



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

THE FOURTH INTERNATIONAL JERUSALEM CONFERENCE ON HEALTH POLICY

ICC Jerusalem Convention Center, December 8-10, 2009

Improving Health and Healthcare

Who Is Responsible?
Who Is Accountable?

Program & Book of Abstracts

CHAIR: Prof. Avi Israeli (IL) & Prof. Stephen Shortell (USA)

Dear Colleagues,

Health systems in nearly all nations face daunting challenges of growing costs while at the same time improving or maintaining access and quality of services. Greater attention is also being given to the social determinants of health with a renewed emphasis on population health. More immediately, health systems and society as a whole are caught up in the whirlwind of an unprecedented world economic crisis. The collapse of financial markets combined with globalization pose challenges never before addressed by national and international leadership. Far more than a simple platitude; we are entering a time of danger, but also one of opportunity.

- * Will the current economic chaos simply put more pressure on already financially stressed health systems – or will investment in health be seen as a spur to economic growth?
- * As societies reconsider their social contracts and the relationship between government and the private sector; how will health systems be affected? What can they offer in the way of lessons after decades of struggling with issues of governance, social support, personal responsibility for health, and systemic accountability for health systems outcomes?
- * Will health systems falter in the face of population migrations – or will they serve as a beacon to maintain solidarity because of – and not despite – immigration of citizens and health professionals?
- * Will Health Ministries maintain their secondary position in the bureaucratic pecking order – or will they succeed in articulating the inter-sectoral nature of health and establish health-promoting coordination with other agencies?
- * Will the new fields of evidence based medicine and evidence based management be confined to the characterization of technical tools and measures – or will they provide an example of nesting quality improvement within the organizational culture and social fabric of societies?

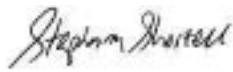
The Fourth International Conference on Health Policy will address these issues, seeking to maximize the health and welfare of populations and to contribute to overall improved social policy. Leading health policy experts from around the globe will discuss these issues in plenary and parallel sessions, debates, panel discussions, and poster presentations. The Conference

will provide new knowledge and ideas aimed at improving the future of populations worldwide during a time of daunting challenges.

Looking forward to seeing you at the conference!



Professor Avi Israeli



Professor Stephen Shortell

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Scientific and Organizing Committee

Chair:

Prof. Avi Israeli The Hadassah–University Medical Center, Israel

Chair:

Prof. Stephen Shortell University of California, Berkeley, USA

Prof. Alik Aviram The Israel National Institute for Health Policy Research, Israel

Prof. Gabi Barbash Tel-Aviv Sourasky Medical Center, Israel

Prof. David Chinitz Hadassah Medical Center, Israel

Prof. Chaim Doron The Israel National Institute for Health Policy Research, Israel

Prof. Alan Garber Stanford University, USA

Ms. Ziva Litvak The Israel National Institute for Health Policy Research, Israel

Prof. Martin McKee London School of Hygiene & Tropical Medicine, UK

Prof. Shlomo Mor-Yosef The Israel National Institute for Health Policy Research and Hadassah Medical Center, Israel

Prof. Rosalind Raine University College of London, UK

Prof. Richard Saltman Emory University, US

Prof. Mordechai Shani The Gertner Institute, Israel

Prof. Amir Shmueli The Hebrew University of Jerusalem, Israel

Sponsors



Acknowledgements



כִּי הַטְבָּרָה הוּא הַחַיבָּר לְחַיִם



בית השקעות חכמת



GENERAL INFORMATION

VENUE

ICC Jerusalem Convention Center
Adjacent to the Crowne Plaza Hotel
Telephone (02) 6558558

REGISTRATION / HOSPITALITY DESKS

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

Opening Hours Crowne Plaza Hotel
Monday: 12:00-19:00
Tuesday: 8:00-18:00
Wednesday: 9:00-14:30
Thursday: 9:00-14:30

Opening Hours ICC Jerusalem Convention Center
Tuesday: 8:00-18:00
Wednesday: 9:00-18:00
Thursday: 9:00-17:00

POSTER BOARDS

Posters will be on display in the poster area for the duration of the conference.
Exhibition hours are:
Tuesday: 8:00-18:00
Wednesday: 8:00-22:00
Thursday: 8:00-14:30

The posters should be removed at the end of the conference on Thursday at 14:30 in the afternoon.

There is no way to retrieve forgotten posters.

Awards for Outstanding Posters will be given at the concluding session on Thursday.

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 and to the Gala Dinner.

LANGUAGE

English is the official language of the conference.

CLOTHING

Dress is informal for all occasions.

OPTIONAL SIGHTSEEING TOURS

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

SOCIAL EVENTS

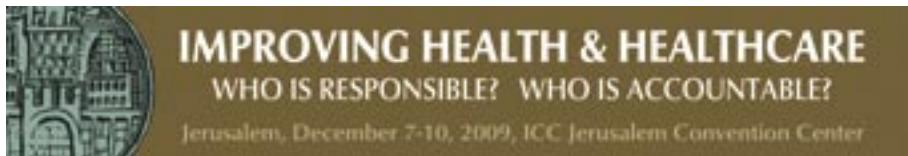
Welcome Reception: Monday, December 7, 2009, 19:00 – 22:00.

The reception will take place at the Bible Lands Museum.

Pickup for the reception will be in the lobby of The Crowne Plaza Hotel at 19:00.

Gala Dinner: Wednesday, December 9, 2009, 18:30 – 22:00.

The Gala Dinner will take place at the Teddy Hall, ICC Jerusalem International Convention Center.



Monday, December 7, 2009

19:00 – 21:00

Welcome Reception

Tuesday, December 8, 2009

Teddy Hall

08:00 – 09:00

Registration

09:00 – 10:45

Opening Session

Chair: Prof. Shlomo Mor-Yosef *Chairman, Board of Directors & Director General of the Hadassah Medical Organization, Israel*

Mr. Nir Barkat *Mayor of Jerusalem, Israel*

Mr. Yaakov Litzman *Deputy Minister of Health, Israel*

Dr. Nata Menabde *WHO Regional Office for Europe*

Prof. Avi Israeli *Co-Chair of the Conference
The Hadassah–University Medical Center, Israel
Responsibility and Accountability – talk is cheap...*

Prof. Stephen Shortell *Co-Chair of the Conference
University of California, Berkeley, USA
Meeting the Challenge of Chronic Illness:
Policy and Evidence On Integrated Care*

10:45 – 11:15

Coffee Break

11:15 – 13:30 **Plenary Session – Group A**
Public Accountability / Governance & Stewardship

Teddy Hall

Chair: Prof. Jonathan Halevy	<i>Shaare Zedek Medical Center, Israel</i>
Prof. Gabi Barash	<i>Tel Aviv Sourasky Medical Center, Israel</i> Government Accountability or Health Care Leaders' Responsibility
Prof. Richard Saltman	<i>Emory University, Atlanta, USA</i> Context, Culture, and the Practical Limits of Health Sector Accountability
Dr. Ezekiel Emanuel	<i>National Institutes of Health, USA</i>
Dr. Josep Figueras	<i>European Observatory & WHO European Centre, Belgium</i> Strengthening health governance: an old “new” paradigm. What is next?
Dr. Siegal Sadetzki	<i>The Gertner Institute, Israel</i> Responsibility and accountability in diagnostic and preventive medicine – are we doing too much or too little?

13:30 – 14:30 Lunch Break

14:30 – 16:00 **Parallel Session 1**

Group A: Public Accountability

Quality Assurance: From Technical Science to Stakeholders Politics

Oren Hall 1

Chair: Prof. Avi Porath	<i>Maccabi Healthcare Services, Israel</i>
Prof. Paulo Moreira	Health communication in the EU: A survey on Citizen Information needs, Sweden
Mr. Dan Peretianu	Health status is depending on corruption, Romania
Dr. Fausto Felli	Redefine Budgets for Local Health Authorities to Produce Health on A Large Scale, Italy
Ms. Edna Bar-Ratson	Accreditation in three Clalit acute care hospitals: promise, performance, and lessons learned, Israel
Prof. Elisheva Simchen	<i>Ministry of Health, Israel</i> Introducing Quality Indicators for hospitals in Israel (QUIP Israel): Setting the Israeli standards for accountability, also for transparency? Israel
Dr. Paula Feder-Bubis	The voice of the Israeli provider in the face of the accountability and transparency challenge (QUIP), Israel

Group B: Social Support**Making the Health System Fit the People, or Vice Versa?**

Chair: Prof. Tamar Shohat *Israel Center for Disease Control, Israel*

Dr. Diane Levin Zamir	Cross Cultural Action for Promoting Health among Ethiopian Immigrants in Primary, Secondary and Tertiary Health Care Settings, Israel
Dr. Nihaya Daoud	First visit to the MCH and the Health Beliefs Model (HBM) among Bedouin mothers in the Negev, Israel
Dr. Orna Baron-Epel	Differences in the association between social support, mental health and visits to physicians in a multicultural population in Israel, Israel
Ms. Anissa Afrite	Assessment of asthma control and its socioeconomic determinants, France
Dr. Paweł Zagódzon	Spatial differentiation of mortality among unemployed subjects in Poland, Poland
Prof. Terje P. Hagen	Is place all that matters? Inequalities in the use of PCI following AMI in Norway, Norway
Ms. Barbara Rabin	A Hospital Experience in Cultural Competence, Israel

Group C: Personal Responsibility**Enhancing Personal Responsibility**

Chair: Prof. Leon Gordis *Tel Aviv University, Israel*

Prof. Rosalind Raine	<i>University College London, UK</i> Tracking the Inverse Care Law in the U.K.
Prof. Daniel Wikler	<i>Harvard School of Public Health, USA</i> Should Personal Responsibility Remain a Peripheral Consideration in Health Policy?
Prof. Elliot Berry	<i>Hadassah University Hospital, Israel</i> The Positive Deviance Approach Enhancing Personal Responsibility in Lifestyle Interventions for Diabetes.

Group D: Performance Management**Management of Physicians' and Nurses' performance**

Oren Hall 4

Chair: Dr. Eyran Halpern	<i>Rabin Medical Center, Israel</i>
Prof. Yaffa Machnes	<i>Bar-Ilan University, Israel</i> The demand for pharmaceuticals by Israeli managed care organizations
Ms. Maria Trottmann	Physician prescription behavior – Do financial incentives affect choice? Switzerland
Dr. Jacob Urkin	Failure to comply with the standards of treatment of acute pharyngitis, Israel
Prof. Talma Kushnir	Communicating with patients, prescribing medications and referring to tests and specialists: Associations with physician burnout and moods, Israel
Dr. Natan Kahan	Off-Label Prescribing of Tamoxifen in Israel: Is it Evidence Based? Israel
Dr. Chaya Balik	Clinical Decision-Making in Nursing Based on Sound Evidence, Israel
Dr. Itzhak Katzir	Promoting and Implementing The Use of Generic Substitutions, Israel
16:00 – 16:30	Coffee Break

16:30 – 18:00

Parallel Session 2**Group A: Public Accountability****Hazards and Special Needs**

Oren Hall 1

Chair: Prof. Asher Or Noy	<i>Hadassah Medical School & Ministry of Health, Israel</i>
Prof. Richard Scheffler	<i>University of California, Berkeley, USA</i> ADHD and accountability: the responsibilities of the government, the health care providers, patients and their families
Ms. Yael Steinberg	Organization of Adult Attention Deficit Disorder treatment in Israel, Israel

Ms. Liri Endy-Findling	Child Safety Report Card: Israel's Child Safety Policy Performance, Israel
Dr. James Muthotho	Current Nutrition Problem in Kenyan Society, Kenya
Ms. Orly Tamir	The Dilemma over Reimbursement of Orphan Drugs – Accountability and Affordability Hand in Hand? Israel
Dr. Paul Kadetz	Determining Sustainable Global Health Policies: an analysis of the World Health Organization's policy for the integration of local healthcare practices and practitioners into state biomedical healthcare systems in the Philippines, UK
Dr. Yaakov Rosenfeld	World Record in IVF Cycles? Who is Counting? And How? Israel
Dr. Daniel Sperling	Attitudes and Policies Regarding Access to Assisted Reproductive Technology in Israel, Israel

Oren Hall 2

Group B: Social Support**Who is Responsible for Caring?**

Chair: Dr. Ehud Kokia	<i>Maccabi Healthcare Services, Israel</i>
Prof. Ariela Lowenstein	Care for Frail Older Persons – Family–Welfare State Balance – and Impact on Quality of Life of Elders, Israel
Dr. Zohar Nir	The Role of Social Support in Quality of Life of Stroke Survivor's Caregiver, (A longitudinal study), Israel
Dr. Dorit Rubinstein	Cultural Differences in Nurses' Health Behaviors, Israel
Prof. Ruth Landau	Ethics of decision making for people with dementia: The case of GPS, Israel
Dr. Laure Com-Ruelle	The place of Hospital at Home in French health care system, France
Mr. Paul Dourgnon	Patient – physician interaction and equity in health: the role of primary care, France
Dr. Dena Jaffe	Social Capital and Pediatric Injuries, Israel

Group C: Personal Responsibility**Ethical Issues of Personal Responsibility****Chair: Prof. Hava Tabenkin** *Haemek Medical Center, Israel***Dr. Gil Siegal***Ono Academic College, University of Virginia, The Gertner Institute, Israel*

Personal Responsibility to Healthy Behavior – Between Perceived Freedom, Autonomy, and Paternalistic Interventions

Dr. Baruch Velan*Israel Institute for Biological Research, Israel*

Personal Responsibility and State Responsibility in Vaccination – A Two Way Road

Dr. Arnon Afek

Personal Responsibility – Is it an ethical measure? Israel

Dr. Shlomi Segall*The Hebrew University of Jerusalem, Israel*

Discussant

Group D: Performance Management**Managing Performance in Managed Care Organizations I****Chair: Prof. Gur Ofer***The Hebrew University of Jerusalem, Israel***Prof. Harold Luft***University of California, San Francisco, USA*

Data and methods for delivery system reform harnessing collective intelligence to learn from positive deviance

Dr. Konstantin Beck

Do Managed Care plans improve efficiency? Evidence from Switzerland, Switzerland

Prof. Martin Gaynor

Payment Reform, Hospital Competition, Costs, and Quality, USA

Dr. Bruce Rosen

What have health plans managers and professionals done to turn quality measures into quality improvement? Israel

Dr. Esti Engelchin-Nissan

Implementing the 'Distance Variable' in the Israeli Capitation Formula, Israel

Dr. Efrat Shadmi

Predictive Models to Identify High-Risk Older Patients, Israel

Dr. Arnon Cohen

The Effect of Introduction of Pneumococcal Vaccination as a Quality Measure in Clalit Health Services on Vaccination Rates, Israel

Oren Hall 3

Oren Hall 4

Wednesday, December 9, 2009

09:00 – 11:00 Plenary Session – Group B Social Support

Chair: Prof. Eran Leitersdorf	<i>The Hebrew University of Jerusalem, Israel</i>
Prof. David Chinitz	<i>The Hebrew University–Hadassah, Israel</i> Legends of Health Policy and Management
Prof. Martin McKee	<i>London School of Hygiene & Tropical Medicine, UK</i> Solidarity in a changing world
Prof. Margaret Whitehead	<i>University of Liverpool, UK</i> Discussant
Dr. Eric Brunner	<i>University College London, UK</i> Discussant
Prof. Lawrence Brown	<i>Columbia University, USA</i> Discussant

11:00 – 11:30 Coffee Break

11:30 – 13:30 Plenary Session – Group C Personal Responsibility

Chair: Prof. Rosalind Raine	<i>University College London, UK</i>
Prof. Mordechai Shani	<i>The Gertner Institute for Epidemiology & Health Policy Research, Israel</i> An Introduction to the Issue of Personal Responsibility
Mr. Harald Schmidt	<i>Harvard School of Public Health, USA</i> Personal responsibility for health: time for a nuanced approach
Prof. Regina Herzlinger	<i>Harvard Business School, USA</i> The Consumer-Driven Health Care Cure
Dr. Joseph Betancourt	<i>Harvard Medical School, USA</i> Responsibility versus Responsible Options: Compliance Meets Public Health in U.S.

13:30 – 14:30 Lunch Break

14:30 – 16:00

Parallel Session 3**Group A: Public Accountability****Managing the Workforce in a Changing World**

Chair: Dr. Bishara Bisharat	<i>Nazareth Hospital, Israel</i>	Oren Hall 1
Prof. Richard Scheffler	<i>University of California, Berkeley, USA</i>	
	The Global Shortage of Health Workers	
Dr. Yeheskel Levy	<i>Ministry of Health, Israel</i>	
	Coping with changes in medical manpower in Israel	
Ms. Nora Gottlieb	Health Rights in an Age of Global Mobility – Migrant Workers' Health Care in Israel, Israel	
Mr. Eithan Brodsky	Advanced / Specialist Nursing Practice: Attitudes of Nurses and Physicians in Israel, Israel	
Dr. Krzysztof Krajewski-Siuda	Emigration tendencies among medical students in Poland, Poland	
Ms. Nurit Nirel	Registered Nurses in Israel: Workforce Supply – Patterns and Trends, Israel	
Ms. Ziona Haklai	Female Physicians: Trends and Impact on Healthcare, Israel	
Prof. Miriam Hirschfeld	Globalization, migration, human resources and long term care policies, Israel	

Group B: Social Support**Health Inequalities: From Rhetoric to Real Action**

Chair: Prof. Leon Epstein	<i>The Hebrew University–Hadassah, Israel</i>	Oren Hall 2
	Health Inequalities: the State of the Art and Beyond	
Prof. Margaret Whitehead	<i>University of Liverpool, UK</i>	
	Health Inequalities: Who is Responsible, Who is Accountable?	
Dr. Ran Balicer	<i>Clalit Health Services, Israel</i>	
	Clalit's Strategy for Health Disparities Reduction: The Vision and Its Implementation	
Dr. Rachel Wilf-Miron	<i>Maccabi Healthcare Services, Israel</i>	
	From measurement to comprehensive policy: The Maccabi Healthcare Services action plan to increase equity	

Group C: Personal Responsibility**Personal Responsibility in the Clinic****Chair: Prof.****Haim Bitterman****Dr. Gene Bishop****Dr. Asaf Caspi****Ms. Leah Wapner***Clalit Health Services, Israel**Pennsylvania Hospital, USA*

Supporting behavior change: whose responsibility?

Chaim Sheba Medical Center, Israel

The Personal Responsibility of the Psychiatric Patient

Israel Medical Association, Israel

Patient Empowerment as a Tool to Strengthen the Relationship Between the Physician and His Patients

Group D: Performance Management**Managing Performance in Managed Care Organizations II****Chair: Prof. Gabi Bin Nun****Prof. Stephen Birch****Dr. Dan Greenberg****Dr. Manuel García-Góñi****Mr. Michel Naiditch****Dr. Francesco Paolucci***Ben-Gurion University of the Negev, Israel**McMaster University, Canada*Tamoxifen for Breast Cancer Risk Reduction
Impact of Alternative Approaches to Quality of – Life Adjustment on Cost–Effectiveness Analysis*Ben-Gurion University of the Negev, Israel*

Is an intervention cost–effective? It depends on whom you ask

Risk adjustment and provider payment systems: complementarities and matching, Spain

The preferred doctor scheme: design, implementation and outcomes of a French Managed Care reform, France

Subsidizing Private Health Insurance: Why, How and How to Proceed? Australia

Special Session**I. The Quest for a “Responsible” Budget Holder and Purchaser**

Chair: Dr. Moshe Leshno	<i>Tel Aviv University, Israel</i>
Prof. Jeff Richardson	<i>Monash University Australia, Australia</i> The Form of Governance in Australia: the Contradictory Recommendations of the 2009 Review 2009 Review
Ms. Rosemarie Day	<i>Commonwealth Health Insurance Connector Authority, USA</i> The Massachusetts Health Care Reform
Dr. Ricardo Bitran	<i>Bitran and Associates, Chile</i> Health System Reform in Chile
Dr. Maureen Lewis	<i>The World Bank, USA</i> Raising Performance in Health Care Systems; the Critical Role of Institutions

II. Accountability to Whom: Tax-payers, Private Payers, Patients?

Chair: Dr. Alexander Preker	<i>The World Bank, USA</i>
Dr. Ronald Donato	<i>University of South Australia, Australia</i> The Single Payer – Single Purchaser Enigma
Dr. Ricardo Bitran	<i>Bitran and Associates, Chile</i> Social Health Insurance; Latin American Perspective
Prof. Leonie Segal	<i>University of South Australia, Australia</i> Strengths and limitations of competitive versus non – competitive models of integrated capitated fundholding
Prof. Dov Chernichovsky	<i>Ben-Gurion University of the Negev, Israel</i> Regulated Private Health Care Finance

16:00 – 16:30 Coffee Break

Oren Hall 1

16:30 – 18:00

Parallel Session 4

Group A: Public Accountability

From Regulation to Stewardship

Chair: Dr. Yitzhak Berlovitz *Wolfson Medical Center, Israel*

Prof. David Levi-Faur

The Hebrew University of Jerusalem, Israel

Regulatory Revolution by Stealth

Dr. Asher Elhayany

The Lotus Project – Eliminating Co-Payments,
Israel

Dr. Guy I. Seidman

Why isn't the Israeli Supreme Court Interested in
Healthcare? Israel

Prof. Gregory P.

Public Stewardship, Managerial Competence and
Regionalization in Canada, Canada

**Marchildon & Prof.
Wallace Lockhart**

Dr. Lisa Rubin

Breastfeeding Knowledge, Attitudes & Supportive
Behavior Among Nurses Working in Tipat Halav
Clinics, Israel

Dr. Doron Garfinkel

Passing the buck – who is responsible for the war
on polypharmacy? Rethinking and reevaluation
needed for each and every drug in the elderly
Using the Good–Palliative–Geriatric–Practice (GPGP)

Oren Hall 2

Group B: Social Support

Priorities: Who Decides Who Gets What, When, How, and Why?

Chair: Dr. Chen Shapira

Carmel Medical Center in Haifa, Israel

Dr. Eric Brunner

University College London, UK

Towards a working definition of morality in public
health

Dr. Nurit Guttman

Tel Aviv University, Israel

Beyond Information: Developing Culturally–
Centered Narrative Formats for Ethiopian
Immigrants on the Realization of Health Rights

Mr. Giora Kaplan	<i>The Gertner Institute for Epidemiology & Health Policy Research, Israel</i> Decision-makers' acquaintance with the public's priorities among various components of health services
Dr. Yeela Raanan	Denial of Access to Electricity and its Effect on Public health, Israel
Prof. Mayer Brezis	Expert Bias Facilitates Adoption of New Fertility Technology, Israel
Ms. Pamela Horowitz	The Dilemma of Statistical Precision vs the Precautionary Principle in Small Areas, Israel
Dr. Elliot Rosenberg	"Healthy Israel 2020": Development of a Prioritization Model to Rank Health Objectives and Interventions-Lessons Learned from the Geriatric Health Committee, Israel

Group C: Personal Responsibility**Patient Empowerment**

Oren Hall 3

Chair: Prof. Joshua Shemer	<i>Assuta Medical Centers, Tel Aviv University, Israel</i>
Mr. Harald Schmidt	<i>Harvard School of Public Health, USA</i> Incentives, sticks and carrots: some thoughts for policy makers
Dr. Mort Soroka	Glaucoma Among Patients Enrolled in a National Vision Care Plan. Knowledge of the Disease, Family History, and Medication Use, USA
Ms. Anat Amit Aharon	Analyzed Reasons to Uncompleted Routine Vaccinations in Well Baby Clinic ("Tipat Chalav") of Tel-Aviv-Yafo Municipality, Israel
Prof. Lisa Benz Scott	Improving Cardiac Health and Health Care: Interventions and Policies Targeting Patient Responsibility, Social Support, and Provider Performance to Promote Outpatient Cardiac Rehabilitation Utilization, USA

Ms. Davida Zigelman-Uzan	Personal Responsibility for Health, Israel
Ms. Malke Borow	Patient empowerment— where does the physician's responsibility end and the patient's begin? Israel
Prof. Varda Soskolne	Family Support in Facilitating Adherence to Diabetes Self-Care and Metabolic Control, Israel

Group D: Performance Management

Managing Performance in Hospitals I

Chair: Prof. Joseph Pliskin	<i>Ben-Gurion University of the Negev, Israel</i>
Prof. Ramiro Guerrero	Health System performance measurement, USA
Ms. Michal Kranzler	Quality control assessment in OR, Israel
Dr. Jacob Dreher	A Four – Year Project for Implementing Hospital Quality Indicators in Israel, Israel
Dr. Yaniv Sherer	Overall treatment-time reduction following opening of an emergency room for walking patients in a tertiary hospital, Israel
Mr. Ofir Ben Assuli	The Impact of Medical Information on Admission Decisions in ED, Israel
Prof. Sara Singer	Hospital Governance and Financial Performance in US Safety–Net Hospitals, USA

18:30 – 22:30

Cocktail & Gala Dinner

Chair: Prof. Chaim Doron	<i>The Israel National Institute for Health Policy, Israel</i>
Prof. Menahem Ben-Sasson	<i>President, The Hebrew University of Jerusalem, Israel</i>

Thursday, December 10, 2009

0900 – 11:00 Plenary Session – Group D
Performance Management

Chair: Prof. Amir Shmueli	<i>The Hebrew University of Jerusalem, Israel</i>	Teddy Hall
Prof. Alan Garber	<i>Stanford University, USA</i>	
	The future prospects of comparative effectiveness research	
Dr. Stephen Birch	<i>McMaster University, Canada</i>	
	The inconvenient truth of economic evaluation: Benefits forgone as a determinant of efficiency and implications for decision-making	
Prof. Harold Luft	<i>University of California, San Francisco, USA</i>	
	Aligning Incentives to Achieve the Performance One Cannot (Micro) Manage	
Prof. Alan Maynard	<i>University of York, UK</i>	
	Pay for Performance (P4P): proceed with care	

11:00 – 11:30 Coffee Break

11:30 – 13:30 Parallel Session 5
Group A: Public Accountability
Epidemics and Emergencies – Managing the Unexpected

Chair: Dr. Ran Balicer	<i>Clalit Health Services, Israel</i>	Oren Hall 1
MK Matan Vilnai	<i>Deputy Minister of Defense, Israel</i>	
	The State's Responsibility for Emergency Preparedness	
Dr. Nachman Ash	<i>Medical Corps, IDF</i>	
	The role of the IDF Medical Corps in Emergency	
Dr. Itamar Grotto	<i>Ministry of Health, Israel</i>	
	Government responsibilities during an influenza pandemic	
Dr. Orna Ben-Natan	National–Level Organizational Model for Coping with an Epidemic Outbreak, Israel	

Dr. Bruria Adini	Civilian staying power in the decision-making process during national emergencies, Israel
Ms. Adi Agiv	Performance management of Emergency Medical Services (EMS) – an evaluation of Madrid EMS conduct based on Israeli EMS protocols, Israel

Group B: Social Support**Social Support in the Morass of Bureaucracy and Market**

Chair: Prof. Orly Manor	<i>The Hebrew University of Jerusalem, Israel</i>
Prof. Lawrence Brown	<i>Columbia University, USA</i> Lifestyle: Between Public Bureaucracy and Private Interests
Dr. Karen Wolk Feinstein	The Role of a Local / Regional Initiative in Health Policy, USA
Prof. Alberto Holly	Informal Care and Formal Home Care Use in Europe and the United States, Switzerland
Dr. Krzysztof Krajewski–Siuda	Posters in public health campaigns – Poland case 1918–2000, Poland
Ms. Naama Ron	Physician peer groups: A new methodology for improving the quality of care, Israel
Dr. Becca Feldman	A Socio–Ecological Analysis of Ethiopian Immigrants' Interactions with the Israeli Healthcare System and its Policy and Service Implications, Israel

Group C: Personal Responsibility**The Never–Ending Dilemma**

Chair: Dr. Boaz Lev	<i>Ministry of Health, Israel</i>
Dr. Eytan Hay–Am	<i>Ministry of Health, Israel</i> The Change of Personal Responsibility in the Kibbutzim
Dr. Carla Saenz	How Much Should People Pay for Health Care? The Reasonable Trade–off Account of Affordability, USA
Dr. Yael Applbaum	Who is Accountable? The Never–ending "Perpetuum", Israel

Dr. Stephen T. Parente	Health Savings Accounts: Are Wealth and Health Portfolio Choices Joint and Rational? USA
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Panel of Knesset Members – Legislators' View on Personal Accountability

MK Rachel Adato	<i>Kadima</i>
MK Aryeh Eldad	<i>Ichud Leumi</i>
MK Ahmad Tibi	<i>Ra'am-Ta'al</i>

Group D: Performance Management

Managing Performance in Hospitals II

Oren Hall 4

Chair: Prof. Zeev Rotstein	<i>Sheba Medical Center, Israel</i>
Prof. Laurence Freedman	Statistical methods and their application to routine administrative data and data from QUIP Israel, Israel
Dr. Paul W. Armstrong	Two answers, one question: do the two most commonly used methods of sampling correctly describe the length of the prospective wait for admission to hospital? UK
Prof. Eitan Naveh	Resident physicians' medical errors: Active Learning – When more is better? Israel
Ms. Osnat Bashkin	Potential Adverse Events in Radiology: Human Factors for Healthcare systems, Israel
Dr. Ygal Plakht	Performance of Reperfusion Interventions after Acute Myocardial Infarction and Their Impact on One-year Mortality in Different Risk Groups of Patients: Decision Making Implications, Israel
Ms. Shoshanna Mischari	Safety and Risk Management through Event Debriefing Lead by Nurses: 2006–2008, Israel
13:30 – 14:30	Lunch Break

14:30 – 17:00	Closing Session
Chair: Prof. Avi Israeli & Prof. Stephen Shortell	Concluding Remarks
Dr. Bruce Rosen	What Lessons Can we Take Away?

Awards for Outstanding Posters

Panel: From Crises to Growth

Chair: Prof. Dov Chernichovsky	<i>Ben-Gurion University of the Negev, Israel</i>
MK Avishay Braverman	<i>Minister of Minority Affairs, Israel</i>
Dr. Ezekiel Emanuel	<i>National Institutes of Health, USA</i>
Prof. Alan Maynard	<i>University of York, UK</i>
Mr. Sever Plocker	<i>Yediot Aharonot, Israel</i>
Dr. Alexander Preker	<i>The World Bank, USA</i>



PARTICIPANTS

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BIOGRAPHIES

Invited Speakers



Nachman Ash

BG Nachman Ash is the IDF Surgeon General since September 2007

Professional Experience

- 1986 – 1989 – Combat Surgeon in an infantry battalion/ brigade.
- 1989 – 1991 – Combat Surgeon of a Special Forces unit.
- 1991 – 1993 – First stage of residency in internal medicine, "Sheba" Medical Center.
- 1993 – 1995 – Chief Surgeon in the "Judah and Samaria" infantry divisions.
- 1995 – 1997 – Second stage of residency in internal medicine, "Sheba" Medical Center.
- 1997 – 1999 – Head of Medicine branch in the Surgeon General HQ.
- 1999 – 2001 – Fellow at the "Brigham and Women" hospital, Medical Informatics, USA.
- 2001 – 2003 – Chief Surgeon of the Southern Command.
- 2003 – 2004 – Clinical work in Internal Medicine and Medical Informatics, "Sheba" Medical Center.
- 2004 – 2005 – Student at the National Defense College.
- 2005 – 2007 – Deputy Surgeon General, Medical Corps.
- 2007 – Present – Surgeon General.

Military Courses

- Officers' Course.
- Military Surgeons Training Course.
- Staff and Command College.
- Advanced studies for brigade commanders.
- National Defense College.

Education

- 1979 – 1986 – Medical School – Sackler Medical School at Tel Aviv University.
- 1991 – 1993 , 1995 – 1997 – Residency – Internal Medicine.
- 1999 – 2001 – M.S. in Medical Informatics – Harvard – MIT, Boston, USA.
- 2004 – 2005 – M.A. in Political Science – National Defense College and Haifa University.



Ran D Balicer

Director, Health Policy Research and Planning, Planning and Health Policy Division, Clalit Health Services

Ran D. Balicer serves as Director of the Health Policy Research and Planning at the Health Policy & Planning Division of Clalit Health Services, the healthcare provider and insurer of more than half of the Israeli population.

In his academic roles, Dr Balicer serves as Senior Lecturer at the Epidemiology Department of Israel's Ben-Gurion University, where he directs the MPH program' Infectious Diseases Track. His research (including two books, book chapters and over 70 peer-reviewed articles) has been focuses on public health decision making and on emergency preparedness.

As a special adviser to the ministry of health, Dr. Balicer serves as Editor of the Ministry Pandemic Influenza Preparedness Plan, and as a member of national steering committees for infectious diseases, vaccination policy and outbreak management. Dr Balicer also serves as secretary of the Israeli Public Health Physician Association.



Gabriel I. Barbash

Dr. Gabriel Barbash is a graduate of the Hadassah Medical School of the Hebrew University, Jerusalem, and is board certified in Internal Medicine, Medical Management, and Occupational Medicine.

In 1985 he received a master's degree in Public Health (MPH) specializing in Health Policy and Management from the School of Public Health of Harvard University.

Since 1993 he has served as Director General of the Tel-Aviv Sourasky Medical Center, a major teaching hospital affiliated to the Tel Aviv University.

1996 - 1999 he served as the Director General (Surgeon General) of the Ministry of Health,

1998 - 2000 has been the Chairman of the Israeli Transplant Center.

1989 - 2000 he was the National Coordinator and principal investigator in Israel of the several multi-center multi-national clinical studies.

In 2001 appointed Professor of Epidemiology and Preventive Medicine in the Sackler School of Medicine, Tel Aviv University.

Dr. Barbash has published more than 80 original papers mainly in the fields of diagnosis, risk assessment and treatment of acute myocardial infarction.



Elliot M. Berry

Dr Elliot Berry graduated from the University of Cambridge, UK with distinction in medicine.

He trained in Internal Medicine at the Royal Postgraduate Medical School, London and at the Hadassah Hospital, Jerusalem.

In 1980 he won a Fogarty Research fellowship at the Rockefeller University, New York working on fat cell metabolism.

His principal research interests are on the bio-psycho-social problems of weight regulation from obesity to anorexia nervosa. Laboratory work uses animal models to study the effects of weight loss - through diet, exercise or stress - on brain function. He coordinates the multi-disciplinary hospital team treating adult eating disorders. In the medical school he teaches medicine, nutrition and public health courses and has been voted twice by the students, as an outstanding lecturer.

Berry has published over 180 articles and chapters in books, and is on the editorial board of three journals on clinical nutrition.

He is full professor in both Internal Medicine and Nutrition. He has been a visiting scientist at the Dept. of Brain & Cognitive sciences at MIT, a distinguished visiting scholar at Christ's College, Cambridge in 1998, and a visiting Professor at Yale University medical school in 1999.

In 1986, Berry was the secretary for the 5th International conference on Obesity, and in 2001 he organized the first national eating disorders conference in Jerusalem.

Berry has chaired national committees for food supplementation and obesity and is an advisor to the Ministry of Health on nutrition.

Dr Berry is a consultant for the WHO, World Bank and the Serbian Government in Public Health.

He was the Director of the Braun School of Public Health & Community Medicine (2003-2006).

Currently Dr Berry is Director of the Dept. of Human Nutrition & Metabolism in the Hebrew University-Hadassah Faculty of Medicine and Head of the WHO Collaborating Center in Capacity Building in Public Health.



Joseph R. Betancourt

Director, The Disparities Solutions Center Senior Scientist, Institute for Health Policy Assistant Professor of Medicine, Harvard Medical School, Program Director of Multicultural Education, Multicultural Affairs Office. Dr.

Betancourt's primary interests include racial and ethnic disparities in health care, cross-cultural medicine, minority recruitment into the health professions, and minority health/health policy research. He has served as Principal Investigator on grants from the Center for Medicare and Medicaid Services, the Commonwealth Fund, the Robert Wood Johnson Foundation, and the California Endowment, in addition to being co-investigator on a project funded by the National Cancer Institute and the Health Resources and Services Administration.

Dr. Betancourt has served on several Institute of Medicine (IOM) Committees, including those that produced "Unequal Treatment: Confronting Racial/Ethnic Disparities in Health Care", "Guidance for a National Health Care Disparities Report", and "In the Nation's Compelling Interest: Ensuring Diversity in the Health Care Workforce." and served on the IOM Roundtable on Health Literacy. He was a member of the Massachusetts State Committee on Racial/Ethnic Disparities and served on the Boston Public Health Commission Committee on Racial/Ethnic Disparities. Dr. Betancourt currently co-chairs the Massachusetts General Hospital Committee on Racial/Ethnic Disparities and the Harvard Medical School Cross-Cultural Care Committee.

Dr. Betancourt has authored peer-reviewed articles on topics including racial/ethnic disparities in health and health care; public health; hypertension, diabetes, and cerebrovascular disease in minority communities; cross-cultural care and education; clinical decision making; ethics; workforce diversity; and the impact of language barriers on health care. Dr. Betancourt also teaches cross-cultural medicine, health disparities, and health policy to medical students and residents at MGH-Harvard Medical School and to students at the Harvard School of Public Health. Dr. Betancourt received his Bachelor of Science from the University of Maryland, his medical degree from the UMDNJ-New Jersey Medical School, and completed his residency in Internal Medicine at the New York Hospital-Cornell Medical Center. Following residency, he completed The Commonwealth Fund-Harvard University Fellowship in Minority Health Policy, and received his Masters in Public Health from the Harvard School of Public Health.



Stephen Birch

Professor, Centre for Health Economics and Policy Analysis, Department of Clinical Epidemiology and Biostatistics,

Associate Member, School of Geography and Earth Sciences McMaster University, Hamilton, Ontario, Canada.

Senior Editor (Health Economics), Social Science and Medicine Website: www.elsevier.com/locate/socscimed

Professor, Health Economics Research at Manchester (HERMAN), School of Community Based Medicine, University of Manchester, Manchester, UK.

Adjunct Professor, Centre for Health Economics Research and Evaluation, University of Technology, Sydney, Australia.

