המכון הלאומי לחקר שרותי הבריאות ומדיניות הבריאות (ע"ר)
The Israel National Institute for Health Policy Research

The 6TH International Jerusalem Conference on Health Policy

May 23-25, 2016
Jerusalem Convention Center, Israel

HEALTH POLICY: FROM LOCAL EXPERIENCE TO GLOBAL PATTERNS AND BACK AGAIN

PROGRAM & BOOK OF ABSTRACTS

Chairs: Prof. Amir Shmueli (IL) & Prof. Martin McKee (UK)

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Dear Colleagues,

We are delighted to welcome so many of you, from many different countries, to the 6th International Jerusalem Conference on Health Policy.

The diversity of experiences and insights that you bring provides an invaluable opportunity for exchanging ideas. We hope that you will make the most of the opportunities for interaction and engagement, remembering that we can all learn from each other. For over a century, health policy at the local and national level has been shaped by insights from elsewhere, challenging assumptions, stimulating new ways of thinking, and encouraging us to reflect on whether what we have always done is really the best way of doing things.

This year our theme seeks explicitly to support this process. Our theme is "Health Policy: From Local Experience to Global Patterns and Back Again". Yet we have no illusions about the challenges involved in this process of shared learning, so we have structured the conference into four broad sub-themes, each led by a pair of Israeli and global scholars, that will help us on the journey to the creation of stronger, better health systems. David Chinitz and Reinhard Busse lead our exploration of the complexity of health policy, and how we can meet it. Yoseph Mekori and Dina Balabanova lead our thinking on how the building blocks of healthcare systems interact and affect each other. Gabi Bin-Nun and Wynand van de Ven help us see how we can make best use of the recently reaffirmed global commitment to universal health coverage. Orna Baron-Epel will remind us of the crucial importance of addressing the social determinants of health.

We are confident that the Plenary and Parallel Sessions, with a wide range of highly interactive panels and roundtables, will provide fertile grounds for the emergence of new insights, ideas and understandings.

We wish you all a successful conference and pleasant stay in Jerusalem.

Prof. Amir Shmueli (Israel) and Prof. Martin McKee (UK)

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Scientific Committee

Chairs:
Prof. Amir Shmueli, The Hebrew University - Hadassah, IL
Prof. Martin McKee, London School of Hygiene & Tropical Medicine, UK

Prof. Alik Aviram, The Israel National Institute for Health Policy Research, IL
Dr. Dina Balabanova, London School of Hygiene and Tropical Medicine, UK
Prof. Orna Baron-Epel, University of Haifa, IL
Prof. Gabi Bin-Nun, Ben-Gurion University, IL
Prof. Reinhard Busse, Technische Universität Berlin, Germany
Prof. David Chinitz, The Hebrew University - Hadassah, IL
Prof. Yoseph Mekori, Tel-Aviv University, IL
Prof. Orly Manor, The Israel National Institute for Health Policy Research & The Hebrew University - Hadassah, IL
Prof. Wynand van de Ven, Erasmus University, Netherlands

ePoster Committee

Chair:
Prof. Siegal Sadetzki, The Gertner Institute, IL

Dr. Ronit Calderon-Margalit, The Hebrew University - Hadassah, IL
Prof. Avi Porath, Maccabi Healthcare, IL
Dr. Orna Tal, Assaf Harofeh Medical Center, IL

General Information

VENUE

ICC Jerusalem Convention Center

Adjacent to the Crowne Plaza Hotel

Telephone +972 (2) 6558558

REGISTRATION / HOSPITALITY DESKS

The Registration / Hospitality Desks will be located at the ICC Jerusalem Convention Center and will be open to coincide with sessions on each day of the Conference. A temporary registration desk will be open the day before the Conference at the Crowne Plaza Hotel.

OPENING HOURS ICC JERUSALEM CONVENTION CENTER

Monday 23rd May: 08:00-18:00

Tuesday 24th May: 08:00-18:00

Wednesday 25th May: 08:00-16:30

ePOSTERS

ePosters will be on display in the ePoster area throughout the three days conference.

Exhibition hours:

Monday 23rd May: 8:00-18:00

Tuesday 24th May: 8:00-18:00

Wednesday 25th May: 8:00-16:30

Awards for Outstanding ePosters will be given at the Closing Session on Wednesday, May 25th, between 14:00-16:30.

CONFERENCE BADGE

Upon registration, you will receive your conference kit, which will include your conference badge.
You are requested to wear your conference badge at all sessions and social events.
In addition, you will receive entry passes to the conference lunches.

LANGUAGE

English is the official language of the conference.

DRESS CODE

Informal for all occasions.

OPTIONAL SIGHTSEEING TOURS

There are a variety of sightseeing tours available. For further information and reservations, please contact the Hospitality / Registration Desk.

SOCIAL EVENTS

By Invitation Only

Sunday, May 22nd, 18:00-20:00
Welcome Reception: Crowne Plaza Hotel, Jerusalem.

Tuesday, May 24th, 18:30-22:00
Evening Event: The Israel Museum, Jerusalem.
Chair: **Prof. Shlomo Mor-Yosef,** Director General, National Insurance Institute, Israel
Greetings: **Prof. Menahem Ben-Sasson,** President, The Hebrew University of Jerusalem, Israel
Keynotes Speakers:
Mrs. Francesca Colombo, Head, Health Division, OECD, Paris, France
Dr. Rick Glazier, Family Physician and Senior Scientist, Institute for Clinical Evaluative Sciences, Toronto, Canada

Wednesday, May 25th, 07:30-09:00
Breakfast Meeting on Family Medicine: The Current Research Agenda, ICC Jerusalem Convention Center.

The 6th International Jerusalem Conference on Health Policy
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HEALTH POLICY:
FROM LOCAL EXPERIENCE TO GLOBAL PATTERNS AND BACK AGAIN

Monday, May 23, 2016

08:00-09:00 *Registration, Coffee & ePoster Exhibition*

09:00-11:00 **Plenary I: Opening Session**
Chairs: Amir Shmueli (IL) & Martin McKee (UK)

Greetings:
Orly Manor, Chairwoman, Board of Directors, The Israel National Institute for Health Policy Research
Moshe Bar Siman Tov, General Director, Israel Ministry of Health

Opening & Overview:
Amir Shmueli (IL)

Keynote Speakers:
Patricia Shaw (UK): Policy and Practice, Rules and Reality-Reflections from a Complexity Perspective
Christian Lovis (Switzerland): Dealing with Truth in the Era of Deluge of Information

11:00-11:30 *Coffee Break & ePoster Exhibition*

11:30-13:00 **Plenary II: Topic Introductions**
Chair: Wynand van de Ven (The Netherlands)
A: David Chinitz (IL),**Reinhard Busse** (Germany), **David Hunter** (UK) & **Victor Rodwin** (USA)
Complexity in Health Policy- Different Views and Examples
B: Dina Balabanova (UK) & **Margaret Kruk** (USA)
From ‘Building Blocks’ Towards Complex and Responsive Health Systems
C: Daniël Cotlear (USA) & **Peter Smith** (UK)
Universal Health Coverage- Where Are We and Where Do We Want to Be?
D: Mauricio Avendano (UK)
The Social Origins of Health and What We Can Do About It

13:00-14:00 *Lunch Break*

Parallel Session 1 14:00-16:00

Topic A - Oren Hall 1 The Complexity of Health Policy	Topic B - Oren Hall 2 The Building Blocks of Healthcare Systems
The Complexity of Interagency Cooperation in Health Care	**Quality of Health Services**
Chair: Itamar Grotto	**Chair: Anat Aka-Zohar**
1. Orly Silbinger (IL) PLANNING A NATIONAL CHILD SAFETY ACTION PLAN IN ISRAEL: WORKING MODEL FOR MULTI-PARTNER DECISION MAKING	**1. Eyal Zimlichman (IL)** "HOSPITAL" SCORE PREDICTS PATIENTS AT HIGH RISK OF POTENTIALLY AVOIDABLE READMISSION: VALIDATION STUDY IN ISRAEL
2. Yaron Connelly (IL) SOCIAL STRUCTURES OF MARKETS AS FRAMEWORK FOR ANALYZING VACCINATION ONLINE DEBATES: THE CASE OF THE EMERGENCY POLIO VACCINATION CAMPAIGN	**2. Bruce Rosen (IL)** ISRAEL'S PIONEERING NATIONAL HEALTH INFORMATION EXCHANGE: HOW ARE THE HEALTH PLANS MAKING USE OF THE NEWLY AVAILABLE HOSPITAL DATA?
3. Yannai Kranzler (IL) MID-LEVEL ACTIVISM, INFORMAL NETWORKS & THE BUREAUCRATIC POLITICS OF HEALTH IN ALL POLICIES	**3. Galit Shefer (IL)** QUALITY IN CAPABLE HANDS:TRUST & EXCELLENCE INPATIENT EXPERIENCE RELATED TO ACHIEVING GOOD RESULTS IN MEDICAL CARE QUALITY
4. Anna Lerner (IL) POLICY INSIGHTS FROM "2 DROPS": A NATIONAL PLAN FOR POLIO VACCINATION IN ISRAEL	**4. David Roe (IL)** THE PSYCHIATRIC REHABILITATION ROUTINE OUTCOME MEASUREMENT (PR-ROM) NATIONAL PROGRAM: EARLY RESULTS OF IMPLEMENTATION & OUTCOMES
5. Bruria Adini (IL) POLICY FOR MANAGING EMERGENCY MEDICAL SERVICES AS A BUILDING BLOCK OF THE HEALTHCARE SYSTEM	**5. Lars Nordgren (SWEDEN)** HEALTHCARE MATCHING: A VALUE CREATING SERVICE
	6. Rachel Podell (IL) ISRAEL'S ELDERLY POPULATION: DO THEY RECEIVE HIGH QUALITY CARE?
	7. Ofir Ben-Assuli (IL) THE USE OF EHR IN HOSPITALS' EMERGENCY DEPARTMENTS: THE MODERATING EFFECT OF TASK COMPLEXITY
	8. Ofir Ben-Assuli (IL) FORECASTING READMISSIONS USING GBTM MODEL

Parallel Session 1 14:00-16:00

Topic C - Oren Hall 3 Universal Health Coverage	Topic D - Oren Hall 4 The Determinants of Health
Health Insurance	**Healthcare Services & Determinants of Health**
Chair: Shuli Bramli-Grinberg	**Chair: Orna Baron-Epel**
1. Peter Smith (UK) UNIVERSAL HEALTH COVERAGE: THE ROLE OF THE HEALTH BENEFITS PACKAGE	**1. Gary Freed (AUSTRALIA)** THE IMPACT OF THE AGEING OF AUSTRALIA ON THE DELIVERY OF HEALTH CARE TO CHILDREN
2. Bruce Landon (USA) FINANCIAL & CARE DELIVERY IMPLICATIONS OF CHANGING PRIMARY CARE REIMBURSEMENT	**2. Pesach Shvartzman (IL)** HEALTH UTILIZATION & CHARACTERIZATION OF PATIENTS USING MEDICAL CANNABIS IN ISRAEL-INITIAL RESULTS
3. Shlomo Mor-Yosef (IL) HEALTH INSURANCE IN ISRAEL: FROM SELECTIVITY TO UNIVERSALITY & BACK	**3. Ido Lurie (IL)** THE MENTAL HEALTH OF ASYLUM SEEKERS & VICTIMS OF HUMAN TRAFFICKING: THE EXPERIENCE OF GESHER (BRIDGE) CLINIC
4. Peter Hilsenrath (USA) PRECAUTIONARY SAVINGS, HEALTH INSURANCE & MACROECONOMIC STRUCTURAL ADJUSTMENT IN CHINA	**4. Rilwan Raji (NIGERIA)** DATA QUALITY SURVEY (DQS) ASSESSING ROUTINE IMMUNIZATION SYSTEM IN A POLIO HIGH RISK STATE IN NORTHERN NIGERIA
5. Alberto Holly (SWITZERLAND) HEALTH & HEALTHCARE DEMAND EFFECTS OF DOUBLE COVERAGE	**5. Doron Garfinkel (IL)** EXCESSIVE POLYPHARMACY IN PATIENTS WITH ADVANCED/END-STAGE CANCER - SIGNIFICANT NEGATIVE IMPLICATIONS ON QUALITY OF CARE & ECONOMIC BURDEN
6. Florence Jusot (FRANCE) THE LIKELY EFFECTS OF EMPLOYER-MANDATED COMPLEMENTARY HEALTH INSURANCE ON HEALTH COVERAGE IN FRANCE	**6. Einav Srulovici (IL)** ASSETS & HEALTH: EXAMINING THE ASSET-BUILDING THEORETICAL FRAMEWORK & PSYCHOLOGICAL DISTRESS
7. Amatzia Ginat (IL) SERVICE LETTERS IN PRIVATE HEALTH INSURANCE: DOES AN ADDITIONAL ISRAELI FOR-PROFIT HMO EXIST?	**7. Efrat Shadmi (IL)** THE COMPREHENSIVE CARE FOR MULTIMORBID ADULTS PROJECT (CC-MAP)
	8. Ajay Phatak (INDIA) GYNAECOLOGICAL MORBIDITIES, HEALTH SEEKING BEHAVIOR & QUALITY OF LIFE OF RURAL FEMALES IN CHARUTAR REGION OF GUJARAT, INDIA

Parallel Session 2 16:30-18:00

Topic A - Oren Hall 1 The Complexity of Health Policy	Topic B - Oren Hall 2 The Building Blocks of Healthcare Systems
The Complexities of Priorities	**Public Health: Education & Communication**
Chair: Nadav Davidovitch	**Chair: Yossi Mekori**
1. Orna Tal (IL) AGE AS A CRITERION FOR PRIORITY SETTING IN HEALTH - PUBLIC STANDPOINTS USING FOCUS GROUPS AND TELEPHONE SURVEY	**1. Ardita Kongjonaj (ALBANIA)** UNDERGRADUATE EDUCATION ON PUBLIC HEALTH IN THE EUROPEAN REGION
2. Maria Ana Matias (PORTUGAL) MENTAL HEALTH INPATIENT CARE: HOW SHOULD SERVICES BE ORGANISED IN A NHS?	**2. Amardeep Thind (CANADA)** A NEW APPROACH TO GLOBAL INTER-DISCIPLINARY PUBLIC HEALTH EDUCATION
3. Noya Galai (IL) PATTERNS OF MAMMOGRAPHY SCREENING OVER 14 YEARS AMONG ELIGIBLE WOMEN IN A LARGE HMO IN ISRAEL	**3. Irit Elroy & Michal Schuster (IL)** GOING BEYOND TRANSLATION- ISRAELI HOSPITALS, INTERNATIONAL STANDARDS & EXPERIENCE: A GLOBAL SEARCH FOR CULTURAL COMPETENCE
4. Rachel Nissanholtz-Gannot (IL) CHALLENGES IN IMPLEMENTATION OF THE DYING PATIENT LAW	**4. Angela Irony (IL)** NOVEL SOLUTIONS IMPROVE HEALTH OUTCOMES: THE TELEHEALTH CENTER
5. Adele Diederich (GERMANY) PUBLIC AND THE PHYSICIANS WITH RESPECT TO EVIDENCE BASED MEDICINE, COST & THERAPEUTIC BENEFITS	**5. Efrat Neter (IL)** ASSISTED USE OF THE INTERNET FOR HEALTH PURPOSES: CHARACTERISTICS & OUTCOMES
	6. Shmuel Reis (IL) DEVELOPING AN INSTRUMENT TO ASSESS COMMUNICATION IN THE COMPUTERIZED SETTING IN PRIMARY CARE

Parallel Session 2 16:30-18:00

Topic C - Oren Hall 3
Universal Health Coverage

Hospital's Expenditure & Hospitalization Trends

Chair: Bruce Rosen

1. **Gabriel Catan (IL)**
   HOW MUCH WE WILL SPEND ON HOSPITALS: AN EXPLANATORY MODEL OF THE DETERMINANTS OF HOSPITALIZATION COSTS
2. **Ziona Haklai (IL)**
   ACUTE CARE HOSPITALIZATIONS: WHO ACCOUNTS FOR HALF OF TOTAL HEALTH EXPENDITURE?
3. **Maria Ana Matias (PORTUGAL)**
   MENTAL HEALTH READMISSIONS: AN EMPIRICAL APPROACH ON THEIR PATH & COSTS
4. **Gali Shlichkov (IL)**
   TRENDS IN SURGICAL HOSPITALIZATIONS IN PRIVATE & PUBLIC HOSPITALS
5. **Myriam Aburbeh (IL)**
   GEOGRAPHIC DISPARITIES IN THE HOSPITALIZATION RATE & THEIR INFLUENCE ON HEALTH POLICY
6. **Dani Kirshner (IL)**
   THE DETERMINATION OF FACTORS ASSOCIATED WITH RECURRENT ADMISSIONS AMONG OLDER PATIENTS IN INTERNAL MEDICINE WARDS AT THE RAMBAM HEALTH CARE CAMPUS

Topic D - Oren Hall 4
The Determinants of Health

Communities Policy & Social Determinants of Health

Chair: Nachman Ash

1. **Mauricio Avendano (UK)**
   THE SOCIAL ORIGINS OF HEALTH & WHAT WE CAN DO ABOUT IT
2. **Idris Guessous (SWITZERLAND)**
   PERSISTENT SPATIAL CLUSTERS OF HIGH BODY MASS INDEX IN A SWISS URBAN POPULATION AS REVEALED BY THE 5-YEAR GEOCOLAUS LONGITUDINAL STUDY
3. **Jennifer Mindell (UK)**
   COMMUNITY SEVERANCE FROM MAJOR ROADS: CAN WE MEASURE ITS EFFECTS ON DETERMINANTS OF HEALTH? LESSONS FROM FINCHLEY ROAD, LONDON, UK
4. **Yonah (Eric) Amster (IL)**
   THE IMPACT OF ENERGY POLICY ON MORBIDITY AND MORTALITY IN THE ISRAELI POPULATION
5. **Bishara Bisharat (IL)**
   HOW CAN HEALTH PROMOTION PROMOTE EQUITY IN HEALTH?
6. **Vered Kaufman-Shriqui (IL)**
   CLOSING THE GAP IN BREAST CANCER SCREENING BEHAVIOURS BETWEEN LOW AND HIGH SES POPULATIONS IN ISRAEL 2002-2014

Tuesday, May 24, 2016

08:00–09:00 *Registration, Coffee & ePoster Exhibition*

09:00–11:00 **Plenary III: Megatrends**

Chair: Stephen Schoenbaum (USA)

Martin McKee (UK): Population Health

Aaron Reeves (UK): Political Determinants

Ichiro Kawachi (USA): Social Determinants

Richard Saltman (USA): Health Policy

11:00–11:30 *Coffee Break & ePoster Exhibition*

Parallel Session 3 Roundtables 11:30–13:00

Oren Hall 1 Roundtable 1	Oren Hall 2 Roundtable 2
Recent Nordic Reform Experience	**The Future Hospital**
Moderator: **Richard Saltman (USA)**	**Moderator:** **Ronni Gamzu (IL)**
Panelists: **Terje Hagen (Norway),** **Juha Teperi (Finland)**	**Panelists:** **Reinhard Busse (Germany),** **Josep Figueras (Belgium),** **Charles N. Kahn (USA),** **Chezy Levy (IL),** **Itamar Ofer (IL)**

13:00–14:00 *Lunch Break*

Parallel Session 3 Roundtables 11:30-13:00

Oren Hall 3 Roundtable 3	Oren Hall 4 Roundtable 4
Social Bonds In Healthcare: Israel's Pioneering Experience	**Innovation in Practice: Are We Doing Enough?**
Moderator: Shlomo Mor-Yosef (IL)	Moderator: Ran Balicer (IL)
Panelists: Adam Swersky (UK), Yaron Neudorfer (IL), Elli Booch (IL)	Panelists: Eyal Gura (IL), Isabelle Durand-Zaleski (France), Yair Schindel (IL), Arnon Afek (IL)

Parallel Session 4	14:00–16:00
Topic A – Oren Hall 1 **The Complexity of Health Policy**	**Topic B – Oren Hall 2** **The Building Blocks of Healthcare Systems**
Rapid Fire Roundtable 1 **The Complexity of Evolving Medical Education & Shifting Professional Roles**	**Health Professions**
Chair: Avi Israeli	**Chair: Ehud Kokia**
1. Stephen Schoenbaum (USA) COMPLEX CHALLENGES IN EDUCATING PHYSICIANS FOR 21ST CENTURY NEEDS	**1. Michael Kuniavsky (IL)** BEING A LEGAL GUARDIAN: THE NURSING PERSPECTIVE
2. Orly Toren (IL) IS THERE A DISPARITY BETWEEN POLICY & PRACTICE? THE CASE OF NURSES' AUTHORITY IN NEONATAL INTENSIVE CARE UNITS (NICUS) IN ISRAEL	**2. Ayelet Schor (IL)** BARRIERS & FACILITATORS OF TEAMWORK IN PRIMARY MEDICINE: A QUALITATIVE ANALYSIS
3. Dan Even (IL) PHYSICIANS' PERSPECTIVES OF NOTIFICATIONS FOR COMPLICATIONS IN MEDICAL TREATMENTS	**3. Keren Dopelt (IL)** INTEGRATING THE PARAMEDICS INTO THE HEALTHCARE SYSTEM: INSIGHTS FROM A STUDY AMONG PARAMEDICS THAT LEFT THE PROFESSION
4. Efrat Shadmi (IL) THE 3-ARM STRATEGY FOR READMISSION PREVENTION	**4. Vincent Mor (USA)** PRAGMATIC TRIALS IN NURSING HOMES: BENEFITS OF A UNIFORM MINIMAL CLINICAL DATA SET LINKED TO MEDICARE DATA
5. Matan J. Cohen (IL) COMMENTARY: LEARNING TO SAY: "TRUST ME- I'M A DOCTOR AND I DON'T KNOW"	**5. Oren Berkowitz (USA)** THE GLOBAL EXPANSION OF A VERSATILE PHYSICIAN ASSISTANT WORKFORCE
	6. Michael Steinman (USA) IMPACT OF A NURSE-BASED INTERVENTION ON MEDICATION OUTCOMES IN VULNERABLE OLDER ADULTS: CC-MAP STUDY RESULTS
	7. Yael Ashkenazi (IL) ARE FINANCIAL INCENTIVES HELPFUL IN BRINGING MEDICAL RESIDENTS TO PERIPHERAL HOSPITALS?
	8. Paula Feder-Bubis (IL) PHYSICIANS MOVING TO THE "PERIPHERY" FOLLOWING THE NEW WAGE AGREEMENT

16:00–16:30 *Coffee Break & ePoster Exhibition*

16:30–18:00 **Plenary IV: Panel:** What is a High Performing Health System?
Facilitator: **Walter Ricciardi** (Italy)
Panelists: **Larry Brown** (USA), **Reinhard Busse** (Germany), **Margaret Kruk** (USA), **Lisa Simpson** (USA), **Wynand van de Ven** (The Netherlands)

Parallel Session 4 14:00-16:00

Topic C - Oren Hall 3 Universal Health Coverage	Topic D - Oren Hall 4 The Determinants of Health
Disparities in Healthcare	**Social Determinants to Health**
Chair: Shlomit Avni	**Chair: Tamar Shohat**
1. Roei Ben-Moshe (IL) RESOURCE UTILIZATION IN THE ISRAELI HEALTHCARE SYSTEM: A GINI APPROACH	**1. Liat Lerner-Geva (IL)** PRIMIPARITY AT AGE 45 YEARS OF AGE OR OLDER: UNLIMITED BUT UNFAVORABLE?
2. Gilad Gal (IL) EQUALITY IN HEALTH SERVICES FOR PERSONS SUFFERING FROM SEVERE PSYCHIATRIC ILLNESS	**2. Barnabas Natamba (USA)** FOOD INSECURITY & LACK OF SOCIAL SUPPORT AS MODIFIABLE SOCIAL DETERMINANTS OF PERINATAL DEPRESSIVE SYMPTOMS SEVERITY IN NORTHERN UGANDA
3. Sivan Spitzer-Shohat (IL) A REALIST INQUIRY OF AN ORGANIZATION-WIDE INITIATIVE TO REDUCE DISPARITIES IN HEALTH & HEALTH CARE	**3. Dance Gudeva Nikovska (MACEDONIA)** SELF-REPORTED HEALTH OF TB PATIENTS IN THE REPUBLIC OF MACEDONIA: IS LESS MORE OR IS IT MORE COMPLICATED?
4. Eran Politzer (IL) THE ECONOMIC BURDEN OF SOCIOECONOMIC-RELATED HEALTH DISPARITIES	**4. Sharon Sznitman (IL)** SOCIOECONOMIC BACKGROUND & HIGH SCHOOL COMPLETION
5. Aviad Tur-Sinai (IL) PRIVATE FUNDING & FORGONE MEDICAL CARE AMONG OLDER PEOPLE IN ISRAEL	**5. Seema Biswas (IL)** CONFLICT AS A DETERMINANT OF HEALTH
6. Idris Guessous (SWITZERLAND) CANCER SCREENING IN SWITZERLAND: TRENDS & SOCIOECONOMIC DISPARITIES	**6. Orly Romano-Zelekha (IL)** DETERMINANTS OF QUALITY OF LIFE AMONG JEWISH & ARAB HEMODIALYSIS PATIENTS
	7. Sharyn Maxwell (UK) GENDER, HEALTH, EQUALITY & HIGHER EDUCATION: SEARCHING FOR COMMON CONCERNS
	8. Ran Balicer (IL) DIABETES IN ISRAEL: TRENDS, CHALLENGES & THE ROAD AHEAD

Wednesday, May 25, 2016

08:00–09:00 *Registration, Coffee & ePoster Exhibition*

Parallel Session 5 09:00–11:00

Topic A – Oren Hall 1 The Complexity of Health Policy	Topic B – Oren Hall 2 The Building Blocks of Healthcare Systems
Rapid Fire Roundtable 2 The Complexity of Policy Learning	**Emerging Health Systems**
Chair: David Chinitz	**Chair: Ora Paltiel**
1. Bruce Rosen (IL) ISRAELI HEALTH CARE AS A SUCCESSFUL ADAPTER OF HEALTH CARE INNOVATIONS DEVELOPED IN OTHER COUNTRIES	**1. Belgin Ünal (TURKEY)** PERCEPTIONS & PRACTICE OF FAMILY PHYSICIANS ON THE MANAGEMENTS OF NCD
2. Moriah Ellen (IL) EXAMINING THE PERCEPTIONS OF HEALTH SYSTEM POLICYMAKERS IN ISRAEL ON THE HEALTH POLICYMAKING PROCESS & KNOWLEDGE TRANSFER & EXCHANGE	**2. Vladimir Lazarevik (MACEDONIA)** THE IMPLICATION OF INTRODUCING TWO MUTUALLY CONFLICTING REFORMS IN PUBLIC HOSPITALS IN MACEDONIA
3. Paul Dourgnon (FRANCE) ORGANIZATION OF HEALTH SERVICES & ACCESS TO CARE: STUDY OF A FRENCH GATEKEEPING REFORM	**3. Mindaugas Stankunas (LITHUANIA)** HEALTH INEQUALITY REDUCTION IN LITHUANIA
4. Margalit Goldfract (IL) READINESS TO IMPLEMENT PATIENT-CENTERED-APPROACH PROGRAMS: IDENTIFYING THE IMPLEMENTATION CHASM WITHIN PRIMARY CARE TEAMS	**4. Yvonne Botma (SOUTH AFRICA)** STUMBLING BLOCKS IN NURSING EDUCATION IN SUB-SAHARAN AFRICA
5. Patrick Jeurissen (NETHERLANDS) COMPLEXITY IN HOSPITAL GOVERNANCE: THE CASE OF THE NETHERLANDS	**5. Ardita Kongjonaj (ALBANIA)** QUALITY OF CARE IN TRANSITION COUNTRIES: THE CASE OF ALBANIA
6. Gabriel Catan (IL) HEALTH INFORMATION TECHNOLOGY IMPLEMENTATION: IMPACTS & POLICY CONSIDERATIONS: A COMPARISON BETWEEN ISRAEL & PORTUGAL	**6. Linh Dinh (VIETNAM)** DRUG LAG IN VIETNAM IN COMPARISON WITH ISRAEL & ITS THERAPEUTIC IMPLICATIONS
Commentators: **Victor Rodwin (USA)** **Larry Brown (USA)**	**7. Dance Gudeva Nikovska (MACEDONIA)** DRIVERS OF INEQUITY IN ACCESS TO HEALTHCARE IN REPUBLIC OF MACEDONIA
	8. Amnon Lahad (IL) BRCA POPULATION SCREENING IN UNAFFECTED ASHKENAZI JEWISH WOMEN

11:00–11:30 *Coffee Break & ePoster Exhibition*

Parallel Session 5 09:00-11:00

Topic C - Oren Hall 3 Universal Health Coverage	Topic D - Oren Hall 4 The Determinants of Health
Countries' Experience	**Promoting Health**
Chair: Boaz Lev	**Chair: Manfred Green**
1. Raphael Wittenberg (UK) UNIVERSAL COVERAGE OF LONG-TERM CARE	**1. Fiona Sim (UK)** FIGHTING OBESITY: POTENTIAL ROLE OF CALORIE LABELLING OF ALCOHOLIC DRINKS
2. Melanie Levy (IL) THE PRIVATE WITHIN THE PUBLIC: INEQUALITIES IN HEALTH CARE FINANCING IN SWITZERLAND	**2. Jenny Dortal (IL)** FROM DETERMINANTS OF HEALTH TO DETERMINING HEALTH: TELEM - A QUIT/STAY QUIT SMOKING PROGRAM FOR PREGNANT WOMEN
3. Florence Jusot (FRANCE) THE SOCIAL SOLIDARITY OF THE FRENCH HEALTH INSURANCE SYSTEM	**3. Jonathon Cylus (UK)** UNEMPLOYMENT INSURANCE & PHYSICAL ACTIVITY
4. Alberto Holly (SWITZERLAND) THE IMMIGRANT HEALTH GAP & THE HEALTH EFFECTS OF SOCIO-ECONOMIC STATUS IN SWITZERLAND	**4. Rania Abu Seir (WEST-BANK)** OCCUPATIONAL EXPOSURES & NHL AMONG PALESTINIANS
5. Fabio Gomes (BRAZIL) GOVERNMENTAL BATTLES OVER FEDERAL HEALTH FUNDING IN BRAZIL	**5. Jumanah Essa-Hadad (IL)** PROJECT "RAPHAEL": A SOCIAL INCUBATOR FOSTERING ACADEMIA-COMMUNITY PARTNERSHIPS TO PROMOTE HEALTH IN THE GALILEE
6. Gary Ginsberg (IL) COST-UTILITY ANALYSIS OF IMMUNIZATION AGAINST HEPATITIS A IN ISRAEL IN THE ERA OF INFANT VACCINATIONS AGAINST HEPATITIS A	**6. Liora Valinsky (IL)** IS SCREENING MAMMOGRAPHY IN WOMEN AGED 40-49 IN ISRAEL SCIENTIFICALLY SOUND OR POLITICALLY MOTIVATED? PARTIAL ANSWERS FROM MEUHEDET DATA
7. Tzahit Simon-Tuval (IL) THE PRICE OF A NEGLECTED ZOONOSIS: CASE-CONTROL STUDY TO ESTIMATE HEALTHCARE UTILIZATION COSTS OF HUMAN BRUCELLOSIS	**7. Shosh Shahrabani (IL)** ATTRIBUTES OF YOUNG WOMEN CHOOSING TO UNDERGO ROUTINE MAMMOGRAPHY

Parallel Session 6 11:30–13:00

Topic A – Oren Hall 1 The Complexity of Health Policy	Topic B – Oren Hall 2 The Building Blocks of Healthcare Systems
Solidarity, Incentives & Regulation: The Complex Balancing of Technical & Social Approaches	**Quality of Health Services**
Chair: Yair Birnbaum	**Chair: Avi Porath**
1. Nurit Guttman (IL) ALTRUISM OR INCENTIVES? WHAT SHOULD BE THE POLICY TO PROMOTE DECEASED ORGAN DONATION & WHY? PERSPECTIVES OF MEDICAL PROFESSIONALS & MEMBERS OF THE GENERAL PUBLIC	**1. Michal Krieger (IL)** OPTIMIZING QUALITY MEASUREMENT: APPROPRIATE CONTROLLER THERAPY FOR ASTHMA
2. Richard Saltman (USA) UNPACKING SOLIDARITY: PRACTICAL POLITICAL VS. ASPIRATIONAL ASPECTS	**2. Claire Lemer (UK)** JOINING UP THE DOTS: IMPROVING EVERYDAY HEALTHCARE FOR CHILDREN & YOUNG PEOPLE IN LAMBETH & SOUTHWARK
3. Malke Borow (IL) INVOLVEMENT OF NATIONAL MEDICAL ASSOCIATIONS IN PUBLIC POLICY: INTERNATIONAL REVIEW & THE ISRAELI CASE	**3. Eugene Marzon (IL)** MOTIVATION, EDUCATION, SKILLS & SUPERVISION TO ACHIEVE BETTER CARE IN A GENERAL PRACTICE ENVIRONMENT (MESSAGE MODEL)
4. Hagai Levine (IL) EPIDEMIOLOGICAL FORECAST ISRAEL 2030 & HEALTH POLICY IMPLICATIONS	**4. Ronit Endevelt (IL)** “OPTIMAL NUTRITION CARE FOR ALL”: THE ISRAELI POLICY
5. Shlomit Avni (IL) NATIONAL POLICIES TO ADDRESS HEALTH INEQUITIES: ISRAEL VERSUS ENGLAND – A MOVE IN THE OPPOSITE DIRECTION?	**5. Yael Livne & Sarit Rashkovits (IL)** PROMOTING PATIENT SAFETY USING NURSE MANAGERS’ LEADERSHIP & AUTONOMY: THE MEDIATING ROLE OF SAFETY NORMS & TEAM LEARNING
	6. Eyal Zimlichman (IL) ESTIMATING CONTINUITY OF CARE ON MEDICINE WARDS IN AN ACADEMIC MEDICAL CENTER IN ISRAEL

Parallel Session 6 11:30-13:00

Topic C - Oren Hall 3 Universal Health Coverage	Topic D - Oren Hall 4 The Determinants of Health
Public-Private Mix	**Health Professions**
Chair: Nir Keidar	**Chair: Arnon Afek**
1. Daniël Cotlear (USA) GOING UNIVERSAL: THE HOW OF UHC	**1. Francesca Colombo (FRANCE)** HEALTH WORKFORCE POLICIES: RIGHT JOBS, RIGHT SKILLS, IN RIGHT PLACES
2. Tamar Medina-Artom (IL) EX-POST WILLINGNESS TO PAY FOR THE RIGHT TO CHOOSE AMBULATORY CARE IN PUBLIC-HOSPITALS AS A HIDDEN BUILDING-BLOCK IN THE ISRAELI HEALTHCARE SYSTEM	**2. Amir Nutman (IL)** INFLUENZA VACCINATION MOTIVATORS AMONG HEALTHCARE PERSONNEL IN A LARGE ACUTE CARE HOSPITAL IN ISRAEL
3. Yael Applbaum (IL) ELECTIVE SURGERY IN ISRAEL: PUBLIC VS. PRIVATE-THE VIEW THROUGH MULTIFOCAL LENSES	**3. Eytan Ellenberg (IL)** SIMULATION-BASED TRAINING DESIGNED TO ENHANCE COMMUNICATION SKILLS & IMPROVE PATIENT EXPERIENCE DURING MEDICAL DISABILITY ASSESSMENT: RESULTS FROM A PILOT PROJECT
4. Giora Kaplan (IL) HEALTH SYSTEMS IN TIMES OF AUSTERITY: WHO IS WILLING TO FORGO WHICH SERVICES?	**4. Lee Gilad (IL)** CHRONIC DRUG TREATMENT AMONG HEMODIALYSIS PATIENTS: ATTITUDES & APPROACHES OF PATIENTS, NURSING & MEDICAL STAFF
5. Omer Ben-Aharon (IL) DOES DRUG PRICE REGULATION AFFECT HEALTHCARE EXPENDITURE?	**5. Oladipo Akinmade (NIGERIA)** EFFECTS OF COMMUNITY VIOLENCE & INSECURITY ON HOSPITAL ACCESS IN NORTH CENTRAL NIGERIA: ACCOUNTS FROM HEALTH CARE WORKERS

13:00–14:00 *Lunch Break*

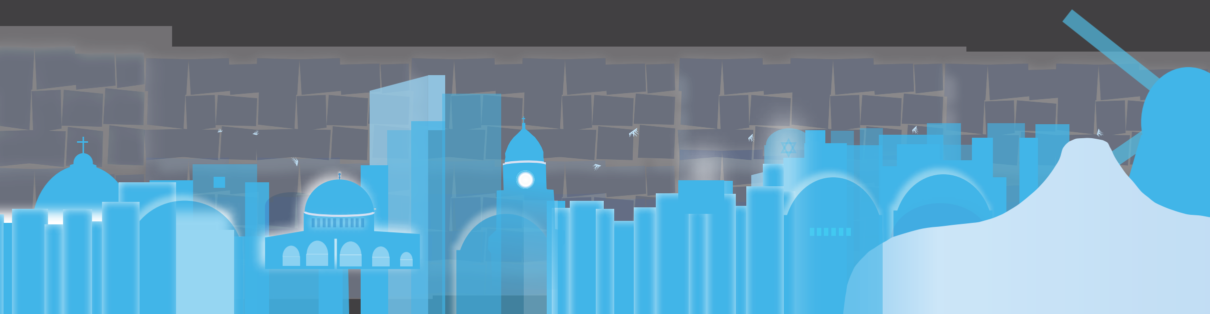
14:00–16:30 **Plenary V: Closing Session**
Chair: Orly Manor (IL)
ePoster Awards: Presented by Siegal Sadetzki,
Chair of ePoster Committee

Panel: Research and Health Policy
Facilitator: **Josep Figueras** (Belgium)
Panelists:
Mauricio Avendano (UK),
Dina Balabanova (UK),
Daniël Cotlear (USA),
David Hunter (UK),
Victor Rodwin (USA)

Invited Speaker: Prof. Eliezer Rabinovici,
VP of European Nuclear Research Organization (CERN)

Closing Remarks

Biographies -
Invited Speakers & Chairpersons



Arnon Afek

Arnon Afek, MD, MHA, is the Associate Director General of the Israel Ministry of Health. Prof. Afek was personally nominated to be a member of the leading Bureau of the OECD Health Committee. He is also a Col(Res) in the IDF Medical Corps.

Prof. Afek is the Director of the NY State/American MD Program and Professor of Pathology at the Sackler School of Medicine, Tel-Aviv University, where he teaches both Pathology and Medical Administration.

Prof. Afek's areas of research fields include: the association between BMI, cancer, & cardiovascular risk factor in adolescents, Pathogenesis of Atherosclerosis, Art and History of Medicine. He has published more than 120 papers in medical literature including in NEJM, JAMA and Circulation.

Prof. Afek was invited as guest speaker and has participated in numerous medical conferences. He was awarded the Kellerman Award, the Goldberg Award, both for research in Cardiology, the Israel National Quality Improvement Award and an Award for Excellence in Military Medicine and the Rector Award for Lecturers.

Prof. Afek was the Director General of the Israeli Ministry of Health until July 2015. His additional previous positions include: Director of Medical Affairs, Israeli Ministry of Health, Deputy Director of Sheba General Hospital, Head of Occupational Medicine & Medical Classification Branch and Head of the Department of Medical Administration and the IDF Medical Corps.

Arnon Afek, MD, MHA, is a graduate in Medicine from the Hadassah and the Hebrew University School of Medicine and in Health Administration cum laude from the Ben-Gurion University of the Negev. He completed residency in Anatomical Pathology at the Sheba Medical Center, and fellowship in Medical Administration under the Director General of the Israeli Ministry of Health and the CEO of the Sheba Medical Center.

Anat Ekka Zohar

Anat Ekka Zohar, BSN, MPH, PhD, studied nursing and received her BsN in 1999 (Dean's Award). She earned a master's degree in Public Health (MPH) from the Hebrew University of Jerusalem in 2003 (Dean's Award). In 2011, she completed her PhD at the School of Public Health at the Hebrew University.

Dr. Ekka Zohar conducted epidemiological studies which focused on quality of healthcare. While still in training, she joined the Department Of Health Services Research as an epidemiologist (2002). Since 2010 she has been leading national researches of evaluating outcomes and process indicators of quality of care.

National Appointments and Assignments:

2014- Appointed as Deputy General Director of Quality and service administration, the Ministry of Health. Leading the Israeli program of health care quality indicators. Leading national patient experience surveys in hospitals and other medical services. Leading and implementing patient safety national issues.

2012- Initiated lead and is conducting the Israeli program of heath care quality indicators.

2013- Appointed by the Director General of the Ministry of Health as leader of one of seven declared main missions of the ministry of health; Quality of care, patient safety and patient experience.

2011- Appointed by the Director General of the Ministry of Health as the Head of the Department of Health Services Research. Since her appointment, she has continued her in-depth outcome studies. In parallel, she is developing the Israeli Program of Hospital Quality Indicators. This national program involved legislation to establish transparency, and requires the hospitals to report data.

2010- Appointed as Deputy of Quality Assurance Division, the Ministry of Health, heading national quality surveys in hospitals and other medical services, and dealing with patient safety and patient experience.

Nachman Ash

Deputy Director General, Health Informatics, Ministry of Health, Israel

Dr. Nachman Ash was born in Israel in 1961. He is a physician, board certified in Internal Medicine and a graduate of the MS program of MIT – Harvard in Medical Informatics (2001) and the MA program in political science from Haifa University and the National Defense University (2005).

Dr. Ash is a retired Brigadier-General who had a long career as a military physician. In his last position he served as the Surgeon General, in which he led the Medical Corps for four years.

Dr. Ash is the Deputy Director General for Health Informatics in the Ministry of Health since 2012 and a senior lecturer at Ariel University.

Mauricio Avendano

Dr. Avendano is an Associate Research Professor and Deputy Director at LSE Health, London School of Economics and Political Science. He is also adjunct Associate Professor at the Department Social and Behavioral Sciences at Harvard University.

Dr. Avendano obtained his PhD from the Erasmus University in the Netherlands, and he was a Research Fellow at the Harvard Center for Population and Development Studies.

He is an epidemiologist with an interest in the causal impact of social policies on health from a cross-national comparative perspective. Dr. Avendano was closely involved in the design of the health module of the Survey of Health, Ageing and Retirement in Europe (SHARE), a comparative study of more than 18 countries examining the links between health and the social and economic dimensions of life.

Dr. Avendano has published more than 70 papers in international journals examining the social determinants of health from a cross-national comparative perspective. In 2011, he was awarded a European Research Council (ERC) grant to examine how economic recessions during critical periods in the life-course from childhood to adulthood influence health and mortality later in life in European countries and the United States. Much of his research focuses on the impact of social policies on health, and understanding whether cross-country differences in policy explain variations in life expectancy and health between European countries and the United States.

Shlomit Avni

Shlomit Avni is the Director of the Reduction of Health Inequalities Unit at the Administration for Strategic and Economic Planning at the Israeli Ministry of Health.

Shlomit holds an M.A in Public Policy, a B.S.W (social work) from Tel-Aviv University and is a Phd Candidate at The Department of Politics and Government in Ben-Gurion University of the Negev.

Shlomit Avni's areas of special interest include health inequity, social determinants of health and health policy.

Shlomit's professional experience includes 13 years of work in NGO's in the field of education and health specializing in community work, lobbying and activism in areas including – the right to health, inequality and social justice.

Dina Balabanova

Dina Balabanova, MSc, PhD, is a Senior Lecturer in Health Systems and Policy in the Department of Global Health and Development at the London School of Hygiene and Tropical Medicine. Her main expertise is in health systems and policy research (governance, institution building and effective delivery models) in the transition countries of the European region, and increasingly in other low- and middle-income countries such as Bangladesh and Malaysia. She leads work on developing effective and equitable primary care models for underserved populations involving community volunteers (Ethiopia), and integrating vertical and system-wide approaches in managing neglected tropical diseases (Kenya).

She also leads empirical and methodological work examining the complex health systems responses required by the rising burden of chronic noncommunicable disease in resource-poor settings, using tracer conditions such as diabetes and hypertension (Colombia, Malaysia etc.).

Dr. Balabanova has designed and runs the LSHTM face-to-face and distance learning Health Systems modules. She is a board member of Health Systems Global (2012-), and Section Editor at BMC Health Services Research.
Follow Dina on Twitter:@DinaBalabanova

Ran Balicer

Prof. Ran Balicer, physician, manager and researcher, serves as Founding Director of the Clalit Research Institute, the WHO Collaborating Center on Non-Communicable Diseases Research, Prevention and Control. In parallel, he serves as Director of Health Policy Planning for Clalit – Israel's largest healthcare organization.

In these roles, he is responsible for strategic planning of novel organization-wide interventions for improving healthcare quality, reducing disparities and increasing effectiveness. These include the introduction of innovative data-driven tools into practice – predictive modeling, real-life effectiveness studies, decision support tools and proactive care models.

Prof. Balicer serves as Associate Professor at the Public Health Department, Ben-Gurion University, Israel, He serves as a Track Director in the Ben-Gurion University MPH program, Prof. Balicer's research is focused the study of extensive clinical databases in care provision and policymaking, and health system re-design towards integrated care and quality management.

In Israel, Prof. Balicer serves in several professional leadership roles – as Chair of the Israeli Society for Quality in Healthcare, as a Board Member of the local chapter of ISPOR (the International Society of Pharmaco-economics and Outcomes Research) and as an Advisor to Israeli Ministry of Health.

Prof. Balicer serves in advisory roles for the WHO Regional Office for Europe on Non-Communicable Diseases, Healthy Aging and Coordinated/Integrated Healthcare Systems. He also serves as a Board Member of the International Foundation for Integrated Care.

Moshe Bar Siman Tov

July 2015 – Director General, Israeli Ministry of Health.

August 2014 – June 2015 – Economic Attaché (Israeli Ministry of Finance), Embassy of Israel, Washington, D.C., USA. Head of Ministry of Finance's Economic Delegation to the United States.

July 2014 – February 2010 – Deputy Budget Director, Israeli Ministry of Finance (from November 2013 – Senior Deputy Director).

June 2008 – February 2010 – Healthcare coordinator at the Budget Division, Israeli Ministry of Finance.

June 2006 – June 2008 – Social Affairs and National Insurance Coordinator at the Budget Division, Israeli Ministry of Finance.

June 2006 – September 2003 – Referent for Employment and Social Affairs in the Budget Division, Ministry of Finance.

Education:
1999 – 2002 – BA in Economics and Business Administration from the Hebrew University of Jerusalem.
2002 – 2004 – MA in Economics and Business Administration, specializing in finance, the Hebrew University of Jerusalem.

Orna Baron-Epel

Orna Baron-Epel, PhD. MPH, is the Director of the School of Public Health at the University of Haifa, Israel and Head of the Center for Evaluation of Health Promotion Interventions. She studied biology for a PhD at the Tel-Aviv University and received her MPH at the Hebrew University.

She developed the health promotion department at Maccabi Healthcare Services between 1988 and 1995, then joined the Israel Center for Disease Control.

Prof. Baron-Epel, has been at the Haifa University since 2000 and is a founder of the School of Public Health at the University of Haifa.

Her research interests are mainly: health promotion, social epidemiology and injury prevention.

Many of her studies try to decipher the differences in health determinants and health behaviors among the different ethnic groups living in Israel, such as Jews, Arabs and immigrants.

Prof. Baron-Epel, is involved in many research projects such as: health and the built environment, health literacy, social aspects of tobacco use, alcohol abuse, social support, discrimination, prevention of road accidents and injuries in Israel.

Gabi Bin-Nun

Prof. Gabi Bin-Nun began his career working as an economist in the Ministry of Health. He worked in various key positions his last being the Deputy Director General for Health Economics and Health Insurance.

Gabi was one of the architects and designers of Israel's National Health Insurance Law (1995) and since then has played a central role in its implementation and evaluation.

Since 2008 Gabi is an Associate Professor in the Department of Health Systems Management at the Faculty of Business and Management at Ben-Gurion University of the Negev in Israel. The courses taught by Gabi include: Public Financing and Health Economics in the MHA Program, and The Israeli Health Care System in the MEMS program.

Gabi holds a B.A degree in Economics and Political Science from the Hebrew University in Jerusalem, and a Master degree in Public Management from the Heller School in Brandeis University, Boston, USA. He is one of the founders and board member of the Israel National Institute for Health Policy and Health Services Research. Between 1998 till 2014 he was a board member of the National Health Council. Between 1998 till 2008 he was a member of the National Drugs and Technologies Prioritization Board, a board member of "ELCA" (Senior Management Training Institute for the Social Services JDC Israel), a board member of Meyers-JDC-Brookdale Institute, Jerusalem, Israel, and a board member of the Gertner Research Institute, Tel-Hashomer, Israel.

In 2014 he was nominated as a member in the Advisory Committee for the Strengthening of Public health system in Israel (The 'Garman Committee').

His research focus is in the field of health policy, health economics and health care systems .He has published books and many articles in these fields.

Yair Birnbaum

Dr. Yair Birnaum is the Chief Medical Officer of Clalit Healthcare Services in Israel (Largest HMO in Israel). He completed his medical degree at the Hadassah-Hebrew University School of Medicine and a residency in Pediatrics at the Shaare Zedek Medical Center. He also received an MA degree in Public Administration from Harvard University in 1999 and completed a residency in Medical Management.

Prior to joining Clalit he served as head of the Medical Division of Maccabi Health Care Services. (Second largest HMO in Israel)

Previous positions included the following: Associate Director General and Head of Medical Services of the Hadassah Medical Organization, Director of the Hadassah Ein-Kerem Medical Center, Associate Medical Director of Maccabi Health Care Services and Deputy Director General of Shaare Zedek Medical Center in Jerusalem.

In addition to medical training Dr. Birnbaum is also an ordained Orthodox Rabbi who wrote his thesis on "The Status of the Physician in Jewish Sources".

Elli Booch

Elli Booch is the Director of Philanthropy at the Rothschild Caesarea Foundation in Israel. As part of the Edmond de Rothschild global philanthropic network, the RCF works to create social empowerment and a more collaborative society, supporting programs in the field of higher education and promoting excellence, equal opportunity and innovation in Israel.

Elli has managed, led and developed innovative solutions to social challenges for over 15 years. He led educational programs in Israel and abroad, established the Center for Social Activism in Jerusalem, and was founder and Executive Director of Kav Hazinuk, an NGO that develops leadership and social entrepreneurship amongst youth.

Elli holds a Bachelor's Degree in Psychology from the Bar-Ilan University and an MA in Public Policy from Tel-Aviv University, Cum Laude.

Shuli Brammli-Greenberg

Shuli Brammli-Greenberg (PhD, Health Economics) is a senior researcher at the Myers-JDC Brookdale Institute and the Head of the Health Systems Management program (MHA) at the School of Public Health, Haifa University in Israel.

In recent years, her research has focused on economic aspects of patient/ doctor/ policymaker behavior and decision-making in health and health insurance markets.

During her career as an applied researcher, Shuli's main efforts have been to disseminate new knowledge and methods to assist leaders of the health care system to make informed decisions. She works closely with senior officials in the Ministries of Health and Finance and was a member of the Public Committee to Strengthen the Public Health System, led by then-Minister of Health Yael German.

Her main areas of research in the last five years have been included: Willingness to pay for the right to choose in health system, integration of public and private financing, compensation models in health systems, health insurance, disparities in the use of health system by different population groups, and waiting times as shadow prices.

Shuli also the Principal Investigator of the on-going assessment of the Israel's National Health Insurance Law and the 1995 reform of the health system.

Reinhard Busse

Prof. Reinhard Busse is Department Head for Health Care Management in the Faculty of Economics and Management at Technische Universität Berlin, Germany.

He is also a faculty member of Charité, Berlin's medical faculty, as well as Associate Head of Research Policy and Head of the Berlin hub of the European Observatory on Health Systems and Policies, a member of several scientific advisory boards as well as a regular consultant for WHO, the EU Commission, the Worldbank, OECD and other international organizations within Europe and beyond as well as national health and research institutions.

Prof. Busse's research focuses on methods and contents of comparative health system analysis (with a particular emphasis on the reforms in Germany, other social health insurance countries and central and Eastern Europe, role of EU, financing and payment mechanisms as well as disease management), health services research and health economics including cost-effectiveness analyses, and health technology assessment (HTA).

His department has been designated as a WHO Collaborating Centre for Health System Research and Management.

He is the director of the annual Observatory's summer schools in Venice and was the coordinator of the EU-funded project "EuroDRG: Diagnosis-Related Groups in Europe: towards Efficiency and Quality" (2009-2011).

Since 2011, he is Editor-in-Chief of the international peer reviewed journal Health Policy.

Professor Busse studied medicine in Marburg-Germany, Boston-USA and London-UK as well as Public Health in Hannover-Germany.

David Chinitz

Prof. David Chinitz holds a PhD in Public Policy Analysis from the University of Pennsylvania and is a Professor of Health Policy and Management at the School of Public Health of the Hebrew University and Hadassah in Jerusalem.

His research and publications are in the areas of comparative health system reform, health care priority setting, management of cancer services, mental health policy, and the impact of quality improvement programs at the level of front line staff in community and hospital settings.

He has consulted for the World Health Organization, and served as President of the International Society for Priority Setting in Health Care, and Chair of the Scientific Advisory Board of the European Health Management Association, as well as serving on the editorial advisory boards of Health Economics, Policy and Law and the Israel Journal of Health Policy Research.

Francesca Colombo

As Head of the OECD Health Division, Francesca Colombo is responsible for OECD work on health, which aims at providing internationally comparable data on health systems and applying economic analysis to health policies, advising policy makers, stakeholders and citizens on how to respond to demands for more and better health care. She works with the Director and Deputy Director of the OECD Directorate for Employment, Labour and Social Affairs to support the strategic orientations of the Secretary-General and their implementation in the area of health.

Mrs. Colombo was a Senior Health Policy Analyst in the Health Division and since November 2013 has been acting Head of the Health Division. She has led projects on the performance of health systems in OECD countries, covering a wide range of topics, including quality of health care policies, health financing and the impact of private health insurance on health systems, health workforce and the international migration of doctors and nurses. She has been responsible for OECD Asian Social and Health activities with non-member countries, working with the OECD/Korea Policy Centre. More recently, she was responsible for a major review of health care quality policies across over a dozen OECD countries. She is a leading international expert on health and care issues for elderly populations and also held responsibilities for co-ordinating OECD involvement at high-level meetings such as on diabetes and dementia.

Mrs. Colombo joined the OECD in 1999. Prior to that, she was seconded to the Ministry of Health and Labour of Guyana as Acting Head of the Planning Unit, where she was instrumental to the implementation of financing and governance reforms of the health system, and also worked at UNCTAD. Over her career, she has travelled extensively in Europe, South America and Asia, advising governments on health system policies and reforms.

Mrs. Colombo holds a MSc Development Studies from the London School of Economics and Political Science (United Kingdom) and BSc in Economics and Management from Bocconi School of Economics (Italy).

Daniël Cotlear

Dr. Daniel Cotlear is the Manager of the World Bank's Universal Health Coverage Support Program and editor of the Universal Health Coverage Studies Series which has published 24 country case studies analyzing how policy-makers around the world are implementing Universal Health Coverage (UHC).

He has held several positions within the World Bank, including as Lead Economist for the Health Nutrition and Population Unit, and as Lead Economist and Sector Leader for human development in Latin America and the Caribbean.

His most recent publications are a book (Going Universal: How 24 Developing countries are implementing UHC reforms from the Bottom up) and a paper published by LANCET (Overcoming Social Segregation in Health Care in Latin America).

Before joining the WB he was a lecturer at the Catholic University of Peru and an advisor to the Ministry of agriculture of Peru.

He holds a D.Phil. from Oxford University, and a BA from PUCP in Peru.

Nadav Davidovitch

Nadav Davidovitch, MD, MPH, PhD is an epidemiologist and public health physician, Professor and Chair, Department of Health Systems Management at the Faculty of Health Sciences and the Guilford-Glaser Faculty of Business and Management, Ben-Gurion University of the Negev in Israel and Chair, Israeli Public Health Physicians Association.

Prof. Davidovitch served as Head, Epidemiology Section, Army Health Branch and as Public Health Officer at the Central District, Public Health Services, Ministry of Health, Israel. He was a Fulbright visiting professor at the Department of Sociomedical Sciences, School of Public Health, Columbia University and a visiting professor at the School of Public Health, University of Illinois – Chicago. His current research and teaching interests include health policy, health inequities, health and immigration, vaccination policy, environmental health and public health ethics.

Prof. Davidovitch serves on several international and national committees, among them: Executive Committee, European Public Health Association; Head of Middle East Chapter, International Society for Environmental Epidemiology and Israel national advisory committee for health promotion.

Prof. Davidovitch authored or co-authored over 120 papers and book chapters, co-edited 5 volumes and books and published his work in leading medical and health policy journals, such as the New England Journal of Medicine, Lancet, Clinical Infectious Diseases, Emerging Infectious Diseases, Journal of Pediatrics, Vaccine, Social Science and Medicine and Law & Contemporary Problems.

Isabelle Durand-Zaleski

Isabelle Durand-Zaleski is a medical doctor and a Professor in Public Health.

She carried out her PhD research in economics and management at Paris IX University. She holds a Masters in Public Health from Harvard University and diploma from the Political Study Institute of Paris (Institut d'Etudes Politiques de Paris).

She has been the head of the Evaluation Department in the National Health Authority. Prof. Durand-Zaleski is currently the head of the Paris Health Economics and Health Services Research Unit.

Josep Figueras

Josep Figueras, MD, MPH, PhD (econ) is the Director of the European Observatory on Health Systems and Policies and head of the WHO European Centre on Health Policy in Brussels.

In addition to WHO, he has worked in collaboration with all major multilateral organizations such as the European Commission or the World Bank. He is member of several advisory and editorial boards and has served as advisor in more than forty countries within the European region and beyond.

He is president of the board of accreditation of APHEA; honorary fellow of the UK faculty of public health medicine, has been awarded twice the EHMA price for the best annual publication on policy and management, and in 2006 he was awarded the Andrija Stampar Medal. He has been lecturer and head of the MSc in Health Services Management at the London School of Hygiene & Tropical Medicine and he is now visiting professor at the Imperial College.

His research focuses on comparative health system and policy analysis. He is editor of the European Observatory series published by Open University Press and has published several volumes in the field of health systems analysis including Health systems, health, wealth and societal well-being. Assessing the case for investing in health systems (2011), Health professional mobility and health systems. Evidence from 17 European countries (2011), Cross-border health care in the European Union. Mapping and analysing practices and policies (2011), Health Impact Assessment (2007), Purchasing to improve performance (2005), Health Systems in Transition (2004), Social health insurance (2004), Funding health care (2002), Critical challenges for European reform (1998) and European Health Care Reform: analysis of strategies (1997).

Ronni Gamzu

Ronni Gamzu is the CEO of The Tel-Aviv Sourasky Medical Center since 2015.

He began his medical career in the hospital 25 years ago when he was 3rd year Medical student. He is a professor for Gynecology as well as associate professor in Public Health and Health & Business administration, all graduated from the Tel-Aviv University. He co-chairs the 'Physicians for Management Leadership' program at the business school at the Tel-Aviv University.

Prof. Gamzu holds in addition to MD, PhD degree in health science research and two Master degrees in Business and health Administration as well as a bachelor degree in Law.

He has completed two medical residencies, in Obstetrics and Gynecology and in Healthcare Administration.

Since 2002 he is part of the Tel-Aviv Sourasky Medical Center management, first as a deputy director for health Economics and later in 2008 became the Director of the General Hospital. In 2010 Prof Gamzu was appointed as the Director General of the Israeli Ministry of Health, where he served for four years. In 2014 he was appointed to be a Senior Health Policy Analyst in the OECD in Paris.

From 2014 he is a board member of The Citizens' Empowerment Center in Israel (CECI).

Richard H. (Rick) Glazier

Dr. Rick Glazier is a Senior Scientist and Program Lead of Primary Care and Population Health at the Institute for Clinical Evaluative Sciences (ICES) in Toronto.

He is also a Family Physician at St. Michael's Hospital and a Scientist in its Centre for Research on Inner City Health.

At the University of Toronto, Dr. Glazier is a Professor in the Department of Family and Community Medicine (DFCM), and is cross-appointed at the Dalla Lana School of Public Health.

His research focuses on primary care health services delivery models, performance measurement, health of disadvantaged populations, and improving equity in health.

Manfred S. Green

Manfred S. Green MD,PhD, Faculty of Social Welfare and Health Sciences, University of Haifa, Israel.

Prof. Manfred Green holds a BSc (Hons) in Mathematical Statistics from the University of Witwatersrand (Johannesburg), an MSc degree in Operations Research and an MBChB (MD equivalent) from the University of Cape Town, and MPH and PhD degrees in Epidemiology from the University of North Carolina at Chapel Hill. He is board specialized in public health, occupational medicine and medical administration.

He has held a number of positions including head of Public Health in the Israel Defense Forces and founding director of the Israel Center for Disease Control in the Israel Ministry of Health.

In 1996, he was promoted to the rank of full Professor (research track) at Tel-Aviv University, Sackler Faculty of Medicine, and held the Diana and Stanley Steyer Endowed Chair in the Prevention and Control of Cancer.

In 2008 he took up the position of head of the School of Public Health at the University of Haifa with the rank of full Professor (research track).

In 2015, he was appointed head of the International Program in Global Health Leadership in the School of Public Health.

Research interests include epidemiology methodology, the epidemiology of chronic diseases, emerging infectious diseases, the prevention and management of potential bioterrorism incidents and health effects of climate change.

He was one of the founders of MECIDS, a forum of Palestinian, Jordanian and Israeli professionals dealing with the control of Infectious Diseases in the Middle East.

He is a member of number of national councils and advisory committees, and heads the National Committees on the Eradication of Polio, Measles and Rubella. For a number of years he has been the chairman of the Scientific Committee of the Regional Research and Development Center in the Arab town of Kfar Kara.
He has published about 240 papers in peer-reviewed journals and several chapters in textbooks, including chapters on Bioterrorism in the Oxford Textbook of Public Health and the Oxford Textbook of Medicine.

Itamar Grotto

Prof. Itamar Grotto is the Director of the Public Health Services in the Israel Ministry of Health.

He is responsible for the operation of all preventive services and health promotion programs operated by the Israeli Ministry of Health. These activities include primary and secondary prevention programs, outbreak response, environmental health, food safety and health promotion among all health suppliers.

Prof. Grotto is also affiliated with the Public Health Department of Ben-Gurion University of the Negev. His main research activities are in the fields of infectious diseases epidemiology and health behaviors among adolescents and young adults, as well as public health policy development.

Prof. Grotto authored in more than 170 scientific publications.

Idris Guessous

Dr. Guessous is a medical doctor specialist in general internal medicine and the head of the Population Epidemiology Unit, Department of Community Medicine and Primary Care, Geneva University Hospitals (HUG), Switzerland. He is responsible for the hypertension consultation at the Division of Primary care at the HUG. Additionally, Dr. Guessous is senior researcher at the Institute of Social and Preventive Medicine, Division of Chronic Diseases, Centre Hospitalier Universitaire Vaudois (CHUV) in Lausanne, Switzerland Since 2014, he has been an Assistant Professor in the Department of Epidemiology, Rollins School of Public Health, Emory University in Atlanta, GA.

In addition to his medical training from the Faculty of Biology and Medicine, Lausanne, Switzerland, Dr. Guessous complemented a PhD in Epidemiology at Rollins School of Public Health, Emory University. Dr. Guessous completed 2 year fellowship (2007-2009) at the Centers for Disease Control and Prevention (CDC) within the National Office of Public Health Genomics.

Beside his clinical activities, he is running several population-based studies in the field of chronic disease including cardiovascular disease and cardiovascular risk factors. His research interests are on chronic disease, screening, genetics, nutrition and healthcare access. He also created a research group that uses spatial epidemiology and GIS to decipher the role of individual versus contextual factors on health and diseases in Switzerland (GIRAPH group) and is a leader in Switzerland in the research on forgoing healthcare for economic reasons.

He has authored over 100 international peer-reviewed papers and participated to several guidelines (e.g. American Cancer Society Guidelines on prostate cancer screening published in CA: A Cancer Journal for Clinicians) and consortium (e.g. European CKD Burden Consortium, Global Burden of Diseases Nutrition and Chronic Diseases Expert Group, NCD Risk Factor Collaboration) that published in several high impact factor journals such as the Lancet, BMJ, and NEJM. He is deputy editor of the Journal of General Internal Medicine (JGIM).

Dr Guessous has received several honors and awards from the Centers for Disease Control and Prevention (CDC), USA (e.g. Oak Ridge Institute for Science and Education Award; USA Department of Health and Human Services Charles C. Shepard Science Awards Nominee) and the Swiss Society of General Internal Medicine.

Eyal Gura

Mr. Gura is the Co-Founder and Chairman of Zebra Medical Vision, a next-generation medical imaging research platform that will enable scalable healthcare for the 1 billion people to join the middle class by 2020.

Eyal is an Angel investor and venture capitalist with Pitango Venture Capital, the largest venture capital fund in the Middle East. Formerly, Co-Founder: PicScout (acquired by Getty Images); PicApp (acquired by Ybrant Digital); The Gifts Project (acquired by eBay). Adviser, WebTeb.com, the leading Arabic medical portal. Member, Advisory Board, Tmura.org. Member of the Board, Latet. Founding Member, Tovanotb.org.

Eyal Gura is a faculty member at IDC's Zell Entrepreneurship Program.

In 2014 Eyal was named a Young Global Leader by the World Economic Forum. Prior to earning his MBA from the Wharton Business school, Eyal graduated his BA with the Zell Entrepreneurship Program of IDC Herzliya, where he also Co-Founded the IEC (first Israel Entrepreneurship Club) and now lectures about Entrepreneurship and Customer Development.

Mr. Gura served in the Israeli Navy Submarine Flotilla in various command positions and despite his workaholic habits, he enjoys scuba-diving, aikido and is a keen karaoke singer.

Terje P. Hagen

Terje P. Hagen, MSc, PhD, is the Head of the Department of Health Management and Health Economics, University of Oslo. Prof. Hagen additional serves as the Head of Program Committee (DEMOS) of the Norwegian Research Council.

Prof. Hagen is an established and widely published researcher. His research focus includes: Health Politics and Policy, Political Economy, Public Policy. Prof. Hagen is currently evaluating major reforms in the Norwegian Health Care systems.

Prof. Hagen works primarily with questions about the effects of different financing and organizational structures have for patients' health and how healthcare utilization in turn affects the individual's health.

Prof. Hagen earned both a Masters and Doctorate degree in Political Science from the University of Oslo. For almost 20 years, Prof. Hagen has been supervising both Master's and PhD students at the Center for Health Administration and Department of Health Management and Health Economics, at the University of Oslo.

Prof. Hagen is a member of several professional organizations including: Norwegian Political Science Association, Nordic Administrative Association, International Health Economics Association and the American Health Economics Association.

David Hunter

A graduate in political science from the University of Edinburgh, David Hunter is a Professor of Health Policy and Management, Durham University, Director of the Centre for Public Policy and Health (CPPH), School of Medicine, Pharmacy and Health, and a Wolfson Fellow in the Wolfson Research Institute for Health and Wellbeing.

He is Deputy Director of Fuse, the Centre for Translational Research in Public Health. He is a non-executive director of the National Institute for Health and Care Excellence (NICE). David also advises WHO Regional Office for Europe. CPPH was designated a WHO Collaborating Centre on Complex Health Systems Research, Knowledge and Action in March 2014.

David has published extensively on health policy and system reform. His books include The Health Debate (2008) and a second edition of this will be published in early 2016; The Public Health System in England (2010), with Linda Marks and Katherine Smith; Partnership Working in Public Health (2014) with Neil Perkins; Reforming Healthcare: What's the evidence? (2014) with Ian Greener, Barbara Harrington, Russell Mannion and Martin Powell.

David is an Honorary Member of the Faculty of Public Health and a Fellow of the Royal College of Physicians (Edinburgh).

Abraham (Avi) Israeli

Prof. Israeli is the Chief Scientist of the Ministry of Health, and the Head of the Health Policy, Health Care Management and Health Economics Department at the Hebrew University - Hadassah Faculty of Medicine. Prior to this he was the Director General of the Israel Ministry of Health (2003-2009) and the Director - General of Hadassah Medical Organization (1998 -2001).

He holds the Chair of Dr. Julien Rozan Professorship of Family Medicine and Health Promotion Chair at the Hebrew University - Hadassah Medical School, Jerusalem (since 1996) and teaches there regularly.

Prof. Israeli chaired the national committee to update the Israeli national standard basket of health services.

Prof. Israeli received his medical degree and his masters in public health from the Hadassah - Hebrew University Medical School. He completed residencies in Internal Medicine and in Health-Care Management at Hadassah University Hospital and has certifications in both specialties. He received his Master's Degree from the Sloan School of Management at MIT, Boston.

His scientific activities are related to applied, methodological and theoretical research in the fields of health policy, health care management, and the epidemiological, economic, social and cultural basis for decision-making.

His publications deal with translation of academic knowledge and inputs from the field into policy setting and decision-making processes.

Two additional key research foci are rationing / priority setting and comparative health care systems.

Charles N. Kahn III

Charles N. ("Chip") Kahn III is President and Chief Executive Officer of the Federation of American Hospitals (FAH), the national public policy organization for investor-owned hospitals, a position that he has held since June 2001. He is recognized nationally as one of the country's most insightful and articulate experts on health policy, Medicare payment, health care financing, and health coverage.

Currently, Mr. Kahn represents the FAH as a member of the Measure Applications Partnership (MAP) Coordinating Committee of the National Quality Forum (NQF), a multi-stakeholder private-public partnership for developing and implementing a national strategy for health care quality measurement. He also is a former member of the NQF's Governing Board. Previously, Mr. Kahn served as a principal of the former Hospital Quality Alliance (HQA), a private-public partnership that he helped to initiate, and as a Commissioner of the American Health Information Community, a former federal policy advisory panel responsible for advising then-HHS Secretary Michael Leavitt about the diffusion of health information technology.

Before coming to the FAH, Mr. Kahn was one of the nation's top public policy leaders for the health insurance industry.

Mr. Kahn has a long and distinguished career as a professional staff person in the United States Senate and House of Representatives, specializing in health policy issues.

Mr. Kahn taught health policy at The Johns Hopkins University, The George Washington University, and Tulane University and writes about health care financing and quality measurement policy.

In 2009, Mr. Kahn co-chaired a conference entitled "Pay for Performance - Can it Improve the Quality and Value of Israeli Health Care?," sponsored by the Israel National Institute for Health Policy and Health Services.

Mr. Kahn holds a Masters of Public Health (M.P.H.) degree from Tulane University's School of Public Health and Tropical Medicine. Mr. Kahn received a Bachelor of Arts degree from The Johns Hopkins University.

Ichiro Kawachi

Ichiro Kawachi, MB.Ch.B., Ph.D., is John L. Loeb and Frances Lehman Loeb Professor of Social Epidemiology, and Chair of the Social & Behavioral Sciences Department at the Harvard T.H. Chan School of Public Health.

Prof. Kawachi received both his medical degree and Ph.D. (in epidemiology) from the University of Otago, New Zealand.

He has taught at the Harvard School of Public Health since 1992.

Kawachi is the co-editor (with Lisa Berkman) of the first textbook on Social Epidemiology, published by Oxford University Press in 2000 (new & revised edition published in 2014). His other books include Neighborhoods and Health (Oxford University Press, 2003); Globalization and Health (Oxford University Press, 2006); Social Capital and Health (Springer, 2008); the Oxford Handbook of Public Health Practice co=edited with Charles Guest and others (Oxford University Press, 2013), and Behavioral Economics and Public Health co-edited with Christina Roberto (Oxford University Press, 2015).

His current project is focused on the longitudinal impacts of community social cohesion/social capital on functional recovery after the March 11, 2011 Great Eastern Japan earthquake and tsunami. In 2013, he launched a massive, open online course (MOOC) through HarvardX called "Health and Society" (PHx 201), in which 32,000 participants registered from throughout the world. Kawachi is the Co-Editor in Chief (with S.V. Subramanian) of the international journal Social Science & Medicine. He is an elected member of the Institute of Medicine of the US National Academy of Sciences.

Keidar Nir

Senior Deputy Director General for Strategic and Economic Planning in the Israeli Ministry of Health. In this role, Nir is responsible for the strategic planning of the Israeli Health System and leads the Long Term Care reform in Israel.

Nir is working in the Moh since 2006 and took a leading part in the dental reform in 2010.

Nir lives in Jerusalem and holds a MA in Public Policy from the Hebrew University of Jerusalem, a MA in Social Sciences and Humanitarian Affairs from La-Sapienza University Italy and a BA in PPE from the Hebrew University of Jerusalem.

Ehud Kokia

Prof. Ehud Kokia, MD, MHA is the president of the Israeli Academic College in Ramat Gan. He is a past Director General of the Hadassah Medical Organization. Prior to his appointment at Hadassah, Prof. Kokia was the CEO of Maccabi Healthcare Services. Prof. Kokia spent 17 years at Maccabi, beginning at the district level and having served in several key positions within the organization.

Prof. Kokia received his MD degree in 1974 from the Sackler School of Medicine, Tel Aviv University. Following a rotating internship at Sheba Medical Center at Tel Hashomer, Prof. Kokia served as a physician in the Israel Defense Forces. Upon completing his army service, Prof. Kokia did his residency in the Department of OB-GYN at Sheba Medical Center. He then returned to active military duty as a Commander in the Israeli Air Force.

Prof. Kokia is a graduate of the US Naval Flight Surgeon Course at the Naval Aeromedical Institution (NAMI) in Pensacola, Florida. Prof. Kokia was a research fellow at the University of Maryland at Baltimore's Department of OB & GYN in the Division of Reproductive Endocrinology.

In 2001, he earned his Masters' of Health Administration from Ben-Gurion University of the Negev.

Prof. Kokia has authored more than 75 scientific publications.

Margaret E. Kruk

Dr. Margaret E. Kruk is Associate Professor of Global Health at Harvard T.H. Chan School of Public Health. Dr. Kruk's research generates evidence for improved health system quality and accountability in low - and middle-income countries. Her work focuses on the intersection of health care delivery and population expectations for health services with the aim of making health systems more responsive to users. In collaboration with academic colleagues and governments in low-income countries, she studies health care utilization and quality, maternal health, and population preferences for health service delivery.

Dr. Kruk is also interested in the development of novel evaluation methods for assessing the effectiveness of complex interventions and health system reforms.

She has worked in Tanzania, Ethiopia, Liberia, Mozambique, Uganda, Zambia, Ghana, and Kenya.

Dr. Kruk served as Commissioner on the Lancet Global Health 2035 Commission on Investing in Health and currently serves on the Institute of Medicine Committee on Health System Strengthening.

She is an editor of the Essential Surgery volume of the Disease Control Priorities Project, 3rd Edition.

Prior to joining Harvard, Dr. Kruk was Associate Professor of Health Management and Policy and Director of the Better Health Systems Initiative at the Columbia University Mailman School of Public Health. She was previously Policy Advisor for Health at the United Nations Millennium Project, an advisory body to the UN Secretary-General on implementing the Millennium Development Goals.

She holds an MD degree from McMaster University and an MPH from Harvard University.

Boaz Lev

Boaz Lev MD, MHA, graduated Tel-Aviv University, Sackler School of Medicine (Cum Laude) in 1973.

He is Board Certified in Medicine, Infectious Diseases and Health Administration (Israel). Dr. Lev completed clinical fellowships in Infectious Diseases and Geographic Medicine (Tufts - Boston) and Pain Management (University of Minnesota, Hennepin Medical Center).

Dr. Lev also holds a Master's of Health Administration, from the Recanati School of Business Administration, Tel-Aviv University.

Dr. Lev served in the Israeli Defense Forces until 1994 and ended the service after serving as Deputy Surgeon General in the Medical Corps.

In 1994 he joined the Israel Ministry of Health (MOH) serving as Associate Director General, in charge of the Health Division.

Between the years 2000-2003, Dr. Lev served as the Director General of the MOH, following which he resumed his former service as Associate Director General and Head of the Health Division of the MOH.

Currently Dr. Lev serves as the Ombudsman for the Medical Professions of the Ministry of Health.

He has been leading the National Steering Committee for the Regulation of Medical Cannabis and was the head of the National Inter-ministerial Task Force concerning suicide prevention.

Dr. Lev initiated the Israel 2020 Health Vision, and is heading "Digital Health Initiative" as part of the governmental "Digital Israel" program.

Dr. Lev has a special interest in Medical Ethics and represents the MOH in the National Bioethics Council.

Chezy Levy

Chezy Levy – M.D., M.H.A. C.E.O. & Medical Director

Academic Education

MHA in Health Administration, Ben-Gurion University of the Negev, Israel.

2002 MPA in Political Science, School of Political Sciences, Haifa University, Israel.

Employment

1997-2001	Chief Medical Officer of the Northern Command, IDF.
2003-2007	Chief Medical Officer, IDF.
2007-2012	Senior Executive and Head of the Ministry of health Medical Division, MOH.
2012	CEO and Medical Director, Barzilai Medical Center, Ashkelon affiliated to the Faculty of Health Sciences, Ben-Gurion University of The Negev, Israel.

Christian Lovis

Christian Lovis is a Professor of Clinical Informatics at the University of Geneva and leads the Division of Medical Information Sciences at the Geneva University Hospitals.

He is a medical doctor trained in Internal Medicine with special emphasis on emergency medicine, is graduated in public health from the University of Washington, Seattle, USA.

In parallel to medicine, he studied biomedical informatics at the University of Geneva, focusing on clinical information systems and medical semantics.

Prof. Lovis has led the development of the computerized patient record for the university and public health sector of Geneva.

Christian is the author or co-authors more than 150 publications focusing on semantics and interoperability in health Big Data; Clinical Information Systems and Advanced Human-Machine Interfaces, including Bio-Captors.

He is editorial board member of major peer-reviewed journals in medical informatics, such as the Journal of the American Medical Informatics Association (JAMIA), PLOS One, the Journal of Medical Internet Research (JMIR), and Applied Clinical Informatics (ACI).

Christian is the European representative and vice-chair of the board of managers of HIMSS Global and member of the board of innovation of GS1, co-chair of the Architecture and standard working group of e-Health-Suisse.

Prof. Lovis is also the co-founder of three startups.

Orly Manor

Prof. Manor is the Chairwoman of the Board of the Israel National Institute for Health Policy Research, 2014 and Professor of Biostatistics at the Braun School of Public Health and Community Medicine of the Hebrew University – Hadassah Medical Organization in Jerusalem.

Prof. Manor is a former Director of the School. Prof. Manor received her first and second degrees in Statistics from the Hebrew University and her PhD in Statistics from Stockholm University. Currently Prof. Manor leads the Israel National Program for Quality Indicators in Community Healthcare. Prof. Manor is the founder of the Israel Longitudinal Mortality Studies. Prof. Manor's research interests include health inequalities, the developmental origin of adult disease and quality of care. In 2012, Prof. Manor was the recipient of The Hebrew University Rector's award for outstanding faculty member.

Martin McKee

Prof. Martin McKee is a Professor of European Public Health at the London School of Hygiene and Tropical Medicine.

He was educated at the Royal Belfast Academical Institution and trained as a doctor at Queen's University Belfast and specialized initially in internal medicine at Belfast City Hospital before moving into public health.

Prof. McKee created the European Centre on Health of Societies in Transition, a WHO Collaborating Centre comprising a team of researchers working primarily on health and health policy in Central and Eastern Europe and the former Soviet Union. He is also research director of the European Observatory on Health Systems and Policies, a partnership of universities, national and regional governments, and international agencies and President-elect of the European Public Health Association.

He has published over 830 scientific papers and 44 books, was an editor of the European Journal of Public Health for 15 years and is a member of numerous editorial boards, and an editorial consultant to The Lancet.

Yoseph A. Mekori

Dr. Mekori received his medical education at the Sackler School of Medicine, Tel-Aviv University (TAU), earning the M.D. degree magna cum laude in 1975. He completed a residency in internal medicine with honors in 1981 at the TAU - affiliated Meir Medical Center, Kfar Saba and moved to Denevr CO for a clinical fellowship in allergy and clinical immunology at the University of Colorado Health Sciences Center, followed by a research fellowship in experimental allergy in the department of pathology at the Beth Israel Hospital, Harvard Medical School, Boston, MA.

Dr. Mekori 's research focuses on mast cell function in non-allergic inflammatory processes.

In 1986, he established and headed the Division of Allergy and Clinical immunology at Meir and in 1990 was appointed Chairman of Medicine in that hospital.

In 1993 he spent a year as a Visiting Scientist in the Laboratory of Allergic Diseases at the NIH, Bethesda, MD. A fellow of the American Academy of Asthma Allergy and Immunology.

Dr. Mekori maintains membership in numerous professional organizations, including the European Academy of Allergy and Immunology and the Collegium Internationale Allergologicum.

He served as the President of the Israeli Society of Allergy and Immunology and member of several international committees in this field.

At TAU, Dr. Mekori became Professor of Medicine in 1995, incumbent of the Argentina Chair of Allergic Diseases, a former head of the TAU-affiliated Felsenstein Medical Research Center.

From 2002 Dr. Mekori served as Vice Dean of the Sackler Faculty of Medicine and in 2006 was appointed as Dean of that Faculty to serve in this position until 2014.

In 2014, was appointed as a visiting professor at Stanford School of Medicine and Medical Center.

Currently, Dr. Mekori heads the Herbert Mast Cell Disorders Center at Meir Medical Center.

Main research interests include: Pathogenesis of the allergic inflammation; mast cell physiology; mast cell T-cell interaction; inflammatory markers in atherosclerotic cardio-vascular diseases, medical education.

Shlomo Mor-Yosef

Prof. Shlomo Mor-Yosef is the Director General of Bituach Leumi, National Insurance Institute of Israel. Prof. Mor-Yosef was the Chairman of the Board of the Israel National Institute for Health Policy Research between the years 2008-2014.

In 2011, Prof. Mor-Yosef completed his tenure as Director General of the Hadassah Medical Organization (HMO) in Jerusalem. His eleven years as Director General were the crowning glory of his 38 years at Hadassah, from his first year of medical school until 2011, with just a few brief exceptions.

Prof. Mor-Yosef graduated from the Hebrew University - Hadassah Medical School in 1980, completing his obstetrics and gynecology specialization at Hadassah. He served as a senior physician in the Department of Obstetrics and Gynecology at Hadassah with special focus on cervical cancer.

From 1988-89 Prof. Mor-Yosef completed a subspecialty in Gynecological Oncology at Queen Elizabeth Hospital, Gateshead, England.

In 1990, Prof. Mor-Yosef assumed the position of Deputy Director of the Hadassah Ein Kerem Hospital, following which he studied at the Harvard University JFK School of Government where he received his Master's Degree in Public Administration. In 1994, he assumed the post of Deputy Director General of HMO and then served as Director of Hadassah Ein Kerem. Prior to assuming his post as Director General of HMO, Prof. Mor-Yosef served as Director General of the Soroka Medical Center of the Negev.

Prof. Mor-Yosef has authored more than 100 scientific publications and has served on the faculty of several universities and boards of various organizations and companies.

From 2001-2012, Prof. Mor-Yosef served as Chairman of Hadasit, HMO's Technology Transfer Company. Among his present responsibilities, Prof. Mor-Yosef serves as Chairman of the Public Committee for Fertility and Birth appointed by the Director General of the Ministry of Health to recommend legislation in the field of fertility and birth in Israel; and Member of the Master Plan for Transportation Committee of the Association for Planning, Development & Urban Preservation - Jerusalem.

Yaron Neudorfer

Yaron Neudorfer is the founder and CEO of Social Finance Israel.

He previously served for seven years as CFO of The Jewish Agency, the largest not-for-profit organization in the country, overseeing a budget of more than $400 million and responsible for all fiscal, financial and budgetary considerations of the organization and its subsidiary companies (some are for-profit). Prior to joining The Jewish Agency, Yaron served for 12 years in various positions in the Israeli Ministry of Finance, overseeing projects within social areas such as healthcare and education.

In his final position at the Ministry of Finance, he was stationed in New York City, representing the Israeli Government vis-à-vis credit rating agencies and implementing the borrowing program of the State of Israel in the Western hemisphere, through various vehicles including retail bonds (Israel Bonds organization), sovereign credit and loan guarantees.

Yaron holds his BA in Accounting and Economics from the Hebrew University in Jerusalem, and his Master in Public Administration from Harvard Kennedy School of Government.

Itamar Offer

Itamar Offer MD MPA, is an Israeli Board Certified Specialist in Pediatrics and in Health Management.

For the last 17 years, Dr. Offer has held senior management positions in the Israeli healthcare system, both public and private hospital setups, as deputy director at Schneider Children's Medical center and CEO at Herzliya Medical Center (current), and in community setups as Medical Director of the Tel-Aviv district at Clalit Health Services.

Dr. Offer spent 4 years in India heading a hospital entrepreneurship project.

Dr. Offer has an MD degree from Tel-Aviv University, Sackler School of Medicine and a Master's degree in Public Administration from Harvard University, as a Wexner Fellow.

Ora Paltiel

Prof. Ora Paltiel is the Director of the Braun School of Public Health and Community Medicine at Hadassah-Hebrew University, Jerusalem. She was born in Canada, and trained in Medicine and in Epidemiology at McGill University, Montreal Canada. Since 1992, she has been a Senior Physician in the Hematology Department at Hadassah and a teacher and investigator at the Braun. Since 2012 she has been the Director of Hadassah's Center for Research in Clinical Epidemiology. From 2013-2016 she directed the international Masters in Public Health program at the Braun School. She is the author of over 125 peer reviewed publications.

Her research interests include cancer epidemiology, especially as regards the lymphomas. She leads a large research effort on non-Hodgkin lymphoma among Israelis and Palestinians focusing on genetic, viral and environmental risk factors. Dr. Paltiel is a co-investigator in the large Jerusalem Perinatal Cohort study. She is a member of international research consortia on Lymphoma (InterLYMPH) and on childhood cancer (I4C). She has been a visiting scholar at the Memorial Sloan Kettering Cancer in New York, and at the National Cancer Institute in Bethesda, Md. She serves as a member of the Executive Committee for the Israeli Quality Indicators Program in Community Health and is a member of the Hebrew University Center of Excellence in Environmental Research in Agriculture and Health (HUCEAH).

Dr. Paltiel is a committed educator and has won several teaching awards. She teaches Masters' level courses on Cancer Epidemiology, Clinical Epidemiology, Research Forum and Clinical Trials, as well as Epidemiology and Hematology for medical students. She runs short courses on clinical research methodology and clinical trials ethics throughout Israel, and is the academic coordinator for GCP training for the Israel Medical association. She has supervised scores of MD, Masters and PhD students, including students from Israel, the West Bank, Uganda, Kenya, Tanzania, Nigeria, Ethiopia, Macedonia, Russia and Albania.

Avi Porath

Prof. Porath is currently the Chief Physician of Maccabi Helthcare Services, the second largest health plan in Israel. Previously he served as the Medical Director of Maccabi Healthcare Services.

Prof. Porath got his MD degree from the Hebrew University in Jerusalem and is Board Certified in Internal Medicine. Prof. Porath got his MPH degree in epidemiology from the University of North Carolina at Chapel Hill, USA.

Prof. Porath served as director of Medical Policy at Clalit Health Services, and director of the department of Medicine at the Soroka Medical Center, which is affiliated with the Faculty of Health Sciences at the Ben-Gurion University of the Negev.

Prof. Porath's holds a degree of Full Professor of Medicine at the Ben-Gurion University of the Negev and member of its epidemiology department.

Prof. Porath is the founder of the Israel Society of Quality in Health Care and was member of several national committees on health. He founded and directed the National Program of Quality Measures in the Community for the Israel Ministry of Health.

Prof. Porath's areas of research include quality in health care, and implementation of evidence into practice.

Eliezer Rabinovici

Prof. Eliezer Rabinovici is the head of the Israeli Committee for High Energy Physics, and has been elected Vice President of the European Organization for Nuclear Research's Board (CERN). Headquartered in Geneva, CERN is the largest particle physics laboratory in the world.

Prof. Rabinovici directed the Institute of Advanced Studies of the Hebrew University of Jerusalem, an institution linked to the UBIAS network, which brings together 34 IASs based in universities around the world.

He is a member of the Senior Committee of the Intercontinental Academia, a project proposed by him with the objective to promote scientific exchange between generations, disciplines, cultures and continents.

He is a professor for Particle Physics at the Hebrew University in Jerusalem, where he holds the Leon H. and Ada G. Miller Chair of Science. He is also a former chairman of the Racah Institute of Physics and has chaired numerous committees in the past, including Professors Union and Gender Equality at the same institution.

Aaron Reeves

Aaron Reeves is an Associate Professorial Research Fellow in the International Inequalities Institute at the London School of Economics and Political Science. He is also an associate member of the Department of Sociology and Nuffield College at Oxford University.

Dr. Reeves obtained his PhD from the Institute for Social and Economic Research at the University of Essex and he has been a postdoctoral researcher at the University of Cambridge and a Senior Research Fellow at the University of Oxford.

He is a sociologist with interests in public health, culture, and political economy. His work involves examining the causes and consequences of social, economic, and cultural inequity in Europe and North America.

Dr. Reeves has published widely on the political economy of health and health inequalities and his interests how social security, pensions, and wage setting affect the health of societies and specific groups within those societies.

Walter Ricciardi

Prof. Walter Ricciardi is the President of the Italian National Institute of Health (Istituto Superiore di Sanità) since September 2015.

He is a Professor of Hygiene and Public Health at the Catholic University of the Sacred Heart in Rome.

Since 1993 he has held a number of key positions including President of the European Public Health Association, and has undertaken work with the World Health Organisation and the European Commission.

He has been a Fellow of the Faculty of Public Health Medicine, Royal Colleges of Physicians of the United Kingdom and a Member of the Executive Board of the National Board of Medical Examiners of the United States of America.

In 2010 he has been elected President of the European Public Health Association (2010-2012) and President of the Public Health Section of the Higher Health Council of Italy and he has been re-elected for a second term in both institutions (2012-2014).

In 2013 he has been appointed Member of the Expert Panel on Investing in Health of the European Commission (2013-2015).

He is Editor of the European Journal of Public Health, of the Oxford Handbook of Public Health Practice and Founding Editor of the Italian Journal of Public Health and of Epidemiology Biostatistics and Public Health.

Victor G. Rodwin

Victor G. Rodwin is a Professor of Health Policy and Management, at the Wagner School of Public Service, New York University and Co-Director (with Michael K. Gusmano) of the World Cities Project, a joint venture of Wagner/NYU, the Hastings Center, and the Butler Columbia Aging Center.

He teaches courses on community health and medical care, comparative analysis of health care systems and international perspectives on health system performance and reform.

Victor Rodwin was Visiting Professor at the Conservatoire National des Arts et Métiers, Ecole Pasteur/CNAM de Santé Publique during his sabbatical leave in 2012-2013.

Prof. Rodwin was awarded the Fulbright-Tocqueville Distinguished Chair during the Spring semester of 2010 while he was based at the University of Paris-Orsay. In 2000, he was the recipient of a three-year Robert Wood Johnson Foundation Health Policy Investigator Award on "Megacities and Health: New York, London, Paris and Tokyo."

His research on this theme led to the establishment of the World Cities Project (WCP), which focuses on neighborhood aging, population health and the health care systems in New York, London, Paris, Tokyo and Hong Kong, and among neighborhoods within these world cities.

Professor Rodwin is the author of numerous articles and books, and has been featured in several leading health journals.

Bruce Rosen

Dr. Bruce Rosen is the director of the Smokler Center for Health Policy Research – a division of the Myers-JDC-Brookdale Institute. His recent research foci have included the Israeli mental health reform, efforts to monitor and improve the quality of care, health information exchanges, and the cross-national flow of health policy innovations. An important component of his work involves promoting linkages between research and health policy development.

Dr. Rosen is the lead author of the European Observatory's country report for Israel and The Commonwealth Fund's profile of the Israeli health care system. He recently co-edited a World Scientific book entitled "Accountability and Responsibility in Health Care: Issues in Addressing an Emerging Global Challenge", which combined conceptual contributions from leading international scholars with local reports on how eight different health systems are addressing the accountability/responsibility challenge.

Dr. Rosen is also co-editor of the Israel Journal of Health Policy Research, which seeks to promote intensive intellectual interactions between scholars from Israel and their counterparts from around the world.

As someone who spent the first half of his life in the U.S. and the second half in Israel, Dr. Rosen has always enjoyed facilitating cross-national learning opportunities between the two countries. In recent years, he has come to see that he can also be helpful in creating bridges with health systems in other countries as well.

Dr. Rosen holds a B.A. in Economics from Harvard College and a Doctorate in Health Policy from the Harvard School of Public Health.

Siegal Sadetzki

Main fields of research – cancer epidemiology and ionizing & non-ionizing radiation effects.

Academic background – graduated from the Technion Medical School in Israel, where she received her B.Sc and MD degrees (1989). In 1994 she completed her MPH at the Hebrew University School of Public Health.

Board certified in Epidemiology and Public Health. Associate professor in the Department of Epidemiology and Preventive Medicine, Sackler Faculty of Medicine, Tel-Aviv University, published more than 100 peer reviewed articles.
Professional positions and activities – has been the Director of the Cancer and Radiation Epidemiology Unit at the Gertner Institute (in the Chaim Sheba Medical Center) since 2000.

Serves as the National Principal Investigator of the "Tinea Capitis" studies in Israel (since 2001). These studies focus on late radiation effects of ionizing radiation, with particular emphasis on implementation of results through legislation and public health activities. Since January 2013, she serves as the Director of the Israeli National Information Center for Non-Ionizing Radiation.

Serves as an advisor to the Minister of Health and the Director General of the Ministry of Health in subjects that relate to health policy and decision making in her fields of expertise. She is involved in several national and international committees (e.g. the National Oncology Advisory Board, the National Council for Imaging, the National Council of Health, the Israeli Ministry of Health representative in the International Advisory Committee of the WHO International EMF Project).

Main research – has vast experience in leading national epidemiological studies e.g. the Tinea Capitis Studies which aim to detect the association between childhood exposure to ionizing radiation and various health outcomes. These include cancer & tumor development; mortality; transgenerational effects of parental exposure; fertility & hormonal problems; dental & periodontal diseases; early cataract; mental & cognitive function; CVA and atherosclerosis; diabetes and other chronic diseases. She also participates in several international studies (e.g. the "INTERPHONE", the "MOBIKIDS" and the GERoNiMO studies (funded by the EU) aiming to assess the health impacts of communication technologies; the GLIOGENE and the GICC studies aiming to identify the genetic background of familial and sporadic glioma (funded by the NIH).

Richard B. Saltman

Richard B. Saltman is a Professor of Health Policy and Management at the Emory University School of Public Health in Atlanta, Georgia.

He also has been involved with the European Observatory on Health Systems and Policies in Brussels, since its inception in 1978. He is an Adjunct Professor of Political Science at Emory University, a Visiting Professor at the London School of Economics and Political Science, and Visiting Professor at the Braun School of Public Health at the Hebrew University in Jerusalem. From 1991 to 1994, he was Director of the Department of Health Policy and Management at Emory. He holds a doctorate in political science from Stanford University.

rof. Saltman has published 15 books and over 100 articles on a wide variety of health policy topics, particularly on the structure and behavior of European health care systems, and his work has been widely translated. In 1987 and again in 1999, he won the European Healthcare Management Association's annual prize for the best publication in health policy and management in Europe. His volumes for the European Observatory book series published by McGraw-Hill Education have been short-listed for the Baxter Prize by the European Healthcare Management Association in 2002, 2004 and 2006.

Yair C. Schindel

Yair Schindel, MD, MBA, is the CEO of the Israeli government's "Digital Israel" National Bureau at the Prime Minister's Office. The bureau is in charge of the strategic planning and implementation of a national cross-ministry program to upgrade all digital services and infra-structures in the Israeli public sphere.

Prior to Digital Israel, Dr. Schindel was the CEO of START-UP NATION CENTRAL (www.startupnationcentral.org), a non-profit aimed at accelerating Israeli innovation and entrepreneurship through deeper connections and co-innovation between Israel and the world. The goals of SNC include driving economic prosperity through innovation, as well as connecting with world thought leaders to collaborate with the Israeli hub for global innovation.

Prior to SNC Dr. Schindel was Co-founder and CEO of MAOZ (www.maoz-il.org), a non-profit he co-founded along with American and Israeli investors. In partnership with Harvard University, IDC Herzliya, Begin Center & Rabin Center, MAOZ is focused on developing senior leadership for the Israeli public & social sectors. Prior to MAOZ, Dr. Schindel served as Vice President with OmniGuide Inc. (www.omni-guide.com).

Dr. Schindel spent 6 years co-building the Massachusetts based MIT start-up, which invented and is commercializing the world's most precise optical laser fibers used as scalpels for minimally invasive surgery. OmniGuide operates in the fields of Neurosurgery, Otolaryngology, Gynecology and Urology. The privately held company is profitable selling over $30MM annually, employing ~150 employees in the US and Israel and growing top line at 20-30% annually. Dr. Schindel managed OmniGuide's clinical, marketing & business development activities for 5 years and then managed the company's international expansion into 10 countries in Europe, 2 in the Arab speaking Middle East and 2 in Australia & New-Zealand. To date, OmniGuide's technology treated over 100,000 cancer patients successfully worldwide.

Prior to OmniGuide Dr. Schindel served as a Combat Medical Officer and then Chief Medical Officer with the IDF NAVY SEALS (Shayetet 13). Yair spent a total of 5 years with IDF Special-Forces. In 2003 he was awarded an IDF Medal of Honor for saving the life of a wounded teammate under fire.

Dr. Schindel earned his MBA from Harvard Business School in Boston/US and his BSc and MD degrees from the Goldman Medical School at Ben-Gurion University in Beer-Sheba, Israel. He is married and a father of three.

Stephen C. Schoenbaum

Since the beginning of 2011, Stephen C. Schoenbaum, MD, MPH, has been Special Advisor to the President of the Josiah Macy Jr. Foundation which fosters innovations in medical and inter-professional (e.g., physicians and nurses) education.

From 2000-2010, Dr. Schoenbaum was Executive Vice President for Programs at The Commonwealth Fund and Executive Director of its Commission on a High Performance Health System.

From 1993-1999, Dr. Schoenbaum was the medical director and then president of Harvard Pilgrim Health Care of New England, a mixed model HMO delivery system in Providence, RI. Prior to that, from 1981-1993, he was Deputy Medical Director at Harvard Community Health Plan in the Boston area, where his roles included developing specialty services, disease management programs, clinical guidelines, and enhancing the Plan's computerized clinical information systems. Nationally, he also played a significant role in the development of HEDIS (the Healthcare Effectiveness Data and Information Set).

In his early career he was trained as an epidemiologist at the Centers for Disease Control, became an infectious diseases specialist, and was a member of the Department of Medicine at what is now Brigham and Women's Hospital and became Associate Professor of Medicine at Harvard Medical School. At Harvard Community Health Plan, he practiced general internal medicine.

He is now a Lecturer in the Department of Population Medicine (formerly Ambulatory Care and Prevention) at Harvard Medical School, a department he helped to found; Adjunct Professor of Healthcare Leadership at Brown University; and the author of 170 professional publications. He was vice-chairman of the board of the former Picker Institute; former president of the board of the American College of Physician Executives; a longstanding member, now chair, of the International Academic Review Committee of the Joyce and Irving Goldman Medical School, Ben-Gurion University, Beer Sheva, Israel; and an honorary fellow of the Royal College of Physicians.

Ari Shamiss

Prof. Ari Shamiss is the Director of Sheba General Hospital, a 1,400 bed Acute Care Medical Center in Israel.

Prof. Shamiss holds M.D from the Technion Institute and MPA from Harvard University.

He is certified in Internal Medicine, Hypertension and Healthcare Management and he is a Professor in Tel-Aviv University on these disciplines with more than 60 published scientific papers.

Prof. Shamiss was the Surgeon General for the Israel Air Force (Col. Ret.) and the Director of its Aeromedical Institute. He is a graduate in excellence, of the US Navy Aerospace Medical Institute.

Prof. Shamiss is involved in numerous global business projects including Healthcare Technologies, Healthcare Management Services and Infrastructure, Investment Consultancy, Healthcare Information Technology, Homeland Security, and Emergency Preparedness.

Patricia Shaw

Prof. Patricia Shaw is a consultant and educator with 30 years experience of working with social and institutional change in international, public and private settings. With an interdisciplinary background in Physics, Psychology, Politics and Performing Arts, her work is primarily informed by the field of complexity studies brought to bear on the political and cultural patterns sustained and changed in everyday communicative activity.

Patricia is a Visiting Professor at the Business School, University of Hertfordshire where she helped to found the Complexity and Management Centre in 2000. The centre developed one of the first professional doctorate programmes in the UK for those wishing to inquire into complexity approaches to leading change.

She is also a Fellow of Schumacher College, an independent centre for studies in ecological sustainability and a Fellow of Glasgow School Art, where she is supporting a doctoral programme in design innovation for the Creative Campus of the Highlands and Islands.

Prof. Shaw lives in both England and France.

Amir Shmueli

Prof. Amir Shmueli received his MA and Ph.D in economics from the Hebrew University, where he currently serves as a professor of health economics. He served as a visiting professor at Yale University, University of Technology Sydney, Paris Dauphine and Bologna.

His research has focused on risk adjustment in health insurance markets, equity, solidarity and inequality in health, and technology assessment in medicine and public health.

He has served as a member of the Israeli Public Committee for the Adoption of New Technologies during 2006-2007.

Amir has been intensively involved both in Israeli health policy decisions, and in global research networks. He was a member of the Stanford Center for Health Policy's global projects TECH and GHP, and is one of the founders of the Risk Adjustment Network (RAN) in 2000, a network focusing on comparative research of competitive national health insurance in Europe, Israel, Australia, South Africa and the USA.

Tamy Shohat

Tamy Shohat, MD, MPH, is the Director of the Israel Center for Disease Control (ICDC) since January 2008.

From 20012-2015, The Head of the Epidemiology Department, School of Public Health, Tel-Aviv University.

From 2004-2007, Prof. Shohat acted as the Tel-Aviv District Health Officer in the Ministry of Health. Before that, she was the Deputy of the Tel-Aviv District Health Officer in the Tel - Aviv District Health Office and the Deputy Director in the ICDC. Back in 1994 she was one of the founders of the ICDC.

During 1983-2003, Prof. Shohat held various positions in the Israeli Defense Force (IDF), including the Head of the Epidemiology Unit (1989-1991) in the Army Health Branch. During this time period, she also completed a fellowship in Medical Genetics (1986-1989) in Cedars-Sinai Medical Center, Los-Angeles, California, where she later had a position of a Visiting Scientist (1991-1992).

Prof. Shohat received her MD degree cum laude from the Tel-Aviv University and her MPH degree from the Hebrew University School of Public Health.

Prof. Shohat main areas of interest are establishing data sets and registries for non-communicable diseases, trends in health behaviors, and survey methods for communicable diseases. Under her supervision some major registries were established i.e the national Diabetes registry, registry of cases of CVA and the national bariatric surgeries.

Lisa Simpson

Dr. Lisa Simpson is the president and chief executive officer of AcademyHealth. A nationally recognized health policy researcher and pediatrician, she is a passionate advocate for the translation of research into policy and practice. Her research focuses on improving the performance of the health care system and includes studies of the quality and safety of care, health and health care disparities and the health policy and system response to childhood obesity.

Before joining AcademyHealth, Dr. Simpson was director of the Child Policy Research Center at Cincinnati Children's Hospital Medical Center and professor of pediatrics in the Division of Health Policy and Clinical Effectiveness, Department of Pediatrics, University of Cincinnati. She served as the Deputy Director of the Agency for Healthcare Research and Quality from 1996 to 2002. Dr. Simpson serves on the Robert Wood Johnson Clinical Scholars Program National Advisory Council, and the Editorial boards for the Journal of Comparative Effectiveness Research and Frontiers in Public Health Systems and Services Research.

Dr. Simpson earned her undergraduate and medical degrees at Trinity College (Dublin, Ireland), a master's in public health at the University of Hawaii, and completed a post-doctoral fellowship in health services research and health policy at the University of California, San Francisco.

She was awarded an honorary Doctor of Science degree by the Georgetown University School of Nursing and Health Studies in 2013.

Peter C. Smith

Peter C. Smith is an Emeritus Professor of Health Policy at Imperial College London. He is a mathematics graduate from the University of Oxford, and started his academic career in the public health department at the University of Cambridge.

He has worked and published in a number of disciplinary settings, including statistics, operational research and accountancy. However, his main work has been in the economics of health and the broader public services, and was a previous Director of the Centre for Health Economics at the University of York.

At Imperial he launched and co-directed the Centre for Health Policy in the Institute of Global Health Innovation. Peter has acted in numerous UK governmental advisory capacities.

He has also advised many overseas governments and international agencies, including the World Health Organization, the International Monetary Fund, the World Bank, the European Commission and the Organization for Economic Cooperation and Development.

He continues to research actively on economic aspects of global health. Current interests include: health system performance assessment, with a particular focus on international comparison; measuring and improving health system productivity; and universal health coverage.

He has published widely on these and related topics, including 12 books and over 150 peer-reviewed journal papers and ten books.

Juha Teperi

Juha Teperi was trained as a medical doctor, graduating at the University of Helsinki in 1988. In the early 1990's he completed his Ph.D in the area of epidemiology applied in health services research, after which he worked as a researcher both in Finland and in the UK. For ten years (1997-2007).

Dr. Teperi held various senior management positions as a unit or division director in STAKES (National Research and Development Centre for Welfare and Health) in Helsinki. In August 2007, he moved to the national Ministry of Social Affairs and Health, in order to head the first national innovation programme in health and social care. In 2011, he moved to Japan and worked as the director of the R& D Unit of the Sendai-Finland Wellbeing Center, facilitating new solutions to aging societies. Since January 2014, Dr Teperi has worked as the Dean of the School of Health Sciences, University of Tampere.

During his career, Dr. Teperi has had numerous advisory assignments in national policy processes. Examples include membership in National Board of Public Health and working groups designing national reforms on health and social care. In addition, Dr Teperi was a member in a working group preparing national innovation strategy, which was chaired by former Prime Minister.

Dr. Teperi has published extensively on health technology assessment, health services and health policy.

Wynand van de Ven

Prof. Wynand van de Ven wrote his thesis “Studies in Health Insurance and Econometrics” at Leiden University. Since 1986 he is professor of Health Insurance at the Erasmus University Rotterdam. His teaching and research focus on regulated competition in health care, competitive health insurance market, risk equalization, managed care and risk selection.

He has experience as a governor and adviser of insurance companies, political parties, government, research institute, hospitals and other health care organizations.

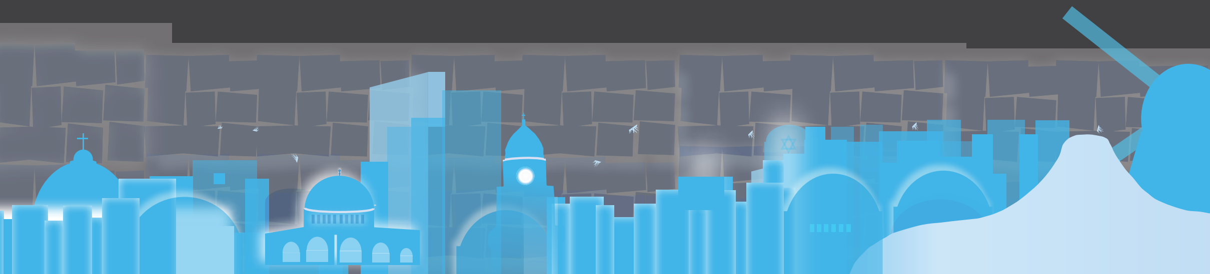
He serves (served) as member of many advisory committees and the editorial Board of scientific journals. As a consultant, e.g. for the World Bank and the World Health Organization, he has studied the health care systems in Chile, Ireland, Israel, New Zealand, Poland, Russia, South Africa and Sweden.

Prof. van de Ven is one of the founding fathers of the European Risk Adjustment Network.

Previous positions are Programme Director of the Master Health Economics, Policy and Law at Erasmus University and Chair of the iHEA Jury-Committee for the annual Arrow Award for best paper in health economics.

ABSTRACTS

Parallel Sessions



PLANNING A NATIONAL CHILD SAFETY ACTION PLAN IN ISRAEL - WORKING MODEL FOR MULTI-PARTNER DECISION MAKING

Orly Silbinger[1], Yitzhak Berlowitz[2]
1 Beterem - Safe Kids, IL
2 Wolfson Medical Center, IL

Background: In Israel, unintentional injuries are the primary cause of death and injury among children aged 1-17. Consequently, Israel joined a global initiative to promote a National Child Safety Action Plan (CSAP). On February 19th, 2012 the Government of Israel passed a resolution to plan a national perennial CSAP in Israel, led by the Ministry of Health with an NGO partner, 16 government ministries and national authorities.
Study Question: What are the unique features of a working model to promote and plan public policy with multiple and diverse partners?
Methods: The team mapped and compared characteristics, needs and tools necessary for planning a CSAP in Israel and abroad. A gap analysis was conducted in order to better understand and select appropriate work practices.
Results: The needs map, derived from the unique characteristics of this multi-sectoral partnership, points to a variety of challenges and barriers in policy planning. Learning and comparing the CSAP process with other countries, points to a gap between the unique needs in Israel and the experience of other countries. As a result specialized tools and techniques were developed as well as a unique model for policy planning by a multi-sectoral partnership.
Conclusions: As in any partnership, the unique characteristics of the multi-sectoral partnership for Israel's CSAP impact the opportunities and challenges in the policy planning process. In order for the process to be effective and applicable, special attention must be paid to these distinctive features both during the planning phase and in adapting appropriate techniques, including dedicated tools and methods for this specific process.
Health Policy Implications: Israel's unique experience in planning a CSAP may be used as a theoretical model for policy planning processes in the health sector as well as for other disciplines, for governments and other organizations that operate partnerships with similar characteristics.

SOCIAL STRUCTURES OF MARKETS AS FRAMEWORK FOR ANALYZING VACCINATION ONLINE DEBATES: THE CASE OF THE EMERGENCY POLIO VACCINATION CAMPAIGN

Yaron Connelly[1], Arnona Ziv[1], Uri Goren[2], Orna Tal[1], Baruch Velan[1]
1 The Gertner Institute, IL
2 e-Pochondriac, digital health-consultancy, IL

Background: The online environment is well recognized as one of the main arenas where the debate between vaccination supporters vs. anti-vaccination protagonists occurs. We suggest that one can look at this online polemic via the lens of the market as a social structure, and conceptualize those interactions in terms of 'sellers' - those who convince others to get vaccinate or not, and 'consumers' - those who have to make the decision.
Study Question: In this study we examine whether the use of the market perspective for analyzing online discussions can yield new insights regarding the vaccination debate.
Methods: A content analysis had been conducted on a representative sample of 200 online discussions revolving around the poliovirus outbreak in Israel at 2013 and the following vaccination campaign. Our prism for the analysis was borrowed from the sociological perspective on markets.
Results: The results revealed three discussion agencies active in the market: the authoritative which promotes the vaccinations, the alternative, which tries to convince others not to get vaccinated, and the impartial, which represents those who are deliberating whether to vaccinate or not. Each of the two partial agencies implemented unique 'luring' and 'convincing' strategies.
Conclusions: The authoritative agency tried to convince the public that the vaccine is necessary and safe, and lure them by offering to share their expertise with them. The alternative agency lures the clients by spreading doubts about the declared purposes of the campaign, and then convinces them by sowing fear about the vaccine's safety, or by discrediting the authoritative agents. The discourse of the impartial agency tends to reflect the messages originally associated with the authoritative or the alternative, as well as undecidedness.
Health Policy Implications: Insights, arising from the rich transcripts of online materials, may be used by decision makers as tools for formulating communication strategies aimed at improving public health promotion behavior.

MID-LEVEL ACTIVISM, INFORMAL NETWORKS AND THE BUREAUCRATIC POLITICS OF HEALTH IN ALL POLICIES

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1 Ministry of Health, IL
2 Ben-Gurion University of the Negev, IL

Background: The World Health Organization (WHO) urges countries to pursue a governance strategy called "Health in All Policies" (HiAP), in which health authorities engage multiple sectors in order to increase access for all to the determinants of good health. Implementation of HiAP continues to fall short, though, and scholars increasingly note the literature's dearth of context and implementation-based analysis. We do not know how the generic model meets bureaucratic reality, and have not sufficiently scrutinized processes, contexts, barriers and opportunities. We addressed this gap by studying Israel's HiAP-based national program to promote healthy lifestyle and curb obesity.
Study Question: How are stakeholders in Israel attempting to initiate and manage intersectoral partnerships, in order to enable healthy lifestyle?
Methods: We conducted three years of ethnographic fieldwork alongside those leading the program's implementation, combining observation, interviews and document analysis.
Results: Amidst budget cuts, broken commitments and contested legislation, the team we studied relied upon informal alliances that transcended ministerial boundaries, "hid" budgets for oft-materializing "rainy days," framed policies according to audience, strategically credited superiors and passed information to NGOs to protest cutbacks. These strategies are not highlighted in the literature, but each proved critical.
Conclusions: The literature's emphasis on systematic frameworks suggests that health governance is a formulaic, technical endeavor. For civil servants in our study, though, it was primarily a human one, heavily dependent upon tacit knowledge. Bureaucrats emerged as activists, political actors and interpreters of people and context. Their ingenuity and resolve to foster health through HiAP, demands our attention.
Health Policy Implications:
HiAP "happens" at public service's mid, not high level.
Informal alliances are more significant than formal ones.
Health authorities need to be willing to be invisible, and let others lead.
Existing policy networks naturally transcend ministerial divides.