Honorary Professor, Health Economics Unit, University of Cape Town, South Africa.



Gene Bishop

Dr. Gene Bishop is a Clinical Assistant Professor of Medicine at the University of Pennsylvania School of Medicine, and a physician consultant to community organizations. In 2005, she left 30 years of clinical practice in primary care internal medicine to pursue her interests in advocacy and health policy. She currently supervises residents in an outpatient clinic at Pennsylvania Hospital in Philadelphia.

In 2001, she was awarded a Soros Foundation Medicine as a Profession Fellowship to work with the Pennsylvania Health Law Project (PHLP) on pharmaceutical access in Medicaid managed care. She currently works as a physician consultant with PHLP, a legal services organization that advocates on an individual and policy level to improve access and quality in the state Medicaid program. Her work there is focused on pharmaceutical policy, and access to care for the uninsured.

She has served as a physician consultant to other community organizations, preparing a major report for the Maternity Care Coalition of Philadelphia on low-income women and obstetrical care in Philadelphia. This work follows long-standing interests in women's health. Prior to attending medical school, she helped to found a free clinic for women, and was a contributor to an early edition of *Our Bodies Our Selves*.

She is a member of Physicians for a National Health Program, and lectures widely to professional and lay audiences on the need for national health insurance in the United States.

She received her undergraduate degree from Harvard University and her medical degree from the State University of New York at Stony Brook.

She did her internal medicine training at Cambridge Hospital in Cambridge, Massachusetts.



Lawrence d. Brown

Lawrence D. Brown is Professor of Health Policy and Management in the Mailman School of Public Health at Columbia University. A political scientist, he got a Ph.D. in government at Harvard University in 1973.

After positions at Harvard, the Brookings Institution, and the University of Michigan, in 1988 he came to Columbia, where he chaired the Department of Health Policy and Management for ten years and the university's Public Policy Consortium for three years.

He is the author of *Politics and Health Care Organizations: HMOs as Federal Policy* (Brookings Institution, 1983) and of articles on the political dimensions of community cost containment, expansion of coverage for the uninsured, national health reform, the role of analysis in the formation of health policy, and cross-national health policy.

Mr. Brown edited the *Journal of Health Politics, Policy and Law* for five years, has served on several national advisory committees for the Robert Wood Johnson Foundation, has an RWJ Investigators in Health Policy award, and is a member of the Institute of Medicine.



Eric Brunner

Eric Brunner is a Reader in the UCL Department of Epidemiology & Public Health, UK.

He is an Investigator on the Whitehall II study of health inequalities.

Eric is co-director of the UCL Masters 'Health and society: social epidemiology'.

He is a partner in EURO-PREVOB, a 6th Framework Programme coordination action on the prevention of obesity in Europe, member of the European Diabetes Epidemiology Group and a Cochrane Heart Group co-editor.



Asaf Caspi

Graduated Sackler School of medicine, Tel-Aviv University.
Head of Psychiatric outpatient services, Sheba medical center.

Author and co-author of papers on schizophrenia,
psychiatric epidemiology and eating disorders.



Eytan Hay-Am

General Manager, Ministry of Health, State of Israel.

Previous professional experience:

2007– 2009	Head of Tel-Aviv Jaffa district, Clalit HMO
2007	Head of medical negligence division, Madanes insurance agency
2001–2007	General Manager of Soroka Medical Center, Beer-Sheva
1997–2001	Head of Center district, Clalit HMO
1995–1997	Medical manager, Center district, Clalit HMO



Dov Chernichovsky

Dov Chernichovsky (Ph.D. Economics) is a professor of health economics and policy in the Department of Health Systems Management at Ben-Gurion University of the Negev, Israel.

Dov is the health system adviser to the Israeli Parliament, heads the Health Team at the Taub Center for the Study of Social Policy in Israel, is a Research Associate with the National Bureau of Economic Research (NBER) in the USA, and consults for the World Bank.

He serves on the board of the Israeli Cancer Society, the Baxter Prize advisory board, and on the editorial boards of several journals.

Dov turned into macro-economic and policy work in health systems that has led to a classic formulation of health system development becoming known as the Emerging Paradigm, and innovative work in the application of Fuzzy Logic to the study of financing of health systems, and formulating a non-conventional view of the effect of aging on health system costs.

Dov was a member of the Israeli State "Netahnanyahu" Commission of Inquiry into the Israeli Health Care System between 1998–1990. This commission outlined the reform proposal that led to the national health insurance legislation that was enacted in Israel in 1995. More recently, 2000–2002, he served on another similar commission that set further reform proposals to the Israeli system. On behalf of the World Bank, he played key roles in health system reform formulations in Romania, Russia, and more recently in Mexico. In Russia he helped to formulate the health insurance legislation underlying the current Russian health system.

He has published extensively in the areas of the economics of population and family planning, nutrition, and health system finance and reform, covering situations in Botswana, Brazil, India, Indonesia, Israel, Mexico, Russia, Tanzania and the USA.



David Chinitz

David Chinitz is Associate Professor of Health Policy and Management at the School of Public Health of Hebrew University-Hadassah.

His PhD is in Public Policy Analysis from the University of Pennsylvania. He served as a Senior Staff Person for the State Judicial Commission of Inquiry into the Israeli Health System (the Netanyahu Commission) and Senior Researcher at the JDC/Brookdale Institute Health Policy Unit.

He is well known and active in both the research and practitioner communities in the US, Europe and Israel dealing with health policy and management. He was chair of the Scientific Advisory Board of the European Health Management Association from 2001-2006, and is active in a number of other international associations and currently serves on the advisory board of the Journal of Health Economics, Policy and Law, and serves as recurrent temporary consultant to the World Health Organization, European Region. He has edited four books, and authored over seventy articles, chapters and research reports on health policy and management. He has particular expertise on the interrelated roles of science and politics in addressing issues such as environmental policy.



Rosemarie Day

Deputy Director & COO, Commonwealth Health Insurance Connector Authority.

Rosemarie Day joined the Connector as its second hire in July of 2006.

As Deputy Director & COO, she has developed the operational strategy to implement many of the key pieces of Massachusetts' landmark health care reform legislation.

Prior to joining the Connector, Day served as Chief of Staff to the Dean of the John F. Kennedy School of Government at Harvard.

Day brings over 12 years of leadership experience in Massachusetts state government to the Connector.

She served as the Chief Operating Officer for the MassHealth program which provides Medicaid coverage to 1 million people in Massachusetts.

Prior to that, she ran the state's Child Support Enforcement Program, served as an Assistant Secretary of Administration and Finance, and was the Budget Director for the Department of Transitional Assistance.

Rosemarie Day graduated from Harvard's Kennedy School in 1992 with a Master in Public Policy.

She holds an BA in Public Policy from Stanford University.



Ronald Donato

Dr. Ronald Donato is a lecturer in economics in the School of Commerce at the University of South Australia and has a PhD in health economics from Monash University.

His research is primarily in the area of the economics of health reform, with a particular focus on managed competition. Recent research has investigated the application of risk-adjustment methods in the Australian context, the political economy of reform and the economics of contracting in health care where he has published in a number of international journals and research volumes. His current research is on primary care and its implications for longer-term reform in Australia.



Ezekiel J. Emanuel

Ezekiel J. Emanuel is Head of the Department of Bioethics at The Clinical Center of the National Institutes of Health and a breast oncologist. He is a special advisor for health policy to the director of the White House Office of Management and Budget.

After completing Amherst College, he received his M.Sc. from Oxford University in Biochemistry, his M.D. from Harvard Medical School, and his Ph.D. in political philosophy from Harvard University. In 1987-88, he was a fellow in the Program in Ethics and the Professions at the Kennedy School of Government at Harvard.

After completing his internship and residency in internal medicine at Boston's Beth Israel Hospital and his oncology fellowship at the Dana-Farber Cancer Institute, he joined the faculty at the Dana-Farber Cancer Institute. Dr. Emanuel was an Associate Professor at Harvard Medical School before joining the NIH.

Dr. Emanuel developed The Medical Directive, a comprehensive living will that has been endorsed by many publications. He has published widely and has written extensively for the popular press on the ethics of clinical research, health care reform, international research ethics, end of life care issues, euthanasia, the ethics of managed care, and the physician-patient relationship in many medical journals. His book on medical ethics, *The Ends of Human Life*, has been widely praised and received honorable mention for the Rosenhaupt Memorial Book Award by the Woodrow Wilson Foundation. He has also published *No Margin, No Mission: Health-Care Organizations and the Quest for Ethical Excellence* and co-edited *Ethical and Regulatory Aspects of Clinical Research: Readings and Commentary*.

Dr. Emanuel served on President Clinton's Health Care Task Force, the National Bioethics Advisory Commission (NBAC), and on the bioethics panel of the Pan-American Healthcare Organization.

Dr. Emanuel has been a visiting professor at the University of Pittsburgh School of Medicine, UCLA, the Brin Professor at Johns Hopkins Medical School, and the Kovitz Professor at Stanford Medical School.



Leon Epstein

Has been in Israel since 1958. Began his academic career at the School of Medicine at the Hebrew University in Jerusalem. Since then he taught and performed research in medical and public health schools elsewhere in Israel, and in London, Washington, South Africa, and in the newly developing Schools of Public Health in Eastern Europe, Russia and Central Asia.

He held an academic appointment at the Technion, Israel Institute of Technology where he established the Department of Family and Community Health in the School of Medicine.

Has been a recipient of research grants, amongst others, from the World Health Organization, the US National Institutes of Health and the British Council.

He has published extensively (over 160 papers) over the years in leading international scientific journals, presented in many international conferences and contributed significantly to the areas of health and health services of his interest

His major research interests are in Epidemiology of Chronic Disease, evaluation of health services and Quality Assurance, Primary Health Care, Epidemiological methodology, and Health Inequity and Inequality in Israel. This has in recent years become his major focus of interest both in research and in the development of a National Program for the reduction of Health Inequality.

Member of Council of International Epidemiological Association, 1987-1990; representing Eastern Mediterranean Region.

He was the Director of the Rambam University Hospital in Haifa from 1979-1982 and from 1990-2003 a member of the Central Administration of the Hadassah Medical Organisation in Jerusalem.

In 1990 was appointed Professor of Social Medicine at the Hebrew University- Hadassah Medical School in Jerusalem and from 1999 to 2003 was the Director of the School of Public Health in Jerusalem.

Since 2003 he serves as Dean of Students at the Israel College.



Josep Figueras

Josep Figueras, 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 thirty countries within the European region and beyond. He is 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.

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 and wealth* (2009), *Impact of EU mobility* (2009), *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).



Alan Michael Garber

Professor of Medicine, Professor of Economics, by courtesy, and Professor of Health Research and Policy, by courtesy, Stanford University.

- 1999– Professor of Economics, by courtesy, in the Graduate School of Business, Stanford University
- 2005– Senior Fellow, by courtesy, Stanford Institute for Economic Policy Research.

Hospital Appointments:

- 1986– Staff Physician, Department of Veterans Affairs Palo Alto Health Care System (formerly Palo Alto VA Medical Center)
- 1991–94 Chair, Pharmacy and Therapeutics Committee, Palo Alto VA Medical Center

Other Professional Positions:

- 1979–82 Research Analyst, National Bureau of Economic Research.
- 1979–80 Consultant, Division of Health Promotion and Disease Prevention, Institute of Medicine of the National Academy of Sciences. Professional staff for the Committee for the Planning Study for Ongoing Study of the Costs of Environment-Related Health Effects
- 1983–86 Faculty Research Fellow, National Bureau of Economic Research
- 1986– Research Associate, National Bureau of Economic Research
- 1987– Acting Director (1987–88), Co-director (1988–90), and Director (1990 to date), Health Care Research and Policy Fellowship, Stanford University
- 1987–96 Director, Palo Alto VA Medical Center component, UCSF/Stanford Robert Wood Johnson Clinical Scholars Program.
- 1988–89 Contractor, Office of Technology Assessment, U.S. Congress
- 1988– Associate Director, Center for Health Care Evaluation: VA HSR&D Field Program, Department of Veterans Affairs
- 1990– Director, Health Care Program, National Bureau of Economic Research
- 1991–95 Deputy Director, Comparative Health Care Policy Research Project, Asia/Pacific Research Center, Stanford University.



Dan Greenberg

Dr. Greenberg is a Senior Lecturer in the Department of Health Systems Management at the Faculty of Health Sciences and the Guilford-Glaser School of Business and Management at Ben-Gurion University of the Negev in Israel, where he teaches on comparative healthcare systems, and health technology assessment.

Previously, he completed a 3-year post-doctoral research fellowship at the Harvard Clinical Research Institute & Cardiovascular Division, Beth Israel Deaconess Medical Center and Harvard Medical School, and was a Visiting Scientist at the Department of Health Policy and Management at the Harvard School of Public Health.

During 2008–2009 Dr. Greenberg was a Visiting Scholar at the Center for the Evaluation of Value & Risk in Health at Tufts Medical Center in Boston.

His research focuses on economic evaluation of healthcare technologies, health technology policy, medical decision-making and outcomes research.

Dr. Greenberg also works closely with pharmaceutical and medical device companies, consulting on technology assessment, outcomes research, and health economics issues.

He is a co-founder and the current President of the Israeli Society for Pharmacoconomics and Outcomes Research (ISPOR-Israel).

Dr. Greenberg received his Masters and doctorate degrees from Ben-Gurion University of the Negev.



Itamar Grotto

Itamar Grotto is a public health physician with a PhD in Health System management.

Dr. Grotto is currently the director of the Public Health Services in the Israeli Ministry of Health.

He is also affiliated with the Faculty of health Sciences, Ben-Gurion University, Beer-Sheva, Israel. In this faculty he is a lecturer and researcher at the Epidemiology Department. He is the deputy director and coordinator of the Environmental Health Track in the University's MPH program.

His main research activities are in the fields of infectious diseases epidemiology, as well as public and environmental health policy development. Dr. Grotto has contributed to more than 80 publications in these fields.



Nurit Guttman

Nurit Guttman is on the faculty of the Department of Communication and Head of the Herzog Institute of Media, Politics and Society at the Faculty of Social Sciences, Tel Aviv University, Israel. She was also a faculty member of the Robert Wood Johnson Medical School, in New Jersey and worked as a Health Education Coordinator at Clalit Healthcare Services.

Her research focuses on issues in health communication, employing participatory approaches to social marketing, disseminating rights information to the public, involving citizens in policy issues, and using entertainment television to advance social issues ('edutainment').

She is the author of *Public Health Communication Interventions: Values and Ethical Dilemmas*.



Regina E. Herzlinger

Nancy R. McPherson, Nancy R. McPherson Professor of Business Administration, received her Bachelor's Degree from MIT and her Doctorate from the Harvard Business School.

Regina E. Herzlinger was the first woman to be tenured and chaired at Harvard Business School and the first to serve on a number of corporate boards. She is widely recognized for her innovative research in health care, including her early predictions of the unraveling of managed care and the rise of consumer-driven health care and health care focused factories, two terms that she coined.

All her health care books have been best sellers in their categories. Her newest book, *Who Killed HealthCare?* (NY: McGraw-Hill, 2007), was selected by the U.S. Chamber of Commerce as one of the ten books that changed the debate in 2008. She has won the Consumers' for Health Care Choices Pioneer in Health Economics award, the American College of Healthcare Executives' Hamilton Book of the Year award twice, the Healthcare Financial Management Association's Board of Directors award, and Management College of Physician Executive. Modern Healthcare's readers regularly selected her among the "100 Most Powerful People in Healthcare" and Managed Healthcare named her one of health care's top ten thinkers. In recognition of her work in nonprofit accounting and control, she was named the first Chartered Institute of Management Accountants Visiting Professor at the University of Edinburgh. In addition, she has delivered many keynote addresses at annual meetings of large health care and business groups and been selected as one of the outstanding instructors of the Harvard Business School MBA Program.

Professor Herzlinger has served on the Scientific Advisory Group to the U.S. Secretary of the Air Force and as a board member of many private and publicly-traded firms, mostly in the consumer-driven health care space, often as chair of the Governance and Audit subcommittees.



Abraham (Avi) Israeli

Professor Abraham (Avi) Israeli has returned to his role as 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 is the Dr. Julian Rozan Professor of Family Medicine and Health Promotion Chair at the Hebrew University-Hadassah Medical School, Jerusalem (since 1996) and teaches there regularly.

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

Professor Israeli received his medical degree and his master 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. 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.



Giora Kaplan

Giora Kaplan is a senior researcher at The Gertner Institute for Epidemiology and Health Policy Research where he heads the area of Psychosocial Aspects of Health. He was born in Argentina and has lived in Israel since 1966.

He studied Sociology at the Hebrew University in Jerusalem and Tel Aviv University, and holds a master's degree in Management of Human Services from The Heller School for Advanced Studies in Social Welfare at Brandeis University. In addition, he has completed courses in statistics and epidemiology in both Israel and the U.S.A.

He served for five years as a sociologist in the Israeli Air Force, and since 1975 has been a researcher in the health system.

Giora's primary research interests include coping with illness, cultural aspects of health, social consequences of health policy, and consultation with the public regarding issues of health ethics and policy.

Giora brings together his extensive experience in conducting population-based surveys with his aspiration to reflect the point of view of health care consumers and the perceptions and expectations of different population groups.

Yeheskel Levy

- 1980 - M.D – Hebrew University and Hadassah Medical School, Jerusalem
- 1994 - Board certified in general surgery
- 1994 - Chief surgeon, Israeli humanitarian delegation and field hospital, Rwanda
- 1999 - Commander, field hospital and the medical mission, Kosovo
Coordinator of the humanitarian delegations of the Israeli Medical Corps to Kenya (1998, 2006), Turkey (1999, 2000).
- 2001- Student at the National Defense University
- 2002 - Masters in Political Sciences, Haifa University
- 2003- 2007 – Surgeon General, Israel Defense Forces.
Member, National Supreme Health Authority
Head of the editorial board, Journal of Israel Military Medicine
Chief Commander, R&D program, Medical Corps, IDF
- December 2007 and since – Head, Medical Administration, Ministry of Health.



Maureen Lewis

Maureen Lewis is Advisor to the World Bank's Chief Economist.

She was formerly the Chief Economist Human Development and Advisor to the Vice President for Human Development at the World Bank.

Much of her research, publications and policy work examine governance and efficiency in the social sectors, particularly health.

She was formerly a Senior Fellow at the Center for Global Development for two years and prior to that managed a unit in the World Bank dedicated to economic policy and human development research and programs in Eastern Europe and Central Asia.

Before joining the World Bank, she established and led the international health policy agenda at The Urban Institute.

She has published dozens of articles in peer-reviewed journals on a range of topics in the social sectors.

She earned her Ph.D. at Johns Hopkins University.



Harold S. Luft

Harold S. Luft, PhD, is Director of the Palo Alto Medical Foundation Research Institute and Esselstyn Professor Emeritus of Health Policy and Health Economics and former Director of the Philip R. Lee Institute for Health Policy Studies at UCSF.

He received his degrees in economics from Harvard University.

His research has covered HMOs, hospital competition, volume, quality and outcomes of hospital care, risk assessment and risk adjustment, and health care reform.

An elected member of the Institute of Medicine, he served on its Council, that of the Agency for Health Care Policy and Research, and the Board of AcademyHealth.

He was co-editor of *Health Services Research*.

Author or editor of five books and over 200 articles in scientific journals, his *Total Cure: The Antidote to the Health Care Crisis*, was published by Harvard University Press in October.



Yaffa Machnes

Yaffa Machnes is affiliated with Bar-Ilan University in Israel where she serves as chair of the Graduate School of Business Administration. She also served as external director of the *Yosma* pension fund and the *Emda* investment fund.

Machnes studied for all her degrees at the Hebrew University of Jerusalem and her main field of research is in the area of risk and insurance. Her studies are theoretical followed by empirical investigations.

She has published dozens of papers in several journals among them: Health Policy, European Journal of Health Economics, International Economic Review, Review of Economic Studies, Journal of Economic Behavior & Organization, Economics Letters, Empirical Economics, Metroeconomica, Applied Economics and Geneva Papers on Risk and Insurance Theory.



Alan Maynard

Alan Maynard is Professor of Health Economics and Director of the York Health Policy Group in the Department of Health Sciences, University of York.

He is also an Honorary Professor of Health Economics at the University of Aberdeen, Visiting Professor at the London School of Economics and Adjunct Professor, Centre for Health Economics Research and Evaluation, University of Technology, Sydney, Australia.

He was Founding Director of the Centre for Health Economics at the University of York (1983 - 95) and Founding Editor of *Health Economics*, a specialist journal.

He has worked as a consultant for the World Health Organization, the World Bank, and the UK Government's Department for International Development in countries such as China, Cyprus, Chile, Brazil and South Africa.

He has published widely in books, specialist journals and the media.

He is Chair of the York NHS Health Services Trust and has been involved in NHS management since 1983.



Martin McKee

Qualified in medicine in Belfast, Northern Ireland, with subsequent training in internal medicine and public health. Professor of European Public Health at the London School of Hygiene and Tropical Medicine where he co-directs of the European Centre on Health of Societies in Transition (ECOHOST), a WHO Collaborating Centre.

He is also research director of the European Observatory on Health Systems and Policies.

A Fellow of the Royal Colleges of Physicians of the UK and Ireland and the UK Faculty of Public Health.

His contributions to European health policy have been recognized by, among others, election to the UK Academy of Medical Sciences, the Romanian Academy of Medical Sciences, and the US Institute of Medicine, by the award of honorary doctorates from Hungary and The Netherlands, visiting professorships at the Universities of Zagreb and Belgrade, the 2003 Andrija Stampar medal for contributions to European public health and in 2005 was made a Commander of the Order of the British Empire (CBE) by HM Queen Elizabeth II.



Nata Menabde

Nationality: Georgian. Born in Latvia, Riga, 1960

Dr Nata Menabde is Deputy Regional Director at the WHO Regional Office for Europe.

She has a solid academic background in public health (M.Sc. in pharmacy, Ph.D. in pharmacology) and 25 years of experience as a health professional, during which she has built an extensive track record in public health and health systems at country and international levels. She has studied health management and leadership in the United States, health care economics in the United Kingdom and public health in Sweden.

Since she took up her current position in 2006, Dr Menabde has vigorously promoted the primary-care-based health systems agenda, culminating in the adoption of the Tallinn Charter in June 2008.

Her extensive public health agenda track record includes achievements in the areas of tuberculosis and HIV/AIDS, non communicable diseases and risk factors such as tobacco and obesity, climate change and other environmental concerns, the International Health Regulations and other aspects of health security, intellectual property rights and the social determinants of health.

She has also strengthened partnerships with key stakeholders such as the Council of Europe, the European Union, the European Commission, the United Nations Children's Fund (UNICEF), The World Bank, the Organization for Economic Co-operation and Development, the Global Fund to Fight AIDS, Tuberculosis and Malaria and the European Investment Bank to increase the effectiveness of WHO's work.



Shlomo Mor-Yosef

Shlomo Mor-Yosef is the Director General of the Hadassah Medical Organization since 2001.

He graduated from the Hebrew University-Hadassah Medical School in 1980, completing his obstetrics and gynecology specialization at the Hadassah University Medical Center at Ein Kerem in 1987.

In 1989 Mor-Yosef completed a subspecialty in Gynecological Oncology in England.

In 1994 Mor-Yosef completed studies at Harvard University where he received his Master's Degree in Public Administration from the John F. Kennedy School of Government.

Prior to his current appointment as Director General, Mor-Yosef served as CEO of the Soroka Medical Center in Beer Sheva.

Mor-Yosef has directed many medical education programs and was a fellow at the Harvard University Institute of Economics and Social Policy of the Middle East.

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

Among his present responsibilities, Mor-Yosef is Chairman of Hadasit, the Technology Transfer Company of Hadassah Medical Organization (HMO) and serves as Chairman of the Board of the Israel National Institute for Health Policy and Health Services Research.



Rosalind Raine

Rosalind Raine is Professor of Health Care Evaluation at University College London (UCL), UK and Lead of the Health Services Research (HSR) Theme at the National Institute for Health Research (NIHR) UCLH/UCL Comprehensive Biomedical Research Centre. She also leads the Health Care Evaluation Group at UCL. She graduated in medicine (having taken an intercalated BSc in Psychology) from UCL and undertook her Masters in Public Health and a PhD in HSR at the London School of Hygiene and Tropical Medicine. She trained in public health medicine and is a Fellow of the Faculty of Public Health.

Rosalind is an international expert on health care inequalities, including quantifying and explaining variations in health care use; assessing the relationship between variations in the use of services and health outcomes, and investigating optimal methods for assessing deprivation at area level. She has examined clinical decision making by groups of clinicians (including NICE Guideline Development Groups) and undertaken evaluations of public health and health care interventions. She is a scientific adviser to the World Health Organisation (Department of Reproductive Health and Research) and regularly advises the Department of Health and national policy Think Tanks on health care inequalities. She is Chair of the UK Clinical Research Network National Specialty Group (HSR), Chair of the Heads of Academic Departments of Public Health and also sits on MRC and NIHR research panels.



Jeff Richardson

Jeff Richardson is a Professor in the Faculty of Business and Economics at Monash University and Foundation Director of its Centre for Health Economics.

He is an Adjunct Associate of Stanford University.

His research interests have included comparisons of international health care systems and health system reform, the econometric modelling of hospital and medical supply, demand and medical fees, cost-effectiveness and cost-utility analysis, the effects of privatization and regulation in the health sector, health care technology and its diffusion, and the modelling of quality of life with multi-attribute utility instruments.

He presently holds a 5 year NHMRC Professorial Fellowship to continue his research into measurement of the quality of life, social objectives and the allocation of health care resources, a topic he has worked on with colleagues in Norway, Spain, USA and UK.

Professor Richardson has worked with the World Health Organization, the Australian Development Assistance Bureau and the Rockefeller Foundation and chaired the recent review of the Tasmanian Hospital System.

He has published over 150 refereed articles and chapters and over 180 other notes, reviews, research reports and working papers.



Siegal Sadetzki

Siegal Sadetzki graduated from the Technion Medical School in Israel, where she received her B.Sc and MD degrees. In 1994 she completed a Masters degree in Public Health at the Hebrew University School of Public Health.

Dr. Sadetzki is board certified in Epidemiology and Public Health. Academically, she is a senior lecturer in the Department of Epidemiology and Preventive Medicine, Sackler Faculty of Medicine, Tel Aviv University. Since 2000, she has been the Director of the Cancer and Radiation Epidemiology Unit at the Gertner Institute and since 2002, Head of the Clinical Epidemiology Department at the Sheba Medical Center in Israel. Her main fields of research are cancer epidemiology (specifically brain), genetic epidemiology and ionizing and non-ionizing radiation effects. Dr. Sadetzki is involved in several national and international epidemiological studies. She led the Israeli part of the international "INTERPHONE" Study that aimed to assess the possible association between mobile phone use and cancer risk. Currently she serves as the Israeli principal investigator of a new international study that aims to investigate the possible association between cell phones and brain tumors in children ("MOBIKIDS"). She also serves as the principal investigator of the "Tinea Capitis" studies in Israel. These studies focus on late radiation effects of ionizing radiation including the issue of familial and genetic susceptibility to cancer development following exposure to radiation. The results of these studies are implemented in public health regimens through legislation and guidelines.

Dr. Sadetzki is involved in several national and international committees that relate to health policy and decision making in her fields of expertise, among which are the Israel National Oncology Advisory Board, the Israel National Council for Imaging and the Brain Tumor Consortium (BTEC - organized by the NCI).



Richard B. Saltman

Ph.D., Stanford University, 1980; M.A., Stanford University, 1971; B.A., Dartmouth College, 1969.

A Professor of Health Policy and Management at the Emory University School of Public Health in Atlanta, Georgia.

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. He 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.



Richard Scheffler

Richard M. Scheffler is Distinguished Professor of Health Economics and Public Policy at the University of California, Berkeley and holds the Chair in Healthcare Markets & Consumer Welfare endowed by the Office of the Attorney General for the State of California.

He is director of The Global Center for Health Economics and Policy Research as well as director of The Nicholas C. Petris Center on Health Care Markets and Consumer Welfare.

He has been a Rockefeller and a Fulbright Scholar, and served as President of the International Health Economists Association 4th Congress in 2004. Professor Scheffler has published over 150 papers and edited and written six books, including his most recent book, *Is There a Doctor in the House? Market Signals and Tomorrow's Supply of Doctors*, published by Stanford University Press, September 2008.

Along with Stephen Hinshaw, Chair of the psychology department at UC Berkeley, he has recently received an Investigator Award in Health Policy Research from the Robert Wood Johnson Foundation to write a book, ADHD Medication in America: Society, Schools, and Public Policy.



Harald Schmidt

Harald Schmidt is a Commonwealth Fund Harkness Fellow in Health Care Policy and Practice at the Harvard School of Public Health, and a Research Associate at LSE Health, London School of Economics and Political Science.

Since 2002, he has been Assistant Director of the London-based Nuffield Council on Bioethics, where his work has focused on the themes of quality and efficiency of health care, equity, fairness and access to care in the fields of public health, healthcare-related research in developing countries, pharmacogenetics and personalized healthcare.

His academic research interests are centred around personal responsibility for health, comparative health policy, and public health ethics, and he has published in journals including the *British Medical Journal*, *the Journal of Medical Ethics*, and *Health Economics, Policy and Law*.

He has experience working closely with policy makers in the Department of Health in Germany and the UK, as well as at the EU and UN level.



Leonie Segal

Professor Segal took up the position of Foundation Research Chair in Health Economics and Social Policy at the University of South Australia in 2007, after eight years as Deputy-Director at Monash University's Centre for Health Economics.

She has a Masters of Economics and Ph.D. in Health Economics.

Professor Segal has 5 current Australia Research Council or National Health & Medical Research Council (NHMRC) grants plus several contracts with State/Federal governments worth more than AU\$10million.

Her primary research areas are health system reform with a focus on funding, quality systems and health workforce and economic evaluation and priority setting, with a particular focus on interventions to prevent child maltreatment. She has 95+ publications in the last 12 years and is on several policy committees including the NH&MRC Health Care Committee, the Minister for Health's Preventative Health Task Force and the Australian Medical Council, Strategic Policy Advisory Committee.



Mordechai Shani

The Israel Prize committee for 2009 said that it was awarding Shani "for a lifetime of exemplary public service, and for being the guiding light and father figure for medicine and the health system of Israel."

"Shani was central to the establishment and development of the Sheba Medical Center; the reorganization of Israel's psychiatric services; the founding of the school for health policy at Tel Aviv University; the drafting and passage of Israel's national health insurance policy and legislation; and the founding of many medical research institutes and scientific foundations (that have produced hundreds of scientific studies); and the mentoring of generations of doctors at Sheba."

"In all these capacities, and through his tenures as director general of the Israel Ministry of Health, Shani had an enormous impact on the health and welfare sectors in Israel, and specifically on the care for Israel's weakest strata and most vulnerable populations, in Israel's peripheral areas and all across the country. He is an enormously impressive and accomplished man by any international standard; the natural and undisputed leader of Israel's health system. Nobody has had a greater influence than him," concluded the prize committee in its formal award citation.

Professor Mordechai Shani, was director general of the Sheba Medical Center at Tel Hashomer for 33 years; served two terms as director general of the Ministry of Health; was the architect of the 1994 reform of Israel's health system; was a key player in the creation of the landmark Patient's Bill of Rights; was co-founder of the Alut Israel Association for Autism; founded Israel's "National Institutes of Health", known as the Gertner Institute for Health Policy and Epidemiology, at Sheba; was chairman of the all-powerful Pharmaceuticals Approval Council in the Ministry of Health; and founded the Ziering National Center for Newborn Screening. Today, he heads the Sheba/Tel Hashomer Research Foundation and the TAU School for Health Policy, among many other activities. The Israel Prize committee's formal review of Shani's career accomplishments (in Hebrew) runs five pages long!



Amir Shmueli

Amir Shmueli is a professor of health economics with the Hebrew University-Hadassah School of Public Health in Jerusalem, Israel.

He has been affiliated with several international research networks (RAN, GHP, TECH).

He served on several public committees which have shaped the reformed Israeli health system.

Amir's main research interests include capitation contracts and risk-adjustment, solidarity in health care, equity and inequality in health, and economic aspects of complementary and alternative medicine.



Stephen M. Shortell

Stephen M. Shortell, Ph.D., M.P.H. is the Blue Cross of California Distinguished Professor of Health Policy and Management and Professor of Organization Behavior at the School of Public Health and Haas School of Business at the University of California-Berkeley. He is also the Dean of the School of Public Health at Berkeley. Dr. Shortell also holds appointments in the Department of Sociology at UC-Berkeley and at the Institute for Health Policy Research, UC-San Francisco.

Dr. Shortell received his undergraduate degree from the University of Notre Dame, his masters degree in public health from UCLA, and his Ph.D. in the behavioral sciences from the University of Chicago.

A leading health care scholar, Dr. Shortell has done extensive research identifying the organizational and managerial correlates of quality of care and of high performing health care organizations. Dr. Shortell has been the recipient of many awards including the distinguished Baxter-Allegiance Prize for his contributions to health services research, the Gold Medal Award from the American College of Healthcare Executives for his contributions to the health care field, and the Distinguished Investigator Award from the Association for Health Services Research. He and his colleagues have also received the George R. Terry Book of the Year Award from the Academy of Management, the James R. Hamilton Book of the Year Award from the American College of Healthcare Executives, and several article of the year awards from the American College of Healthcare Executives and the National Institute for Health Care Management. His most recent book (with colleagues) is entitled **Remaking Health Care in America: The Evolution of Organized Delivery Systems**. During 2006-07 he was a Fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford.

He is an elected member of the Institute of Medicine of the National Academy of Sciences and is past editor of **Health Services Research**. He serves on many boards and advisory groups.

He is currently conducting research on the evaluation of quality improvement initiatives and on the implementation of evidence-based medicine practices in physician organizations.



Gil Siegal

Gil Siegal, MD, LLB SJD is a surgeon and a health law professor: Director, Center for Health Law and Bioethics at the Kiryat Ono College, Israel; Professor, University of Virginia School of Law; Senior Researcher, Gertner Institute for Epidemiology and Health Policy Research.

He is a Member of the National Committee for Medical Research in Humans; Member, the National Advisory Committee on Genetic Information; and Member, National Brain Death Committee.

He received his medical and law degrees from Tel Aviv University, Israel, his SJD (PhD in Law) from the University of Virginia, and completed an ENT residency at Bnai Zion Medical Center, Haifa, Israel. In 2003, he was a fellow in health policy and ethics at the Law School and the Institute for Practical Ethics, University of Virginia, USA, and during 2004 he was a Research Fellow at Harvard University Schools of Medicine and Public Health.

Elisheva Simchen

Education and Degrees

1960–1963	Medical School, the Hebrew University of Jerusalem
1963–1967	Continued medical training at Queen Elizabeth University Hospital, University of Birmingham, England
1967–	M.B., Ch.B., University of Birmingham, England
1967–1968	Internship at the Hadassah Hospital, Jerusalem.
1968–1970	Career interruption due to child bearing. Working as a physician in the emergency service of Magen David Adom.
1970–1971	Training in Public Health. Joined the first International M.P.H. class at the Hebrew University, Jerusalem.
1971–1973	Training in Epidemiology at the School of Public Health, University of Washington, Seattle, Washington.
1973–	M.P.H., The Hebrew University Medical School, Jerusalem.
1992–	The Hadassah – Hebrew University Appointment Associate Professor in Public Health, Medical School, The Hebrew University of Jerusalem.
1993–1996	Director, the Braun School of Public Health, Hebrew University and Hadassah, Jerusalem .
2003–	1 st of September. Retired from Hadassah hospital and the Hebrew University of Jerusalem.

Major National Assignments

2003–	Appointed by the Director General of the Ministry of Health to a national committee on “Setting Long Term Health Goals for Israel”.
2008–	Assigned by the Director General of the Ministry of Health to lead a study on the quality of care in general and orthopedic surgery in all 21 hospitals with intensive care units in the country. The study is held over the course of 2009–2010 and is planned as an ongoing project.



Baruch Velan

Baruch Velan is a career scientist involved mainly in research of countermeasures against infectious diseases. He was involved in a variety of projects related to examining mechanisms of microbial pathogenesis, analyzing the interactions between hosts and invading microorganisms, and defining immune-evasion strategies used by various pathogens. Additional aspects of Dr Velan's research include the design of diagnostic methods for specific microorganisms, as well as development of classical and recombinant vaccines.

Dr. Velan has conducted most of his scientific activities at the Israel Institute for Biological Research, where he also assumed several executive functions. Dr. Velan was a visiting professor at the Harvard Medical School in Boston and at the Rockefeller University in New-York. At present, Dr. Velan is studying various topics in vaccination ethics at the Gertner Institute in the Sheba Medical Center.



Leah Wapner

Leah Wapner serves as Secretary General of the Israel Medical Association, a position she has held since 1995. Prior to this appointment, she completed both her BA and MA in law at Bar Ilan University and worked at the IMA as Deputy Secretary General and deputy legal advisor.

Leah also serves in various international roles. Presently she serves as Secretary General and Legal Advisor of the European Forum of Medical Associations and Advisor to the Ethics and Social Medical Committees at the World Medical Association.

Leah is a member of numerous forums on the subject of quality such as those at the Brookdale Institute and a member of the participating team at the Dead Sea Conference for Health Policies.

In addition, Leah is a frequent lecturer in both Israel and abroad on health and medical issues, medical ethics, organization of health systems and social issues within medicine and has served on the law faculty of the College for Management and the Health Faculty at Ben Gurion University of the Negev.



Margaret Whitehead

Professor Margaret Whitehead holds the W.H. Duncan Chair of Public Health in the Faculty of Medicine, University of Liverpool, UK, where she is also the Head of the World Health Organization (WHO) Collaborating Centre for Policy

Research on the Social Determinants of Health. Researchers involved in this program are studying both the social causes of ill health and the adverse consequences of having a chronic illness, such as reduced income and employment chances, social isolation and stigma. With international collaborators, they are looking at the ways in which health and social welfare systems themselves reduce or exacerbate the adverse consequences of ill health and what can be done to improve the situation. The centre is developing ways of carrying out health inequalities impact assessment of complex interventions and public policies, including evidence synthesis concerning employment policies.