POLICY INSIGHTS FROM "2 DROPS" - A NATIONAL PLAN FOR POLIO VACCINATION IN ISRAEL

Anna Lerner, Nir Kaidar, Amit Sharir
Ministry of Health, IL

Background: In August 2013 the Ministry of Health initiated a broad national program to vaccinate children against polio in Israel. Within a few weeks, the national vaccination coverage was 65% of the potential recipients. One of the greatest challenges was to reach all parts of the population. This study examines the Ministry's approach which focused on different social groups and the public response to those policies.

Study Question: Has the chosen approach has been vindicated? What were the actions that were taken that helped the public to get vaccinated and what can be learned from them?

Methods: Analysis of the vaccines data of Israel Ministry of Health segmented by age, social groups, steps taken by the Ministry and date of the vaccine.

Results: The Arab population was well immunised (91.31%), significantly more than other groups. Similarly, the Ultra-Orthodox population were better immunised than the national average (68.48%). The analysis of Socio-Economic clusters of cities and smaller forms of settlements showed that the vaccination percentage of settlements ranked in cluster 5 was identical to the national average. The vaccination percentage of clusters 1-4 was significantly higher than the average. The vaccination percentage of Clusters 6-10 was lower than the average. The difference between the three age groups was not statistically significant.

Conclusions: The Ministry's approach led to a high percentage of vaccination of the different social groups, except the secular-Jewish group.

Health Policy Implications: In the range between differential Policy and universal policy, the differential policy proved itself in Israel in 2013. However, a re-thinking about the paradigm is needed to encourage response in diverse social groups. It will be important to characterise other conditions that enable a successful differential policy.

POLICY FOR MANAGING EMERGENCY MEDICAL SERVICES AS A BUILDING BLOCK OF THE HEALTHCARE SYSTEM

Bruria Adini[1], Moran Bodas[2], Kobi Peleg[2]

1 Ben-Gurion University of the Negev, IL

2 Tel-Aviv University, IL

Background: Operating Emergency Medical Services (EMS) presents a challenge to healthcare managers, due to the variety of needs that should be considered, including cost-benefit concerns, inter-agency collaborations, managing mass casualty incidents (MCIs), availability and safety of personnel, equity of services, etc.

Study Question: To examine the views of field and managerial content experts about solutions to dilemmas in EMS operations during routine and crises.

Methods: Advanced solutions to 21 dilemmas in EMS operations were proposed based on a literature review and on Israeli experience. The suggested modes of operation were disseminated to 38 content experts from 10 countries, through a two-cycle modified Delphi process. Elements that achieved >80% consensus were recommended for inclusion in the policy for managing EMS.

Results: 16 proposed modes of operation concerning collaboration between ambulance services and between civilian and military services during crises, unified operation centers, minimal-cost alert systems, training personnel to cope with violence, emotional support systems and community volunteers were consensually adopted for inclusion in EMS policies in the first Delphi cycle. Among five elements that initially achieved <80% consensus, one concerning on-site command of operations was adopted after the second Delphi cycle. Significant variability in perceptions according to content experts' region of origin was evident concerning assigning ambulances to off-duty team members and adopting an automatic EMS response to MCIs.

Conclusions: Dilemmas concerning EMS operations are common to most healthcare systems. As operating EMS during crises is a highly complex process, implementation of advanced solutions to frequently encountered challenges is highly beneficial to both EMS providers and healthcare policy-makers.

Health Policy Implications: Establishing EMS policies is crucial in order to build and sustain an ongoing effective mode of operation during routine and emergency crises. The proposed policies achieved in the present study may facilitate improvement of EMS operations.

AGE AS A CRITERION FOR PRIORITY SETTING IN HEALTH - PUBLIC STANDPOINTS USING FOCUS GROUPS AND TELEPHONE SURVEY

Orna Tal[1], Baruch Velan[2], Arnona Ziv[2], Yaron Connelly[2], Giora Kaplan[2]
1 Assaf Harofeh Medical Center, IL
2 The Gertner Institute, IL

Background: Achieving maximum health benefit is essential when considering budget allocation for treatment. In various countries, patient's age is utilized as a criterion in the decision-making process. In Israel, age considerations are rarely applied (organ transplants). Since prioritizing on the basis of age raises ethical dilemmas and involves social values, public standpoints should be considered in policy-making.
Study Question: Comprehending the insight of public willingness to consider age as a legitimate factor in prioritizing healthcare.
Methods: Four citizen focus-group discussions and a telephone survey were analyzed: participants from the general public confronted five narratives. Scenario: the right to receive dialysis-treatment in times of shortage. Thorough theme-mining of discussions protocols and survey-statistics were analyzed by an interdisciplinary research team engaged in medicine, sociology, statistics, epidemiology, ethics and media.
Results: Analysis of public perceptions revealed several divergent motives:

- Prioritization based on predetermined criteria is not legitimate. Allocation should be based on "first-come first-served" (a major motive).
- Prioritization should be left to the discretion of medical professionals. There is no room for public involvement.
- Moral criteria could be applied, yet these should relate mainly to utilitarian arguments (a major motive).
- Young age is a legitimate criterion for periodization, yet age is perceived as a utilitarian asset.
- Young age per-se justifies prioritization, young people should be allowed to live and fulfill their desires (a minor motive).

Conclusions: A combination of qualitative analysis of focus-group discussions and quantitative analysis of the telephone survey yielded important insights on value perceptions and the preferences of the Israeli public.
Health Policy Implications: When decision-makers are facing complex social-ethical dilemmas, the dual-methodology approach provides a comprehensive picture on public confrontation to achieve a preferable policy.

MENTAL HEALTH INPATIENT CARE: HOW SHOULD SERVICES BE ORGANISED IN A NHS?

Maria Ana Matias, Pedro Pita Barros
Nova School of Business and Economics, Portugal

Background: Mental health financing is a hot topic. Financing of mental health, needs to take account of how services must be organised. Due to the multidisciplinary characteristic of mental health, the way the services are organised has an important role on their effectiveness and fulfillment of the aims of national mental health policies. In Portugal, where mental health financing is being discussed, there is no study addressing the organisation of the hospital services.

Study Question: Is there any advantage in concentrate mental health inpatient care in high volume hospitals? Are there any potential savings if integrated continuous care was part of the mental health system?

Methods: We performed this analysis for a European country with a case-mix based funding system (Portugal). We used a diagnosis related group (DRG) dataset from 1994 to 2013 considering only mental health inpatient discharges. To capture the scale effect we used a conditional risk set model, where the dependent variable was the LOS and the independent variable of interest was the number of cases treated by each hospital per DRG. We have controlled for patient and hospital characteristics.

Results: We found a scale effect for each DRG. Despite this result, the economic magnitude is rather small to justify the centralisation of psychiatric services in high volume hospitals. We found potential savings for the NHS if integrated continuous care was in place that ranged between €4.5M and €13.4M.

Conclusions: The focus of mental health system redesign should be on promoting integrated mental health care with concentration of services not being relevant.

Health Policy Implications: Promoting integrated continuous care can reduce hospital readmissions and also provide social integration for patients with severe mental illness (SMI). It can also improve the ability of inpatient care to help SMI patients.

PATTERNS OF MAMMOGRAPHY SCREENING OVER 14 YEARS AMONG ELIGIBLE WOMEN IN A LARGE HMO IN ISRAEL

Noya Galai[1], Einat Elran[2], Shiraz Vered[1], Avi Porath[2]
1 University of Haifa, IL
2 Maccabi Health Services, IL

Background: Mammography screening for early detection of breast cancer is one of the indicators used to evaluate quality of care in HMO organizations. Administrative data is routinely used to monitor population performance levels over time.

Study Question: We propose to use individual screening patterns to gain insight into behaviors of specific sub-groups to inform planning of intervention to improve performance.

Methods: The population includes women from a large HMO in Israel, aged 50-75 between Jan 1, 2000 and Dec 31, 2014. Dates of all mammography exams for these women were obtained along with socio-demographic characteristics. A statistical model for recurrent events based on conditional risk-set survival models was used to characterize patterns of mammography timing and evaluate resulting overall population trends. Estimates of relative hazards (RH) are shown, where values >1 indicate a shorter time between examinations.

Results: 228,667 women with >1 year of follow-up provided 2,240,413 person-years (PY) with an average rate of 3.65/10PY. At 1,2,3,5 and 10 years the estimated proportions who performed the first mammogram were respectively 37.7%, 58.1%, 68.6%, 78.1% and 89.8%. As expected, factors associated with more frequent examinations over the entire window of observation include younger age when entering the analysis window (RH=1.058/5 years lower age) and higher SES level (RH=1.025/1 point). Chronic Heart Disease (RH= 0.791) and diabetes (RH= 0.836) and not born in Israel were associated (RH = 0.983) with longer time between examinations. Women from clinics with higher proportions of Ultra-Orthodox Jews or Arab populations were also less likely to perform mammography.

Conclusions: A better characterization of individual screening patterns provides an important insight into designing targeted population interventions to improve HMO mammography performance.

Health Policy Implications: Micro-simulation models are being developed based on the survival modeling results that could provide an important tool for assessing the potential impact on the population trends of specific interventions.

CHALLENGES IN IMPLEMENTATION OF THE DYING PATIENT LAW

Rachel Nissanholtz-Gannot, Michal Gordon
Myers-JDC-Brookdale Institute, IL

Background: The development of life-sustaining technologies has made quality End-of-Life (EOL) care a priority in most western countries, requiring them to address complicated moral issues. In Israel, the 2005 Dying Patient Law (DPL) mandated the dying patient's right to refuse certain treatments, including through advance directives or surrogates, and to receive palliative care when appropriate. However, this legislation has encountered serious implementation barriers.
Study Question: What activities were undertaken by stakeholders to implement the DPL? To what extent have these resulted in actual implementation? What are the main barriers to implementing the law and to delivering better EOL care as perceived by professionals in the field?
Methods: We conducted 35 open in-depth interviews with professionals (doctors, nurses, social workers) treating EOL patients, or implementing EOL policy, at the Ministry of Health (MOH), the four health-funds, hospitals, hospices and assisted-living facilities. We also held focus groups for nurses and social workers.
Results: Implementation activities by MOH and health-funds have increased in recent years, though the effect on frontline workers is unclear. Bottom-up initiatives have also been important in improving EOLcare and law-adherence. Consequently, we see differing levels of implementation. Barriers include: parts of the law that are overly bureaucratic/incompatible with clinical reality; absence of standards for proper implementation, a lack of clarity regarding division of responsibility; and difficulties with initiating EOL discussions: emotional difficulties, insufficient training and the feeling that many families/patients are not open to such discussions.
Conclusions: Legislation in this area is beneficial in that it raises awareness within the healthcare system regarding EOL issues and calls healthcare deliverers to action. However, it should be accompanied by clear implementation standards, to be monitored through routine quality inspections of healthcare organizations.
Health Policy Implications: It is imperative to invest resources in ongoing training for medical staff, and to develop initiatives to bring EOL issues into public awareness.

PUBLIC AND THE PHYSICIANS WITH RESPECT TO EVIDENCE BASED MEDICINE, COST AND THERAPEUTIC BENEFITS

Adele Diederich
Jacobs University Bremen, Germany

Background: Health systems worldwide are grappling with the need to control costs to maintain system viability. Citizens and physicians may controversially view common cost control mechanisms, e.g. curtailment of patient access and treatment prioritization. The German Woman Medical Association specifically supports the discussion on prioritizing medical services, which came lately to a standstill in Germany.

Study Question: The goal of this study is to investigate attitudes and preferences of two stakeholder groups towards therapeutic benefits and cost of treatments, and evidence based medicine (EBM) as possible criteria for prioritizing health care services.

Methods: A population survey was conducted with people in Germany living in private households. Data were collected with computer assisted personal interviews (CAPI). The physician survey was conducted via an online platform. Of the more than 130 questions, nine items were concerned with therapeutic benefits, measured in terms of response rate and survival time; three with cost of a medical treatment, in both general and specific scenarios; and eight with EBM, in general and exceptions under specific conditions.

Descriptive statistics are applied to analyze the data (n=2,031 for the population survey; n=445 for the physicians).

Results: On some items both stakeholders agree (importance measures; binary responses) on others they disagree, in particular on those items that state cost explicitly. For instance, to determine therapeutic benefits, physicians and citizens agree on criteria like pain reduction, but disagree when the benefit of a treatment is marginal (citizens are in favor of financing it.). An opposite result is observed when the item was framed as a cost-benefit item: for physicians cost, play a minor role. EBM as prioritizing criterion plays a role for both stakeholders, although a less important role for citizens than for physicians.

Conclusions: Under certain circumstances, the general public and physicians seem to accept therapeutic benefit, costs, and EBM as possible prioritization. However, the circumstances under which acceptance occur are different for some items for both groups.

Health Policy Implications: Health policy makers should encourage a discussion about prioritizing health care services. The general public is more “reasonable” than presumed.

Monday, 16:30 - Oren Hall 1

COMPLEX CHALLENGES IN EDUCATING PHYSICIANS FOR 21ST CENTURY NEEDS

Stephen Schoenbaum
Josiah Macy Jr. Foundation, USA

Background: Medical education is an essential first step in developing a country's needed workforce of competent physicians.

Study Question: Some policy issues affecting medical education in Israel are:

- Should Israel seek recognition by the World Federation for Medical Education (WFME) for its medical school accrediting body, the Council for Higher Education (CHE)?
- Should medical schools have a common core of courses, centrally determined?
- Should funding for medical education continue to go through universities or directly to medical schools?
- Should there be central funding for resources usable by all medical schools?
- Should medical schools be required to have appointed deans or continue to have elected deans?

Methods: Review of Israeli medical schools by an external committee of 8 experts in 2014.

Results: The questions have not been specifically or fully addressed by Israel despite their importance in meeting current and future national needs for effective and efficient medical education.

Conclusions: WFME recognition requires significant changes in CHE's accreditation process and staffing.

A common core of courses would help meet national needs for ambulatory vs. hospital based physicians; primary care vs. specialist physicians; physicians for positions in research, public health, and management.

Direct medical school funding could facilitate closer collaboration between the schools and the health care delivery system.

A small central fund would facilitate development of shared educational materials or special expertise; and increase efficiency of limited faculty.

The rapidly changing nature and content of medical education necessitates appointing or electing deans with in-depth knowledge of medical education and authority to develop and institute important curricular changes. Terms of elected deans should be long enough to develop and institute such changes.

Health Policy Implications: Each issue demands thorough discussion and careful policy decisions at the national level.

IS THERE A DISPARITY BETWEEN POLICY AND PRACTICE? THE CASE OF NURSES' AUTHORITY IN NEONATAL INTENSIVE CARE UNITS (NICUS) IN ISRAEL

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2 Private, IL

Background: Implementing policy is a fundamental aspect in health care practice. In Israel, in recent years, the policy of the Ministry of Health (MOH) has been to expand nurses' authority. Due to the requirement of both physicians and nurses to provide care, it is necessary to examine the responsibility and authority division between these professions, particularly in light of expanding nurses' authority.
Study Question: To examine the MOH policy implementation; practice and policy gap; identify barriers preventing policy implementation; and evaluate the need for change.
Methods: A cross-sectional study among physicians and nurses at 22 NICUs in Israel (N=432).
Results: A large part of the tasks permitted to nurses by law and government regulations are not performed by them. The main barriers to this are the need for organizational approval and a lack of knowledge by nurses of the tasks that they are permitted. Concomitantly, in some situations, nurses are compelled to perform tasks and make decisions that they are not authorized to do, mainly because of the unavailability of physicians and the workload in the NICUs Almost half of the respondents believe that the division of work between physicians and nurses requires change. Most of the staff stated that broadening nurses' authority would contribute to more independent and efficient work. Furthermore, most of the respondents feel that this would lead to a better response and quality of care.
Conclusions: The current policy of broadening nurses' authority in NICUs is not being fully implemented. In part, it does not meet the demands in the field for more efficient and constant action.
Health Policy Implications: As a result of the uncertainty over which activities nurses are permitted to perform, there is a need to formulate a policy that will fit actual needs and base them on a broad process of care rather than on separate activities.

Tuesday, 14:00 - Oren Hall 1

PHYSICIANS' PERSPECTIVES OF NOTIFICATIONS FOR COMPLICATIONS IN MEDICAL TREATMENTS DISCOVERED IN RETROSPECT: THE IRRADIATION FOR RINGWORM AS A CASE STUDY

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2 The Gertner Institute, IL
3 Leumit Health Care Services & Tel-Aviv University, IL

Background: One of the questions on health system's agenda concerns actions required in response to complications discovered in retrospect in previously legitimate medical treatments. This scenario involves numerous issues: Should the public be notified for complications and how? Who is responsible to track patients and distribute messages? Are patients entitled for compensation?
Study Question: The study aims to examine doctors' perspectives and to present a generic model for addressing such affairs, based on a case study of irradiation treatments in childhood and increased risk, unknown at the treatment time, for developing tumors.
Methods: Survey distributed among 5,926 physicians in nine medical specialties most likely to treat patients irradiated during childhood. Study tool composed of 24 questions regarding knowledge and attitudes.
Results: 878 physicians answered the survey, and 779 included in analysis, 14.15% of Israeli physicians in relevant specialties, of whom 39.41% reported encountering patients irradiated during childhood for scalp ringworm. Physicians fail to indicate when the association with complications emerged, especially hematologists and oncologists (83.72% and 73.53% failure).
Main sources of knowledge among physicians were med schools (36.84%), their patients (22.85%), scientific literature (23.11%) and popular media (19.13%), while regulatory institutions responsible for health policy in Israel, such as the Ministry of Health (15.5%) and health care providers (Clalit) (4.62%), failed to deliver messages. Many physicians (41.59%) failed to implement the knowledge within daily routine in clinic. 63.54% of the physicians aren't aware of the National Center for Compensation of Scalp Ringworm Victims which enforces a 1994 law for compensating patients affected by treatment.
Conclusions: Physicians lack basic factors which could have promoted notifying patients of complications in treatments discovered in retrospect.
Health Policy Implications: Healthcare regulatory institutions should set rules for continuous informing of physicians on harms connected to treatments discovered in retrospect. Trends described promote the construction of a notification model and allowing health systems to prepare for forthcoming crises throughout structured protocols, regulations and laws.

Tuesday, 14:00 - Oren Hall 1

THE 3-ARM STRATEGY FOR READMISSION PREVENTION: AUTOMATED PREDICTIVE MODELING, READMISSION PREVENTION INTERVENTION, AND MONITORING

Efrat Shadmi[1], Natalie Flaks-Manov[2], Rina Yahalom[2], Calanit Kay[2], Ran Balicer[2]
1 University of Haifa, IL
2 Clalit Health Services, IL

Background: We developed and implemented an organization-wide strategy to prevent 30-day readmissions in hospitalized older adults in Israel, including 3 ARMs: Automated predictive modeling, Readmission prevention intervention, and Monitoring.
Study Question: Can the 3 ARM strategy improve care transitions of older hospitalized adults?
Methods: The strategy includes a data-driven high-risk patient identification algorithm, classifying all older Clalit enrollees (65+) according to their a-priori risk for readmission (scores range 0-100); a nurse-led intervention to target high risk patients in all general hospitals in Israel providing discharge planning intervention, coupled with a primary care clinic nurse intervention to assess post-discharge needs; and a post-discharge community follow-up, and readmission rates monitoring of all hospitals and primary care clinics as well as reports on patients' transitional care experience. We examined the rate of contact with primary care providers within 3 and 7 days after discharge. We also measured readmission rates before, and 6 months after, the program began.
Results: The Preadmission Readmission Detection Model (PREADM), a unique real-time admission risk identification algorithm, exhibits good predictive accuracy (c-stat = 0.69). Readmission rates during January-June 2012 (before the program) varied between 17.2% and 23.8% by district. Six months after the start of the program, during January-June 2013 the readmission rates were 16.6%-23.2% by district; The readmissions rate declined by an average of 4%. In 2012, the rate of contact within 3 and 7 days after discharge with primary care clinic nurses was less than 48% and 63% in 2013 this rate increases over 62% and 80% (within 3 and 7 days respectively).
Conclusions: Our results show improvement in care transitions and a trend towards reduction in readmission rates.
Health Policy Implications: Large-scale organization-wide strategies involving readmission risk targeted interventions for older patients is feasible and can be disseminated in any hospital as well as in community clinics.

ISRAELI HEALTH CARE AS A SUCCESSFUL ADAPTER OF HEALTH CARE INNOVATIONS DEVELOPED IN OTHER COUNTRIES

Bruce Rosen
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Background: As a small country in a tough neighborhood, Israel has developed an array of mechanisms to facilitate learning about innovations taking place in distant lands. These include sabbaticals abroad, travelling to conferences in other countries, and the hosting of international workshops in Israel.
There is also a recognition that systemic and cultural differences preclude simply cutting and pasting successful innovations developed in other countries. Accordingly, Israel has apparently also evolved a substantial capacity to adapt relevant innovations to the Israeli context.
Study Question:
- Which countries do Israelis look to for new ideas and innovations?
- What are the main types of adaptions made to adjust those innovations to the Israeli context?
- What are the main reasons for these adaptations?
- What are the implications for future cross-national learning and adaptation efforts?

Methods: I am collecting stories from Israeli health care thought leaders, senior professionals, former MOH director-generals, and current CEOs of health plans and hospitals. I am combining these stories with concepts from the professional literature about how good ideas develop and flow, my own experiences as a participant-observer in Israeli health policy development, and the reflections of experts from other countries involved in promoting the cross-national flow of health policy ideas and health care innovations.
Results: Preliminary findings suggest that European countries are a major source of ideas for Israel about health care financing and other, macro-level, health policy innovations, while the U.S. is a major source of ideas about health care delivery innovations. Adaptations are driven both by Israeli limitations (e.g. budget and workforce scarcities) as well as by Israeli opportunities (e.g. well-developed community EHR).
Conclusions: Israel's capacity to adapt innovations from abroad has been an important contributor to some of the main achievements of its health care system.
Health Policy Implications: The mechanisms that foster successful adaptation need to be maintained and strengthened.

EXAMINING THE PERCEPTIONS OF HEALTH SYSTEM POLICYMAKERS IN ISRAEL ON THE HEALTH POLICYMAKING PROCESS AND KNOWLEDGE TRANSFER AND EXCHANGE

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2 The Gertner Institute, IL
3 McMaster University, Canada

Background: The use of research evidence in policymaking is an international challenge; however, it is of particular importance in Israel, where the health system is characterized by scarce resources and the necessity to make rapid policy decisions.
Study Question: The purpose of this research was to explore the perceptions of health system policymakers' and those that support policy-makers in Israel regarding the use of health systems and policy research (HSPR) in health policy making.
Methods: Semi-structured interviews, with both closed and open-ended questions were conducted with health system policymakers and those that support policy-makers in Israel. Interviews were tape recorded and transcribed. Descriptive statistics were conducted for close-ended questions and thematic analysis was conducted for open-ended questions.
Results: 32 policymakers were interviewed. Both the quantitative and the qualitative components of the study demonstrated that while there are many barriers in place, there are numerous facilitators as well. The barriers focused on the currently available research and its lack of relevance and timeliness to support decision-making, the lack of funding to support research use, and interests of stakeholder groups. The main facilitators identified were the strong foundation of relationships and collaborations between researchers and policymakers. Suggestions to improve the use of HSPR focused on improving dissemination of research findings and ensuring that the research was more relevant and timely.
Conclusions: Policymakers in Israel have strong relationships with researchers however there is room for improvement i.e. partnering in research projects to ensure relevance. Future research should test different modes of dissemination to determine effectiveness.
Health Policy Implications: Policymakers in Israel agree that research can inform policymaking however they are aware of the limited efforts that exist in using research to support policy. Policymakers are interested in receiving research in an effective format and should consider investing in efforts to support the use of research to inform policy.

Wednesday, 09:00 - Oren Hall 1

ORGANIZATION OF HEALTH SERVICES AND ACCESS TO CARE: STUDY OF A FRENCH GATEKEEPING REFORM

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2 Michigan University, USA
3 Paris-Dauphine University, France
4 ISPED, France

Background: In the French health system, patients have long enjoyed considerable freedom of choice, including the ability to self-refer, but, health spending is high relative to OECD countries. In 2004, in France, a reform was implemented to drive better coordination, lower spending and diminution in specialist visits. This policy is a form of gatekeeping. It innovated that every insured person must choose a doctor who becomes his "Preferred doctor". This doctor handles the first point of contact, provides care/ makes a referral to a specialist. However, patients stay free to self-refer but there are financial penalties. Although this is one of the most significant reforms enacted in France in recent years, little is known about its effects.
Study Question: In this paper we evaluate the effect of the French health care reform on access to care. How did the reform impact the number of doctor and specialist visits?
Methods: We used a panel based on national sickness fund databases for the years 2000, 2002, 2004, 2006, 2008 which included 85,000 individuals. We conducted before and after analysis with count data models on different outcome variables: number of GP visits, number of specialist visits, number of different GPs seen during the year.
Results: We found that the reform has reduced by 2.6% the number of GP visits and by 7.6% the number of specialist visits. This reduction was more important on specialties (11%) which were often consulted by self-referral before the reform. The effect of the reform was also a 5.6% reduction in the number of different GPs seen during the year.
Conclusions: The gatekeeping reform has contained the demand for specialist care and has improved coordination of care because patients see less different GPs.
Health Policy Implications: Gatekeeping reform in a health system such as France seems to be effective in improving coordination and reducing access to specialists.

READINESS TO IMPLEMENT PATIENT-CENTERED-APPROACH PROGRAMS: IDENTIFYING THE IMPLEMENTATION CHASM WITHIN PRIMARY CARE TEAMS

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3 Clalit Health Services; 4 Tel-Aviv University, IL

Background: Patient-Centered-Approach Programs implementation among chronic patients is associated with higher quality care and better outcomes. Often the main implementer is the primary care team. Barriers to transfer new practices into clinical practice in primary care are well documented in the literature, especially when the program includes a complex set of skills like patient-centered communication. Chasm theory argues that the group of pragmatists/ mainstream adopters which are the majority, stay behind and create a chasm in "buying" a new-concept. Although healthcare and clinical opinion leaders emphasize the importance and early adopters among care-teams are ready to implement; the majority of clinicians in healthcare systems do not easily implement new programs.

Study Question: The aim of this study is to investigate differences in readiness to implement patient-centered-approach programs between different groups of clinicians in order to draw a portrait of early adopters and pragmatists within primary-care teams and find antecedents of Readiness to Implement.

Methods: The sample comprised 2,243 team members, planning to implement a patient-centered program. Anonymous ORCA-questionnaires were distributed (Organizational-Readiness-to-Change-Assessment-Questionnaire, Helfrich, 2011).

Results: Differences in readiness to implement between primary team members were identified. Nurses felt more capable and ready to implement than physicians [t(1779)-7.32, p<0.001]. Physicians that studied in Israel showed more readiness to implement the program then clinicians that studied abroad (F(1,923)=9.83, p<0.001). Following factor analysis, reliability tests, correlation matrix, a step-by-step regression was performed to examine antecedents of readiness to implement. The best solution model included an evidence assessment (β=0.238, p<0.01), self-efficacy (β=0.273, p<0.01) and discipline (β=0.178, p<0.01) as significant antecedents.

Conclusions: As primary care teams increasingly attempt to adopt patient-centered approaches to improve chronic care, understanding readiness to implement of clinicians with different adoption patterns may be a key factor in determining the success of the program.

Health Policy Implications: Understanding readiness is an important step towards establishing effective patient-centered-approach programs including training design, setting objectives and timelines and tracking processes.

Wednesday, 09:00 - Oren Hall 1

COMPLEXITY IN HOSPITAL GOVERNANCE: THE CASE OF THE NETHERLANDS

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2 Emory University, USA
3 Worldbank consultant, USA

Background: This paper reviews hospital governance in the Netherlands. The landscape consists of ninety (non-profit) hospital organizations. The market is concentrated and capital spending is high. Most physicians are self-employed.
Study Question: Hospital governance generates substantial complexities to channel the challenges many hospitals face. Changes in professional networks are important. With declining length-of-stays, increasing numbers outpatient treatments, and more chronic ailments, hospitals cannot rely on the strong central position they once had. More transparency and active purchasing might put pressure to scale down activities, specialize and/or divest some activities. This suggests a redirection of capital flows.
Methods: A scoping review of recent developments in hospital governance. A focus group gave feedback on the results.
Results: The government recently ended much of the dedicated revenue stream to doctors. Ironically, this strengthened the position of medical specialists. Many group practices merged to uphold the tax benefits of their self-employed status increasing their leverage over hospital managers. Market forces are on the rise, especially since 2008 (the ending of CON legislation); and 2012 (more freedom for negotiating and underwriting risks by insurers). Private ownership has increased among outpatient clinics while inpatient for-profit structures remain forbidden. The combined forces of fiscal stress and financial risk have now brought many underlying dilemmas to the fore. Strategic hospital mergers are being sought as insurance companies need these for their network. Smaller hospitals and ASC's face difficulties. Four hospitals plan to build a proton-beamer, a trend that is confronted with increasing skepticism.
Conclusions: See above.
Health Policy Implications: There are major challenges for policymakers and regulators that feel an increasing pressure to (finally) use instruments the market-based governance system has provided them with (anti-trust, transparency, market interventions) or more hesitantly contemplate other options for high-cost / low volume medical services (regulation, central negotiations).

HEALTH INFORMATION TECHNOLOGY IMPLEMENTATION: IMPACTS AND POLICY CONSIDERATIONS- A COMPARISON BETWEEN ISRAEL AND PORTUGAL

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2 ISCTE-IUL (University Institute of Lisbon), CIES-IUL & Universidade Nova de Lisboa, Portugal
3 Hadassah Medical Organization, IL
4 HMO Meuhedet, IL

Background: Utilization of Information and Communications Technology (ICT) in health systems is increasing worldwide. While it is assumed that ICT holds great potential to improve efficiency and grant patients more empowerment, research on these trends is at an early stage.

Study Question: Building on a study of the impact of ICT on physicians and patients in Israel, a Short Term Scientific Mission sponsored by COST Net facilitated a comparison of ICT in health in Israel and Portugal. The comparison focused on patient empowerment, physician behavior and the role of government in implementing ICT.

Methods: In-depth interviews with the Ministry of Health, the private sector, patients associations and health plans were used to collect data. Purposeful sampling was used to select respondents.

Results: Respondents in both countries feel that patient empowerment has been furthered by introduction of ICT. Regarding physicians, ICT is seen as providing more information that can be used in medical decision making. Increased access of patients to web-based medical information can strengthen the role of patients and improve the physician-patient relationship, but also shift the latter in ways that may require adjustments in physician orientation. At the national level, while in Israel, ICT was promoted and adopted by the health plans, government intervention can be found in a later stage, in Portugal the government was the main developer and national strategies were built from the beginning.

Conclusions: ICT tools were successfully implemented and the general perception is that they have been beneficial. Government involvement in earlier stages could benefit in terms of interoperability of systems, however, innovation could be slowdown due to bureaucracy or lack of leadership.

Health Policy Implications: The work provides information in order to understand and improve ICT services. Additionally, it provides input regarding impact of ICT on the physician/patient relationship and national policies.

ALTRUISM OR INCENTIVES? WHAT SHOULD BE THE POLICY TO PROMOTE DECEASED ORGAN DONATION AND WHY? PERSPECTIVES OF MEDICAL PROFESSIONALS AND MEMBERS OF THE GENERAL PUBLIC

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1 Tel-Aviv University, IL
2 Ono Academic College, IL

Background: Current policies aim to address the shortage of organs for transplantation despite wide public support. Israel's transplantation policy is based on voluntary donation (opt-in). However, Israel is the only nation to introduce a prioritization incentive system to increase motivation, contested by some on moral and practical grounds. Advocates propose 'solidarity' and 'reciprocal altruism' ("We all do good so all can benefit") as alternative motivational approaches.
Study Question: How do medical professionals-in particular those directly involved in organ transplantation-and members of the public from different social groups, view the appropriateness of the prioritization system, altruism, solidarity and reciprocal altruism as policy means to promote organ donation?
Methods: A 'contemplative' interview method employed in personal and group Interviews with 140 medical professionals (18 institutions); 56 directly involved in organ transplantation, and 28 focus groups with members of diverse populations (religious/secular/immigrants/medium/low income) in 17 locations.
Results: Altruism was viewed as an appropriate motivator but elicited concerns regarding low social cohesion. Reciprocal altruism was viewed as promising by those believing it serves utilitarian and fairness goals. Prioritization was supported mainly if "it works" or as exercising 'fairness' but opposed among professionals directly involved in transplantation for moral and practical reasons. Two views of altruism relating to organ donation were associated with 'costs', 'rewards' and norms. Doctors involved in transplantation but not with donor families were less cognizant of difficulties in the donation decision. Doctors involved in transplantation advocated a policy of transparency.
Conclusions: Altruism is considered a strong motivator but people are open to solidarity and reciprocity appeals. Objections to prioritization found among those involved in transplantation.
Health Policy Implications: Organ transplantation policy should emphasize transparency of procurement and allocation systems to promote public support. Public discourse, including campaigns, should devote a greater emphasis on appeals to collective interests stemming from solidarity and reciprocal altruism. There is strong opposition to direct monetary incentives.

UNPACKING SOLIDARITY: PRACTICAL POLITICAL VS. ASPIRATIONAL ASPECTS

Richard Saltman
Emory University, USA

Background: The concept of solidarity leads two distinct lives in the health sector. One life is aspirational: solidarity is the moral culmination of collective support for individual needs. The second is practical political: solidarity is a set of national government policies that vary widely depending on available funds and other operational considerations.
Study Question: Proponents of these two different approaches rarely acknowledge the large and growing gap between them, complicating policy analysis and also the development of feasible future policy proposals.
Methods: Policy analysis.
Results: The growing gap between aspirational and practical political dimensions of solidarity is being increasingly politicized.
Conclusions: The solidarity "debate" is complicating efforts to adapt collectively funded health systems to a fundamentally changed economic situation in Europe.
Health Policy Implications: This presentation will explore the two different approaches, consider how they interact in European health care systems, and raise some questions regarding their likely trajectories in the near future.

Wednesday, 11:30 - Oren Hall 1

INVOLVEMENT OF NATIONAL MEDICAL ASSOCIATIONS IN PUBLIC POLICY - INTERNATIONAL REVIEW AND THE ISRAELI CASE

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Israeli Medical Association (IMA), IL

Background: In addition to their role as professional organizations, National Medical Associations (NMAs) are often involved in broader societal and ethical issues that concern public health. NMAs aim to frame public agenda and try to influence the political arena in various matters ranging from health disparities to prisoners' rights to medical treatment. This activity reflects the moral responsibility of medical practitioners towards society in a broader sense of professionalism - the cornerstone of every functioning healthcare system.
Study Question: To what extent are NMAs involved in public health issues? What are the issues they are involved in and how do they try to influence national agendas?
Methods: The authors conducted a review of NMAs position papers and websites and examined WMA (World Medical Association) documents over the last five years (2010-2015) in order to explore the nature and characteristics of issues that interest NMAs worldwide.
The Israeli Medical Association (IMA) served as a case study that allows us to carefully explore the organization's activity in the following issues: forced feeding of prisoners on hunger strikes, health disparities and the operation of a refugee clinic in Tel-Aviv.
Results: Three primary domains of NMAs involvement featured prominently in our review both on a national and international level: ethics, social policy and human rights. The IMA strives to impact policy making through typical channels of an advocacy group such as shaping public opinion, mobilizing civic voice and proposing bills reflecting its goals.
Conclusions: Without disavowing the NMA's role as an interest group concerned with the welfare of its members, our review indicates that physicians' representative bodies also strive to maintain the "social contract" between the medical profession and society.
Health Policy Implications: NMAs role as an advocacy group should be taken into account in the formation of health policy by establishing mechanisms of joint policy planning between decision makers and professionals.

EPIDEMIOLOGICAL FORECAST ISRAEL 2030 AND HEALTH POLICY IMPLICATIONS

Hagai Levine
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Background: Forecasting the future burden of diseases could aid tremendously in health policy planning. However, such forecast was not previously attempted for Israel.

Study Question: What is the projected overall and specific burden of mortality and morbidity in Israel by 2030?

Methods: World Health Organization most recent projections for 2030 in high-income countries served as the basis for the forecast. Mortality projections included overall mortality and by specific causes, by sex and age groups. Morbidity projections included the Disability-Adjusted Life Years (DALYs) baseline scenario overall and by specific causes, by sex and age groups. Results were grouped to:

- Communicable;
- Non-communicable diseases;
- Injuries.

Demographics data for Israel 2030 were based on the Central Bureau of Statistics projections by sex and age groups.

Results: In 2030, from 10.0 million people living in Israel, 64,000 would die (0.64%), from non-communicable diseases (85.9%), communicable (7.7%) and injuries (6.4%). The leading specific causes would be cardiovascular (29.8%) and malignancies (27.8%). The highest burden would be for 70+ age group, both for men (68.7%) and women (80.7%). The burden of disease would be 1.0 million DALYs: non-communicable diseases (85.5%), communicable (4.4%) and injuries (10.1%). The leading specific causes would be Neuropsychiatric (31.1%) [Especially depression among women], Cardio-vascular (12.1%) and malignancies (11.9%). The highest burden would be for 15-59 age group, both for men (59.4%) and women (54.9%).

Conclusions: The forecast points to shifting epidemiological patterns, such as higher burden of neuropsychiatric conditions.

Health Policy Implications: The detailed forecast could serve as a health policy planning tool for the Israeli health system, informing future needs. Furthermore, the forecast methodology could be further developed and serve as a basis for inter-disciplinary and cross-organizational task force for health policy planning in Israel and in other countries.

NATIONAL POLICIES TO ADDRESS HEALTH INEQUITIES: ISRAEL VERSUS ENGLAND - A MOVE IN THE OPPOSITE DIRECTION?

Shlomit Avni, Diana Nacamulli Levi, Emma Averbuch
Ministry of Health, IL

Background: Israel and England both have coherent national policies to reduce health inequities (HI), policies that differ greatly from one another.

Study Question: To characterize the similarities and differences between Israel's and England's national policy (NP) to reduce HI. Furthermore, to analyze changes over time and their implications.

Methods: An analysis of policy papers and strategic plans from Israel and England was undertaken. Analysis covered six themes: the strategic approach, goals, locus of intervention, target population, monitoring tools and challenges and achievements.

Results: The Israeli NP was formulated in 2010 after years of sporadic down-stream interventions. The plan focused on mid-stream interventions within the health system as opposed to the English 1997 plan which focused on mid and upstream interventions. Israeli policy focused on interventions aimed at reducing economic and cultural obstacles to health as well as on improving distribution of infrastructure in the periphery, while England focused on actions aimed at the social determinants of health (SDH). Israel defined its goals in process terms while England defined outcome measurements. Current policies in Israel favor mid-stream interventions with a slight shift towards the SDH. The English plan changed considerably (partly as a consequence of the 2012 reform in the health system) and current policies tend to center on the health system, focusing on integration of a regard to HI in all policies and interventions.

Conclusions: Israeli NP produced changes in the health system's cultural, economic and organizational structures while England has statutory commitments and established infrastructure to address HI. Both face challenges regarding sustainability and impact

Health Policy Implications: Systematic analysis of NP to reduce HI is crucial for monitoring achievements, or failures, in order to intervene where needed. Furthermore, inquiry into different national policies with the same aim can help enrich strategic approaches and practices to reducing HI.

ESTIMATING CONTINUITY OF CARE ON MEDICINE WARDS IN AN ACADEMIC MEDICAL CENTER IN ISRAEL

Eyal Zimlichman, Nadav Furie, Ariel Israel
Sheba Medical Center, IL

Background: The importance of continuity of care for hospitalized patients has grown in recent years, and emphasis has been placed on transfer of information between caregivers as a way to decrease possible adverse outcomes. Yet, very little is known regarding fragmentation of care within medicine wards that is attributable to changes in treating physicians on the wards. Recent changes in regulations enforcing restrictions on residents working hours will likely increase potential for fragmentation.
Study Question: What is the level of care continuity measured through the assessment of the number of treating physicians? Can differences between wards or trends across time be identified?
Methods: In this retrospective cohort design study we have utilized information gathered from the Electronic Medical Record at Sheba Medical Center, a tertiary academic medical center in Israel. Data from six medicine wards across five years (2009-13) has been collected, including treating physicians on a daily basis as well as background clinical information on patients. For each hospitalization the number of treating physicians has been calculated.
Results: We have summarized information from 429,708 hospital days and 105,883 hospitalizations at medicine wards (mean length of stay 4.05). Mean number of treating physicians per hospital stay was 2.38. We have found significant differences between medicine wards. We found a small non-significant trend towards less treating physicians across the two study years (from 2.40 to 2.26 physicians for 2009 and 2013 respectively).
Conclusions: We believe some level of fragmentation of care can be attributable to changes in treating physicians across hospitalization in medicine wards. Changes in work routines between wards possibly explains changes in numbers of treating physicians per patient.
Health Policy Implications: Being able to estimate continuity of care within the hospital can potentially guide improvement efforts through care redesign that would strengthen continuity and decrease fragmentation.

ISRAEL'S PIONEERING NATIONAL HEALTH INFORMATION EXCHANGE: HOW ARE THE HEALTH PLANS MAKING USE OF THE NEWLY AVAILABLE HOSPITAL DATA?

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2 Tel-Aviv University, IL
3 Ono Academic College, IL

Background: Israel recently introduced a national Health Information Exchange (HIE) which facilitates the sharing of patient-level data between all of Israel's hospitals and its four health plans, as well as additional care providers. As such, Israel is at the forefront of international efforts to promote informational continuity between hospitals and community-based providers.
Study Question: How are the health plans making use of newly available data about the hospital care being provided to their members?
Methods: In-depth interviews with senior health plan managers at national and regional levels.
Results: All four health plans have made the discharge summary PDF files easily accessible to their primary care physicians (PCPs). Clalit and Leumit have also made available the full range of coded, electronic data about hospital diagnoses, tests and treatments. In contrast, Maccabi and Meuhedet have not done so, due primarily to concerns about the quality and consistency of the hospital data.
None of the health plans has undertaken a major effort to promote PCP use of the national HIE hospital data. The reasons include prior PCP familiarity with (paper) discharge summaries (Maccabi and Meuhedet), prior PCP familiarity with electronic hospital data (Clalit), and the integration of HIE-related training into a broader, multi-phased effort to train PCPs in the use of a rapidly evolving EMR (Leumit).
Conclusions: The full potential of the HIE is not yet being realized. Health plans differ markedly in the extent, and manner, in which they are using the newly available, member-level, hospital data.
Health Policy Implications: The current effort to upgrade Israel's HIE will probably promote greater adoption and use. The latter might also be promoted by helping the health plans understand how some of their peer organizations have made effective use of the hospital data.

QUALITY IN CAPABLE HANDS: TRUST AND EXCELLENCE IN PATIENT EXPERIENCE RELATED TO ACHIEVING GOOD RESULTS IN MEDICAL CARE QUALITY

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Clalit Health Services, IL

Background: The empirical evidence for considering patient experiences an integral part of healthcare quality and a key factor in achieving favorable health outcomes is lacking. In Clalit, patient experiences are surveyed intensively in community practices, with over 120,000 patients surveyed annually.
Study Question: Is there an association between patient experience in community practices, and key processes and outcome care quality measures?
Methods: 121,300 patients completed a community patient experience survey in 2014. Internal consistency was examined for all domains of patient experience (satisfaction, attitude, trust, information, sequencing and coordination, availability and accessibility) using Cronbach. For each patient data were gathered on key quality measures: mammography, fecal occult blood test, adequate HbA1c control (<7), and comprehensive control of diabetes (BP, HbA1c and LDL). Multivariate logistic regression was used to assess the association between patient experience variables and outcome measures, while controlling for socio demographic and clinical variables.
Results: Several statistically and clinically meaningful associations were identified. For example: women who were confident in the judgment of clinicians were 17% more likely to have a mammography than women who expressed no such confidence ($p<0.02$). Patients who felt that they were in good hands were 11% more likely to perform a fecal occult blood test ($p<0.02$), and diabetics who ranked their clinic service level as high were 16% more likely to be adequately controlled ($p<0.05$).
Conclusions: Favorable patient experiences are associated with desired health outcomes and health promoting behavior.
Health Policy Implications: Patient experiences are the building blocks of healthcare systems. It is important to educate clinicians on the need to implement service and patient engagement principles as an integral component of their striving for quality of care.

Monday, 14:00 - Oren Hall 2

THE PSYCHIATRIC REHABILITATION ROUTINE OUTCOME MEASUREMENT (PR-ROM) NATIONAL PROGRAM: EARLY RESULTS OF IMPLEMENTATION AND OUTCOMES

David Roe[1], Efrat Shadmi[1], Paula Garber Epstein[1], Vered Baloush-Kleinman[2], Marc Gelkopf[1]

1 University of Haifa, IL
2 Ministry of Health, IL

Background: The Psychiatric Rehabilitation Routine Outcome Measurement (PR-ROM) national program, a collaboration between the Ministry of Health, The Laszlo N. Tauber Family Foundation, and the University of Haifa, is the first systematic effort to implement mental health routine outcome measures in Israel.

Study Question: The goal is to provide updated information about the process and impact of psychiatric rehabilitation services on the personal recovery of the patients.

Methods: All mental health rehabilitation service patients in Israel and their respective providers were invited to complete the survey following informed consent. Using validated questionnaires, rehabilitation outcomes were assessed (such as: quality of life (QOL), functioning, setting rehabilitation goals, and recovery). Several outputs were generated: patients receive a personal summary which reflects their assessment; each service received a summary report of their patients' outcomes; and an integrative summary was presented to policy makers.

Results: Between 2012-2014, 4,600 patients and 3,300 professionals from rehabilitation services were evaluated (the project is ongoing). A total of 81% of patients reported on personal goals (most of them vocational goals), yet, most reported on not meeting their goals. 62% reported a good score in QOL, and 60% reported that their symptoms impacted on some aspects of their lives. Assessments of providers' reports regarding patient outcomes were consistently lower than patients' reports (e.g., average QOL score of consumers: 3.51, vs. staff: 3:13 ($p < 0.05$)). Early reports indicate that the personal and service reports are being utilized as part of efforts to improve the rehabilitation process.

Conclusions: ROM is an important tool for improving mental health rehabilitation services.

Health Policy Implications: Through the feedback provided to the services and to the consumers, it is possible, for the first time, to tailor the rehabilitation process and to improve the quality of services, based on a set of validated measures.

HEALTHCARE MATCHING - A VALUE CREATING SERVICE

Lars Nordgren, Agneta Planander, Catharina Wingner Leifland
Lund University, Sweden

Background: Long waiting times have been a significant problem in the Swedish health care system. A lack of matching of pathways of care has led to long waiting times for patients, increasing medical risk and contributing towards less effective capacity utilisation. There are different pathways into the elective healthcare system in Sweden, some via referral from a physician and others via referral written by the patient. Other ways are through the district health authority or the emergency ward. As patients move from one provider to another, the complexity of matching patients and their records across healthcare organisations increases.
Study Question: To discuss the need, and barriers, for healthcare matching in the Swedish healthcare.
Methods: The research was inspired by engaged scholarship a participative form of research for obtaining different perspectives of key stakeholders in the study of complex problems.' (Van de Ven 2007). There was collaboration between the medical practice and academia interacting with practitioners in the Skåne and Halland regions. The study draws on the concepts of matching, cooperation and coordination. A detailed reading of patient statements from Swedish healthcare studies was performed. Analysis of the experiences of Skåne region patient coordination was also performed.
Results: Coordination of patients took place across different boundaries in healthcare. Patient statements expressed a need for matching.
Conclusions: There seems to be a need for healthcare matching. The coordination of patients and referrals could be improved by better matching patients to appropriate physicians.
Health Policy Implications: Healthcare matching affects organisational and technical systems and professional identity. In order to succeed in the notion of equal accessibility to care, there must be an understanding of mutual needs by the parties involved.

Monday, 14:00 - Oren Hall 2

ISRAEL'S ELDERLY POPULATION: DO THEY RECEIVE HIGH QUALITY CARE?

Rachel Podell, Vered Kaufman-Shriqui, Ehud Horwitz, Arie Ben-Yehuda, Orly Manor
The Hebrew University - Hadassah, IL

Background: In developed countries, elderly populations are growing exponentially. By the year 2030, those aged 65+ years are expected to comprise 14% of the Israeli population; other countries expect larger proportions. As populations age, health status decreases, precipitating increases in the burden of disease on the healthcare system.
Study Question: To evaluate the quality of primary care provided to elderly Israelis.
Methods: Five elderly-specific (65+years) indicators which originated within the framework of the Israel National Program for Quality Indicators in Community Healthcare (QICH) were selected: influenza and pneumococcal vaccination, body weight documentation, and benzodiazepine use. QICH comprises data from patient's electronic medical records provided by the four Israeli health plans. Data were stratified by year, gender, age and socio-economic position (SEP). Low SEP is defined as exemption from medical co-payments.
Results: Influenza vaccination rates increased since the first measurement (2002) from 42.0% to 62.2% (2013). In 2013, women had lower rates than men (60.4% vs. 64.7%). Rate of pneumococcal vaccination increased since the first measurement (2005) from 25.9% to 74.9% (2013). Body weight documentation rate reached 81.8% in (2013); the 85+ age bracket had the lowest rate (71.5%). Benzodiazepine- use indicators were first measured in 2011 during the 2011-2013 measurement periods. The rate of benzodiazepine overuse remained steady around 5%; the rate of long-term benzodiazepine use fell from 3.8% (2011) to 3.1% (2013). Benzodiazepine over and long-term use were highest among elderly women (11.7% and 4.3%, respectively).
Conclusions: Most indicators demonstrated improvement. High elderly vaccination rates can decrease the burden of influenza and pneumococcal disease. High body weight documentation rates allow for future quality indicator development. The relatively high rate of benzodiazepine use confirms the need for continued practitioner-focused benzodiazepine prescribing education.
Health Policy Implications: Recognizing low quality of care in elderly Israelis can drive health reforms in elderly healthcare access.

THE USE OF EHR IN HOSPITALS' EMERGENCY DEPARTMENTS: THE MODERATING EFFECT OF DIAGNOSIS TASK COMPLEXITY ON READMISSIONS

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2 University of Haifa, IL
3 College of Management Academic Studies, IL
4 Baruch College, USA
5 Tel-Aviv University, IL

Background: The emergency department (ED) represents a distinctively challenging and critical work environment. While there is growing evidence for the positive role played by electronic health record (EHR) systems in hospitals, the evidence for their effectiveness in the ED setting has been inconclusive.

Study Question: How to evaluate the role played by diagnostic task complexity on the relationship between system use and quality of care in the ED setting and specifically the readmissions phenomenon. If the patient re-appears in the emergency room shortly after the discharge decision, it is considered an indicator poor quality of care.

Methods: To explore the impact of using the EHR system on the quality of medical care, a large database of ED referrals was analyzed. The log-files were made up of data collected from seven main hospitals, over a period of four years using advanced statistical and econometric tools and methods.

Results: Our empirical investigation employs field data collected from the EHR systems (549,108 patient encounters) of the seven EDs within a single country. We consider the complexity of the medical diagnosis task using three sub-components and use the Analytical Hierarchy Process to derive a composite score for complexity. While EHR system use has a positive impact on care quality under highly complex diagnostic tasks, interestingly system use has a negative impact on care quality for simple diagnostic tasks.

Conclusions: Using EHR is most beneficial in complex tasks. In these tasks, practice in informed medical decision making via the EHR system led to a reduction in short-term readmissions.

Health Policy Implications: The result of this study can help health policy makers to better understand the potential of interoperability between various points of care, showing the value of information sharing.

Monday, 14:00 - Oren Hall 2

ON ANALYZING FREQUENT READMISSIONS USING A GROUP-BASED TRAJECTORY MODEL

Ofir Ben-Assuli[1], Rema Padman[2], Martha Bowman[3], Moshe Leshno[4], Itamar Shabtai[5]

1 Ono Academic College, IL
2 Carnegie Mellon University, USA
3 Olmsted Medical Center, USA
4 Tel-Aviv University, IL
5 College of Management Academic Studies, IL

Group B

Background: The problem of readmissions has become a challenge worldwide due to care quality and financial concerns. Predicting who is likely to be readmitted and understanding the factors contributing to preventable readmissions is being widely researched.
Study Question: Our question is how to identify patients at high risk of frequent readmissions, using a clinical marker of disease progression.
Methods: Using Electronic Health Record data we retrieved 7,722 patients having seven to twelve separate visits to seven major Israeli emergency departments (EDs). We apply a method called group-based trajectory modeling (GBTM) to study the developmental course of readmission risk (within 30 days) based on creatinine levels in the body. The two primary outputs of the model are the shape of the trajectory for each group and the size of the group as measured by the proportion of population under study following the trajectory.
Results: Preliminary results suggest four distinct creatinine-based trajectories over time, with significantly differing readmission rates by age, gender, creatinine levels and length of stay that may enable readmission risk stratification of the patient population for targeted interventions.
Conclusions: Applying GBTM to patient data from EDs across Israel, our findings suggest that creatinine level based risk stratification can potentially identify distinct groups of patient trajectories based on their presentation in the ED for admission and readmission purposes. The trajectories can be analyzed to generate valuable insights regarding significant covariates that impact readmission risk.
Health Policy Implications: Combining technology adoption with outcome predictions may provide a more holistic view of the relationship between EHR adoption and its meaningful use for generating value. Risk factors and clinical markers for readmission rates may enable health policy makers to better understand the potential of interoperability of the system.

UNDERGRADUATE EDUCATION ON PUBLIC HEALTH IN THE EUROPEAN REGION

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1 ASPHER, Albania

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3 The Hebrew University, IL

Background: Public health workforce development has traditionally focused on training at graduate levels. However, there is a growing awareness that undergraduate education is also required for sufficiently meeting the public health quality and workforce needs of the future. Bachelor level education is expanding and playing an increasing role in meeting the many challenges in the health care sector in the USA, Europe and Worldwide. More knowledge is needed about current and best practice among public health bachelor degree programs across Europe, to enhance knowledge at this earlier stage of education.

Study Question: What is the role of public health education at the undergraduate level in the European Region in schools of public health?

Methods: A preliminary survey to gather information and describe the status of Bachelor programs among the schools within the ASPHER. A study was conducted of 102 current and planned programs in public health and related subjects within European Universities at Bachelor level.

Results: The majority of Bachelor programs have similar student criteria and curricula. Bachelor level education is expanding and playing an increasing role in the development of the public health workforce in Europe, following the goals of public health training in the 21st century with competencies and motivation for the exploration of public health monitoring, understanding, identification, initiating and response planning.

Conclusions: This study shows the growth of public health education in Europe and provides a base for follow up studies of undergraduate program content, student competencies, absorption into the public health workforce and program accreditation. It will help to contribute to a growing world literature on undergraduate education for the public health workforce.

Health Policy Implications: Aiding stronger links between public health education and leading health policymakers and public health advocates.

Monday, 16:30 - Oren Hall 2

A NEW APPROACH TO GLOBAL INTER-DISCIPLINARY PUBLIC HEALTH EDUCATION

Amardeep Thind
Western University, Canada

Background: Health professionals are the sine qua non of a health system, and a health professional educational system is a key building block. The 2010 Lancet Commission on the Education of Health Professionals for the 21st Century noted a mismatch between the problems facing health care systems and health professional educational systems. Challenges include health inequities, globalization, population aging, climate change, and technologic change overlaid on greater social awareness worldwide. In contrast, educational systems were "fragmented, outdated, and static".
Study Question: What should be the structure of an MPH program geared to produce future public health leaders?
Methods: A series of consultations were held with stakeholders both within and without Western University. Core principles on which the new program was to be based included cased based learning, being competency driven, interdisciplinary, and team based. Students take 48 credit hours of courses in Fall and Winter semesters and complete a 12 week practicum in the Summer. A team based approach is fostered through 'Learning Team' activities and sessions.
Results: The inaugural class of 30 students graduated in Fall 2013; 90% were employed six months after graduation. More than 60% of the curriculum is delivered using cases; even the final deliverable of the program is a teaching case and teaching note developed from the student's practicum project. Other curricular innovations include two day-long Integrative Workshops per semester, where students work in teams tackling a current public health problem, with the aim of synthesizing and integrating their didactic knowledge acquired to date. Student and employer feedback has been uniformly positive, and we are in the process of getting CEPH accreditation.
Conclusions: It is possible to design an innovative case based MPH program, but evaluation remains a challenge.
Health Policy Implications: Case based teaching has great potential in training public health professionals, but we need to expand the pool of public health cases.