Margaret has worked extensively on social inequalities in health and in health care, in particular the question of what can be done to reduce them. To this end, she has been involved in various national and international efforts, including sitting on the UK Government's Independent Inquiry into Inequalities in Health (the Acheson Inquiry) and membership of a number of WHO taskforces on equity. Currently, she is a member of two EU networks to learn from international experiences on inequalities: one on finding ways to evaluate the impact on inequalities of complex interventions, and one tracing the health inequalities impact of public policies and political context.



Daniel Wikler

Daniel Wikler, Ph.D., is Mary B. Saltonstall Professor of Population Ethics in the Department of Global Health and Population at the Harvard School of Public Health.

He also serves on the core faculty of the Harvard Program in Ethics and Health, an inter-faculty initiative that addresses ethical issues involving health arising at the population and global levels.

Wikler served as the first “staff ethicist” at the World Health Organization in Geneva. While at WHO, Professor Wikler directed an international collaboration among philosophers and economists on ethical, methodological, and philosophical issues raised by WHO’s work in measurement of the global burden of disease and in developing methods for improving health resource allocation. His work at WHO and its regional offices included also issues in the ethics of research with human subjects.

Wikler was co-founder and second president of the International Association of Bioethics. His current research agenda includes ethical issues in health resource allocation, health measurement, and public health policy, and in the use of human subjects in health research. Along with three fellow philosophers, he is author of *From Chance to Choice: Genes and Justice*, published by Cambridge University Press.



Rachel Wilf-Miron

Director, Quality Management, Maccabi Healthcare Services (MHS)

Pediatric specialty (1988) and Medical Management fellowship – (1996), both in Sheba Medical Center

Relevant Experience:

Planning and evaluation of community-based adolescent health services; coordination of these services (1989–2000)

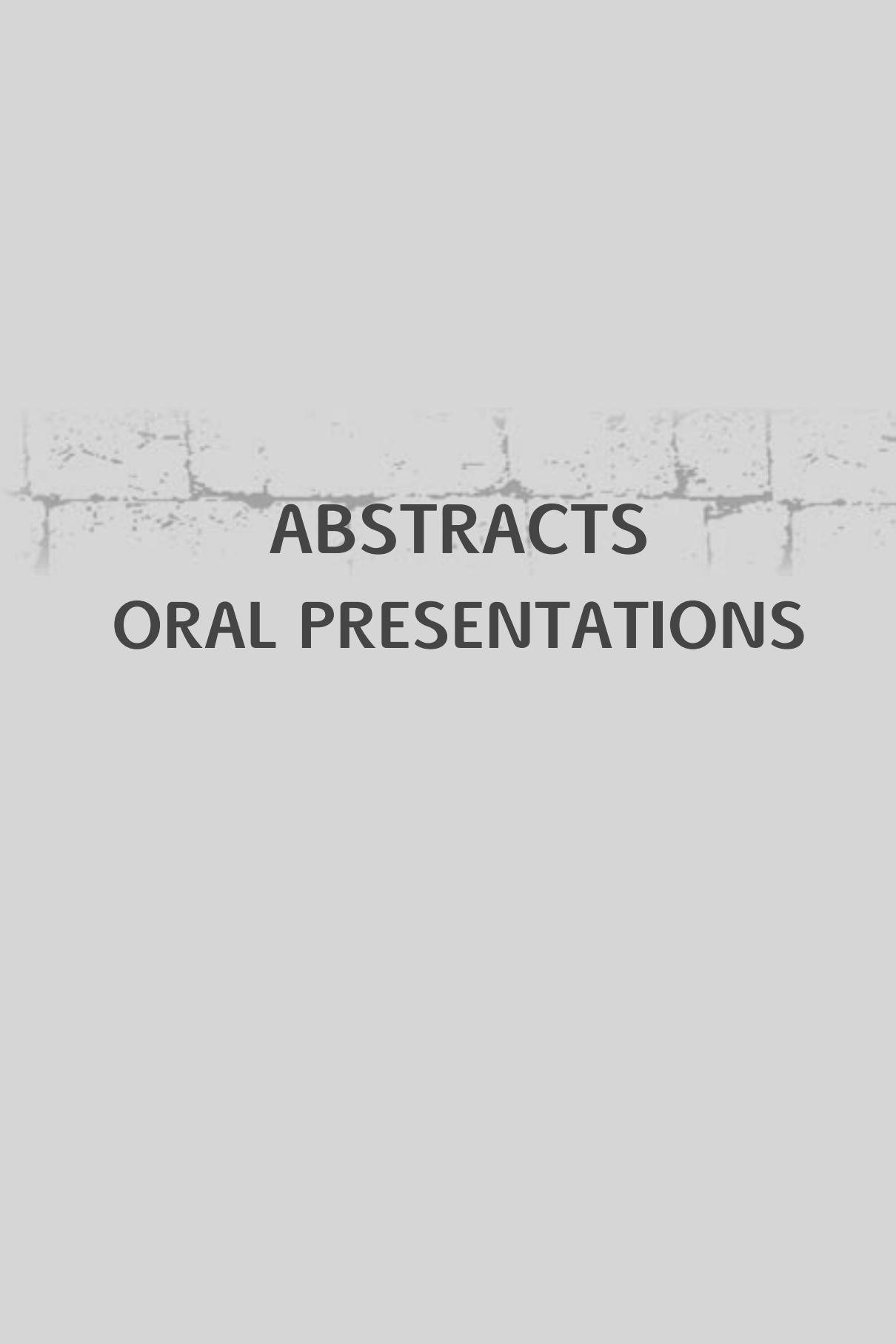
Establishment of the MHS risk management body, located in its headquarters.

Director, Risk Management Department, MHS (1996–2002)

Establishment of the MHS quality management body, located in its headquarters.

Director, Quality Management, MHS (2002–present)

Direction of organizational effort to decrease disparities while promoting equity and equality in healthcare services and health outcomes, MHS.



ABSTRACTS

ORAL PRESENTATIONS

Responsibility and accountability: talk is cheap...

Avi Israeli

The Hadassah-University Medical Center, Israel

The formative years of the State of Israel's development were characterized by ideological and values-based leadership driven by a clear vision and a strong determination to realize solidarity based policy goals. These characteristics were bolstered

by the Israeli society's strict socialist values, mixed with Western social-democratic concepts of the welfare state, social cohesion, collective responsibility and centralized decision-making. It follows, therefore, that central government and the sick funds were acting during that time in an atmosphere of collective responsibility, and that they made no attempt to relieve themselves of their perceived roles and duties; there was no need for, or talk of, accounting or accountability.

The 1980's introduced change into Israel's public arena: change in political outlook, change in economic beliefs and policies, and a shift away from collectivism and towards individualism. As a country, Israel became less socialist and more liberal, less ideological and more materialistic.

This transformation did not spare the medical system, as witnessed by the proliferation of private medical services and supplemental health insurance, and a widening health gap across socioeconomic and geographical strata. Interestingly, however, the medical system retained many of its classical values, some of which were updated or modernized to meet current social trends. It is during this period that Israel introduced key pieces of legislation, such as the constitutional proxy "Basic Laws", personal rights laws, and laws addressing equality and opportunity. It is during this period of national development that the term "accountability" became pertinent to Israeli public administration.

The answer to the question "Who is accountable?" arises in every country from a different background. It arises from a deep-rooted historical, organizational and governmental tradition. In a country that had only a collectivist orientation towards responsibility, we now ask "who is responsible?" "Who is accountable?" "And for what?" In Israel, our formative years were steeped in ideologically-driven commitment and obligation and strong

organizational belief in "responsibility" of the government, sick-funds and others, the succeeding decades have seen a shift away from this sentiment, responsibility being progressively shed and passed on to the free market, to the other main players in the health care system, and ultimately to the patient. The focus seems now to be more on diverting responsibility and less on directing accountability, and the weakest player in the game – the individual – is left to bridge the gap between the two

The counterbalance to this is accountability of framework in which the individual makes his choices. The accepted requisite of financial accountability has slowly led health care providers to recognize and accept their own professional accountability. But there remains a substantial risk that this trend will slowly erode the mechanisms through which health care services are provided in Israel, and will eventually lead to deterioration in quality and availability of care. But the system has also demonstrated some checks and balances in this regard.

It appears that accountability is not a panacea for the problems of health care systems, and that it can, in and of itself, be the source of new challenges that require redress. One conclusion is sure: it is easier to talk about accountability than it is to implement it successfully.

"Meeting The Challenges of Chronic Illness: Policy and Evidence on Integrated Care"

Stephen Shortell

University of California, Berkeley, USA

This keynote presentation will highlight the challenges posed to health systems worldwide from the growing prevalence of chronic illness. It will address cross-cutting conference themes including governance and management, social support and responsibility, and performance management. Various models and approaches for providing more cost-effective care will be discussed. These include experience with the chronic care model, the integrated care pilots in the U.K. and initiatives in other countries. Evidence regarding the performance of integrated delivery systems will be summarized. Potential innovations in care growing out of the current U.S. health care reform efforts will be presented including the patient-centered medical home concept and the creation of accountable care organizations. Suggestions for further research and implications for policy and practice will be highlighted.

Government Accountability or Health Care Leaders' Responsibility

Gabi Barash

Tel-Aviv Sourasky Medical Center, Israel

The health care market characteristics in favor of governmental involvement are well recognized. In order for governments to assert their power, they need public support and this may be built only in an evolutionary process accompanied by changing societal values. Factors leading to the building of public support will be discussed with special emphasis on issues related to resource allocation and cost containment.

It will be argued that it is health care leaders' responsibility not to take a removed approach, but get engage with governments in effort to better and reform the health care system. We will discuss the hurdles resulting from the different characteristics of the professional vs. political systems, and the inherent objective difficulties in communicating information dealing with allocation of health care resources in a simple, understandable, and meaningful fashion. Media role and limitations as a go-between the professional and political systems will also be discussed.

Context, Culture, and the Practical Limits of Health Sector Accountability

Richard Saltman

School of Public Health, Emory University, Atlanta, USA

While accountability in theory has many positive attributes, in practice accountability also has a variety of structural limitations.

Existing institutional arrangements, economic and managerial capabilities, cultural norms and expectations, all place boundaries around the actual implementation of accountability arrangements.

Thus professional, ethical, legal, financial, democratic (political), and even clinical forms of accountability, when operationalized, inevitably represent compromise rather than optimal strategies of health system control.

Strengthening health systems governance: an old 'new' paradigm. What's next?

Josep Figueras

European Observatory & WHO European Centre, Belgium

Strengthening health governance became the 'new' reform paradigm at the beginning of this century following the focus on NPM and market reforms in the 90's.

Both the policy debate and academic literature seem to have adopted governance as some form of universal panacea to address all sorts of health system ills ranging from ensuring an appropriate public private mix, to dealing with patient safety and improving intersectoral action for health.

The presentation contends that debate on governance should be on the merits (or otherwise) of specific and very distinct strategies, reviewing reform progress and then outlining an agenda for the future.

Responsibility and accountability in diagnostic and preventive medicine – are we doing too much or too little?

Siegal Sadetzki

*Cancer & Radiation Epidemiology Unit,
The Gertner Institute, Israel*

In an era when new techniques and technologies are constantly evolving, there is a growing public demand for prevention and early detection of disease, along with zero tolerance for misdiagnosis. This climate is further enhanced by malpractice suits, efforts of industry to promote use of new technologies, and a tendency of the media to be overly involved in the formation of public opinion concerning health matters.

An appropriate balance of the many considerations of the various disciplines involved in determining health policy is hard to achieve. Among the important questions which must be answered is: who should be responsible and accountable for the implementation or restriction of the use of new technologies?

In order to illustrate the complexity of this issue, several relevant examples will be discussed.

Health communication in the EU: A survey on Citizen Information needs

Paulo Moreira

Deputy Head of health Communication Unit, European Centre for Disease Prevention and Control (ECDC), Sweden

ECDC has a central role in health communication and communicable diseases as defined in its Founding Regulation:

"The mission of the Centre shall be to identify, assess and communicate current and emerging threats to human health from communicable diseases".

"Within the field of its mission, the Centre shall search for, collect, collate, evaluate and disseminate relevant scientific and technical data".

The specific communication mandate of ECDC is detailed in Article 12:

"The Centre shall communicate on its own initiative in the fields within its mission, after having given prior information to the Member States and to the Commission. It shall ensure that the public and any interested parties are rapidly given objective, reliable and easily accessible information with regard to the results of its work. In order to achieve these objectives, the Centre shall make available information for the general public, including through a dedicated website. (...). The Centre shall act in close collaboration with the Member States and the Commission to promote the necessary coherence in the risk communication process on health threats."

In this context, an exploratory study has been undertaken to clarify some major information needs as perceived by citizens in 27 EU countries and related to communicable diseases.

Twenty seven focus groups were undertaken (one in each of the 27 EU countries members). The same guide was used for posing questions which were translated for the local language.

Results are of an exploratory nature and allow to identify some major health communication needs and perceptions amongst EU population.

A major implication for health policy development is that citizens demand information on specific diseases and expect clear guidance for actions to be taken at an individual level. This finding will be put into the context of recent public health policy theory and community intervention models as they suggest.

Health status is depending on corruption

Dan Peretianu, Octavian Georgescu

*Romanian Federative Chamber of Physicians, Bucharest,
Romanian*

Background: Last year we presented at “The International Conference on Priorities in Health Care” a poster concerning with how “Could health care system crisis coexist with increased funds in health”. Our conclusion was that:

1. Health status indicators are not dependent on increasing the budget.
2. HCS crises seem to be related to lack of democracy: lack of real negotiations, transparency, and corruption [a.o]. Discussing on the poster, some were not so convinced about the relationship between corruption and health.

Objective: To establish if there is any correlation between health status of a country and corruption.

Method: 2 health status indicators were selected: life expectancy (LE), infant mortality (IM) (source: WHO, 2008).

- I. World wide: **LE**: average: 65,82 y, min: Swaziland, 32,23; max: Andorra, 83,53. **IM**: 36,8%; min: Iceland, 2,9, max: Sierra Leone 160,3. Corruption Score (CS) was applied (source: Transparency International): 3,98; min (very corrupt): Somalia, Myanmar, 1,4; max (no corrupt): Finland, New Zealand, 9,4. Correlation test with CS were performed for each health status data.
- II: Romania: 11 years: 1999–2008: **LE**: average: 71,5; min: 70,5, max: 73; **IM**: Average: 16,38%, min: 13,9, max: 23,7. CS: average: 3,06, min: 2,6, max: 3,7.

Results:

- I. **1.** 191 United Nation states were analyzed. **2.** Life expectancy-corruption correlation: $r=0,58$, slope= 0,1, $p << 0,001$. **3.** Infant mortality-corruption correlation: $r=-0,61$, slope=-10,7, $p << 0,001$.

- II. Romania: LE-CS: $r=0,36$, MI-CS: $r=0,16$ -NS (necessary 25 observations).

Conclusions: More corrupt is a country, less life-expectancy it is. More corrupt is a country, high levels of infant mortality there are.

Policy Implications: Health status depend more on democracy and (non)-corruption than in funds allocating for the health care system.

Redefine Budgets for Local Health Authorities to Produce Health on a Large Scale

Fausto Felli

Network of local health authorities, Rome, Italy

Objectives: The launch of the second European Plan for Health 2008-2013 marks a historic step: the issue of promotion, protection and production of health is now universally accepted as the emerging type of costs in the next future.

The delicate relationship between "rights & budgets" in the field of health shows significant developments: how you cannot confuse the right to healing with the right to health, so no one cannot confuse the budget for healing with that for health. It cannot be ignored the fact that the increase in longevity mass cannot be managed with the policy of cuts and roofs. The Report Eurostat 2008 confirms the need to give utmost importance to ageing society. So actions to redefine budgets for local health authorities to produce health on a large scale are strongly required.

strategic relevance and contribution to the public health programme before Squeezing the Toothpast Remove the Cap is the acronym of the leading concept: unless local health authorities actions to produce health are stable, prolonged and on a large scale, ther's no use in institutional health dreaming. Moreover: economically fragile elderly with chronic diseases, new forms of poverty, the weakening purchasing power of wages pose with urgency the question produce health as a huge institutional duty. Our proposal goes in this direction.

Methods & Means: Network of local health authorities applying standardized and integrated models of health production on a large scale including:1 The citizen-self-producer of health, for which, reaching the goals of health will be studied appropriate incentives 2 Motor Sciences 3 Nutrition Sciences 4 Social as Therapy 5 bio-strengthening - make Chronic the Health (new generation of drugs, vaccines, spas etc.) 6 Villages of Health City of Itaqua Project of Italian Institute for Quality of Life 7 Communication (to produce new habits and attitudes not fleeting and to use ICT finally also to grow), 8 health production skilled GP group.

Local health authorities Budgets Redefinition to Include Health Check in theory first and then gradually in practice, possible impact the allocation of additional 5% of the budget by local health institutions in supporting the Model Promotion and Production of Health (MPPH) through needful and strong local social alliance.

Expected Outcomes: A) Strategic experimentation of new specific figures (health manager, general practitioner sentinel for health etc.) at the level of local health institutions. B) Analysis of new infrastructures, equipment and intangible assets to produce health, to ensure efficacy of actions taken. C) Good cultural and practical experience about health, good cultural dissemination through good cultural contamination and good communication among different institutional levels, society, scientific level and policymakers towards redefinition of budgets to include health and to fight health discrimination and inequality. D) Reproducibility of MPPH all over Europe

Accreditation in three clalit acute care hospitals: promise, performance, and lessons learned

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Clalit Health Services, Israel

Background: In the US, accreditation is very common. HMOs and the Centers for Medicare and Medicaid require it as a contractual condition. The Joint Commission accredits 88% of US hospitals. Similarly, Joint Commission International (JCI) and other agencies accredit hospitals worldwide. Three hospitals affiliated with Clalit – Soroka, HaEmek and Meir – have recently concluded an accreditation survey and received the quality and safety recognition by the JCI. Three additional medical centers, Rabin, Kaplan and Carmel, have joined the program. Patients admitted to these hospitals are expected to experience an improved level of service and safety.

Study question: Did the patient safety at the three hospitals increase as the result of the accreditation process? Specifically, did the safety of medication management and surgical procedures improve?

Methods: Results of the survey conducted at the 3 hospitals over 2006–2008 by the JCI team, including 331 standards tested, marked and summarized into the manual's 14 chapters were analyzed. Medication management safety was tested using an internal audit developed at Clalit. Surgical procedures safety was assessed using the "time out" checklist, implemented at Clalit during the accreditation process.

Results: Of the 14 chapters, 2 were introduced in 2008 and 1 was expanded in 2008. Of the remaining 11 chapters, 7 showed significantly overall improvement ($p<0.05$). Two hospitals significantly improved in 6 chapters, and the third – in 9 chapters ($p<0.05$). Overall, the number of items with remarks decreased from 36% (106 out of 296 items) to 10% (33 out of 331 items, $p<0.001$). Results regarding medication management and surgical procedures safety are still being processed and will be presented.

Conclusions: The accreditation process enhanced the safety of care. A safe delivery system is the basis for providing high quality care.

Health Policy Implications: Implementing the accreditation system on a national level is recommended.

Introducing Quality Indicators for hospitals in Israel: Setting the Israeli standards for accountability, also for transparency?

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Background: Measurement of quality of care is an integral feature of modern health systems. Although in Israel sporadic studies by the Ministry of Health of hospital care have been conducted for the past 20 years, a systematic, sustainable endeavor of hospital quality indicators was initiated only this year. Its main objective is to create and promote a quality measurement culture in Israeli hospitals. The project has been launched as an audit and inquiry board.

Issues in the initiation of the project: *What to measure?* A decision was made to measure outcomes such as mortality and morbidity, and process factors only if directly related to outcome. Hospitals in Israel are autonomous entities with no common reporting system. Thus, no baseline standard for Israeli hospitals was available, and no agreed set of clinical priorities for future monitoring. It was decided to sequentially study hospital departments, and then have committees of clinicians establish a minimal list of indicators for future annual review.

How to measure? We completed to date a twice repeated one day prevalence study in 34 general surgery and 27 orthopedic departments, in order to identify the national average of post operative complications in an unbiased national sample of patients. The 3rd round is currently being carried out.

Preliminary analysis of data regarding the first five hundred patients from 2 prevalence rounds and 500 retrospectively reviewed colon surgery patients will be presented.

Interim summary: Full cooperation of the surgical departments heads and hospital directors, made the initiation of this project possible. While accountability is evolving the issue of transparency will have to be resolved in the future stages of the project.

The voice of the Israeli provider in the face of the accountability and transparency challenge

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Background: While the Ministry of Health mandate is to represent the public's interest in providing quality care, the burden of improving quality of care is on the providers. The building of a receptive climate among the providers when reporting and receiving feedback about sensitive data, may lead to the development of their commitment towards a quality culture.

Study Question: What are senior physicians' attitudes and concerns towards the National Hospital Quality indicators project?

Methods: A qualitative study. Senior physicians from General Surgery and Orthopedics departments that participated in the first round of the National Quality Indicators Project were interviewed using an open ended, structured questionnaire. It included questions about teams' overall attitude towards being measured, perceived strengths, weaknesses and challenges towards the implementation of changes based upon measurement, quality benchmarking, as well as answering hospital specific quality-related needs. The interviews were recorded and transcribed. Data is being analyzed in the spirit of grounded theory, using Narralizer software for qualitative data.

Results: The preliminary stages of the analysis indicate that there is no consensus among senior physicians regarding outcome measurements in improving quality. Attitudes ranged from full acceptance to absolute rejection. Self-measurement is generally perceived as not feasible unless additional, earmarked resources are provided. The providers' main concern is transparency of data, which is described as a major barrier towards the establishment of a quality culture. The full analysis will be presented.

Health Policy Implications: will be discussed upon full data analysis.

ADHD Medication: Society, Schools, and Public Policy

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Among child and adolescent disorders, attention-deficit hyperactivity disorder (ADHD) is the most prevalent globally. This condition involves developmentally extreme, impairing, and cross-situational manifestations of disorganization, poor focus, impulsivity, and motoric overactivity. Stimulant medications are the chief means of treating such youth. High levels of public debate and controversy surround this area, over the safety, necessity, and appropriateness of medication use.¹ ADHD medications are the most commonly prescribed form of psychopharmacology for any child mental health condition. Annual expenditures are rising sharply; we estimated that, since 2000, annual global expenditures have risen over 40 percent annually.

These factors raise the following questions: Are we medicalizing and medicating what is essentially a social problem? How safe and effective are these medications; are they aiding or harming the developing brain during a child's formative years? Do medications merely suppress excessive behavior or actually enhance academic performance?² How have schools, pharmaceutical firms, advocates, health insurers, and policy makers contributed to the steep increases in rates of medication use and medication expenditure across the past 15 years? What are the disparities in diagnostic and treatment rates across racial, ethnic, socioeconomic, and national boundaries—and what can be done to ensure equal access to care?

Supported by the Robert Wood Johnson Foundation's Policy Investigator Award, the book, titled "ADHD Medication: Society, Schools, and Public Policy," will comprise a major analysis of ADHD and medication treatments for this disorder—both of which are high-prevalence, high-impact issues. The book's appeal is based on several key premises: (1) The societal and personal costs of ADHD are substantial; (2) stakeholders need evidence-based information, rather than the tumultuous, politicized opinions too often masquerading as fact; and (3) public policy interest is intense with respect to schools, health insurance coverage, professional standards for care, and effects on national productivity.

¹ Hinshaw, S. P., and R. DeGrandpre. "Attention-Deficit Hyperactivity Disorder: Psychiatric Problem or American Cop-Out?" *Cerebrum: The Dana Foundation Journal on Brain Sciences*. July 2, 2000.

² Scheffler, R.M., T.T. Brown, B.D. Fulton, S.P. Hinshaw, P. Levine, and S. Stone. "Positive Association Between Attention-Deficit/ Hyperactivity Disorder Medication Use and Academic Achievement During Elementary School." *Pediatrics*. May 2009.

Organization of Adult Attention Deficit Disorder treatment in Israel

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Background: Adult Attention Deficit Hyperactivity Disorder (Adult ADHD) affects up to 10% of the adult population in Israel, with consequent negative impacts on health care costs and quality of life. Optimal treatment should combine pharmacological and behavioral interventions. However, little is known about the extent of organizational setups for achieving this type of blended care in Israel.

Study Questions: What are the organizational frameworks, both public and private, available today in Israel for treatment of adult ADHD and to what extent do they address teamwork and coordinated treatment? How successful are these arrangements and what criteria should be used to make this evaluation?

Methods: Qualitative in depth interviews were carried out with key informants involved in Adult ADHD care in Israel. The tape recorded interviews were transcribed; main thematic categories were identified and analyzed. Implications for theory and policy were discussed.

Results: Consensus was found regarding the utility of combining drugs and cognitive behavioral interventions in a teamwork setting. The respondents indicated that treatment should be provided by specialists in adult ADHD treatment. The current situation, however, is characterized by a shortage in specialists, partial public funding (only for pharmacologic treatments), the absence of teamwork in both the public and private sectors, and the lack of monitoring, follow-up and guidance regarding suitable treatment. Respondents indicated that, in the absence of agreed objective indicators, qualitative assessments, based on self reporting by patients should be used for evaluation.

Conclusions: The current situation does not offer adequate Adult ADHD treatment due to lack of trained personnel, finance, organizational frameworks, interdisciplinary teamwork, reliable information, and insufficient monitoring of treatments and guidance regarding appropriate treatment.

Policy Implications: Development of options to correct the deficiencies identified in this research is the next important task regarding Adult ADHD treatment in Israel.

Child Safety Report Card: Israel's Child Safety Policy Performance

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Beterem- Safe Kids Israel, The National Center for Childrens Health and Safety, Israel

Background: In Israel, injury is the leading cause of death in children and adolescents. As part of a process of promoting a national child safety action plan under the auspices of the European Child Safety Alliance, Beterem conducted a situational analysis of child injury indicators to form the basis of Israel's Child Safety Report Card 2009. The report card includes an examination of specific unintentional injury areas, leadership committed to take action and the amount of human and financial capacity to address this issue.

Study Question: Where is Israel in terms of adoption, implementation and enforcement of policy that supports child safety as a baseline for national action planning.

Methods: Beterem conducted primary data collection by contacting government departments in Israel to ascertain information regarding current policies in accordance with the indicators included in the survey tools developed in conjunction with an expert advisory group made up of members from the WHO – European Office, UNICEF, the Health and Environment Alliance (HEAL), an expert in child and adolescent indicators and an expert in current best evidence on prevention of childhood injuries.

Results and Conclusions: Israel has adequate human capacity and infrastructure to address child and adolescent safety, however stronger leadership from government is required.

Health Policy Implications: Government leadership is needed to ensure development and implementation of a government endorsed national strategy with specific targets for child and adolescent safety. The Israeli Health Ministry is beginning to promote a National Child Safety Action Plan that takes into account priority areas and performance gaps in Israel and clearly lays out mandated government responsibility, specific targets and timelines for the different types of child injury.

Current Nutrition Problem in Kenyan Society

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Health Promotion King Baudoin Foundation Kenya, Kenya

Background: The current daily meals for all Kenyans are creating many medical nutrition problems. For people of 35 years old, mental fatigue, back ache, joint muscle pains, swollen joint (arthritis like) Neuropathy have become major clinical presentation. Current meals lack Zinc, Selenium, Manganese, Magnesium, Calcium, and Copper, Vitamins A and B and essential amino acids. This is due to over cooking and high use of polished grains. In modern society control was initiated presenting with above.

Methods: Nutrition health clinics were started in 2001.

All patients over 35 years old were enrolled in programs. Their routine food eating and nutrition composition was recorded first. Locally available foods rich in Zinc, Selenium, Manganese, Copper, Vitamins A, B and other essential amino acids were incorporated in daily meals for the family. Breakfast, lunch or supper forms to monitor mainly clinical changes and BMI were used for one (1 year). Artificial micro-nutrients rich on above chemicals (Beta Vit) were used for serious cases but later changed to natural diet supplying the same.

Results: 75% Over 50% people who were put on above chemicals received there indicated probably. It is also proved highly effective in reducing micronutrient deficiencies as well as improving vitality.

Conclusion: Our study showed Routine foods eaten by Kenyans lack antioxidant essential mineral: Nutrition value is destroyed by over cooking (vitamin A) there is high intake of non essential amino acids (proteins). Our study shows that the above current medical problems facing Kenyan society can easily be controlled by people feeding on food rich in Zinc, Selenium, Vitamin A, B, C and K and Manganese, Magnesium, Copper, Vitamins A and B and essential amino acids. Polished foods are creating many nutrition medical problem societies.

The Dilemma over Reimbursement of Orphan Drugs – Accountability and Affordability Hand in Hand?

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The Gertner Institute For Epidemiology and Health Policy
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² Ministry of Health, Israel

Budget constraints that characterize all health systems globally, require setting priorities to determine “worthy” preferences between new candidate medical technologies each time public funding is considered. Resolving issues of how to prioritize and according to what criteria is extremely complex, especially when a unique therapeutic group, such as orphan drugs, is in question. This group is characterized by high prices and small patient population on one hand, and significant health gain and gravity of the condition on the other. This study aims to assess and compare policies regarding reimbursement of orphan drugs in Israel and in selected countries. The review consists of descriptive characteristics, such as: existence of explicit policy towards reimbursement of orphan drugs, year in which each current program/policy came into effect, detailed guidelines and/or criteria for provision, type of reimbursement, orphan drugs licensed in the country, drugs that are financed, etc. Results of this study suggest a common ground for centralized procedures for technology assessment of orphan drugs. Furthermore, it elucidates the different criteria and considerations that underlie the debate over reimbursement of this unique therapeutic group.

Conclusions drawn from this study may provide policy makers with the information to make rational improvements in guidelines and in allocation of resources to suit the unique needs and preferences of the country as well as principles of equity and equality.

This research is funded by the Israel National Institute for Health Policy and Health Services Research.

Determining Sustainable Global Health Policies: an analysis of the World Health Organization's policy for the integration of local healthcare practices and practitioners into state biomedical healthcare systems in the Philippines

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Traditional, complementary, and alternative medicine (or non-biomedical practices) function as the primary source of healthcare for a majority of populations in developing countries. Medical pluralism, of biomedical and local (non-biomedical) healthcare practices and practitioners, presents in complex and often unstructured combinations distinctive to a given local level at a given time. Global healthcare policy has sought to structure this medical pluralism along a model of integration of non-biomedical systems into state and local biomedical healthcare systems. This policy, adopted by the World Health Organization in 1977, has been implemented in the Philippines since legislation of the Traditional and Alternative Healthcare Law was approved in 1997.

This research analyses the development, interpretation, and implementation of this policy from global to state to local levels and evaluates both the impact of this global healthcare policy on local healthcare medical pluralism and on the health of populations in four communities in the Philippines. Documents of both the World Health Organization and the Government of the Philippines related to this policy were analysed. Stakeholders of this policy at the World Health Organization in Geneva, and in state and local government in the Philippines were interviewed regarding this policy. Finally, an impact evaluation of this policy was conducted in two communities in the Philippines that have fully adopted the policy for healthcare integration and two other communities that have not adopted the policy and demonstrate a different typology of medical pluralism. Results indicate that the impact of this policy on local health and the manner in which it is interpreted and implemented is context-dependent.

Heretofore, neither a critical analysis, nor an impact evaluation of this policy has been conducted to determine the effects of implementing this policy on local healthcare and population health. The implications of this research include a methodology whereby impact analysis and monitoring & evaluation of policy can facilitate the most appropriate policy for a given context, and thereby help to establish best practices in global policy formation and global governance; provide more feasible and sustainable development solutions for populations; and generate an evidence-based foundation for best practices in global health policy design.

World Record in IVF Cycles? Who is Counting? And How?

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Background: Israel is in the top of the list of the number of Vitro Fertilization (IVF) cycles per million per year: Israel reported 1,657 IVF cycles. This rate is 5.7 times higher than that of industrialized states average (289). At an average cost of 15,000 NIS per treatment the question whether this report is valid is extremely important.

Study Question: Are the reported IVF cycle numbers valid?

Methods: Reports of IVF units in the District were compared to administrative data. These reports were inaccurate in more than half of the cases. A second sample was evaluated in order to identify potential causes for these inaccuracies.

Results: 108 IVF cycles were primarily surveyed. IVF cycle number was accurate in 29 (27%). In 30 cases (28%) it was too high, and in 10 (10%) it was too low. In 39 cases (36%) – It was not reported.

In some units a single list of treatments is held for both Ovum Pick Up cycles, and Frozen Embryo Transfers. This practice leads to a "too high" IVF cycle numbers. A "too low" IVF cycle numbers were found in units which started a new counting after a variety of events: a new year, a transfer from one unit to another, or treatment continued after a previous "successful" cycle.

Conclusions: Specific causes of inaccurate IVF reported numbers share a common denominator, i.e. a lack of a simple and valid counting system that is used by all units.

Health Policy Implications: National regulatory agencies should issue a consistent method for IVF cycle counting.

Attitudes and Policies Regarding Access to Assisted Reproductive Technology in Israel

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Background: Despite high profile presence of Assisted Reproductive Technologies (ART) in medical and ethical discourse, their social and regulatory contexts remain largely unexplored. While some theoretical discussions address issues of justice and equality in ART, very few studies explore their practical application. These studies reveal a practice of candidate screening on a somewhat arbitrary basis. Examining the above issues is appealing to Israel, given its fertility rates. To this end, we conducted a survey of physicians' attitudes regarding access to ART.

Study Questions: 1. How requests for IVF treatment are dealt with, which information is sought, and which guidelines are used for screening candidates? 2. To what extent do personal values of IVF providers affect their decisions regarding access to IVF? 3. How do public and private institutions vary regarding access to IVF?

Methods: An anonymous questionnaire was distributed among IVF providers in all fertility clinics in Israel during 2008–2009.

Results: A total of 46 physicians from 17/24 IVF units responded. Although all accept the notion that every person has a right to procreate, 15.25% believe it is important to screen candidates and 55.6% believe they have both the duty and the ability to consider non-medical criteria when doing so. Only 47.8% of physicians acknowledge the existence of guidelines in their units, but where they exist, 20% state they do not follow them in most or all cases. Furthermore, between 40–60% of physicians are willing to perform controversial procedures if backed by official guidelines.

Conclusions: Results show substantial variation across clinics in the likelihood of rejecting hypothetical candidates. Existing guidelines are often missing, vague, or ignored.

Health Policy Implications: The study reveals a need to develop guidelines for screening IVF candidates. Different guidelines should be considered for public and private clinics. The study helps in focusing the public debate regarding the controversies concerning ART in Israel.

The Global Shortage of Health Workers: Skill Mix and Pay for Performance

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I will review the global shortage of health workers. Solving the shortage problem will require significant changes in the workforce skill mix. It is likely that more nurses in expanded roles will be needed as well as a significant increase in community health workers of all types. Empirical estimates of workforce mix changes will be presented and resulting cost savings will be discussed.

The second part of the presentation focuses on pay for performance (P4P) and its impact on improving quality of the performance of health workers. Evidence from P4P experiments in the United States, United Kingdom and less developed countries will be presented.

An assessment of the future of P4P will conclude the presentation.

Coping with changes in medical manpower in Israel

Yeheskel Levy

Ministry of Health, Israel

In the last decade the balance between the Western world population needs to medical professionals (doctors and nurses will refer primarily) going to upset against the needs of the population. Professional supply goes down due to the fact that training does not meet the needs, attempts to reduce working hours and on-call hours and shortening hospital stay, not specialization (even an escape) in certain professions which are considered particularly difficult, increase in the number of women in medical professions, especially as physicians and retirement of doctors and nurses. Both in the western world and in Israel we witness the processes of migration of doctors from the periphery to larger population centers, or migration of doctors to other countries. However, the medical needs of the population are increasing due to the increasing demand of Preventive Medicine, improvement in life expectancy and aging of the population, hence appearance of complex diseases that should be treated.

In the State of Israel we also see a growing decline at the rate of doctors and nurses, compared to the size and needs of the population. At present, the rate of doctors in Israel is still good compared to Western countries, however, there is a constant decline in the rate toward the end of the next decade, when it is going to reach negative climax of 2.8 doctors per 1,000 people. The situation in nursing and nurses is not better also and the rate now stands at about - 5.6 nurses per 1000 persons - a low rate compared to Western countries. The lecture will discuss the factors that led to reduction in the rate of doctors and nurses (eg, like decreased immigration from the former Soviet Union) and the need to reassess the ways to increase the number of doctors and nurses. Reconsider the policy to expand training in Israel, increasing attraction to specialize in certain professions, regulatory policies in the health system and policies to attract physicians and nurses to work in peripheral communities. the shortage in medical professions lowers the quality, availability and accessibility and equality in getting medical services. Decision makers in the country should do a systemic multidisciplinair effort, for ensuring adequate medical services to the public in the future.

Health Rights in an Age of Global Mobility – Migrant Workers' Health Care in Israel

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Background: 180,000–280,000 legal and illegalized migrant workers reside in Israel. They remain excluded from the national healthcare system, except for a few public health services. Since 2001 employers are obliged to insure their foreign workers with private health insurance companies by law. However, many migrant workers ultimately seek healthcare from non-governmental organizations (NGOs).

Research question: This paper investigates rationales and implications of Israel's health policies towards migrant workers, how they mediate tensions between different rationales relating to migrant healthcare (e.g. public health, health economics, political goals, human rights), and to whom they appoint responsibility for migrants' healthcare.

Methods: Our methods include the analysis of policy documents and in-depth interviews with key informants, as well as the analysis of socio-demographic and health-related data retrieved from 800 patient files kept by the "Physicians for Human Rights", the largest healthcare provider for uninsured persons in Israel.