GOING BEYOND TRANSLATION - ISRAELI HOSPITALS, INTERNATIONAL STANDARDS AND EXPERIENCE: A GLOBAL SEARCH FOR CULTURAL COMPETENCE

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2 Bar-Ilan University, IL.

Background: Inspired by International standards, in 2013, a Director General's circular requiring Israeli health organizations to provide culturally and linguistically competent services , was enacted by the Ministry of Health. The circular is part of the Ministry's ongoing efforts to promote equality in the health system. Concurrent with the circular, we conducted a study, funded by the NIHPR that examined the level of cultural competence (CC) in all general hospitals in Israel.
Study Question: To assess the CC of hospitals, learn about activities to promote it and identify enhancing and inhibiting factors.
Methods: A mapping tool based on the circular and on international standards; In-depth interviews with CC coordinators in the hospitals.
Observations in hospitals.
Various CC dimensions were examined: linguistic accessibility, response to religious needs, adaptation of physical environment, organizational policy and community relations.
Results: We found that the level of CC in Israeli hospitals at the time of the circular was low to moderate.
Currently, most organizational efforts are devoted to improving linguistic accessibility and less to other aspects. CC standards were implemented mainly when required by the circular or the accreditation process (JCI), or as a response to needs. The reasons appear to be a narrow view of CC among hospital staffs, insufficiently expressed need for CC responses and difficulty in translating CC principles to de-facto activities.
Conclusions: The study revealed that the circular raised the issue of CC in hospitals and contributed to implementing CC standards. However, there is still a lack of knowledge, tools and motivation to promote CC beyond linguistic accessibility.
Health Policy Implications: The lecture will position the findings in the international context of promoting CC and examine what the Israeli system can learn from the experience of other countries, and vice versa, within the process of creating a culturally competent system in the broadest sense.

Monday, 16:30 - Oren Hall 2

NOVEL SOLUTIONS IMPROVE HEALTH OUTCOMES - THE TELEHEALTH CENTER

Angela Irony, Galit Kaufman, Nachman Ach, Avi Porath
Maccabi Healthcare Services, IL

Background: Changing patterns in patient's services consumption and rising health demand dictate out of the box thinking in developing innovative building blocks, prompting Maccabi to found the Telehealth services providing solutions through advanced technologies.
Study Question: Is Telehealth care cost-effective and does it leads to improved health outcomes?
Methods: The Telehealth center provides online intervention at 3 levels: Acute 24/7 responding nurses' triage (NT) for 2,000,000 Maccabi members with access to medical records. Home doctor visit call-center (HDV) - a revolutionary after-hours service. Established in order to better adapt the medical service to the patient's needs and to maintain continuity of care. Chronic Proactive intervention in complex chronic patients, through multi-disciplinary team-work using transmitting sensors. Prevention Proactive intervention regarding smoking cessation and post-partum breastfeeding. The Telehealth center comprises a platform for the development of new services working in full cooperation and clarity with the community.
Results: NT- 2,000 nurse consultations a day for women, children and acute issues. Patients' satisfaction rates are 6.6/7 and only 14% of monthly calls result in emergency room referrals. Assessing HDV services demonstrates only 17% of all calls requesting a doctor's home visit were referred to ER, 50% referred to a doctor visit and in 19% a nurse's guidance was sufficient. Since founding the chronic service at 07/12 about 16,000 patients were treated. Diabetes patients showed a 23% improvement of AbA1c values, as well as a 7% decrease in number of hospitalization compared with controlled patients ($p<0.05$). COPD - A 7% decrease in cost of hospitalization ($p<0.05$). Prevention 80% of smoking cessation consultees quit smoking after completing counseling. 800 consultations (with growing demands) for women.
Conclusions: Professional support, combining knowledge, experience and technology, supplies solutions situations, empowers patients and improves adherence.
Health Policy Implications: Telehealth services is an innovative essential building block. It functions as an integrator supports community health services and improving health outcomes.

ASSISTED USE OF THE INTERNET FOR HEALTH PURPOSES; CHARACTERISTICS AND OUTCOMES

Efrat Neter, Esther Brainin
Ruppin Academic Center, IL

Background: Most studies on Internet use for health purposes distinguish between users and non-users. The current study focused on a group often not studied: assisted users.
Study Question: What characterizes the 'assisted users' group (as opposed to independent users and non-users) in terms of background variables, content sought, information sources used and outcomes of information search?
Methods: Participants included 631 Israeli men and women aged 50 or more who responded to a nationally representative random-digital-dial (RDD) telephone survey in 2013.
Results: Assisted users were older, less educated, and reported poorer health as compared to independent users and used more traditional sources of information (interpersonal, print, television and radio). Users in both groups reported little online information search in most categories (diseases and their treatment, service and social support content), with the exceptions of service content used moderately among independent users. Assisted users derived less positive outcomes from the information search compared to independent users.
Conclusions: The study is unique in focusing on a group not addressed in the domain of digital health. Assisted use does not compensate for lack of digital health literacy.
Health Policy Implications: Though assisted users tended to be older, their other characteristics indicate that they will not disappear with time. Accordingly, services need to be constructed so that the needs of this group are met, especially as digital health services proliferate.

Monday, 16:30 - Oren Hall 2

DEVELOPING AN INSTRUMENT TO ASSESS COMMUNICATION IN THE COMPUTERIZED SETTING IN PRIMARY CARE

Shmuel Reis[1], Shiri Assis-Hassid[2], Tsipi Heart[3], Josef Pliskin[4], Iris Reichav[5]
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2 Harvard University, MA, USA
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4 Ben-Gurion University of the Negev, IL
5 Ariel University, IL

Group B

Background: Patient-doctor communication (PDC) has been recognized as a central component of patient centered care. The introduction of the Electronic Medical Records (EMR) system as part of the medical encounter at the GP clinic has significantly changed the way doctors should communicate with patients. In fact, the dyadic PDC has changed into the patient-doctor-computer communication (PDCC) triad. This change calls for the development of new instruments for evaluating the doctor's communication capabilities. The objective of this study was to develop and validate a new PDCC assessment instrument, the e-SEGUE.
Study Question: Developing an instrument to assess communication in the computerized setting in Primary Care.
Methods: The e-SEGUE was developed and validated using the methodology suggested by MacKenzie et al. It was then tested for reliability using simulated medical encounters with real doctors and standard patients, who were evaluated by two independent raters. The inter-rater reliability scores (Kn) were calculated for each one of the 22 e-SEGUE items.
Results: 70% of the e-SEGUE items received between moderate to perfect agreement score. The average Kn was 0.703, considered moderate agreement. The results indicate a satisfactory reliability of the e-SEGUE.
Conclusions: The newly developed e-SEGUE has a promising future as a PDCC assessment instrument. It can likewise serve as a guideline for effective communication in the computerized era, as well as a benchmark for desired communication skills.
Health Policy Implications: Embracing the communication behaviors manifested by the e-SEGUE items can enhance the effective use of EMR in primary care while still adhering to patient centered principles. This will have positive implications on the quality of care, as well as quality of medical data available to policy makers and researchers.

BEING A LEGAL GUARDIAN - THE NURSING PERSPECTIVE

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1 Assaf Harofeh Medical Center, IL
2 The Hebrew University of Jerusalem, IL

Background: Surrogate decision making is common worldwide. In Israel, an incompetent adult patient requires a Legal Guardian (LG), appointed by the court, for approval of invasive none-life saving procedures. Nurses are the most available healthcare providers to the families and the LG. We found that the most difficult issues for the LGs were decision related issues, family related issues and appointment bureaucracy issues.
Study Question: To qualitatively assess and compare nurses' attitudes regarding the difficulties that families and LGs face during and after the appointment of an LG.
Methods: Demographic and semi-structured questionnaires were used to assess the attitudes of 34 nurses (convenience sample). After reading and analyzing the responses provided by the nurses, the authors categorized the pertinent topics raised using content analysis. Nurses' perceptions were also compared to those of LGs reported in previous research by the authors.
Results: Three main themes emerged: Decision related issues, Family related issues, and Bureaucracy issues. Regarding the first two, the feelings of the nurse respondents were similar to those of the LGs. The third theme was never mentioned by the nurses, as opposed to LGs who mentioned it frequently.
Conclusions: The difficulties of decision making, family support and responsibility of LGs are well known by nurses. The bureaucracy issues were neglected by nurses, although they are very important to the LGs. Improvement of this parameter of care is needed. Possible directions for improvement include raising awareness among nurses regarding the appointment process and the alleviation of bureaucracy.
Health Policy Implications: The situation could be improved by involving nurses more in LG appointment teams. Holding workshops on the entire process of LG appointment, for nurses and nursing students, as part of their studies, is another possible action. Additionally, the whole process of LG appointment could be revised, perhaps waiving the need for appointment in certain cases.

Tuesday, 14:00 - Oren Hall 2

BARRIERS AND FACILITATORS OF TEAMWORK IN PRIMARY MEDICINE: A QUALITATIVE ANALYSIS

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2 University of Haifa, IL

Background: Teamwork within primary healthcare services is widely considered as good practice, serving an essential role in effective primary care. In spite of vast clinical evidence supporting the use of multidisciplinary clinical teams, implementation is lacking and many healthcare professionals work alongside each other rather than as a cohesive team.
Study Question: What are the facilitating factors and barriers regarding teamwork in primary healthcare among health professionals?
Methods: Semi-structured interviews were conducted with 30 health professionals (Maccabi Healthcare Services): eleven general practitioners, eight nurses, five dietitians and six social workers. The study took place this year in Israel. Thematic analysis was used to analyze the data.
Results: Overall, most participants demonstrated positive attitudes towards teamwork. While the concept of multi-disciplinary medicine was vastly regarded as a sensible practice, teamwork was perceived as essential in chronic patients, but complex and sometimes inefficient. The leading facilitating factors influencing teamwork included the perception that multidisciplinary teamwork has better clinical results in chronic illnesses, a sense of personal empowerment and support, improves self-efficacy and internal locos of control. In contrast, the barriers included negative attitudes towards teamwork, and gaps between the professional perception of the employees and the organizational policy. Working conditions did not seem to necessarily correlate with personnel's norms and attitudes.
Conclusions: There are various perspectives regarding medical teamwork. Since positive attitudes were demonstrated alongside negative ones, training for healthcare providers is required to cope with this ambivalence and create positive experiences improving self-efficacy and teamwork competencies At the same time, the organization can minimize the gaps identified by supplying personel with tools necessary for teamwork, such as communication skills, as well as defining goals relevant to teamwork and rewarding healthcare providers accordingly.
Health Policy Implications: Healthcare organizations addressing these issues will enjoy more professional and effective teams, thus improving patients' health and reducing the cost of care in the long term.

INTEGRATING THE PARAMEDICS INTO THE HEALTHCARE SYSTEM: INSIGHTS FROM A STUDY AMONG PARAMEDICS THAT LEFT THE PROFESSION

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Background: The rate of Israeli paramedics leaving the profession has been increasing in recent years. Approximately 2,400 paramedics have been trained, yet only about a third of them are still active.
Study Question: To examine the factors related to paramedics leaving the profession in Israel.
Methods: Online survey among paramedics who left the profession. Questions included demographics, job satisfaction, and reasons for leaving or remaining in the profession.
In-depth interviews with 15 paramedics who left the profession.
Results: 250 paramedics who left the profession responded (73% left five years or more after completing training and 93% after 10 years). Choosing the paramedic profession was based mainly on an idealistic sense of mission and eagerness to help, yet extrinsic factors impeded their devotion to the paramedic profession: lack of career options, extensive and strenuous physical demands accompanied by unrewarding salaries, unusually long work hours and shift work that negatively affected their family and personal life.
Conclusions: Rates of leaving the profession of Israeli paramedics are the highest recorded in the world. It seems that work conditions, mainly the lack of opportunities for promotion, lack of professional prospects and inappropriate compensation for hard work are crucial factors in the decision to leave.
Health Policy Implications: A joint committee of the Ministries of Health, Justice, Finance and the MDA should be established for the purpose of improving the conditions and modalities of employment of paramedics and providing appropriate emotional support for paramedics who are exposed daily to work under extreme stress and human suffering. The joint effort can greatly reduce rates of leaving, training costs and costs incidental to turnover as well as increase job satisfaction. Moreover, regulating the profession and granting authorization for additional medical procedures/treatments (e.g. physician assistant) can create opportunities for advancement and diversity at work that will help retain paramedics in the profession.

Group B

PRAGMATIC TRIALS IN NURSING HOMES: BENEFITS OF A UNIFORM MINIMAL CLINICAL DATA SET LINKED TO MEDICARE DATA

Vincent Mor
Brown University, USA

Background: Policy analysis is facilitated by the availability of uniform data on populations served. The more clinically comprehensive and longitudinally structured the more useful.

Study Question: Can population based, clinical data systems linked to utilization events be valid sources of information about disease epidemiology, treatment effectiveness and population health outcomes for selected, high using sub-populations?

Methods: This paper provides an historical overview of the development of the Minimum Data Set (MDS) for Nursing Home Resident Assessment (RAI) and how it evolved into uniform data set complete with physical, cognitive and emotional functioning of the 4+ million Medicare beneficiaries using nursing homes in any year.

Results: Research has shown the MDS/RAI to be a valid data source that has spawned a huge increase in knowledge about the population of post-acute and long term care users, made it possible to evaluate the effect of drugs on frail elderly rarely included in drug studies and now forms the basis for a new generation of cluster randomized clinical trials of treatments, programs and staffing models being tested in U.S. nursing homes.

Conclusions: In the over 20 years since the MDS/RAI was created, geriatric epidemiology, analyses of nursing home quality of care and long term care policy analysis have advanced because of the availability of uniform data.

Health Policy Implications: The experience of the long term care sector with the uniform data available in the MDS/RAI suggests efforts to standardize clinical health information beyond diagnoses and procedures will be worth the pain caused by current efforts in acute and ambulatory care settings.

Tuesday, 14:00 - Oren Hall 2

THE GLOBAL EXPANSION OF A VERSATILE PHYSICIAN ASSISTANT WORKFORCE

Oren Berkowitz
Boston University School of Medicine, USA

Background: The Physician Assistant (PA) profession has experienced diverse international growth over the past two decades. PAs have successfully grown into a vital part of the USA workforce and the Affordable Care Act has cemented their role in expanding services and access to care. PA model professions have been created and piloted in several different countries in an attempt to fill gaps in international healthcare workforces. Israel has recently decided to move forward with its own version of a PA professional.

Study Question: Is the PA model an adaptable workforce that could potentially fill healthcare gaps in Israel and in various international healthcare systems?

Methods: A review of the literature was performed on the structure and evolution of the PA profession. Information has been culled from several global PA professional societies and their publications. Conversations with USA and global PA leadership have also informed this paper.

Results: Approximately 100,000 PAs and nearly 200 PA education programs at the master's degree level exist in the USA. Nearly one-third of PAs practice primary care and the remainder practice in every specialty and setting of medicine and surgery. There are about a dozen industrialized countries and over two-dozen developing countries that have a PA model profession with a wide range of practice scope and educational tracks. Israel is creating a PA profession by building on its existing paramedic workforce. Israel will provide additional education and training to paramedics who will then work in emergency departments under the supervision of physicians.

Conclusions: The PA professional model has displayed versatility and adaptability to many international healthcare systems. Nations with universal healthcare such as the UK and Canada have successfully created PA professions that have increased access to care and produced high satisfaction levels.

Health Policy Implications: Countries such as Israel with universal healthcare could potentially benefit from the implementation of a PA workforce.

Tuesday, 14:00 - Oren Hall 2

IMPACT OF A NURSE-BASED INTERVENTION ON MEDICATION OUTCOMES IN VULNERABLE OLDER ADULTS: RESULTS FROM THE CC-MAP STUDY

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Background: In older adults, symptoms such as pain are often undertreated, and clinical inertia can delay modifying patients' medication regimens as their circumstances change.

Study Question: To assess the impact of a patient-centered case management intervention (Comprehensive Care for Multimorbid Older Adults, or CC-MAP) on use of symptom control medications and changes to medication regimens.

Methods: We evaluated 639 patients from 7 clinics who were enrolled in the intervention, and compared them to 1,660 randomly selected adults who met trial enrollment criteria. Medication use was assessed using Clalit pharmacy data. All analyses were adjusted for age, sex, ACG score (a measure of illness burden), and medication use at baseline.

Results: Mean age in the intervention group was 71.6 years, 42% were men, and the mean number of medications was 4.9 (SD 3.1). The control group was slightly older (mean age 73.0) but otherwise similar. At 9 months, the mean number of symptom control medications was similar in both groups (1.06 in intervention vs. 1.11 in control, P=0.84). Both groups had a similar number of changes to the medication regimen between baseline and 9 months (mean 3.4 vs. 3.3 changes, P=0.21). However, there was substantial heterogeneity in the effect of the intervention among different types of patients. Intervention patients age <75 had 0.40 more medication changes than controls, while intervention patients age >=75 had 0.18 fewer changes than controls (P=0.005 for age-by-treatment interaction). Similarly, the intervention worked in opposite directions for patients taking <=5 vs. >5 medications at baseline (0.30 more changes vs. 0.14 fewer changes than controls, P=0.03 for interaction).

Conclusions: The CC-MAP intervention had heterogeneous effects in different patient populations.

Health Policy Implications: Understanding why the CC-MAP intervention had different effects in different types of patients, and whether this reflects appropriate individualization of care, will be important to inform future versions of this and similar interventions.

ARE FINANCIAL INCENTIVES HELPFUL IN BRINGING MEDICAL RESIDENTS TO PERIPHERAL HOSPITALS? LESSONS FROM THE ISRAELI EXPERIENCE

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Background: Similar to many other countries, Israel suffers from a shortage of physicians in peripheral areas. To address this problem, the government decided in 2011 to provide financial incentives to attract medical residents to peripheral hospitals.
Study Question: To what extent did the incentives succeed in bringing more residents to peripheral hospitals?
Methods: Analysis of trends in the employment of residents 2005-2013.
2015 nationwide survey of medical residents (response rate: 70%).
Results: The proportion of residencies in the periphery, of all new residencies, was 17%-20% in 2005-2010, rising to 20%-23% in 2011-2013. This increase resulted from an increase in the proportion of periphery residents among physicians who had studied medicine abroad. There was no increase among physicians who had studied in Israel. 49% of periphery residents (13% of all hospital residents) reported that the incentives contributed to their decision to do their residency in the periphery. However, 39% of those who reported so also reported that they planned from the beginning of medical school to take a residency in the periphery.
The survey found a strong connection between residency locality and residents' background characteristics: 61% of the residents in the south and 81% in the north grew up in the periphery. Among periphery residents, there were more who studied medicine abroad, more Arabs and more Russian-speakers than among the residents in central Israel.
Conclusions: We conclude that the incentives apparently contributed to the decisions of some residents to apply to peripheral hospitals, but they did not have a major effect on the periphery's share of residencies. The background-characteristics of periphery residents suggest that many of them would have gone to peripheral hospitals regardless of the incentives.
Health Policy Implications: Additional measures should be explored as means to close the gap between center and periphery, e.g., training more physicians who live in the periphery to begin with.

PHYSICIANS MOVING TO THE "PERIPHERY" FOLLOWING THE NEW WAGE AGREEMENT

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3 Soroka Medical Center, IL

Background: At the end of the doctors' strike in 2011 a new wage agreement was signed. It included financial grants for physicians who will begin to work in the "periphery", aiming to reduce the shortage of doctors in hospitals there, upgrade their working conditions, and improve medical care quality in periphery hospitals.

Study Question:

- To map doctors' recruitment to hospitals in the periphery;
- To examine the motives that brought doctors to work in these hospitals;
- To elucidate doctors' evaluations of their decision;
- To describe how (and especially where) these doctors see their professional future;
- To learn what additional strategies can attract physicians to the periphery.

Methods: The study combined quantitative (mapping) and qualitative (in-depth, semi-structured interviews with residents who moved to the periphery) methodologies. The mapping was based on data from hospitals' human resource departments. Following the mapping, a maximum variation sampling of 54 doctors was undertaken. We used descriptive statistics for the analysis of data obtained from the mapping, and grounded theory for the analysis of the interviews.

Results: Most of the physicians that started working in periphery hospitals were male, married and parents. About half of them chose specialties that also entitled them to the grant assigned to specializations "in crisis". The financial grant was among the professional and family considerations that brought physicians to work in periphery hospitals.

Conclusions: The availability of positions for physicians in periphery hospitals, combined with grants for physicians, alongside hospitals' characteristics, resulted in increased numbers of physicians in these hospitals.

Health Policy Implications: It is necessary to simultaneously implement several mechanisms to improve long-term medical manpower distribution in Israel.

PERCEPTIONS AND PRACTICE OF FAMILY PHYSICIANS ON THE MANAGEMENT OF NONCOMMUNICABLE DISEASE AT THE PRIMARY CARE LEVEL IN TURKEY, 2012

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Background: The burden of non communicable diseases (NCD) has increased substantially in the last 20 years due to the demographic and epidemiologic transition in Turkey. Effective control of NCDs should include integrated preventative and curative actions at the primary care level. The aim of this study is to analyse physicians' perceived difficulties and practices in the management of NCDs at the primary care level.
Methods: Data from the Chronic Diseases and Risk Factors Survey 2012, conducted by Ministry of Health of Turkey were analysed. The study population consist of 20,044 family physicians (FP) and two randomly selected over 15 years old participants (40,088) from each physician's list. In total 15,597 FPs (response rate77%) and 18,477 individuals (response rate 46.1%) filled the questionnaire. The questionnaire included questions on the difficulties in providing service, use of clinical guidelines and evaluation of self competency in the management of chronic diseases. Getting advice on lifestyle changes was asked to participants.
Results: According to FPs, the most difficult aspect of NCD management was the patients' noncompliance with the medication (61%) and providing non-pharmacologic therapies (25%). Half of the physicians (46%) used national and international guidelines for NCD management. Use of guidelines was the lowest (35%) in the Eastern Anatolia regions ($P<0.001$). Almost 60% of the physicians evaluate their own competency in management of NCDs as good or very good. Physicians in the North, South and Eastern Central Anatolia regions stated worse competency levels ($p<0.001$).
Conclusions: In order to provide better NCD care, the knowledge and skills of the physicians on the prevention and treatment of NCDs need to be improved in all regions and especially in the in Eastern Anatolia, in Turkey.
Health Policy Implications: The knowledge and skills of the physicians on the prevention and treatment of NCDs need to be improved for better NCD control.

THE IMPLICATION OF INTRODUCING TWO MUTUALLY CONFLICTING REFORMS IN PUBLIC HOSPITALS IN MACEDONIA

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Background: The pace of Results Based Financing reforms as introduced in Macedonia was directly linked to the political changes in the country. Our research was conducted to describe, in detail, all steps in the evolution of two mutually conflicting Results Based Financing schemes: Diagnostic Related Groups (DRG) and Pay for Performance (P4P) in Macedonia during the period 2006-2014.
Study Question: To describe the nature and processes behind implementation of Diagnostic Related Groups and Pay for Performance as results based financing schemes in Macedonian public hospitals.
Methods: We conducted a series of interviews with officials and key parties at the Ministry of Health, Health Insurance Fund, State-owned University Clinics, Medical associations and with members of hospital management. Data was collected and reviewed from all available published and unpublished sources.
Results: Scaling up of DRG at the national level was enabled over a complex set of interactions between four components of a policy cycle: policy process, context, reform actors and content. International experience, combined with strong political support were essential prerequisites for generating national knowledge and ownership of the reform. There was no clear and agreed model of the P4P scheme. This has resulted in conflicts between the members of the working groups. There was little or no international experience and, according to the interviewees, the ownership of the scheme was limited to a few individuals within the Ministry of health.
Conclusions: The findings from our research show that use of international knowledge combined with strong local leadership and ownership of the new reforms may result in successful implementation of the idea into scaled up national policy for the developing countries.
Health Policy Implications: The experience of implementing P4P reforms suggest that fragmentation in the content of the reform, and lack of local ownership in transfer of the knowledge, results in resistance and reluctance in the implementation of the reform.

HEALTH INEQUALITIES REDUCTION IN LITHUANIA BY DEVELOPING MONITORING SYSTEM AND BUILDING CAPACITY OF PUBLIC HEALTH PROFESSIONALS

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Background: Lithuania has one of the worst records for health inequality. In 2014, the Lithuanian Parliament approved the Lithuanian Health Program 2014-2025. One of strategic goals of this program is to reduce health inequality and health care inequality in Lithuania.
Study Question: To investigate the perceptions and attitudes of public health professionals working at municipality level regarding the monitoring and reduction of health inequalities in Lithuania.
Methods: A cross-sectional survey of 150 health care specialists of municipalities and public health bureaus in Lithuania, 2015.
Results: 43.8% of the respondents suggested that strategies for reducing health inequalities at the municipality level are only ever partly implemented. The need to improve monitoring of health inequalities was considered as important (3.48±1.02, max.5), while the possibility of identifying health inequalities in public health bureaus was assessed less positively (3.23±0.89, max.5). The respondents emphasized the necessity to strengthen multi-sector collaboration and setting of priorities for monitoring health inequalities.
Conclusions: These results suggest, that there are serious challenges and a need for guidelines and skills for monitoring and reducing health inequalities in Lithuania.
Health Policy Implications: In order to achieve this goal, the Lithuanian University of Health Sciences, Vilnius University, Klaipeda University and the Institute of Hygiene have initiated a project "The Development of a Model for Strengthening Capacity to Identify and Reduce Health Inequalities", financed by the Norwegian Financial Mechanism 2009-2014 Program "Public Health Initiatives". The project has two main actions. The first - to develop a health inequality identification and monitoring system, has been completed and all municipalities in Lithuania are expected to implement it in 2016. The second action is the capacity building of public health specialists and policy makers at the regional and national level. It is expected that training will increase awareness and facilitate other initiatives for reducing health inequalities.

Wednesday, 09:00 - Oren Hall 2

STUMBLING BLOCKS IN NURSING EDUCATION IN SUB-SAHARAN AFRICA

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Background: Contrary to the nurse-driven, decentralized district-based healthcare service delivery models in most Sub-Saharan African countries, training of nurses is primarily hospital and content-based. Nurses in these African countries are autonomous practitioners and independently provide comprehensive healthcare in remote areas. However, newly qualified nurses are ill equipped to provide the healthcare needed by the majority of the population. Enormous amounts of external funding are invested in nursing education in Africa to pay consultants to assist in transforming the curricula from content-based to competence-based, to provide and equip technology-rich computer and simulation laboratories and to support the development of e-learning materials.

Study Question: What are the building/stumbling blocks that will either support or hinder the sustainability of the transformation of nursing education in an under resourced Sub-Saharan African country?

Methods: A rapid situational analysis was done in one Sub-Saharan African country by means of structured interviews with different categories of staff. The questionnaire used during the interviews encompasses criteria used by councils of higher education to accredit institutions and programs.

Results: Building blocks include: the support provided by the Ministry of Health and the national action plan of 2010-2015, National guidelines that prescribe a primary healthcare approach, community involvement and inter-sectoral collaboration and partnership. Additionally, the students' experience of disparity between what is being taught and what is required of them in clinical practice. Stumbling blocks include: insufficient infrastructure, insufficient guidelines on governance, and the inability of nurse educators to make the required paradigm shift.

Conclusions: Lack of guidance by the local nursing council, a dysfunctional council of higher education and a lack of sound policies regarding nursing education may have a profound influence on the quality of healthcare services.

Health Policy Implications: Should training of nurses in Africa be placed under the jurisdiction of higher education institutes instead of the Ministry of Health due to the profound lack of direction at a national level?

UNDERGRADUATE EDUCATION ON PUBLIC HEALTH IN THE EUROPEAN REGION

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3 The Hebrew University, IL

Background: Public health workforce development has traditionally focused on training at graduate levels. However, there is a growing awareness that undergraduate education is also required for sufficiently meeting the public health quality and workforce needs of the future. Bachelor level education is expanding and playing an increasing role in meeting the many challenges in the health care sector in the USA, Europe and Worldwide. More knowledge is needed about current and best practice among public health bachelor degree programs across Europe, to enhance knowledge at this earlier stage of education.
Study Question: What is the role of public health education at the undergraduate level in the European Region in schools of public health?
Methods: A preliminary survey to gather information and describe the status of Bachelor programs among the schools within the ASPHER. A study was conducted of 102 current and planned programs in public health and related subjects within European Universities at Bachelor level.
Results: The majority of Bachelor programs have similar student criteria and curricula. Bachelor level education is expanding and playing an increasing role in the development of the public health workforce in Europe, following the goals of public health training in the 21st century with competencies and motivation for the exploration of public health monitoring, understanding, identification, initiating and response planning.
Conclusions: This study shows the growth of public health education in Europe and provides a base for follow up studies of undergraduate program content, student competencies, absorption into the public health workforce and program accreditation. It will help to contribute to a growing world literature on undergraduate education for the public health workforce.
Health Policy Implications: Aiding stronger links between public health education and leading health policymakers and public health advocates.

Wednesday, 09:00 - Oren Hall 2

DRUG LAG IN VIETNAM IN COMPARISON WITH ISRAEL AND ITS THERAPEUTIC IMPLICATIONS

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2 The Hebrew University, IL

Background: "Drug lag" is the delay in making a drug available to patients in a country. It has been investigated extensively and received significant political attention in the developed markets, but poorly understood in the developing markets.

Study Question: How does the unavailability of drugs in Vietnam relative to Israel distribute across therapeutic groups? To what extent does it affect the Vietnamese population?

Methods: 17,475 pharmaceutical products approved in Vietnam and 4,019 in Israel in 2012 were coded to Anatomic Therapeutic Chemical (ATC) codes based on active pharmaceutical ingredients, and then compared to find out which drugs were available in Israel but not in Vietnam. To assess the therapeutic value of the missing drugs, the availability of 'substitute' drugs for therapeutic interchange was identified, and the population affected by a missing, non-substitute drug was obtained from the prevalence of its indicated conditions in previous studies. Patent status was used as a predictor for availability and affordability. A review of the official documents regulating drug registration in the two countries was conducted.

Results: In Vietnam, absolute drug lag affected some therapeutic groups more than others, most severely in "Antineoplastic and immunomodulating", and "Nervous-system-acting agents". More than half of the missing drugs did not have a substitute, amongst which 41.3% were under patent. These missing, non-substitute drugs were mainly targeted to rare, very low prevalent, and very high prevalent health conditions. The situation may be explained by the differences in the epidemiological patterns, affordability and the approaches for medicine registration between Vietnam and Israel.

Conclusions: This work reveals the absolute drug lag picture in Vietnam and its impact on population health at a crude level, and suggests the long-lasting unavailability of treatment for some conditions.

Health Policy Implications: The findings indicate a need to make medicines for highly prevalent conditions available, and pose a question about equity-economic trade-off in rare diseases. Health economic evaluations should be conducted for more precise information.

DRIVERS OF INEQUITY IN ACCESS TO HEALTHCARE IN REPUBLIC OF MACEDONIA - RESULTS FROM POPULATION BASED HOUSEHOLD SURVEY

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2 National Institute of Public Health, Macedonia

Background: Inequities in the health status are global problem, equally affecting rich and poor countries. Many attempts to quantify economic impact of health inequities have shown significant opportunities for savings if these inequities are reduced. Following the independence in 1991, Republic of Macedonia (RM) has faced numerous challenges in all sectors of the society, in transition towards development of parliamentary democracy and preserving social values and access to healthcare as a basic human right.
Study Question: The goal of this study was to identify main social determinants of health (SDH) associated with access to healthcare and assessment if the health system provides for universal health coverage.
Methods: Nested case-control study was conducted on a sample of 605 households (HH) by face-to-face interviews, using selected modules from World Health Survey questionnaire. Cases are TB patients registered Jul, 2012-Jun, 2013 and controls HH in their immediate vicinity.
Results: Data was analyzed with SPSS 19.0, utilizing logistic regression to measure predictive value of most important SDH. 16.1% respondents didn't receive health care when in need in the past 30 days, the main reasons being lack of health insurance (16.1%) and inability to pay (13%). The highest percentage is noted in the South-West region, populated mainly with Albanians, 64.8% unemployed. The main predictors of access were employment status (OR=2.16, CI=1.97-2.39), gender (OR=3.22, CI=2.49-4.16) and ethnicity (OR=3.86, CI=2.47-5.22).
Conclusions & Health Policy Implications: Understanding the main SDH that impair access to healthcare is integral to reducing its impact on health and their recognition is imminent for achievement of broader public health goals. The survey has only partially confirmed the main hypothesis that the health system in RM provides equal access to healthcare for all citizens. Identified regional differences associated with both material and non-material factors, as well as employment status, gender and ethnicity identified as main SDH of access, require further targeted exploration.

Wednesday, 09:00 - Oren Hall 2

BRCA POPULATION SCREENING IN UNAFFECTED ASHKENAZI JEWISH WOMEN. A RANDOMIZED CONTROLLED TRIAL OF DIFFERENT PRE-TEST STRATEGIES

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3 Ben-Gurion University of the Negev, IL

Background: In the Ashkenazi Jewish (AJ) population, 11% of breast cancer and 40% of ovarian cancer are due to three mutations in BRCA1/BRCA2 genes. For carriers, risk-reducing salpingooophorectomy reduces morbidity and mortality. Population screening for mutations among AJ women was justifiable in the first step of our study based on 175 male carriers and their 431 female relatives. Risk of developing breast or ovarian cancer by age 60 and 80, respectively, were 0.60 and 0.83 for BRCA1 carriers and 0.33 and 0.76 for BRCA2 carriers. Half of BRCA1/BRCA2 carriers lack significant family history, and would only be identified through screening.
Study Question: We aim to examine the impact of excluding pre-test genetic counseling (GC) in the population screening setting.
Methods: Healthy AJ women age >25 years are randomized to two pre-test arms: written information only (WI) vs. GC. Post-testing, GC is provided to non-carriers indicating significant family history and to all carriers. Psychosocial outcomes (satisfaction, stress, personal perceived control (PPC), knowledge) are assessed one week (Q1) and 6 months (Q2) post-testing.
Results: for the first 749 participants: Post-testing, 95% of GC and 94% of WI participants report being satisfied with testing. Stress (IES) scores were similar. At Q1, PPC and knowledge were higher in GC (p=.005; p=.0001), At Q2, only PPC remained higher in GC: 1.39 vs. 1.25 (p=.02). At Q2, carriers' stress level was higher (14.9 vs. 5.3, p=.0006), as expected.
Conclusions: General screening would identify substantially more carriers, regardless of family history. Compared to WI, pre-test GC provides a mild, temporary, increase in knowledge, accompanied by a greater sense of control.
Health Policy Implications: In Forgoing pre-test GC may be a legitimate alternative for large scale screening, particularly if alternative methods for imparting knowledge are explored.

OPTIMIZING QUALITY MEASUREMENT: APPROPRIATE CONTROLLER THERAPY FOR ASTHMA

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Background: Asthma is a common chronic disease imposing an unacceptable burden for patients, families and health care systems. Although regular daily controller therapy is considered the mainstay of persistent asthma management, under-treatment is not uncommon. Therefore, appropriate controller therapy is an essential target for quality measure. A process quality measure should both correlate with disease outcome and reflect the quality of care.

Study Question: To assess alternative quality measures for appropriate controller therapy of asthma.

Methods: Pharmacy data from 2012-2013 for 12,412 patients with persistent asthma was extracted from Maccabi Healthcare Services computerized database. Three alternative pharmacy-based measures were assessed:

- Rate of controller medication use.
- Rate of reliever overuse.
- Rate of patients with Asthma Medication Ratio (AMR) > 0.5. AMR is the ratio between controller medications and total asthma medications purchased in one year.

We examined the association between each measure and systemic steroid use, serving as a marker for the outcome of asthma exacerbation

Results: There was no association between the first measure and systemic steroid use (rates of use: 25.7% and 25.6% in patients fulfilling and not fulfilling the measure respectively, p=0.88). Measures 2 and 3 were significantly and similarly associated with systemic steroid use (23% and 32% in patients fulfilling and not fulfilling the measure respectively, p<0.01). There was a 79% agreement between these measures.

Conclusions: We assessed three alternative pharmacy-based quality measures for appropriate controller therapy for asthma, using asthma exacerbation as disease outcome. Measures 2 and 3 were equally associated with this outcome, but the AMR measure may better reflect the quality of medical care, especially in difficult to control, severe asthma cases.

Health Policy Implications: A process quality measure should correlate with disease outcome and reflect the quality of medical care. Therefore, AMR has been recently incorporated into the National Program for Quality Indicators in Community Healthcare.

JOINING UP THE DOTS: IMPROVING EVERYDAY HEALTHCARE FOR CHILDREN AND YOUNG PEOPLE IN LAMBETH AND SOUTHWARK

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Background: England has poor morbidity and mortality when health outcomes are compared between children in Britain and the rest of Europe. This is particularly true for long term conditions. Southwark and Lambeth are amongst the worst areas in England. The primary care work stream is one part of the Children and Young People's Partnership which aims to develop innovative ways of delivering healthcare that bridge divisions eg between primary and secondary healthcare or schools and local authority delivered care.
Study Question: Do parents and primary care physicians like review by a pediatrician and GP in primary care, as assessed by the friends and family test?
Methods: Phase 1: the introduction of clinics where a GP and pediatrician sit side by side and review patients, and user response is assessed. Further phases involve rolling this concept out more widely and evaluating alterations in patient flow to outpatients, as well as changes in GP comfort with pediatrics and adherence to NICE or best practice guidance.
Results: Results show overwhelmingly positive support for the approach – with 100% of families extremely happy to recommend the service.
Conclusions: The clinics were very well received. Indeed GPs and commissioners are keen that this becomes a wider trial to enable financial data to be generated to ensure long term sustainability.
Health Policy Implications: Clinicians and families appreciate visually seeing integration in action. National Payment schedules could be tweaked, if further data confirms efficacy, to make this the norm. This data starts to back up recent consensus recommendations of a joint working group of the 3 main royal colleges dealing with children.

MOTIVATION, EDUCATION, SKILLS AND SUPERVISION TO ACHIEVE BETTER CARE IN GENERAL PRACTICE ENVIRONMENT (MESSAGE MODEL)

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Background: There are many barriers to attain effective diabetes care at the different levels- the patient, the healthcare team, the organization's environment. Family physicians, having "less than 10-minutes visit", fail to meet the patient's needs, which may negatively affect adherence to treatment recommendation and result in poor disease management. Leumit Health Services (LHS) developed a unique model of chronic care which includes the enhancement of the primary care team's motivation, education and communication skills; and defines protected time for pro-active diabetes care, combined with supportive supervision of certified diabetes educators.

Study Question: To what extent does a new model affect the quality of diabetes care in general practice environment?

Methods: 18 primary care clinics in the Central District of LHS were enrolled into the pilot. Primary care physicians and nurses attended a training program using a curriculum developed by the study team. After graduation, primary care teams received 3 hours/week for pro-active diabetes management. Our outcomes were quality indicators in diabetes care, described as proportion of DM patients with HbA1c<7, HbA1c> 9, LDL cholesterol <100 mg/dl, and blood pressure <130/80.

Results: The proportion of controlled diabetics (HbA1c<7) significantly increased in the intervention clinics as compared to other clinics in the Central District- 25.8% vs. 7.6% (p<0.01); the proportion of uncontrolled diabetics (HgbA1c>9) decreased by 2.2% in the intervention clinics, and increased by 1.4% in other clinics. The proportion of patients with LDL<100 mg/d significantly increased in the intervention clinics as compared to other clinics 7.5% vs 4.3% (p<0.01). The proportion of patients with BP<130/80 increased by 1.4% in the intervention clinics, and decreased by 1.2% in other clinics.

Conclusions: Our intervention program has a significant positive effect on the quality of diabetes care.

Health Policy Implications: We suggest implementing the MESSAGE model in chronic disease management.

"OPTIMAL NUTRITION CARE FOR ALL" - THE ISRAELI POLICY

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Group B

Background: Malnutrition is a significant public health problem which includes both ends of the nutrition spectrum, with obesity and overweight at one end and under-nutrition at the other. Various programs exist for combating the obesity epidemic but under-nutrition has been largely ignored, despite it costing as much to society in health and economic terms and its severe impact on the quality of life of those experiencing it. Israel is one of eight countries participating in the European Nutrition for Health Alliance (ENHA) whose common goals are 'Optimal-Nutrition-Care-for-All' in healthcare systems and the community across Europe.

Study Question: How to create national awareness and policy implementation for better nutrition for all the population.

Methods: Three round table discussions of stakeholders in four topics:
1. Hospitals 2. Community 3. Continuity of care 4. Education and communication. Subcommittees were formed to decide on policy and implementation of the various actions.

Results: The Israeli national program which started in 2015 is led by the Ministry of Health and includes the following actions: A charter signed by all the stakeholders on May 14th 2015. The Implementation of measuring weight and height in all health care settings. Screening for malnutrition and treating those at risk in all health care settings. Creating health quality indicators computed on national unified infrastructure as an incentive for assimilating the recommendations. Improving the nutritional quality of food served to patients in hospital settings. Policy creation for the continuity of treatment- care sequence. 'Efshari-Bari' program for promoting a healthy lifestyle for the entire population. Participating in a national committee for food security, creating a national food security basket and research networking.

Conclusions: Multidisciplinary teams must work together at a national level towards reaching the goal of 'Optimal-Nutrition-Care-for-All'.

Health Policy Implications: Eliminating malnutrition will improve quality of life and lower costs to the healthcare system.

PROMOTING PATIENT SAFETY USING NURSE MANAGERS' LEADERSHIP AND AUTONOMY: THE MEDIATING ROLE OF SAFETY NORMS AND TEAM LEARNING

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Background: Patient safety is a fundamental factor in promoting patients' health. In the last decade considerable efforts to improve patient safety have not yielded the desired results. Realizing that achieving this aim requires a systemic approach, this study focuses on characteristics of the nurse manager, i.e. safety leadership and psychological empowerment, and explores the processes by which they affect patient safety.
Study Question: What are the mechanisms through which nurse managers can increase the level of safety in their departments?
Methods: 299 nurses from 26 departments in one hospital participated in the study. The data collected derived from a number of sources: self-reporting of nurses and nurse managers, and hospital reports on adverse events.
Results: Using SPSS PROCESS procedure to assess mediation effects, we found that safety-promoting leadership of the nurse manager predicted nurses' perceptions of their own safety behavior mediated by safety norms, while the nurse manager's sense of autonomy on the job predicted the number of reported adverse events in the department as mediated by team learning.
Conclusions: The level of patient safety is influenced by two different processes: While a safety-promoting leadership style leads to norms of safe behavior through which it influences the nurses' perceptions of the level of patient safety, the nurse manager's sense of autonomy promotes team learning, thus reducing adverse events.
Health Policy Implications: Promoting patients' health by reducing the rate of treatment errors requires placing an emphasis on group-level processes headed by the nurse manager. To that end, it is recommended to develop team learning abilities among nursing staff and to establish norms of behavior that underscore compliance with safety procedures. This aim will be best attained by training the nurse managers towards a safety-promoting leadership style and, at the same time, enhancing their sense of autonomy at work.

ESTIMATING CONTINUITY OF CARE ON MEDICINE WARDS IN AN ACADEMIC MEDICAL CENTER IN ISRAEL

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Background: The importance of continuity of care for hospitalized patients has grown in recent years, and emphasis has been placed on transfer of information between caregivers as a way to decrease possible adverse outcomes. Yet, very little is known regarding fragmentation of care within medicine wards that is attributable to changes in treating physicians on the wards. Recent changes in regulations enforcing restrictions on residents working hours will likely increase potential for fragmentation.
Study Question: What is the level of care continuity measured through the assessment of the number of treating physicians? Can differences between wards or trends across time be identified?
Methods: In this retrospective cohort design study we have utilized information gathered from the Electronic Medical Record at Sheba Medical Center, a tertiary academic medical center in Israel. Data from six medicine wards across five years (2009-13) has been collected, including treating physicians on a daily basis as well as background clinical information on patients. For each hospitalization the number of treating physicians has been calculated.
Results: We have summarized information from 429,708 hospital days and 105,883 hospitalizations at medicine wards (mean length of stay 4.05). Mean number of treating physicians per hospital stay was 2.38. We have found significant differences between medicine wards. We found a small non-significant trend towards less treating physicians across the two study years (from 2.40 to 2.26 physicians for 2009 and 2013 respectively).
Conclusions: We believe some level of fragmentation of care can be attributable to changes in treating physicians across hospitalization in medicine wards. Changes in work routines between wards possibly explains changes in numbers of treating physicians per patient.
Health Policy Implications: Being able to estimate continuity of care within the hospital can potentially guide improvement efforts through care redesign that would strengthen continuity and decrease fragmentation.

UNIVERSAL HEALTH COVERAGE: THE ROLE OF THE HEALTH BENEFITS PACKAGE

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The health benefits package is a central policy instrument in securing the transition towards universal health coverage. It defines the services to which patients are entitled under the statutory health insurance system, and can also act as the basis for establishing a market in voluntary complementary health insurance.
Economists have long argues that cost-effectiveness should form the basis for setting the benefits package, as it maximizes the health benefits that can be secured from a fixed health care budget. However, numerous practical constraints may in practice modify that simple decision rule.
This paper examines the type of infrastructure, bureaucratic and political constraints that can influence choice of the health benefits package, and discusses their implications for selecting the package.

Monday, 14:00 - Oren Hall 3

FINANCIAL AND CARE DELIVERY IMPLICATIONS OF CHANGING PRIMARY CARE REIMBURSEMENT

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2 Stanford University School of Medicine, USA
3 Massachusetts General Hospital, USA

Background: Primary care is a key building block of most health systems. Yet, many international health systems reimburse primary care using fee-for-service payments, which has led to a dysfunctional primary care system in many countries. Innovative models of primary care delivery such as the patient-centered medical home may require different payment models in order to achieve their goals.
Study Question: To understand the financial and care delivery implications of shifting primary care payment from reimbursement via FFS payments to reimbursement via primary care capitation (PCC).
Methods: Microsimulation model, tabulating practice revenues and costs from a practice manager perspective. Revenue and cost data were obtained from national practice surveys. Simulated clinics reflecting the US national range of practice size, location, and patient population were subjected to various mixes of patients with reimbursement via FFS or PCC. Changes in clinic utilization and net annual revenue will be estimated after clinics expand services to include: investing in patient tracking, communications, and quality improvement systems; increasing support staff; altering visit templates to accommodate longer visits, telephone visits, and/or electronic visits; and extending service delivery hours.
Results: Our results will demonstrate the optimal behavioral response of primary care practices as the percentage of patients reimbursed via PCC increases from 0% to 100%. We will identify the point at which changes in behavior to offer fewer face-to-face visits by incorporating non-reimbursed services and personnel makes sense from the economic perspective of the practice.
Conclusions: True reform of primary care requires new payment models that transition a substantial proportion of primary care revenue away from standard fee-for-service payments.
Health Policy Implications: Primary care payment reform is needed to support innovative methods of primary care delivery that will optimize both resource use and patient experiences.

HEALTH INSURANCE IN ISRAEL: FROM SELECTIVITY TO UNIVERSALITY AND BACK

Shlomo Mor-Yosef, Jacques Bendelac, Refaela Cohen
National Insurance Institute of Israel, IL

Background: In 1995 the National Health Insurance Law was enacted, and Israel moved from private/selective to public/universal health insurance. The law established universal eligibility to a basket of health services to which every citizen is entitled. The basket is both uniform and extensive and the capitation formula is designed to prevent health maintenance organizations from giving preference to certain insurees over others.
Study Question: The study will investigate whether during twenty years of universal health insurance, the principle of universal eligibility to health services has been eroded Changes in the public health system will be examined: universality in the light of the development of the regressive private system.
Methods: Analysis of trends and data comparison will be based on NII files: The health file (distribution of insurees over the years, according to HMO), and current files (benefit recipients, salary files, and others). In addition, use will be made of Health Ministry information, and the CBS' surveys of income and expenditure. OECD data will be used as an international comparison for rates of insurance coverage (public/private).
Results: When the law was enacted in 1995, all of Israel's population was provided with health insurance which entitled them to a uniform basket of services. Over the years an erosion of universality has been observed:
Limiting eligibility to returning citizens (2003).
Private payments (co-payments) in the public system (1998).
Complementary health insurance (1998).
An increase in insurees using additional health services.
Those insured for only some of the services.
Conclusions: The universality of the Israeli health system has been eroded over the years - this conclusion will be supported with the use of an exclusive database.
Health Policy Implications: Universality within the public system needs to be strengthened.
Balance is required between the private and public systems in order to secure a more equal and solid health system.

PRECAUTIONARY SAVINGS, HEALTH INSURANCE AND MACROECONOMIC STRUCTURAL ADJUSTMENT IN CHINA

Peter Hilsenrath
University of the Pacific, Stockton, California, USA

Background: China has exploded onto the world economy over the last few decades and is undergoing rapid transformation toward relatively more services. The health sector is an important part of this transition.
Study Question: The paper focuses on health insurance and macroeconomic structural adjustment toward less saving and more consumption. In particular, the question of how health insurance impacts precautionary savings is considered.
Methods: Multivariate analysis using data from 1990 to 2012 is employed. The household savings rate is the dependent variable in 3 models segmented for rural and urban populations. Independent variables include out-of-pocket health expenditures, health insurance payouts, housing expenditure, education expenditure and consumption as a share of GDP.
Results: Out-of-pocket health expenditures were positively correlated with household savings rates. But health insurance remains weak and increased health insurance payouts have not been associated with lower levels of household savings so far. Housing was positively correlated while education had a negative association with savings rates. This latter finding was unexpected. Perhaps education is perceived as investment and a substitute for savings.
Conclusions: China's shift toward a more service oriented economy includes a growing dependence on the health sector. Better health insurance is an important part of this evolution. Increasing focus on the growth, efficiency and equity of Chinese healthcare is expected.
Health Policy Implications: Health policy is integrally linked with macroeconomic policy in an environment constrained by prevailing organizational and institutional convention. Problems of agency relationships, professional hegemony and special interest politics feature prominently, as they do elsewhere. China also has a dual approach to medicine relying heavily on providers of traditional Chinese medicine. Both of these segments will take part in China's evolution, adding another layer of complexity to policy.

HEALTH AND HEALTH CARE DEMAND EFFECTS OF DOUBLE COVERAGE

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2 Nova University, Lisbon, Portugal
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Background: The measurement of moral hazard faces different challenges in countries where a National Health Service prevails. The Portuguese health system has a particular feature: the existence of profession-based mandatory health insurance (known as health subsystems). This coverage is exogenous, as people do not select a particular job position because of the associated health insurance and selection is not a major concern.
Study Question: We address the effects on health and on demand for health care using coverage by private and public subsystems as a way to identify them.
Methods: We estimate a three-equation model with endogenous latent variables as well as endogenous dummy variables. One equation is related to health status (self-reported health) and the other two related to use of health care (pharmaceuticals and visits to the doctor). The health equation and the pharmaceutical use equation contain latent variables. Use of pharmaceutical products is subject to prescription (for the most relevant treatments), and we may see it as reflecting physicians' moral hazard while visits to the doctor are mostly patient initiated. We estimate the model by a specifically built Full Information Maximum Likelihood procedure.
Results: Health subsystems provide better access to doctors (higher number of visits) and more so for private health subsystems than for public health subsystems. There is no evidence that in either case a higher health status results.
Conclusions: Health subsystems as double insurance coverage lead to a higher number of visits to doctors. The additional layer of health insurance coverage does not have a significant impact on health.
Health Policy Implications: Our results call for a careful assessment of the role of health subsystems. It suggests enrollment should not be mandatory and no public money should be present in paying for this double coverage, an important policy implication for public health subsystems.

THE LIKELY EFFECTS OF EMPLOYER-MANDATED COMPLEMENTARY HEALTH INSURANCE ON HEALTH COVERAGE IN FRANCE

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1 Université Paris Dauphine, France
2 IRDES, France

Background: Despite the existence of compulsory and universal public health insurance, access to health care is highly dependent on complementaty health insurance (CHI) coverage in France. Thus, the generalisation of CHI became a core factor in the 2013 national health strategy and this objective was implemented in the National Interprofessional Agreement (NIA), which mandates that all private sector employers offer partially financed compulsory CHI to all of their employees beginning on January 1st, 2016 and improve its portability coverage for unemployed former employees for up to 12 months.
Study Question: This article provides a simulation of the likely effects of the NIA mandate on the non-coverage rate of the whole population and explores to what extent this scheme will reduce inequalities in CHI coverage and improve access to CHI among individuals subject to involuntary non-coverage due to financial barriers or, on the contrary, constrain individuals who would prefer remaining without coverage regarding their preferences.
Methods: Based on data from the 2012 French Health, Health Care and Insurance survey and three application scenarios of the law, we simulate the proportion of the population who would remain without CHI coverage and analyse non coverage rates according to age, health status, socio-economic characteristics and time and risk preferences.
Results: We show that the non-coverage rate that was estimated to be 5% in 2012 will drop to 4% following the generalisation of employer-sponsored CHI and to 3.7% after accounting for portability coverage. In addition, non-coverage is expected to remain higher among the most fragile populations.
Conclusions: The mandate could reduce the relationship between non-coverage and time and risk preferences without eliminating social inequalities.
Health Policy Implications: These results highlight the questionable effects on mandating private sector employers to offer compulsory CHI to employees on efficiency and equity in access to CHI coverage.

SERVICE LETTERS IN PRIVATE HEALTH INSURANCE: DOES AN ADDITIONAL ISRAELI FOR-PROFIT HMO EXIST?

Amatzia Ginat[1], Amir Shmueli[2]
1 Ministry of Health, IL
2 The Hebrew University - Hadassah, IL

Background: The service letter is a commitment of the insurance company to supply certain health services to the purchaser of a health policy. Some of the suppliers of those services are not regulated by health authorities, although some of them provide services countrywide. More than a million people in Israel are covered by those service letters today, accounting for more than 13% of Israel's population.
Study Question: The study question is to examine the subject of the policies that include service letters, and to determine whether the constellation of the services and the suppliers, actually constitute another Health Fund, a for-profit one.
Methods: The research is focused on the health insurance for health care expenses, sold to private customers by the insurance companies. The data was gathered in two different commemorative dates, with the aim of gaining an understanding of the differences that occurred during this time frame. The gathering of the data, both times, was executed twice, with two different techniques; automated and manual.
Results: 124 service letters were offered to the public in 106 different health insurance policies. All the service letters were analyzed. The analysis of the service letters concluded that about two thirds of the listed services offered overlapped the National Health Basket list.
Conclusions: The constellation of service letters meets some of the criteria of a Health Fund, but not all of them. The main differences are that the insurance companies are for-profit firms, conducting intensive underwriting, setting the insurance terms, the conditions and the list of services they offer, and are regulated by the regulator of the insurance market.
Health Policy Implications: The lack of governmental supervision on some health service suppliers. The lack of cooperation between the regulators of financial markets and health services means that the public need is not being met.

HOW MUCH WE WILL SPEND ON HOSPITALS: AN EXPLANATORY MODEL OF THE DETERMINANTS OF HOSPITALIZATION COSTS

Gabriel Catan, Nir Oz, Yuli Babitzki
Meuhedet Healthcare, IL

Background: Healthcare costs are increasing every year and this places increasing pressure on healthcare providers and insurers. In-patient costs at hospitals are one of the largest expenses for Israeli health plans. It is well known that elderly people cost more in terms of treatment than the younger population, thus, ageing could affect considerably the in-patient hospitalization budget. In addition, it has been observed that during the period of the Jewish holidays, hospital expenses decrease significantly in comparison with other periods during the year. Additionally, hospitalization increases during the cold season when people are more likely to fall ill.
Study Question: This work intends to find the determinants of variability in hospitalization costs and to measure their effect.
Methods: A General Linear Model was used to estimate the parameters of the model. Before modelling, a comparison of means and analysis of other variables was carried out to review the relevance of introducing them into the model.
Results: According to the results, the model (Adjusted R2=0.701) indicates that a 1% increase in the ratio of 65+'s will result in an increased hospitalization cost of 15.4 million NIS. In addition, it is anticipated that hospitalization costs during holiday seasons, will be 16.2 million NIS lower, on average, than other periods. Finally, the winter season increases costs on average by 16.9 million NIS in comparison with the rest of the year.
Conclusions: The current ageing trend in Israel indicates that hospitalization costs may increase further in the nearer future. In order to reduce these expenses, the health plans should continue shifting some of the services to the community. In addition, expanding promotion and prevention programs may reduce avoidable diseases in specific seasons.
Health Policy Implications: By understanding the determinants in the variability of hospitalization expenses, this study provides some helpful indications to decision-makers in order to reduce further increases in total expenses.