Findings and Conclusions: Patterns of disease and healthcare-seeking behavior among migrant workers reflect lack of access to healthcare, as well as high exposure to occupational risks, unhealthy living conditions and other stressors associated with migration- and socio-economic status. Genderized impacts of policies and practices put migrant women at specific health risks. Current health policies towards migrant workers reflect contradicting forces of exclusion and inclusion related to Israel's immigration regime, to public health and economic concerns and to health rights considerations. At large the state tends to avoid responsibility for migrants' healthcare and to shift it to NGOs. These, however, are incapable of offering an adequate and comprehensive response to migrant workers' healthcare needs.

Health Policy Implications: We recommend to take the rationales of public health, health economics and health rights stronger in account when determining health policies for migrant workers and to reconsider the integration of migrant healthcare into existing healthcare structures.

Advanced / Specialist Nursing Practice: Attitudes of Nurses and Physicians in Israel

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Background: With the introduction of new and advanced nursing roles, the nursing profession is undergoing dynamic change. Realizing changes will be easier to accomplish if the nursing community and other healthcare professionals welcome the process. Recently the nursing staff mix in Israel has been undergoing a transformation: encouraging registered nurses to enhance their status by acquiring academic degrees and advanced professional training, and initiating the adoption of new nursing roles.

Study Question: Our goal is to evaluate Israeli nurses' and physicians' attitudes to the introduction of new nursing roles and to expanding the scope of nursing practice.

Methods: Two hundred and fifteen nurses and 110 physicians from three large general hospitals and 15 community clinics filled in a questionnaire.

Results: In general the majority of the nurses supported expansion of nursing practice,

and such expansion did not cause significant opposition among physicians. However when the task affected patients' health, physicians were less willing to permit nurses to perform skills previously their responsibility alone. In addition, using multiple logistic regressions, support of the expansion of nursing practice was significantly higher among nurses in management or training positions, and among academically accredited nurses. Support for expanded roles was prominent among hospital physicians, graduates from Israeli schools of medicine, and less-tenured physicians.

Conclusions: We suggest that confirmation by various groups of physicians and nurses of standardized definitions of the new boundaries in the scope of nursing practice roles could successfully promote development of new roles and facilitate integration of the Israeli healthcare system into the global context of change.

Health Policy Implications: Inter- and intra-professional collaboration, agreement, and understanding regarding advanced nursing practice roles and their introduction into the healthcare system might improve the relationship between healthcare professions and ultimately increase quality of care and patient satisfaction.

Emigration tendencies among medical students in Poland

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Background: Labor emigration has intensified after Poland joined the EU. However, emigration of high skilled workers remains controversial. Public expenditures on educating medical doctors are high and the brain-drain is believed to adversely affect the Polish health care system.

Aims: To predict the scale of emigration of youngest physicians from Poland in the nearest future.

Methodology: The Study was based on a survey of 1214 medical students at five universities in Poland (Katowice, Poznań, Kraków, Warsaw, Białystok) and a comprehensive literature review. The survey utilized an original questionnaire including 25 questions regarding respondents' migration plans, factors affecting the decision to migrate, steps taken to implement the migration plan.

Results: Sixty two percent of the respondents considered emigrating, of which 71.8% have taken steps to accomplish this plan. In most cases students indicated 50% probability of emigration and preferred long-term emigration. Majority of students declared that better remuneration in Poland and easier access to professional training courses would change their emigration plans. Interestingly, 84.2% of students declared they were able to enhance their professional experience in Poland. Study identified factors affecting the desire to emigrate which included: sex, place of origin, age and the years in medical school. According to some estimates, in 2008 the number of physicians who emigrated reached 7,000, which equals 50 percent of medical school graduates in any given year.

Conclusions: 1. Anecdotal data suggest that current scale of emigration may adversely affect the health care system, particularly in Western Poland, and in certain medical specializations. 2. Most of the medical students are willing to emigrate. Fewer students in their last year of study plan emigration. Moderate engagement in making preparations for leaving, as well as generally optimistic opinions about professional development in Poland, indicate that the actual scale of emigration of graduates will be relatively low.

Registered Nurses in Israel: Workforce Supply – Patterns and Trends

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Background: The characteristics and size of the nursing workforce in the world are changing, partly due to the shortage of nurses. Surveys on the supply of nurses have advanced understanding of the structure of the nursing workforce, the identification of deficiencies and the planning of training.

Study Questions: Examine the supply of registered nurses (RNs); e.g. the rate of employment, job characteristics, the rates and trends of mobility in the profession as well as exits and entries back into the profession, vis-a-vis future sources for increase.

Methods:

1. Nationwide telephone survey among a random sample of 10% of all RNs of working age (n=3,200 RNs) between October 2008 to February 2009.
2. Analysis of administrative data.

Results: Most RNs (90%) are employed, 67% in full time positions. The workforce is relatively mature (45% over 45) and experienced: 27% working in the profession for over 20 years; 24% with advanced training specialization working for over 21 years in their specialty. Mobility is mostly from hospitals to the community. The paper examines length of time in the nursing profession and in advanced-training specialties and patterns of mobility, versus future sources of additional professional work force.

Conclusion: The findings appear to indicate that the nursing workforce cannot be expanded based on the current workforce (employed and unemployed). The findings provide a basis for adjusting the extent of training for different services and specializations.

Health Policy Contribution: The findings may contribute to determining the need for RNs in Israel.

Female Physicians: Trends and Impact on Healthcare

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Background: Trends in the gender and preferences of physicians have a notable impact on health services. Since 2000, there is a decline in the number of physicians per capita and new physician licences in Israel. The proportion of female physicians, which increased after 1990 as a result of immigration from the Former Soviet Union, continues to rise. Women tend to prefer certain specialties, such as family medicine, psychiatry and paediatrics as opposed to surgery and orthopaedics. The Central Bureau of Statistics workforce survey shows that female physicians work on average less hours than males.

Study Question: How will these trends affect medical care?

Methods: Ministry of Health data on licensed physicians for 1999–2008 was analysed by year for all physicians, all specialists, and various individual specialties to predict gender by age, immigrant status and place of study (Israel, abroad) using a multivariate logistic model.

Results: The proportion of women amongst physicians is rising constantly, for those under 65 from 38% in 1999 to 41% in 2008 and for those under 45 from 37% to 50%. After adjusting for age among all physicians in 2008, the odds ratio for those who studied in Israel compared to other physicians who studied abroad was 1.23 and 2.83 for immigrants since 1990 who studied abroad. For all specialists the odds were 1.16 and 2.14, respectively.

Conclusions: This increase is likely to continue in most specialties for physicians who studied both in Israel and abroad.

Health Policy Implications: The changing gender composition of physicians needs to be taken into consideration when planning for future medical personnel training and licensing especially in light of the decrease in the number of physicians per capita.

Globalization, migration, human resources and long term care policies

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Background: This study is based upon a literature review and consultation with leading international experts. It explores the effects of globalization and migration upon the availability of human resources in long term care in rich (demand) and poor (supply) countries and the issues this raises for the global availability and quality of care and long term care policies.

Study Question and Methods: I reviewed the literature and sought expert opinions in personal interviews in order to answer the questions of how globalization and, in particular, female migration, effected the supply and demand for care to handicapped and old persons in OECD and developing countries.

Results: Rising labor market participation of women, declining family size and the steep increase of time old impaired persons require long term care have all created a demand that women in rich countries are no longer able to fill. The gap in care is largely filled by immigrant women from poor countries. There is a global trade in nurses and caregivers and rich countries owe an unacknowledged debt to poor countries for subsidizing their health workforce.

Data from the USA, Canada, the UK, Italy, Greece, Spain and Israel confirm this trend. In poor countries, remittances are a major source of income for governments. They support migrant families economically, while leaving them with a vacuum of care for children, ill, handicapped and old persons, as well as for the health systems.

Conclusions and Health Policy Implications: The implicit global policy of responding to long term care needs by recruiting migrant labor raises serious issues of fairness, quality of care and sustainability. In light of the financial crisis it seems especially urgent to carefully reconsider the implications of these practices.

Regulatory Revolution by Stealth

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Ours is an era of change. This change is most commonly captured by the notions of liberalization, privatization and deregulation. Yet these rather salient and widely celebrated aspects of change are not necessarily the most important, or even the most interesting, elements of the emerging new global order.

What is rather more important and fascinating is the paradoxical 'regulatory explosion' amidst neoliberal (neoconservative) hegemony. I assert that regulation and regulatory reforms are playing out the effects of neoliberal reforms and are creating a new global order that is characterized in important ways by regulation.

Some implications of the thesis to the study of health governance, health regulation and health reforms are then discussed.

In particular I focus on the role of the state in an era of change.

The Lotus Project – Eliminating Co-Payments

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Background: The Israeli healthcare system is legally required to provide equitable, high quality services to all residents. Individual co-payments for medical services have increased since the law was enacted. This has had a significant effect on lower income residents and is expected to have a mounting negative impact on the equitable distribution of health services. As it becomes increasingly difficult for private individuals to meet co-payments, access to medical care will diminish. This phenomenon is evident in the increasing number of patients who have foregone healthcare due to economic difficulties.

Study Question: Will subsidizing co-payments for low socioeconomic, chronically ill patients increase their use of health services and thereby improve their health?

Methods: Chronic illnesses (hyperlipidemia, high blood pressure and diabetes) with easily measurable responses were included in the study.

Patients with a low socioeconomic status (SES), as defined by The National Insurance Institute of Israel, who were not regularly purchasing prescribed medications, were included in the study.

Blood glucose, blood pressure and cholesterol levels were measured.

A donor covered the co-payments for low SES patients who were not buying needed medications. Patients in the program received a “credit card” to purchase prescribed chronic-care medications.

Study Population: 325 patients with borderline hypertension, high cholesterol, or diabetes (average age 64.6 years) participated in the study for 6 months and were followed for 12 months.

Results: Relatively quickly, significant improvements related to taking prescribed medications were noted in all health measures.

Conclusions: Eliminating co-payments for medications improved the response to treatment and improved health measures for patients with chronic illness and low SES.

Health Policy Implications: Subsidizing co-payments can contribute to the health of chronically ill, low income patients, at least as much as expensive new technology and follow-up services.

Why isn't the Israeli Supreme Court Interested in Healthcare?

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Israel's Supreme Court enjoys vast and almost unparalleled power of administrative review. It has jurisdiction to hear challenges to decisions made by essentially any public official or tribunal in Israel in an almost limitless topical span. Furthermore, considered one of the most activist Courts in the world, the Israeli Supreme Court has also shown its willingness to hear cases involving highly contentious issues of politics and public policy in Israeli public life.

Yet the Israeli Court seems to be unusually shy in matters of healthcare policy: while it has brought forced the resignation of ministers, and weighed in on the legality of the withdrawal from Gaza, the Court seems unwilling to accept challenges in the diverse spectrum of health policy.

Analyzing extensive case law of the Israeli Supreme Court and adding a comparative legal perspective, I will try to suggest the possible reasons for this phenomenon. I will explain why, in my view, the Court is perfectly true to its own policy of judicial review, where it feels it makes sense for it not to intervene in the highly complex professional decisions pertaining to the provision of public healthcare in Israel and the efficient allocation of scarce resources.

Public Stewardship, Managerial Competence and Regionalization in Canada

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As originally implemented, public health insurance in Canada was a redistributive mechanism for funding health care. With the introduction of various forms of regionalization beginning in the early 1990s, provincial governments have moved beyond administering passive repayment mechanisms to managing health systems. This major shift in the orientation of public health care has increased the degree of state involvement in health care and put a premium on public stewardship and managerial competence.

Using measures of citizen satisfaction based on large-sample national surveys, the perception of the quality of public stewardship was decidedly negative in the first phase of regionalization as a result of the original disruption caused by structural reform as well as cost containment efforts that ran parallel to regionalization. This decline was accompanied by a high degree of uncertainty concerning the accountability of the delegated public authorities. In addition, both citizens and ministries of health have periodically raised questions concerning the stewardship and managerial competence of the senior executives as well as governance boards of the delegated public authorities.

Based on a 2008 cross-Canada survey of senior healthcare managers conducted by one of the authors through the Canadian College of Health Service Executives, the most significant deficiencies (the difference between self-assessed importance and actual level of competency) included process redesign, quality management and strategic thinking. In addition, there was a powerful and direct correlation between the size of organization and self-reported perception of relative managerial ineffectiveness. These results suggest that when governments increase their respective responsibility for public health care by integrating and coordinating a broader range of services through public administrative mechanisms, their efforts may be undermined by their own managers who feel they lack the process redesign and strategic planning skills to implement effectively such a structural reform. These results have implications for policy makers considering organization restructuring, for universities delivering public management and public policy programs, for accreditation and other bodies determining managerial competencies, and for ministers, governors and senior executives tasked with steering these large & complex organizations.

Breastfeeding Knowledge, Attitudes & Supportive Behavior Among Nurses Working in Tipat Halav Clinics

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Background: Health organizations worldwide recommend breast milk as the best nourishment needed to achieve optimal growth, development and health for infants. Global research shows that there is often a gap between official recommendations and the knowledge, readiness and ability of staff to assist mothers with breastfeeding.

Study Question: To examine the breastfeeding knowledge, attitudes & supportive behavior of nurses in Tipat-Halav clinics in three geographic settings.

Methods: A self-administered questionnaire was distributed to nurses in Tipat-Halav clinics run by the Ministry of Health and Clalit Health Services.

Results: Nurses with more positive breastfeeding attitudes reported helping breastfeeding mothers more. A partial association was found between breastfeeding knowledge and attitudes or supportive behavior among nurses. Practical knowledge of managing breastfeeding problems was less than theoretical knowledge. Nurses who relied on breastfeeding information from formula companies scored lower on attitudes than those who relied on other sources. Nurses who used the internet, professional books and articles as primary sources for information scored higher on supportive behavior.

Conclusions and Health Policy Implications: The partial association found between knowledge and supportive behavior, as well as the gaps demonstrated in practical breastfeeding knowledge suggest that efforts should be made to enhance current, evidence-based knowledge among nursing staff. It is recommended that professional attitudes be strengthened among the nurses and that their role in supporting and promoting breastfeeding be strengthened and encouraged. Nurses should have access to current information sources in their place of work. The Ministry of Health's ban of formula companies' advertising and favors for nurses should be enforced.

Passing the buck – who is responsible for the war on polypharmacy? Rethinking and re-evaluation needed for each and every drug in the elderly Using the Good-Palliative-Geriatric-Practice (GPGP)

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Background: Family physicians usually extrapolate from Clinical Practice Guidelines proven in adults to include elders in whom research evidence underpinning guidelines may not exist. As the extent of inappropriate medication use increases with age, co-morbidity, disability and number of medications, this therapeutic approach in elders requires rethinking.

Study Question: The Good Palliative–Geriatric Practice (GPGP) has previously proven effective in reducing polypharmacy, improving mortality and morbidity in nursing home inpatients. The objective of this study was to test this approach in community dwelling elders.

Methods: Drug evaluations were carried out in community dwelling elders using the GPGP approach to recommend “non-life-saving” drug discontinuations (DD) for at least 3 months. Outcome measures assessed included success rates of discontinuation for each medication, adverse effects, compliance, death rate, referrals to hospitals and changes in health status.

Results: Seventy elders age 82.8 ± 6.9 were evaluated using the GPGP approach 83% were independent/frail, 61% had ≥ 3 , 26% ≥ 5 co-morbidities, 71% suffered from ≥ 3 geriatric syndromes. Counting co-morbidities & syndromes together, 94% suffered from ≥ 3 , 51% > 6 different health problems. The mean follow up was 19.2 ± 11.4 months. Participants used 7.73 ± 3.7 medications (range 0–16). DD was recommended for 57.5% of these drugs (mean 4.4 ± 2.5 drugs/participant). After further consultation with guardian and family physicians 47% (3.7 ± 2.5 drugs/participant) were actually stopped. Only 5/256 discontinued drugs had to be restarted (DD failure 2%), successful DD eventually achieved in 80.7%. DD was not associated with significant adverse effects. 80% of patients/families reported medical-functional-mental-cognitive improvements, defined as significant in 37%, outstanding in 29%. 10 elders died after follow up of a mean of 13 months, mean age at death 88.

Conclusions & Health Policy Implications: Many elders suffer from ill effects of polypharmacy. As previously proven in nursing home inpatients, the GPGP framework is also beneficial in community dwelling elders and has no significant adverse events. Applying this GPGP nationwide may significantly decrease medication burden in elderly people, improve their quality of life, with an associated cost reduction.

The role of the IDF Medical Corps in Emergency

Nachman Ash

Medical Corps, IDF

The IDF Medical Corps is responsible for healthcare of soldiers in lull times and during emergency. Since there are no military hospitals in Israel, soldiers are hospitalized and treated in civilian hospitals. Thus, the military needs to count on civilian facilities and the Medical Corps needs to apply its responsibility to services given by other medical institutions, and specifically by civilian hospitals.

The Medical Corps, through the medical units in the home front command is responsible for the preparedness of all hospitals in Israel to times of emergency, including non-military scenarios like earthquake. Therefore, the emergency department of the ministry of health, the home front command and the Medical Corps share their accountability for hospital preparedness. The share of the Medical Corps is even bigger in non conventional scenarios since the doctrine of treating the casualties is created by the NBC branch in the Medical Corps.

It is not always clear where this responsibility ends. Is the Medical Corps a contractor that executes the policy of the ministry of health or is it a partner? I would argue that in a small country like Israel where resources are limited, both systems, the civilian and military, have to count on each other, cooperate and support each other.

Nonetheless, the limited resources generate some conflicts of interest that must be dealt cautiously by all involved bodies that must see the common interest of all in times of emergency.

Government responsibilities during an influenza pandemic

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Background: The next influenza pandemic is expected to spread rapidly, causing worldwide morbidity, mortality and economic disruption. The current A/H1N1 2009 influenza epidemic can serve as a "drill" to draw new lesson on pandemic preparedness and response, and specifically on the extent and limitations to government responsibilities in such an event.

Study Question: What are the government responsibilities during an outbreak of a new strain of influenza, potentially setting the stage for an influenza pandemic?

Methods: During the current A/H1N1 California outbreak in Israel, we mapped the critical governmental functions performed during the event, focusing on functions that are usually performed by other sectors in the health system.

Results: The following crucial functions should be performed by the Ministry of Health, especially during the first phases of the event: Stewardship, surveillance, defining case definitions and prioritizing use of laboratory diagnosis, setting clinical guidelines and rules for treatment of cases and their contacts, stockpiling and distribution of drugs and vaccines, coordination of communication to both the public and healthcare professionals and planning and preparedness for the next phases. When significant disruptions to the economy are imminent, other governmental agencies (i.e. Ministry of Defense) should take the lead in mitigation of the event.

Conclusions: The government and especially the Ministry of Health play a crucial role in the preparedness and management of an influenza pandemic.

Health Policy implications: It is important that all stakeholders would be familiar with the unique transformation of responsibilities during such an event.

National-Level Organizational Model for Coping with an Epidemic Outbreak

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Background: Panic causes incomprehension of disease coping, awareness and good care are blocked. Fear affects understanding of new diseases, obstructing the decision-making process. Preparedness requires the construction of an organizational model for coping with epidemic which will enable full coordination and cooperation between various professional elements within the healthcare system and with the public, to reduce the anxiety level and mitigating panic in a state of uncertainty. The purpose of the research was to construct an organizational model for coping with an epidemic outbreak on a national level.

Research instruments include a closed questionnaire examining the views and perceptions of the public, experts and professionals on the topic of epidemic, before, during and after the outbreak.

Research population include the general public - 801 people forming a representative sample of the population of Israel and 45 decision-makers professionals.

Results: 82% of the study population believes that fear of epidemic causes people to panic. 72% of the study population agrees to be quarantined and to obey instructions. 93% of decision-makers agrees that it is necessary to find a way to achieve voluntary isolation. 93% of the study population thinks that media presence and reports increase the public's anxiety and that epidemic information should be conveyed to the public by the Ministry of Health. All the decision-makers agree to a national-level preparedness plan.

Conclusions: The health system must prepare the public prior to an outbreak. Epidemic outbreak preparedness should be implemented written in advance by decision makers. This model can serve as a checklist for decision makers. Organizing preparations prior to the event determines the level of implications for the public and for decision-makers.

The epidemic preparedness plan as presented in this study will significantly affect the results of an epidemic threat or of a genuine epidemic.

Civilian staying power in the decision-making process during national emergencies

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Background: During national emergencies, the Ministry of Health (MOH) is responsible for orchestrating the response of the healthcare system. Over the past three years, the issue of evacuating a hospital was twice debated. We are aware of no research on the effects such an evacuation would have on the staying power of the affected population.

Study Question: Should civilian staying power be a consideration in the MOH decision to evacuate hospitals?

Methods, Results: During the 2nd Lebanon War the Mizra psychiatric hospital suffered a direct hit by a Lebanese missile. Though damage was limited, the hospital had no structural protection and therefore evacuation was undertaken. The civilian population in the region was not evacuated. The MOH considered the issue of staying power prior to the decision to evacuate the hospital, including needs of the population, psychological impact of evacuation on the community, consequences for transferring patients to other facilities and potential danger to patients and staff.

During the Gaza incursion, a single salvo of missiles was fired at the city of Nahariya, far distant from the conflict zone. The population of the region was not ordered a prolonged stay in shelters. The Nahariya hospital's administration requested a directive from the MOH to evacuate patients to underground shelters sufficient for approximately two thirds of the patients. The decision of the MOH was not to evacuate.

Conclusions: Social fortitude impacts on decision-making during emergencies, and should be integrated in response plans based on: ongoing evaluation of the status of the healthcare system; up-to-date information regarding risks and potential consequences; mechanisms for supporting decision-making; supervision over implementation of decisions made, and; flexibility for modifying decisions according to the evolving situation.

Health Policy Implications: The Israeli MOH position is that all measures should be taken to avoid evacuation of medical institutions during emergencies.

Performance management of Emergency Medical Services (EMS) – an evaluation of Madrid EMS conduct based on Israeli EMS protocols

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Background: On 3/11/2004, at 07:39, ten explosive devices were detonated on board four commuter trains in Madrid (incident named M-11). Madrid EMS teams were forced to deal with simultaneous explosions at four sites causing 191 fatalities and over 2000 injured. The magnitude and special nature of the event posed a huge challenge for caregivers and system managers.

Study Question: Can Israeli EMS protocols be used to identify faults and suggest solutions for improved future management of mass casualty events such as M-11.

Methods: Four aspects of crisis management were used to conduct a structured analysis of the event: management, administration, communication and team's safety. A thorough literature review of the event and interviews with local authorities sketched the detailed management scene. Israel's EMS protocols were approached and analysed for relevance to the various situations noted in Madrid.

Results: Israel's success in managing public health emergencies roots from continuous national efforts to ensure knowledge, supply equipment, assemble protocols, execute drills and inspections. In Madrid, local drills had been conducted but not wide coordinated ones that simulated the interfaces between all authorities. In M-11, the hospital, which was designated to receive most casualties in the drills, received only 3.2%. EMS employees were unaware of emergency protocols. There were no checklists; the dispatch centers did not know the number of staff at hand. The use of triage tags was unclear to EMS personnel causing unregulated evacuation to nearby hospitals. Little information was shared between EMS's dispatch centers and hospitals. The hospitals learned about the magnitude of the event as it progressed.

Conclusions: MDA protocols offered solutions to failures pointed out in Madrid. These solutions have been proven effective in Israel both in drills and in real life events.

Health Policy Implications: Although countries vary in their EMS services, solutions may be adjusted and implemented in other EMS services worldwide.

Cross-Cultural Action for Promoting Health among Ethiopian Immigrants in Primary, Secondary and Tertiary Health Care Settings

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Group B

Background: Ethiopians immigrants in Israel, over the past three decades, experience significant adjustment problems to the health system due to cultural disparities. Difficulty in meeting health needs stems from cross-cultural communication problems and disparities in the cultural perspectives and habits regarding health. Clalit Health Services (Israel's largest health service organization) insures the majority of the Ethiopian community.

Study Question: To develop and implement culturally appropriate health services on a sustainable basis, and to evaluate their impact using culturally appropriate indicators.

Methods: 1. Integrating trained Ethiopian immigrants in over 40 clinics, as cross-cultural health liaisons between patients and health professionals ("Refuah Shlema"), promoting the health of the Ethiopians via improved communication, based on the concept of health literacy. (Co-coordinated / subsidized by the Ministry of Health.).

2. In-service training for clinical/administrative staff, increasing awareness and sensitivity regarding Ethiopian health perception, disease causation and treatment, bridging cross-cultural gaps; 3. Implementing culturally appropriate health education group programs. 4. Incorporating telephone translation (Tene Briut) in over 50 clinics and hospitals where cultural liaisons are not available.

Results: Qualitative and quantitative evaluation showed effectiveness in significantly improving: 1. physician-patient relations, 2. accessibility to medical services, 3. ability to navigate the health system, 4. clinical quality indicators of chronic disease management (diabetes) and preventive services and examinations (mammography, FOBT etc), while not significantly increasing service expenditure.

Conclusions: Culturally appropriate services can significantly improve communication, health habits, the use of the health care system and clinical quality indicators.

Health Policy Implications: Increased access to culturally appropriate services and improving cultural competence skills are critical for eliminating disparities and should be included in national health policy.

First visit to the MCH and the Health Beliefs Model (HBM) among Bedouin mothers in the Negev

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Background: The first visit to the MCH (Maternal & Child Health Clinics: Tipat Halav) is an important indicator for well baby care specifically in disadvantaged populations. The MOH (Ministry of Health) recommends carrying out this visit within the first two weeks after birth.

Objectives: The current study examined factors associated with the age of first visit to the MCH among Bedouin mothers in the Negev using the Health Beliefs Model (HBM).

Methods: 464 mothers of full-term babies aged 9–15 months who visited 14 randomly selected MCHs were personally interviewed using structured questionnaires. Data was also collected from the babies' files in the MCH. Age at first visit was dichotomized into ≤30 days or >30 days.

Results: Only 10.1% of the Bedouin mothers carried out the first visit within the first two weeks and 25.6% within 30 days after birth. The mean age at first visit was 42 days ($SD=\pm 38$, range= 0–332). In the multivariate analysis late age at first visit (>30 days) was significantly associated with living conditions (household not connected to electricity and ownership of household land), lower rank of father's occupation, higher birth weight, higher number of children, mother's perceptions of the baby's susceptibility and barriers of care. Other cultural factors and access and availability of the MCH had no significant associations with the first visit age.

Conclusions: The results indicate that improving the living conditions and socio-economic status might help mothers to carry out a timely first visit to the MCH. These factors might help mother's to overcome barriers of baby care and increase the motivation to have their first visit to the MCH as early as possible for better well baby care.

Differences in the association between social support, mental health and visits to physicians in a multicultural population in Israel

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Group B

Background: Social support predicts better health; however, it is not clear if this is true for all three population groups in Israel and if this association may be explained to some extent by use of health care services.

Study question: This study examines to what extent does the association between social-support and mental health depend on the social context, and to what extent can the association between mental health and social support be explained by use of health services in veteran Jews, immigrants and Arabs.

Methods: This is a secondary analysis of data from the National Health Survey performed during 2003–4. The survey was part of the World Health Organization's World Mental Health Survey Initiative. The analysis included 4,639 face-to-face home interviews with individuals aged 21–98 living in Israel. Social support was measured using four items. Mental health was measured using the General Health Questionnaire-12. Respondents reported visits to family physicians and specialists during the previous two weeks.

Results: Veteran Jews reported higher levels of social support and better mental health compared to immigrants and Arabs. Mental health was associated with the variables of social support mainly among veteran Jews and less so among Arabs and immigrants. Social support was not associated with visits to family physicians. However, among veteran Jews and Arabs but not among immigrants, visits to specialists were associated with frequency of contacts with friends and having someone to talk to when in need. Visiting a doctor did not explain the association between social support and mental health.

Conclusions: The association between social support and mental health depends on the social context in which the individuals are embedded. It does not seem that visits to doctors can add to the explanation of the association between social support and mental health.

Assessment of asthma control and its socioeconomic determinants

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Background: Asthma is a major public health issue given its high prevalence and consequences in terms of both morbidity and mortality.

As in other industrialized countries, asthma prevalence has increased in France in the last decades. Previous studies have shown a higher prevalence among lower social classes.

Study question: This study aims to estimate the asthma prevalence in France in 2006, assessing the level of asthma control and identifying the factors associated with non control.

Methods: Data are from the 2006 Health Protection Social Survey, representative of the French population, which included a standard set of questions on respiratory diseases.

The level of asthma control (controlled, partly controlled or uncontrolled) is assessed according to the 2006 Global Initiative for Asthma guidelines. Determinants of uncontrolled asthma are identified among patients' characteristics by means of multivariate logistic regression analysis.

Results: In 2006, the asthma prevalence was 6.7% versus 5.8% in 1998. Asthma is partly controlled for 46% of asthmatics and uncontrolled for 15%. Among the uncontrolled asthmatics, 24% has no long-term daily treatment and 54% has an inadequate treatment. Adjusted by level of treatment, gender and age, the likelihood of suffering from uncontrolled asthma rather than controlled increases with low income ($OR=4.18$; $p<0.01$), current smoking ($OR=1.72$; $p<0.10$) and obesity ($OR=2.60$; $p<0.01$).

Conclusion: Since 2000, mortality and hospitalizations resulting from asthma are decreasing as a result of a better management of the disease. Nevertheless, our results show that non control of asthma is associated with socioeconomic characteristics in France.

Health Policy Implication: Asthma control requires not only a suitable and effective medication, but also improvements in access to therapeutic education, especially for asthmatics' with lower economic status.

Spatial differentiation of mortality among unemployed subjects in Poland

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Background: The identification and documentation of health disparities are important functions of public health surveillance. Increasing health discrepancies observed in the last decade after transition in Poland could be attributed in part to the social consequences of unemployment. Mortality is a powerful indicator of disparities in both health status and access to health care that can readily be monitored using routinely available public health surveillance data.

Study Question: Is there evidence for spatial differentiation in mortality of unemployed individuals in one region of Northern Poland in a typical economic transition context of high and persistent unemployment?

Methods: We analyzed geographic differentials in survival among 47 247 unemployed individuals in Gdansk City and Gdansk County registered by the Labour Office as unemployed between 1 January 1999 and 31 December 2004. To assess the effect of place of residence on survival, we calculated the sex and age-adjusted hazard ratio (HR) and 95% confidence intervals (CI) by conducting Cox proportional hazard analyses.

Results: We estimated that the risk of death among unemployed population varied significantly between different quarters of the city. Age and sex adjusted HR was 3.28 times higher (95% CI 1.18 - 9.12) among unemployed persons living in the most economically deprived quarter compared to those living in the least impoverished area. We developed GIS maps showing variation in mortality across different quarters of Gdansk City and different communities of Gdansk County.

Conclusions: Our results provide evidence on residential segregation that affects socioeconomic determinants of mortality in unemployed subjects in Poland.

Health Policy Implications: would be to improve human capital investment programs and make *health care more accessible* and affordable for the people living in most deprived areas.

Is place all that matters? Inequalities in the use of PCI following AMI in Norway

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Background: Percutan coronary intervention (PCI) is the recommended procedures following acute myocardial infarctions (AMI). However, PCIs are highly specialized procedures that in most countries are performed only in tertiary care centers leaving patients experiencing AMIs in remote areas with trombolysis as the best alternative. Norway with its sparsely populated regions has established 6 PCI-centers mainly located in the greater cities.

Study question: Which factors in addition to travel distance to PCI-centers explain variation in the probability of receiving PCI following AMI in Norway?

Data: All patients in Norway classified with AMI (ICD10 I21 and I22) in the period 1999–2008.

Results: Average probability of receiving PCI following AMI increases from 0.03 in 1999 to 0.24 in 2008. The probability of receiving PCI increases with age until 60–65 years after which it falls slightly. It is slightly higher for men than for women. The probability of receiving PCI is higher in areas with high AMI-mortality while (community level) socioeconomic seem to have only weak effects. Controlled for distance to PCI-centers, the variation in probability of receiving PCI within the group of catchment areas of the PCI-centers was significant by the beginning of the period but has decreased substantially while the variation in probability of receiving PCI within the group of catchment areas of hospitals without PCI-centers is substantial throughout the period.

Conclusions/re commendations: A hierarchical governed health care system mainly based on risk adjusted capitation budgets systems seems to tackle the problems of inequality related to socioeconomic factors while there seems to be some variations related to geographical variations that need further attention.

A Hospital Experience in Cultural Competence

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Background: Israel is a melting pot of diverse minority groups; however the incorporation of cultural sensitivity in health care deliverance has not been inadequately addressed in medical settings. The Meir Medical Center was awarded an accreditation certificate in 2008 by the JCI, a global organization which disseminates information, standards development and quality improvement in medical environments. Working towards this achievement generated changes in reducing the disparity in the provision of health services in deliverance and expectations of different population groups.

Study Question: The hospital was challenged on how to identify and adapt the system and its infrastructure to culturally sensitive issues.

Method: Management appointed a multi professional task force to identify and define the problematic areas in the hospital's health delivery. A survey was conducted including parameters defined in the accreditation demands such as privacy in hospital wards, staff reports, admission and consent forms, discharge planning and inter staff communication.

Results: Rules and regulations were designed and discharge measures considered cultural issues. Accessibility to information and consent forms was provided through the hospital intranet (translation, people to people and material translation) as well as religious connections (rabbi, sheikh etc.) An e-learning, interactive program, outlining the patient rights law, was developed for the staff (ad hoc over 400 participants)

In 2009, inter staff communications with cultural competence training (two workshops) and multi cultural communities out reach programs (more than five) were planned. Family members participated in ward rounds (in more than half the departments) reducing the level of misunderstandings. Patient satisfaction results regarding privacy rose 6% during 2007 – 2009.

Conclusions: Results indicated an advanced awareness of cultural sensitivity

Health Policy Implications: A higher awareness of cultural issues improves medical treatment and increases patient and staff satisfaction.

Care for Frail Older Persons – Family-Welfare State Balance – and Impact on Quality of Life of Elders

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Background: Quality of life (QOL) is one indicator for wellbeing in modern welfare states and a measure for effectiveness of socio-political interventions. With respect to old age it was shown that QOL is strongly connected to the family as an institution delivering help and assistance to its frail members. However, family structures, norms and behaviours are changing, posing significant challenges to societies, families and individuals. As many industrialized nations face an aging population and the economic strains of changing dependency ratios, societies will have to create health and social policies and programs to meet the needs of their new demographic. These needs will have to be addressed through cooperative efforts and collaboration between informal care – family care – and formal care. Can we have trust in family solidarity, and if so, do we really want to? What about the welfare state? Is the welfare state a resource or a risk for family solidarity? The paper examines the strength and character of intergenerational family solidarity under different welfare regimes.

Main research questions: are more generous welfare state provisions a risk (crowding-out) or a resource (crowding-in) for family care? What is the impact on QOL of frail elders?

Methods: The questions are explored with data from the OASIS comparative study among urban populations aged 25+ (n=6 100) in Norway, England, Germany, Spain, and Israel. Data was collected via structured interviews looking at needs, filial norms, family support, use of health and social services and QOL.

Findings: indicate that the welfare state has not crowded-out the family in elder care, but have helped the generations establish more independent relationships which impacts positively QOL. Availability of support from any source was also a positive predictor of QOL in old age. Recommendations for health policies to complement family support are presented.

The Role of Social Support in Quality of Life of Stroke Survivor's Caregiver (A longitudinal study)

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The yearly incidence of stroke in Israel is about 15,000. Stroke strikes unexpectedly survivors and caregivers into uncertain reality. Caregivers are initiated into their demanding role when the survivor is often at maximal disability without time to practice. The policy of cost containment has shortened in-patient treatment for stroke survivors and resulted in their return home at earlier stages of convalescence. Early discharge has been associated with poorer physical and emotional status, placing the caregiver at risk for burnout.

This study is a part of a longitudinal study including 155 senior stroke survivors and 140 caregivers. The aims were 1. To examine the changes in caregivers' burden, physical and emotional health, social support network and quality of life (QOL). 2. To identify the predictors of caregiver's QOL during the first 6 months following stroke occurrence.

Subjects were assessed after the first week of admission to the rehabilitation ward and at 3 and 6 -month follow-up intervals.

Results indicate that after 3 months depression and the need for instrumental support decreased. Caregivers' physical health remained stable during the 6-month period. Nevertheless, satisfaction with informal support, family relationships and QOL decreased.

After 6 months, perception of health and QOL increased. Burden decreased at 3 and 6 -month intervals. These results indicate that overall, caregivers adapted to their role over the 6-month period. At each of the 3 intervals, QOL was explained by the same 4 variables, although with differential weights: physical health, confidence in the social support, burden and sharing a household with the survivor.

The findings call to healthcare providers, to identify caregivers at risk, and develop appropriately timed interventions for empowering caregivers in their role fulfillment. It is highly recommended that intervention planned by the healthcare designers be anchored in the general context of the Israeli national healthcare policy.

Cultural Differences in Nurses' Health Behaviors

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Background: While nurses are the largest occupational group of all health professionals, they come from diverse backgrounds. All nurses are expected to engage in healthy lifestyles in order to meet their obligations as role models.

Study Questions: To assess and compare health behaviors between nurses from different countries.

Methods: Two prior studies regarding nurses' health behaviors from Hong Kong (H.K.) and the United Kingdom (U.K.) were chosen from the literature and compared with a recent Israeli survey. Nurses working in most clinical specialties were represented.

Results:

- ◆ Smoking habits – H.K. (16%) and Israel (25%); higher percentage found in the U.K. (47%).
- ◆ Regular physical activity – U.K. (61%) and Israel (49%); lower percentages reported by the H.K. nurses (36%).
- ◆ Dental hygiene – the percentage of nurses reporting similar compliance in H.K. (74%) and Israel (77%), while U.K. nurse reports were higher (81%)
- ◆ Cervical screening – U.K. (79%) and Israel (74%); there is a lower participation in cervical screening for the detection of cancer in H.K. (45%).

Conclusions: Despite the differences in data collection and cultural environment, the sample is representative of nurses in varying clinical specialties in these three countries. Variations were found in the nurses' health behaviors.

An international multi-centered study would contribute additional information on this subject.

Health Policy Implications: Implementing free health promotion programs in the working environment will encourage nurses' participation thereby improving nurses' health behaviors.

Ethics of decision making for people with dementia: The case of GPS

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Background: Wandering, affecting 20–25% of persons with dementia (PWD's), is a potentially life-threatening behaviour. Advanced technologies, such as Global Positioning Systems (GPS), allow for tracking and managing this human spatial activity. However, tracking raises the ethical dilemma of autonomy versus personal safety.

Study question: Who should decide about the use of tracking for PWD's, particularly when they are unable to make decisions for themselves?

Methods: Data were gathered from focus groups with professional and family caregivers of PWD's by employing a vignette. Next, questionnaires were completed by 69 family caregivers, 96 professionals, 55 social workers and 61 BSW students. Participants were asked to rate the involvement of each of nine possible decision makers.

Results: Ideally tracking should be used only when the individual gave his informed consent. Decision making was believed to be in the realm of the family. Although family caregivers thought it would be helpful to consult professionals; professionals, including social workers, preferred not to be involved in such decisions.

Conclusions: Professionals' reluctance to intervene may be related to fear of paternalism and being involved in decisions which may contradict autonomy. Perceived as an intra-family issue, it seems that the decision regarding tracking should be primarily based on elders' values and wishes. However, given that the entire family system is affected, the decision should be considered as a process involving both PWD's and their family members.

Health Policy Implications: Thought should be given to how health policy might improve the involvement of professional services so that these meet the families' needs and fulfill their role in promoting the well-being of both PWD's and their caregivers.

The place of Hospital at Home in French health care system

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Background: Since fifty years in France, Hospital at Home (HAH) is an original model of organisation of hospital care at home. HAH provides acute, technical and coordinated care to patients in their own homes rather than hospital. International researches have shown its medical, human and economic interests. In France, legislative measures and a new financing model have contributed to its recent development.

Study question: This study aims at describing HAH in the French health care system, by describing patients' profile and their care pathways, nowadays in comparison with the situation before the reform.

Method: The 2006 medical hospital information system provides individual patients' characteristics and treatments delivered during each HAH stay.

Results: Patients admitted, of all ages, were especially elderly men and young mothers. Six stays out of ten concerned women; half of the stays last less than six days but this duration varies with admission cause. Perinatal care (22% of admissions, 7% of days), cancer care (10%, 7%) and palliative care (15%, 20%) were the main admission causes. Six patients out of ten admitted from a classic hospital setting whereas four patients out of ten were at home. Hospitalisation in an institution has been reduced for 33% of the patients, delayed for 7%, partly avoided for 20% and totally avoided for 33%. About 7% of the stays have finished by the patient's death at home.

Conclusion: Medical progress permits HAH to offer an alternative to traditional hospital-based care. Nevertheless, several departments did not supply HAH care in 2006.

Health Policy Implication: HAH improves coordination between primary care and hospital, providing acute health care and offering a solution for chronic diseases in front of demographic evolution.

Patient – physician interaction and equity in health: the role of primary care

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Background: Many studies and reports have stressed the crucial role of primary care in tackling social health inequalities. Although showing very low levels of social inequalities in access to General practitioner, France appears to suffer from some of the highest levels of inequalities in health among OECD countries.

Study question: We study how patient–physician interaction in the context of primary care may create or influence existing social health inequalities, focusing on overweight and obesity.

Methodology: This study uses a 2007 specific survey which collected data on a sample of 30 general practitioners and 600 of their regular patients. Both actors' views of the visit were collected through identical questioning. Data includes purposes and contents of the visit, patient's health status, with a focus on overweight and obesity, lifestyle, weight and height measures, socioeconomic status and visit outcome, including prescription and compliance with treatments.

Results and conclusions: Half of the patients included in the survey were obese or overweighed. These conditions were addressed in four visits out of ten. First analysis show that while patient and practitioner views of the visit converge on topics such as medical treatments or diagnosis, they strongly diverge on mental health and prevention. We also study compliance with treatment, information on healthy habits and prevention provided by the doctor and how these elements are linked with patient's socioeconomic status and the visit contents.

Health policy Implications: This research will bring new elements on how interaction between patients and health services affect social inequalities in health, health, healthy lifestyles, and compliance with treatments. It will also provide insights on the role of primary care in tackling social health inequalities.

Social Capital and Pediatric Injuries

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Background: Childhood injuries account for close to one million deaths globally, while non-fatal injuries, frequently resulting in hospitalizations and lifelong disabilities, affect tens of millions of children worldwide. The burden of childhood injuries is not equally distributed and there are numerous elements influencing injury risks, such as socioeconomic position (SEP) and social capital. Within the context of social capital are factors such as social networks, support and integration – loosely defined as an individual or collective sense of belonging, trust, and reciprocity. Religion holds a unique position in communities as a strengthening factor for many of these aspects of social capital.

Study Question: To assess the effect of SEP and religion on injury-related hospitalization rates.

Methods: An ecological retrospective study using the Israel National Trauma Registry (ITR) was performed for a 10-year study period, 1998–2007. We identified three Jewish cities in Israel with exclusive coverage by the ITR, similar geographic locations, and varying area-level SEP and religious affiliation. City-specific injury rates were calculated for children 0–17 years.

Results: Rates of intentional and unintentional injuries were consistently lower among children living in areas of low SEP/high religious affiliation compared with those living in areas of medium or high SEP/low religious affiliation.

Conclusions: Social capital is an important factor influencing injury-related hospitalization rates. Religious affiliation modified the expected inverse association between low SEP and increased rates of injury. Lower injury rates in the low SEP/high religiously affiliated community were offset by a greater absolute number of children injured.

Health-policy implications: Targeted prevention programs should consider the influence of social capital as well as deprivation on health.

Legends of health policy and management

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Over the last twenty to thirty years the field of health policy and management has spawned a long list of technical solutions and a lexicon for coping with the problem of aligning costs, quality and equity (these themselves being such). While not oblivious to social context, practitioners of the field have struggled to systematically include contextual issues, such as politics, culture and religion in the analysis. Unfortunately, however, we have not gotten far beyond viewing matters of values, social capital, and trust in institutions as residual to the ostensibly more robust analysis of incentives, cost effectiveness, cost utility and evidence based medicine. Even less attention has been given to ways in which context can alter the very essence of the technical models themselves. We aim, in this section of the conference, to find a better blend of attention to technical and contextual issues.

Solidarity in a changing world

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The modern welfare state is based on a series of transfers from rich to poor, from those in working ages to children and old people, and from healthy to ill. It has arisen in part out of altruism but also enlightened self interest: a generation of people living in Europe during the 1930s and 1940s were all too aware of how, no matter how privileged they were, events of which they had no control could turn their world upside down. As a consequence, they arranged post-war societies in ways that presaged Rawl's veil of ignorance, whereby the policy maker took decisions blind to how they might impact on him or her. The model was underpinned by a concept of shared humanity, in which each person recognized that in other circumstances it could be them who were in need of help. However, since the 1980s this model has faced growing pressures. Large scale migration has changed the nature of many societies, creating divisions between those of different religions and races. Ageing populations have placed growing demands on health and pension systems just as "generation X" was confronting the evidence that each generation may not be better off than the one that preceded it. Some politicians have exploited these changes, encouraging an individualism that sees taxes as theft and sharing as outdated. Many collective institutions have struggled, exemplified, in Israel, by the Kibbutz movement. Yet polling suggests that a sense of solidarity remains strong, at least in Europe. The question is whether it can survive, in the face of relentless attacks from some politicians and their media backers. The answer will have profound implications for public health.

Clalit's Strategy for Health Disparities Reduction: The Vision and Its Implementation

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Background: Healthcare organizations have an important role in reducing health disparities caused by social factors as well as by unequal access to high-quality medical care. The means by which these goals can be achieved are yet to be uncovered.

Objective: To formulate and implement a plan for setting and evaluating a systematic disparity-reducing strategy in Clalit Health Services.

Methods: A steering committee examined 70 healthcare quality measures, part of a decade-long quality-improvement effort, and selected a set of key disparity quality indicators, which show wide variation in performance associated with socioeconomic status and ethnicity. A composite weighed score was constructed to track and set goals for quality improvement and disparity reduction. Data on clinics' performance guided development of specific disparity-reducing strategies.

Results: Seven indicators were selected, targeting disease control and primary prevention, pertaining to large segments of the population. 55 Low-performing clinics, affecting ~10% of Clalit enrollees, largely of low socioeconomic and minority populations, were selected for intervention according to a composite score. Each district developed and implemented tailored plans to improve the level of care in all aspects in the target clinics, and performance financial incentives were set on the district level. Full implementation began in late 2008, and early results show that disparity reduction is indeed taking place, with overall reduction of 30% of the quality gap within 8 months, with periphery districts achieving up to 80% reduction.

Conclusion: This unique study presents a successful large-scale organization-wide systematic process of disparity reduction based on quality improvement methodologies involving a mixed top-down and bottom-up approach of policy change, including continuous measurement of disparities, support by top-management, and local-level empowerment for implementing specific disparity-reducing interventions.

Health Policy Implications: Directing an organizational focus and relevant resources to clinics that serve disadvantaged populations and are failing to adequately address the challenges posed by their needs, is key to closing the health and healthcare quality gap.

From measurement to comprehensive policy: The Maccabi Healthcare Services action plan to increase equity

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Maccabi Healthcare Services (MHS) has chosen to implement a long-term action plan to decrease disparities and promote equality and equity in service provision together with health outcomes.

This strategic decision is rooted in a number of parallel processes: MHS' 5-year-experience with measurement and internal reporting of performance results, which raised awareness of disparities between units that serve different populations; the effect of local initiatives that created tailor-made solution to barriers to equitable care; institution of a Quality Improvement infrastructure to support on-going organizational learning; and growing recognition of how disparities in Israeli society affect health care.

As part of this action plan, MHS recently published its first Equality Report, dedicated to transmitting the observed associations between members' demographic and socio-economic characteristics and health measures such as prevalence of chronic disease and preventive chronic care performance.

The report specifically identifies populations at risk for healthcare disparities. These sub-groups belong to Israel's geographic and social peripheries; they require preferential allocation of resources and focused interventions to achieve optimal health.

Based on the report's proposals, MHS has decided to:

(1) Designate promotion of equality as its strategic objective, a filter through which every policy decision will reviewed; (2) Develop an organizational methodology for measuring equality; (3) Adjust MHS services to members' ethnic, cultural and social needs; (4) Strengthen perceptions of community-oriented primary care; (5) Target resources to "social peripheries", beginning in 2010; (6) Improve service accessibility and availability in geographically peripheral areas; (7) Reduce economic barriers to receipt of healthcare; and (8) Develop an organizational index to assess reductions in disparities over time.

The presentation will describe the disparities as analyzed in the report in addition to the specific steps of the action plan formulated in their wake.

Towards a working definition of morality in public health

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Background: There are two key applications of public health values at policy level. One relates to provision of health care with respect to the ability of citizens to pay. The other relates to the uneven distribution of health capability (Marmot's *causes of the causes*) across the social body. Recent financial events draw our attention to the disputed ground, including the issue of income inequality.

Aim: To re-examine notions of equality, justice and fairness, and their impact on health. To attempt to distil from this some pointers to a reasoned morality of public health.

Method: Narrative review.

Results: Political philosophers have articulated the problem of the conflicts between freedom and collectivity, rights and responsibilities, individualism and conformity. Rawls' difference principle is an attempt to reconcile the polarity with a liberal theory of distributive justice, that as well as there being a need for equality in the assignment of basic rights and duties, there is justification for social and economic inequalities in wealth and power, provided they result in compensating benefits for everyone, and in particular for the least advantaged. The justification encompasses recognition of diversity of industriousness and objections to 'equalising down'. Two lines of evidence suggest there is a need to reconsider the boundary between rights and duties: (1) social epidemiology has shown that health is not merely a household concern, and has its origins in social organisation, and (2) the global financial meltdown – fashioned by the unregulated greed of the few and threatening the health and well-being of the least advantaged and many more besides – particularly in the light of Wilkinson's work on the collective impacts of income inequality.

Conclusions: The health care funding debate may have been unduly influenced by the unsustainable market-economic values of the past decade. We should consider the negative implications of extending the idea that health is just another commodity. The insights of social epidemiology further add weight to Dworkin's argument that the moral legitimacy of a political system is brought into question if it does not pursue intersectoral public health policies that address inequalities in health capability as well as inequalities in health outcomes.

Beyond Information: Developing Culturally-Centered Narrative Formats for Ethiopian Immigrants on the Realization of Health Rights

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Background: According to the National Health Insurance Law all residents are entitled to receive health rights information. Disseminating it to Ethiopian immigrants poses challenges related to cultural and language barriers, acculturation, low literacy, and economic and social marginalization.

Study Objectives: To identify Ethiopian immigrants' particular needs and views regarding health rights. Drawing on these - to develop theory-based prototypes of formats to present health-rights information in culturally-centered ways to enhance perceived efficacy to pursue their attainment.

Methods: Over 60 Interviews (individual and group) with Ethiopian immigrants from different age groups and immigration waves (most in Amheric), from 14 locations, and with healthcare and health rights practitioners working in the Ethiopian community. An advisory group of 2 Ethiopian and 2 health rights organizations. Development and testing 3 theory-based narrative/scenario formats for presenting rights information (video and print), based on cases described by study participants.

Results: Participants expressed lack of knowledge of health rights and low sense of efficacy to attain them, even when aware of specific rights. Major obstacles noted were language barriers, lack of trust in the system, feelings of discrimination. The narrative strategies were assessed as informative and culturally appropriate.

Conclusions: Ethiopian immigrants found the narratives/scenarios useful formats to learn about health rights and to increase self-efficacy and perceived norms to attain them. They however find language barriers and low self efficacy as major obstacles.

Health Policy Implications: The study provides a culturally-centered narrative-based method for disseminating health rights information to low-literacy Ethiopian immigrants that can also help enhance self-efficacy to attain

Decision-makers' acquaintance with the public's priorities among various components of health services

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Background: The globalization process, the increasing price of health services, changes in the political atmosphere and the rise of neo-liberal ideologies, have all led to renewed and critical examination of the health care system. What are the "must have" and what are the "nice to have" among the wide range of components and services? Today there is an increasing tendency to listen to the public for policy decision making. Decision makers often assume they know the public's standpoints and see themselves as capable to represent them.

Study Questions: 1. To examine the relative importance ascribed by the public to selected components of health services, in the national allocation of resources and in their personal insurance. 2. To assess the level of understanding senior decision-makers have concerning the public's priorities. Methods: A phone survey was conducted with a representative sample of the Israeli adult population (N=1,225). In addition, face-to-face interviews were conducted with senior decision-makers and health journalists.

Results: Early disease detection and nursing care for the elderly were given high priority relatively to dental health, mental health, fertility treatments, cardiac rehabilitation, alternative medicine, building a new hospital, adding clinic staff, and subsidizing complementary insurance for the poor. Most decision-makers incorrectly estimated the public's priorities at the national level and in personal health insurance.

Conclusions: The public's preferences focused on prevention and care. The public seems "mature" in its priorities and does not tend to "pampering" issues. Decision makers were unable to predict the public's preferences.

Health Policy Implications: Evidence regarding the public's preferences should be part of the decision-making process. Even if a decision contradicts public opinion, the public's attitudes can be useful in planning the implementation strategy.

Denial of Access to Electricity and its Effect on Public health

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Electricity is a vital component in public health. The prevention of access to electricity, while not a health policy, is a policy with far reaching effects on health. The aim of our research was to understand and expose the effects of lack of electricity on chronically ill people living in the Unrecognized Bedouin Villages in the Negev.

As part of the policy of non-recognition, the government of Israel prohibits connection of all homes in the unrecognized villages to the national electric grid. This includes 80,000 citizens of Israel.

The novelty of this research is the far reaching access to the community. A cluster sample is of 405 was used: two villages were chosen randomly, staying away from the villages located in extreme toxic environments, and within these villages two neighborhoods were chosen randomly. In these neighborhoods, each resident was personally questioned: "Are there any people in this residence that suffer from chronic diseases that need electricity to help with the treatment? Please tell me about them." The results were surprisingly grave: for example, 31% of the women in the villages had chronic illness that without access to electricity, the suffering was increased, and 20% of the children. 2% of the chronically ill died because of lack of access to electricity.

From this research it is obvious that the government is willfully disregarding its responsibility to promote health to an entire community. When challenged in the Supreme Court, the government defended itself by claiming that "It is the individual's choice to live in the villages." We will attempt to use the results of this research to promote government accountability.

Expert Bias Facilitates Adoption of New Fertility Technology

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Group B

Background: Oocyte cryopreservation is a novel technology for preserving fertility that raises challenging ethical, social and economic questions: e.g., should women who wish to postpone parenting to achieve a professional career be treated as those undergoing chemotherapy? Who should bear the costs?

Study Question: To assess opinions of assisted reproductive technology (ART) professionals, bioethics experts, and a sample of the Israeli population toward provision and financing of oocyte cryopreservation.

Methods: (1) Survey of 21 ART units directors; (2) Interviews with 23 bioethics experts; (3) Random-dial telephone survey of the general public (N=600); (4) Survey of 196 medical students from two universities. All surveys were in Israel.

Results: Nearly 80% of ART and bioethics experts and 56% of medical students thought that oocyte cryopreservation should be allowed to preserve fertility even for personal reasons. While bioethicists expressed concerns about social consequences, they emphasized individuals' right. By contrast, among the public, only 40% supported use of this technology for personal reasons (ranging from 24% among Ultra-orthodox Jews and Arabs, to 51% among secular individuals or with academic education). Of note, 15% were undecided (vs. < 2% among experts, p<0.001). Most experts suggested private financing of procedure for personal reasons, whereas most of the public preferred national or private insurance coverage.

Conclusions: Non-experts express a more balanced position than experts who appear to be biased by professional beliefs and/or interests.

Health Policy Implications: Healthcare costs are increased by widespread adoption of novel technologies before solid evidence on efficacy and risks. Our observations suggest that the "wisdom of crowds" may be paradoxically more poised than expert opinions, indicating usefulness of public discourse and democratization in health policy decisions.

The Dilemma of Statistical Precision vs. the "Precautionary Principle" in Small Areas

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Ministry of Health, Israel

Background: The presentation of health data on the level of a single locality allows for the detection of inequalities between and within localities. However, rates in small populations often lack reliability due to small numbers. A literature review shows statistical and non-statistical ways of coping with this issue. It's generally accepted that the absence of evidence does not represent evidence of absence of a risk. The "precautionary principle" suggests that uncertainties should be explored in order to find supportive information for action.

Study Question: Should health policy makers disregard statistically unstable data or bolster them by using sophisticated statistical methods and\or examining other sources of information for the purpose of planning intervention policy in light of the "precautionary principle"?

Methods: Since 1979 the Ministry of Health and Central Bureau of Statistics published four health-demographic profiles of local authorities in Israel. The data were analyzed in order to detect differences between local authorities. Standardized rates and their confidence intervals were calculated and presented graphically. The Healthy Cities Network deepened the information collected for the profile with data from municipal sources and from a residents' survey with the goal of detecting inequalities within the city.

Results: Because of overlapping confidence intervals, the detection of statistically significant differences between local authorities was possible only between a few localities. The method of combining several small localities similar in social characteristics along with the use of previous knowledge and face-validity allowed conclusions to be drawn.

Conclusions: Our experience suggests that even weak statistical evidence can lead to useful conclusions for intervention policy according to precautionary principle.

Health Policy Implications: It's the responsibility of the health policy maker to base his decisions for action in small populations, on a combination of informational sources. Especially on a local level, residents' familiarity with their locality provides valuable input (*Vox populi, vox dei*).

"Healthy Israel 2020": Development of a Prioritization Model to Rank Health Objectives and Interventions—Lessons Learned from the Geriatric Health Committee

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Background: Healthy Israel 2020 (HI2020) is a national health targeting initiative designed to develop health objectives and the evidence-based interventions necessary to achieve them. Its committees will generate over 100 objectives overall and even more interventions. Funding constraints justify development of a prioritization scheme. The initiative's Geriatric Health Committee met this challenge.

Study question: What scientifically credible and transparent method exists to achieve such prioritization?

Method: A necessary condition for selection of objectives is the existence of an effective intervention to achieve it. Hence, prioritization of the latter was critical. Five variables were selected for the model: supporting study validity, intervention effectiveness in decreasing the burden of disease (BOD), ease of implementation, equity of interventional substrate, and cost-effectiveness (CE). In lieu of Israeli BOD DALY data, morbidity and mortality data were utilized. As quality of life and functionality are paramount considerations for elders, these were equally weighted.

Results: 16 interventions were assessed. Since equity and CE data were not available for each intervention, they were removed from the model. Four interventions lacking evidence of effectiveness were dropped. Interventions to encourage aerobic exercise, prevention of urinary incontinence, DEXA for osteoporosis screening, and influenza vaccination led the ranking, while motor vehicle accident prevention was last.

Conclusions: The model successfully prioritized between interventions.

Health Policy Implications: Broad opportunities exist to utilize the model for other health prioritization challenges.

Pursuing Healthy Lifestyle: Between Public Bureaucracy and Private Interests

Lawrence Brown

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Health promotion is increasingly on the agenda of policymakers, and "active living" – encouragement for walking, bicycling, and other types of physical exercise that combat the ill effects of sedentary and otherwise unhealthy life styles – is widely recognized as a promising strategy by means of which to promote health.

Those who seek to pursue this approach, however, find themselves caught between myriad public bureaucracies that manage zoning codes, master plans, transportation designs, and parks and recreation facilities, and powerful private sector realtors, housing developers, contractors, road builders, and others.

My paper will explore how activists seeking to make the built environment more conducive to active living in four cities funded by the Robert Wood Johnson Foundation's Active Living by Design program marshaled social and political support in the voluntary sector to pressure and persuade key public and private actors to support active living-friendly policies.

The Role of a Local / Regional Initiative in Health Policy, USA

Karen Wolk Feinstein

Pittsburgh Regional Health Initiative, USA

Formed in 1997, the Pittsburgh Regional Health Initiative (PRHI; www.prhi.org) was among the first regionally-based, multi-stakeholder health improvement collaboratives in the United States. Bringing together such local “stakeholders” as hospitals, physicians, health insurers, businesses that purchase health insurance, government and consumer groups, PRHI works to support innovations that yield lasting improvements in healthcare safety, efficiency, and best practice.

PRHI focuses on four major goals: (1) Building comprehensive, patient-centered infrastructure that links patient care across multiple inpatient and outpatient domains; (2) Training more than 2,000 healthcare providers in Perfecting Patient CareSM – a Lean-based quality improvement method that has resulted in such significant improvements as: a 68% decline in Central Line-Associated Bloodstream infections (CLABs) in 34 hospitals in a single region, a 50% reduction in Pap smear tissue sampling defects, and 100% guideline compliance, documentation & aspirin use in outpatient diabetes clinic; (3) Creating a scalable online community, called Tomorrow’s Health Care, in which healthcare providers, and their teams, can actively engage in meaningful lifelong learning & initiate quality improvement initiatives; and (4) Supporting comprehensive, national payment reforms that reward, rather than penalize, efforts to improve value in healthcare delivery, via the Center for Healthcare Quality & Payment Reform (CHQPR; <http://www.chqpr.org/index.html>) created by PRHI’s parent organization, the Jewish Healthcare Foundation.

PRHI is now one among over 50 U.S. regional health improvement collaboratives, all working to improve the quality and value of healthcare delivery. Many serve as pilot locations to test innovative ideas for improving the quality of health services. Regional collaboratives were among the first to produce public reports on the quality and cost of physicians, hospitals, health plans, and other healthcare providers. They are also actively engaged in experiments to test alternative payment methods that provide incentives for delivering improved patient care, such as hospital-community joint efforts to improve care for people with chronic diseases – experiments that are currently informing the U.S. national health insurance debates and legislation.

Informal Care and Formal Home Care Use in Europe and the United States

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Background: The provision of informal care by adult children is one of the predominant forms of long-term care for older individuals and can reduce the use of medical services if they are substitutes. We examine how informal care by all children and formal care interact, which is critically important given demographic trends and the many policies proposed to promote informal care. We argue that the institutional setting is different across the Atlantic, as European home care schemes are predominantly publicly run, whereas the market plays a bigger role in the United States.

Study Question: The purpose of this study is to compare the interaction between informal and formal home care United States and European countries.

Methods: We use a flexible simultaneous equations approach that allows for a different relationship between informal and formal home care in the two regions. In a second stage, we extend the analysis by considering the possibility that individuals behave differently according to their dependence status. We use a latent class model, and thus allow unobserved heterogeneity in the relationship between informal and formal home care.

Results: We find that in the United States, children base their informal care provision decision on the quantity of formal home care that their parents use, whereas in Europe, the supply of informal care is taken into account when choosing the quantity of formal care.

Conclusions: We show that the two types of care are substitutes, and that endogeneity is present. Moreover we explain that institutional differences between the two continents must be taken into account, otherwise the direction of causality between informal care provision and formal home care use could be misspecified. The main difference is that European countries have predominantly public long-term-care schemes, which are affected by supply shortages in some areas. This has the effect that the availability of informal care is taken into account when the decision of the authorities to grant formal home care is taken, whereas in the United States the sector of home care is more market oriented and thus allows for more flexibility.

Health Policy Implications: Our results suggest that the institutional setting is important when looking at health policy questions, in particular in the home care context. Policies that are relevant in the United States might not be adequate in a European setting, or vice-versa.

Posters in public health campaigns – Poland case 1918–2000

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Background: Graphic and pictorial posters have played a significant role in public health campaigns in twentieth-century Poland. Posters provided a collaborative field between art and science, where the artist's intervention located the supposedly technical and objective knowledge of science within a social and cultural context. They did this against the shifting background of Poland's turbulent political history, starting with a brief interwar phase of independence, followed by war, Stalinism, cultural thaw, and finally the decline and fall of Communism. Poland also has a distinctive history of poster design, encompassing Art-Deco styles before 1939, then a phase of socialist realism, before the arrival from 1956 of the Polish School of Poster, renowned for its stylistic eclecticism and use of surrealism, symbolism and ambiguity.

Aim of the study: To survey and analyze the Polish public health poster 1918–1990.

Material and methods: Archival survey has identified 995 public health posters from analysed period, of which the key themes are: alcoholism, hygiene, sexually transmitted diseases & HIV/AIDS, tuberculosis, smoking, the Polish Red Cross, infectious diseases control, and maternal and child welfare.

Results: The gathered material represented different phases of Poland's political history, which affected the visual means used by the authors. A wide variety of styles and graphical trends was identified and illustrated in the study. Among them most important were art nouveau, art deco, socialist realism, constructivism, expressionism, pop-art and psychedelia. The largest single theme the posters were dedicated to was anti-alcohol propaganda. Research focusing on anti-alcohol posters proved the strong dependency between visualization of health problem and political context.

Physician peer groups: A new methodology for improving the quality of care

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Maccabi Healthcare Services, Israel

Background: Maccabi Healthcare Services (MHS) provides community-based services to 1.8 million members by means of 3,700 solo practitioners. The organizational system of performance measurement demonstrated antibiotics overuse by primary physicians serving Arab patients in Nazareth and its surrounding villages.

Study purpose: To examine the effects of a peer group quality improvement methodology to reduce antibiotics overuse in primary care.

Methods: During 2007, 17 primary care physicians participated in 4 group sessions, guided by the regional medical director and a quality facilitator. Key performance measure was defined as the number of antibiotics prescriptions issued per 1,000 patient visits. Individual physician performance was coded to promote a non-judgmental environment supporting open discussion. The group analyzed reasons for group antibiotics overuse as well as causes for considerable variation between individuals.

Results: Barriers to appropriate care were defined, such as the lack public awareness of the consequences of antibiotics overuse. Educational materials were distributed by the local media to promote understanding and appropriate use. During 12 months, antibiotics prescriptions decreased by 20% among group participants, as compared with 10% and 7% in the Northern region and MHS overall, respectively. Variation among group participants also decreased.

Conclusions: The peer group methodology is an effective way to involve practitioners in care improvement. Working together as a group strengthened participants' adherence to practice guidelines and ability to influence community compliance.

Health Policy Implications: Creation of a protected, non-judgmental atmosphere among a group of physicians promotes transparency and open discussion. It appears that this methodology supports the recruitment of physicians for active involvement with the quality agenda and helps the medical directors conduct an efficient and productive dialogue with physicians throughout the organization.

A Socio-Ecological Analysis of Ethiopian Immigrants' Interactions with the Israeli Healthcare System and its Policy and Service Implications

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Group B

Background: Despite receiving free medical care and social services, many recent Ethiopian immigrants in Israel feel discouraged by the healthcare and treatment they receive.

Study Question: What are the obstacles that both recent Ethiopian immigrants and healthcare providers face regarding receiving and providing treatment and how can they be mitigated or resolved?

Methods: Semi-structured interviews were conducted with three groups, healthcare providers, immigrants, and interpreters, in two regions of Israel. A socioecological model guided data analysis in order to organize the numerous factors that influence healthcare among this population. The constant-comparison method was employed to compare and contrast themes across groups; excel matrices organized content areas and quotes. The Narralizer software program aided in further organizing and synthesizing findings.

Results: Four themes emerged which were grouped into two domains: cultural divide and the interpreters. Within each domain there were influences on healthcare at the micro-, meso-, and macro-level of the socioecological model.

Conclusions: The culturally different understanding of health and healing was an obstacle to effectively receiving and providing healthcare. The lack of culturally appropriate training of interpreters was also perceived as a substantial barrier. These issues must be addressed programmatically at the varying levels of the ecological model.

Health Policy Implications: Necessary program and service modifications include that cultural mediation become an integral part of health personnel's training. We recommend that professionals within the health system be trained as interpreters. Lastly, the integration of traditional healers into Israel's health system should be considered. These modifications require a system-wide change in policy, structure of services, and practices.

Tackling the inverse care law in the UK

Rosalind Raine

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"The Availability of good medical care tends to vary inversely with the need for it" (The Inverse Care Law, Tudor Hart, 1971)

My presentation will address the following questions:

1. Does the availability of health care vary by socioeconomic circumstances (SEC) in the UK National Health Service (NHS)? The NHS is a tax funded system based upon the premise of universal access to health care for all, solely on the basis of clinical need. I will briefly summarise the research which demonstrates that (i) the quality of primary care may be poorer in disadvantaged areas & (ii) pro-rich bias in use of hospital services.

2. In what circumstances are health care inequalities most likely to occur? In order to investigate this, we recently compared social variations in the likelihood of referral for conditions which varied with respect to the presence of referral guidance and their potential to be life threatening. We found that for all three conditions examined, older patients were less likely to be referred. We also found striking inequalities by socioeconomic status, age and gender in the likelihood of referral for those conditions where clinical judgment cannot be informed by guidelines or driven by the need to exclude a cancer diagnosis.

3. Do they matter? Health care inequalities matter because they undermine the capacity of the NHS to remain true to its core values. In addition, they may not be justifiable in terms of variations in treatment effectiveness. We demonstrated this in a national analysis of secondary drug prevention for patients who have survived a stroke. We found that old patients were substantially less likely to receive lipid lowering drug treatment compared with younger patients and that this could not be justified because older people are at least as likely to benefit from treatment as younger people.

4. Will policies to improve access to health care reduce health ine qualities? Non- health care related policies (eg fiscal and environmental policies) are essential determinants of health and health inequalities. However the NHS is currently largely responsible for public health policies to reduce behavioural risk factors (such as smoking) and for ensuring equitable access to effective health care interventions. The limitations in the available evidence on the impact of NHS interventions on health inequalities are described. I then outline our current approach to estimating future trends in health care use and in behavioural risk factors by SEC. Our research will inform the debate about how resources should be distributed between public health and health care interventions to reduce inequalities.

5. What are the best ways to tackle the inverse care law? These are on- going debates concerning: (i) the primacy of state intervention versus individual freedom; (ii) whether we should address the gap or the gradient in health inequalities; (iv) the benefits of national versus local approaches to reducing health care inequalities and (v) the current UK policy emphasis on behaviour change of the patient versus that of the health care professional. The rationale for and against each of these issues is discussed with the aid of specific examples in each case.

6. What is the best way forward? I suggest key policy and research requirements for achieving health care equity.

Should Personal Responsibility Remain a Peripheral Consideration in Health Policy?

Daniel Wikler

Harvard School of Public Health, USA

Personal responsibility for health, assigned on the basis of the extent to which an individual's success or failure in maintaining or restoring is attributed to voluntary choices the individual has made, has in the past played a peripheral role in health policy.

Physicians are expected to treat patients according to need, even if they could have avoided the need to care by making healthier decisions, and individual culpability likewise has not been a significant consideration in determining eligibility for care or reimbursement in health insurance, public or private.

The few apparent exceptions serve to demonstrate a general consensus on this point. Some recent developments, including the use of incentives for healthy behavior in workplace-based health insurance, seem to open the door to a much more significant role for personal responsibility in health policy. A distinction between "backward-looking" and "forward-looking" senses of personal responsibility for health can help to achieve a principled ethical response.

The Positive Deviance approach to enhance personal responsibility in lifestyle interventions for "Diabesity"

Elliot M Berry

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The major cause of morbidity and mortality in western countries is related to obesity (the pandemic of the 21st century) and the insulin resistance syndrome (IRS). These diseases are responsible for up to 6% of health care expenditure in the European countries. Many physicians (encouraged by the drug marketing industry) prefer to prescribe medications which may correct the biochemical abnormalities without doing anything for the underlying cause. Weight loss of only 5–10% is sufficient to improve significantly the IRS, thereby decreasing the need for multiple drug therapy. However this “simple” goal is usually unattainable by the conventional medical approach. The key message is so simple – “eat less and exercise more” – yet so hard in practice. Exercise may improve metabolic abnormalities even without weight loss. Other holistic advice relates to diet particularly the Mediterranean-type lifestyle with its social networking. Mental activity and a sense of humor are also important, but as yet unproven, requisites for success.

The public health approach to lifestyle promotion requires a multidisciplinary task force to alter the obesogenic environment, involving schools, the work place, the community, food & advertising industry, local government and legislation amongst others. In the HMO setting, lifestyle changes require a new paradigm in the doctor-patient relationship where the doctor becomes more of an advisor/coach, and the *patient must take more responsibility for his or her health* and adherence to long-term treatment. These topics must also become part of the medical school curriculum. The positive deviance approach will be described whereby the behaviors of successful people (positive deviants) will be used to help others succeed *within the same community* to combat obesity. The four steps are Define the problem; Determine the deviants; Discover their successful behaviors and Do the intervention with monitoring. Special emphasis will be given to the lower socio-economic groups where the challenges are greatest.

Personal Responsibility to Healthy Behavior – Between Perceived Freedom, Autonomy, and Paternalistic Interventions

Gil Siegal

Ono Academic College, University of Virginia School of Law, The Gertner Institute, Israel

Liberal societies are committed to advance concepts of autonomy and self-governance. Conventional wisdom deduces from such a stance that the state has a very limited right to dictate or influence individuals' behavior, even in the face of overt self-inflicted harm (such as obesity). To the contrary, the harm principle allows for the state's intervention in the case an individual harms or creates a risk for some harm to his fellows (such as in the case of infectious diseases or passive smoking).

It is therefore imperative to determine the legal and ethical limits on the state's attempt to advance healthier behaviors. In such cases, a tension exists between an individual's right for *rational* and *autonomous* control over his or her body, the moral duty to prevent harm, and the public interest. However, mounting evidence from the fields of behavioral and cognitive psychology and economics shake our trust in the wisdom of hand-off, intervention-free policies. Indeed, incorporating the insights of behavioral biases on individuals' decision-making might bear important policymaking and legal implications.

As a general rule, it calls for accepting the essential role of the government in assuring that the majority is made better off, while maintaining an individual's rights. To this end, legislation should incorporate, in suitable cases, protective components to better guarantee that people do not succumb to their fallacies, and will have a better chance of making the right decision (such as the case of setting defaults or framing effects). Such paternalistic measures do necessitate the differentiation between autonomy as *negative freedom* ("the right to be left alone") and autonomy as self-determination (promoting individuals' more essential interest to act on their goals and aspirations). Adapting to a more realistic understanding of decision-making and behavior (and thereby determining the premature death of '*homo-economicus*') will serve to enhance meaningful self-governance and improving the public's health.

Personal and State Responsibilities in Vaccination: A Two-Way Road

Baruch Velan

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The victim/vector status of individuals inflicted with communicable diseases imposes a notable complexity on the personal responsibilities related to compliance with vaccination programs. Individuals are expected to be vaccinated not only to ensure their personal health, but also to avoid the third-party harm of infecting others. Moreover, vaccination programs promote the well-being of the entire community through herd-immunity, provide one of the most cost-effective medical commodities, enable economic and cultural interactions between different communities world-wide, and finally facilitate eradication of specific infections for the sake of future generations. All this combined, creates a heavy responsibility on individuals to get vaccinated against a large spectrum of vaccine-preventable diseases. This heavy burden often engenders various forms of resistance to vaccination. Non-compliance can have several roots such as: apathy, non-willingness to take potential risks, religious or philosophical beliefs, divergent perception of disease and cure, and erosion of public confidence in the medical establishment. All this imposes a new set of responsibilities on health authorities. Thus, in addition to the well-established duty of the state to provide safe vaccines, and approachable vaccination programs, the state is also expected to help individuals in their ability to cope with the burden of personal responsibilities related to vaccination. This can be achieved by employing high degrees of scrutiny and selectivity in the adoption of new vaccination programs, as well as by allowing full transparency of all decision making processes.

Personal Responsibility – Is it an ethical measure?

Arnon Afeck, Ari Shamiss

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In 1996, Patients Rights Act was passed by the Israeli Parliament stating the duties of the health care professionals to its patients. According to the law, physicians must make clear to the patients their ailment, the possible treatments including advanced modalities. The liability lies solemnly on one side – the physician.

Rising medical expenses in the western world became a major challenge. The USA and Germany spend 16% and 11% of their GPD respectively on health. The rising life expectancy, load of chronic patients, the cost of novel technologies and public aspirations induce a further increase.

Multiple measures were implemented to manage health expense including competition, managed care and rationing. Their success is limited, while their implementation and responsibility is placed once more on the physicians.