ACUTE CARE HOSPITALIZATIONS: WHO ACCOUNTS FOR HALF OF TOTAL HEALTH EXPENDITURE?

Ziona Haklai
Ministry of Health, IL

Background: Similar to the OECD average, acute care hospitalizations in Israel represent one third of national health expenditure, while bed occupancy rate is higher than the OECD average.
Study Question: Identify the distribution of expenditure among inpatients and find indicators for high hospital expenditure.
Methods: This research focuses on non-maternity public acute care hospitalizations in Israel between 2007 and 2014 as reported to the Ministry of Health. Expenditure was calculated as annual cumulative hospital expenditure based on listed tariffs. Univariate and multivariate analyses were performed to identify "expensive" patients, defined as those in the top cumulative expenditure decile. Explanatory variables were age, gender, HMO, comorbidity and hospitalization variables.
Results: In 2013, the median cumulative expenditure per patient was 9,800 NIS with an interquartile range of 4,200-22,100 NIS, and the top decile was 50,000 NIS. Eighty percent of inpatients accounted for one third of total expenditure, whereas 11% accounted for half of the expenditure. This distribution was similar for all years. Multivariable analysis for "high expenditure" showed that the odds ratio rose with increasing age (OR=1.9 for ages 75-84, vs. ages 35-44), for babies under one year (OR=2.0), males (OR=1.2), those having operations (OR=2.8), ER admission (OR=1.4), ICU stay and multiple comorbidity as measured by Charlson index.
Conclusions: One tenth of inpatients, mainly elderly with multiple chronic diseases, accounted for half of the total expenditure. There is a strong correlation between high expenditure and high cumulative number of hospitalization days.
Health Policy Implications: Policies should be targeted at the high risk patients who account for a large proportion of expenditure and have long hospital stays. Alternative treatment methods in the community or at home could reduce hospital expenditure. Improved communication with the patient and family members during discharge could help reduce repeat hospitalizations.

Monday, 16:30 - Oren Hall 3

MENTAL HEALTH READMISSIONS: AN EMPIRICAL APPROACH ON THEIR PATH AND COSTS

Maria Ana Matias, Pedro Pita Barros
Nova School of Business and Economics, Portugal

Background: Hospital readmissions are an important indicator of patient health outcome and health care system performance. The 30-day readmission rates for severe mental illness are considered one of the key indicators of mental health quality. Reducing these rates should be one of the top strategic priorities. In the vast literature there are no studies focusing entirely on analysing and estimating the costs of mental health readmissions. This is an important issue especially in countries that are discussing a new mental health financing program.
Study Question: How have mental health readmissions been evolving over time? How much do they cost?
Methods: We performed this analysis for Portugal, a country with a case-mix based funding system. We use a diagnosis related group (DRG) dataset from 1994 to 2013 considering only mental health inpatient discharges. To estimate the cost of emergency readmissions, we eliminated from our analysis the programmed rehospitalisations by using a negative binomial regression. To access if the current financing system is creating incentives for hospitals to increase readmissions we used a probit model.
Results: Between 2011-2013 readmissions increased significantly. Combined with the fact that the average length of stay has been decreasing, we conjecture that patients are leaving hospitals not fully recovered. The total cost of emergency readmissions amounts to €11M. We found evidence that the current financing system is creating incentives for hospitals to increase readmissions.
Conclusions: The focus of mental health system redesign should be on creating incentives to reduce hospital readmissions and guarantee that patients leave the hospital stable.
Health Policy Implications: Based on our results, and in order to increase the performance of the mental health care system, we suggest that policy-makers should introduce a quality measure that could be associated with the reduction of the DRG price.

TRENDS IN SURGICAL HOSPITALIZATIONS IN PRIVATE AND PUBLIC HOSPITALS

Gali Shlichkov, Jill Meron, Ziona Haklai
Ministry of Health, IL

Background: The scope of surgical activity performed in private hospitals directly impacts the availability of resources in the public health sector, and household health expenditure which is high in Israel (26% in 2013) compared to the OECD (20%).
Study Question: To compare changes in surgical hospitalization rates in public and private hospitals by age and gender.
Methods: This research is based on the Israel National Hospital Discharge Register in the Ministry of Health. The research population includes all surgical hospitalizations with at least one surgical procedure.
Results: The percent of surgical hospitalizations in private hospitals increased from 18.8% in 2007 to 21.2% in 2013. The rate is higher for males compared to females and the gender gap is increasing with time, 20.1% for males and 17.8% for females in 2007 compared to 24.8% and 18.4%, respectively, in 2013. Private hospitalizations are more prevalent among children aged 14 and under (57% in 2013) and among ages 45-74 (26% in 2013). During this time, the rate in public hospitals fell by 5% while the rate in private hospitals increased by 10%. In private hospitals the surgical hospitalization rate increased by 24% for males yet remained constant for females. In public hospitals the rate was 1.4 times higher for females compared to males in 2013 whereas in private hospitals the rates were similar.
Conclusions: In recent years there has been a move from public to private hospitals, primarily among males. The percent of private hospitalizations is increasing as is the private surgical hospitalization rate compared to a falling public hospitalization rate.
Health Policy Implications: By its nature, private hospitalization is more accessible to wealthy populations and results in increased health expenditure and social and gender inequalities. Increased private hospitalizations will deflect resources from public healthcare and have a negative effect on physician availability and waiting times in the public health system.

GEOGRAPHIC DISPARITIES IN THE HOSPITALIZATION RATE AND THEIR INFLUENCE ON HEALTH POLICY

Myriam Aburbeh, Jill Meron, Ziona Haklai
Ministry of Health, IL

Background: According to research conducted by the OECD, variations in healthcare utilization rates between regions are a cause for concern. In Israel, recognition of the importance of reducing inequalities has raised awareness of the need to examine geographic disparities.
Study Question: To examine the utilization and diversification of hospitalization services in Israel.
Methods: The data are based on 1.1 million annual non-maternity hospitalizations in 40 acute care hospitals in the years 2011-2013. Age adjusted hospital discharge rates for each district and sub-district were calculated as was the geographic diversification of hospitalizations by home district and hospital location.
Results: The age adjusted non-maternity hospitalization rate was 131 per 1,000 people. The difference between the highest and lowest district rate is 52%. In the Tel-Aviv and Central districts the rate is lower than the national rate, in the Southern district the rate is similar to the national rate and in the Haifa and Northern districts the rate is higher than the national rate by 19% and 11% respectively. The majority of hospitalizations in Northern and Southern district hospitals are of residents of those districts whereas in the Haifa, Tel-Aviv and Central district hospitals patients are often residents of adjacent districts. A tenth of all hospitalizations were in private hospitals, fewer in the Northern sub-districts where there are less private hospitals than in the central areas.
Conclusions: Higher hospitalization rates in the periphery compared to the center of the country are influenced by socio-economic levels, morbidity levels, health care services and HMO policy.
Health Policy Implications: Proximity to hospital services is important for community wellbeing and depends on the supply of hospital services and on HMO policy and its agreements with the hospitals. We recommend examining the reasons for the geographic disparities in the hospitalization rate in order to improve the quality of care provided to the entire population.

THE DETERMINATION OF FACTORS ASSOCIATED WITH RECURRENT ADMISSIONS AMONG OLDER PATIENTS IN INTERNAL MEDICINE WARDS AT THE RAMBAM HEALTH CARE CAMPUS

Dani Kirshner, Tzvi Dwolatzky
Rambam - Health Care Campus, IL

Background: Reducing the rate of acute care readmissions may improve quality of care and decrease health care costs. It is known that older people are at high risk for readmissions. Nevertheless, there is limited data on the frequency and the factors associated with recurrent admissions. Prediction models for readmission risk are compound and have poor predictive ability, especially among older patients. Factors shown to be associated with recurrent admissions include co-morbidity, assessment scales, pharmacologic, laboratory and social measures.
Study Question: To determine the factors associated with recurrent admissions among older patients in internal medicine wards at the Rambam - Health Care Campus.
Methods: We conducted a retrospective study based on the electronic records of patients at the Rambam - Health Care Campus for the period January 1, 2009 to 31 December 2014. The study population included patients aged 65 years and older admitted to internal medicine wards. Primary outcome was early (within 7 days) and late (within 30 days) readmission. Independent variables included incidence of readmissions, mortality rate in primary hospitalization, length of stay, gender, age, first ward of admission, stay in intensive care unit, Norton risk scale, Charlson comorbidity index, discharge destination and laboratory data. Bivariate and multivariate logistic regression analysis were used to predict the risk for readmission.
Results: A total of 44,172 hospitalizations were analyzed. Readmission incidence was 4.9% and 11.3% for early and late readmission, respectively. In the multivariate analysis, age, gender, length of primary admission, hemoglobin, albumin and BUN (Blood Urea Nitrogen) on discharge, Norton scale and Charlson score predicted readmission.
Conclusions: In this study we have identified important risk factors for recurrent admissions. Focusing on these factors during hospitalization, may allow for the development of strategies to decrease the rate of readmissions.
Health Policy Implications: This study will encourage the development of specific strategies for decreasing hospital readmissions.

RESOURCE UTILIZATION IN THE ISRAELI HEALTHCARE SYSTEM: A GINI APPROACH

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1 Meuhedet Healthcare, IL
2 Assaf Harofeh Medical Center, IL

Background: Since the Israeli healthcare system is based on universal insurance coverage, there is a constant tension between equality and justice or fairness. A literature review reveals different principles for resource allocation in health, however, only a few studies examined the consequences of allocation through an egalitarian prism. In Israel, each citizen is privileged to health services (equality in access), yet it is still questionable if the usage of services is equal.
Study Question: To present the fairness in distributing resources in healthcare by using the Gini-coefficient-Index (GiniCI), originally used to measure equality in income, on a scale from 0 (totally equal) to 1 (totally unequal).
Methods: Analyzing cumulative data on expenses per services and patient, and data from the Ministry of Health, GiniCI were calculated for: 1. The health services usage by patients of an Israeli HMO in 2014, 2. The additions of technologies to the National List of Health Services (NLHS) (2000-2015) and 3. Utilization of dental services in 2014 following the dentistry reform of 2010.
Results: Within the HMO, primary physician services expressed the lowest Gini value (0.5) (reflecting high equality), and hospitalizations showed the highest value (0.94) (lower equality), having 34% and 93% of the total expenses concentrated in the upper 10%, respectively. In the case of the NLHS, the 2015 NLHS had the less egalitarian distribution (the upper 10% concentrated the 95% of resources), while the 2004 list has the most egalitarian distribution (23% of resources, respectively). In the dentistry reform, the GiniCI showed the highest egalitarian distribution among the beneficiaries (0.3).
Conclusions: GiniCI can be used to demonstrate the degree of inequality in allocating budget in different mechanisms in healthcare. This can be a useful tool to support wise decision making.
Health Policy Implications: This research presents an innovative indicator and encourages the debate about measuring fairness in the utilization of services in national health programs.

Group C

Tuesday, 14:00 - Oren Hall 3

EQUALITY IN HEALTH SERVICES FOR PERSONS SUFFERING FROM SEVERE PSYCHIATRIC ILLNESS

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2 Clalit Health Services, IL
3 University of Haifa, IL

Background: The "Convention on the Rights of Persons with Disabilities" calls for equality of health services for all people. Numerous studies have reported excess mortality from cardiovascular disease and diabetes among persons with severe mental illness (SMI). Early interventions are critical to attain better treatment and prognosis and reduce the burden associated with a disease.
Study Question: This study tested if the right for equality in health services is fulfilled among persons with SMI in Israel, under the cover of the National Health Insurance and the Rehabilitation Law for Persons with Mental Disability.
Methods: A cross-linkage was performed between the National Psychiatric Case Registry (INPCR) and the database of Clalit Health Services (CHS), Israel's largest health care provider. The INCPR applied the inclusion criteria of psychiatric hospitalization with a release diagnosis of schizophrenia or bipolar disorder among adults. Matched comparison groups of CHS members were built according to the age, sex, national affiliation and socioeconomic status characteristics of each diagnostic group, in a ratio of 2:1. Annual measures of visits to specialists, laboratory tests (Hemoglobin A1C, and cholesterol), and surgical interventions for persons with a cardiovascular disease were collected between the years 2002-2009 and compared between users of the two groups to their matched controls.
Results: The linkage identified 17,041 users with schizophrenia and 2,217 with bipolar disorder registered in both databases. In both groups laboratory tests were comparable to their matched controls. Visits to specialists were slightly lower among service users with schizophrenia and higher among persons with bipolar disorder compared to their matched groups. Surgical interventions among persons diagnosed with schizophrenia were 30% lower compared to controls, while no significant difference was found among persons with bipolar disorder.
Conclusions: Health care disparities were observed among persons diagnosed with schizophrenia, but not bipolar disorder.
Health Policy Implications: Priority recommendations based on WHO recent policies guidelines are proposed.

A REALIST INQUIRY OF AN ORGANIZATION-WIDE INITIATIVE TO REDUCE DISPARITIES IN HEALTH AND HEALTH CARE

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1 University of Haifa, IL
2 Clalit Health Services, IL

Background: An organization-wide disparity reduction intervention implemented in Israel's Clalit Health Services, focused on reducing gaps between clinics of low-socioeconomic and minority populations, and all other clinics in a composite score of: diabetes, blood pressure, lipid control, prevention of anemia in infants, performance of mammography, occult blood tests, and influenza vaccinations. Between 2009-2012 the gap decreased by 66.7%, however, variations in disparity reduction were observed.
Study Question: What types of interventions, in relation to the organizational context, will assist clinics in improving quality of care to achieve overall disparity reduction.
Methods: Realistic Evaluation was employed to study the program in 26 of the target clinics and their sub-regional and regional managements. Semi-structured interviews were conducted with 108 team-members. Organizational ties were mapped through Social Network Analysis and perceived Team Effectiveness (TE) was assessed. Types of interventions employed were analyzed using categories of the Chronic Care Model. Context-mechanism-outcome configurations were identified to assess the variations in disparity reduction.
Results: Configurations of successful clinics included high intra-clinic density, strong ties with sub-regional management, and high-perceived TE levels ($r=0.406$, $p<0.05$; $r=0.464$, $p<0.05$). Clinics that employed broad mechanisms, focusing on improving work processes rather than on a specific clinical indicator, achieved improvement in the composite score ($r=0.393$, $p<0.05$). Furthermore, clinics that harnessed a wide range of resources, such as team training, service delivery and tailoring interventions to the community (e.g., addressing religious issues or cultural beliefs), also improved in the composite measure ($r=0.461$, $p<0.05$).
Conclusions: We demonstrated that cohesive clinics, with a high level of perceived TE employ a wider range of interventions that address the inner and outer context of the clinic, and achieve greater improvement in quality resulting in overall organizational-wide disparity reduction.
Health Policy Implications: These findings may help guide policy makers as to how to achieve success in similar programs.

Group C

THE ECONOMIC BURDEN OF SOCIOECONOMIC-RELATED HEALTH DISPARITIES

Eran Politzer[1], Amir Shmueli[2], Gur Ofer[2], Shlomit Avni[3]
1 Bank of Israel, IL
2 The Hebrew University, IL
3 Ministry of Health, IL

Background: Low income, low education, and social exclusion often lead to excess morbidity and early mortality. These adverse health outcomes have a negative impact on the Gross Domestic Product and welfare of the society, and increase the expenditure on medical care.
Study Question: What is the economic burden caused by socioeconomic-related health disparities in Israel?
Methods: We use the CBS's Health and Social Surveys, CBS's Profile of Localities, and the MOH's hospitalization data. We define "equality scenarios" among localities or individuals and calculate the welfare loss originated from actual disparities. We use both the human capital and the welfare approaches to estimate the burden.
Results: The mortality rates for working age individuals in weaker localities are higher by 15 to 25 percent than the rates in stronger localities for all age groups (and gaps for children aged 0 to 4 are even higher - 89 percent). Under the human capital approach, monetizing the excess mortality by actual wages, the discounted value of the lost working years per annum is estimated at NIS500 million. Under the welfare approach, using the Ministry of Transport's value of life, the welfare loss from excess mortality at all ages rises to NIS4 billion per annum. The product loss due to excess morbidity of low income employees is estimated at NIS1.5 billion a year. Excess medical care leads to annual net cost of at least NIS400 million. Summing up, we estimate the total burden due to socioeconomic related health disparities is 2.4 to 5.9 billion shekels per annum (in 2014 terms) - a sum equal to 0.2 to 0.5 percent of Israel's GDP.
Conclusions: Socioeconomic-related health disparities have a significant economic burden.
Health Policy Implications: This burden should further encourage policy makers to narrow the gaps - an investment that might pay for itself in the longer run.

PRIVATE FUNDING AND FORGONE MEDICAL CARE AMONG OLDER PEOPLE IN ISRAEL

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Background: The increase in life expectancy and its outcome, population ageing, are global phenomena. Healthcare expenditure in Israel points to an increase in the extent of private funding for health-related costs from the disposable income of the older population.

Study Question:

- Produce a profile of healthcare services that are privately funded by seniors.
- Produce a profile of the seniors who pay out of pocket for medical care and detect changes over time.
- Identify predictors of private funding of healthcare services among seniors.
- Determine whether a correlation exists between the propensity to privately fund healthcare services and the propensity to forgo medical care.

Methods: Quantitative research based on data from the first two "waves" of the longitudinal SHARE-Israel survey.

Results: A large majority of the 50+ population (average age of sample: 67) paid for healthcare services out of pocket. The most powerful predictors of private funding were: enrollment in a supplemental health insurance plan, state of health and changes in it, and economic resources. The propensity to forgo medical care generally correlated with out-of-pocket spending on healthcare services.

Conclusions:

- The share of private funding of healthcare in the total annual income of senior households is increasing.
- Economic motives prove to be central in determining the extent of out-of-pocket expenditure on healthcare services.

Health Policy Implications:

Enhance awareness within the healthcare system of the profile of those aged 50+ who find it necessary to pay privately for, and often to forgo, medical care.
The Ministry of Health must seek alternative ways to protect funding for the senior population in order to narrow healthcare inequality and injustice in Israel.

CANCER SCREENING IN SWITZERLAND: TRENDS AND SOCIOECONOMIC DISPARITIES

Idris Guessous[1], Stéphane Cullati[1], Claudine Burton-Jeangros[2], Christine Bouchardy[2], Orly Manor[3]

1 Geneva University Hospitals, Switzerland
2 University of Geneva, Switzerland
3 The Hebrew University - Hadassah, IL

Background: Trends in colorectal cancer (CRC), prostate cancer (PCa), and cervical cancer (CC) screening and social disparities have not been investigated in Switzerland.

Study Question: What are the cancer screening trends and associations with socioeconomic indicators in Switzerland?

Methods: We used self-reported data from waves (2007-2012 CRC: 2007-2012; PCa, CC:1992-2012) of the population-based Swiss Health Interview Survey.

Results: The analysis on CRC, PCa, and CC screening included respectively 13,170 men and women, 12,034 men, and 32,651 women. CRC screening increased from 18.9% in 2007 to 22.2% in 2012. CRC screening prevalence was greater in the highest income (>$6,000) vs. lowest income (≤$2,000) group in 2007 (24.5% vs. 10.5%) and in 2012 (28.6% vs. 16.0%). Between 1992 and 2012, ever use of PCa screening increased from 55.3% to 70.0% and its use within the last two years from 32.6% to 42.4%. PCa screening within the last two years was greater in men with the highest (>$6,000/month) vs. lowest income (≤$2,000) (46.5% vs. 38.7% in 2012). Between 1992 and 2012, rates of CC screening over the past 3 years fluctuated between 71.7% and 79.6%. Lower CC screening was observed among women with low education, low income, and those having limited emotional support. Differences in CC screening across age groups diminished while rates among women who visited a GP over the previous year, versus those who did not, increased.

Conclusions: While screening of major cancers increased in Switzerland, major socioeconomic disparities exsit and persisted over time.

Health Policy Implications: These findings highlight the need for increased access and enhanced awareness to CRC and CC screening in the Swiss population, particularly among low-income residents. On the other hand, given the uncertainty of the usefulness of PCa screening, men, including those with high socioeconomic status, should be clearly informed about benefits and harms (over-diagnosis and associated over-treatment) of PCa screening.

UNIVERSAL COVERAGE OF LONG-TERM CARE

Raphael Wittenberg
London School of Economics and Political Science, UK

Background: How best to finance long-term care in the context of rising demand and constrained resources is one of the major social policy challenges facing developed and developing countries. The extent of universal coverage, while widely discussed in respect of acute health care, is also a major issue for long-term care.
Study Question: This presentation will discuss three questions. What levels of need for long-term care should the state address, i.e. what should be the eligibility criteria for publicly funded care? Should the amount of public funding for those in need of care be affected by the amount of unpaid care they receive from family and friends? Should public funding be subject to a means test of people's income and savings?
Methods: The presentation will consider these questions in the light of potential objectives of policy. A widely recognised objective is to enable people with care needs to live as independently as possible and with as a high a quality of life as possible. The challenge is to assess which specific approaches to financing long-term care are likely to promote this aim in an efficient, equitable and sustainable manner. Different countries have adopted different approaches to this challenge which enables cross-country comparisons to be explored.
Results: While a generous system of universal coverage for long-term care risks proving unsustainable as the number of older people rises, a system with tight eligibility criteria and/or tight means testing risks placing a large burden on unpaid carers, shifting demand to acute health care and generating inequities.
Conclusions: Countries need to consider carefully which approach best meets their values, especially in terms of equity, and is likely to be efficient and sustainable in the context of their wider welfare state system.
Health Policy Implications: As per conclusions.

THE PRIVATE WITHIN THE PUBLIC: INEQUALITIES IN HEALTH CARE FINANCING IN SWITZERLAND

Melanie Levy
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Background: The Swiss Health Insurance Law, adopted in 1994, established a mandatory and universal system of health care coverage, based on a regulated benefits' catalogue. For the first time in the history of the Swiss health care system, there were universal public health care guarantees, through regulatory entitlements to social health insurance benefits.
Study Question: With the Health Insurance Law implemented in 1996, the federal government imposed more uniform national standards on the 26 cantonal health systems and, at the same time, sought to achieve three purposes: equality in health care coverage (through a regulated benefits' catalogue); greater social solidarity between all Swiss residents; and cost containment. However, one of the main aspects of the new law, its financing mechanism, is neither solidary nor equal.
Methods: Analysis of social health insurance regulation and policy.
Results: The financing of health care in Switzerland is an expression not of a public/private divide, but of an increasing sphere of the private, in different forms and shades, within the public. The part of health expenditures that is supported by residents through regressive per capita insurance premiums, important cost-sharing mechanisms and considerable out-of-pocket payments is one of the highest among OECD countries.
Conclusions: The Swiss case presents the intriguing phenomenon of a parallel development of establishing universal health care coverage and designing the financing mechanism of social health insurance in a way that heavily relies on private ability to pay. The presumingly progressive reform of achieving universal coverage within the public health care system is accompanied by an increasing role of the private, both in terms of health care financing, and responsibility for health and healthy behavior. The issue of inequality and inequity that follows from this development has remained unaddressed so far.
Health Policy Implications: Vertical and horizontal inequity in health care financing remains the biggest concern within the Swiss health care system.

THE SOCIAL SOLIDARITY OF THE FRENCH HEALTH INSURANCE SYSTEM

Florence Jusot[1], Renaud Legal[2], Alexis Louvel[2], Catherine Pollak[2], Amir Shmueli[3]
1 Université Paris Dauphine, France
2 DREES, France
3 The Hebrew University - Hadassah, IL

Background: The health insurance system in France is characterized by the presence of both public health insurance and complementary health insurance. Public Health Insurance provides compulsory and universal health insurance financed by social contributions and income tax. In accordance with the Marxian principle from each according to one's ability (to pay), to each according to one's (health) needs', this system is supposed to induce cross-subsidies from the healthy to the sick as well as from the rich to the poor.
Study Question: This article proposes to measure the magnitude of the social solidarity of the French health insurance system and to discuss the results with respect to three parallel equity principles: vertical equity in finance, which stressed progressivity, horizontal equity in access to care which requires equal treatment for equal needs of care, and equity in health which requires to eliminate social health inequalities.
Methods: Based on the INES-OMAR simulation modeling, the solidarity of the system is measured using the solidarity index proposed by Amir Shmueli (2015). Counterfactual analyses are conducted to assess the degree of solidarity that should exist in several scenarios related the three equity principles.
Results: The social solidarity of the French health system is induced by the public part of the system and is mainly driven by its respect to the principle of equity in finance.
Conclusions: Even if health expenses are more concentrated among the poorest, the principle of horizontal equity in access to care isn't respected. The existence of large social inequalities in health induces cross-subsidies from the rich to the poor and then increases the level of solidarity of the health insurance system.
Health Policy Implications: These results highlight the interest of analysing simultaneously the solidarity of the health insurance system and its respect the three parallel equity principles.

THE IMMIGRANT HEALTH GAP AND THE HEALTH EFFECTS OF SOCIO-ECONOMIC STATUS IN SWITZERLAND

Sara Rellstab, Karine Renard, Philippe Wanner, Alberto Holly, Marco Pecoraro
University of Lausanne, Switzerland

Background: With more than a fifth of the population being foreign citizens, Switzerland offers an ideal case to study the migrant health gap and the role of Labour Market Status on the migrants' health.
Study Question: This paper examines the potential health gaps between Swiss nationals and different migrant groups (from the permanent foreign resident population), and how alternative types of labour market status (LMS hereafter) affect health among each selected groups.
Methods: Using a sample of working-age males from the Swiss Labour Force Survey for the years 2003-2009, we estimate a model with a dichotomic dependent variable and test the potential endogeneity of the LMS variable. Our empirical strategy avoids inconsistencies incurred by unobserved heterogeneity and simultaneity of the choice of LMS.
Results: We observe a health gap in terms of chronic illness between Swiss nationals and all considered migrant groups. Compared to the Swiss, nationals from former Yugoslavia and Turkey have a worse health status whereas Germans have a lower prevalence of chronic illness. Our findings show a negative influence of part-time work, unemployment, and inactivity on health for all groups under study. Labour market status explains the health gap for migrants from Italy and Portugal entirely, whereas it does not for migrants from Germany, Turkey and former Yugoslavia.
Conclusions: All in all, we provide insights on the unconditional health gap between migrants and Swiss nationals and the causal effect of labour market status on chronic illnesses for different groups of foreigners and the Swiss population. The results show a negative correlation between LMS and health but this effect is reduced when taking into account the endogeneity of this variable.
Health Policy Implications: Policy makers may need to look for new health policies for migrants coming from specific countries for which health gap in terms of prevalence of chronic illnesses is only partially explained by labour market status, which in our study turns out to be Yugoslavia and Turkey.

Wednesday, 09:00 - Oren Hall 3

GOVERNMENTAL BATTLES OVER FEDERAL HEALTH FUNDING IN BRAZIL

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Brazilian Chamber of Deputies, Brazil

Background: The background integrates knowledge on Medicine, Public Health, Public Administration and Political Science.

Study Question: The Brazilian health system, SUS, was created by the 1988 Constitution and guarantees the right to health for all, as a duty of the State. Despite several advances in access, some services are inadequate due to underfunding by the federal government. This study examined the behavior of actors from the legislative and executive power during the legislation of laws on financing of SUS and the ability of those laws to improve the system.

Methods: A case study included the legislative histories and effects of the following legal texts: 1988 Constitution, Organic Health Law; Provisional Contribution on Financial Transactions; Constitutional Amendments (29/2000 and 86/2015) and Complementary Law 141/2012. The study considered a systemic and strategic model for policymaking in the context of the Brazilian coalition presidentialism.

Results: During the National Constituent Assembly, the legislative presided over a weakened executive and laid the foundation of SUS, but didn't establish stable sources of funding. A pattern was observed in which the executive (regardless of the party in power) tried to reduce the federal budget impact and the legislative (supported by organized society) sought solutions which would result in more resources. All studied laws represent solutions agreed by coalition governments, which produced suboptimal results, since underfunding persisted.

Conclusions: Despite the legislative's best endeavors to move the health financing agenda forward, its dependence on external stimuli has rendered its performance fragmented and inconsistent. The advancements depend on incremental, yet insufficient, solutions accepted by government coalitions. A more autonomous role of the legislative would probably result in a greater development of the health system.

Health Policy Implications: The study of behavioral patterns of agents with institutional power in democracies is useful to improve implementation strategies of successful health policies.

COST-UTILITY ANALYSIS OF IMMUNISATION AGAINST HEPATITIS A IN ISRAEL IN THE ERA OF INFANT VACCINATIONS AGAINST HEPATITIS A

Gary Ginsberg
Ministry of Health, IL

Background: Israel was one of the first countries in the world to introduce universal infant vaccinations against Hepatitis A (HA), this has resulted in a 98% decrease in HA incidence.
Study Question: In era of decreased incidence of HA, do we need to continue vaccinating at risk-groups like physicians and nurses against HA. Can we identify other at-risk groups that need to be vaccinated?
Methods: Israeli treatment cost data, age-specific HA incidence data, employment costs and Occupational specific relative risk (RR) data, were used as a basis to calculate occupational specific cost-utility ratios (from a social perspective) of vaccinating against hepatitis A in Israel.
Results: Cost of vaccinating Yeshiva students was $24,000 per averted DALY as they have an RR of 10, food industry workers ($63,000), kindergarten staff ($73,000), medical therapists and technicians ($80,000) and physicians and dentists ($89,000). Cost per averted DALY for teachers was $121,000), Nurses and Midwifes ($210,000), Academic Occupations ($330,000) of all ages. Housewives ($80,000) and Hospital laundry workers ($82,000) in the 22-39 year age group.
Conclusions: In spite of the considerable decrease in incidence, HA vaccinations should be given to some occupational groups.
Health Policy Implications: On cost-effectiveness grounds, the following groups should receive the vaccination: Yeshiva students, food industry workers, kindergarten staff, medical therapists and technicians ($80,000) as well as physician's and dentists ($89,000). Housewives and Hospital laundry workers only in the 22-39 year age group. Vaccination should not be offered to teachers or Academic Occupations of all ages. Ceasing to vaccinate Nurses and midwifes might be difficult to implement.

THE PRICE OF A NEGLECTED ZOONOSIS: CASE-CONTROL STUDY TO ESTIMATE HEALTHCARE UTILIZATION COSTS OF HUMAN BRUCELLOSIS

Tzahit Simon-Tuval[1], Oded Vered[1], Pablo Yagupsky[1,2], Assi Cicurel[1,3], Nadav Davidovitch[1]

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2 Soroka University Medical Center, IL
3 Clalit Health Services, IL

Background: Human brucellosis has reemerged as a serious public health threat to the Bedouin population of southern Israel in recent years. Little is known about its economic implications derived from elevated healthcare utilization (HCU).

Study Question: To estimate the HCU costs associated with human brucellosis from the insurer perspective.

Methods: A case-control retrospective study was conducted among Clalit Health Services (CHS) enrollees. Brucellosis cases were defined as individuals that were diagnosed with brucellosis at the Clinical Microbiology Laboratory of Soroka University Medical Center in the 2010-2012 period (n=470). Control subjects were randomly selected and matched 1:3 by age, sex, clinic, and primary physician (n=1,410). HCU data, demographic characteristics and comorbidities were obtained from the CHS computerized database.

Results: Mean±SD age of the brucellosis cases was 26.6±17.6 years. 63% were male and 85% were Bedouins. No significant difference in Charlson comorbidity index was found between brucellosis cases and controls (0.41 vs. 0.45, respectively, P=0.391). Before diagnosis (baseline), the average total annual HCU cost of brucellosis cases was slightly yet significantly higher than that of the control group ($439 vs. $382, P<0.05), however, no significant differences were found at baseline in the predominant components of HCU, i.e. hospitalizations, diagnostic procedures, and medications. At the year following diagnosis, the average total annual HCU costs of brucellosis cases was significantly higher than that of controls ($1,327 vs. $380, respectively, P<0.001). Most of the difference stems from 7.9 times higher hospitalization costs (p<0.001). Other elevated costs were: 3.6 times higher laboratory tests (P<0.001), 2.8 times higher emergency room visits (P<0.001), 1.8 times higher medication (P<0.001) and 1.3 times higher diagnostic procedures (P<0.001).

Conclusions: Human brucellosis is associated with elevated HCU costs.

Health Policy Implications: Considering these results in cost-efficiency analyses may be crucial for both reducing health inequities and optimal allocation of health systems' scarce resources.

GOING UNIVERSAL- THE HOW OF UHC

Daniel Cotlear
The World Bank, USA

Developing countries around the world are going universal. This presentation summarizes the results from 24 developing country case studies analyzing the implementation of universal health coverage (UHC) reforms.
The reform programs are found to be new, massive (covering a third of the world population) and transformational (changing the way health systems operate aiming to achieve greater equity and efficiency).
The study finds that countries are showing a strong policy convergence in many areas, but that there are significant policy areas where countries choose different paths. The study also finds that countries use many stepping stones on their way to UHC and that researchers need to recognize the temporary nature of these stepping stones.
Finally, while recognizing a positive potential in these reforms, the study also identifies new risks countries may face when implementing UHC reforms.

EX-POST WILLINGNESS TO PAY FOR THE RIGHT TO CHOOSE AMBULATORY CARE IN PUBLIC-HOSPITALS AS A HIDDEN BUILDING-BLOCK IN THE ISRAELI HEALTHCARE SYSTEM

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1 Myers-JDC-Brookdale Institute, IL; 2 Tel-Aviv University, IL ; 3 University of Haifa, IL; 4 Wolfson Medical Center, IL; 5 Sheba Medical Center, IL

Background: The right-to-choose in the public-healthcare-system is more restricted in Israel than elsewhere. While extensive choice may constitute responsiveness to consumers' subjective needs, it is a costly privilege. Limited choice may lead consumers to pay privately. The study examines patients' willingness-to-pay (WTP) privately to increase their choice of outpatient clinics (OPC) in public-hospitals (PHs).

Study Question:

1. Extent of and reasons for ex-post WTP for OPCs in PHs.
2. Impact of the hospital, visit, patient and health-plan characteristics on ex-post WTP.
3. The reasons patients pay privately for treatment in OPCs in PHs.

Methods: The study utilized two specialized databases and was conducted in two stages: An analysis of administrative data files from Sheba and Wolfson hospitals, which included all visits to their OPCs at four times during 2012 and 2013; telephone survey of a sample of OPC patients. Approximately 1,400 patients were interviewed (response rate 79%).

Results: 14% of the OPCs visitors had paid privately (6% at Wolfson; 16% at Sheba). On average, they had paid NIS503 (SD 1,538). We found that several characteristics of the hospital, the visit, the patient and the health-plan had independent effects on the WTP. Moreover, "no previous visits," which might be a proxy for less serious cases, increases the likelihood of using private funding. Main reasons for patients' WTP were: The wish for treatment from a specific professional, and insufficient availability/accessibility of treatment through the public-system.

Conclusions: The findings show that WTP is a response to perceived needs of the public and demonstrate how WTP is affected by several kinds of explanatory variables, including hospital's actions.

Health Policy Implications: The study findings shed light on a hidden building-block of the system: the preference and characteristics of the ex-post WTP for the right-to-choose PHs ambulatory care. It might enable policymakers improve the public-system, e.g. allowing greater choice in the public-Israeli-healthcare-system.

ELECTIVE SURGERY IN ISRAEL: PUBLIC VS. PRIVATE - THE VIEW THROUGH MULTIFOCAL LENSES

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Ministry of Health, IL

Background: Universal health insurance provides a basket of medical services according to insurer's preferences or limitations. Patients who opt to undergo medical procedures by a surgeon in hospitals that are not under contract with their provider may utilize complementary insurance policies or pay out of pocket.

Study Question: To characterize the population that chooses to have surgery in private institutions.

Methods: We studied elective procedures that allow the patient time to deliberate and to select the hospital and the attending surgeon. We looked at the patient's residential district and insuring sick fund and where he performed the surgery. The data was generated from the national hospitalization database in the Ministry of Health.

Results: A large percentage of the insured population chose to perform elective operations in private hospitals, but the distribution was different according to the patient's residential district and insurer. In some districts we found that close to 50% of surgeries were performed in private institutions, while only 20% in others.

In addition, differences were found by type of operation, in some procedures over half were performed in private institutions, while in others just one fifth. We found differences among private hospitals, where in some cases there was a distinct preference for geographic proximity to patient's residence, but in some we noticed that patients were willing to wander far from home to undergo the procedure by the surgeon of their choice.

Conclusions: We have previously shown the rising trend of performing elective surgery in private hospitals in Israel. This paper is a snapshot of the current situation, attempting to help demonstrate what forces are influencing patients' choices regarding the location of elective operations.

Health Policy Implications: Policies aimed at reducing private health expenditure should take into consideration all available data that explain patients' preferences and needs in order to introduce and implement interventions and policy changes.

HEALTH SYSTEMS IN TIMES OF AUSTERITY: WHO IS WILLING TO FORGO WHICH SERVICES?

Giora Kaplan, Yaron Connelly
The Gertner Institute, IL

Background: Rationing of health care in a major economic crisis has ethical implications and hence requires social consensus. The present study uses a novel approach for assessing the public's priorities by asking what services they are prepared to forgo, rather than choosing those of greater importance to them.
Study Question: To evaluate the willingness and ability of the public and health decision makers to cope with rationing in health services, to identify trends among different population groups and to compare the public versus decision-makers' preferences.
Methods: A questionnaire was developed based on a model to evaluate the willingness for rationing in regard to three dimensions of health care: Types of medical care (preventive, rehabilitative, etc; 16 items); elements of service quality (e.g. infrastructure; 8 items); and social values (9 items) The questionnaire was administered to a representative sample of Israel's adult population (n=609) and to 20 senior representatives of regulators and providers of health services.
Results: More than 50% of the public were definitely prepared to forgo at least 6 of the 33 items, including: a drug for smoking cessation (55%), a product for preventing surgical scars (35%), budgets for improving physical appearance and comfort in hospitals (42%), influenza immunization (27%), in vitro fertilization for a second child (24%). The public were more prepared to forgo preventative services than access to health care professionals.
Conclusions: Despite the difficulty of the rationing task, we were able to identify items that a large proportion of the public were willing to forgo in an economic crisis.
Health Policy Implications: The rationing of health care requires complex professional evaluations; however, social values always play a role in the prioritization process. With preparation and training, the general public can be involved in various methods of consultation and become an appropriate partner in the process of health care rationing.

DOES DRUG PRICE-REGULATION AFFECT HEALTHCARE EXPENDITURE?

Omer Ben-Aharon, Oren Shavit, Racheli Magnezi
Bar-Ilan University, IL

Background: The rise of health expenditure is a major concern to decision makers. A variety of cost containment tools are utilized in order to control this trend, including methods for reducing reimbursement and the regulation of maximum prices for health technologies. There is no available information to indicate the efficacy of these methods. Our objective was to evaluate the association between different cost-regulating mechanisms and national health expenditure.
Study Question: What is the impact of the value-based reimbursement mechanism compared to maximum-price regulation on national health expenditure?
Methods: Reimbursement and price-regulation mechanisms of prescription drugs among OECD countries were reviewed (mainly based on WHO data). National health expenditure indexes for years 2008-2012 were extracted from OECD statistical sources. Statistical tests were conducted in order to examine possible associations between characteristics of different systems for reimbursement and regulation of drug prices & health expenditure as a whole, and drugs expenditure in particular.
Results: In most reviewed countries there are reimbursement mechanisms for drugs included under public financed plans. Maximum price regulation mechanisms include referencing to prices in other countries (the method adopted by the Israeli MOH) or therapeutic alternatives, as well as Value Based Pricing (VBP). The last is a novel approach in which the price of a drug is set by its added value. Neither maximal-price regulation nor traditional reimbursement mechanisms were found to be associated with a reduction in rising health expenditures. However, VBP may be a more effective mechanism in long run expense reduction.
Conclusions: Maximal price regulation and reimbursement mechanisms based on clinical efficacy were found not to be associated with the reduction of national health expenditure. VBP may hold the potential to do so in the long run.
Health Policy Implications: Israel is recommended to examine the adoption of VBP, based on the experience from Sweden and Germany, adapting it to local health system characteristics.

Wednesday, 11:30 - Oren Hall 3

THE IMPACT OF THE AGEING OF AUSTRALIA ON THE DELIVERY OF HEALTH CARE TO CHILDREN

Gary Freed
University of Michigan and University of Melbourne, Australia

Background: Changing demography (aging) has important implications for health delivery systems. However, a predominant focus the elderly will miss important consequences on health care for children. Australia has an ageing population and a system where primary care is provided exclusively by general practitioners (GPs).
Study Question: To determine the impact of the aging of Australia on the delivery of GP and emergency department (ED) services to children.
Methods: Analysis of census, Medicare and ED data to determine the changes in rates, actual numbers and types of GP and ED visits by age over the past 20 years.
Survey of 1150 parents presenting to an ED with a child having a low-urgency condition.
Assessment of patients seen by GPs during training.
Results: Although children have become a smaller proportion of the population in Australia, the actual number of children have increased. In contrast, over the past 20 years, both the proportion and the absolute numbers of GP visits for children have fallen. At the same time, lower-urgency ED visits for children have increased by >30% and referral from GPs to specialists have increased by >40%. Many parents now bypass the GP and go directly to the ED for lower urgency conditions. GP residents refer children at 3x the rate of adults for similar conditions.
Conclusions: GPs are seeing fewer children despite an overall increase in the population of children and an increase in those who survive with chronic diseases. It is unclear if this has resulted in a growing lack of confidence on the part of GPs to care for children or a loss of confidence on the part of parents in primary care provided by GPs.
Health Policy Implications: Maintenance of GPs as the sole provider of primary care to all ages in Australia will require substantive changes to training, practice and parental behavior.

HEALTH UTILIZATION AND CHARACTERIZATION OF PATIENTS USING MEDICAL CANNABIS IN ISRAEL-INITIAL RESULTS

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2 Tel-Aviv Sourasky Medical Center, IL
3 Sheba Medical Center, 4Abarbanel Mental Health Center, IL

Background: Recently in Israel, we have witnessed a significant increase in the use of medical cannabis. The law approves its use for non-cancer and cancer pain, nausea and lack of appetite in cancer patients, multiple sclerosis, epilepsy, inflammatory bowel disease and more. The number of licensed users in Israel has increased, currently reaching over 23,500 users. No evaluation and follow-up of these patients has taken place.
Study Question: To prospectively follow-up new users of medical cannabis, and to determine and characterize: socio-demographic and disease profile; indications for cannabis prescription; methods of administration, exposure and dose; past treatments up until cannabis authorization; long-term side-effects and safety; compliance and drop-out; effectiveness of treatment in accordance with initial indications.
Methods: Four months follow-up on new patients licensed for medical cannabis use. After receiving informed consent patients were contacted before treatment, and phone interviewed 1-3 months from the date of approval. Data was analyzed only for patients who received cannabis for a pain symptom.
Results: 213 new medical cannabis patients were interviewed (of them 65 cancer patients). The majority of patients tried different treatment before cannabis; they changed to cannabis due to side effects or lack of efficiency of other treatments. 79.9% of cancer patients and 67.1% of non-cancer patients reported a variety of side effects. Most frequent side effects were: hunger, dry mouth, elevated mood, and tiredness. Seventy nine non-cancer patients who were interviewed eight months after approval, indicated a decrease in the worst pain reported in the last 24 hours from 8.5±1.6 before treatment to 7.1±2.7 in first interview and 6.7±2.8 in the second interview ($p<0.0001$). Nine percent of the patients reported on the first interview that they had stopped using medical cannabis.
Conclusions: Monitoring of medical cannabis use is essential and will influence the future decision about this scientifically controversial issue.
Health Policy Implications: Evaluating outcomes of medical cannabis is important for policy makers.

THE MENTAL HEALTH OF ASYLUM SEEKERS AND VICTIMS OF HUMAN TRAFFICKING: THE EXPERIENCE OF GESHER (BRIDGE) CLINIC

Ido Lurie
Shalvata Mental Health Center, IL

Background: There are approximately 50,000 asylum-seekers in Israel, mostly from Eritrea and Sudan. Of whom, approximately 7,000 individuals are victims of trafficking and torture (VOT), as a result of their passage through the Sinai desert. The prevalence of psychiatric diagnoses and behavioral disorders among immigrants and specifically VOT- may reach 30% or more, including posttraumatic stress disorder (PTSD), depression, anxiety and alcohol/ substance abuse.
In light of these needs and a lack of stable provision of services for this population, a partnership between the Ministry of Health/Yaffo Community Mental Health Center with UNHCR was created and a mental health clinic, "Gesher" (Bridge) was opened in February 2014. The clinic provides psychiatric and psychosocial services tailored to the cultural and linguistic needs of status-less persons.
Study Question: To explore the characteristics of service users among asylum seekers and VOTs in a MOH mental health clinic.
Methods: An archive cross sectional survey.
Results: Between February 2014 to August 2015, the clinic has provided treatment to 451 service users in over 3,000 appointments. The mean age is 33 years, 70% are men. The majority of the service users are from East Africa (Eritrea-67%, Sudan-25%), and the remainder are from Africa, Asia and Eastern Europe. The diagnoses are mainly conditions related to trauma; PTSD (40%), adjustment disorder, mood and anxiety disorders, as well as psychotic spectrum (15%). Among the patients, VOTs were found to use more services.
Conclusions: The level of emotional distress, psychopathology and needs of mental health services among asylum seekers is high, especially in VOTs.
Health Policy Implications: Allocation of resources to mental health services and research is urgently needed to improve the emotional distress of asylum-seekers in Israel. It seems that both migrants and the native population of Israel would benefit from allowing immigrants access to culturally appropriate psychiatric services.

DATA QUALITY SURVEY (DQS) ASSESSING ROUTINE IMMUNIZATION SYSTEMS IN A POLIO HIGH RISK STATE IN NORTHERN NIGERIA

Rilwan Raji
WHO United Nations, Nigeria

Background: Studies emphasize the importance of quality data for effective programme planning, monitoring and evaluation. In view of strengthening routine immunization (RI) systems and ensuring quality data for effective planning, it was important to carry out a systematic assessment of the RI systems in a polio high risk state in Nigeria.
Study Question: Does the RI data reflect programme performance? How effective is the RI system?
Methods: A program review in selected HFs & districts. Using standardized templates, validation of data from RI tools was done with results inputed into a database to calculate accuracy ratios, weighted averages & verification factors to correct for inaccurate coverage rates. Structured questionnaires were developed to assess 6 pre-defined components required for an effective RI system; computing responses in a dichotomous scale (Yes or No), imputed into a database to generate radar graphs of performance.
Results: 36 sites assessed (12 districts & 24 HFs). Over-reporting of tally data was the commonest issue. Using the verification factor to correct for the State reported coverage for the period under review, only 82%, 90%, & 85% of Penta3, OPV3, & TT2+ reported coverage rates were accurate. Only 30% of districts have 80% efficient immunization systems, with 30% districts well below the State average immunization quality index. Of the 6 components; utilization of data for action was the major concern as only 33% of RI data generated was used for action.
Conclusions: DQS identified gaps in data quality providing an opportunity to identify bottlenecks behind low coverage. One major challenge was lack of routine support supervision, emphasizing the need for supervisory plans to be developed and implemented. Other issues such as lack of cold-chain logistics, including data tools, must be addressed while ensuring accountability amongst health workers.
Health Policy Implications: RI policy documents should emphasize establishment of functional committees for efficient continuous RI monitoring and evaluation.

Monday, 14:00 - Oren Hall 4

EXCESSIVE POLYPHARMACY IN PATIENTS WITH ADVANCED/END-STAGE CANCER - SIGNIFICANT NEGATIVE IMPLICATIONS ON QUALITY OF CARE AND ECONOMIC BURDEN

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Background: New chemotherapies/biological agents enable increased survival of cancer patients. However, their benefit/risk ratio is sometimes overestimated making patient's expectations for better Quality of life (QoL) unrealistic. Beneficial effects of other Clinical Practice Guidelines (CPGs) for common age-related diseases were proven in relatively healthy adults with long life expectancy. Applying these CPGs to the very old, those with co-morbidity, dementia, frailty and limited life-expectancy (VOCODFLEX) is unjustified, usually associated with decreased QoL.

Study Question: Are end-stage cancer patients (ESCP) overmedicated?

Methods: We evaluated number and types of medications and chemotherapies given to ESCP upon admission to Homecare Hospice, Israel Cancer Association (HCHICA).

Results: A random sample of 202 ESCP, average age 79.5±7.9. Average stay in HCHICA until death 39.2±5.4 days. "Curative" or "cancer progression slowing" interventions were continued by oncologists in 25% and 23%, 2 months and 2 weeks before death, respectively.

Average number of other medications 9.2±3.7, 63% consumed 6-12, 23% 12-22 drugs.

2 months before Death: 22% ESCP were still on Aspirin for "vascular problems prevention", 60% were prescribed at least one, 17% used ≥ 3 Blood Pressure lowering drugs, 30% were still on statins "to lower serum cholesterol".

Conclusions: Many oncologists do not adopt palliative perceptions and continue recommending so-called "curative" interventions until death. Moreover, oncologists do not change medications prescribed by other experts and vice versa (the bystander effect). VOCODFLEX, even ESCP continue to visit family physicians and experts who continue prescribing medications based on "their CPGs", although they are completely irrelevant in these sub-populations. Lowering blood pressure, cholesterol and glucose blood levels are definitely harmful in ESCP who suffer from anorexia, weight loss, sarcopenia and cachexia.

Health Policy Implications: We are harming our most vulnerable patients adhering to "defensive medicine guidelines". Is this abuse? Do we really respect patient/family preferences? How much does it cost? Who is responsible for stepping on the brakes?

ASSETS AND HEALTH: EXAMINING THE ASSET-BUILDING THEORETICAL FRAMEWORK AND PSYCHOLOGICAL DISTRESS

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1 University of Haifa, IL

2 Washington University in St. Louis, MO, USA

3 University of North Carolina at Chapel Hill, NC, USA

Background: The asset-building theoretical framework (ABTF) is acknowledged as the most complete framework thus far for depicting the relationships between assets (the stock of a household's saved resources available for future investment) and health outcomes. Although the ABTF takes into consideration the reciprocal relationship between assets and health, no ABTF based study has yet examined this relationship.

Study Question: What is the reciprocal relationship between assets and psychological distress?

Methods: The study employed longitudinal data from 6,295 families from the 2001 and 2007 Panel Study of Income Dynamics data sets. Structural equation modeling (SEM) was used to test the reciprocal relationship between assets and psychological distress.

Results: In general, the data displayed a good fit to the model. The longitudinal SEM found that asset accumulation significantly increased with a decreased in distress over time, while distress significantly increased with an increase in asset accumulation over time, confirming the existence of the hypothesized reciprocal relationship.

Conclusions: Individuals who are less distressed might have more energy to engage in activities, such as furthering their education or obtaining better jobs that are in turn associated with greater asset accumulation, while those who have greater assets may invest those assets in riskier investments or may be working harder, resulting in increased psychological distress. The confirmation of this reciprocal relationship highlights the importance of conducting longitudinal studies and testing the reciprocal relationship between assets and other health outcomes.

Health Policy Implications: In order to provide a fuller picture of changes in health outcomes, health policy development should be based on health research, which takes the ABTF into consideration (including the reversed causality between assets and health).

THE COMPREHENSIVE CARE FOR MULTIMORBID ADULTS PROJECT (CC-MAP)

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2 Clalit Health Services, IL

Background: Patients with multimorbidity (multiple chronic conditions) require proactive, coordinated care management to effectively manage multiple chronic conditions comprehensively and not each as a discrete problem. Based on evidence on effective care-management for multimorbid patients, in 2012 the largest insurer and provider of services in Israel, Clalit Health Services (Clalit), in collaboration with the Gertner Institute, created the Comprehensive Care for Multimorbid Adults Project (CC-MAP).
Study Question: Does the CC-MAP improve the quality of care and reduce preventable hospital admissions for adult g-risk multimorbid Clalit members?
Methods: The program currently operates as part of a clustered control trial, including 600 patients in the intervention and 600 patients in the control-arm. The intervention builds on a primary care physician – nurse partnership and the extensive computerized infrastructure available at Clalits clinics. Each CC-MAP nurse follows up to 100 of the highest-risk multimorbid patients of 3-4 primary care physicians in her clinic. Inclusion: three or more chronic conditions and an Adjusted Clinical Groups® (ACG) prediction score of >0.19, indicating a high risk of poor clinical outcomes based on multi-morbidity associated disease burden. The intervention includes: Identification of high-risk patients, comprehensive assessment, generation of a coordinated care plan, "Multimorbid Action Plan" for patients, patient-centered care and caregiver support including self-management education, proactive monitoring, and coordination of care from all providers including follow-up to institutional transitions.
Results: Early results indicate favorable findings for the quality of chronic care, in decreasing the number of days in hospital (~2 days/participant/year), and a significant improvement in patient reported outcomes, in the intervention versus the control group. Full economic assessment including cost-benefit is now underway.
Conclusions: After 3 years of operation, the CC-MAP care management model for multimorbid patients has been feasibly implemented in the Israel healthcare context.
Health Policy Implications: Based on this experience Clalit plans to gradually extend the program to similar clinics and populations.

GYNAECOLOGICAL MORBIDITIES, HEALTH SEEKING BEHAVIOR AND QUALITY OF LIFE OF RURAL FEMALES IN CHARUTAR REGION OF GUJARAT, INDIA

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Background: In most cultures, anatomical sex is the basis for gender differentiation. Albeit medical sociologists endorse holistic 'gender analysis of health', reproductive and gynaecological health of a female is not addressed adequately in developing economies. Most attempts to document gynaecological morbidities did not involve physical examination.

Study Question: To assess the gynaecological morbidities, health seeking behaviour and quality of life and explore relationship among them in rural females of Charutar region.

Methods: A community based cross sectional study was conducted in randomly selected 750 females greater than 12 years in 3 villages of Charutar region of Gujarat. Socio-demographic data, quality of life and presence of urinary incontinence was determined through a structured questionnaire followed by thorough clinical examinations and diagnostic testing. Proper counselling, appropriate medications and referral to higher centre was done as per need.

Results: Overall 656 females participated with a response rate of 83.3%, 87.5% and 93.0% from the three villages respectively. High prevalence of anemia (98.5%) was observed. Vaginal discharge (88%), Menstrual problems (31.7%), Urinary incontinence (18.75%) and prolapse (13.2%) were most common problems. 7 females have either clinically confirmed or pathology suggestive of carcinoma cervix/vagina. A staggering 70.5% participant had at least one gynaecological symptom whereas 28.5% participants had two or more. Significant discordance between history/perceptions and observed gynaecological symptoms was noted. Non-availability of: attendant (48.8%), female doctor (64%) and doctor in general (60.4%) hindered their health seeking. Significant association between quality of life and urinary incontinence was observed but not with other gynaecological problems.

Conclusions: Gynaecological problems are rampant even in villages of economically well-off region of Charutar. Due to their social role, perceptions and financial dependence, women developed the tendency to 'Suffer in Silence' for many easily treatable diseases.

Health Policy Implications: Early sex education, empowering families about importance of healthy female and constructing health system through innovative ideas like "Women's Health Centre" should be tried to improve the situation.

Monday, 14:00 - Oren Hall 4

THE SOCIAL ORIGINS OF HEALTH AND WHAT WE CAN DO ABOUT IT

Mauricio Avendano
LSE Health, London School of Economics and Political Science, UK

Social Epidemiology is concerned with understanding how the way societies are organized, shapes population health and health inequalities.
This lecture explores a shift in social epidemiology, from a discipline primarily concerned with describing variations in the rate of disease between groups and populations, to a practicable social epidemiology concerned with the causal nature of such variations.
This shift has prompted a novel focus on causal inference, the health impacts of public policies, social experiments and quasi-experiments, as part of a revitalized quest for identifying social interventions that improve population health and reduce health inequalities.

PERSISTENT SPATIAL CLUSTERS OF HIGH BODY MASS INDEX IN A SWISS URBAN POPULATION AS REVEALED BY THE 5-YEAR GEOCOLAUS LONGITUDINAL STUDY

Idris Guessous[1], Stéphane Joost[2], Jean-Michel Gaspoz[3], Gérard Waeber[4], Peter Vollenweider[4]

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4 Lausanne University Hospital (CHUV), Lausanne, Switzerland

Background: Body mass index (BMI) may cluster in space among adults and be spatially dependent. Whether and how BMI clusters evolve over time in a population is currently unknown.

Study Question: We aimed to determine the spatial dependence of BMI and its 5-year evolution in a Swiss general adult urban population, taking into account the neighborhood- and individual-level characteristics.

Methods: Cohort study of a Swiss general urban population. 6,481 geo-referenced individuals from the CoLaus cohort at baseline (age range 35-74 years, period=2003-2006) and 4,460 at follow-up (period=2009-2012). Body weight and height were measured. BMI was calculated as weight (kg) divided by height squared (m2). Participants were geocoded using their postal address (geographic coordinates of the place of residence). Getis-Ord Gi statistic was used to measure the spatial dependence of BMI values at baseline and its evolution at follow-up.

Results: BMI was not randomly distributed across the city. At baseline and at follow-up, significant clusters of high versus low BMIs were identified and remained stable during the two periods. These clusters were meaningfully attenuated after adjustment for neighborhood-level income but not individual-level characteristics. Similar results were observed among participants who developed obesity. The observed east to west pattern of BMI clustering fits known socio-economic and ethno-cultural differences distinguishing these opposite regions of the city of Lausanne, Switzerland.

Conclusions: This is the first study to report longitudinal changes in BMI clusters in adults from a general population. Spatial clusters of high BMI persisted over a 5-year period and were mainly influenced by neighborhood-level income.

Health Policy Implications: These results suggest that specific prevention interventions involving urban planning decisions could be targeted to such areas. Further studies are needed to better understand the causes of such clustering, both at the individual level and at the structural level, and to plan interventions aiming at modifying these determinants.

COMMUNITY SEVERANCE FROM MAJOR ROADS: CAN WE MEASURE ITS EFFECTS ON DETERMINANTS OF HEALTH? LESSONS FROM FINCHLEY ROAD, LONDON, UK

Jennifer Mindell, Muki Haklay, Peter Jones, Shaun Scholes, Laura Vaughan
University College London, UK

Background: Transport-related community severance impedes access to goods, services and people. It reduces walking and the number of social contacts, with consequent health effects. Valuing severance is important for policy decisions.
Study Question: Can we develop tools to measure community severance and effects on wellbeing in a London case study (FR)?
Methods: Participative mapping (n=101); self-completion questionnaire (n=209); stated preference survey (n=100); video observation of road motor traffic movement and pedestrian flows; pedestrian environment survey (114 street sections); local and regional spatial analysis; model of walkability for London.
Results: Spatial analysis shows FR is structurally important. While a peak location in London for walkability, it has motorway-level traffic. 47% of participants reported that traffic volume affected their ability to walk locally at least occasionally, also affected by crossings with inadequate time to cross for 25% of participants. Among participants not living on the busiest road, 25% avoiding walking along or crossing it; pedestrian flows were low except near major destinations. Pollution levels exceed EU limits. The proportions with limiting longstanding illness and with low wellbeing was highest among participants living within about 3 minutes' walk of the busiest road, where one-third reported noise and air pollution on their road. Although a local destination, some residents consider FR a socio-economic boundary, confirmed by mapping area deprivation. On average, pedestrians prefer a 7 minute detour to avoid using an underpass.
Conclusions: Tools to detect and quantify community severance can be developed for planners' and communities' use, to identify problems for remediation and reduce health inequalities.
Health Policy Implications: Encouraging active travel and reducing private motor vehicle journeys can enhance health and reduce inequalities. We recommend: enhancing the pedestrian environment; more road-level pedestrian crossings, with longer crossing times; and incorporating comprehensive walkability analysis in assessing healthy built environments.

THE IMPACT OF ENERGY POLICY ON MORBIDITY AND MORTALITY IN THE ISRAELI POPULATION

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1 University of Haifa, IL
2 New York University, USA

Background: Emissions from power generation is a major contribution to poor air quality in Israel and a potential contributor to adverse health outcomes among the Israeli population. Israel is home of the largest coal-fired power plant in the Eastern Mediterranean. Over the past decade significant changes of energy policy transitioning from coal-generated to natural gas-generated electricity has changed the quantity and quality of emissions, creating a natural experiment for the impact of changing energy policy on the health of a population.

Study Question:

- Are emissions from Israel's largest power plant associated with adverse respiratory health outcomes?
- Is the change in Israeli energy policy associated with change in morbidity and mortality?

Methods: Two novel methods assessing exposure to power plant-specific emissions were estimated for 2244 participants residing down-wind from the Hadera power-plant who completed the European Community Respiratory Health Survey. Estimated emissions over a 6 year time period were associated with prevalence of respiratory diagnoses and symptoms using multi-variable logistic regression. Additionally, a time-series analysis was conducted comparing decreasing emissions from three of Israel's major power plants with mortality and disease-specific mortality rates in Ashdod, Tel-Aviv and Haifa.

Results: Increased and worsening respiratory symptoms were associated with exposure to emissions from Israel's largest coal-fired power plant. As power plants in three major Israeli cities have transitioned from coal to natural gas and low-sulfur fuels, there has been a significant decrease in power-plant emissions and an associated decrease in overall morbidity and disease specific mortality.

Conclusions: Energy policy plays a significant role on the public's health through mitigation of power plant emissions.

Health Policy Implications: The health impact of power-plant emissions should be considered when developing energy policy. The development of clean energy policy should be considered as an integral aspect of health policy.

HOW CAN HEALTH PROMOTION PROMOTE EQUITY IN HEALTH?

Bishara Bisharat, Samar Samawi
The Nazareth Hospital - EMMS, IL

Background: The National Healthcare Law in Israel that was implemented in 1995, has indeed enabled the development and significantly improved the health level of the general population in Israel. However, if before the implementation of the law one expected that it would reduce inequalities in health, specifically life expectancy and infant mortality, we have seen quite the opposite - inequalities have increased, despite a dramatic improvement manifested in life expectancy and infant mortality trends.
Study Question: How can Health Promotion promote Equity in Health?
Methods: In Order to promote equity in health, the hospital promotes health. Health promotion (HP) addresses the unserved and weak population with low health literacy and can improve quality of lives and impact health indicators positively. By promoting knowledge of Diabetes, obesity and lifestyle- related issues by raising awareness on the use of health services, health literacy can promote equity in health and reduce systematic disparities in health.
Results: This process needs time in order to evaluate the input, but we can evaluate process indicators. Our assumption is that the current change, we're experiencing, of people habits and lifestyle and the impact on service providers, like food manufactures, can reduce disparities during the coming years. HP programs became a tool in our hospital.
Conclusions: Equity is an ethical principle. Exploring ways to "fight" inequity is obligatory. Health promotion activities in the Arab community in Israel in health can decrease disparities and the increasing rise in the trend of health problems occurrence. Also, leading the population to a proper use of health services and preventive medicine can reduce the unnecessary use of services and resources.
Health Policy Implications: The Health Basket provides equal services to a diverse population. In order to provide equal services and justice, a systematic health promotion program for populations with low socioeconomic status or specific needs and profiles will decrease disparities.

CLOSING THE GAP IN BREAST CANCER SCREENING BEHAVIOURS BETWEEN LOW AND HIGH SES POPULATIONS IN ISRAEL 2002-2014

Vered Kaufman-Shriqui[1,2], Ora Paltiel[1-3], Wiessam Abu-Ahmed[1,2], Michal Krieg[1,2], Orly Manor[1,2]

On behalf of the Steering Committee, the National Program for Quality Indicators in Community Healthcare, Israel

1 The Hebrew University - Hadassah, IL

2 National Program for Quality Indicators in Community Healthcare, IL

3 Hadassah Medical Center, IL

Background: Breast cancer is the most prevalent cancer, and the primary cause of cancer mortality among Israeli women. Although women of high socioeconomic position (SEP) have been found to have a higher risk of developing breast cancer, women of low SEP have been shown to experience poorer survival after diagnosis than women of high SEP. Studies suggests that differences in diagnostic factors are associated with higher mortality among women of low SEP. Screening has been shown to lower morbidity and mortality from breast cancer.

Study Question: To measure trends in performance of mammography screening, among women of low and middle to high SEP, at the national level.

Methods: Data was originated within the framework of the Israel National Program for Quality Indicators in Community Healthcare (QICH) for 2002-2014, based on patient's electronic medical records provided by the four Israeli health plans. Practically all Israeli women aged 50-74 were included. Data was stratified by age and Socio-Economic Position (SEP). Low SEP was defined by exemption from co-payments for medical services.

Results: Overall 713,320 women, and 784,099 women were included in 2002, and 2014 respectively. Prevalence rates for mammography in Israel increased from 51.2% in 2002 to 69.7% in 2014. In 2002, rates of mammography were 43.9% and 54.6% among women of low SEP, and middle to high SEP, rates increased steadily among both group, and were 68.2%, and 70.1% among women of low SEP, and high SEP in 2014.

Conclusions: This study shows a diminishing social gradient in breast cancer screening behaviours among women of low SEP populations between 2002-2014.

Health Policy Implications: Reporting of performance indicators within the framework of QICH enables monitoring social disparities in breast cancer screening behaviours.

Monday, 16:30 - Oren Hall 4

PRIMIPARITY AT AGE 45 YEARS OF AGE OR OLDER: UNLIMITED BUT UNFAVORABLE?

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1 The Gertner Institute, IL
2 Tel-Aviv University, IL
3 Sheba Medical Center, IL

Background: Progress in assisted reproductive technologies has expanded the boundaries of fertility, enabling women to give birth for the first time in their fifth, sixth or even seventh decades. In light of Israel's unique and liberal-nearly unlimited-health policy regarding fertility treatments, it is important to determine whether very-advanced-age (VAMA) primiparae constitute a specific risk group.

Study Question: Are pregnancy complications and adverse birth outcomes significantly greater among VAMA primiparae (aged ≥45) compared to younger primiparae.

Methods: Data were abstracted from medical records of all 222 VAMA primiparae delivering at Sheba Medical Center from 2008-2013, and 222 primiparae aged 30-35 delivering during this period. Multivariate logistic regression explored the relationships between adverse outcomes, adjusting for demographic and clinical variables. Subgroup analysis compared VAMA with and without chronic conditions.

Results: VAMA primiparae were more likely to be single, have chronic morbidity and deliver prematurely. Infants of VAMA primiparae were at greater risk for low birthweight and NICU admission. In multivariate analysis VAMA was an independent risk factor for gestational diabetes (OR 2.38; 95%CI 1.32-4.29), gestational hypertension (OR 5.80; 95%CI 2.66-12.64) and preeclamsia-toxemia (OR 2.45; 95%CI 1.03-5.85), irrespective of preexisting chronic morbidity.

Conclusions: VAMA primiparity poses significant risks for pregnancy complications and adverse birth outcomes, compared to primiparity at a younger age. Absence of pre-existing chronic medical conditions and/or use of young oocyte donors does not improve these outcomes. Thus, primiparity at an earlier age should be encouraged and awareness of the risks of VAMA should be heightened, even for women without chronic conditions.

Health Policy Implications: In light the considerable resources invested in achieving and preserving VAMA pregnancies, and as their rates are expected to rise, better understanding of their risk for unfavorable consequences is necessary to provide better-informed consultation to this unique risk group.

Tuesday, 14:00 - Oren Hall 4

FOOD INSECURITY AND LACK OF SOCIAL SUPPORT AS MODIFIABLE SOCIAL DETERMINANTS OF PERINATAL DEPRESSIVE SYMPTOMS SEVERITY IN NORTHERN UGANDA

Barnabas Natamba[1], Saurabh Mehta[2], Rebecca J. Stoltzfus[2], Sera L. Young[2], Jeffrey K Griffiths[3]

1 Harvard University, USA
2 Cornell University, USA
3 Tufts University, USA

Background: Common mental disorders, such as major depressive disorders and anxiety disorders, affect 16% of pregnant women in low and middle-income countries (LMICs). Food insecurity (FI) and lack of social support are modifiable social determinants of health usually associated with depressive symptoms severity in many contexts. Although the association between FI and depressive symptoms severity has been shown to be mediated through or moderated by social support (SS), there is limited evidence of these associations among pregnant women living in LMICs.

Study Question: We studied the association of FI on depressive symptoms severity and assessed whether such an association varied among Ugandan pregnant women with lower or higher levels of SS.

Methods: Longitudinal data was collected from 403 pregnant women in northern Uganda. SS was assessed at baseline using a modified Duke-UNC functional SS scale while FI and depressive symptoms were assessed at each visit with, respectively, the individually-focused FI scale (IFIAS) and the Center for Epidemiologic Studies-Depression (CES-D) scale. Women were split into 2 SS groups, based on a score of < or ≥ the median SS value.

Results: At baseline, FI and depressive symptoms severity (CES-D scores) were positively and significantly associated with each other (Pearson's correlation coefficient= 0.4526; p<0.0001). Longitudinal models indicate that the association between FI and depressive symptoms severity was weaker among women in the high SS category (adjusted regression coefficient (95%CI) = 1.14 (0.93; 1.36)) than for women belonging to the low SS group (1.27 (1.20; 1.36)) (p value for interaction=0.041).

Conclusions: There is a need to design and evaluate cost-effective and contextually appropriate mental health services that include food security and social support components.

Health Policy Implications: The WHO and national governments should support research efforts aimed at integrating mental health services into the implementation of antenatal programs in low and middle countries.

Tuesday, 14:00 - Oren Hall 4

SELF-REPORTED HEALTH OF TB PATIENTS IN THE REPUBLIC OF MACEDONIA - IS LESS MORE OR IS IT MORE COMPLICATED?

Dance Gudeva Nikovska[1], Fimka Tozija[2]

1 University Ss Cyril and Methodius, Skopje

2 University Ss Cyril and Methodius, Skopje and National Institute of Public Health, Macedonia

Background: Self-reported health (SRH) is considered an indicator for morbidity and mortality that may be used in primary health care to detect poor health in certain population groups and predicts health care utilization. Prognostic value of SRH is particularly important among older adults, as a key measure of health status.

Study Question: The goal of the survey is to assess the socio-economic SRH gradient and describe the contribution of behavioral risk factors to this gradient among TB patients in the Republic of Macedonia.

Methods: A "nested case-control study" was conducted in the period March - December, 2013. "Cases" are households with TB patient(s) and "controls" are households randomly chosen in cases' immediate vicinity. The total study population was 605 households (2,720 respondents). SRH is assessed through the question, "How will you rate your health status today?", with a five-point scale 1 - very satisfied to 5 - very dissatisfied. Data was analyzed with SPSS 19.0, utilizing logistic regression to measure the predictive value of the most important factors that determine SRH.

Results: SRH was reported as excellent or good by only half of the respondents, with evident differences in responses for poor or extreme difficulties in everyday life. Significant were differences in categories bad with dominant TB cases and very bad with 10.3% positive answers among cases vs. no such response in controls ($X2=26.410$, $df=4$, $p<0.001$).

Conclusions: Positive association was found between poor rated health and long-standing diseases and education was associated with poor SRH. Adding questions on mobility, self-care, pain, cognition, interpersonal activities and affect has only reaffirmed poorer health of TB patients, with statistically significant differences among study groups along all six dimensions.

Health Policy Implications: The ease of use of simple questions to ask for SRH makes it an extremely beneficial tool in health care planning.

SOCIOECONOMIC BACKGROUND AND HIGH SCHOOL COMPLETION: MEDIATION BY HEALTH AND MODERATION BY NATIONAL CONTEXT

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1 University of Haifa, IL
2 Institute for Social Research, Norway

Background: High school completion has become an increasingly important credential to gain access to large parts of the labor market. It is therefore particularly troublesome that a substantial amount of research has shown that adolescents from lower socioeconomic backgrounds are at higher risk than their more advantaged peers to leave high school without a diploma. Little attention has so far been paid to the role that adolescent health plays in the relationship between socioeconomic status and educational attainment.
Study Question: The present study examines whether adolescent health mediates the relationship between socioeconomic status and successful high school completion and whether the magnitude of the mediation varies by national context.
Methods: Moderated mediation models were estimated using longitudinal data from Norway (n=13,262) and the United States (n=2,108).
Results: Significant mediation by health was found in both national datasets. Specifically, results show that in both countries part of the tendency for lower socioeconomic adolescents to drop out of high school is explained by the negative effect that low socioeconomic status has on adolescents' health which in turn reduces the chances of timely high school completion. Results further specify that this mediation effect is stronger in the United States than in Norway due to the stronger influence of socioeconomic background on both health and high school completion in the United States.
Conclusions: In addition to reducing societal and individual costs directly related to health, improving adolescent health and specifically inequality in adolescent health has the potential to reduce the indirect costs of low educational attainment.
Health Policy Implications: Combined these results suggest that country and community level policies aimed at preventing high school dropout need to address both socioeconomic inequality and adolescent health.

CONFLICT AS A DETERMINANT OF HEALTH

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2 Hadassah College, IL

Background: As the Syrian conflict continues for a fifth year, casualties of civil war continue to arrive at Ziv Medical Center for medical care. Most often patients have surgical trauma, but they are malnourished and in poor general health. Patients with chronic medical conditions and in advanced pregnancy also arrive in search of healthcare.
Reports indicate near total collapse of healthcare infrastructure within conflict zones in Syria.
Study Question: What evidence can we gain from patients treated at Ziv Medical Center about the chronic health needs of patients in Syria?
Methods: In Ziv Medical Center meticulous records have been kept of the injuries and medical conditions that patients from Syria have arrived with since February 2013. With ethics committee approval medical records are examined in order to determine both acute and chronic health care needs.
Results: Over 600 patient records provide data not simply on mechanism of injury, but the availability of acute and chronic medical care, availability of medication and medical supplies, availability of trained medical staff within Syria, food, drinking water, shelter, clothing and shoes.
Conclusions: Conflict, the destruction of medical facilities, elimination of health workers and scarcity of key commodities such as food and shelter are determinants of health.
Health Policy Implications: Recovery from emergency treatment of wounds is one small part of the treatment of patients affected by conflict. Integral to their care is the identification and management of key determinants of health including safety, shelter, food and ongoing medical care.

DETERMINANTS OF QUALITY OF LIFE AMONG JEWISH AND ARAB HEMODIALYSIS PATIENTS

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1 Ministry of Health, IL
2 Meir Hospital, IL
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5 Sourasky Medical Center Tel-Aviv, 6 The Israeli Society of Nephrology and Hypertension, IL

Background: Improving dialysis patients' quality of life (QOL) is an important and challenging goal. Despite improved survival rates, patients with end stage renal disease have significantly lower QOL than in the general population. Higher QOL in dialysis patients has been associated with fewer hospitalizations and lower mortality.

Study Question: To assess QOL in Jewish and Arab hemodialysis patients, and examine the factors associated with QOL in these population sub-groups.

Methods: Patients were sampled from 61 hemodialysis units across Israel.
QOF was assessed by the KDQOL-SF36 questionnaire. Information was collected on age, marital status, income, education, comorbidities and blood test parameters.

Results: 558 (50.6%) Jewish patients and 544 (49.4%) Arab patients participated in the study. Arab patients scored significantly lower than Jews in the physical and mental components, the sf-36 and the KDQOL (25.9+20.5 vs. 29.0+22.3, 31.4+20.6 vs. 40.1+24.3, 28.6+19.2 vs. 34.6+21.5 and 55.6+12.9 vs. 59.8+13.4). The most notable difference was in the "physical role" sub-scale (9.9+28.1 vs.19.4+35.3 $p<0.0001$, respectively).
In both Jewish and Arab patients, QOL was positively associated with male gender, higher educational level and higher albumin level, and negatively associated with low income, difficulty in urinating, older age and comorbidities.
In Arab patients, QOL was negatively associated with time needed to reach the dialysis unit (>30 mins) and lower socioeconomic level of residential area.

Conclusions: The low "physical role" scores underline the importance of improving physical functioning, thus facilitating change in patients' perception of the disease and in its associated disability. QOL disparities between Jewish and Arab patients need to be addressed.

Health Policy Implications: The introduction of new available technologies will improve the physical functioning of hemodialysis patients, and subsequently their QOL; additionally, access to dialysis units needs to be improved in the Arab sector.

Tuesday, 14:00 - Oren Hall 4

GENDER, HEALTH, EQUALITY AND HIGHER EDUCATION: SEARCHING FOR COMMON CONCERNS

Sharyn Maxwell
Durham University, UK

Background: In recent postgraduate course reviews students from a range of countries strongly agreed that "there are no public forums to discuss gender and sexuality at home so it's a waste of time to study these things". This belief clashed badly with the traumatic personal stories of other students I was supporting and was deeply incongruent (to say the least) with the pursuit of public policy and global health agendas. I decided to learn how gender-based issues are incorporated into health-related courses elsewhere and which pedagogies around teaching, supervising, advising and supporting students academics find helpful when questions about gender and gender inequality are controversial and/or personally confronting to class members.

Study Question: What and how do other health-focused academics teach about gender, gender inequality and gender mainstreaming in public and global health courses and which pedagogies have they found to be useful?

Methods: Literature review and personal reflection.

Results: There is some interest in these questions amongst people interested in undergraduate medicine curricula: there is almost nothing about them in public and global health oriented literature. This is despite regular calls for improved promotion of gender equity in health via greater research and collaboration between academics, practitioners and policy makers.

Conclusions: Lack of discussion about practice may not be evidence of lack of practice but it suggests we are missing important opportunities to normalise gender matters within health-related courses. If so, we are failing to create a future generation of public and global health professionals who will routinely address gender inequalities in their pursuit of health.

Health Policy Implications: UN Resolution 70/1 emphasises interconnectedness of the 2030 SDGs. It stipulates the use of gender mainstreaming in the pursuit of gender equality. Without a generation of health professionals who have normalised the importance of gender for health, improvement in global health equality is likely to be compromised.

DIABETES IN ISRAEL: TRENDS, CHALLENGES AND THE ROAD AHEAD

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Introduction: In view of its availability of unique data sources, tradition of quality improvement and innovative spirit, Israel has a unique capacity to shed light on key trends and challenges in tackling the type-2 diabetes pandemic, and suggest new directions for the road ahead.
Methods: We query the database and professional expertise of Clalit, an integrated provider-and-payer-system covering 53% of Israel's population. A composite diabetes case-finding algorithm was built using EMR diagnoses, lab tests, and antidiabetic medication purchases to assess trends and rates of diabetes prevalence, incidence, screening and risk profiling, key complications, control, adherence to medication, cost and mortality.
Results: There were 343,554 diabetes cases in 2012 (14.4%) out of 2,379,712 members aged 26+. A consistent but decelerating upward trend in diabetes prevalence was observed from 2004-2012, while annual mortality rates decreased (from 13.8 to 10.7/1,000 ($p=0.0002$)). Disease control have improved dramatically but now reached a plateau. Only 46% of treated patients have good medication adherence, varying by agent and population subgroup. Among younger patients, one third of uncontrolled patients could be attributed (and potentially averted) to low medication adherence. Unexpectedly, incidence rates are shown to have declined consistently (13.3 to 10.8/1000 ($p<0.0001$), even among previously-screened at-risk members. A predictive model for diabetes incidence based on EMR data was developed, and subgroups of non-diabetic patients were identified with very high risk of becoming diabetic within 3 years. Interventions are directed at these patients to prevent diabetes, and the potential savings are sufficient to support funding by impact investment and social impact bonds.
Conclusions: The increase in diabetes prevalence is decelerating in Israel despite declining mortality and increasing testing rates. A decline in previously-screened incident cases and a shrinking pool of previously-unscreened members were observed. After a decade of improvement in disease control, a plateau was reached, partly due to failing to increase medication adherence. Subgroups at risk for transition to diabetes can be identified, their transition rates and financial gains from prevention quantified, allowing for planning advanced financial tools of impact investment to fund diabetes prevention efforts.

FIGHTING OBESITY: POTENTIAL ROLE OF CALORIE LABELLING OF ALCOHOLIC DRINKS

Fiona Sim, Duncan Stephenson
Royal Society for Public Health, UK

Background: The obesity pandemic is one of the greatest public health policy challenges of our time. This project explores the policy implications of the part played by social alcohol consumption in this epidemic.
Study Question: What part does social alcohol consumption play in the obesity epidemic? Can we influence policy to ensure that customers are provided nutritional information about the alcoholic drinks they consume?
Methods: A large online survey to ascertain people's knowledge of the calorie value of alcoholic drinks and an experiment in a London pub to test our hypothesis that typical customers do not consider the calorie value of their drinks.
Results: Most members of the public have no idea that alcoholic drinks contribute substantially to their daily or weekly calorie intake and that reducing their intake of calories from alcohol could help in efforts to maintain a healthy weight or to reduce excess weight. The majority are in favour of being given such information when purchasing their drinks.
Conclusions: Our work has contributed to an ongoing European campaign to introduce calorie labelling on bottled and canned alcoholic drinks, and on drinks served in restaurants and bars.
Health Policy Implications: The European Union is considering this proposal, and although legislators in the European Parliament have expressed support for nutritional labelling of alcoholic drinks, actual progress has been slow. In the EU foodstuffs must, by law, display nutritional information, but alcoholic drinks are so far exempt from nutritional labelling legislation. It is our contention that, worldwide, a double effect from labelling of beverages for calories, as well as for alcohol content, will permit consumers to make more informed and healthier choices about the food and drink they purchase. The role of the alcohol industry and some possible unintended consequences of this policy will be discussed.

FROM DETERMINANTS OF HEALTH TO DETERMINING HEALTH: TELEM - A QUIT/STAY QUIT SMOKING PROGRAM FOR PREGNANT WOMEN

Jenny Dortal, Maly Rosner, Tali Liber, Hanna Sharon, Diti Shacham
Maccabi HealthCare Services, IL

Background: 60% of female smokers quit during pregnancy. However, one year post-partum, 90% of women, who smoked prior to pregnancy, will be smokers again. The most significant predictor to quitting /abstaining is having a partner who smokes (60% of female smokers).
Study Question: Can TELEM intervention reduce smoking rates amongst female smokers during/after pregnancy?
Methods: Intervention: Nurses were trained to identify and refer pregnant or post-partum women (and their partners) who smoked or had stopped smoking during pregnancy. These women are referred to the Quitline Telephone service. Nurse and counselor work together to promote cessation/abstinence.
Evaluation: Prior to intervention, a telephone survey was carried out for all women who had visited a nurse for the first time in the pilot and control region. The survey established the frequency with which women were asked about their/their partner's smoking status and whether they were referred to a quitline service.
The survey was repeated six months later.
A third survey is currently underway to measure the smoking rate of all identified smokers/abstainers one year post-delivery.
Results: Pilot nurses have identified to date 150 women meeting the intervention criteria, with 70% agreeing to speak to a quitline counselor and 15% reporting no intention to resume smoking.
1,700 women were interviewed (48% response rate). Identifying smokers/recent smokers rose from 50 to 55% in the intervention region only (from 47% to 63% for women seen by the Mother & ChildCare services). Identifying partners that smoke rose from 35% to 41% in the intervention region only (19% to 41% for women seen by a Perinatal nurse).
Conclusions: The intervention was effective in improving identification and referral of the target population.
Health Policy Implications: Few interventions have succeeded in reducing smoking rates one year post-delivery. By combining the strengths of the relationship with the nurse and counselor expertise, we hope to reduce smoking rates of these women.

UNEMPLOYMENT INSURANCE AND PHYSICAL ACTIVITY

Jonathan Cylus
London School of Economics, UK

Background: Unemployment insurance (UI) reduces the opportunity cost of leisure, but it is unknown if this additional time is spent engaging in physical activities. Economic theory posits that demand for time-intensive, health promoting activities will increase as the price of engaging in these activities decreases. This could mean that UI recipients are more likely to participate in physically active leisure compared to non-recipients.
Study Question: Do unemployment benefits encourage physical activity in the US?
Methods: Firstly I exploited the variation across US States in the timing of a program known as 'Alternate Base Period' (ABP) which expanded UI eligibility for low-educated unemployed workers. Secondly, I exploited variations across States and time in the generosity of State-mandated UI benefit levels.
Results: Using nationally representative monthly data between 2003 and 2010 from both the Behavioral Risk Factor Surveillance System (BRFSS) and the American Time Use Survey (ATUS), I found, using difference-in-difference and difference-in-difference-in-difference models, that UI is associated with greater participation in physical activity. ABP UI eligibility expansions coincided with increased probability of engaging in physical activity among unemployed people with no high school degree, while it had no effect on the physical activity of highly educated unemployed unaffected by the expansion. Increases in maximum allowable State benefit levels are also associated with greater probability of participating in physical activity among high school graduates and those who attended some college.
Conclusions: Although the image of an unemployment benefit-receiving 'couch potato' may be ubiquitous, I found UI benefits can cause the unemployed to spend some of their leisure time engaging in physical activity. Possible long-run health effects of leisure time physical activity include better weight management, lower risk of chronic disease, and reduced risk of death.
Health Policy Implications: A growing literature suggests social programs can have important health consequences. The results emphasize the need for intersectoral approaches to health policy and health promotion.

OCCUPATIONAL EXPOSURES AND NHL AMONG PALESTINIANS

Rania Abu Seir[1], Yonah Amster[2], Nemah Abu Khdeir[1], Radwan Qasrawi[1]
1 Al Quds University, Abu-Dis, West Bank
2 University of Haifa, IL

Background: Occupation is a significant social determinant of health, especially when determining risk factors to malignant diseases such as NHL. Assessing the distribution of occupational hazards is difficult, especially within the Palestinian population with high worker turnover and no data regarding exposures and hazards that workers encounter.
A job exposure matrix is a cross classification between a list of job titles and occupational hazards and is a useful tool used in epidemiological studies in assessment of risks and burdens of diseases and prediction of exposures.
Study Question: To establish a job exposure matrix for Palestinians and to further examine the association between occupational exposures and the risk of non-Hodgkin lymphoma.
Methods: A case-control study of 300 NHL cases and 390 cancer free controls has been conducted to study the risk factors of NHL. The study used an interview-based questionnaire adapted from the original Epilymph questionnaire and collects data on medical history, family history, and social determinants such as lifestyle and occupational history. A job exposure matrix (JEM) for the Palestinian population was built based on exposure assessment data from a population-based sample. Data will be collected using a questionnaire that has been developed for the purpose of occupational exposure assessment.
Results: There is an association between risk of NHL and history of employment in agriculture (19.5% of cases vs. 12.2% of controls), construction (26.1% cases vs. 22% of controls) and in services and sales (13.4% of cases vs. 10.4% of controls).
Conclusions: The development of a JEM for the Palestinian population has refined exposure assessment among the workforce and will help further study the relationship between NHL and other malignant diseases in this population.
Health Policy Implications: Developing a uniform and comprehensive method of assessing occupational risk factors for the Palestinian population is imperative to understanding the influence of occupation on health.

PROJECT “RAPHAEL": A SOCIAL INCUBATOR FOSTERING ACADEMIA-COMMUNITY PARTNERSHIPS TO PROMOTE HEALTH IN THE GALILEE

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Bar-Ilan Faculty of Medicine in the Galilee, IL

Background: Israel's newest medical school was established with an aspiration to improve health and minimize health inequalities in the Northern periphery. Project “Raphael” aims to create academia-community partnerships addressing the region's most pressing health needs, and supporting local organizations to develop innovative solutions.
Study Question: Is Raphael an effective engine for development of academia-community partnerships that promote health?
Methods: 4-5 proposals from local organisations are selected to participate each year on the basis of their, innovation, health impact, neediness of target group, and potential for sustainability. As part of the “Raphael” incubator, organizations undergo training on needs assessment, implementation and evaluation and receive $5,000 seed funding. Program impact is assessed through the Community Impact of Research Oriented Partnerships tool (CIROP) and interview.
Results: Out of 91 applications received from 2013-2015, 13 have participated: 9 successfully completed with 8 sustaining activities over time; 4 are currently underway Projects targeted issues including disability, lifestyle, mental health and health education. 3 projects targeted Arab, 8 Jewish and 2 mixed populations. Impact evaluation thus far showed organizations' access and use of information improved, formation of new connections was facilitated, and personal research skills improved. Qualitative analysis revealed a variance in priorities: with organisations focusing on practicality and implementation and less emphasis on rigorous evaluation. The principal factor attributed to sustainability was training local teams rather than outsourcing.
Conclusions: Local organizations' value the opportunity to address health concerns through their own innovative solutions. Sustainability of programs relies on capacity building of organization's staff. The formation of academia-community partnerships is challenging, with tension at times around implementation versus evaluation.
Health Policy Implications: The Raphael model offers a way that medical schools, with their limited but special resources, can connect to the health needs of local population. Further evaluation is underway to ascertain Raphael's impact on the region's health and well-being.

IS SCREENING MAMMOGRAPHY IN WOMEN AGED 40-49 IN ISRAEL SCIENTIFICALLY SOUND OR POLITICALLY MOTIVATED? PARTIAL ANSWERS FROM MEUHEDET DATA

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Meuhedet Health Fund, IL

Background: The issue of breast cancer screening has become controversial on several levels worldwide. Screening in Israel is recommended between the ages of 50-74 every 2 years. In the US, screening age has recently been increased from 40 to 45. The current Health Minister has announced the nomination of a committee to examine the benefits of reducing screening age to 40.
Meuhedet, a PPO insuring 1.2M members, in addition to inviting women aged 50-74, was proactive in encouraging women aged 40-49 to have screening mammography until 2014. This creates an opportunity to examine the outcomes of screening between 40-49 years in the Israeli population.
Study Question: To examine the differences in incidence of mammography, breast ultrasound, biopsies and breast cancer diagnosis between the ages of 40-49 and 50 and above in the Meuhedet population.
Methods: Based on the Meuhedet medical records for the years 2005-2015, we calculated the annual proportion of mammograms, ultrasound examinations, biopsies and diagnoses associated with breast cancer in our population. We also conducted sub-analyses by culture, geographic location and Socio-economic status.
Results: The annual incidence of bilateral mammograms by age in 2014 was 14.2% for 40-49, 38.7% for 50-59, and 40.3% for 60-69. Ultrasound incidence was 10.6%, 16.8% and 14.4% respectively. Biopsies were obtained in 1.4%, 2.5% and 2.7%. Among women who had mammograms, the incidence of newly diagnosed breast cancer in 2014 was 1.4% for 40-49, 0.8% for 50-59, and 1.1% for 60-69.
Conclusions: We found differences in incidence between age-groups, for example, younger women performed less mammograms but more of them were diagnosed with cancer. This demonstrates the need to further understand the issue before any decision is made.
Health Policy Implications: Because of its previous screening policy among women aged 40-49, Meuhedet can provide an optimal database in order to compare outcomes and support consolidation of a policy.

Wednesday, 09:00 - Oren Hall 4

ATTRIBUTES OF YOUNG WOMEN CHOOSING TO UNDERGO ROUTINE MAMMOGRAPHY

Shosh Shahrabani
The Max Stern Yezreel Valley College, IL

Background: As in the USA., the Israeli Ministry of Health does not recommend mammography for women under the age of 50 who are not at risk since this test involves exposure to radiation and unnecessary costs and seems to be ineffective for young women. Nevertheless, in many developed countries including Israel, a non-negligible portion of women under the age of 50 who are not at high risk elect to undergo this test.
Study Question: To examine socioeconomic variables among Israeli women aged 40-49 who underwent early mammography.
Methods: Based on CBS data, we identified the characteristics of women who underwent mammography before age 50. Statistical models and econometric analysis were implemented.
Results: 22% of the women between the ages of 40 and 49 underwent early mammography as part of a routine checkup. Of these, 78% were not at risk, and 40% of these checkups were self-initiated. Young women who underwent early routine mammography had a higher education level and higher income than those who did not. In addition, the percentage of women with private or complementary health insurance among those who underwent early mammography is higher than among those who did not.
Conclusions: Women aged 40-49 who undergo routine early mammography tend to have high socioeconomic status. They probably underestimate the danger of exposure to radiation and the unnecessary costs and are not aware of the ineffectiveness of this test for young women.
Health Policy Implications: Mammography before age 50 may involve unnecessary radiation and false positive results and places an economic burden on households, HMOs and insurance companies. These results can serve to increase awareness among physicians and HMOs regarding the profile of women who do not conform to mammography recommendations.

HEALTH WORKFORCE POLICIES: RIGHT JOBS, RIGHT SKILLS, IN RIGHT PLACES

Francesca Colombo
OECD Health Division, France

Faced with growing demand for care, how is the health workforce changing? Are forecasts of shortage of health professional materialising, and how are countries responding? Are health professionals in OECD countries qualified for the job they do? Who is doing what in health care and who will do what in the future?
This presentation will review key trends and current policy priorities concerning health workforce strategies in OECD countries.
The focus will be on the demand for and supply of doctors and nurses, given the preeminent role that they have traditionally played in health service delivery.
The presentation will also analyse how Israel compares to other OECD countries, covering challenges and possible strategies to move forward to respond effectively to changing population health needs.

Wednesday, 11:30 - Oren Hall 4

INFLUENZA VACCINATION MOTIVATORS AMONG HEALTHCARE PERSONNEL IN A LARGE ACUTE CARE HOSPITAL IN ISRAEL

Amir Nutman, Naomi Yoeli
Tel-Aviv Medical Center, IL

Background: Vaccinating healthcare personnel (HCP) against influenza is important to prevent transmission and morbidity among patients and staff.
Study Question: To assess predictors of immunization and to identify target groups for intervention.
Methods: We conducted an online survey assessing knowledge, perceptions and attitudes concerning influenza and vaccine. Multivariate logistic regression was performed to identify independent predictors.
Results: The survey was completed by 468 HCP representing all categories of staff. Doctors believed that vaccination was the best way to prevent influenza and perceived the vaccine less harmful as compared to nurses and other healthcare professionals. Getting vaccinated was associated with a greater likelihood of recommending vaccination to patients: 86% vs. 54% in vaccinated and unvaccinated HCP, respectively. Reasons for vaccine refusal were fear of needles (19%); fear of side effects (66%) and lack of time (16%). In the multivariate analysis, survey items that were independently associated with vaccination were beliefs that: vaccine effectively prevents influenza (OR 4.07 95% CI 2.51, 6.58); HCP are at increased risk of influenza (OR 2.82 95% CI 1.56, 5.13); vaccine causes influenza (OR 0.41 95% CI 0.25, 0.65); contracting influenza is likely in the absence of vaccination (OR 1.96 95% CI 1.12, 3.42); and that unvaccinated HCP might transmit influenza to their family (OR 4.54 95% CI 1.38, 14.97).
Conclusions: Our study revealed misconceptions and knowledge gaps concerning the risk of influenza and the influenza vaccine. There were significant differences in knowledge and attitudes between healthcare professions. HCP decline vaccination because they do not perceive a personal risk of influenza infection and are concerned about side effects.
Health Policy Implications: Influenza vaccination is recommended to promote patient and employee safety, however uptake is unsatisfactory. It is important to educate HCP to correct misconceptions while stressing the ethical responsibility to protect their patients in order to increase vaccination rates.

SIMULATION-BASED TRAINING DESIGNED TO ENHANCE COMMUNICATION SKILLS AND IMPROVE PATIENT EXPERIENCE DURING MEDICAL DISABILITY ASSESSMENT - RESULTS FROM A PILOT PROJECT

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1 National Insurance Institute of Israel; 2 MSR / Tel-Aviv University, IL

Background: In Israel, 2,200 physicians working with the National Israeli Insurance Institute (NIII) participated in the disability assessment process to determine patient disability employability and their compensation levels. Patients frequently express frustration, distrust, and misunderstandings during the medical evaluation process while National Insurance Physicians (NIPs) describe the encounters as especially challenging. Few initiatives to improve communication skills of physicians serving on disability committees have been tested with promising results, especially in the Netherlands.

Study Question: Does the usage of simulation-based training improve communication in the medical commission and improve patient satisfaction.

Methods: The NIII partnered with the Israel Center for Medical Simulation (MSR), to conduct simulation-based communication pilot training. NIPs (n=49) and Medical Board secretaries (n=21) participated in seven-hour simulation-based workshops (5 in total). The workshops presented scenarios portraying realistic and challenging situations. All encounters were videotaped and debriefed in group-sessions facilitated by trained instructors. Participants completed pre/post workshop questioners, depicting their perceptions about the workshop, communication skills, and teamwork capabilities. In addition, patient satisfaction was analyzed based on phone surveys conducted regularly by NIII a few weeks before after the workshops, for participating physicians.

Results: Participants appreciated the workshop and indicated acquiring tools that could improve communication with patients and contribute to their work with peers. Positive correlations were demonstrated among the study variables: vigor, importance of communication skills, teamwork, coping, contribution, relevance and satisfaction. Survey results demonstrated significant improvement in most measured factors, including - patient satisfaction, perception of the Board's professionalism, team-work and patient centeredness.

Conclusions: Simulation-based training is perceived as an effective modality in enhancing communication skills for NIPs.

Health Policy Implications: This Medical Simulation-Based training pilot contributed to the integration of a broader NIII intervention based on internal policy to improve patients-physician communication in Disability Boards and will be expanded in an effort to provide patients with better services.

Wednesday, 11:30 - Oren Hall 4

CHRONIC DRUG TREATMENT AMONG HEMODIALYSIS PATIENTS - ATTITUDES AND APPROACHES OF PATIENTS, NURSING AND MEDICAL STAFF

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1 The Hebrew University, IL
2 Ben-Guryon University, IL
3 Shari Tzedek Hospitel, IL

Background: Dialysis patients are required to take 17-25 pills a day. Drugs burden creates complexity in treatment of dialysis patients. This research is a continuation of a study conducted in the Dialysis Unit of 'Hadassah Medical Organization', which documented the medical treatment and drug purchase at pharmacies as opposed to reports of patients and staff. The research showed significant differences between drug consumption and reporting.
Study Question: What are the attitudes and approaches of dialysis patients towards medication compared to attitudes and approaches of nurses and doctors?
Methods: The analysis was conducted in a systematic, qualitative research methodology based on GROUNDED THEORY approach, using semi-structured in-depth interviews.
Results: Doctors see non-compliance of patients to drug treatment as a reflection of general non-compliance to treatment. Hereby, emphasizing the dual role of doctors as being both a help and a burden to patients. Patients proclaimed loyalty to drug programs, while admitting that they forget to follow them. They see disease symptoms as the main reason for following the medication regime. The desire to meet the normal range of laboratory tests increased their compliance as well. The dynamics created by the staff does not create uniformity in treatment, and may be the reason for asymmetry in constructing the role of each group. It was prominent mainly among nurses. The lack of symmetry reduces the authority and responsibility imposed on them.
Conclusions: The gaps revealed in the study, explain the findings of the previous research: While the quantitative study presented irregularities regarding drug treatment, this qualitative study provides an understanding for their existence.
Health Policy Implications: There is a need to train staff to improve compliance in dialysis patients; creating practical training would help motivate patients to obey a drug regime; sharing information about patients with HMO's would create cooperation that would help in the monitoring of drug treatment, as well as the establishment of a monitoring system in the Dialysis unit.

EFFECTS OF COMMUNITY VIOLENCE AND INSECURITY ON HOSPITAL ACCESS IN NORTH CENTRAL NIGERIA- ACCOUNTS FROM HEALTH CARE WORKERS

Oladipo Akinmade, Seun Ogundeko, Abiodun Akanji, Olanrewaju Olaiya, Joseph Enegela

Pro-Health International (PHI), Nigeria

Background: Community violence and insecurity significantly limit access to healthcare as a result of compulsory relocation of the patient, caregiver and/or the hospital. This is amplified by the restriction of patients' access to hospital services and/or the restriction of healthcare workers (HCWs) to access their workplaces or perform their duties. The effect is seldom quantified, hence going unnoticed by policy makers and people in governance.

Study Question: We set out to measure the effect that community violence/insecurity have on hospital access by the HCWs and their patients.

Methods: Questionnaires were administered with the support of trained none-resident personnel to assess the experiences of 51 HCWs from 16 health facilities spread across Kanam, Wase and Kanke Local Government Areas of Plateau State in North-central Nigeria. Respondents were HCWs involved in HIV/AIDS service provision; hence they had a good knowledge of their patients and the clinic appointments as is expected with most HCWs involved in chronic care.

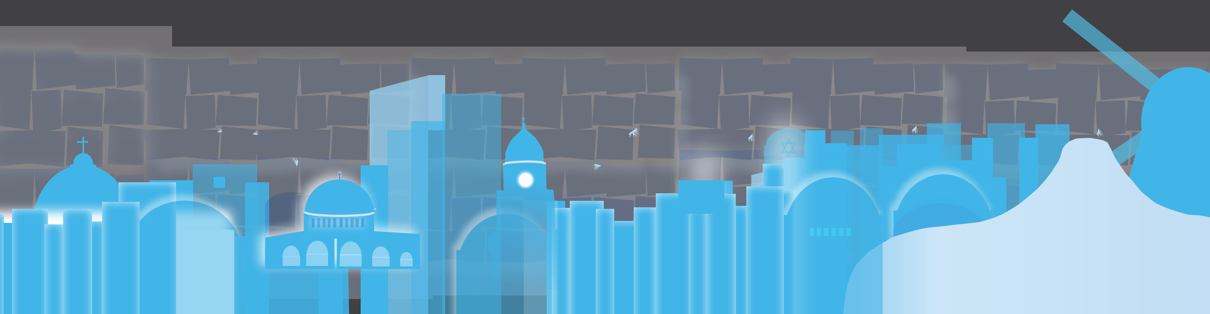
Results: 51 (78.5%) out of 65 HCWs responded, 42 (82.4%) of whom reported experiencing violence/insecurity. While 53.8% of the HCWs had restricted access to work, 71.2% reported same about their colleagues. Hospital access was also affected among 36.5% of HCWs; with 63.5% of respondents' patients and 51.9% of respondents colleagues were also denied access to the hospital. Insecurity also resulted in significant reported relocation by HCWs (51.9%), family members (55.8%), patients (71.2%), colleagues (57.7%), friends (86.5%) and neighbours (73.1%). Data analysis was conducted using SPSS.

Conclusions: Community violence/insecurity impact on the wellbeing of patients and HCWs, and can restrict access to hospitals where healthcare services are provided and received.

Health Policy Implications: Policies to expedite hospital access in situations of insecurity will go a long way in promoting the right to health of all citizens.

ABSTRACTS

ePoster Exhibition



IMPACT OF THINK-TANKS AIMED TO DESIGN HEALTH POLICIES FOR EMERGING THREATS ON PERCEPTIONS OF EMERGENCY PREPAREDNESS

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Background: Emergencies may require challenging and sensitive decision-making, which should be prepared for in advance. In order to reduce vulnerability and design health policies for emerging threats, a novel methodology of multi-professional Think-Tanks was conducted.

Study Question: To study the impact of Think-Tanks designed to create a policy for emerging threats on medical teams' perceptions of systemic emergency preparedness.

Methods: Multi-sector senior and mid-level healthcare managers rotated between five Think-Tanks, each lasting 25 minutes, aimed at discussing topics that require creation of policies. Each Think-Tank included two chairmen that remained constant (facilitating discussions), participants (proposed potential solutions), and observers (commented in writing concerning challenges and proposed policies). A survey concerning perceived individual and overall emergency preparedness was filled by all partakers, before and after application of the Think-Tanks.

Results: 59 managers from community services, hospitals, MOH and military medical corps participated. Outputs of the Think-Tanks provided healthcare leaders with proposed policies for five main issues concerning the emerging threats: provision of primary-care services; operating hospitals including hospital evacuation, elective procedures and manpower coordination; casualty evacuation; provision of medical services to special-needs populations; and, delivery of medical services in a military-closed zone. Comparison of perceived emergency preparedness before and after the Think-Tanks presented a significant increase in numerous elements including perceived individual (3.71 vs 4.60 respectively) and systemic (3.56 vs 4.37 respectively) competency, and proficiency in reference emergency scenario (3.47 vs 4.37 respectively).

Conclusions: Think-Tanks proved to be an effective mechanism in involving multi-sector professionals in designing health policies for emerging threats, as well as strengthening individual and systemic perceptions concerning emergency management.

Health Policy Implications: Utilization of Think-Tanks enables creation of health policies based on input from numerous professionals and healthcare entities, thus contributing to the process of building knowledge and decision-making procedures. Simultaneously, this unique means facilitates increasing perceived emergency preparedness, and strengthens readiness for emerging threats.

INCREASING AVAILABILITY OF CONTRACEPTIVES THROUGH REVIEW-RESUPPLY CLUSTER MODEL: EXPERIENCE FROM NIGERIA

Olusegun Tope Afolabi[1], Olanike Adedeji[2]
1 Obafemi Awolowo University, Ile-Ife, Nigeria
2 United Nations Population Fund, Abuja, Nigeria

Background: Access to essential supplies is critical to reaching universal health coverage and is a key building block to an efficient and effective health system. The most common challenges to the health supply chain are related to stock-outs of essential supplies due to expiration, poor quantification, inefficient last mile distribution, and incomplete reporting. This is compounded by poor coordination, financing and poor availability of data to guide procurement systems. Distribution usually gets to the state from where it stalls as mechanisms for getting them to the service delivery points or community based distributors were not too functional.
Study Question: Has the review resupply model of contraceptive distribution been effective in making contraceptives available to the end user?
Methods: A bi-monthly review resupply meeting was instituted which focused on ensuring "last mile" distribution of Family Planning (FP) commodities and the appropriate documentation of processes at state levels aimed at strengthening the Supply Chain Management System for FP using a cluster model. Stock out indicator was measured using the global programme for enhancing reproductive health commodity security (GPRHCS) survey in 1041 facilities in all states of the Federation.
Results: The 2014 GPRHCS survey indicated that 78% of all facilities reported no stock-out of contraceptives in the last three months prior to the survey, compared to 67% in 2012. There was little variation in stock-outs levels across facilities in urban and rural areas. About three-quarter (72%) of facilities reported that they are responsible for collecting family planning supplies and medicines from supply sources while about 78% reported that it took less than two weeks between ordering and receiving family planning supplies.
Conclusions & Health Policy Implications: There was a significant reduction of stock-out in health facilities. Effective and sustainable last mile distribution strategy improves availability of commodities for clients.

ASSESSING HEALTH ACCESS THROUGH THE AVAILABILITY OF PUBLISHED INTERNET LINKS- A REVIEW OF REFERENCES IN NIGERIA HEALTHCARE GUIDELINES

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Pro-Health International (PHI), Nigeria

Background: The International Covenant on Civil and Political Rights proposed "freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of his choice. Riding on this, the twenty-second session of the Committee on Economic, Social and Cultural Rights defined health accessibility in four overlapping dimensions namely: Non-discrimination; physical accessibility; economic accessibility (affordability) and information accessibility.
Study Question: We sought to determine the degree to which health information can be non-discriminatory, affordable and physically accessible through published web links in Nigeria National guidelines as compared to international guidelines.
Methods: 19 guideline documents published within the past 9 years (2007-2015) on the HIV and TB programs in Nigeria and two international guidelines in the same field were reviewed for the presence of references and particularly the presence of published web links. The analysis was restricted to the availability of published internet links as opposed to access on closed user databases, as access to these is very limited in this setting. The data was analysed using Microsoft excel 2010.
Results: 4 (21.1%) out of the 19 National guidelines had a reference section with a total of 123 quoted references. Of these, 20 (16.3%) quoted references had internet links for users access as opposed to the significantly higher 57.3% in the PEPFAR guidance document; and 31% in the WHO guidelines.
Conclusions: Today, the importance of access to information in achieving optimum health becomes even more pertinent as cutting edge healthcare is dependent on the amount of up to date information available to both care giver and client.
Health Policy Implications: The non-discriminatory physical access to affordable health information by both service providers and their clients is significantly dependent on the access to, and utilization of internet.

INCORPORATION OF LEADERSHIP MODULES IN TECHNICAL TRAINING - A STRATEGY FOR IMPROVED TRAINING OUTCOMES IN NORTH-CENTRAL NIGERIA

Oladipo Akinmade, Oluwafunmilayo Ogundeko, Joseph Enegela, Amana Effiong
Pro-Health International (PHI), Nigeria

Background: Substantial resources are devoted annually into training healthcare workers (HCWs) to support their job functions. However participants return from training with additional technical expertise but a significantly poor sense of responsibility and/or inability to transfer the knowledge; nor translate it to practice and drive the required change.
Study Question: How can training be better utilized to improve the knowledge, skills, practice and leadership capability of HCWs?
Methods: We piloted a strategy to build the leadership capacity of HCWs participating in a Continuous Quality Improvement (CQI) training by incorporating leadership modules to the syllabus. The CQI and leadership modules were handled by different facilitators who were not privy to the intervention objectives. A mixed study was conducted to assess if the represented hospitals conducted step-down trainings; and initiated the routine CQI assessments devoid of external supervision. 10 participants were also followed-up with a questionnaire assessing the effect that the leadership modules had on their knowledge, attitude and practice as HCWs.
Results: 11 HCWs from 6 hospitals were observed. Hitherto, HCWs did not conduct step-down trainings, nor initiate the routine CQI assessments without direct external supervision. Post-intervention we observed that step-down trainings were conducted in 5 (83%) hospitals; 4 (67%) initiated the assessment; and 3 (50%) completed the process without supervision. 7 (70%) of the reached participants responded to the survey corroborating that the intervention was helpful, motivating, and stimulated them to improve their teamwork. They confirmed that the intervention made knowledge implementation easier and they achieved more than they would have with the core training content alone.
Conclusions: Improving leadership skills goes a long way in translating knowledge to practice, and improving training outcomes.
Health Policy Implications: The healthcare sector will benefit from having HCWs who are technical area experts as well as leaders in their respective areas of expertise; hence the need to build leadership skills.

WHEN “IRON SHARPENETH IRON”: REPORTED INFLUENCE OF HEALTHCARE WORKER’S BEHAVIOUR ON THE HEALTH SEEKING BEHAVIOUR OF PATIENTS IN UMUAGBAI, SOUTH-SOUTH NIGERIA

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Background: In addition to providing required healthcare services to their patients, healthcare workers (HCWs) are believed to have some influence on their health seeking behaviours as well. Thus the role of the HCWs extends beyond providing necessary care, treatment and counsel to serving as role models of their message and practice.
Study Question: We sought to explore perspectives of patients and HCWs on the amount of influence HCWs have on the health seeking behaviour of their patients.
Methods: Two sets of questionnaires were administered, one to HCWs and the other to out-patients in a Primary Healthcare centre (PHC) in Umuagbai Rivers state of South-south Nigeria. The PHC was running a free healthcare service program which enjoyed the patronage of members of the immediate, neighboring communities. The responses were collated and analysed using the SPSS version 20.
Results: A total of 22 HCWs and 40 patients were assessed during this period, with a male to female distribution of 24:16 and 59:41 respectively. Majority of patients and HCWs have tertiary education 45% and 81.8%. There was a significant but contrasting opinion between patients and HCWs. While a majority (54.5%) of HCWs reported that their behaviour toward their health can influence patients’ behaviour towards their health; a minority (35%) of patients shared the same opinion while 65% disagreed. However, most patients (62.5%) corroborate that if HCWs do not have the right habits for maintaining good health it will affect them.
Conclusions: Patients and HCWs differ in majority opinion as to the influence of HCWs health behaviour on patients’ health behaviour.
Health Policy Implications: The promotion of a good work ethic, and the personal and professional conduct of HCWs will go a long way in improving the health seeking behaviour of patients and HCWs.

ECONOMIC IMPLICATIONS OF REDUCING CARDIOVASCULAR EVENTS BY PCSK9 INHIBITORS

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Background: Proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitors can significantly lower the levels of low-density lipoprotein cholesterol, on in patients receiving statin therapy. Early evidence suggests that the use of PCSK9 inhibitors improves outcomes by reducing the incidence of major adverse cardiovascular events (MACE).
Study Question: Our objective was to determine preliminary economic implications of using this therapy to improve health outcomes.
Methods: We used the cardiovascular (CV) outcomes data of 6,806 patients enrolled in the OSLER and ODYSSEY LONG TERM trials to estimate the reduction of MACE in the patients treated by PCSK9 inhibitors. The cost of achieving the reduction in MACE was estimated based on the trials follow-up data and current costs of the PCSK9 drugs. We compared the costs of MACE reduction to contemporary cardiovascular therapies, and the cost of preventing death to therapies in Hepatitis C.
Results: Using PCSK9 in the 4,529 patients enrolled in both trials resulted in the prevention of 35 major CV events (MACE): 8 cardiovascular - deaths, 22 Myocardial Infarctions, 0 strokes and 5 unstable anginas. The additional costs of using this therapy during the 4,903 patient-years of follow-up would be $70,172,141. The costs to prevent one MACE ($2,004,918) or death ($8,777,518) are at between 10 to 100 times higher than the compared therapies.
Conclusions: Assuming that the upcoming PCSK9 outcome trials will demonstrate similar results, using PCSK9 inhibitors to prevent MACE or death seems to be a very expensive strategy.
Health Policy Implications: The healthcare community needs to look for affordable and cost-effective strategies to use this therapy wisely.