A new approach is needed based on sharing responsibilities between physicians and patients. Patient should have duties and not only rights. Refusal to take screening and preventive measures such as vaccination can induce tremendous costs as in the case of liver transplant due to fulminate hepatitis in a patient who didn't take an anti hepatitis virus A vaccination screening for colon cancer can prevent expensive chemotherapy. A logical approach is to ask people to share at least a part of the extra cost induced by their personal choice.

Although reasonable, such an approach carries numerable ethical dilemmas as there is a correlation between low socio economical status (SES) and poorer health status. These populations are also under educated, suffer more from chronic diseases, have higher risk factors and also tend to use less preventive medicine.

In our presentation, we will attempt to present the association between health status, low SES and the ethical dilemmas arising from the implementation of personal responsibility as well as suggest a method to share Responsibilities with the active participation of Israeli HMOs.

Personal responsibility for health: time for a nuanced approach

Harald Schmidt

School of Public Health, Harvard University, USA

The topic of personal responsibility for health raises complex issues in diverse fields such as epidemiology, clinical practice, law, philosophy and health policy: to what extent can it make sense to say that a person is responsible for their poor (or good) health? And how should this responsibility be considered in policy and practice? A number of policies have recently been set out to implement personal responsibility, and the presentation reviews salient features of UK, US and German initiatives. Some commentators, typically on the left, abhor the concept: they worry that it blames people unduly, and they therefore argue that the debate should shift from the personal to the societal level – for example, by seeking to find ways of improving the social and other determinants of health. Others, typically on the right, are far more open to the idea: on their view, where people take unreasonable health risks and a decision needs to be made as to whether the community or the individual pays for the resulting costs, they argue that it is only fair to make the people concerned face up to the consequences of their actions. Much of the literature is focused on defending one or the other position, but this focus is unhelpful. It is shown that a closer analysis reveals that the concept of personal responsibility is in fact highly nuanced; not reducible to the left-right categorization; and that the focus on seeking either to deny or to attribute blame runs the risk of overlooking these nuances. Distinctions are made between different dimensions of retrospective and prospective responsibilities, and their value for health promotion and health policy is emphasized in the concept of co-responsibility for health. Finally, a framework is presented for designing and implementing co-responsibility for health, and for evaluating existing responsibility-policies.

The Consumer-Driven Health Care Cure

Regina Herzlinger

Harvard Business School, USA

Key insights into a consumer-driven cure for a health care system which is dangerously eroding patient welfare and pushing costs out of the reach of millions and its implications for all stakeholders

How a consumer-driven system can deliver affordable high-quality care to everyone by reinforcing personal responsibility .The innovations this system will include insurance policies that reward people for prevention and health improvement ; disease-focused factories, national system of medical records, mandatory transparency of health care providers' performance ;and health insurance with subsidies for those who cannot afford it.

Personal Responsibility versus Responsible Options: Compliance Meets Public Health in the US

Joseph R. Betancourt

Harvard Medical School, USA

In this presentation I will cover the tension that exists between expecting personal responsibility versus the importance of having responsible options in the community; I will put this in the context of efforts to improve compliance in chronic disease management, and highlight a program that bridges these components to address diabetes in disadvantaged communities.

Supporting behavior change: whose responsibility?

Gene Bishop

School of Medicine, University of Pennsylvania, USA

Programs designed to save money by promoting “personal responsibility for health” may present problems for clinicians who have long sought to help patients change health-defeating behaviors. “Personal responsibility” has recently been elevated from one component of comprehensive care that acknowledges vast differences among the capabilities of diverse patients into a public policy position that not only profoundly alters the social contract, but also ignores much of what we know about the multiple determinants of health and the behavior of humans.

The participation of informed patients in their own medical care, whenever possible, is critical to successful prevention and management of both acute and chronic conditions. But fundamental questions as to how we achieve this goal, and how we define success remain unanswered.

This paper will discuss, from the viewpoint of a primary care physician, recent public and private programs in the United States promulgated under the rubric of “placing patients in charge of their own health.” Utilizing case stories from clinical practice the paper will look at the possible impact of proposed programs on patients, doctors, and the doctor-patient relationship.

How do these programs affect our patients, and what do they have to do with the way we, as practitioners, care for people? How does patient responsibility interact with physician responsibility and governmental responsibility in a way that leads to better outcomes or an improved sense of well being for the patient? What models are available to support patient empowerment and self-efficacy? How can the lessons we learn from our patients be effectively incorporated into policies developed far from the examination room?

Enhancing personal responsibility among psychiatric patients

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Personal responsibility extends way beyond individual culture, life style, values and spirit and constitutes a major element in societies' survival. Enhancing personal responsibility is at the heart of the psychiatric debate and has become a major challenge over the past decade. In some aspects, Psychiatry could well serve as a role model for other medical disciplines regarding the approach to personal responsibility. Nevertheless, Psychiatry still serves occasionally as a refuge aimed at decreasing personal responsibility. The issue of personal responsibility is broader than merely the dialogue between therapist and patient. It involves and is influenced by different social, political and legal issues. Reducing paternalism and increasing personal choice within different domains of life are issues that lie within the very heart of the modern social debate as well as in the heart of personal responsibility in Psychiatry. Alongside with these, personal responsibility is influenced by stigma. The presence of stigma has a central role in the reduction of responsibility and its removal could well serve its enhancement. The vast majority of Psychiatric patients are capable of gaining complete personal responsibility. A rather minor group of patients suffering mainly from severe and chronic psychotic disorders could be defined as incapable of maintaining personal responsibility only on the basis of specific parameters thus reducing personal responsibility. Enhancement of personal responsibility is ought to lie primarily within the dialogue between patient and therapist directed always towards reduced paternalism, enhanced self awareness, mutual respect, insight and emphasizing patients responsibility to their quality of life. Clinical strategies aimed at cognitive enhancement and reward could contribute directly. Family members play a central role in creating a continuum of therapy. Trends such as within community rehabilitation, reduced duration of hospitalizations and peer support including patients becoming peer therapists could also contribute.

Patient empowerment as a tool to strengthen the relationship between physician and patient

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Patient empowerment is a potent tool for strengthening the relationship between a physician and his or her patients. However, as with so many other things, patient empowerment is a tool that must be applied wisely. While having the power to strengthen the relationship, it also has the potential to cause harm to the relationship.

In order for patient empowerment to succeed, the physician and the patient must be partners in their relationship. The physician's attitude towards patient empowerment is key to its success. It is largely the atmosphere set by the physician that determines the extent to which the patient will feel comfortable exercising his autonomy. Understandably, the physician's attitude might differ depending on the specific setting or circumstances.

There are also objective factors in the physician-patient relationship that influence the implementation of patient empowerment, such as limited time for office visits, the conflict between the patient's personal autonomy and the collective good and the different extents to which patients are interested in autonomy.

At the same time, however, the patient must use his empowerment wisely. The explosion of information in the popular media, on the internet and other sources has led to situations where patients receive information that they don't know how to process or utilize properly. It has also led to some extent to the commoditization of medicine, where treatments become an item to be purchased, with the patient as the consumer and the doctor there simply to provide this service rather than to advise and direct.

The proper use of patient empowerment, representing a true partnership of physician and patient will lead to a strengthening of the physician-patient relationship.

Incentives, sticks and carrots: some thoughts for policy makers

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Personal responsibility can be promoted in a range of ways, including through 'carrots' or 'sticks', i.e. through incentive or disincentive programs. While the former are often seen as uncontroversial reward schemes, the latter are generally regarded more critical. However, in practice, the distinction can be less clear-cut. The presentation examines conceptual and practical issues in using incentive programs, and draws on data from a recent evaluation of incentive programs of one of Germany largest sickness funds. Arguments around the potential of the schemes to achieve cost-saving, health promotion and competition between sickness funds are analyzed. It is concluded that while incentive schemes can make a valuable contribution to efforts at improving the health of the population, several ethical issues require close consideration in the implementation, in particular with regard to fairness and equity.

Glaucoma Among Patients Enrolled in a National Vision Care Plan. Knowledge of the Disease, Family History, and Medication Use

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Background: Glaucoma is one of the leading causes of impaired vision and blindness in the United States. An understanding of the disease process and its risk factors by patients is essential if we want to mitigate its consequences. Health literacy can help promote awareness for early recognition and treatment among potential patients.

Study Question: Patients with glaucoma typically do not have ocular or systemic symptoms. To what extent are glaucoma patients and glaucoma suspects knowledgeable about the disease? This study reports on the responses to a questionnaire by patients on their use of vision care, their understanding of their disease, and whether they shared their medical history with other family members.

Methods: A survey was mailed to members of a national vision care benefits plan who received an eye examination with a diagnosis of glaucoma. A survey instrument was designed to determine family history, use of vision care, medications used, and basic knowledge of glaucoma.

Results: One hundred forty-eight surveys were returned; two-thirds were from glaucoma patients and one-third from glaucoma suspects. The frequency of eye examinations and the reason for their most recent exam differed between the two groups. As expected, glaucoma patients were better educated than the glaucoma suspect group, however, knowledge of the disease process and its consequences was lacking even among those who were taking glaucoma medication.

Conclusion: Glaucoma patients appear to be unaware as to the effects of glaucoma on their vision. Understanding one's disease can enhance patient compliance and ensure the patient returns for continued treatment and management. Patients with poor health literacy, especially with a disease whose beginning stage is asymptomatic are at a higher risk for non compliance.

Health Policy Implications: Health literacy is increasingly important in patient care. Understanding one's disease can enhance patient compliance in taking prescribed medication and returning to their doctor for continued treatment and management.

Analyzed Reasons to Uncompleted Routine Vaccinations in Well Baby Clinic ("Tipat Chalav") of Tel-Aviv-Yafo Municipality

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Background: In the last years, immunization refusal phenomenon is raising from miscellaneous reasons: parent's ideology, misunderstanding vaccination importance and, rarely, neglecting the children's needs.

Study questions:

1. Whether the unimmunized children depend on parent's refusal, medical contra-indications or nurse's professional reasons? Is there any significant reason?
2. Are there any difference reasons between high and low SES?

Methods:

1. Retrospective study of all medical files of children born in 2004, that didn't complete routine immunizations, at 2 years old.
2. Three group's vaccines were screened: DTaP-4, MMR and Hepatitis A-1.
3. Four groups of reasons to unimmunization were characterized: parent's decision, nurse's professional, medical reasons and others.

Results:

1. The main reason to uncompleted vaccinations depends on parent's decision.
2. In high SES parents, ideology is the main refusal to complete the vaccination, while at low SES it is not clarified.
3. In DTaP vaccination, the leading reason to uncompleted vaccination depends on parent's decision, while in Hepatitis A, there are nurse's professional responsibilities.

Conclusions: The main reason of uncompleted routine immunization schedule attached to the patients: ideology of insubordination to vaccination, no compliance to treatment and even neglecting the child's needs (5 cases).

The reasons depend on nurse's professional are attached to uncompleted reachingout, and providing unsatisfactory medical information to the parents about the importance of the vaccinations.

Health policy implications: This initial and unique study, propose evidence based understanding why there is no 100% level of vaccination. The conclusions help to plan specific and cultural adjusted intervention program that will increase the vaccination rate among children in the first two years of life.

Improving Cardiac Health and Health Care: Interventions and Policies Targeting Patient Responsibility, Social Support, and Provider Performance to Promote Outpatient Cardiac Rehabilitation Utilization

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Background: Outpatient cardiac rehabilitation (OCR) is an evidence-based health service shown to significantly reduce rates of morbidity and mortality associated with cardiovascular disease. Despite the availability of OCR in the U.S., U.K., Israel, and other countries, it is underutilized among eligible patients with participation rates at 15% to 40% if not lower; hundreds of thousands of people are missing the health benefits that can be realized from this life-saving service each year.

Study Question: What is the state of the science for interventions and related policy implications targeting improved OCR utilization?

Methods: The presenter will summarize literature on the factors known to impede (barriers) and facilitate utilization of OCR internationally, including descriptive and intervention research and policy implications. Emerging research will be discussed to include promising studies in progress.

Results: Interventions and policies are needed in practice to improve utilization of OCR by targeting patient responsibility (education and empowerment), provision of social support (such as patient navigation provided by a peer during and post hospitalization), and provider performance tools (such as automated physician referrals and strategies that facilitate communication between inpatient and outpatient cardiac services).

Conclusions: Although patients are ultimately responsible for the decision to utilize OCR, policies are needed to promote patient education and empowerment and provider accountability so that more eligible patients will make an informed choice to enroll in an OCR program following a cardiac event/procedure.

Health Policy Implications: Policies that are known to impede utilization of OCR include those that limited coverage for clinically eligible diagnoses/procedures, poor provider reimbursement, as well as a lack of information sharing across inpatient to outpatient settings and provider accountability.

Personal Responsibility for Health

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Background: Encouraging personal involvement and responsibility for health promotion and health maintenance results in an active partnership between professionals and individuals who share a common goal of maintaining wellness. Rising health costs have challenged insurers in both the public and private sectors to develop incentive plans that may motivate individuals to take responsibility for their health needs. Several health systems have addressed the need for active personal participation in health maintenance and treatment plans.

Study Question: Are government sponsored initiatives effective in motivating personal responsibility for health care?

Methodology: Review of literature related to shared health responsibility initiatives as presented in the health plans of Germany, Australia, United Kingdom and the United States (West Virginia).

Results: The 4 countries surveyed recommended encouraging personal responsibility for health by offering health education programs (to private individuals as well as professional caregivers) and economic incentives. These incentives range from discounted health services to monetary remuneration and are not without ethical dilemma.

Conclusions: The importance in fostering personal responsibility for health and wellbeing cannot be denied. Nevertheless incentive programs are not without ethical questions that must be considered. In order for an incentive initiative to be implemented in Israel it is necessary to consider cultural diversity along with economic and human resource restrictions.

Health Policy Implications: Effective encouragement of personal health responsibility can lead to improved health maintenance outcomes as well as efficient use of human resources and funding. Money saved from decreased hospitalizations may be redirected into promotion of preventative medicine programs that will further support health and wellness.

Patient empowerment- where does the physician's responsibility end and the patient's begin?

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Patient empowerment is a recent development affording patients greater involvement and autonomy in the administration of health care, their relationships with physicians and the treatment they receive. Although a seemingly positive development, patient empowerment must be viewed within a larger context and applied wisely. Not all patients desire autonomy to the same extent, nor is all information helpful.

In 2002, the Israeli Medical Association undertook, at the behest of the World Health Organization, to prepare a report on the existence, effect and implications of patient empowerment. The questions addressed included: what is the current level of patient empowerment in various countries, what factors affect the existence or non-existence of patient empowerment, to what extent is patient empowerment a positive development, what are its limitations and what role can doctors play in fostering greater patient empowerment.

The methodology used combined statistical and anecdotal analysis. Sixty-two questionnaires were distributed to medical associations in various European countries. Of these, 29 completed questionnaires were received and analyzed.

The key findings of the study revealed perceived socio-demographic differences in patient empowerment, few legal responsibilities for either physician or patient and the fact that most physicians were ill-equipped to recognize differences in the amount of patient autonomy desired. We concluded that there was a need to target specific groups and foster empowerment and to provide further training and guidance for doctors. In addition, more study was needed to discern the extent to which patient empowerment is positive and the source of physician resistance to the phenomenon.

There are many implications for patient empowerment, specifically in the area of the physician-patient relationship, the participation of patients in their own treatment and the ultimate success of such treatments.

Family Support in Facilitating Adherence to Diabetes Self-Care and Metabolic Control

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Background: Adherence to diabetes self-care behavior guidelines is determined by the patient's characteristics and by the most proximal social system – the family. Data on diabetes-related family support in Israel is limited.

Study Question: Is there a unique contribution of family structure and family support to adherence to diabetes self-care and to glycemic control, beyond that of the patient's personal resources?

Methods: Adult non-insulin dependent diabetes patients, aged 35–55 years, registered in Maccabi Diabetes Register for at least two years, were randomly selected from three patient groups: 1) Well controlled (HbA1c <7). 2) Poorly controlled HbA1c ≥8.5. 3) Not tested for HbA1c in the previous year (total N=475). Data were collected by telephone interviews. Variables: Family structure, family support in diabetes self-care; Patient's cognitive and psychological characteristics; Outcome variables – adherence to self-care (six behaviors and overall score), glycemic control group. Control variables – gender, diabetes duration.

Results: Using ANOVA, statistically significant associations were found between family support and several self-care behaviors, but not with glycemic control. Family structure (not married) was significantly associated only with smoking. Using regression models, family support remained significantly and positively associated with the overall self-care score and with dietary care, yet the strength of the associations of self-efficacy with these outcomes was the highest.

Conclusions: Patients with low self-efficacy and low family support are at higher risk for poor self-care behaviors.

Health Policy Implications: An ongoing psychosocial evaluation of diabetes patients is recommended to identify patients at elevated risk for poor adherence. Intervention strategies to enhance the patient's self-efficacy and family support have a potential to improve self-care and reduce future complications.

The change of personal responsibility in the kibbutzim

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Over decades the Kibbutz movement symbolized equality and unification. Death rates and life expectancy, which indicate population's health, were better in the kibbutz compared to other parts of Israel. As a concentrated and relatively easy to follow-up population, the kibbutz served as a platform for several Israeli medical research projects. Examples include: prevalence of several chronic diseases such as Parkinson's disease, diabetes mellitus, hypothyroidism, malignant melanoma, inflammatory bowel diseases and cancer incidence; study of inherited conditions such as heart rate variability, QT interval variability, and inheritance of LDL diameter. In addition, the change from communal to familial sleep arrangement in the Kibbutz also served as a ground for research. However, all aspects of lifestyle have tremendously changed during the last decade upon the privatization process that occurred to various extents in most kibbutz. Few novel results indicate that this change in the socioeconomic structure of the kibbutz had associated unwanted health effects. The individual person now is supposed to have more responsibility for his own health status, and not surprisingly the sick and old are the first to suffer from this change. In general, kibbutz that underwent privatization reduced the number of employees in their clinics, albeit increase sometimes in the number of patients. In addition, the longer the duration of privatization was- the more comprehensive the inequity between kibbutz members was. Moreover, while those who are at a low socioeconomic status at the kibbutz are generally less healthy (based on various measures), this difference in health status is more accentuated in the kibbutz that underwent privatization rather than the cooperative kibbutz. The personal responsibility is accentuated in the kibbutz therefore in the last decade, but this fact should not diminish the mutual responsibility of the society / state for one's health.

How Much Should People Pay for Health Care? The Reasonable Trade-off Account of Affordability

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As the costs of health care keep rising, we have to figure out how much we can ask individuals to bear for their own health care. The government requires individuals to contribute toward their health care on the assumption that the amount of the contribution is reasonable. But what is a reasonable contribution? How much can people afford to pay for health care?

Three approaches to defining affordability have been advanced. The first two approaches are empirical. The third approach is needs-based. I argue that these approaches are inadequate. They can lead to the imposition of an excessive burden on the population. I propose the reasonable trade-off account, which is a normative account of affordability. According to the reasonable trade-off account, individuals should only be required to make reasonable trade-offs in order to pay for their health care. That is, health care is affordable if in order to pay for it one does not have to sacrifice other benefit(s) which are comparable in importance to the benefits of health care. I propose a set of benefits that are comparable to the benefits of health care, and claim that this grouping is justified by the fact that any person would rationally agree on it if asked to group comparable benefits when not taking her own particular preferences, health status, or individual circumstances into account. Finally, I explore the policy implications of my account. While we now might lack the data to set up a system of health-care contributions using the reasonable trade-off account, we can use the account to adjust the current systems of contributions which have been devised using other approaches.

Who is Accountable? The Never-ending "Perpetuum"

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Background: In the Israeli national health system, various stakeholders are accountable for different aspects of healthcare, however the same quality measures and indicators are used to characterize their scope of responsibility. By nature, health performance measures are directed to the measurable, drilled down to the solitary physician. However, the agenda of the lone physician is mostly patient-centered, while the state and the health insurers have a social agenda, that must be population-oriented. This disparity between them may often cause conflict.

In a system in which patients have no accountability, healthcare professionals sway like a pendulum being pulled by these diverging forces. Actually, in the accountability pyramid, individual patient behavior and responsibility determine overall healthcare success based on measurable health indicators on a physician and a national basis.

Study Question: How to present collaborative accountability within the National Health Service that differs from traditional models and does not focus only on physician-centered aspects.

Methods: On the basis of a literature review and interviews with experts, influential partners in the healthcare system were defined, to create a collaborative model.

Results: In this model, an additional stakeholder – the patient, should be added to those held accountable for healthcare outcomes. Patients should be responsible – by being a good steward of one's own health. The state should then enable efforts to encourage such positive individual behavior, without using physicians' performance measures as the sole parameters. Conclusions: Combining responsibility to both patient and physician levels, will project a more appropriate indicator of population health behavior. Responsibility should also be reflected in fiscal terms.

Health Policy Implications: Joint efforts of all the stakeholders will ultimately promote better health outcome results – a desirable outcome for all!

Health Savings Accounts: Are Wealth and Health Portfolio Choices Joint and Rational?

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Congress enacted and the President signed into law the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA). The MMA establishes Health Savings Accounts (HSAs), which are tax-advantaged savings vehicles that can be used to pay for medical expenses incurred by individuals and their dependents. Unused balances in HSAs can accumulate over a lifetime and at retirement age they can be converted into retirement savings. Early withdrawals for non-healthcare uses have penalties similar to early withdrawals from tax-advantaged retirement accounts.

HSAs are being sold by financial services companies as part of a health/wealth savings package. We develop a theory for the relationship between health and retirement savings choices and hope to test the theory using data from one large national employer to identify whether there is a relationship between HSA election, HSA contribution size, and retirement portfolio decisions. We posit that these choices will be conditional on prior personal states – including income, previous contributions, previous health history, and demographics such as age and the number of dependents.

We examine two research questions:

- ◆ Is HSA choice related to retirement investment decisions?
- ◆ If HSA choice is related to retirement investment decisions, do consumers make rational retirement portfolio decisions?

We collected data on health plan choices and retirement savings decisions by employees from a large employer that offered traditional health plans and an HSA in 2006. We record employees' 401K retirement contributions for the current and prior years. Specifically, we abstract the current account balance by employee and the proportions of portfolio contributions by mutual fund and account types.

The analysis starts with a bivariate analysis of the decision to change one's retirement portfolio allocations (e.g., move from 45% to 65% in growth funds) with the choice of an HSA versus a traditional health plan. We also record whether the employees choosing the HSA supplement the amount provided by the employer (e.g., \$1,000) with the employee's own pre-tax income up to the deductible level of the catastrophic health plan associated with the HSA. We continue with an exploratory reduced-form regression analysis of the change in retirement portfolio allocation as a function of employee demographic factors, health status, and HSA plan choice.

The findings from this analysis will be the first empirical evaluation of this topic with a substantial population size. These findings will provide continuing evidence of whether HSA choice has any relationship to rational investment behavior and more importantly, we will see if HSAs have the potential to increase the personal savings rate.

The demand for pharmaceuticals by Israeli managed care organizations

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Israeli managed care organizations are obligated to provide their members with the health services and pharmaceuticals included in the *National List of Health Services (NLHS)*. The price of each pharmaceutical has a *CAP* set by the Ministry of Health. The maximum price for each drug is equal to the minimum price of the drug in the Netherlands and an average of the prices in seven European countries. This policy alleviates the time and effort involved in negotiating with manufacturers and also shields the cost from fluctuations in drug prices and/or the foreign currency exchange rate.

The four Israeli managed care organizations and hospitals deal with manufacturers on this basis and pay less than the *CAP* whenever possible.

When a new drug added to the *NLHS* the Ministry of Finance authorizes an additional budget to the managed care organizations according to the number of patients listed as needing this specific new drug. The managed care organizations must supply the drug to patients while attempting to remain within the limits of the specific fixed additional budget it was allocated for this purpose. The quantity can still be controlled to some extent by the managed care organizations through diagnosis.

In the last five years, 115 new drugs have been added to the *NLHS* and have been allocated government funding. At the same time, 33 drugs lost their patent and became generic. The study analyzes the change in the quantities of pharmaceuticals delivered after these changes occurred and estimates the demand elasticity for pharmaceuticals. This sheds light on the ways in which managed care organizations can control the quantities of pharmaceuticals made available to patients.

Physician prescription behavior – Do financial incentives affect choice?

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Extensive theoretical research has been devoted to the importance of financial incentives for physicians' treatment decisions. Most researchers accept that physicians value their financial benefits as well as the medical benefit generated to their patients. A more debated question is whether physicians also respond to patients' co-payments, which could be caused by consideration for their patients' finances or by patients' power to influence physician decisions.

The Swiss market for prescription drugs offers a unique opportunity to analyze these issues empirically. A particularity of the system is that physicians in some regions are allowed to prescribe as well as dispense drugs – and pocket the margins. In other regions, physicians prescribe while pharmacies sell. Existing empirical evidence on the consequences of drug dispensing by physicians is mixed. For some reason or the other, average drug expenditures are lowest in the regions that allow it.

This research sheds new light on the issue by building a logit model of the choice between generic versus brand name drugs. Surprisingly, dispensing physicians are more likely to opt for generics than non-dispensing physicians, even though generics have lower margins. Moreover, the patients' co-payment significantly increases the probability of generics being used. In the second part of the paper, the impact of physician dispensing on total health care spending is analyzed. A two stage residual inclusion method is used to control for unobserved characteristics that influence both regulation and spending. Again, our findings do not support the hypothesis that physician dispensing leads to higher spending.

Failure to comply with the standards of treatment of acute pharyngitis

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Background: Acute pharyngitis and tonsillitis is commonly diagnosed in community setting. Only 15–30% are caused by Strep group A. The use of antibiotics is recommended only when throat culture or a rapid strep test are positive.

Study question: Do primary physicians comply with the recommendations on the management of acute pharyngitis in children.

Methods: A cross sectional study, on all the children, aged 0–18 years old, in one district of Clalit, in the year 2006. Data was extracted by electronic queries on the computerized health records.

Results: 28,511 episodes of pharyngitis were diagnosed by 125 physicians. Of those, only in 52% a throat culture was taken, in 23.6% antibiotics was prescribed without taking a throat culture. 50% of the cultures end-up as negative. Among 24.8% of cases, throat cultures were taken and antibiotics started immediately at the time of clinical diagnosis.

Among patients treated or not treated with antibiotics, 50% and 64% respectively, had negative throat cultures ($p=0.001$). Physician's older age is a risk factor for prescribing more antibiotics and omitting throat cultures.

Conclusions: More than 2 decades of guideline recommendations for management of acute pharyngitis, did not prevent unnecessary use of antibiotics for most children.

Health policy implications: Prolong failure to implement guideline recommendation is costly and contributes to the development of antibiotic-resistance bacteria. Providers of care, at all levels, should find novel paradigms to implement guideline recommendations for better quality of care.

Communicating with patients, prescribing medications and referring to tests and specialists: Associations with physician burnout and moods

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Background: Affects include both transitory emotional states, such as moods, and more stable conditions (e.g. burnout). The contribution of affective factors to physicians' behaviors has rarely been studied.

Research questions: How do physicians' moods in the medical encounter affect self-reported behaviors (talking with patients, prescribing medications, and making referrals), and does burnout level interact with these associations?

Methods: An exploratory investigation on 188 family physicians, pediatricians and internists, participating in CME, activities who responded anonymously to a self-reporting questionnaire. Variables assessed: burnout and the rates of speaking with patients, prescribing medications and referrals to laboratory and diagnostic tests, and to consultations with specialists, on positive and negative mood days (bad, tired, nervous). A series of ANOVA's analysed the combined effects of the four moods and burnout levels (high/low) on each of the five behaviors.

Results: significant main effects were found for moods on all behaviors. On good mood days, compared with negative mood days, physicians talked significantly more, but prescribed less medications, and referred less to laboratory tests, diagnostic tests and specialists. High compared with low burnout physicians referred more to laboratory tests, diagnostic tests and specialists. Burnout interacted significantly with moods.

Conclusions: negative moods reduced communication but increased prescriptions and all referral behaviors. Conversely, increased communication with patients was done "at the expense" of prescribing and referrals. Chronic burnout accentuated the effects of transitory moods.

Health policy implications: this exploratory study suggests that negative moods and burnout may be costly to healthcare systems, but replication with objective measures of prescribing and referral behaviors is essential. Physician-patient communication training and burnout reduction interventions are recommended, if findings are replicated.

Off-Label Prescribing of Tamoxifen in Israel: Is it Evidence Based?

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Background: Although off-label medication use is common and supported by the American FDA and the American Medical Association, drugs in Israel may only be prescribed for Ministry of Health (MOH) approved indications or with specific authorization. Tamoxifen citrate, an estrogen receptor antagonist, is indicated in Israel exclusively for palliative treatment of breast cancer. Although prescription of tamoxifen for Non-MOH labeled indications has been observed, the magnitude and evidence supporting this behavior has not been evaluated.

Study Question: What is the prevalence of off-label prescribing of tamoxifen in Israel and what is the quality of the evidence supporting its use for the off-label indications observed?

Methods: A retrospective drug-utilization-analysis for tamoxifen in the Leumit Health Fund of Israel during 2008 was conducted. The distribution of diagnoses registered was evaluated. A literature search using PubMed, Cochrane database, and Micromedex was conducted to ascertain the level of evidence available supporting its use for observed indications other than breast cancer.

Results: During the study period 877 patients were treated with tamoxifen, 57 (6.5%) for off-label indications including: malignant neoplasm of ovary (n=13), and female infertility (n=15). The strength of the recommendations was at best Class IIb (recommended in some cases). There is some evidence from observational studies that tamoxifen may produce a response in a modest proportion of women with relapsed ovarian cancer. However, there are no reliable data from randomized controlled trials nor is strength of the recommendation for use in these patients listed in Micromedex.

Conclusions: Off-label use of tamoxifen was found to be common despite a lack of strong evidence.

Health Policy Implications: Off-label use of drugs and the available supporting evidence should be evaluated periodically and indications/regulations changed accordingly.

Clinical Decision-Making in Nursing Based on Sound Evidence

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Background: It is believed that clinical work based on evidence from applied research will provide better care than reliance only on experience. Therefore, the personal and professional responsibility of nurses treating patients is to base their clinical decision-making on sound evidence.

Study Questions: Evaluate the attitudes and knowledge of academic nurses in postgraduate training programs towards evidence-based practice (EBP).

Do nurses retrieve and use professional electronic information resources in their work?

Methodology: A convenience sample of 188 graduate nurses attending postgraduate courses completed a self-reported questionnaire gathering data on: demographic information, attitudes and level of EBP knowledge, utilization of nursing information resources during work shifts and leisure time, feelings of confidence in clinical decision-making based on available reported research findings, and the pragmatic EBP support provided by healthcare managers.

Results: Overall, 167 nurses responded. The majority reported using Google and Medline, and some used Cochrane databases. They retrieved data from the internet to support their clinical decisions both at work and leisure ($r_p=.441$, $p=.000$). Their attitude and training in evaluating research correlated significantly with their confidence in research validity ($r_p=.635$, $p=.000$).

Conclusion: Nurses reported extensive utilization of traditional and modern technological information sources. They have a confident positive attitude in evaluating research.

Health Policy implications: The survey results support the development of information retrieval skills (including electronic databases) and implementation as an integral part of EBP. Incorporated at all levels of nurse training, this will enhance the clinical decision-making process for the benefit of patients.

Promoting and Implementing The Use of Generic Substitutions

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Background: The Israeli health basket defines medications by active substance (AS). This allows HMOs to include at least one generic substitution (GS) in their formulary. Use of GS allows HMOs to allocate their resources. Since 2001, Maccabi Healthcare Services (MHS) encourages GS use by various strategies. Yet, patients, who developed adverse side effects (ADR) attributed to preferred generic substitution (PGS), are entitled to use non-preferred generic substitution (NPGS). For few generics with relatively highly used NPGS, increased co-payment from 15% to 50% was applied when there was no clinical necessity for NPGS.

Aim: To enhance the use of GS while allowing continuation use of NPGS when clinically needed.

Methods:

1. Physicians could request approval for NPGS to patients formerly treated with GS, and developed ADR. The requests were reviewed by pharmacists and Physicians. Patients who met the criteria were entitled to continue treatment with the NPGS. Others could get NPGS with a co-payment of 50%.
2. Numbers of packages, users of GS and expenditure was collected from MHS data systems. Changes regarding these variables were calculated.

Results: Between 2001-2007 use of GS in MHS increased by 48%, to 49%. During 05.2007-11.2007, 4,594 requests, regarding 10 AS with GS were received. 72% of them related to Omeprazole. 74% of the requests were approved. This process decreased NPGS prescriptions by 71.5%, with annual estimated save of 12M NIS (74% of the expenditure on these drugs). As a result the use of PGS increased to 53% of the total dispensed packages.

Discussion: Despite the observed improvement, there is still need for more effort in promoting the use of GS.

Data and Methods for Delivery System Reform: Harnessing Collective Intelligence to Learn from Positive Deviance

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Data and methods can be policy tools to reform the delivery system. A health care system should incorporate internal mechanisms and incentives for continually gathering, assessing, and acting on data. It should be an adaptive system, learning as technology changes and the system itself adapts to such changes. This learning and adaptation requires better data than we have now, ways to convert that data into potentially useful information and the incentives and mechanisms to apply that information.

I have described elsewhere a proposal for fundamental reform of the U.S. health care system that is such an adaptive system. It incorporates economic incentives for clinicians to alter their practice decisions to increase value (higher quality and/or lower cost) for their patients. Economic incentives, however, are necessary, but not sufficient — information is also needed. The new incentives will lead clinicians to demand that better information be extracted from existing data, and that better data be collected. Policy changes are needed to facilitate those efforts. Simultaneously, the new flows and use of information become policy levers.

The first part of this paper will discuss how comprehensive data sets can be generated to collect the full range of clinical and patient-based measures. Such data sets, however, must be created with attention to the quality of the data, how the data will be used, and the interests of those supplying the data. The second section introduces two concepts: collective intelligence and positive deviance. The former characterizes knowledge gained from observing the behavior of many independent actors as they adapt to changing situations. Positive deviants are those achieving better results than expected. By focusing on them, rather than those who are problematic, we can learn far more about how to improve the system. The third section describes how incentives can accelerate the use of such data and information to enhance quality and efficiency.

Do Managed Care plans improve efficiency? Evidence from Switzerland

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Switzerland introduced managed care options in its social health insurance market in order to contain health care expenditures (HCE). These capitated Managed Care plans reduce costs by gate keeping, internal guidelines, promoting generics etc. Given advantages in costs of about 62% it is a crucial question for health insurers as for the regulator whether MC-plans improve efficiency or profit from self selection. Up to present, only one paper by Lehmann and Zweifel has analyzed this question applying Swiss data (and appropriate econometric tools). They decompose the 62% into 40% efficiency gain and 22% selection effect.

This research applies a matching technique to estimate the efficiency gain. Starting point are all 55'810 MC-insured of a given fund, distributed over 18 different MC-plans. This sample is divided into 442 risk classes according to demographics, place of resident, chronic conditions etc. Out of 900,000 insured of the same fund that didn't choose the MC-plans but have the identical coverage and *free access* to providers, we draw "samples of twins" of identical size and risk structure as the MC-plans (according to the 442 risk classes) and calculated its average HCE. We re-sampled up to 60 times per plan and calculated the average HCE of the 60 averages. This average of averages was compared with the simple average of HCE in the MC-plan, yielding the efficiency gain. While the same average of averages compared with the simple average of all not MC-insured living in the same area indicates the selection effect. All calculations are done separately for each MC-plan and two years (2006 and 2007).

Our approach provides efficiency gains of only 8.7% (over all plans) and selection effects of about 52%. The different models differ substantially and our analysis defines also a best practice plan with 19.4% efficiency gain. The goal of this study was also to inspire those plans below the benchmark to copy the best practice tools of the leading MC-plans.

Payment Reform, Hospital Competition, Costs, and Quality

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Many countries are reforming their health systems to introduce competition in hopes of controlling costs and assuring quality. The Payment by Results scheme for hospitals in the U.K. changed hospital payment to fixed rates and expanded patient freedom of choice. The intent of this reform was to induce hospital competition and thereby reduce costs and enhance quality. In this paper we assess the impact of this reform on hospital competition, costs, and quality. We use data from the National Health Service on all patients and hospitals in England for the period 2003–2008. As a first step, we construct geographic market areas for nine different products: cataract extraction, hip replacement, CABG, neurological surgery, emergency AMIs, maternity care, elective care, emergency care, and all admissions. We analyze the extent of potential competition within these markets by examining the number of hospitals within each market and a measure of how concentrated treatments are at a small number of hospitals (the Herfindahl-Hirschmann Index). For some products, e.g., maternity care, most geographic markets have a lot of providers and a lot of potential competition. For other products, e.g., CABG, the opposite is true. We then go on to analyze the effect of the reform via two methods. First, we evaluate the effects of the reform on hospital costs and quality using difference in difference methods, where the first difference is before and after the reform, and the second difference is between markets where there is potential for competition and those where there is not. We also estimate a structural model of hospital non-price competition, and use this model to simulate the effects of policy changes, such as changes in fixed prices or the entry of new competitors.

What have health plans managers and professionals done to turn quality measures into quality improvements?

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Background: The National Quality Measures Program was initiated in 2000 and involves ongoing assessment of the quality of selected services supplied by the health plans (Israel's HMOs). To date, 69 indicators have been developed and they are regularly measured in the total Israeli population. During the course of the project, performance on most of the indicators has improved significantly.

Study Question: This study seeks to identify the key behavior changes that took place on the part of health plans managers and clinicians in the wake of the introduction of the quality measures project.

Methods: The study is based primarily on in-depth interviews with managers and leading professionals in the health plans. In addition, relevant planning and monitoring documents are being analyzed.

Results: All of the health plans have significantly expanded their quality improvement efforts since 2000. Many of these efforts focused on one of the six specific medical fields addressed by the indicators project (particularly diabetes, immunizations and mammography). In addition, the health plans undertook a broad range of quality-promoting initiatives of a crosscutting organizational nature (such as information system development, enhanced use of multi-disciplinary teams, and enhancing individual physicians' responsibility for the quality of care provided to a specific set of patients). Many of the new initiatives were attributed, at least in part, to the quality indicators project.

Conclusions / Health Policy Implications: The national quality indicators project is at an important juncture; various internal and external developments have stalled the project and even raised questions about its continued viability. The findings of this study could invigorate the efforts of all involved to find ways to overcome the current difficulties.

Implementing the 'Distance Variable' in the Israeli Capitation Formula

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The Israeli National Health Insurance Law enacted on Jan. 1, 1995 opens by stating that equity and justice are its main goals. Accordingly, the Law entitles every Israeli to a pre-set 'basket' of medical services. These are secured through public funds which are allocated to four competing budget holders or sickness funds by a risk adjusted allocation mechanism. The 'capitation formula' has been a key element of this mechanism; the Law stipulates that the allocation to sickness funds is by the size of sickness fund membership and its distribution by 'age', 'distance from populated centers', and 'other variables' that would be determined. To date, only 'age' is in use as a risk adjuster in Israel. As a result the Israeli capitation mechanism, 'underdeveloped' by any standard, does little – if anything – to reduce disparities in health and availability of medical resources in Israel. The paper presents a straightforward proposal to implement the 'distance variable' as a means to establish the necessary condition for a more just and efficient allocation of public moneys toward medical care in Israel. The proposal is based on the 'distance' in kilometers of any sickness's fund standard capita (by age) from a general hospital or medical center. Accordingly, two sickness funds which are relatively concentrated in the populated centers 'lose' public moneys to the two funds which are relatively spread out in outlying areas.

Predictive Models to Identify High-Risk Older Patients

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Background: To target interventions to patients with complex care needs that can benefit from them the most, effective high-risk case identification tools are required.

Objectives: To assess alternative predictive modeling (PM) measures to identify high-risk patients who are best suited for inclusion in care management programs.

Methods: We compared several alternative approaches for identifying high-risk older adults: Prior cost alone; Clalit's Data-mining (DM) award-winning utility, developed to identify patients at highest risk for deterioration in their health status; and the diagnoses-based Johns Hopkins Adjusted Clinical Groups (JH-ACG) PM System. Diagnostic and / or healthcare utilization characteristics of a representative sample of 15,000 elderly patients were used to identify those at highest risk. The predictive accuracy of each model was assessed using Positive Predictive Value (PPV) and ROC curve area.

Results: The three models identify older patients at risk for future deterioration and high resource use. Both JH-ACGPM and Clalit's DM performed significantly better than prior cost only. Predictive accuracy of both measures was high: PPV ~40% and area under the ROC ~0.7. Clinical characteristics of patients identified by the two systems indicated that they are well-suited for care management intervention.

Conclusions: PM systems that are based on clinical characteristics as well as resource use are superior to those based on prior cost only. Model performance of the JH-ACG-PM system, which was not yet enhanced to take into account Clalit's patients' characteristics, demonstrates the robustness of the system in identifying high-risk patients.

Health Policy Implications: Identification of high-risk patients is a crucial healthcare resource optimization tool that can assist in the delivery of effective and efficient care. Further testing of the JH-ACG system is underway to allow for incorporation of pharmacy and other data into the predictive model, for even better accuracy in high-risk case identification.

The Effect of Introduction of Pneumococcal Vaccination as a Quality Measure in Clalit Health Services on Vaccination Rates

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Background: The indications for pneumococcal vaccination as directed by the Israel Health Ministry include patients with immune suppression or chronic diseases and Israeli citizens above the age of 65 years. Nevertheless, response rates for pneumococcal vaccination in this population were estimated at 6%. In 1.1.2008 pneumococcal vaccination was introduced into Clalit Health Services (CHS) as a quality measure.

Study Question: To describe the effect of this executive decision on CHS vaccination rates in the following year.

Methods: An observational study on the process and results of introduction of pneumococcal vaccination in CHS.

Results: At the introduction of pneumococcal vaccination as a quality measure in CHS, the weight of pneumococcal vaccination quality measure within the set of CHS quality measures (which includes 71 individual measures) was set at 3.19%. The target goal for the measure was set at 75%. The introduction of a pneumococcal vaccination as a quality measure was accompanied by three additional essential actions: 1) Pairing the pneumococcal vaccination with the influenza vaccination campaign. 2) Reduction of mandatory co-payment. 3) Addition of an alert in the "Clicks" medical software used by all CHS physicians in the Preventive Medicine Assistant.

During a period of 4 months after the introduction of pneumococcal vaccination into CHS as a quality measure, 273,308 CHS enrollees with chronic diseases/above the age of 65 years received pneumococcal vaccination. This represents 43.15% of a target population of 633,370 CHS enrollees and a 7-fold increase in the vaccination rate.

Conclusion: The introduction of pneumococcal vaccination as a quality measure in CHS, coupled by other managerial actions, substantially increased vaccination rates.

Health Policy Implications: This study demonstrates the effect of introduction of pneumococcal vaccination as a quality measure in CHS on vaccination rates.

* The authors acknowledge the crucial contribution of our partners in the community health division of CHS and IT division of CHS for their key daily contribution to the CHS quality measurement and quality improvement systems. The full list of these partners will be acknowledged in the lecture.

Tamoxifen for Breast Cancer Risk Reduction Impact of Alternative Approaches to Quality-of-Life Adjustment on Cost- Effectiveness Analysis

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Background: In cost-effectiveness analysis (CEA), the effects of health-care interventions on multiple health dimensions typically require consideration of both quantity and quality of life.

Objectives: To explore the impact of alternative approaches to quality-of-life adjustment using patient preferences (utilities) on the outcome of a CEA on use of tamoxifen for breast cancer risk reduction.

Research Design: A state transition Markov model tracked hypothetical cohorts of women who did or did not take 5 years of tamoxifen for breast cancer risk reduction. Incremental quality-adjusted effectiveness and cost-effectiveness ratios (ICERs) for models including and excluding a utility adjustment for menopausal symptoms were compared with each other and to a global utility model.

Subjects: Two hundred fifty-five women aged 50 and over with estimated 5-year breast cancer risk - 1.67% participated in utility assessment interviews.

Measures: Standard gamble utilities were assessed for specified tamoxifen-related health outcomes, current health, and for a global assessment of possible outcomes of tamoxifen use.

Results: Inclusion of a utility for menopausal symptoms in the outcome-specific models substantially increased the ICER; at the threshold 5-year breast cancer risk of 1.67%, tamoxifen was dominated. When a global utility for tamoxifen was used in place of

outcome-specific utilities, tamoxifen was dominated under all circumstances.

Conclusions: CEAs may be profoundly affected by the types of outcomes considered for quality-of-life adjustment and how these outcomes are grouped for utility assessment. Comparisons of ICERs across analyses must consider effects of different approaches to using utilities for quality-of-life adjustment.

Is an intervention cost-effective? It depends on whom you ask

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Cost-effectiveness analyses presenting an incremental cost per quality-adjusted life year (QALY) ratio are increasingly being used in many western healthcare systems to inform resource allocation decisions. As opposed to benefit-cost analysis (BCA), cost-effectiveness studies do not present health outcomes in monetary terms, which would permit a straightforward comparison of costs and benefits to determine whether an intervention provides "good value for money". Therefore, the relative value for money of an intervention can only be interpreted by a reference to an external standard (threshold). By setting an implicit or explicit threshold, decision makers stipulate that only interventions with a cost-effectiveness ratio below that value should be reimbursed. Great debate exists, however, over appropriate cost/QALY thresholds.

We assessed reporting of cost-effectiveness thresholds in the literature to examine prevailing judgments about society's willingness to pay per QALY.

We evaluated approximately 1,800 cost-effectiveness analyses published from 1998 to 2008 and listed in the Tufts Medical Center Cost-Effectiveness Analysis Registry (www.cearegistry.org). We hypothesized that stated thresholds (i.e., the number study authors used as a benchmark of what cost per QALY value constituted a "cost-effective" intervention) were directly related to an author's home country GDP per capita, have increased over time to reflect economic growth and vary by type of disease.

The most prevailing value used in the U.S. was \$50,000 per QALY while in the U.K. the vast majority of studies used the common UK threshold of £20,000–30,000 per QALY gained. Stated thresholds do not appear to relate to GDP per capita, did not change over time and did not vary by disease category. More research is needed to determine appropriate country-specific or disease-specific thresholds. Mechanisms for updating thresholds to reflect inflation rates or changes in GDP are warranted.

Risk adjustment and provider payment systems: complementarities and matching

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Background: Under universal coverage, risk adjustment is a tool for setting capitation rates according to morbidity. This requires an integrated care organization or global purchaser of health services for a population. Provider payment systems have been developed to allocate resources according to the services produced. While there is a volume of activity on the services, there is also a ceiling on the total expenditures for a population. Both systems for allocating resources, between purchasers and providers require a matching process that take advantage of complementarities.

Study Question: This paper analyzes the matching process and expected outcomes of capitated and activity based payments and its implications in a universal coverage system.

Methods: We combine the hybrid risk adjustment model with conventional provider payment systems and define an algorithm for matching quantities and resources between providers.

Results: Providers under an integrated care organization need to set up an agreement after the matching process of quantities at the beginning of the period, and require reconciliation on legitimate differences at the end.

Conclusions: Resources in a supply and demand model for population health are allocated between providers following a matching algorithm under a ceiling of expenditures defined by capitated risk adjustment allocation.

Health Policy Implications: appropriate incentives have to be designed and oriented to the agents taking the decisions on the clinical practice. Efficiency has to be promoted in technical and allocative perspectives.

The preferred doctor scheme: design, implementation and outcomes of a French Managed Care reform

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Background: In 2006 France implemented the Preferred Doctor Scheme, an innovative attempt to introducing features of managed care in the ambulatory care sector which was so far based on unrestricted access to specialists and general practitioners without any coordination. The formal objective of the reform was to regulate access to specialist care, through diminishing redundant specialist visits. Patients were encouraged to enlist with a preferred doctor, who would act as a referring doctor to access second line care. The scheme works on financial incentives: supplementary out-of-pocket charge on visits to specialists that are not referred to by the Preferred Doctor.

Study question: We describe the political process which lead to the reform implementation, and relate these elements with the reform outcomes in terms of access to specialist care.

Methodology: We base our assessment of the reform implementation and outcomes on a representative 2006 survey (ESPS), where we introduced a set of questions relating to patient's understanding and compliance with the scheme and a specific module on subjective unmet needs for specialist care.

Results: Results after one year implementation show that most patients chose a preferred doctor, who happened to be their family doctor. Many considered the scheme as mandatory. Impact on access to specialist care appears not negligible, especially for the worse off and those not covered by a complementary insurance.

Conclusions and Health policy Implications: The reform short term weak outcomes are linked with the health system governance and to the political and professional context in which the scheme unfolded. On a more long range perspective, we analyse how the new scheme may nevertheless lead up to reinforced managed care reforms.

Subsidizing Private Health Insurance: Why, How and How to Proceed?

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Background: Australia's healthcare system relies upon a mix of public-private financing of health services. The existing health financing arrangements lead to duplication in coverage for PHI-holders. There are two options to remove duplication: 1) allowing "opting-out" from Medicare for people who buy PHI; 2) confining PHI to the coverage of supplementary services.

Study Question:

- ◆ Given the presence of a compulsory tax-financed scheme (Medicare), what are the possible rationales for subsidising PHI in Australia?
- ◆ Taking the decision to subsidise PHI as given, is the current complex mix of subsidies (i.e. community rating, combined with claims-equalisation and ad valorem premium subsidies) optimal? And what is the 'best' alternative to optimise the trade-offs between affordability, efficiency and incentives for risk selection in the Australian PHI?

Methods and Results: This paper outlines how consumer choice between Medicare and PHI combined with a system of risk-adjusted subsidies would improve incentives for efficiency and remove duplicate coverage.

Conclusions and Health Policy Implications: This paper argues that from an efficiency perspective: (a) purchase of PHI should be fully substitutive of Medicare coverage (i.e. "opting-out"); (b) community-rating should be replaced by premium bands; and (c) the 30-40% ad valorem subsidy for PHI should be replaced by risk-adjusted subsidies.

Quality control assessment in OR

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The operation room (O.R.) is an area of intense activity, characterized by several components: Intensive high tech medical care, stressful events, and a tight time table, exchange of information between many multidisciplinary health care staff members, anesthetized patients and concerned relatives. This system is prone to human and technical errors. One of the measures needed to improve and maintain patient safety and quality service is an on-going quality control system (QCS).

The quality of treatment that the patients receive in hospitals is highly affected by the nurses' safety culture and performance of daily routines. In our hospital, we have a tradition of on-going nursing QCS. This year we conducted in-depth quality control (QC) in the OR aimed at assessing the current quality of nursing activity and identifying areas for future quality improvement interventions.

We have developed a QC tool based on the OR perioperative report sheet. This report sheet goes over the main points of the operative process, from the patients' admittance to the OR area until their return to their original department.

According to the protocol of critical activities, our results were a 100% performance level in several areas, such as - marking of the operation side, patients' known allergies and informed consent, usage of a tourniquet, patients' positioning, pain assessment, and monitoring of the incision area.

Improvement is needed in the following areas: Skin assessment prior to and post operation, on going assessment of intravenous infusion and other drainage catheters, choosing the person to whom information will be delivered, based on the patients' decision and the "patient's rights law", safe usage of diathermia, closer assessment of limb color and pulse.

This assessment provides a glimpse of the current status and its value is precious. We identified important areas for improvement and helped the OR personnel in their general effort to achieve excellence. Quality control assessment is a powerful managerial tool for both the manager and the worker.

A Four-Year Project for Implementing Hospital Quality Indicators in Israel

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Background: A process of decentralization was initiated in 2005 in hospitals affiliated with Clalit Health Services. The project focuses on clinical quality of care, quality of service, costs, patient throughput and academic excellence. Clinical quality indicators (QIs) were developed based on a common data warehouse with administrative, laboratory, and clinical data. Evidence-based clinical QIs were chosen by expert groups. QIs were used at the department level for developing an annual work plan with quantitative targets. A designated computer application for presentation of QIs was developed, allowing benchmarking between similar departments across the organization.

Study question: Which areas show major improvement in the first four years of the project?

Methods: Data regarding QIs were extracted from the application. For each hospital, trends in performance were calculated for 2005–2008, and the statistical significance was estimated.

Results: 60 clinical QIs were developed in 6 clinical specialties and used by 96 wards in 8 general hospitals. The number of entries to the application increased from 3,442 in 2,005 to 6,803 in 2008. Significant improvement was consistently observed in multiple institutions in the following areas: (1) the performance of echocardiography in acute myocardial infarction; (2) planned discharge for dependent patients in internal medicine; (3) performing a pre-specified detailed nurse admission in internal medicine (4) non-elective coronary angiography performed within 48 hours of admission and (5) reducing excessive length of stay in partial mastectomy.

Conclusions: A successful decentralization process was implemented using clinical QIs and led to improvement in major clinical issues.

Health Policy Implications: QIs can facilitate a decentralization process for public hospitals and improve certain areas of care.

Overall treatment-time reduction following opening of an emergency room for walking patients in a tertiary hospital

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Objectives: A new wing of the department of emergency medicine (ER) has recently been opened in a tertiary medical center. The aim of this study was to examine whether the overall treatment time of patients treated in the older as well as the new part of the ER was modified following opening of the 'walking patients' ER.

Methods: The overall number of patients, their distribution across the different week days, mean and median length of stay at the ER- were compared before and after the opening of the 'walking patients' ER.

Results: Following opening of the new 'walking patients' ER, the percentage of patients treated in this new wing of the ER out of the total patients treated in the ER ranged between 29%-39%. The daily total number of patients treated in the ER before the opening was 211-271, and it rose to 247-293 patients (increase rate of 8%-17%). Both the median and the mean treatment time in the older wings of the ER decreased following the new ER opening, and the length of stay in the walking patients ER was even shorter (less than 2 hours).

Conclusions: The objectives behind opening a new wing of the ER dedicated to walking patients include improvement in medical care quality, creation of a better therapeutic environment for patients, families and medical staff, and also as evidenced in this study- significant shortening of the overall treatment time both in the new as well as the old wings of the ER.

The Impact of Medical Information on Admission Decisions in ED¹

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Background: Many medical organizations have invested heavily in IT², aiming at improving medical care and increasing its efficiency through improved medical processes, reduced costs and integration of patients' data. Despite their advantages, the information systems do not always immediately provide the vital medical information required for critical decision-making, and the decisions based on partial information may result in a decreased level of quality of care and unnecessary costs.

Objectives and Study Question: The main objective of this research is to assess the contribution of information to decision-makers (physicians) at the point of care of EDs, by investigating whether the information systems have improved the medical outcomes and if so-in what aspects.

Methods: Two accepted methods will be used in this study: the track log-file analysis (using information based on data from seven hospitals in Israel) and an experiment study (simulating the complicated reality of an ED environment).

Conclusions:

- ◆ Medical history contributes to admission decisions and clearly reduces avoidable redundant admissions.
- ◆ Viewing local medical history contributes to admission decisions much more than the viewing of external medical history does.

Contribution and Health Policy Implications: The findings of this study can contribute to the scientific knowledge (in fields such as: medical informatics), policy makers, technology designers, physicians and patients. For instance:

- ◆ Focusing on the impact of using integrative real-time medical information components on decision-making on stressful environment (ED).
- ◆ Shedding a light on the relationship between using medical history and performing a more accurate DD³.

¹ ED - Emergency Department

² IT - Information Technology

³ DD - Differential Diagnosis

Hospital Governance and Financial Performance in US Safety-Net Hospitals

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Numerous studies suggest that hospital ownership relates to financial performance. We sought to understand whether these findings generalize to safety-net hospitals (SNH), where managers have sought to reduce government control to improve financial performance; and whether the relationship of governance to performance is mediated by the management strategies employed by hospitals of differing governance types.

Our sample of 122 US safety-net hospitals was defined based on membership in the National Association of Public Hospitals and Health Systems (NAPH), or on Medicaid, minority, or free care burden. Financial performance data from 2003 to 2007 was standardized using state financial reporting databases, audited statements, and IRS filings where available. Management strategies were derived from the AHA annual survey. Governance structure was classified based on criteria defined by NAPH to reflect degree of political influence for publicly-owned facilities. Hospital annual operating margin was the primary dependent variable. Models controlled for safety-net burden, key hospital and market characteristics, and state and year fixed effects. To test for mediation, we examined the following relationships: (1) governance structure and management strategies, (2) governance structure and financial performance, and (3) governance structure and financial performance controlling for management strategies.

We found that on average private for-profit, private non-profit (NAPH and non-NAPH), and public, autonomously-controlled SNH outperformed directly-controlled government hospitals ($p<.05$). We additionally found that hospital strategies, including measures of horizontal integration, diversification, and service scope, mediated the relationships between governance structure and financial performance.

Directly-controlled SNH under-performed for-profit, non-profit, and autonomously-controlled SNH. Differences in profitability were largely attributable to differences in hospital strategies.

Direct government control of SNH may introduce external influences that constrain the strategic position, and ultimately the financial performance, of the organization.

The Future Prospects of Comparative Effectiveness Research

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The federal government of the United States has already committed substantial funding (more than \$1 billion) to comparative effectiveness research, and is considering committing longer-term funding and creating infrastructure for such research.

The views about what types of studies comparative effectiveness research should support, and indeed the definition of the field, are diverse.

I discuss alternative approaches to comparative effectiveness research, the ways that the results of comparative effectiveness research can be incorporated into medical practice and health policy, and the implications for costs and the outcomes of care in the U.S. and elsewhere.

The inconvenient truth of economic evaluation: Benefits forgone as a determinant of efficiency and implications for decision-making

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The research literature and policy directions concerning health care resource allocation have focussed on the development, standardization and application of methods for economic evaluation without identifying the theoretical foundations of the cost-effectiveness approaches recommended or their utility in addressing decision-makers' problems.

In this paper we adopt Alan Williams' definition of economic evaluation and identify three economic implications or 'truths' emerging from this definition.

We show that the first two 'truths' are convenient in that their inclusion in the cost-effectiveness methodologies is consistent with decision-makers' interests.

However we show how the proposed methodologies fail to accommodate the third implication and note how this represents an important inconsistency between the methods proposed by researchers and the problems faced by decision makers.

As such it represents the 'inconvenient truth of economic evaluation.'

Alternative approaches are presented and illustrated for dealing with the inconvenient truth in order to ensure that recommendations emerging from economic evaluation represent valid approaches to addressing decision-makers' problems.

Aligning Incentives to Achieve the Performance One Cannot (Micro) Manage

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Many of the problems in "managing" the healthcare system arise from misaligned incentives in the ways that insurance is structured and providers are paid.

Top down "micro management" of care processes is usually resisted by providers, often adversely affects the care of at least some patients, and is rarely successful. It also tends to inappropriately "freeze" care practices in the face of rapidly changing healthcare technologies.

Approaches that bundle payments at the level of the care delivery teams that make the micro-decisions can give them much more flexibility in redesigning care processes and incentives to constantly improve.

When coupled with information on outcomes and incentives to self-identify superior processes, one can create a "learning environment."

Pay for Performance (P4P): proceed with care

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Why do we need to improve "performance management"?

What policies are being developed in the English NHS?

What is their evidence base?

Should we incentivise processes and/or outcomes?

Does incentivising "quality" reduce costs?

Should we incentivise institutions or individual practitioners: which is most efficient?

Should we use penalties and/or bonuses to improve performance: which is most efficient?

Time to walk cautiously and with careful evaluation before we run with financial incentives?

Statistical methods for identifying institutions with unusually high or low performance measures: application to routine administrative data and data from the MOH hospital quality indicators project

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Background: Reliable statistical methods for identifying institutions with unusually high or low performance measures are important for effective monitoring of a health service.

Study Question: Can one develop effective performance monitoring based on routine administrative data?

Methods: We present statistical methods for (a) identifying institutions with unusually high or low performance measures based on routine administrative data, and (b) for in-depth analysis of the influence of case-mix and treatment process variables on equivalent performance measures based on data from a national survey. For aim (a) we propose a logistic regression model where the institutional effects are modeled as random effects [1]. In this context, using random effects is preferable to fixed effects, as it accounts for the inevitable incompleteness of the adjustment for the case-mix that arises from the limited information in the administrative data. For aim (b) we propose the sequential logistic regression approach previously described by Simchen et al [2]. We describe how the survey data can be used to validate the administrative data and how the two methods (a) and (b) used in parallel can strengthen monitoring of institutional performance.

Results: We will present the application of these methods to data on infection and complication rates following colectomy. The routine administrative data are derived from the returns of hospital discharge records submitted by Israeli hospitals to the Ministry of Health. The survey data are derived from a retrospective sampling of case records on patients receiving colectomies, performed as part of the current Israel national hospital health indicators project.

Conclusions and Health Policy Implications: Will be described on receipt of the results.

Two answers, one question: do the two most commonly used methods of sampling correctly describe the length of the prospective wait for admission to hospital?

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Background: The Information Centre for Health and Social Care (2007) assumes that census-, and event-, based sampling ought to report the same distribution of waiting times. But Don, Lee and Goldacre (1987) claim that the census exaggerates the proportion of long waits, and Armstrong (2009) claims that the census exaggerates the proportion of short waits.

Study Question: To compare the distribution of (incomplete) waits obtained by taking a census with the distribution of (complete) waits obtained by capturing all those admitted during a specified calendar period.

Methods: Hospital Episode Statistics was used to identify the cataracts that had been added to the list between 1 October 2003 and 30 September 2005 and admitted no more than two years after the date of their enrolment. Census- and event- based sampling provided two sets of records in which the rules about suspension and deferral, the (potential) length of follow-up, and the outcome of enrolment were the same.

Results: The census-based sample yielded a higher frequency of short waits than the event-based sample. 36,593 (65%) out of 56,073 of those captured by the census on 30 September 2005 had waited 0-7 weeks, whereas only 27,508 (37%) out of 74,092 of those admitted between 1 July and 30 September 2005 and 28,316 (40%) out of 71,679 of those admitted between 1 October and 31 December 2005 had waited 0-7 weeks.

Conclusions: The two methods cannot both describe the length of the prospective wait. If those who are removed (rather than admitted) from the list are excluded from the event-based sample, they must also be excluded from the census-based sample.

Health Policy Implications: Census-, and event-, based waits should no longer be reported to the English Parliament as though they differ only as a result of inconsistencies in the rules about suspension and deferral.

Resident physicians' medical errors: Active Learning - When more is better?

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Background: Residents learning cannot all be done purely "off-line", i.e., in classes and through simulation. There is no alternative to learning-by-doing and most of their learning must occur "on-line" while they perform their tasks. Active learning facilitates new knowledge acquisition by encouraging residents to ask questions, seek feedback, explore, and experiment. These activities also increase a learner's chances of erring. However, in hospitals, any error is unacceptable and may well be life-threatening.

Study Question: There is a dilemma between, the residents' need to actively learn and explore, which is at the core of high quality medicine, and the need to keep patients safe and eliminate medical treatment errors. This study suggests that by adjusting the conditions of priority of safety and managerial safety practices, organizations can balance these potentially conflicting activities.

Methods: 123 residents from 25 medical wards in two hospitals answered the study questionnaires. Three months after the collection of the independent variables questionnaires from the residents, we collected data about the number of errors that each resident made.

Results: The positive linear relationship between priority of safety and safety performance, demonstrated in earlier studies, existed only when active learning climate was low. When active learning climate was high, results demonstrated a u-shaped curvilinear relationship between priority of safety and number of errors. High managerial safety practices mitigated the number of errors as a result of active learning climate.

Conclusions and Health Policy Implications: Residents errors are not necessarily the complete fault of the individual but are also the result of organizational factors that can be controlled and changed by the hospital. While medical education tends to encourage active learning, priority of safety, and managerial safety practices all at the same time, this study showed that this is not necessarily the optimal combination for minimizing error rates.

Potential Adverse Events in Radiology: Human Factors for Healthcare systems

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Background: Radiology is one of the most progressive fields in medicine and it constitutes the key for diagnosis in medical care systems. The wide progress in demonstrating diseases in radiology has left error analysis a subject rarely explored.

Study Question: The primary goal of the present study was to identify and examine potential adverse events (PAEs) in the radiology work environment, through the use of a proactive approach.

Methods: Three nursing students performed 200 observations hours on 100 patients in three radiology units. They observed each patient throughout the complete medical process, using an observation form that included five main aspects of the medical process, in which unsafe actions may constitute a risk to the patient: 1. Patients admission to the unit, 2. Existence of medical information required, 3. Keeping antiseptic conditions, 4. Patients release from the unit, 5. Continuity in care throughout the patient stay in the unit.

Results: Out of 100 patients been observed in three units, 34 were observed in the Angiography unit, 30 in the CT unit, and 36 in the MRI unit. PAE's were found at different stages of the medical process in 97 patients.

Conclusions: Results showed that accountability for quality and safety of medical process should concern staff members at all levels of the medical organization, and should be treated as an optimization problem of the whole medical system.

Health policy implication: The research results draw important conclusions and recommendations regarding strategies for improving patient safety in non-direct medical care systems as the Radiology department.

Performance of Reperfusion Interventions after Acute Myocardial Infarction and Their Impact on One-year Mortality in Different Risk Groups of Patients: Decision Making Implications

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Background: In-hospital reperfusion therapy performed on Acute Myocardial Infarction (AMI) patients improves prognosis, relieves symptoms, prevents ischemic complications, and improves functional capacity. However, there is evidence, that high risk patients are deprived of this therapy.

Study questions: To investigate the rates of in-hospital reperfusion interventions among post-AMI patients in different risk groups and the impact of this therapy on one-year mortality.

Methods: Retrospective analysis of the AMI patients who were discharged alive from hospitalization during 2002-2004. Patients were stratified into 3 equal groups (low, medium, and high risk for mortality) in accordance to values of the unique risk index developed and validated for this population. The impact of reperfusion during the initial hospitalization in each risk group was assessed by comparison of one-year mortality rates between the reperfused and non-reperfused patients.

Results: The cohort included 2733 patients (age 66±13 years, 70% males). Calculated risk score values were similar among the reperfused and non-reperfused patients in the high risk group. The main results are presented:

Risk group (n)	Mortality, %	Reperfusion, %	AdjHR (CI 95%)	p
Low (912)	0.5	66.7	0.13 (0.015 - 1.11)	0.069
Medium (910)	7.3	53.4	0.47 (0.28 - 0.79)	0.004
High (911)	29.5	32.2	0.46 (0.34 - 0.62)	<0.001

Conclusions: The rate of reperfusion in the high risk group was low. However, high risk patients also benefit from reperfusion interventions.

Health policy implications: The spread of in-hospital reperfusion interventions among the post-AMI patients with the high mortality risk should be increased.

Safety and Risk Management through Event Debriefing Lead by Nurses: 2006–2008

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Introduction: Debriefing is an essential element in patient safety and risk management. that method places the head nurse and their staff at the center of the preventing errors and promoting safety .

Method: All head nurses (80) and more then 64 selected nurses were trained for debriefing method. We established a quality standard as part of a work plan (a performance of minimum 3 debriefing for each department).

Parallel to this process, we established frequent head nurse's meetings with the risk manager coordinator in order to report completed debriefing outcomes, as a part of organizational learning and transparency policy.

Discussion: This debriefing method established professional standards for the nursing staff, and provided viable tools creating familiarity with safety terminology and process. This advanced the goal of improved organizational function and enhanced the organization's capability to develop in an unstable and uncertain environment.

Results: We started with 0 debriefing and increased to 257 in 3 years. 95.7% head nurses were trained by consultant and risk manager coordinators. 76.1% needed continued support from the coordinator, 69.9% preformed their debriefing in nurse's meetings, and 95.7% declared that they changed their approach to risk management. 91.3% became able to identify the real reasons that lead to mishaps. 87% used the style developed in the method to promote safety. 60.9% increased their reporting on events at the departmental level. 84.5% pointed out improvement in the medication process, and 95.7% prevented patient falls. 98.9% indicate the work with the risk manager coordinator motivated them to deal with the risk factors in the departmental level and implemented the debriefing method.

All staff became involved in risk management issues. Debriefing became a crucial component in the head nurses "Tool Box."

The Form of Governance in Australia: The Contradictory Recommendations of the 2009 Review

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The Australian health sector is a case study of a mixed public-private, federal-state system where ill-defined roles and boundaries have compromised performance. Many of the deficiencies of governance are attributable to the lack of a single fund holder for individuals. However, it is argued that this is a necessary but not sufficient condition for "dynamic" efficiency which may be defined as improvement through time by error learning and contrasts with the "static" efficiency considerations which have dominated the fund-holding literature.

The paper relates two examples of large-scale failure with respect to dynamic efficiency. These concern equity and adverse events. It is argued that these failures reflect the influence of vested interests and that, at least in Australia, health sector decision-making should be distanced from the political system.

A recent review of the health system largely ignored these issues, but did make two curious recommendations for the reform of governance. One was to centralise control under the Commonwealth government, thereby exacerbating the likelihood of dynamic inefficiency. The other was to consider decentralising control to ill-defined fund holders. This was unaccompanied by comments on governance.

The paper concludes by arguing that, to achieve dynamic efficiency in the latter type of system, there should be an independent body with extensive powers to collect and disseminate information and the separate power to fine-tune governance and incentives through time.

The Massachusetts Health Care Reform

Rosemarie Day

Commonwealth Health Insurance Connector Authority, USA

Massachusetts is leading the way in health care reform in the United States.

The state enacted a groundbreaking health care reform law in 2006, with the goal of achieving near-universal coverage.

Rosemarie Day, a leader in the state's health care reform implementation efforts, will address the conference by providing an overview of the key elements of health care reform in Massachusetts.

She will highlight the results achieved to date, and discuss how these results have influenced President Obama's health care reform plan for the US, as well as the current health care reform debate in Washington, DC.

Institutions and performance in health care delivery in developing and transition countries

Maureen Lewis

The World Bank, USA

The impacts of health care investments in developing and transition countries are typically measured by inputs and general health outcomes. Most often levels of inputs, and outcome measures such as infant and child mortality, are relied upon to gauge effectiveness and impact of health investments. Unfortunately neither can provide evidence of effectiveness as inputs are necessary but not sufficient, and outcomes are too removed from the operations of health care delivery. Indeed ample evidence exists for developing countries that mother's education is the single, strongest determinants of infant mortality. Missing from the health agenda are measures of performance that reflect the quality of institutions. Such measures are better suited to whether health systems are meeting their objectives; public resources are being used appropriately; and the priorities of governments are being implemented. Effective institutions are critical to raising performance in health care delivery. High performance requires standards, information, incentives and accountability.

The presentation will (1) provide a framework for thinking about governance issues as a way of improving performance in the health sector, (2) suggest performance indicators to track relative health performance, (3) offer possible measures for indicators of health service delivery, and (4) provide evidence on the relevance and importance of specific measures drawing on existing research and documented experiences.

Single Payer – Single Purchaser enigma

Ronald Donato

University of South Australia, Australia

An emerging trend in health system reform among many developed economies has been the devolution of financial responsibility to single fundholding intermediaries who are paid prospectively on a capitated basis and have distinct role of purchasing/commissioning health services for a defined population through a variety of contractual arrangements. Depending on a country's specific history and institutional arrangements two broad forms of single capitated fundholding have emerged: a non-competitive third-party purchasing framework involving a monopsonist government agency who has purchasing responsibilities for a defined population group; and a competitive third-party purchasing approach, where health funds compete for enrollees within the publicly-funded framework. Australia is somewhat unusual in that it operates a highly pluralistic health system structure characterised by significant public as well as private sector involvement in both funding and provision, such that both non-competitive and competitive purchasing frameworks have been advocated as longer-term policy reform options.

This paper explores two important issues surrounding the move towards single fund holding and third-party purchasing in the Australian context. First, the political economy of health system reform and the importance for policymakers of understanding the interplay between economic and institutional perspectives in order to develop a strategic approach to guide incremental policy development and thereby broaden the range of policy options which can be contemplated. Second, to explore the implications of extending the transaction cost economics framework to encompass elements from the resource-based perspective to provide a more robust framework from which to analyse and inform policy on contracting and third-party purchasing.

Strengths and limitations of competitive versus non-competitive models of integrated capitated fundholding

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Integrated fundholding based on risk-adjusted capitation is widely viewed as a core element of health system reform. Two contrasting models have been developed: the competitive model where fundholders or health plans compete for enrollees and the non-competitive model, where plan membership is determined according to an objective attribute such as place of residence. Under the competitive model, efficiency is sought through consumer choice of plan. A range of regulatory elements may also be introduced to moderate undesirable elements of competition. Under the non-competitive model, efficiency is achieved through government regulation and the continuing responsibility for the health of a defined population.

Economic theory, as well as documented health system experience, can help identify the relative strengths and limitations of each model. Concerns with the competitive model relate primarily to the capacity to develop robust risk adjusters sufficient to reduce the incentives for patient risk selection. Possible reductions in the quality of care are also a concern, compounded by difficulties for consumers in discriminating between plans. Efficiency under the non-competitive model requires a strong and appropriate regulatory/policy framework and effective use of micro-management tools. Funding equity objectives can be met through either model by the adoption of income-related contributions, but under the competitive model this may be compromised by incentives for the fundholders to risk select.

Evidence drawn from regional fundholding in the Northern Territory (Australia) and the US Veterans Health Agency and the literature on managed care and managed competition is used to illustrate the strengths and weaknesses of each model.

Regulated Private Health Care Finance

Dov Chernichovsky

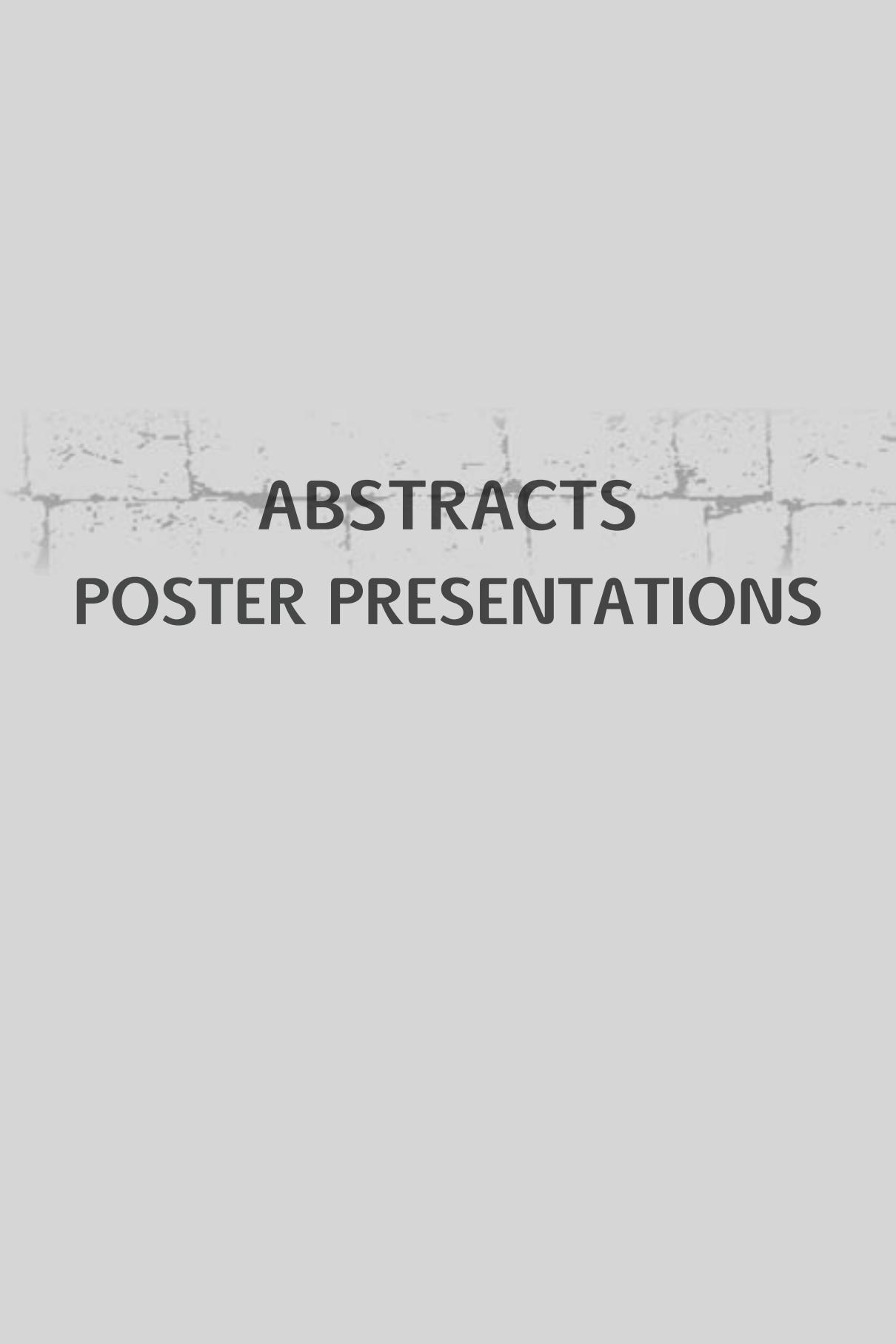
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Privately funded or voluntary medical insurance (VMI) is a challenge to the democracy that guarantees universal entitlement to set medical benefits.