MAPPING HEALTH INEQUALITIES IN ISRAEL

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Background: Maps have been used increasingly in many areas of decision making in the past decade, including in the health sector. GIS (Geographical Information Systems) tools are being implemented today in several countries in studying health disparities, as is manifest in the increasing number of scientific publications and governmental web sites.
Study Question: To study and present health disparities in Israel at the regional and local levels using GIS tools.
Methods: Mapping and spatial analysis were carried out using the ArcGIS 10.3 software (ESRI, Redlands CA, USA). Health and health-service related data were gathered from the Israeli Central Bureau of Statistics, several disease registries run by the Israel Center for Disease Control, and administrative, ministerial data sources.
Results: Substantial disparities in health indicators and services at the regional and local levels were identified. Higher prevalence rates of diabetes were demonstrated in the northern parts of Israel. The northern sub-districts were shown to be at increased risk for certain cancers. Relatively high mortality rates were identified in peripheral localities. As for health services, the maps helped to reveal under-served regions and localities. These include small peripheral localities, mostly in the border regions of the country. As for Family Health Centers, several localities located in the central part of the country were identified as serving large numbers of children.
Conclusions: This mapping project is a pioneering attempt at presenting spatial health disparities in Israel, with the purpose of displaying the relevant information in this field in a tangible and easily grasped manner.
Health Policy Implications: Using mapping tools for studying and demonstrating health inequalities can be extremely useful both for professionals and the general public. These maps should be used as a tool in the hands of decision makers in the process of planning and developing health services.

EFFECT OF VERY EARLY PARENT TRAINING ON FEEDING INTERACTION AND INFANT EATING HABITS AT 12 MONTHS

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Background: Developing a positive feeding relationship between mother and child, by identifying the baby needs and responding to them with an appropriate response, may affect the infant's future eating patterns and the attitude towards food.
Study Question: This study examined whether professional behavioral and nutritional training for first-time mothers can improve feeding relationships and infant eating habits at age 12 months.
Methods: Participants were 128 mother-infant dyads: 86 in the intervention group (IG) and 42 controls. Mother's' age was M=30 years (+2.6), with M=16 (+2.2) years of education. IG received four weekly workshops when infants were 4-6 months old, followed by continued internet-based support of a pediatric dietitian and social worker until infants reached 12 months. Control group received municipal well-baby clinic's standard mother-infant support. Blinded coders evaluated videotaped home mealtime interactions (at age 12 months) using Chatoor Feeding Scale (CFS).
Results: Significant inter-group differences emerged in mealtime interactions for four of the five CFS dimensions: dyadic conflict (IG = 4.69 vs. control = 8.38), talk and distraction (3.75 vs. 4.90), struggle for control (2.30 vs. 4.88), and maternal non-contingency (1.61 vs. 2.75). Findings indicated significantly more positive mother-infant mealtime interactions and maternal responses to infant cues in the IG than in controls.
Conclusions: Very early maternal training may support development of more positive mother-infant feeding interactions. This may contribute to preserved internal hunger and satiety, improved eating habits, and prevention of future eating disorders and obesity. Long-term follow-up may optimize training for specific target populations.
Health Policy Implications: Feeding problems and obesity at early age are a growing problem, with high economic costs, and health implication. Implementation of very early parent education, may support development of more positive feeding interaction with infants at 12 month, improved eating habits and perhaps even prevention of future eating disorders and obesity.

EVALUATION OF 'BETEREM IN THE CITY': MANAGEMENT AND PROMOTION OF CHILD SAFETY IN ISRAEL'S CITIES

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Background: 'Beterem in the City' was developed in 2008 based on Safe Communities criteria to promote and manage child safety in municipalities. It incorporates components of public health, organizational consultation and safety management and is tailored to unique characteristics of municipalities in Israel. A formative and summative evaluation of program effectiveness was conducted.

Study Question: To what extent does the model effect change in child safety promotion in participating cities.

Methods: The three year evaluation included:

Quantitative tools:

- Surveys with program directors and managers in 23 cities;
- Surveys with organizational consultants;
- Behavioral surveys in four cities.

Qualitative tools:

- Interviews with developers and stakeholders;
- In-depth review of implementation in four cities, based on interviews and documentation.

Results: Findings indicate that implementation of the model is incomplete. Components implemented in full, demand less time, resources, and expertise as compared to components not implemented. Program components found to be correlated with positive outcomes include effective management and utilization of organizational consultation hours.

Conclusions: 'Beterem in the City' has potential to lead organizational change and increase child safety over time, however the current model is ambitious and may not be suitable for the organizational culture and management in most Israeli municipalities. Evaluation points to better outcomes over time and in cities with stronger, more evolved management structures. Model needs to be adapted to municipalities with a low socio-economic population.

Health Policy Implications: 'Beterem in the City' has potential to lead organizational change and increase child safety over time, however the current model is ambitious and may not be suitable for the organizational culture and management in most Israeli municipalities. Evaluation points to better outcomes over time and in cities with stronger, more evolved management structures. Model needs to be adapted to municipalities with a low socio-economic population.

MEASURING HEALTH CARE SERVICE QUALITY THROUGH PATIENT SATISFACTION IN MONGOLIA

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Background: Patient satisfaction is a crucial health policy issue as an indicator of health care quality in Mongolia. Health care reforms have been implemented in the country since the socioeconomic transition in 1990; however, few studies have been conducted on this topic.

Study Question: Reported satisfaction does not necessarily mean that performance of all the determinants were satisfactory.

Methods: The study was conducted by face to face interviews, closed-ended questionnaires, with 961 randomly selected in-patients of 3 tertiary level, state hospitals in Ulaanbaatar, Mongolia between 2014 and 2015. Structural equation modeling was used to test the initial and alternative models and to determine a level of in-patient satisfaction with 3 tertiary level hospitals in Mongolia.

Results: Overall satisfaction with health services in the selected hospitals was 61%. Among the satisfaction indicators, satisfaction with treatment was rated as "satisfying" by a majority of respondents (70.2%) followed by physical environment (67.02%), interpersonal skills (54.0%), professional competence (52.2%), and admission service (51.3%). Professional interpersonal skills and competence were the most important determinants of in-patient satisfaction; however their performance was rated as relatively poor. Patients' self-rated psychological health status is the only important predictor to shape in-patient satisfaction with health care services among the socio-demographic variables.

Conclusions: The overall in-patient satisfaction level in 3 state central hospitals was fairly high. However, higher reported satisfaction does not necessarily mean that performance of all the determinants was satisfactory.

Health Policy Implications: Implementing a standardized patient satisfaction measurement in the health sector, conducted by a third-party may reduce the cost and improve quality of health care and health system responsiveness.

FROM MEDICAL BIG DATA TO COMPACT VISUALIZATION IN POLICY AND EPIDEMIOLOGICAL RESEARCH

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Background: "Big Data" in epidemiologic studies comprises administrative and medical data collected over the course of many years. Epidemiological Data Science, deals with detecting and describing patterns, trends and relations in data, for supporting semi-automated hypothesis generation, easy and rapid visualization of the mining results, and reducing time-to-interpretation.
Study Question: Our research objective is to propose a compact visualization (CV) facilitating the discovery of:

- Associations between events,
- Changes in associations over time,
- Clusters of characteristics for similar trends.

Our method was implemented in studying the associations between children's season of birth and their purchasing of first medication for Attention Deficit / Hyperactivity Disorder (ADHD).
The CV interpretation was focused on:

- Trends of the associations over 2006-2011,
- Clustering of children characteristics treated for ADHD over time.

Methods: We built a CV combining the graphical representation of the hierarchical clustering (HC) and a heatmap wherein a color gradient reflects annual incidence values for children born in each season and rows are ordered according to the HC. The HC is computed based on incidence values of all available discretized attributes describing the children population at children season of birth level.
Results: In the context of the ADHD, by a visual snapshot of the CV we were able to see that:

- Younger children in class are treated more than older children,
- First medication incidence increases for all the attributes between 2006-2011,
- 3 main profiles of ADHD treated children can be detected.

These results were comparable with results from previous research using classic statistical approaches.
Conclusions: The CV facilitates achieving our goals; specifically identification of clusters of attributes having similar trends and thus defining profiles of patients, in a relatively short time.
Health Policy Implications: Compact visualization supports the development of health policies with minimal delay by providing the medical decision makers a "data/analysis" integrated tool.

WHO WILL CARE FOR THE CAREGIVER? HOW THE HEALTH SERVICES ADDRESS THE NEEDS OF FAMILY CAREGIVERS

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Background: Although health and social services provide the sick and the disabled with many services, family members still have a major role in providing care to them. However, often they do so at a considerable cost to themselves, including health problems.

Study Question: Identify family caregivers at high risk of developing health problems.

Examine their role as mediators between the patient and the medical system and highlight the difficulties that arise from this encounter.

Examine possible strategies that the health system might employ to address the needs of family caregivers.

Methods: A secondary analysis of recent studies carried out by the Myers-JDC-Brookdale Institute about family caregivers.

A review of state-of-the-art programs in this area, in Israel and abroad.

Focus groups of health professionals, service developers and policymakers to identify possible strategies and programs to address these problems.

Results: Heavy burden of care is linked to poor physical and mental health, particularly among female spouses aged 50-75. Feeling burdened may cause postponement of visits to doctors as well as postponement of diagnoses and tests. The involvement of family members in the provision of medical treatment and as mediators to the medical staff is very high, particularly in home hospice settings.

Conclusions: The study offers possible strategies that address the needs of family caregivers, in order to improve their health and enhance the efficiency of their involvement in the care of the patient.

Health Policy Implications: The strategies for addressing the needs of family caregivers can be employed by the health system.

TRENDS IN BENZODIAZEPINE DRUGS CONSUMPTION, ISRAEL, 2005-2013

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Background: Benzodiazepines are a class of drugs which act pharmacologically on GABA-A receptors in the brain by increasing the affinity of the neurotransmitter, GABA. As a result, Chloride channels open to cause hyperpolarization and decreased nerve impulses in the central nervous system. The main indications for treatment include: anxiety, tension and convulsive disorders and treatment of insomnia.

Study Question: The aim of this study was to describe innovative trends in Benzodiazepine drugs consumption in Israel over the 9 years, 2005-2013, and to explore explanations for changes in quantity and pattern of utilization.

Methods: Data for the period from 2005 to 2013 were extracted from the database maintained by the Israel Ministry of Health's Pharmaceutical Administration and from Pharmaceutical companies. The data were converted into a measure of Defined Daily Dose (DDD) per 1,000 inhabitants per day.

Results: Consumption of Benzodiazepine drugs for sleeping disorders, covered by Israel's national health care system went up over the study period, from 10.22 DDD/1,000 inhabitants/day in 2005 to 22.49 DDD/1,000 inhabitants/day in 2013.

Conclusions: There has been a drastic rise in Benzodiazepine drugs consumption for sleeping disorders in Israel over 2005-2013. This is probably due to over prescribing of medications especially for older patients, despite the policy that limits use to a specified time.

Health Policy Implications: A key goal for the future is to diminish over-prescriptions of BZ to older patients, especially for sleeping disorders, and to establish ground rules for communication between the physician and the pharmacist.

DEVELOPING ENVIRONMENTAL HEALTH INDICATORS IN ISRAEL

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Background: Environmental health indicators are important tools for monitoring trends in health effects resulting from environmental exposures and for evaluating the effects of policies and interventions intended to improve environmental health. While extensive health and environmental indicator data are regularly collected and published in Israel, Israel has yet to develop environmental health indicators.
Study Question: Study Question: What are the candidate environmental health indicators for Israel?
Methods: We reviewed environmental health indicators developed by the World Health Organization, US Centers for Disease Control and the European Environment and Health Information System related to air pollution, sanitation, hazardous/toxic substances including pesticides, food safety, climate change, radiation, noise, occupational health risks, access to safe drinking water, vector-borne disease, and solid waste management and rated them for relevance to current environmental health problems in Israel. Next we mapped data availability for the twenty most relevant indicators, including data source and most recent available data in Israel. Finally we identified environmental health indicators with unique relevance to Israel, including those not developed in international frameworks mentioned above.
Results: Data are available in Israel for numerous environmental health indicators developed by the national and international organizations. However, it is important to note that data are lacking for many environmental health indicators, including ventilation in schools, reported pesticide exposure and related illness, childhood exposure to mercury, and data on heat stress related hospitalizations and mortality.
Conclusions: Environmental health indicators for Israel should be developed and used to track the impact of environmental health policy both on exposures and health outcomes. Data collection and validation will require coordination between multiple relevant ministries (e.g. health, environment, economy), meteorology services and Health Maintenance Organizations in Israel.
Health Policy Implications: Indicator data will be applied to develop prudent public health policy in the field of environmental health.

DOES TRIAGE PREVENT EFFECTIVE SOLUTIONS FOR CERTAIN CASES IN EMERGENCY MEDICINE DEPARTMENTS?

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Background: During 2015, 113,256 patients arrived at the Department of Emergency Medicine (DEM) of Barzilai University Medical Center (BUMC). The high volume of admissions cannot be treated immediately due to long the waiting time for initial triage. The management of BUMC developed and implemented the criteria of direct referral (without triage) of patients who need treatment by

- An ophthalmologist;
- An ear, nose & throat (ENT);
- An oral & maxillofacial surgeon (OMS);
- A gynecologist, without the evaluation of a triage nurse.

Study Question: Is direct referring feasible, effective and safe?

Methods: The EDM staff were carefully instructed regarding the guidelines and criteria for direct referral of these four patients groups. Uncertain cases were brought to the triage nurse for the final decision. The data on those patients, who were referred directly from the clerk desk to the four specialists, was collected prospectively during 28 consecutive days from the beginning of the project (15.11.15). Data included the date and time of admission; type of specialist; outcome of visit (discharge /hospitalization); department (if hospitalized) and appropriateness of referral.

Results: During the study period 9,518 patients were admitted to the EDM, 626 (6.6%) of these patients met direct referral criteria and were sent to relevant specialist without evaluation of a triage nurse. 55%, 34%, 9% and 2% of 626 patients were referred directly to a Gynecologist, Ophthalmologist, ENT, OMS, respectively. Most referrals (56%) were registered during morning shifts, 34.4% during evening shifts and 9.6% during nights. The remaining patients were discharged by the specialist to whom they were referred. There was no case of miss referral.

Conclusions: The direct referral to Ophthalmologist, ENT, OMS and Gynecologist in DEM of BUMC was found to be an effective solution to decrease crowding and waiting times, and to increase quality of health care services at the DEM of BUMC.

Health Policy Implications: Range of nurse triage policies in DEM.

OPERATIVE MORTALITY FOLLOWING BARIATRIC SURGERY: RESULTS FROM THE ISRAELI NATIONAL BARIATRIC REGISTRY

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Background: Obesity has become a major epidemic with considerable morbidity and mortality. Evidence shows that bariatric surgery is the only effective long-term treatment. Data on operative mortality from large national cohorts are sparse.

Study Question: To determine operative mortality rate and causes of death following bariatric surgery.

Methods: Data on all bariatric surgeries performed in Israel between June 1, 2013 and December 31, 2014 were obtained from the National Bariatric Surgery Registry. Matching mortality data were acquired from the national population registry. Time and causes of death were assessed from hospital medical records and death certificates.

Results: 14,944 surgeries were performed during the study period, with 14 operative related deaths (0.09%). Mean age of the deceased was significantly higher than the other registry patients (52.2±9.4 years vs 41.6±12.4 years, p=0.001. However, no difference was found between the groups and BMI 45.4±10.0 kg/m2 (range 32.2-76.4 kg/m2) vs 42.3±5.2 kg/m2 (range 25.3-76.4 kg/m2), p=0.26, respectively).

Sleeve gastrectomy was associated with 10 cases of deaths (0.08%), Roux-en-Y gastric bypass 3/ (0.21%), VBG modification 1(1.05%), Duodenal switch, Gastric Banding and BPD - none (p<0.001). Six deaths occurred within 30 days of surgery, 3 occurred 1-2 months after surgery, 5 occurred 2-7 months following surgery. The most frequent cause of death was leak: 7/14(50%) following gastric bypass; bleeding accounted for 2/14(14.2%), myocardial infarction, CVA, PE/MI, colitis and sepsis each accounted for 1/14(7.1%).

Conclusions: Bariatric surgery is safe with an acceptable mortality rate. Sleeve gastrectomy is associated with half of the mortality rate of Roux-en-Y gastric bypass.

Health Policy Implications: The study underlines the importance of the national registry in identifying trends and causes of death and in determining health policy.

EVALUATING THE EFFECTIVENESS OF ISRAEL'S NATIONAL SUICIDE PREVENTION PROGRAM

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Background: Accurate statistics are vital for properly targeted prevention strategies. The national program for the prevention of suicide in Israel supports a multi-system approach for improving the timeliness, relevance, and precision of suicide statistics. In that effort, a pilot study was conducted by the Israel Center for Disease Control, to appraise the sensitivity of death notifications in the district of Tel-Aviv - revealing that about a third of genuine suicide cases were incorrectly registered in the official record - further stressing that registering a death as a suicide is not a straightforward process.
Study Question: First steps in assessing whether Israel's national program for suicide prevention is effective in decreasing the incidence of suicide.
Methods: Deriving from our prior findings, records on all deaths (n=36,487) were extracted from 13 metropolitans (within 4 districts), between the years 2011-2015, compiled into a database, and selected categories (e.g., those of uncertain death manner) identified, to discern their contribution to misclassification. Efforts were then made to retrospectively infer indication of intent-to-die by extracting accompanying information (e.g., hospital records and autopsy reports).
Results: Of the 4,651 subjects (thus far inspected); 336 were classified as suicides, of whom 30 percent were registered as suicides in the death certificates. 2,138 cases require further analyses.
Conclusions: Given their inaccuracies, constructive use of suicide rate data requires an understanding of the sources-of-error and their scope; for instance, using multiple data bases and constant reporting practices, could improve the integrity of suicide case ascertainment, and, thereby, inform future preventative initiatives.
Health Policy Implications: To meet challenges associated with local and global increases in rates of suicide, well developed, credible, population-based suicide metrics must be available. Only then, can we determine the utility of programs aimed at decreasing and preventing suicide mortality.

INTERIM REPORT: HBV AND HCV INFECTED HEALTH CARE WORKERS (HCW'S) - POLICY IMPLICATIONS

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Background: According to current guidelines, healthcare employers are required to report to the Israeli Ministry of Health (MOH) all employees who are Hepatitis B (HBV) or C (HCV) carriers. In 2006 the Israeli MOH advisory committee for policy concerning infected HCW's with HBV and HCV published recommendations for prevention of viral transmission from HCW to patient. Between December 2008 and December 2015, the committee reviewed the records of 64 HCW's who were HBV and HCV carriers.
Study Question: Assess the number of new HBV and HCV carriers among HCW's in Israel.
Re-review the adequacy of current guidelines in light of advances in HCV and HBV treatment.
Methods: Data analysis and characterization of 64 cases reviewed by the committee. Cost benefit analysis of treating HCW's who perform exposure prone procedures (EPP's).
Results: 67% of HCW's evaluated by the committee were HBV carriers and 33% HCV carriers, of whom 2 were also HIV positive. EPP was performed by 40.5%, mostly surgeons and dentists. 62% of the carriers were born in the former USSR, 25% in Israel, 4.7% in Ethiopia and Romania each. Unknown country of birth was reported in 3%. Positive HCV RNA by PCR was recorded in 52.3% of anti-HCV (+) HCW's, 4 patients (36%) were treated and showed sustained viral response. Positive HBV DNA by PCR was recorded in 93% of anti-HBV (+) HCW's out of whom only 2 patients (16%) had a viral load >2000 IU/ml and were temporarily restricted from performing EPP's. Cost benefits analysis results are pending.
Conclusions: This interim report will form a basis for updating existing guidelines.
Health Policy Implications: Prevention of transmission HBV and HCV from HCW to patient.

THE IMPACT OF HIV AND AIDS POLICIES ON THE OF PROMOTION, SUPPORT AND PROTECTION OF BREASTFEEDING PRACTICES IN SUB-SAHARAN AFRICA

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Background: Early global policies with safety measures to prevent vertical HIV transmission. Recommnedations were that HIV infected women living with safe water and a sanitised environment should not breastfeed in order to avoid the infant being infected (Ebrahim 1991). Thus, since 1987 worldwide and especially many national policies of Sub-Saharan African countries were supported by global policies on HIV and infant feeding recommendations. Though breastfeeding rates in 1987 were quite high in much of Sub-Saharan Africa, this trend has been reversed since. In fact, women even on antiretroviral treatment become reluctant to breastfeed, due to an increasingly favourable environment for the promotion of artificial feeding which has a negative impact to the infant survival.
Study Question: The study investigates if global HIV and AIDS policies influence the support, promotion and protection of breastfeeding practice.
Methods: A qualitative approach has been adopted in the investigation using a semi-structured questionnaire that was sent electronically to sixteen professionals who work in the HIV and breastfeeding field worldwide in 2006. Ethical approval was granted by the Research Ethics Committee of Queen Margaret University in Edinburgh, Scotland.
Results: The study has confirmed that global HIV policies have influenced breastfeeding practices in Sub-Saharan Africa. Although the size of the study is limited to 2006, it reveals that even in 2016 the global policies on HIV are still impacting infant health.
Conclusions: Health Policy Implications. Due to the complexity of health policy, African countries have paid a high price in the field of HIV and breastfeeding. They continue to struggle to impose best breastfeeding practice due to previous global policies.

SELECTING A TOOL TO PREDICT HIP-FRACTURE RISK FOR USE IN A LARGE INTEGRATED ELECTRONIC HEALTH RECORD SYSTEM

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Background: Hip fractures are preventable events, associated with considerable morbidity, mortality and high costs. Existing tools predicting hip-fracture risk use various inclusion criteria and are inconsistently cross-validated. Furthermore, applicability within an electronic health record (EHR) system is unclear. Policy-makers are faced with considerations of performance, local applicability, and resource inputs in tool adoption decisions.

Study Question: Of three leading hip-fracture prediction tools, QFracture, FRAX and Garvan (26, 11 and 5 inputs, respectively), which provides the greatest discrimination when cross-validated using EHRs?

Methods: A retrospective cohort study comparing QFracture, FRAX and Garvan-predicted five-year probabilities of hip-fracture to observed fracture rates among 990,265 Clalit members, aged 50-90, in Israel.

Results: Predicted five-year probabilities for hip-fractures in females and males were 2.21% and 1.36% (QFracture), 1.97% and 1.04% (FRAX), and 0.82% and 1.86% (Garvan). Observed five-year rates were 3.37% among females and 1.94% among males. The Receiver-Operator Curve for QFracture, FRAX and Garvan was 82.63% (95%CI:82.40%-82.87%), 81.48% (95%CI:81.23%-81.72%) and 77.69% (95%CI:77.42%-77.96%), respectively. The top tenth predicted high-risk group yielded sensitivities of 44.9%, 43.4% and 36.8% for QFracture, FRAX and Garvan, respectively.

Conclusions: This is the first study to compare three leading hip-fracture prediction tools and externally validate QFracture outside of the United Kingdom. All tools were feasibly cross-validated using EHR data, although only QFracture was developed in this setting. Both QFracture and FRAX had high discriminatory power, with QFracture performing slightly better. This performance gap was more pronounced in previous studies, likely due to broader age inclusion criteria for QFracture validations.

Health Policy Implications: Two international fracture prediction tools performed well when cross-validated in a local population. Although complex, QFracture demonstrated the best discrimination and is amenable to EHR implementation. The simpler FRAX performed almost as well, which may have advantages for manual physician use when EHR implementation is unavailable. Both tools require local calibration.

THE FLOW OF FUNDS IN THE NATIONAL HEALTH EXPENDITURE IN ISRAEL

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Background: In 2012, national expenditure on health in Israel totaled NIS 73.9 billion, which is equivalent to 7.5 percent of Israel's GDP. Funds flow in the system from various sources, through several public and private insurers and statutory arrangements, and are used in various settings and institutions.
Study Question: The study aims to describe the flow of funds in the national healthcare system between the state, the patients, the insurers and the service providers. It aims to integrate various existing data sources and to add new unpublished data on the private sector's share.
Methods: We integrated data for 2012 from various sources: Central Bureau of Statistics, National Insurance Institute, Ministry of Health, the Health Funds, and Ministry of Finance budget and tax data.
Results: A figure presenting the flow of funds in the Israeli healthcare system was created, and it illustrates the complexity of the system and the numerous reciprocal financial relationships between its components.
The business sector was responsible in 2012 for 30.2% of total provision of healthcare services (up from 23% in 1995). About a third of these services is purchased by the public Health Funds, and the rest is privately financed. New administrative tax data shows that in 2012 private for-profit hospitals (together with other entities that operate under licenses from the Ministry of Health) accounted for 3.4% of national health expenditure, up from 2.4% in 2007.
Conclusions: The system is still based primarily on public funding and the public provision of services; nonetheless, the share of private funding and privately provided services has been rising continuously during the last two decades.
Health Policy Implications: Policy makers should keep track on the flow of funds in the healthcare system as a whole to understand its developments and trends. The policy should consider the growth in private funding and privately provided services over the years.

INCOME-RELATED INEQUALITIES IN PRIMARY HEALTH CARE UTILIZATION IN URBAN AND RURAL AREAS IN MONGOLIA

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Background: In Mongolia, the entire population has free access to primary health care which is fully funded by the government. It is delivered by the family health centers in urban settings. In rural areas, primary health care, including outpatient and inpatient services are provided by the soum (county) health centers. However, health care service utilisation differs across various population groups. The aim of this study was to evaluate income-related inequalities in primary health care utilization in urban and rural areas of Mongolia.
Study Question: Are there income-related inequalities in primary health care utilization in Mongolia?
Methods: Data from the Household Socio-Economic Survey 2012 was used in this study. The Erreygers' concentration index was employed to assess inequalities in primary health care utilization in both urban and rural areas. The indirect standardization method was applied to measure the degree of inequity.
Results: The concentration index for primary health care at the family health centers in urban areas was significantly negative. Outpatient services at the soum health centers in rural areas were concentrated among the rich, but it was not significant. The concentration index for inpatient services at the soum health centers was significantly positive. This indicates that the higher income group was more likely to use inpatient care at the soum health centers in rural areas.
Conclusions: Income-related inequalities in primary health care utilization exist in Mongolia and its pattern differs across geographical areas.
Health Policy Implications: Significant pro-poor inequity observed in urban family health centers indicates that their more effective gatekeeping role is necessary in the health sector. Strengthening primary health care in rural areas is needed, by eliminating financial and non-financial access barriers for the poor and higher need groups, even it is free of charge. Both policy dimensions are contributory to universal health coverage in Mongolia.

AN AUTISM REGISTRY IS AN EFFECTIVE TOOL TO IMPROVE EARLY DETECTION IN THE COMMUNITY

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Background: Increasing incidence in autism spectrum disorders (ASD) is of concern worldwide. Today one in 68 births leads to a diagnosis of autism. Early diagnosis and appropriate intervention are essential to maximize the child's potential.
The autism registry in Meuhedet, a PPO insuring 1.2M members, of which 45% are aged 17 and under, was established in 2014. This innovative and unique registry defines three populations: Certain diagnosis (CD) - based on Health Ministry definitions. Highly suspected diagnosis (HSD) - diagnosed by psychiatrist, neurologist or developmental physician. Suspected diagnosis (SD) - diagnosed by primary care physician or healthcare practitioner.
Study Question: Does the autism registry improve early detection and follow-up of children in the ASD range?
Methods: Using the registry algorithms, we developed a monthly report of children divided into the above categories. For CD children we examine their therapeutic process and take-up of legal rights. For the HSD children we conducted a telephone outreach process to collect information that enabled us to complete the diagnostic process and refer the child to appropriate services. For SD children we sent a letter to parents asking them to contact us if they felt that their child required further investigation.
Results: In December 2015 there were 3,032 people in the registry - 2,417 under the age of 18. Over half (52%) are CD and require biannual follow-up. Of the remaining population - 208 HSD and 715 SD - 120 (13%) were categorized as CD following our outreach procedures. The remaining children were referred to alternative diagnostic procedures.
Conclusions: Our autism spectrum registry, combined with a community-based outreach process has been shown to be an effective and acceptable tool for the diagnosis and management of both confirmed and suspected cases.
Health Policy Implications: This growing, at-risk population can benefit significantly from the combination of a computerized registry and a treatment and administrative infrastructure using established outreach protocols.

"WE DON'T HAVE A PLAN. WE SHOULD BE WORKING ON A PLAN": OBSTACLES TO TRANSITION PLANNING FOR INDIVIDUALS WITH FRAGILE X SYNDROME

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Background: Fragile X syndrome (FXS) is the most common heritable form of intellectual disability in the United States. Adults with FXS vary in their health status and functional capacity, and require a range of caregiving activities. As adults with FXS mature and develop different needs, their aging caregivers face multiple barriers to obtaining long-term care in the community.
Study Question: This qualitative study examines the challenges of caregiving, transition, and long-term planning for adults with FXS.
Methods: Between May 2014 and February 2015, two focus groups (N=11) and 26 open-ended phone interviews were conducted with caregivers of adults living with FXS. Respondents were recruited from an academic medical center's fragile X clinic, parent listserv, and Facebook group. Caregivers filled out an online survey to capture descriptive characteristics and shared their perspectives about the challenges of caregiving, transition, and long-term planning in focus group discussions or interviews. All interviews were transcribed and analyzed with thematic, open, and matrix coding using Nvivo Software.
Results: Data from a total of 39 caregivers respondents was gathered from the online survey (N=36), focus groups (N=11), and phone interviews (N=27) regarding 46 adults with FXS. Caregivers identified many challenges in formulating and executing long-term plans, including the distinctive symptomology of FXS itself, family contextual factors, caregiving in a resource-scarce environment, and constrained decision-making owed to bureaucratic complexity.
Conclusions: The varied challenges posed by FXS provide a valuable context to consider broader obstacles facing individuals with often-severe disabilities, their families, and health/social systems. Service rationing, waiting lists, and crisis-based service allocation diminish the effectiveness of long-term planning. As caregivers focus scarce resources on day-to-day urgent matters, they hinder their ability to focus and make decisions about long-term concerns.
Health Policy Implications: We consider innovative policy planning to improve options within the choice architecture of service provision to help caregivers formulate more effective long-term plans.

PATIENTS EXPERIENCE AT HOSPITAL DISCHARGE AND READMISSIONS

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Background: Readmission reduction is at the focus of health care systems worldwide in efforts to improve efficiency across care settings. Patients' reports of their hospital to community transitional care experience are an important tool to detect breakdowns along the care continuum.

Study Question: What is the relationship between patients' reports on the experience of their transitional care process and the risk of readmissions?

Methods: A retrospective cohort study based on data of hospitalized members of Clalit. Participants were aged 65 and older, admitted to internal medicine departments between September 2012 and February 2013. The Care Transition Measure (CTM) survey was used to evaluate patients' transitional care experience. Readmission was defined as unplanned hospitalization to internal department or intensive care units within 30 days of discharge to any hospital. We examined differences in the readmissions rates within the high PREADM (Preadmission Readmission Prediction) score group (10% highest score) according to CTM scores.

Results: A total of 2,626 patients completed the survey. The average CTM score was 85.7. Over 60% of respondents reported a good - excellent transitional care experience (CTM above 80). Analysis of the difference in readmission rates by CTM score showed a 14% greater likelihood of readmission in those with medium-low CTM scores (below 80) and those with high CTM scores (80 or higher) (22% and 25.5% readmission rate respectively).

Conclusions: This study shows that high-risk patients benefit from treatment focused on the patient and the experience of a good discharge, with a 14% reduced risk of readmission within 30 days.

Health Policy Implications: These findings support previous research on the importance of targeting patient-centered interventions at patients with high readmission risk.

REHABILITATION FOR THE WAR WOUNDED FROM THE SYRIAN CONFLICT

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Background: Ziv Medical Center in the north of Israel is the closest hospital to the Israel-Syria border and has received over 600 casualties of the Syrian civil war. Though the patients make excellent recoveries, from what are, mostly, severe and multiple injuries, there is no real potential for rehabilitation as these patients are in Israel only for the care of life-threatening conditions and may not remain for long term care as refugees. The patients who travel to Israel for medical care have taken the decision to cross a closed border with a nation regarded historically with hostility. Many travel alone and are anxious to return to family left in Syria.

Study Question: Is it possible to negotiate complex Israeli and international health, defense, foreign and humanitarian assistance policies in order to provide long term rehabilitation for patients wounded in the Syrian civil war?

Methods: With the approval of the hospital ethics committee, data on the physical and mental health needs of patients from Syria have been documented. Physical rehabilitation needs have been identified, especially amongst patients with intestinal stoma, limb amputations, blindness and disability that affects mobility and reintegration into a society where survival is harder than in times of relative peace. Mental health issues have also been identified but resources and the brevity of hospital admissions in Israel have left these issues largely unaddressed.

Data on these unaddressed health needs form the burden of the argument in favour of a rehabilitation facility after life-threatening injuries have been addressed.

Results: The need for a rehabilitation facility has been demonstrated and negotiations continue in order to make this a reality.

Conclusions: Humanitarian and healthcare diplomacy is crucial to addressing the real needs of patients.

Health Policy Implications: Complex policies require research, negotiation and support for their implementation. Multiple partners are involved. Competing interests must be discussed with patient well-being paramount.

COST-UTILITY ANALYSIS OF PASSIVE IMMUNIZATION AGAINST RESPIRATORY SYNCYTIAL VIRUS (RSV) IN ISRAEL

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Background: Israel currently provides passive immunization (with palivizumab) against RSV to premature babies and infants with Congenital Lung Disease (CLD), Congenital Heart Disease (CHD) and Bronchopulmonary Dysplasia (BPD). Vaccination prevents 50% of hospitalisations due to RSV that usually last few days and with no serious chronic sequelae, but was not shown to decrease mechanical ventilation or mortality.
Study Question: To assess the cost utility of this procedure by week of delivery and risk group in reference to its high cost ($6,300-$9,800 per recipient depending on weight) so as to provide an economic-epidemiological evaluation of its inclusion in the basket of health services.
Methods: Epidemiological, demographic, efficacy and economic data from Israel (supplemented with data from the literature) were used to build a spreadsheet model in order to calculate the costs per averted disability adjusted life year (DALY) (from a social perspective) of vaccinating various sub-groups of infants.
Results: Costs per averted DALY were well above the thrice GNP threshold ($103,000) for all the examined sub-groups. Ranging from CHD ($267,000), BPD ($327,000), CLD ($365,000), <29 weeks gestation ($343,000), 29-32 weeks ($474,000), 33-36 ($1,482,000), no risk groups ($4,228,000).
Conclusions: Cost parameters of palivizumab per averted DALY are much higher than the traditional criteria used to assess the inclusion of procedures to the Health Basket.
Health Policy Implications: Until much cheaper alternatives become available, the extent of passive vaccination against RSV to infants at risk should be re-considered.

COST-UTILITY ANALYSIS OF cfDNA SCREENING FOR DOWN'S SYNDROME IN ISRAEL

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Background: Cell-free DNA (cfDNA) testing is a new technology that is available to improve screening for Down's syndrome (DS).
Study Question: To carry out a cost-utility analysis of adopting cfDNA testing modalities to replace the current conventional contingent screening (OCS) protocol where persons whose risk of DS exceeds 1 in 200 at term are offered invasive prenatal diagnosis (PND) and those with borderline risks (1 in 200-3,000), are offered second trimester risk reassessments, with PND if the risk exceeds 1 in 380.
Methods: Detection and false-positive rates were obtained by modeling and from meta-analyses using published parameters. Costs and utilities were based on local values. Optimal intermediate cut-off risks were derived and comparisons made between conventional contingent, routine cfDNA and contingent cfDNA, with and without additional maternal serum markers. Incremental cost-effectiveness ratios (ICERs) were computed for cfDNA options compared with conventional screening.
Results: If the intermediate cut-off risks were changed to 1 in 200-4,000, these would dominate the existing strategy this will result in their being 1.5 fewer Down's syndrome births, 9 fewer fetal losses and a saving of over $1 million in resources over the next decade. Contingent cfDNA dominated conventional screening by being cheaper and averting more DALYs. Routine cfDNA turned out to be marginally cost-effective when compared with contingent cfDNA options.
Conclusions: Relying in the past on foreign guidelines, without taking into account Israeli specific demographic and cost data has resulted in sub-optimal algorithms being used. With this in mind, the new cfDNA technology has been evaluated using Israeli specific epidemiological and economic data.
Health Policy Implications: If the current conventional screening mode is kept, the present test cut-off limits should be modified, immediately to 1 in 200-4,000. Despite its initial increased expense, consideration should be given to adopting routine cfDNA on grounds of its cost-effectiveness.

ESTIMATING THE BURDEN OF DEMENTIA AND ALZHEIMER'S DISEASE IN ISRAEL AND WORLDWIDE

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Background: With the increasing number of the very elderly, dementia and Alzheimer's disease are commoner. The OECD is considering quality indicators for their care.
Study Question: To investigate the rates of dementia/Alzheimer's disease as underlying cause (UC) of death, among multiple causes of death (MCOD) and among acute care hospitalizations in Israel. To study their comorbidity from death notification forms and hospitalization diagnoses, and compare with international mortality data.
Methods: Mortality rates for dementia/Alzheimer at ages 75+ were calculated from the nationwide death cause databases for UC, 2000-2013 and for MCOD and comorbidity, 2007-2013. Rates of hospital discharges and comorbidity, aged 75+, were calculated from the hospital discharge database. International mortality data was age standardized to the new European standard population.
Results: Although mortality rates for dementia/Alzheimer as UC almost doubled between 2001 and 2013, their rate of mention amongst MCOD decreased about 10% between 2007 and 2013. 46% of deaths with mention of dementia/Alzheimer had heart disease mentioned, 32% septicemia, 32% hypertension and 23% had cerebrovascular disease.
Mortality rates have increased in all countries between 2001 and 2012. Highest rates were found in 2012 in Finland, followed by the USA, UK, Netherlands, Switzerland and Sweden.
Acute care discharge rate, aged 75+, including a diagnoses of dementia decreased 17% between 2003 and 2013, but increased 75% for Alzheimer. Dementia/Alzheimer patient comorbidity from hospitalization data was significantly lower than others, except for cerebrovascular disease.
Conclusions: There is an increase in dementia/Alzheimer as UC of death in Israel as in many Western countries, but the prevalence rate shown in acute care hospitalization and MCOD data, shows an increase in Alzheimer but a decrease in dementia.
Health Policy Implications: The increase in dementia/Alzheimer deaths may be due to increasing numbers of older people and choice of UC, and not an increase in disease rates. Nevertheless, care must be provided for increasing numbers.

THE USE OF CLINICAL DATA REPOSITORY FOR THE ESTABLISHMENT OF AN OSTEOPOROSIS REGISTRY: EPIDEMIOLOGIC FINDINGS

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Background: Osteoporosis is a growing public health concern worldwide, due to its rising prevalence, excess morbidity and mortality, yet local estimates of its burden in Israel were lacking.
Study Question: We aimed to design, develop and validate an infrastructure which will detect osteoporosis patients in the community.
Methods: The registry was built using Maccabi Healthcare Services computerized EMR's database, and included patients with at least 2 osteoporosis diagnoses, history of typical low trauma fractures or 2 purchases of relevant medications. In addition, we included patients with low bone density as measured by Assuta centers. The latter was facilitated by Optical Character Recognition (OCR) technology, which extracted numeric tables from 200,000 historical PDF reports, as well as ongoing coded transmission from the densitometers to Maccabi database as of 2014. Automated alerts are currently constructed for screening reminders, easy referrals, secondary fractures prevention and monitoring of therapy duration and quality.
Results: We identified 130,000 osteoporosis patients (100,000 currently active), with a point prevalence of 19% in 2014 among members aged 50+, and approximately 7,000 incident cases a year. A third of the registry patients were treatment- naïve. Eight different osteoporosis studies were conducted, revealing, among other things, that non-adherence was associated with 13% higher medical costs and 50% increased fracture risk among the elderly (75+), and physicians' involvement in conveying the importance of therapy is sub-optimal (only 6% of surveyed patients were told that the therapy was indicated for preventing osteoporotic fractures).
Conclusions: This large automated registry can be used both for epidemiology research as well as real-time identification of unmet needs, such as under-treated high risk populations.
Health Policy Implications: Real world registries can provide valuable data for cost-effectiveness, long term safety, efficacy and outcomes research, support the development of local intervention thresholds, and lead to improved quality of care.

A METHODOLOGY FOR MONITORING LEGISLATIVE PROPOSALS RELATED TO HEALTH IN BRAZIL

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Background: The background integrates knowledge on Medicine, Public Health, Public Administration and Political Science.

Study Question: This study presents a methodology for monitoring health related bills of law (HRB) and the results of its application to data obtained from the Brazilian Chamber of Deputies (BCD).

Methods: All kinds of HRB, introduced in the BCD, that can generate laws or amend the Constitution were included and collected through the BCD´s Legislative Information System. The HRB were classified using a typology developed by the Research Group on Legislative and Health Policy. An exploratory study identified content and status of nearly 5,000 HRB, introduced between 1999 and 2006. Another approach included nearly 2,000 HRB being processed in January 2014, to analyze content, places of decision and relevance (according to criteria of need, opportunity, contribution to the governmental plan and relationship with structural problems of the health system).

Results: It was observed a high participation of both, the legislative and the executive, in the composition of the health agenda, with dominance of the coalition government as author of successful HRB. The second approach observed an association between content and critical places of decision and also identified around 10 highly relevant HRB (which met at least three criteria).

Conclusions: The main findings reject the thesis that there would be a division in the powers agenda and that the legislative would have low participation in the definition of health policies. The methodology showed capable to support the development of a system for monitoring and identifying high relevant health content pending before the BCD.

Health Policy Implications: In democratic societies, the legislative power deals with a wide range of proposals, including those related to health and the healthcare system. Mechanisms to make more transparent how they are considered have the potential to promote more equitable outcomes and rational use of institutional resources.

CAESAREAN SECTION: RISK FACTORS AND HOSPITAL POLICY

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Background: One fifth of live births in Israel are by Caesarean section, a low rate compared to the OECD.
Study Question: What are the indications for c/sections and how does hospital policy influence the rate?
Methods: The research is based on diagnostic, demographic and history in the National Hospitalization Database. After adjusting for these variables, we compared the rates in different hospitals to determine whether hospital policy might be a determining factor in the rates.
Results: Caesarean sections are the most common operation performed in Israel. The rate of c/sections rose from 13% in 1995 to 20% in 2008, and is decreasing slightly since. In the years 2011–2013, the overall rate of caesarean section was 19%. Two thirds of multiple births are c/sections. The rate of c/sections increases with maternal age, 11% for ages 20–24, and 64% for ages 45 and older. Ninety four percent of women with a history of two or more c/sections have subsequent c/sections, the rate for women who had successful vaginal births after caesareans is similar to first births, 20%. Multiparous women with no history of caesareans have 7% caesarean section rate. Diagnostic conditions that have significantly higher c/section rates include failed induction (91%), breech presentation (81%) placenta previa (50%), and elderly prima gravida (46%). After adjusting for the above indicators and others, there is a marked difference between hospitals.
Conclusions: Differences between hospital rates might imply differing policy regarding caesarean sections, as well as the significance of various indicators for sections. Further analyses comparing maternal and fetal outcomes for caesarean section and vaginal births should be performed.
Health Policy Implications: Examining outcomes of different hospital policies could lend insight into the decision making process of determining birth type.

END-OF-LIFE MEDICAL RESOURCES UTILIZATION OF CANCER PATIENTS: A RETROSPECTIVE ANALYSIS

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Background: Patients with advanced cancer expect to improve their survival. When disease is advanced, risk of treatment may jeopardize survival and might deteriorate quality-of-life. Recently, the "choosing wisely" campaign addresses value of care issues, which are crucial at end-of-life cancer treatment.
Study Question: To assess the medical resource utilization close to death of cancer patients followed at Rabin medical center (RMC), a tertiary hospital in Israel. To identify disease-specific properties and time trends.
Methods: The study population included all "Clalit" HMO insured cancer patients, treated at RMC with a documented death date between 2000-2010. Data regarding resource utilization at end-of-life was extracted from "Clalit" databases. For each resource, average number of uses per-patient was calculated per-year and per-malignancy. Descriptive statistics including time trends were presented.
Results: The study population included 12,078 cancer patients. Chemotherapy utilization increased during the last 30-60 days of life throughout the years: 0.06 to 0.16 treatments per-patient in 2000-2003 and 2008-2010 respectively (r=0.93). Highest rates were shown in lung, breast and pancreatic cancer patients (0.16, 0.20 and 0.32 respectively).Overall 23.5% of patients were hospitalized during the last 14 days of life. 21.8% of breast, 22% of colon, 26.5% of lung, 31.3% of liver and 32.8% pancreatic cancer patients. An increase was also shown in ER visits, lab tests and imaging.
Conclusions: Value of cancer care at end-of-life has not been thoroughly assessed in Israel. Our data shows time and disease-specific trends. Updated data through 2015 will be presented.
Health Policy Implications: Our findings could serve as an educational tool for health care providers and policy makers.

PHARMACOVIGILANCE (PV) ACTIVITIES IN ISRAEL

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Background: Monitoring and updating medicine safety profiles must take place regularly during the medicine's life cycle. Not all safety issues can be identified during the pre-marketing period. In the light of the Eltroxin crisis in 2011, Israel established a new Pharmacovigilance department in the Ministry of Health (MOH). The department's goal is to identify, monitor and prevent safety issues regarding marketed products. On June 2013, the Knesset approved regulations that require any Marketing Authorization Holder (MAH), Health maintenance organization (HMO) and Hospital in Israel to report adverse drug reactions (ADRs) and new safety information relating to medicines used in Israel to the MOH.
Study Question: Whether the use of Pharmacovigilance tools adopted and developed in Israel's PV department generated signals and appropriate actions to implement new safety data in Israel.
Methods: Collection and analysis of ADR-reports, Periodic safety reports (PSURs), literature reviews, safety alerts of international regulatory authorities, signals reviewed and actions taken by the Israeli PV department in the years 2013-2014.
Results: The Israeli PV department receives spontaneous ADR-reports at a central database developed for this purpose. ADR reports are received from healthcare professionals, patients and the MAH. During 2013-2014 14,700 reports and 500 PSURs were received. 480 signals were identified, resulting in PV activities such as enhanced monitoring 27%, prescriber's and patient leaflets update 22%, recall of products/batches 2.5%, Alerts for health care professionals 10%. 4% of the signals concerned quality issues resulting in quality investigations and two resulted in the initiation of epidemiological studies.
Conclusions: The main PV tools have been implemented successfully in Israel. The main methods for risk minimization are publication of Safety Alerts, updates of prescriber's and patient leaflets and development/approval of additional risk minimization plans implemented in Israel as of 2015.
Health Policy Implications: The Israeli PV department will continue to identify, monitor, and minimize safety issues of medical products as described.

EXTENDED-SPECTRUM-Β-LACTAMASE (ESBL) PRODUCING ENTEROBACTERIACEAE IN MATERNAL URINE CULTURES AND RELATED NEONATES' CULTURES

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Background: Enterobacteriaceae has become a major cause of neonatal sepsis over the past decades. Pregnant women are potential carriers of extended-spectrum-β-lactamase producing Enterobacteriaceae (ESBL-PE). Neonates can acquire ESBL-PE during the passage through the birth canal. There is a need to measure the influence of ESBL-PE prevalence in neonates on morbidity and mortality, and to analyze vertical transmission of these resistant bacteriae.
Study Question: What is the correlation between the presence of ESBL-PE in pregnant women's urine cultures and the finding of ESBL-PE in related neonates' cultures? What are the ESBL-PE prevalence trends in neonates? What is the effect of ESBL-PE on neonatal morbidity and mortality?
Methods: A retrospective cohort study was conducted with data obtained from the centralized Clalit Health Services (CHS) database. The study population included neonates born in one of seven CHS hospitals between 2009-2013.
Results: The study population included 137,580 neonates. Of the 31,921 (23.2%) neonate cultures taken, 2,647(8.3%) were positive. The odds ratio (OR) of ESBL-PE in urine cultures of mothers of neonates with positive ESBL-PE cultures was 2.69 fold (95%CI: 1.06-6.80) greater than in women with negative cultures. Hospital stay for the 3 months after birth was 38.8 days (median) vs. 16.5 days in neonates with and without ESBL-PE. The finding of ESBL-PE in neonatal cultures is associated with increased neonatal mortality (OR=2.11, 95%CI: 1.17-3.82). ESBL-PE prevalence in neonatal cultures increased from 7.3% in 2009 to 17.1% in 2013.
Conclusions: Our study demonstrates that maternal carriage of ESBL-PE is an important risk factor in passing it on to their neonate. The prevalence of ESBL-PE in neonates increased during the study period. ESBL-PE is associated with increased morbidity and mortality in neonates.
Health Policy Implications: The policy to prevent ESBL-PE outbreaks in neonatal units should include maternal and neonatal screening and cohorting, and active notification of medical staff when ESBL-PE positive women and their neonates are admitted.

CORRELATES OF BREAST CANCER SCREENING IN A COUNTRY WITH NATIONAL HEALTH INSURANCE AND A NATIONAL BREAST CANCER SCREENING PROGRAM

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Background: The effectiveness of breast cancer screening programs in reducing mortality is well established. The Israel National Breast Cancer Screening Program performs biennial mammograms on 50-74y women of average risk and annual mammograms on certain 40-49y women at high risk.

Study Question: What are the correlates of breast cancer screening in women aged 50-74 years in a country with national health insurance and a national breast cancer screening program?

Methods: The national Knowledge, Attitude and Practices (KAP) survey conducted in 2010-12 included 2,575 women aged 21+. Two main outcomes were studied: ever been screened and screened in the last 2 years. The independent variables were socio-demographic characteristics, perceived health status, lifestyle and healthcare fund. Multivariate logistic regression was used.

Results: Of the 943 participants aged 50-74, 87% had ever been screened and 74.8% attended screening in the last 2 years. Jewish women reported higher rates of ever been screened and screened in the last 2 years compared to Arab women (91% vs. 82%; and 79% vs.69%, respectively). In multivariate logistic model, population group and marital status were independently associated with ever been screened. Jewish women compared to Arab women, and unmarried compared to married women were more likely to have ever been screened (Adjusted Prevalence Ratio (APR) =1.8, 95%CI; 1.02 - 3.4; and APR=2.9, 95%CI; 1.2-7.2, respectively). The only independent correlate associated with breast cancer screening in the last 2 years was the health care fund (Maccabi, Clalit, Mehudit and leumit).

Conclusions: Breast cancer screening attendance in Israel is high among women aged 50-74 years. Strategies for breast cancer screening attendance differ by health care fund.

Health Policy Implications: There is a need for better targeted outreach programs at the level of each health care fund in order to increase the attendance of breast cancer screening. Additionally, special attention should be paid for women who never attended breast cancer screening.

EXCLUSIVE BREAST-FEEDING DURATION: HAVE WE MET THE INTERNATIONAL TARGET?

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Background: The official recommendation of World Health Organizations for exclusive breastfeeding is 6 months, followed by continued breastfeeding for one year or more when complementary food is introduced. The global nutrition target for 2025 is to increase the prevalence of exclusive breastfeeding in the first 6 months to at least 50%. The estimated prevalence of exclusive breastfeeding for 6 months in Israel was 14.5% in 2000.

Study Question: To examine the prevalence and predictors of exclusive breastfeeding for ≥6 months among Jewish and Arab women in Israel

Methods: 2,119 women from selected hospitals who delivered between September 2009 and February 2010 were included in the study. Exclusive breastfeeding duration was divided into two different categories (<6 and ≥6 months). Sociodemographic characteristics, maternal pregnancy, and delivery-related variables were examined. Multivariate logistic regression was used for analysis.

Results: The duration mean and median of exclusive breastfeeding in Israel was 3 months. The prevalence of exclusive breastfeeding for ≥6 months was 20%, and significantly higher among Jewish (23.6%) compared to Arab women (17.5%). The predictive factors that were independently associated with increasing exclusive breastfeeding for ≥6 months were: population group (Jews vs. Arab; Adjusted Odds Ratio (AOR) =2.4, 95%CI=1.3-4.5), mother's sufficient milk (AOR=2.1, 95% CI; 1.2-3.9), mothers that do not need to return to work (AOR=3.5, 95% CI;1.3-9.6), and infants that were not exposed to formulas in the delivery ward (AOR= 1.7, 95% CI;1.1-2.6).

Conclusions: The 6-month exclusive breastfeeding rate is low in Israel, and international recommendations have yet to be implemented.

Health Policy Implications: Intervention programs are needed to increase exclusive breastfeeding among Israeli women, and special attention should be paid to Arab women. Women with insufficient milk should be instructed for exclusive breastfeeding, and the practice of giving formula to newborns should be given in complicated situations alone. The workforce should support women's practices of exclusive breastfeeding.

DIABETES EDUCATION EXAM: A UNIQUE AND INNOVATIVE MODEL FOR ACCREDITATION

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Background: Diabetes educator is a well-established profession in many countries. This function is part of the healthcare team involved in treating diabetes patients who has been specifically trained to support patient's self-management, self-efficacy and motivation. Accreditation in other countries is, in most cases, based on a written multiple-choice question exam (MCQE). Recently in Israel such a function has been established. Structured training is followed by examination, in which, for the first time to our knowledge, an objective-structured clinical exam (OSCE) has been implemented in this field.
Study Question: Is an OSCE format feasible, acceptable and does it have an added value over MCQE in accreditation of diabetes educators?
Methods: In 2015, 50 healthcare professionals (50% dietitians, 42% nurses, 8% physicians) participated in a Diabetes Educator course. The course was composed of theoretical knowledge and hands-on practice. The final exam had two parts: 50 MCQs on different aspects of knowledge in diabetes treatment; an OSCE with 4 scenarios carried-out by standardized patients and mimicking a clinical setting. Following the exam, participants were asked to give feedback through a short questionnaire.
Results: The reliability of the OSCE was 0.92 (Cronbach alfa) and over 90% of the participants expressed satisfaction with the difficulty level of the exam, with the examination method, and with the compatibility with their everyday work. The MCQE was composed of 64% diabetes treatment knowledge and 36% questions on therapeutic education and motivational therapy. 75% of the participants noted that the theoretical questions were compatible to their work, and 74% recommended continuing with the format of MCQE.
Conclusions: While the MCQE evaluates knowledge and theoretical functioning, the OSCE assesses concrete diabetes education skills and role competency. The OSCE design is reliable, feasible and acceptable for diabetes educators.
Health Policy Implications: Implement the OSCE format together with the MCQE in accreditation of diabetes educators.

(UN) COVERING BALD HEADS

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Background: Women's baldness, considered an aesthetic problem, is not covered by Israel's National Health Insurance Law (NHIL). Israeli HMO's provide partial financial assistance to purchase wigs only to oncological patients. Yet baldness is not limited to oncology patients. In Israel, over 10,000 women without cancer, suffer from permanent hair loss due to illness or medical procedures such as radiation therapy in childhood, Alopecia Areata, neurosurgery procedures etc.

Study Question: The current study seeks to enrich our understanding of the effects of permanent hair loss among non-oncological patients. It examines the scope and the psycho-social and financial outcomes of permanent baldness among women.

Methods: Using descriptive statistics and content analysis, 500 files of women who suffer from partial or complete baldness, due to radiation therapy in childhood, were analyzed.

Results: Most of the bald women suffered from psycho-social problems including social anxiety, depression, low self-esteem and/or lack of a sense of femininity. Furthermore, higher rates of divorce, domestic abuse and unsatisfied marriage were also prevalent among them. The cost of wigs is approximately 3,000 NIS per year per woman. Many women emphasized that baldness has more severe ramifications than the physical or medical problems that they face.

Conclusions: The mental and social repercussions of baldness are significant for women. The economic cost of baldness also appears to be severe. Even a one-time compensation for hair loss due to previous medical treatments for some bald women does not cover the real and ongoing costs of a wig.

Health Policy Implications: Although on the surface baldness would seem to be solely an aesthetic problem, in fact it should be considered as a medical issue, just like any other aesthetic prostatic. Policy makers should acknowledge the medical, physiological, social implications and the financial burden of wearing a wig for all women who suffer from baldness, as part of the NHIL's basket of services.

RISK FACTORS FOR CROSS-TRANSMISSION OF CARBAPENEM-RESISTANT ENTEROBACTERIACEA (CRE): VARIABLES RELATED TO EXPOSED PATIENTS, CRE-CARRIERS AND WARDS

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Background: Carriage of carbapenem-resistant Enterobacteriacea (CRE) is rising worldwide. Treatment options for CRE infections are limited and the attributed mortality is high. The predictors for CRE infections are known but risk factors for cross-infection have been less studied.
Study Question: What are the risk factors for CRE cross-transmission among CRE-carriers?
Methods: A retrospective cohort study conducted between 2007-2012 at Kaplan Medical Center, based on electronic health records. Study population included patients who were inadvertently exposed to CRE carriers (in the same room or in another room with the same nursing personnel) and were rectally screened to determine if they were cross-infected. Demographic variables, comorbidities, clinical status, antibiotic treatment, invasive procedures, and specific hospital ward of exposure variables were examined in an univariate analysis.
Results: Exposure to a CRE carrier occurred in 1403 hospitalizations of 1353 patients. There were 328 CRE carriers who exposed other patients in 414 hospitalizations. Thirty eight (11.6%) CRE-carriers transmitted CRE to 50 exposed patients. The final multivariable model included 6 variables. Exposed patients' variables included: need for oxygen (OR 2.42, p=0.082) or ventilation (OR 5.8, p<0.000), antibiotic therapy in the last 3 months (OR 2.18, p=0.013). CRE transmitters' variables included: ≥6 days of exposure (OR 3.71, p<0.000), source of CRE culture (rectal/clinical culture) (OR 2.3, p=0.009 for clinical culture), antibiotic therapy in the last 3 months (OR 2.97, p=0.001). Ward of exposure variables included the type of ward (internal medicine/other wards). For the internal medicine ward, the OR was 7.02 (p<0.000) (≥100% occupancy). The C-statistic of the multivariable model was 0.842 (95%CI 0.781-0.902).
Conclusions: The risk to be cross-infected with CRE is an integration of variables of the exposed patient, the CRE-transmitter and the ward of exposure.
Health Policy Implications: Identify and screen patients at risk to transmit CRE, distinguish patients at risk to be cross infected and aim to achieve ward occupancy of up to 100%.

ADHERENCE TO RECOMMENDED PREVENTIVE HEALTH SERVICES IN ISRAEL

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Background: The Healthy Israel 2020 initiative aims to establish and expand proactive preventive interventions, and improve adherence to preventive health services included in the health basket.

Study Question: What are the uptake rates of recommended preventive health services (defined by the Clinical Guidelines in Primary Care, grade A and B recommendations) in the different population groups and in the different HMO's?

Methods: A national telephone survey was conducted during 2014 using a random representative sample of Israeli adults (N=4388; 3040 Jews, 1348 Arabs). Respondents were asked about blood pressure measurement, as well as cholesterol, mammography, Pap and fecal occult blood (FOBT) testing. Individuals who reported having been tested according to the recommended schedule for their age and gender were considered compliant. Two-tailed chi2 analyses were performed to examine bivariate associations.

Results: Compliance rates were 93.0% for cholesterol, 90.4% for blood pressure, 83.2% for mammography, 55.8% for Pap and 42.8% for FOBT. Rates were significantly higher among Jews compared with Arabs for Pap (70% vs 30.5% respectively, $p<0.001$), for blood pressure (93.3% vs 84.0% respectively, $p<0.001$) and for cholesterol testing (95.0% vs 87.6% respectively, $p<0.001$). FOBT rates were similar (41.6% and 46.0%, respectively). Mammography screening rates were similar among Jewish and Arab women: 83.8% and 81.7% respectively. Compliance rates for most tests were similar across HMO's, with the exception of Pap, (between 47.1%-69.7%; $p<0.001$).

Conclusions: Compliance rates are high (>90%) for blood pressure and cholesterol tests. Rates for mammography are higher in Israel than in most OECD countries, while Pap rates are slightly lower than average. FOBT rates remain low, as in most OECD countries. Excluding Pap tests, compliance rates are similar in the 4 HMO's.

Health Policy Implications: Outreach efforts are required to improve compliance rates in the Arab population, especially with regard to Pap tests in Arab women. HMO's with low Pap rates need to invest particular efforts.

THE IMPACT OF INTERVENTION MODELS ON TIME FROM BREAST CANCER DIAGNOSIS TO INITIATION OF CURATIVE THERAPY

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Background: Breast cancer is the most common cancer among women in Israel (33% of cancers in 2012). Age-adjusted incidence (invasive tumors) was 95/100,000 among Jewish women and 60/100,000 among Arab women (2012). The annual number of new cases increased in the last decade (2003-2012) from 3,085 to 3,777 (22.4%) among Jewish women and from 180 to 364 (102.2%) among Arab women.

As part of its strategy, Clalit Health Services (CHS), the largest healthcare provider organization in Israel, focused since 2010 on improving continuity of care among women who were diagnosed with breast cancer.

Study Question: The goal of the study was to assess the impact of the intervention on the rate of women initiating curative therapy within 60 days following the diagnosis.

Methods: Several models of intervention were applied to simplify procedures and reduce waiting times:

- "Three Stations", based on three stages of treatment (early detection, treatment and follow-up);
- "Coordinator Nurse", one address for the patient;
- "Oncology area", include major CHS hospital and primary clinics around it;
- "One stop station", all examinations done in one site within short time. We examined the association between intervention models and proportion of patients initiating curative therapy within 60 days of diagnosis.

Results: Approximately 1,300 women were included at each time point (2014-2015). The proportion of breast cancer patients initiating therapy within 60 days from diagnosis increased in 6.1% between October 2014 and 2015 (49.7% to 52.8%). The increase was higher in the south ("Coordinator Nurse" model) - 17.2% (50.8% to 59.6%) and among Arab patients - 9.9% (42.5% to 46.7%).

Conclusions: Initiation of curative therapy for breast cancer patients in Israel is delayed in a significant proportion of cases.

Health Policy Implications: Implementing several models of intervention managed to decrease the delays.

DIABETIC NEPHROPATHY: HEALTHCARE QUALITY INDICATORS OUTCOMES, 2014

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Background: Nephropathy is a common complication of long-standing diabetes inflicting 20-40% of patients. In Israel, diabetes is a leading cause of end stage renal disease accounting for ~43% of dialysis patients. Angiotensin Converting Enzyme Inhibitors or Angiotensin Receptor Blockers (ACE-I/ARBs) are indicated in diabetic patients with proteinuria in order to retard renal disease progression.
Study Question: To evaluate the prevalence, monitoring and ACE-I/ARBs therapy of renal disease among Israeli adult diabetic patients.
Methods: Data was originated within the framework of the Israel National Program for Quality Indicators in Community Healthcare (QICH) for 2014, based on patient's electronic medical records provided by the four Israeli health plans. Diabetic nephropathy measures include three domains:

- Renal function monitoring [Glomerular Filtration Rate (GFR) and urinary protein excretion].
- Prevalence of nephropathy (GFR<60 ml/min/1.73m² or abnormal urinary protein).
- ACE-I/ARBs therapy for nephropathy.

Data was stratified by age, gender, and Socio-Economic Position (SEP). Low SEP was defined by exemption from medical co-payments.
Results: In 2014, the prevalence of diabetes among Israeli adult population was 9.7% (481,730 patients). Rates of GFR and urinary protein documentation were 91.3% and 79% respectively. The overall prevalence of nephropathy was 30.5%, steadily increasing from 9.6% in the 20-24 age bracket to 53.3% in the 80-84 age bracket. Nephropathy was more prevalent among men (32.4% vs. 28.6%) and low SEP (37.7% vs. 26.4%). Overall rate of ACE-I/ARBs therapy was 76%. Lower rates were observed in younger patients.
Conclusions: This is the first national-level report on diabetic nephropathy in Israel. The observed prevalence of nephropathy was consistent with the literature. Higher prevalence was observed in men, low SEP and older patients. Despite an overall acceptable rate of ACE-I/ARBs therapy, relatively low rates were observed among young adults.
Health Policy Implications: Our findings mandate further investigation and can guide policy planning, especially focusing on therapy for young diabetic nephropathy patients.

HOSPITAL MANAGEMENT GUIDED BY PERFORMANCE METRICS ("MATZPEN" - DEPARTMENTAL COMPASS)

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Background: Hospital multi-tasking and goals make it difficult to monitor regularly and uniformly various departments, and to examine trends over time. Uniform measurement and monitoring of departments' performance is a corner stone in hospital management process and forms the basis of continual improvement.
Study Question: We describe our experience in creating and implementing a management and comparative comprehensive tool for hospital departments (called "departmental Compass"-"Matzpen") which tracks indicators in various tasks of hospital departments. This tool allows comparison of performance measures between different departments and presents trends over time for the same department.
Methods: We set performance metrics composed of uniform solid indicators for departments' performance, divided into five sections (Medical quality, patient experience, staff satisfaction, teaching and research, and operational efficiency) weighted according to their "weight of importance" in our hospital. The source of data is mostly computerized, based on the hospital information systems. Hospital and departments' directors receive a periodic report, comparing departments' performance in each section and yielding a summative evaluation score.
Results: The "Matzpen" scores were published twice this year (mid-year and at the end of the year). Departments were sorted into three groups for each section and for their summative score (upper, mid, lower). The scores were published publicly for all of hospital's directors and were the reference findings for continuous hospital's processes of improvement. The end-of-the-year average summative score was 5 points higher than the mid-year's, reflecting departments' directors endeavour.
Conclusions: Our "Departmental Compass" proves to be an available, objective, comprehensive and friendly benchmark tool, enabaling departments and hospital's leaders to evaluate their performance continuously and comparatively, and to act accordingly on an ongoing basis.
Health Policy Implications: Standardized, open and comparative measurement processes encourage hospital leaders to improve their departments' performance. Competition constitutes a powerful incentive to directors to increase their involvement in their department, and to initiate processes of improvement.

USE OF DIAGNOSTIC IMAGING WITHOUT CLINICAL INDICATION: CHOOSING WISELY RECOMMENDATIONS AND CLALIT HEALTH SERVICES

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Background: Reduction of unnecessary testing can improve the quality of health care. The Institute of Medicine has released recommendations for which interventions have clinical indication, termed "Choosing Wisely." However, few healthcare systems have evaluated their performance by Choosing Wisely recommendations.

Study Question: How many of the following tests are performed in Clalit Health Services, without clinical indication:

Computerized Tomography (CT) before US for evaluation of childhood appendicitis.

Chest radiogram (CXR) for non-cardiopulmonary emergency department presentation.

Bone densitometry scans (DEXA) for patients at low-risk for fracture.

Methods: We extracted medical history data from the comprehensive electronic health care records for continuous members in 2014 of Clalit Health Services, a payer/provider system that services over 4.3 million or 53% of the Israeli population. We created algorithms to identify how frequently imaging was performed "without clinical indication."

Results: There were over 5,000 evaluations performed for appendicitis in 2014. Of the 15% of evaluations that included a CT, the majority were completed without a concurrent ultrasound. There were over 45,000 CXR performed in 2014 in the emergency department. Over 25% of tests had no observed clinical indication; the majority were performed on patients younger than 65. There were over 50,000 DEXA performed in 2014. More than half of these tests were indicated by age of patient. Among those who were not indicated, a previous vitamin D level or internal policy justified the vast majority of cases.

Conclusions: An evaluation of three types of imaging in Clalit Health Services revealed a range from 5-25% of testing performed without clinical indication by Choosing Wisely recommendations.

Health Policy Implications: The application of system-wide policy adherence to Choosing Wisely recommendations can have significant implications. Understanding their impact and the sub-populations at highest risk can help prioritize the need for interventions.

ALBANIAN NATIONAL HEALTH STRATEGY 2016-2020, HEALTH POLICY CONSIDERATIONS

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Background: The Albanian Government (GoA) is developing a new National Health Strategy (ANHS) that guides efforts to invest and improve the health of the Albanian population towards 2020. The ANHS harmonizes the GoA objectives for health and key principles of the WHO European Framework for Health and Well-being (Health 2020). The ANHS is a framework strategy that coordinates the program strategies that are already in place. Public expenditure for health in 2015 reached an all time high of 2.86% of GDP.
Study Question: Developing a national strategy for health and well-being requires political willingness and the clear vision to achieve the objectives set, outlining concrete actions to invest in health and provide the resources needed. Resources are conditioned by economic development and the priority health has in relation to other sectors.
Methods: The first ANHS draft highlights 4 priority areas and several strategic objectives to be achieved by 2020. An interministerial working group produced (with support from the WHO) the draft, discussed internally in Dec 2015. A broader consultation through an online platform will ensue.
Results: The ANHS has 4 priority areas: UHC, HiAP, HSS and NCDs, translated in 29 strategic objectives. Some of the objectives transform the way the system is organized and funded. Additional services are outlined that require more funding for health, including a free PHC service, check-up for ages 40-65, a new national EMS, reduction of the financial burden of pharmaceuticals, and new PPPs.
Conclusions: There is a clear political commitment for advancing health in Albania towards 2020. The vision for having better health and well-being for all Albanians expands beyond the time frame of the present administration. The proposed systemic changes and objectives call for additional resources to be mobilized in the short term.
Health Policy Implications: A balance between objectives and achievability within the time frame is necessary.

USE OF HIV SERVICES BY PEOPLE LIVING WITH HIV ENROLLED FOR CARE AT ONE SUB-DISTRICT REGION; ISRAEL, 2002-2012 - A COHORT ANALYSIS

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Background: Israel is a low HIV burden country, with People Living with HIV (PLWHIV) often originated from high epidemic countries. Good adherence to HIV services is associated with reduced transmissions and good health.
Study Question: How do Israelis of Ethiopian origins (IEO) use HIV services compared to other Israelis in the major AIDS center?
Methods: A retrospective cohort study, involving 288 PLWHIV notified to Rehovot sub-District Health Office during 2002-2006, followed until end of 2012. Data was collected from patient charts and analyzed by SPSS®. "Good" adherence was defined as CD4 count ≥200cells/ cm3, and/or undetectable viral load, and/or three physician visits and more per year, and/or absence of AIDS defining illnesses. Baseline and end line adherence were compared between IEO and other Israelis.
Results: Out of 288 PLWHIV, 229 (79.5%) were IEO and 59 (20.5%) were other Israelis. By the end of 2012, 78.1% (225) were registered at Kaplan Medical Centre (KMAC), while 55 (19.1%) received care at other HIV facilities (and 8 had unknown follow-up - 2.8%). At baseline (2002), adherence of IEO followed at KMAC included 153 patients; only 37.9% had a "good" adherence, while 25.5% was "unknown". At the end of 2012, there was no "unknown" adherence, and the rate of "Good" adherence among IEO had increased (56.6%) (p= 0.044). The rate ratio of medical visits among IEO compared to other Israelis was 1.20. The percentage of IEO with AIDS defining illnesses was 26.6% vs. 18.6% among others (p=0.384), and death rate higher among IEO (26/229 - 11.4%) vs. 5/59 - (8.5%) (p.< 0.001).
Conclusions: Improved adherence status between 2002-2012 was reported in all population groups. However, "good" adherence is still low, and many IEO reported AIDS defining illnesses and finally, mortality.
Health Policy Implications: We recommend an adjustment of multifaceted team approach strategies to carry more innovative and efficient messages on the benefit of long-term adherence.

TRENDS IN THE USE OF ATYPICAL ANTIPSYCHOTICS IN THE ISRAELI INPATIENT POPULATION, 2004-2013

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Background: The psychiatric hospitalization system in Israel includes ten psychiatric hospitals and twelve wards in general hospitals. These provide inpatient care or day hospitalization according to the severity of the condition. There was a major reform in the patterns of mental health care which resulted in a massive reduction in the number of inpatient beds – from 0.79/1,000 population in 2004 to 0.42/1,000 population in 2013.

Study Question: The aim of this study was to detect trends in the use of ten atypical antipsychotic drugs (sertindole, ziprasidone, clozapine, olanzapine, quetiapine, amisulpride, risperidone, aripiprazole, paliperidone and iloperidone) in the Israeli inpatient psychiatric population throughout the last decade, and to scrutinize explanations for changes in the prescribing patterns of atypical antipsychotic agents.

Methods: Data regarding allocation of atypical antipyschotics during the period from 2004 to 2013 were extracted from the electronic records of SAREL, which is Israel's largest private supplier of drugs to healthcare and medical facilities. The data were converted to defined daily doses (DDD) per1000 inpatients per day.

Results: Usage of atypical antipsychotic agents allocated through Israel's national health care system increased by 73%, from 128.09 DDD/1,000 inpatients/day in 2004 to 221.69 DDD/1,000 inpatients/day in 2013. This rise from 2004 to 2013 was largely due to a 1.6-fold increase in the administration of olanzapine (48.31 to 79.57 DDD/1,000 inpatients/day), a 4.4-fold increase of quetiapine (9.74 to 43.04 DDD/1,000 inpatients/day) and 3.7-fold increase of amisulpride (5.54 to 20.38 DDD/1,000 inpatients/day).

Conclusions: There was a substantial increase in the administration of atypical antipsychotic drugs to the Israeli psychiatric inpatient population across the study period. Polypharmacy and the use of larger doses of antipsychotics may account, in part, for this increase.

Health Policy Implications: The findings have implications for mental health policy in the context of the Mental Health Care System Reform. Systematic studies on appropriate dosing of antipsychotics and augmentation strategies are warranted.

ARE TB PATIENTS IN THE REPUBLIC OF MACEDONIA AT RISK OF CATASTROPHIC HEALTH EXPENDITURE? RESULTS OF A CROSS SECTIONAL-STUDY

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Background: The Republic of Macedonia (RM) has developed a comprehensive TB control program over the past decade, reflected in decreasing TB incidences, from 25.9/100 000 in 2006 to 15.2/100.000 in 2014. TB diagnostics, treatment and follow-up is free of charge for the whole population, regardless of their insurance status. However, not all the population has benefited from the implementation of activities, the highest rates being noticed in the north-west part of the country and certain ethnic groups.

Study Question: To explore whether TB patients are at risk of impoverishment after they pay for health services, aimed at identification of most at risk population.

Methods: Nested case-control study on a sample of 605 households (HH); face-to-face interviews were conducted, using selected modules from World Health Survey questionnaire. Cases are TB patients registered Jul, 2012-Jun, 2013 (n=315) and controls HH in their neighborhood (n=290). Data was analyzed with SPSS 19.0.

Results: The mean value of costs for treatment were higher in controls, with exception of costs for transport that are significantly higher in TB cases (t=6.548, p<0.01). Statistically significant differences are noted by place of residence, costs being higher among TB patients living in rural areas (t-test=-2.145, p=0.034) and in the North-West region (t-test=1.212, p<0.001). The share of costs for health care in TB patients in the total HH expenditures amounts to 55-70%.

Conclusions: High share of expenditures on healthcare in the total HH expenditures implies not only CHE, but also existence of inequity in access for this socially disadvantaged population stratum. The findings need further exploration of the underlying causes, particularly due to the fact that treatment of TB is free of charge under provisions of the National TB control program.

Health Policy Implications: Notified regional differences in expenditures imply inequities in access to health care of certain vulnerable groups and require targeted actions.

DETERMINANTS OF ADHERENCE WITH PHYSIOTHERAPY PROTOCOLS: DOES DISTANCE MATTER?

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Background: Physiotherapy treatment has been demonstrated to significantly improve outcomes after catastrophic events, and improve function and quality of life. Treatment is provided in a series of frontal therapy sessions, combined with recommendations for complementary home exercises.
Adherence to treatment protocols is known to vary significantly between patients, and is associated with patient outcomes. Studies that examined patient variables associated with reduced adherence to treatment focus on patient personality and psychological traits, but no studies were found that examine access to care and adherence.
Physiotherapy services within Meuhedet are delivered in 53 clinics employing over 200 physiotherapists, generating 330,000 visits per year throughout the country.
Study Question: Is access to treatment as expressed by distance associated with adherence to treatment in the physiotherapy clinics in Meuhedet?
Methods: We extracted all adult physiotherapy visits to Meuhedet clinics for the years 2013-2015. Data included patient age and gender, and treatment code (e.g. orthopedic, neurological). Using a Geographic Information System (GIS) we calculated the distance between the patient's home address and the closest physiotherapy clinic. We then examined the association between completion of a treatment series (adherence) and all other variables.
Results: We analyzed 152,000 treatment series for patients aged 18 and over. We treated adherence as a dichotomous measure (full or not). Full adherence was found in 44.8% of series, and females and older patients were slightly more likely to adhere ($p<0.01$). After adjusting for gender, age and period, distance was found to be strongly correlated with adherence ($p<0.05$).
Conclusions: Distance from the clinic is a determinant of adherence. Further analyses will be conducted including SES and cultural background.
Health Policy Implications: Identification of access variables that may predict non-completion of treatment can be used when planning health service, and can be used to identify patients at risk and intervene appropriately.

IMPACT OF THE FLOODS ON CASUISTRY OF ZOONOTIC DISEASES AND ACCIDENTS CAUSED BY ANIMAL BITES RECORDED IN A GENERAL HOSPITAL IN THE CITY OF IQUITOS, LORETO - PERU

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Background: Bachelor in Veterinary Medicine and Veterinary Medicine Degree (1966) MPH Israel (1980). Level of biological exposure and health effects of using wastewater in kibbutzim fish ponds.

Study Question: Floods generate favorable conditions for the reproduction of arthropod vectors of dengue and yellow fever, as well as rodent mammals leptospira reservoirs. In addition, the habitat of animals is altered for wild animals (ophidians), causing a greater contact with people. The objective of this study is to determine the association of cases of zoonotic diseases and accidents produced by animals, registered in the Regional Hospital of Loreto-Iquitos "Felipe Santiago Arriola Iglesias", between January - June 2011 and 2012, dates that reported regular rainfall and floods, respectively.

Methods: After reviewing the records of the Bureau of Epidemiology of the Hospital, they were transferred to a database. The frequency of submission of zoonotic diseases and accidents by bite of ophidians was contrasted using Odds Ratios.

Results: There were 7,595 and 6,917 incidences in the period January - July of the years 2011 and 2012 respectively. We found an odds ratio of 2.08 (1.19 - 3.62) for the records of the disease of Plasmodium falciparum Malaria and 0,096 (0,079 - 0,116) for the Classic Dengue disease, when it came to 2012 (a year of floods) as a risk factor. Other diseases such as leptospirosis and accidents by ophidia were found not to be associated with the extreme rainy season.

Conclusions: The results indicate that malaria is a disease that must be taken into account in case of natural disasters such as flooding in this region.

Health Policy Implications: Disasters are associated in a unique way to each region, modifying stable health policies.

CENTRAL RESEARCH SERVICES: AN INNOVATIVE APPROACH TO INCULCATE RESEARCH CULTURE IN ACADEMIC INSTITUTIONS

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Background: Developing researchers who are amidst problems is essential as they bring about better contextual solutions. In a large, culturally diverse country such as India, it is important to have such capabilities across the country.
Study Question: Can we increase pertinent and methodical research in medical college through creation of a separate service that focuses on the development of research capability.
Methods: Central Research Services (CRS) was established in April, 2009 at Charutar Arogya Mandal (CAM). Personnel with expertise in research methodology, public health, epidemiology, biostatistics etc. were brought into CRS after withdrawing them from diverse parent department, thus making them accessible to all the institutes. Material resources and adequate floor space was provided. Internal, national and international workshops were organized. Collaborations with national and international organizations, establishment of 'Clinical Trials Wing' and researcher centric service delivery systems were pursued and established. The funding of human resources is drawn from multiple sources and income generated from research projects (as overheads), workshops, etc. contributes substantially to the cost of resources and manpower.
Results: The diligent efforts of CRS resulted in significant increase in quality and quantity of research at CAM. It is recognized as a Scientific and Industrial Research Organization (SIRO) by Government of India. From an average of 5-7 PubMed publications (2000-2010), the past three years has almost 50/year. CAM has the highest number of publications among medical colleges in Gujarat. Income obtained from clinical trials, workshops, lectures has been sufficient to cover cost related to personnel solely associated with CRS.
Conclusions: Setting up a dedicated research cell can be done with minimal cost considerations and has resulted in an increase in published research, externally funded research projects and contribution to global evidence base in health.
Health Policy Implications: Propagating and supporting this model of CRS across medical institutions can fill evidence gap and lead to improved policy.

IMPROVING QUALITY OF DISCHARGE SUMMARIES: INDIAN EXPERIENCE

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Background: Immaculate and timely communication among healthcare providers is crucial for continuity of care. Discharge summaries (DS) are commonly used for communication among different healthcare facilities. Deficiencies in DS may lead to various adversities and hamper optimal resource utilization. In Indian academic institutions, DS are prepared by junior doctors without formal training.
Study Question: We tested an innovative educational intervention to improve quality of discharge summaries.
Methods: A 2h structured workshop including conceptualization of 'one sentence summary' and presentation on 'qualities of good DS', both followed by hands-on in four small groups, for medicine residents, was conducted in September 2013 by a senior consultant. Discharge summaries of patients admitted for more than 48 h in medicine department in August 2013 and October 2013 were audited by trained consultants. Individual Feedback Form for DS from 'Reviewing Effective and Accurate Documentation (REED)' workshop was used for assessing quality of DS. The form evaluates information on 7 pertinent domains and overall impressions through 5 point Likert/dichotomous scale such that lower scores (individual or mean) indicate better quality.
Results: All the 18 residents participated in the study. Total 426 DS (223 and 203 from pre and post intervention periods respectively) were audited. The quality of DS improved significantly in all the 7 domains as well as 'Overall Impression' [all $p<0.001$]. Despite these improvements, serious lapses in social and family history were observed.
Most residents were positive about the experience but expressed concerns of mainly 'Lack of time' and suggested automation as a feasible solution.
Conclusions: It is possible to improve soft skills like communication, documentation etc. through innovative curriculum. Social context to medicine is not prevalent.
Health Policy Implications: Indian medical education system needs urgent reforms that should include soft skills and also stress on social context to medical education. The health system should imbibe automation, supported by right processes for improved efficiency.

TEMPORAL TRENDS IN ACUTE MYOCARDIAL INFARCTION (AMI): DISPARITIES BETWEEN STEMI & NSTEMI REMAIN

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Background: Contemporary data on trends of acute myocardial infarction (AMI), particularly outcomes of hospital survivors by AMI type is sparse.
Study Question: To explore temporal trends throughout 2002-2012 of AMI admissions, characteristics of presenting patients, in-hospital and 1-year post-discharge all-cause mortality by AMI subtype.
Methods: Analysis of 11,107 consecutive AMI patients in a tertiary hospital in Israel throughout 2002-2012. The annual incidence of ST-segment elevation (STEMI) and non-ST-segment elevation (NSTEMI) admissions was calculated using age-gender-ethnicity direct adjustment. A multivariate prognostic model was built to evaluate in-hospital and 1-year post-discharge all-cause-mortality, adjusted for patients' risk factors.
Results: A decline in the adjusted incidence of AMI admissions (per-1,000 persons) was documented (2002 vs. 2012) for STEMI: 4.70 vs. 1.38 ($p<0.001$) and non-significant tendency of increase for NSTEMI: 1.86 vs. 2.37 ($p=0.109$). The prevalence of most cardiovascular risk-factors, some non-cardiovascular comorbidities and invasive interventions increased. In-hospital mortality declined significantly for STEMI: 10.8% vs. 7.7% ($p<0.001$) and with no change for NSTEMI: 5.0% vs. 5.5% ($p=0.137$). Consistently, 1-year post-discharge mortality declined for STEMI: 13% vs. 5.9% ($p<0.001$) and with a non-significant increase for NSTEMI: 12.6% vs. 17.0% ($p=0.377$).
Adjusting for the risk factors, an increase of one year was associated with a decline of in-hospital mortality for STEMI: OR=0.86 ($p<0.001$) and for NSTEMI: OR=0.92 ($p<0.001$). However, the risk for post-discharge mortality increased for STEMI: OR=1.11 ($p<0.001$) and for NSTEMI: OR=1.12 ($p<0.001$).
Conclusions: Throughout 2002-2012 a significant decline in the incidence and in-hospital mortality of STEMI were found. However, adjusted post-discharge mortality rates increased significantly with time.
Health Policy Implications: Health policy could be more focused on measures for improving incidence of AMI and outcomes among hospital-survivors.

VARIATION IN PRESCRIPTION DRUGS PROVISION ACROSS HEALTH FUNDS, AGE GROUPS AND GENDER

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Background: The capitation formula in Israel has had several updates over the past 20 years, with the latest occurring in 2010. The team in charge of updating the formula is still working (as of early 2016) on releasing a new update. As part of the updating process, the health funds sent the team data on prescription drugs that are provided as part of the universal coverage of the basket of goods and services ("the health basket"). Drugs are the topic of several debates in the Israeli health system, all sharing the universality question in the health coverage.
Study Question: How do different health funds differ across age groups in prescription-drugs consumption?
Methods: For privacy reasons, the separate health funds data will be presented anonymously. The data was compiled in terms of quantities, and later verified and presented uniformly across health funds. Next, a price tag was assigned to every unit in order to convert the data from being quantity-based to being cost-based. The costs were then aggregated across different age groups, mostly using a ten-year range. The age groups were identical to the capitation formula age-groups. Further analysis was made based on the gender of the users, enabling gender comparison between health funds.
Results: The health funds display similar consumption patterns across most early-age groups, but as the age increases disparities appear. Gender analysis shows very interesting patterns as females at the older age groups consume less prescription drugs than males. Variation between health funds is demonstrated in this part as well.
Conclusions: Variation in health care provision is a major concern when discussing universal health coverage. This differentiation across gender and age groups between health funds raises the question of the universality of coverage when it comes to prescription drugs.
Health Policy Implications: Over-and under-provision should be looked at for efficiency and equality reasons.

PHYSICIAN'S LACK OF KNOWLEDGE: A POSSIBLE REASON FOR RBC TRANSFUSION OVERUSE?

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Background: Red blood cell (RBC) transfusion is a common therapeutic intervention. Despite their risk and high cost, a significant percentage of RBC transfusions are inappropriately proscribed. A restrictive blood management (RBM) approach (using hemoglobin threshold 7-8 g/dL) is superior to a liberal approach (using hemoglobin threshold 10 g/dL) in improving clinical outcome, and reducing RBC utilization. Despite a growing number of studies, there is still an insufficient evidence for generation of comprehensive RBC transfusion guidelines, thus the existing American recommendations are limited. Israeli guidelines currently do not exist.

Study Question: To suggest that physician's lack of knowledge in the field of transfusion medicine may play a role in RBC transfusion overuse.

Methods: Questionnaires were written by the investigating team and were given to 79 physicians from surgical and internal medicine departments who were employed in the Galilee Medical Center during 2014. Questionnaires examined general knowledge, familiarity with the RBM discipline and knowledge regarding different indications for transfusion.

Results: General knowledge: Familiarity with the RBM discipline and knowledge of the indications for transfusion in the population studied were low (below 50 in a 0-100 scale). Questions examining physiologic reasons for transfusion had particularly low scores with only 9% of respondents answering correctly to both questions. 63% of respondents agreed that a lack of clear guidelines for RBC transfusion is a source of confusion among physicians.

Conclusions: There is a lack of general and fundamental knowledge among physicians in the field of transfusion medicine, which may be a cause for RBC overuse. Absence of Israeli guidelines and limited American recommendations may contribute to the lack of knowledge in transfusion medicine among Israeli physicians.

Health Policy Implications:

- Definitive recommendations await further clinical trials.
- Validation of the American guidelines (AABB) by the Israeli ministry of health may increase awareness and improve the practice of RBC transfusion among Israeli physicians.

MEUHEDET AMBULATORY MENTAL HEALTH SERVICES - INITIAL TRENDS AFTER IMPLEMENTATION OF THE MENTAL HEALTH REFORM

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Background: In July 2015, the Mental Health reform came into effect.
The quantitative goals of the reform are that 2% minors and 4% of the adult population be treated within mental health services (having an average of 12 and 9 yearly contacts respectively).
Study Question: To conduct a preliminary examination of mental health patient ratios and respective number of contacts within mental health services in Meuhedet before and after the reform in mental health.
Methods: Prior to the reform a new mental service concept was constructed. New mental health clinics were opened and in existing clinics more clinicians were recruited. Three different routes of mental health services were designated: Clinic services in Meuhedet's medical centers and specialized multidisciplinary mental health clinics, out-sourcing via existing public services and subsidized services provided by private clinicians.
Results: Throughout 2015 33,000 mental health patients were treated by Meuhedet's mental health staff, 7,000 were treated by Meuhedet's private clinicians. This is a partial ratio of 3.8% and 2.15% for adults and minors from Meuhedet's population, respectively. The average yearly number clinical contacts were 4.68 and 4.84 for adults and minors respectively, which is an increase of 35% since 2013.
Conclusions: The proportion of Mehuhedet population diagnosed by mental health services exceeded the nation's estimation designated by the Ministry of Health. Expanding free mental health services in Meuhedet's clinics led to a preference of these services over subsidized external mental health services. This move is in line with the social concept of the nation's reform in the field of mental health.
Health Policy Implications: The mental health service model in Meuhedet's clinics contributes to the successful detection of mental health illness and significantly reduces the gap between illness diagnosis and treatment. When planning the transfer of mental health services to the community, estimation of the proportion of patients expected should be re-evaluated.

THE HOME AS THE PREFERRED PLACE OF TREATMENT FOR ELDERLY PATIENTS

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Background: The aging of the population and increasing life-expectancy pose a challenge to the healthcare system and its ability to provide institutional solutions of all kinds. Moreover, hospitalization poses serious risk for functional decline in the elderly, often resulting in trading independent life for institutionalization.
Study Question: What are the best policy steps to promote the patient home as the preferred alternative for treatment of the elderly in Israel?
Methods: Collection and examination of data on the scope and nature of existing HMO home-care units, examination of home-care through literature reviews and consultation with providers and decision-makers.
Results: In May 2015, patients in all home-care units numbered about 33,000. A lack of uniformity was found in standards of care, structure, scope, and distribution of services. Clinical and structural barriers to at-home care were clarified.
In accordance with the literature and discussions with stakeholders, a model was developed whose application requires expansion of home-care units in scope and nature of service, to provide acute care in agreed-upon cases and to the homebound.
Conclusions: The main obstacles to home treatment were clarified and found to be influenced by medical and social approaches to care and by the complexity of the agreements between the HMO's and the general hospitals. The voice of the elderly was not dominant in determining services. Establishing the home as the preferential treatment- place for the elderly requires investment in multidimensional home-based care, developed through a consensual process between community stakeholders and relevant professionals.
Health Policy Implications: Homecare-treatment for acute and long-term conditions and avoidance of ER visits and hospitalization whenever possible has proven crucial to the elderly in avoiding institutionalization and its critical implications for quality of life. Health policy that views the home as the preferential place of treatment for the elderly needs to be expanded and strengthened in light of the National Health Insurance Law.

BUILDING THE BASE FOR A REASONED PREVENTIVE HEALTH POLICY IN CHILDREN - THE NEW COMPUTERIZED TIPAT CHALAV HEALTH RECORD

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Background: The community-based Maternal Child Health centers ("Tipat Halav "), provide free universal preventive pediatric care according to national guidelines. A new computerized MCH health record was inaugurated on June 2014 in all centers operated by the Ministry of Health, 2 municipalities (Jerusalem and Tel-Aviv) and 1 HMO (Leumit) covering some 70% of the annual birth cohort.
Study Question: Monitoring health indices of children is a cornerstone of public health. Can this data provide a basis for evaluating the health status of Israel's children? Can it be used to monitor implementation of policy and service performance? Can we use this data for an evidence-based MCH policy?
Methods: We reviewed applications of data that have been used since the record's advent. Other planned updates illustrate additional uses of the record.
Results: Immunization coverage retrieved from the record has improved accuracy and timeliness, enabling estimates of delayed as well as missed immunizations. The new system will eventually enable determination of actual population coverage. Vaccination records are routinely shared with the HMOs since 2015. Real time data on breastfeeding prevalence, critical to determining needed support and intervention, are presented. Monitoring population and regional rates of obesity, under-nutrition and stunting enable identification of groups at risk. Measures of the prevalence and severity of postpartum depression as well as information on the support and interventions provided are now available. Information on the prevalence of acceptance and refusal of postnatal intramuscular injection of vitamin K exemplify the possibility for monitoring current population trends. The new preventive care quality indicators are all derived from the record.
Conclusions: The record provides significant opportunities to examine health status and service parameters.
Health Policy Implications: Adoption of the record or coordinated sharing of all HMOs data will strengthen the validity of the health measures derived.

CHARACTERIZATION OF EMERGENCY DELIVERY ROOM CALLS TO NEONATOLOGISTS DURING MORNING VERSUS EVENING SHIFTS

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Background: Within minutes following birth, newborns must adjust to independent functioning. For births in which there is greater risk of newborn distress, neonatologists are called to provide support and resuscitation. The availability of neonatologists is limited, particularly during evening and night shifts, though it appears that the incidence of their calls to the delivery room rises during these shifts. Thus, the current study was designed to characterize the incidence of delivery room calls to neonatologists.

Study Question: To characterize delivery room calls to neonatologists during morning versus evening shifts.

Methods: A prospective study was performed between March and July 2015. Information regarding duration, reason, and required level of intervention for each call was collected from medical files. Data from evening and night shifts were combined for analysis.

Results: During the course of the study, 1,046 babies were born.

The incidence of emergency calls to neonatologists was approximately 40% (384/958) with no significant difference between morning and evening shifts.

The distribution of reasons for calls was similar to that reported in the relevant literature.

The level of intervention required of the neonatologist was minimal in 89% of cases and significant in 11%.

Call duration was significantly longer for calls related to elective surgery than for emergency calls, and shorter for morning calls than for evening calls.

Conclusions: The overall incidence of delivery room calls to neonatologists was higher than that reported in the literature, though there was no difference between morning and evening shifts. Call duration was longer during evening shifts.

Health Policy Implications: In accordance, staff schedules and resources should take into consideration the anticipated activity loads of the different shift times.

ADHERENCE TO ANTIDEPRESSANTS IS ASSOCIATED WITH LOWER MORTALITY: A FOUR-YEAR POPULATION-BASED COHORT STUDY

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Background: Despite the growing use of antidepressants (AD) and the potential grave consequence of inadequate treatment, little is known about the impact of adherence to AD treatment on mortality in the general population.
Study Question: This study objective was to evaluate the association between adherence to AD and all-cause mortality in a population-based cohort.
Methods: Data was extracted from the electronic medical database of the largest health provider in Israel (53% of the nation's population) on a total of 251,746 patients aged above 40 years old who claimed AD prescription at least once during 2008-2011.
The main outcome measure was all-cause mortality during the study period. Adherence was measured as a continuous variable representing possession ratio (duration of claimed AD divided by duration of prescribed AD).We used a polynomial model of proportional hazard Cox regression for multivariable survival analysis adjusting for demographic and clinical variables that affect mortality.
Results: The association between adherence and Hazard Ratio (HR) for mortality follow a quadratic model in which the lowest HR (0.66 [95% Confidence interval (CI): 0.64 to 0.69]) is at a level of 60% adherence in respect to non-adherence.
Conclusions: Adherence to AD is significantly associated with a corresponding decrease in the risk of mortality, controlling for relevant covariates.
Health Policy Implications: Physicians from all disciplines should actively improve their patients' adherence to AD since their persistent use is associated with increased survival.

EPIDEMIOLOGIC, ENVIRONMENTAL AND LABORATORY INVESTIGATION IN RESPONSE TO AN OUTBREAK OF SALMONELLA ENTERITIDIS INFECTION IN ISRAEL

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Background: In November 2015, due to a prominent increase in Salmonella Enteritidis cases in Israel, mostly attributed to a novel subtype of bacteria, an outbreak was identified. A national effort, which included epidemiologic investigation, laboratory investigation of clinical and food samples, and risk communication, was conducted.

Study Question: The aim of the investigation was to identify the source of the outbreak, in order to take regulatory measures to stop it.

Methods: Case-control investigation, based on food exposure questionnaires, was conducted by the Israeli Disease Control Center. Food identified as high-risk was sampled by the Veterinary Services and the Food Control Services. Laboratory investigation of clinical, food and poultry samples was performed by the Central Public Health Labs. Periodic meetings of all partners were conducted to discuss the results and decide upon operative measures.

Results: The outbreak, which peaked in October 2015, still continues. Laboratory investigation found a novel subtype of Salmonella Enteritidis to be linked to the outbreak. This subtype was isolated from clinical samples, but not from food, eggs or poultry. Preliminary Results of the epidemiologic investigation suggest various possible sources, including: eggs, poultry, and possibly sprouts and tahini. Out of all food sampled, microbiological testing has isolated Salmonella Enteritidis, which was not of the same novel subtype, from an imported egg.

Conclusions: Regulatory measures focused on informing the healthcare institutions, as well as the public, regarding the disease and its prevention. The isolation of Salmonella Enteritidis from an imported egg has resulted in the regulatory step of ceasing the import of eggs from the origin country. During the past few weeks, there has been a gradual decrease in new cases.

Health Policy Implications: This case demonstrates the importance of a multidisciplinary coordinated response to a disease outbreak on the national level, in which clinical, epidemiological and regulatory actions are conducted.

PROVIDING EYE CARE SERVICES: THE SUPPLY OF OPHTHALMOLOGY AND OPTOMETRY WORKFORCE

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Background: An integral component of a health system's building blocks is its workforce. Physicians are aging, medical students are opting for sub specialty fields, and health reform has increased demand. These factors caused a doctor shortage both geographically and in certain specialty areas imperiling access to care. In planning for an adequate supply of eye care providers a determination of the current supply of eye practitioners is necessary. Databases for ophthalmologists and optometrists have been found to be inaccurate. The number of ophthalmologists is dwindling. Optometrists, authorized to treat and manage ocular diseases fill this void. Workforce studies must consider both optometrists and ophthalmologists.
Study Question: Are there adequate eyecare providers in New York State? What is the projected supply of optometrists and ophthalmologists? Can optometrists provide primary and medical eyecare and relieve the shortage of eye providers?
Methods: A workforce study for New York determined the supply of optometrists and ophthalmologists. A comprehensive telephone census determined the current supply of eye care providers. Data was compared to state licensure information and professional databases.
Results: Existing database were outdated. Thirty percent of ophthalmologists and 25% of optometrists no longer practiced. Geographic areas had no ophthalmologists but had optometrists. Optometrists were more likely to offer weekend and evening hours.
Conclusions: Supply of all providers has not kept pace with practitioner attrition nor population growth. Strategies must be developed to assure that the eye care needs are met.
Health Policy Implications: The scope of optometric licensure increased substantially the past 30 years to incorporate most medical eye services enabling the substitution of optometrists for ophthalmologists. The shortage of ophthalmology can be alleviated by optometrists. The cost of optometric education is considerably less than training of ophthalmologists. In Israel the scope of practice of optometrists is limited. Expanding the scope of practice of optometrists in Israel may be a viable option.

ETGAR - A MEDICAL SCHOOL'S INNOVATIVE PARTNERSHIP WITH HOSPITALS TO TACKLE HEALTH INEQUALITIES DURING TRANSITION BETWEEN CARE SETTINGS

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Background: Transition between care settings is troubling health systems worldwide, with health care disparities associated with higher rates of avoidable readmissions. In Israel attempts to improve transition in care rely mostly on nursing staff and have largely been led in the community. We present a novel hospital based initiative, ETGAR, staffed by senior medical students to bridge the transition home for disadvantaged patients across the Galilee.
Study Question: Does ETGAR result in better patient understanding, less suffering from medication discrepancies and reduced rates of readmissions for socially disadvantaged patients?
Methods: Complex and/or disadvantaged patients are identified by ward staff. Trained medical students meet patients briefly on the ward and then conduct a home visit following discharge to verify understanding, check medication and liaise with community services as necessary. Follow up continues by telephone. Impact is assessed through (a) readmission rates; and (b) the Care Transmission Measure. ETGAR patients are evaluated for health literacy, medication discrepancies, and a phone interview to ascertain benefits. Students are trained in providing information in simplified language, working effectively with patients from diverse cultures and motivational interviewing. They are assessed for attitudes and competencies for working with underserved populations.
Results: In its pilot phase, 50 students in years 5/6 completed ETGAR training to assist 500 patients across the Galilee. At baseline patients understood their medical condition moderately (x=3.53 sd=1.50), and their medication regimen (x=3.68 sd=1.57). They reported improved knowledge after the home visit (x=3.80 sd=1.30; x=4.40 sd=0.89). Students' written reports highlighted patients' inadequate knowledge regarding medication and information on community services (e.g. National Insurance following discharge).
Conclusions: In its pilot phase ETGAR shows promise in helping disadvantaged patients bridge the gap between ambulatory and acute settings.
Health Policy Implications: ETGAR offers a new and feasible initiative to lower adverse events tied to hospital discharge, especially for patients in need.

WORK-RELATED DISEASE IN ISRAEL - WHAT ARE WE MISSING?

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Background: Israeli national policy is to compensate work-related injuries. One of the reasons a mandatory-reporting database of work-related injuries was created by the Ministry of Health (MOH) was to facilitate this effort. The National Insurance Institute (NII) has a database of all the claims patients filed for compensation or assistance.
Study Question: Can the Israeli national claims data set be used to supplement existing registries to identify work-related diseases?
Methods: During the years 2011-2014 cases of mesothelioma in the MOH database were compared to cases in the NII database. Mesothelioma claims to the NII were identified by whether a claim was linked to an ICD code for mesothelioma (163 and 158).
Results: The MOH database reported 5 cases of mesothelioma during the years 2011-2014. During those years 289,712 claims were made to the NII. Of these, 63 potential mesothelioma cases were identified by ICD-9 coding. Review of these 63 charts revealed that 28 were in fact mesothelioma cases. Of these, 13 (46%) were filed as work-related claims. Further investigation of the 15 non-work related claims revealed that at most 6 of these may in fact have been work-related. Thus the NII database had overall approximately 3-4 times more cases (13-19) reported than the MOH database.
Conclusions: Using mesothelioma as a test case has demonstrated that the MOH database grossly under-reports some work-related injuries. The NII claims database identified numerous additional work-related injuries. Most of the mesothelioma claims at the NII were not work-related, but some of these claims may have been erroneously filed by the claimant as not work-related.
Health Policy Implications: Identifying work-related injuries through the MOH database may not be effective. To implement Israel's national policy that work-related injuries should be compensated, additional efforts are needed. In addition, the NII claims database should be used to supplement other databases and insure that national policy is realized.

PHYSICIAN, HEAL THYSELF: ISRAELI PHYSICIANS' HEALTH PRACTICES AND PERCEPTION OF HEALTH STATUS

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Background: Modifiable risk factors, such as poor nutrition and lack of physical activity, contribute to morbidity, mortality and healthcare costs. Physicians practicing healthy lifestyles are more effective in promoting such behaviors among patients.

Study Question: Do Israeli physicians adopt healthy lifestyles? Is there a correlation between physicians' lifestyles and perceived health status?

Methods: Study population: All members of the Israeli Medical Association. Data collection: Short, specially developed digital questionnaire was e-mailed to the study population in July 2015. Statistical analysis: Uni- and multi-variate regression.

Results: 4,832 out of 25,590 physicians responded; 60% males, 38% were below 44 years of age; 15% were 65+. Age and sex distribution was similar among respondents and non-respondents. 51% work in hospital settings, 19% residents. 21% reported poor or fair health status; 36% felt considerable emotional stress. Calculated Body Mass Index indicated overweigh or obesity in 57% of the respondents. 29% met recommended physical activity level. 50% ate breakfast or lunch regularly; 25% slept 5 hours or less; Females reported higher stress while males tended to be more overweight. Residents and hospital physicians reported considerably less-healthy lifestyles. Younger age, specialist status, good nutrition, recommended physical activity levels and lower stress were among the factors promoting perception of good health status. Being female, younger, poor nutrition, less than recommended physical activity and inadequate sleep explained high stress levels.

Conclusions: Respondents demonstrated less-favorable health practices when compared with Canadian and US physicians and other Israeli sectors similar in education or income. The fact that modifiable risk behaviors contribute to emotional stress and ill health represents a wake-up call.

Health Policy Implications: When physicians are unwell, the healthcare system's performance is sub-optimal. Effective pro-health interventions at workplaces are crucial for physicians to minimize burnout and ill-health, and for patients, who rely on physicians as role models.

HARNESSING TECHNOLOGY FOR TREATMENT SAFETY: COMPUTERIZED IDENTIFICATION AT AN IMAGING INSTITUTE

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Background: Correct identification of patients is a central objective in ensuring treatment quality and safety, and is defined internationally as a key measure in accreditation by the JCI. Use of barcode technology for rapid and accurate identification has reached the medical world, in operational and managerial fields as well as in interactions with patients. The risk of patient identification errors at imaging institutes is significant, and may result in unnecessary tests and associated complications. As such, a computerized system was developed to improve patient identification protocols.

Study Question:

- Implementation of the PILOT patient identification system, integrated with computerized patient medical files, in seven examination points at an imaging institute for six months.
- Examination of the results of system use.

Methods: After mapping requirements, a team of clinicians and computer experts developed an Internet-based patient identification system using HTML/.Net technology.

In addition, a central website was built to enable managers to track identification performance online in various examination rooms.

- Computerized identification was performed in the imaging examination rooms, before each imaging procedure, based on first name, surname, and identification number.
- Computerized comparison using a barcode reader on the patient's wrist band and on the referral form sticker was performed by an imaging technician. Following verification of data, correct identification resulted in an approval message on the computer display.

Results:

- Computerized identification rates rose dramatically, from 13% to 58%, during the course of system use.
- Subjectively, there was an increase in technician satisfaction in terms of ease of use and awareness of patient safety.

Conclusions: Computerization of the patient identification procedure was simple and feasible. The software constitutes an additional tool for reducing identification errors in a high-risk environment.

Health Policy Implications: Plans are underway to use barcode technology for patient identification at other medical center sites.

COMPARISONS OF HEALTH STATUS AND BEHAVIORS OF ADOLESCENT IMMIGRANTS AND NON-IMMIGRANTS BY GENDER

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Background: Research shows that adolescent immigrants exhibit a greater risk for poorer health than native adolescents. Yet, to date, gender differences in health behaviors in adolescents born to immigrant families and non-immigrant families were not explored.

Study Question: Do male and female adolescents born to immigrant families and non-immigrant families living in Israel differ in health behaviors and health status?

Methods: A cross-sectional study was conducted at several public health high schools where surveys on health status, health behaviors and other variables were collected on 10th grade students using validated questionnaires (n=612). Comparisons between immigrant and non-immigrants adolescents were made to examine report of excellent health status or not.

Results: Bivariate results indicate that of the four adolescent groups (male immigrants, female immigrants, male non-immigrants and female non-immigrants), excellent health status was reported least by male adolescent immigrants ($p<0.05$). Patterns of health behaviors varied among the four groups. Female immigrants compared to three other groups of adolescents (i.e., male immigrants, male non-immigrants and female non-immigrants) were more likely to smoke ($p<0.01$) and reported the highest number of hours on the internet ($p<0.0001$). Male compared to female adolescents, reported exercising more frequently ($p<0.0001$); no differences were found by immigrant status. Female adolescents, scored higher on mental health problems ($p<0.0001$); and again, no differences were found by immigrant status. Yet, when logistic regression models were adjusted by these variables, male adolescent immigrants compared to all others remained least likely to report excellent health status ($p<0.01$).

Conclusions: Male immigrant adolescents were more likely to report “less than excellent health” compared to all other groups, despite the finding that female immigrants had more mental health problems.

Health Policy Implications: Health risks associated adversities, including social isolation in adolescence, can remain into adulthood and throughout the life-course. Consequently, specific youth-targeted gender-specific interventions are indicated.

ACCURACY OF STROKE CODING IN GENERAL HOSPITALS IN ISRAEL: IMPLICATIONS FOR THE NATIONAL STROKE REGISTRY

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Background: A national stroke registry (NSR) was established by the Ministry of Health in 2014. The registry is based on data extraction from electronic medical records (EMRs) of all cases with an active discharge diagnosis code indicative of stroke/TIA.
Study Question: To determine the accuracy of the ICD-9-CM codes for identification of patients with acute cerebrovascular events.
Methods: The study was conducted in all general hospitals (24) reporting to the registry. Discharge letters for all cases reported in Q1-2014 were reviewed by the study team, in order to determine whether the patient had an acute cerebrovascular event and which type: ischemic stroke, intracerebral hemorrhage or TIA.
This classification was compared to the data reported to the registry and the rates of positive predicative value (PPV) and subtype misclassification were calculated.
Results: 4,400 cases were included in the analysis, 3889 were true cases. The PPV of stroke/TIA diagnosis was 89% (range 97.5%-61.4%). Main reasons for false-positive were using an ICD9 code of an acute event to record past history of stroke (n=270, 53.0%), and coding suspected cases that were ruled out (n=113 22.2%) as cases.
Misclassification of event subtype occurred in 356 (8.1%) of cases, (range 2.5%-47.1%). The most common misclassifications were coding stroke as TIA (214, 60.1%), and coding TIA as stroke (n=77, 21.6%). False subtyping was more common in hospitals where the EMR enables the physician to choose an ICD code and then to change the text of diagnosis that will be displayed in the discharge letter.
Conclusions: The validity of the NSR is impaired by current coding practices especially when data are analyzed at a hospital level.
Health Policy Implications: The ministry issued stroke coding guidelines and is planning to block the option of changing the diagnosis description in order to improve the accuracy of the registry.

THE EFFECT OF ADHERENCE TO ADHD PHARMACOLOGICAL TREATMENT ON OCCUPATIONAL FUNCTION IN SOLDIERS

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Background: ADHD is a neuro-developmental disturbance estimated at 5% prevalence of the adult population. It first appears in childhood, but lasts throughout adulthood and is characterized by substantial comorbidities. The treatment is multifaceted and includes pharmacological treatment, mostly methylphenidate. Pharmacological therapy improves the outcome in many areas, including occupational performance. Soldiers are required to present high levels of social, occupational, and educational function, which may be affected by an unbalanced ADHD. Despite therapeutic efficacy, many young Israelis wish to stop treatment after graduating from high-school due to negative stigma and side effects, which may result in low adherence to treatment among soldiers.
Study Question: To characterize the connection between the level of adherence to pharmacological treatment for ADHD to occupational functioning in soldiers.
Methods: A retrospective study was conducted on soldiers serving in the IDF (2008-2012) using a comprehensive cohort of soldiers with prescriptions to treat ADHD pharmacologically and fulfilled in a military pharmacy. By comparing adherence levels according to the treatment dispensing patterns, we examined variables that are indicative for occupational function.
Results: Positive correlation found between adherence levels and occupational functioning measurements - number of sick days, profession disqualification, and medical release from daily activity.
Sub analysis of disqualification rates by profession groups showed different types of correlations. Specifically, in driving professions, increase in adherence level correlates to a decrease in professional disqualification.
Conclusions: General occupational function tended to decrease with a rise in adherence, as shown by the number of sick days and medical release from activity (possibly due to the high correlation between ADHD severity and adherence levels). However, in driving professions, there is a decrease in profession disqualification rate (i.e. better occupational function) with higher levels of adherence.
Health Policy Implications: The negative occupational influences demonstrated are relevant not only for soldiers, but also for the civilian population, affecting millions of lives. Therefore, a national program aiming to improve adherence to ADHD pharmacological treatment should be considered, considering the negative affect of low adherence.

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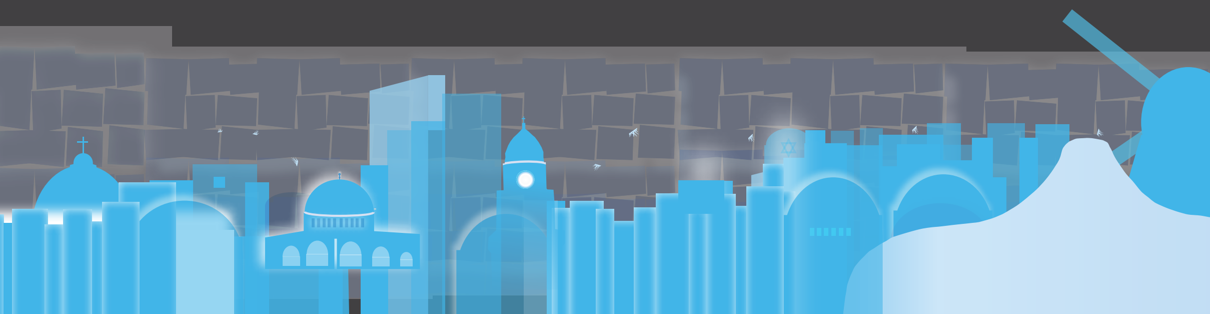

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Wide-ranging review of the Israeli health system
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Reforms are being taken as follows: the benefit package was recently expanded to include mental health care and dental care for children; a multipronged effort seeks to reduce health inequalities; national projects are set up to measure and improve the quality of hospital care and reduce surgical waiting times, along with greater public dissemination of comparative performance data. Due to the growing reliance on private financing with potentially deleterious effects for equity and efficiency, action is taken to expand public financing, improve the efficiency of the public system and constrain the growth of the private sector. Finally, major steps are being taken to address projected shortages of physicians and nurses.

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