This democracy needs to maintain a careful balance between the preservation of its citizens' right to free choice, such as that exercised under VMI, and the protection of its other citizens' rights as taxpayers to the benefits of entitled care, which may be threatened by VMI.

Ultimately, VMI should be judged by the extent to which it either serves or interferes with the goals of the publicly supported system: equity, cost containment, efficiency of medical operations, and choice.

These, in turn, serve the population's health and satisfaction with the system. This session presents three countries: the Netherlands, Israel, and Australia, each of which has a distinct funding mechanism for universal entitlement, but allows VMI in addition to these basic benefits. These countries must, therefore, meet the challenges that VMI poses in this system.



ABSTRACTS

POSTER PRESENTATIONS

Multiple Channel Program Aimed at Adoption of Healthy Nutritional and Activity Habits for the Hadassah Personnel – A Community Intervention Program

Dorit Adler, Pnina Stein

Hadassah EC Medical Center, Israel

Background: Overweight and diabetes, presenting a growing problem, is a central risk factor for most of the modern diseases. Therefore there is an urgent need to change existing nutritional habits by developing relevant and effective programs and utilities. Working place is defined as one of the recommended targets for such interventions by the WHO.

Study Question: Will a community program based on multiple channel visualization program, lead to a significant change in the food and activity habits of the Hadassah personnel?

Methods: The intervention was based on monthly theme for 10 months, delivered through many channels: headings attached to the salary, intranet, lectures, platforms of live samples, and a holistic change in the food composition and cooking methods of the kitchen, magnified by explanations and visualizations in the cafeteria.

The results were measured before the study and at its conclusion of random sample, including anthropometric measurements and food habits questionnaire. The results refer to 192 workers at the beginning and 271 at the end of the intervention.

Results: we found significant changes in the average BMI, frequency consumption of fast foods, portions of vegetables, fruit and whole grains, frequency of exercise and even in the index of diabetes risk.

Conclusions: The multiple channel intervention program, which is a low intensity kind, led to change in a variety of food habits, exercise frequency and anthropometric measurements, of the kind that has been proved to have impact on the risk of most modern diseases.

Health Policy Implications: Multiple Channel Nutrition Program in working places, based on professional message framing and visualization can have profound effect on food and exercise habits.

The Impact of the Market Oriented Policy on Private Health Services: Lessons from Turkey

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Background: The health care system in Turkey has been going through a series of crucial reforms in recent years. One element of the reforms has been to increase quality of health services by creating competition between public and private health providers. In this concept, the public insured have been allowed to access private facilities since 2005.

Study Question: How did the market oriented health policy affect private health services in Turkey especially during the economic crisis?

Method: The data were obtained from the Ministry of Health (MoH), Social Security Institution (SSI) and Association of Private Hospitals and Services databases and estimated by the authors.

Results: This policy change has enhanced private sector investments, introduced hospital chains and increased demand by patients. Thus, the number of hospitals has risen from 246 in 2003 to 400 in 2009. Similarly, the number of outpatient clinics and laboratories has grown. The hospitals hold 58,2% of the MRI devices and 63,6% of dialysis patients have been treated in the private centres. The number of physicians improved from 11535 in 2001 to 20667 in 2006. The SSI has transferred approximately 32% of health spending to the private hospitals in 2008.

Conclusions: In order to cope with increasing health spending the government has enforced a new regulation which allows more responsibility to the MoH in deciding investments for the sector. Moreover, user charges for private hospitals have been increased. Equal competition rules have been removed for the public and private health sector since second part of the 2008. After these implementations and the recent economic crisis, private facilities are under the treat of becoming closed and planned investments could not be completed.

Health policy implications: Countries should refrain from the populist approaches in identifying the role and size of private health sector. It has been suggested that incremental changes may be easier than transformational change in developing efficient and equitable health system.

Economic impact of indirect costs of routine preoperative tests in healthy patients

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Background: Routine preoperative tests (e.g. blood tests, chest x-ray, ECG) in healthy patients are unnecessary. Despite clear guidelines by the Israeli Ministry of Health, most patients undergo such tests causing direct costs of > 14,000,000 Shekel / year. Indirect costs, e.g. time spent and travel expenses, may have important economic impact.

Study Question: The goal of this study was to calculate the indirect costs of routine preoperative testing in healthy patients for minor surgery.

Methods: The study was approved by the IRB of the Hadassah Medical Organization. Healthy adult patients (ASA 1) undergoing minor surgery under general or regional anesthesia were included. Data on tests performed, occupation, time spent and travel expenses were collected. Costs for lost working-hours were based on data on incomes by the Central Bureau of Statistics. The annual number of operations was based on data from the Ministry of Health.

Results: 99 patients were studied. 93 (94%) had at least one preoperative test. Patients invested an average of 1.7 hours. The average costs (income lost) per patient was 49.31 Shekels and travel expenses were 20.4 Shekels. Based on a total cost per patient (69.71 Shekels) and the number of elective operations performed in Israel per year for patients between the age of 18-65 (151,305; excluding children, cardiac, thoracic, vascular, urologic surgery, cesarean sections or neurosurgery) the total indirect costs of unnecessary preoperative tests are at least 10,547,472 Shekels.

Conclusions: Indirect costs for unnecessary preoperative testing are high. The burden for society is substantial, with more than 250,000 lost working hours. Adhering to the Ministry of Health guidelines could save society much money.

Preoperative testing: An opportunity for cost savings without affecting quality

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Background: There is clear evidence from the literature that routine preoperative tests (blood tests, chest x-ray, ECG) are unnecessary. The Ministry of Health (MOH) has guidelines for routine preoperative tests. However, most patients undergo more tests than required by MOH guidelines.

Study Question: What are the number and costs of unnecessary preoperative tests performed in Israel using Ministry of Health (MOH) guidelines to define unnecessary tests?

Methodology: After approved by the Institutional Review Board of the Hadassah Medical Organization, data were collected in seventeen hospitals each for week. Inclusion criteria were: ASA 1 and 2 undergoing elective surgery, ASA 3 undergoing procedures under local anesthesia (cataract, minor plastic surgery). Patients undergoing cardiac, thoracic, vascular, urologic surgery (except children), cesarean sections or neurosurgery were excluded. Calculations of the number of operations performed annually were based on statistics from the Ministry of Health. Costs were calculated based on information received from Hadassah, Clalit and Leumit HMO.

Results: Among 1651 patients, an average of 7.1 (± 8.7 SD) unnecessary preoperative tests per patient were performed (median 3, lowest 0, highest 69, Q1=0, Q3=11). Only 31% of all patients had no tests done at all. The average cost per test was 51.4 Shekels. With 275,824 operations performed per year direct costs for unnecessary tests were about 14,177,354 Shekels.

Conclusions: Expenses for unnecessary preoperative testing are substantial. Adhering to the clinical practice guidelines issued by the Israeli Ministry of Health could avoid this.

This study was supported by a grant of the The Israel National Institute for Health Policy and Health Services Research (R03/17).

Electronic health records as a powerful tool in setting priorities and influencing cost-containment – a four years of experience

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Background: Health information technology (HIT), and electronic health records (EHRs), have the potential to improve the efficiency and effectiveness of health care cost. Insufficient data are available on the costs or cost-effectiveness of implementing of such systems, although all cost-benefit analysis predicted substantial savings.

Comprehensive EHRs developed for medical army purposes are present at all military primary care and at all military specialty clinics with the capacity to store data and help translate it into context-specific information that can empower providers.

Study Question: To asses the effectiveness of EHRs on cost-savings by using incorporated list of preferred providers and desire thresholds for preferences.

Methods: At the beginning of 2005 all medical providers were divided from the least to the most preferred categories. These categories were implanted in the EHRs. All providers appeared on the same screen and the physician could choose the preferred one giving the patient all needed documents.

To assimilate this new concept 3 complementary steps were taken. Explicit criteria for primary physician were published emphasizing the importance of continuity of care and geographic proximity. Physician and administrative staff conferences were undertaken. A set of threshold references were determined. Data were collected for 2005-2008.

Results: An increase in quantity of referrals to preferred providers categorized in categories 1 and 2, from 72.61% to 90.08% was observed. Over the past four years total cost for referral to specialists decreased by 14.13% ($p=0.04$; 2008 prices). The mean cost for referral to a specialist decrease by 11.56% ($p=0.005$; 2008 prices).

Conclusion: The use of EHRs with desired thresholds for preferences influenced medical care consumption and brought a more efficient economical utilization of medical resources.

From a policy perspective as the success of health policy efforts to influence medical practice and achieve transparent, efficient and just cost containment highly dependent on physicians' attitudes and behavior EHRs appear as a powerful tool in achieving theses goals.

Comprehensive Geriatric Assessment: Is it effective?

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Background: Comprehensive geriatric assessment and management (CGA) is defined as an interdisciplinary evaluation of the medical, functional, cognitive and social status of frail elders. CGA results in a treatment plan based on recommendations to the patient, his family and primary caregiver. International studies have shown the benefits of CGA on preserving function and improving mood and patient satisfaction. This service, its outcomes and effectiveness, have not been studied in Israel.

Study Questions: To determine: 1) if an appropriate population of elders was referred to CGA 2) adherence of primary care physicians to recommendations 3) functional and service utilization outcomes for CGA participants.

Methods: 1) Charts of 1,000 elderly members of Maccabi Healthcare Services who underwent CGA in 2007 were assessed for demographic, functional and geriatric syndromes data 2) 200 referring physicians were surveyed regarding their satisfaction with CGA services and adherence to recommendations 3) Direct interview at two 6 month intervals of 200 elders who underwent CGA and 170 non-CGA comparable elders to compare functional, quality of life and service utilization data.

Results: Approximately 60% of elders referred for CGA in 2007 had functional impairment, 50% had cognitive impairment, 20% had recurrent falls and 25% had depression. Half of physicians reported that recommendations contributed to their care of the elderly. Comparison of CGA and non-CGA elders revealed improved function, and ability to cope with cognitive decline and depression.

Conclusions and Health Policy Implications: CGA is an effective tool for the care of elderly with multiple impairments. It follows that this service should be expanded to an appropriately targeted population. A program of physician training would ensure referral of elders who would most benefit from this effective yet resource-rich intervention.

Patterns of psychotropic medication use among the old-old in Israel: A cohort comparison

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Background: The increased concern over the side effects and dependency of benzodiazepines resulted in strategies to reduce their use in the U.S.A and European countries.

Study Question: To evaluate changes in use of psychotropic medications across two cohorts, ten years apart, of community-dwelling elderly in Israel and assess socio-demographic, physical and mental health characteristics related to their use.

Methods: Data were taken from two national surveys of the Israeli Jewish population aged 75-94, which respectively sampled two cohorts in 1989 and again in 1999. Psychotropic medications were assessed from the list of all medications recorded during a face to face interview schedule.

Results: Total sedatives/hypnotics and anxiolytics use increased from 22.2% in 1989 to 25.4% in 1999 ($p=0.10$); antidepressants from 3.8% to 4.8% ($p=0.22$). Similar pattern of associations were observed across the two surveys for socio-demographics, health status and life events with use of total psychotropic medications. The pooled multivariate analysis for use of sedatives/hypnotic/anxiolytics (95% benzodiazepines) showed significantly higher use among women, those with sleeping problems, increased number of other medications, depressive symptoms and traumatic events. Higher education, disability and depression were significant correlates of use of antidepressants. Cohort membership (1999 vs. 1989) was not associated with use of psychotropic medications.

Conclusions: Results show stability in prescription habits of psychotropic medications across the nineties for old-old Israelis. The high use of benzodiazepines and low use of antidepressants among highly depressed elderly suggests that some depressed subjects were treated inappropriately with benzodiazepines.

Health Policy Implications: Adequate strategies to reduce inappropriate use of benzodiazepines and to introduce alternative medications for treatment of anxiety and sleep disorders should be considered.

Between personal responsibility to physician accountability: Determinants of colonoscopy screening in individuals with family-history of colorectal cancer

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Background: Colorectal cancer (CRC) pathophysiology provides opportunity for prevention by early detection and removal of adenomatous-polyps via colonoscopy. First-degree-relatives (FDRs) of CRC patients will gain most from colonoscopy-screening as high-risk population, yet their adherence is suboptimal. This calls for investigation of determinants of colonoscopy adherence.

Study objectives: To identify CRC screening behaviour and its salient determinants among FDRs of CRC patients.

Methods: Cross-sectional study was conducted among 318 FDRs of 164 CRC patients treated at Tel-Aviv Sourasky Medical Center. Interviews were carried out according to the I-Change Model.

Results: Underutilization of CRC screening was found: 32.7% underwent colonoscopy screening test and only 23% of sample were on schedule with current guidelines. Additionally, 28% of individuals ≥40years performed inadequate CRC screening. 52.5% of the subjects do not perceive themselves at high-risk. CRC screening was not offered to the sample's bulk (65.6%). Family physician and kin were significantly identified as the most prominent influential persons on individual's decision. Intention, affective barriers, positive attitudes, social support, cues to action, age and health maintenance, were the most salient determinants of colonoscopy.

Conclusions: Adherence to colonoscopy among FDRs of CRC patients is low. Future intervention should focus on overcoming affective barriers, fostering positive attitudes, enhancing cues to actions and family physicians' education. Health policy implications: Intervention for FDRs of CRC patients should be designed independently of public health campaigns. Family physicians have key role in reviewing family history and provide screening recommendations. FDRs screening should be an integral part of medical protocol for CRC.

Window of Opportunity: Referral of Adolescents to the Hospital Child Protection Team

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Background: The arrival of an adolescent at the hospital provides an opportunity to detect possible maltreatment, by looking beyond the presenting symptom. The Child Protection Team (CPT) assesses cases of suspected abuse or neglect (SCAN) referred by hospital staff, and if reasonable basis is found, reports are made to welfare and/or police authorities.

Study Aim: As adolescents pose a different array of presentations than do younger children, their socio-demographic features and characteristics of hospitalization and suspicion were assessed, to improve procedures for identifying SCAN.

Method: Files of all 674 referrals to Safra Hospital's CPT of 10-17-year-olds from 1991-2007 were abstracted.

Results: Different patterns were found by gender and age group. The youngest group (10-13-y.o.) had a higher rate of boys than girls (47.9% vs. 27.6%), and the oldest (16-17-y.o.) had a higher rate of girls (31.9% vs 26.0%). There was a higher rate of immigrants in the study group, compared to all hospital admissions (12.8% vs. 4.7%). The most frequent reason for hospitalization was suicidal behavior (30.9%). Older age was related to fewer arrivals for trauma/burn among the boys, and more suicidal behavior among girls. In 83.1% of the cases, reports were made to the authorities. In 64.2% suspicion was of emotional abuse or physical/emotional neglect; in 18.8% physical and/or sexual abuse was suspected.

Conclusion: This study highlights the importance of age-by-gender analysis and understanding the differential susceptibility to SCAN.

Health Policy Implications: Every encounter of an abused or neglected child with health services offers a window of opportunity to identify the risk and initiate protective inquiry and procedures. Thus improving understanding of the nature of such risk and its victims is vital for optimizing case identification in the hospital setting.

Effectiveness of influenza vaccination in the elderly – a retrospective longitudinal large-scale cohort study

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Background: The extent of impact of influenza vaccination on morbidity among the elderly is under debate in the literature.

Objective: To assess the impact of influenza vaccination, on health care utilization, among elderly people.

Methods: In a large-scale retrospective longitudinal cohort study we analyzed the computerized records of Clalit Health Services and compared elderly (age 65+) members vaccinated with influenza at a given year to unvaccinated matched controls, in three consecutive influenza seasons (2003/4, 2004/5, 2005/6). Matching was performed using propensity score method for being vaccinated, based on demographic variables (age, sex, and minority status) and comorbidities measures. Healthcare utilization measures were compared in terms of difference (between vaccinated and unvaccinated cohorts) in differences (between the post-vaccination winter and pre-vaccination winter).

Results: In the three seasons included the vaccinated and unvaccinated cohorts comprised of 24,006–41,059 exposed and 88,875–152,439 unexposed members, respectively. Matching has achieved lack of difference between the two cohorts in demographic, comorbidities and outcome data during the pre-vaccination winter. Clinically and statistically significant differences in hospitalization rates were observed in overall hospitalization rates (vaccine efficacy 16.4%–21% in the different seasons) and hospitalization rates in internal medicine wards (vaccine efficacy: 13.3%–25%), between the vaccinated and unvaccinated cohorts. Significant differences in vaccine effectiveness were observed between age groups within the elderly population.

Conclusion: This study shows significant impact to influenza vaccinations on hospitalization rates among the elderly, further strengthening evidence from some observational studies published to date.

Health Policy Implications: Influenza vaccination is a key quality indicator in Israel and other western countries. The results of this study are in accordance with some of the large studies published in the literature, and may assist reassuring clinical staff and policymaker in the importance of this preventive measure.

Trends in smoking, obesity and physical activity 2000–2008

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Background: Smoking, unhealthy diets and physical inactivity are major preventable risk factors for chronic diseases such as cardiovascular diseases, cancer and diabetes.

Study Question: To examine trends in smoking, physical activity and obesity in Israel since the year 2000.

Methods: Data were collected via the Israeli National Knowledge Attitudes and Practices Health Surveys (KAP) which are conducted biannually (2000–2006), and the Israeli National Health Interview Surveys (INHIS) in 2003–4 and 2007–8. Prevalence rates were calculated for smoking, physical activity ≥ 3 times per week and obesity ($BMI > 30$). Temporal trends were estimated for the overall population, and comparisons were carried out among 4 sub-groups: Jewish males, Jewish females, Arabs males and Arab females.

Results: Smoking rates declined nationally from 25.9% in 2000 to 24.0% in 2007, but for Arab males rates fluctuated from 45% in 2002 to 41% in 2006 and 53% in 2007. Reported physical activity ≥ 3 times weekly declined from 32.7% in 2000 to 29.8% in 2004 and increased to 35.8% in 2007. While a general upward trend was noticed in the general population, sharp fluctuations were found in the Arab population: A decrease from 30.6% in 2002 to 14% in 2004, an increase to 37% in 2006 and a decrease to 27.6% in 2007. $BMI > 30$ increased from 10.8% to 15.7% between 2000–2007.

Conclusions: Seemingly positive national trends might be masking great variations in prevalence of health-impacting behaviors among sub-groups.

Health Policy Implications: Monitoring trends of preventable risk factors should relate specifically to population sub-groups, in order to plan and implement effective strategies to improve health and reduce morbidity and mortality.

Evaluation of a lifestyle group intervention: self-efficacy and attendance as predictors of weight loss in Maccabi

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Background: Studies of weight loss have reported inconsistent evidence regarding the efficacy of intervention and the predictors of successful weight loss. Many studies have been limited in sample size, length of follow-up or composition (i.e., community sample versus clinic attendants).

Study Question: How effective is a group intervention aimed at lifestyle changes regarding weight loss and its maintenance over a 1-year period? To what extent is dieting self-efficacy related to weight and weight loss?

Methods: Participants in 72 lifestyle groups in the community were enrolled in the study. The group intervention consisted of 10 weekly sessions facilitated by a dietician, which focused on adopting health eating habits and a healthy diet and engaging in regular physical activity. Participants filled in questionnaires at the 2nd (n=634; 79% of all participants) and last (n=388) sessions and answered a phone survey 3 (n=514) and 12 months (n=488) after the last session. Weight and attendance were recorded by the group facilitator in every group meeting. The questionnaires assessed dieting self-efficacy (in social situations and emotional states) and weight loss goals.

Results: Body Mass Index (BMI) dropped from 31.5 to 30.5 over the 10-week intervention period, dropped an additional 0.4 units over the next three months, and increased by 0.2 units over the next 9 months. Self-efficacy improved over the intervention period. Actual weight loss was much lower than goals reported at baseline but higher goals predicted greater weight loss.

Conclusions: A group intervention is effective in reducing weight and maintaining weight loss over time and in improving perceived ability to control overeating under social and emotional pressures.

Health Policy Implications: Effective lifestyle changes can be achieved with community group interventions.

Health Inequalities in Israel: Unintentional Injuries among Arab and Jewish Children

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Background: Unintentional injury is a leading cause of morbidity, hospitalization, and mortality for children in Israel similar to other developed countries. In recent years, injury-related mortality rates for all children in Israel have decreased. There remain however, major disparities in the injury-related fatality rate between the Arab and Jewish child population.

Study Question: What are the characteristics and gaps in injury-related child deaths among the Arab and Jewish populations in Israel?

Methods: 'Beterem' conducted a special analysis of Israel Central Bureau of Statistics datasets on mortality, local authorities, and road accidents to identify the characteristics and gaps in injury mortality rates between Arab and Jewish children.

Results: Injury related mortality is significantly higher for Arab children than Jewish children at a rate of 9.3 and 4.4 per 100,000 children in the population respectively. Specific differences identified include injury mortality rates by age group and type of injury. Disparities are also identified in road accident injury rates and injuries in Arab and Jewish local authorities.

Conclusions: Although a decrease in child injury-related mortality was observed in both the Jewish and Arab child population (a 34% and 24% decrease respectively) the gap has not narrowed over the past decade. 'Beterem' is developing evidence-based programming targeting these high injury areas and populations.

Health Policy Implications: 'Beterem' is working with the Ministry of Health to develop a National Child Safety Action Plan to actively promote injury prevention and reach the Ministry of Health's Goals for 2020: reduction of child injury rates by 50% and the narrowing of gaps between Jewish and Arab children by 25%.

Economic implications of Operation Cast Lead at Barzilai Medical Center

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Background: In December 2008, the Israel Defense Forces launched Operation Cast Lead (OCL) against the Hamas regime, in order to regain security for the population of southern Israel. Consequently, Israel came under massive rocket attacks that largely targeted the Barzilai Medical Center (BMC), which serves Ashkelon, Ashdod, Kiryat Malachi, Kiryat Gat, Sderot and the environs. The Ministry of Health instructed the hospital to operate under emergency conditions, which meant admitting only urgent cases, discontinuing outpatient clinics and evacuating entire wards.

To date, the number of patients has not reached the level prior to OCL.

Study Question:

- ◆ To estimate the financial costs incurred by BMC as a result of OCL.
- ◆ Examination of patient reutilization of hospital services since OCL to date, based on patient geographics and treatment type.

Method: Calculation of hospital revenues before and after OCL, based on patient geographics and reason for referral.

Conclusion: There appears to be a clear, albeit gradual trend of resumption of hospital services to pre-OCL levels, with a clear distinction between the various geographic regions and reasons for referral.

Health Policy Implications: In compensating the hospital for OCL, short - and long-term losses should be calculated with the understanding that health service consumption changes as a function of distance, necessity and behavior.

15:15 – Briefing before Duty

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Background: The Obstetrics & Gynecology Department includes labor and delivery suits, emergency, and operating rooms; maternity and gynecology wards; and a high-risk pregnancy unit. It is characterized by varied, serious, unstable health problems, requiring prompt, appropriate treatment. Many care providers operate the department and complete, accurate knowledge of patients' status is critical. We identified the end-of-day shift change with minimal staffing as a weak-link in information transmission.

Study Question: How patient information is shared between shifts to ensure continuity of care, appropriate, timely decision making, and patient safety?

Methods: We designed a structured, briefing process to transmit critical information at shift changes that occurs daily at 15:15, in the centralized labor and delivery area. All on-duty evening/night shift staff and physicians representing all department areas participate. Relevant data are transmitted verbally in a structured format and summarized on a message board designed as a tool to centralize patient information. The daily briefing is managed by the senior physician in charge of the coming shift.

Results: The "15:15 Briefing" was incorporated into the departmental routine gradually and initially monitored closely by senior management. It was designed through team effort to meet the staff's needs and ensure smooth performance. A filmed didactic was presented to the entire medical staff. A staff survey conducted after 6-months revealed 100% implementation; 97% noted improved continuity-of-care, and 94% increased patient safety.

Conclusions: The briefings improved: Workflow; Continuity of safe, quality patient care; Reaction time and medical decision-making; Proactive intervention for unstable patients; Staff satisfaction; Organizational knowledge through structured incident reporting.

Health Policy Implications: Institution of a structured routine for transmitting patient information between shifts can improve patient safety and staff performance.

Psychopathology Following Child Abuse: Results of the Israel–World Mental Health Survey

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Objective: Child abuse is a known risk factor for psychopathology in adulthood. This study tested the association between child abuse and emotional distress, anxiety and mood disorders, and sleep disturbances.

Methods: Data were gathered from the Israel-based component of the World Mental Health Survey (n=4859). Sexual and physical abuse was defined according to direct questions on the occurrence of such events. Mood and anxiety disorders were diagnosed with the Composite International Diagnostic Instrument (CIDI), emotional distress was measured with the 12-item General Health Questionnaire (GHQ-12), and sleep disturbances were based on self report.

Results: The analysis showed increased risk for mood and anxiety disorders among subjects exposed to either sexual (n=207), or physical (n=119) abuse. Multivariate analysis indicated an increased risk for mood (odds ratio (OR)=1.66, 95% confidence interval (CI) 1.15-2.41) and anxiety (OR=2.45, 95% CI 1.56-3.86) disorders, but only if the adverse event occurred before age 13. In the same line, greater emotional distress and sleep disturbances were indicated among subjects exposed to childhood abuse.

Conclusion: Exposure to sexual or physical abuse during childhood is an important risk factor for mood and anxiety disorders in adulthood, as well higher psychological distress and sleep disturbances. This is a strong “case for action” to increase the awareness of social and medical practitioners for such incidents.

Establishing National Policy for Smoking Cessation: Planning, Implementation and Evaluation of Training Clinical Staff in Healthcare Settings

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Background: In Israel - 23.2% of adults smoke daily. Clalit Health Services, Israel's largest health service organization, developed, implemented and evaluated a national smoking cessation training program for physicians and primary clinic staff.

Study Questions: To increase the awareness, self efficacy, and capacity of physicians and other health professionals regarding smoking cessation among patients.

Methods: The initiative included two phases: 1. Training physicians and health promoters to conduct in-service training among primary care staff; 2. National in-service training of primary care clinic staff. A multi-disciplinary working group developed methodology, guidelines and instructional materials, based on 5A/5R model, Stages of Change (Procheska/DiClemente), and Motivational Interviewing (Rolnick/Miller).

Results: Phase 1 In 2007-2008, 30 family physicians and health promoters were trained in all 8 Clalit districts, to teach the program to primary care staff.

Training Evaluation

Satisfaction	Acquired Knowledge/ Tools		Confidence Levels to Instruct	
Very satisfied 50%	Very much	50%	Very high	20%
Satisfied 40%	Much	25%	High	40%
Somewhat satisfied 10%	Somewhat	10%	Medium	20%
Not Satisfied 0%	Little	5%	Little	10%

Phase 2 Between 2008- 5/2009, 625 physicians, nurses, pharmacists, and other professionals, participated in in-service training. Registration of smoking status in the EMR increased significantly, partly attributed to the training. The evaluation design includes measuring significant changes in knowledge, attitudes, self-efficacy while maintaining high satisfaction.

Conclusions: The initiative is feasible with implementation conditional upon the inter-disciplinary and intra-organizational cooperation between national and district management. The program was integrated into the Clalit 2009 work plan.

Health Policy Implications: Smoking cessation training and implementation can and should be included in healthcare policy, including quality indicators for sustainable and effective impact.

Cost analysis of home hospitalization for cancer patients: the experience of Regione Calabria, Italy

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Background: The need to contain healthcare expenditure, looking at quality of assistance as well, has lead in recent years to the implementation of new assistance paradigms. Home hospitalization is intended to improve quality of assistance: patients remain in their own environment, assisted by their families.

Study Question: The purpose of the paper is that of analyzing level of costs for home hospitalization vs. hospitalization. The analysis correlates evaluation of patients' health conditions with the level of costs, seeing if worse health conditions can determine a higher level of costs for home assistance.

Methods: The analysis has been carried out for Regione Calabria (Italy) in the period 2003–2007. Data about 92 cancer patients observed at 3 different operative units have been considered. The correlation between costs and patients' multi-dimensional evaluation has been analyzed by applying OLS estimation strategy.

Results: Home hospitalization allows considerable saving of resources (138,94 € is the daily estimated cost, vs. 188,09 €, that is the cost of 1 day of hospitalization). These results are even more significant when looking at patients' health conditions, which might determine higher costs. According to the results of the EQ-5D questionnaires administered to patients in the observed sample, the greatest number of patients declare to have improved or maintained unchanged his/her perceived quality of life.

Conclusions and health policy implications: Results of this analysis can be useful to health policy authorities, which will be able to plan assistance schemes according to patients' needs. Moreover, the analysis framework applied in this study – correlating costs with patients' clinical conditions – is likely to be replicated in other contexts, so that the results obtained can be generalized.

Research to Reality: Health Policy Development Regarding Postpartum Depression

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Israel serves as a prime example of the development of national policy regarding early identification and intervention in cases emotional difficulties among pregnant and postpartum women. This path has been taken over the course of several years and is continually being improved and expanded. In response to identification of the problem of postpartum depression (PPD) by nurses in Mother Child Health Care (MCHC) clinics, a prospective study was conducted on a community cohort to document the scope and risk factors for PPD.

The results showed that: (a) 22.6% scored ≥ 10 on the Edinburgh Postnatal Depression Scale (EPDS), indicating symptoms of a depressive episode; (b) psychosocial risk factors included dissatisfaction with partner relationship, poor social support, depression symptoms during pregnancy; (c) screening was feasible in the primary clinic. As a result of these findings the Ministry of Health decided to add an EPDS screening and nurses' supportive intervention program to the routine pregnancy and postpartum follow-up care in its MCHC clinics.

Following a pilot study confirming the program's feasibility, the Ministry has expanded the program to over 175 MCHC clinics, added a 6-hour study unit to its course for qualifying public health nurses, published an information brochure about PPD, and is currently preparing material regarding PPD for its website. In addition, Clalit Health Services, Israel's largest HMO, adopted a similar screening and early intervention program in over 150 of its MCHC clinics. Over 10,000 EPDS questionnaires completed in Clalit clinics were summarized and highlighted differences in depression rates among regions and types of community. The screening and intervention program has also recently been expanded in the Arab sector, both in the North and in a Bedouin community in the South.

Risk Factors for Chronic Kidney Disease in Israeli Adults

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Background: In western countries, 6–16% of the adult population may contract stage 3 and stage 4 Chronic Kidney Disease (CKD). Of these, over 1% will deteriorate to End Stage Renal Disease (ESRD), and adequate treatment can significantly delay this deterioration. Large-scale local Israeli data on prevalence and risk factors of CKD are scarce.

Objective: To assess the prevalence of stage 3–4 CKD in the adult Israeli population, and identify demographic and clinical factors associated with CKD prevalence.

Methods: We used the centralized database of Clalit, including 1,500,000 patients aged 35+, excluding severely ill. Laboratory test results (including blood creatinine levels) during two consecutive years, as well as demographic data, were used to define eGFR according the modified MDRD formula. Risk groups for stage 3–4 CKD were defined based on a variety of variables available in Clalit's computerized records including comorbidities, demographic attributes and laboratory tests.

Results: At least one blood creatinine level was available during 2003–4 for 68% of the study population – 52% for adults aged 35–50, and 79% at age 50+. The prevalence of laboratory-defined stage 3 CKD was 8%, – 1% at groups aged 35–50, and 13% at age 50+. The prevalence of stage 4 CKD was 0.35%. Several risk factors associated with CKD stage 3–4 prevalence, including male sex, age, religion, socio-economic status and others were identified.

Conclusions: The prevalence of stage 3–4 CKD among otherwise 'healthy' adults in Israel is considerable and significant risk factors can be identified.

Health Policy Implications: Establishing guidelines for early detection of CKD and adequate focus on patients at risk is a requisite in the Israeli adult population, to prevent and postpone ESRD by applying appropriate preventive measures.

Who is bearing the largest financial burden for their healthcare?

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Background: The private expenditure on health in Israel is high compared to Western Europe and is rising. The out of pocket payment of households for health services and drugs was 33% of national expenditure on health in 2007 compared to 26% in 1995.

Study Question: To investigate the socio-demographic and morbidity characteristics of those who paid high sums for their healthcare.

Methods: The study focused on adults who paid 200+ NIS for healthcare in two weeks, based on the 2003–2004 health survey (Ministry of Health, CBS). Multivariate analysis was done to investigate the relationship between high payments and gender, age, population group, having supplementary medical insurance, chronic physical disease, mental disorders and chronic pain. Payments were grouped into: all healthcare services, all drugs, prescription drugs, and dentistry.

Results: A tenth of those 21+ reported paying 200+ NIS in two weeks for healthcare services and drugs; 4.4% for all drugs, 2.4% for prescription drugs and 3.6% for dentistry. Logistic regression analysis showed a significant connection between high payments and chronic physical disease (diabetes OR=2.2, cardiovascular disease OR=1.8, kidney disease OR=1.7, respiratory disease OR=1.6), chronic pain (OR=1.6), and having supplementary medical insurance (OR=1.8). Immigrants from the FSU and Arabs paid less (OR=0.6, 0.4) compared to Jews and other. The model predicting payments for drugs showed similar results, and also aged 65+ paying significantly more. Payments for dental treatment were significantly less for Arabs and FSU immigrants (OR = 0.3, 0.5). No significant results were found for chronic mental disorders.

Conclusions: A significant connection was found between high payments for healthcare and chronic physical disease, age of 65+, and population group.

Health Policy Implications: Efforts should be made to ensure that financially and socially weaker populations have equitable access to healthcare resources.

Adolescent Disordered Eating Behaviors – the Mabat National Health and Nutrition Youth Survey

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Background: The Israeli Ministry of Health Mabat Youth Survey 2003–4 assessed health and dietary habits.

Study Question: How prevalent is disordered eating? Is it related to overweight and dieting?

Methods: 6274 students in 179 randomly selected state schools completed questionnaires which included a modified, four item SCOFF disordered-eating screener. Disordered eating was defined as two or more affirmative answers (purging, excessive weight loss, distorted self-image, fear of loss of control over eating). Skilled interviewers performed anthropometric measurements.

Results: 14.8% (6.3% and 24.2% of boys and girls, respectively) reported weight reduction dieting. 62.8% and 27.5% of girls and boys, respectively thought they should be dieting (older girls more than younger, $p<0.05$). Among these, 28.5% and 54% of girls and boys respectively were overweight or obese. 14.4% reported purging. 32.5% reported weight loss (girls 45.8%, boys 38.4%). 1.5% of boys, and 4.1% of girls had distorted body image and 33% worried about loss of control (boys 20.3%, girls 43.7%). 37.3 % (28.2 % of boys, 44.7% of girls) had disordered eating (older girls more, 50.2% vs. 39.2%, $p<0.001$).

Conclusions: Many Israeli adolescents with acceptable weight are dieting. Many have disordered eating behaviors, mainly older girls.

Health Policy Implications: Efforts should be made to empower children, especially girls, to resist peer pressure and to follow positive role models. To mitigate the phenomenon of disordered eating and ensure appropriate support for those with disorders, gender-specific approaches are recommended, including development of a National Strategic Plan and School Health Programs, utilizing dietitians, mental health and communication specialists.

Educating Nurses in "Caring" for Patients

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Background: Nurses provide the lion's share of health care, making quality nursing education a priceless asset for the health care delivery system. The goal of nursing education is to facilitate students' internalization of "Caring"—the heart and core of nursing practice. Caring nurses engage all their intellectual, physical, emotional and spiritual resources for achieving optimal patient goals. They nurture patients unconditionally, empowering them to find meaning in their condition and continue all the while to grow as human beings.

Study question: How do nursing students' perceptions of caring develop during the course of their nursing education?

Methods: Students (n=136) filled out an open-ended questionnaire at the onset of their nursing education (Time 1) and at the conclusion the first two semesters (Time 2 and Time 3, respectively). Content analysis for existing and frequency of words and phrases relating to caring as presented in the Caring Behaviors Inventory (Wolf, 1994) was performed. Data was classified according to 11 categories: skilled nursing performance, humane approach, identifying with and supporting the patient, needs satisfaction, honesty and integrity, education and guidance, addressing families, alleviating suffering, honoring, being with patient, and practicing nursing as a calling.

Results: Students made mention of all categories at each point in time, although emphases differed. At time 1, especially dominant categories were humane approach identifying with and supporting the patient; skilled nursing performance and needs satisfaction. At Time 2, all categories dominant at time 1, except for needs satisfaction, remained dominant. In addition, honoring patients more than doubled its frequency. At Time 3, education and guidance become more dominant and frequency of previous categories was sustained, with the exception of needs satisfaction. Data collection will continue throughout the course of study.

Conclusions and health policy implications: Caring is critical to facilitating patient well being and satisfaction with health services. Students' perceptions of caring are dynamic and informed by nursing education. Teaching strategies should be cognitively and affectively driven, addressing all caring dimensions in a balanced fashion.

Perceived Mental Distress and Help-Seeking Behaviors: Who Is Responsible for Providing Services?

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Background: Mental distress (MD) refers to a range of disorders which do not necessarily imply a psychiatric diagnosis. Many patients with MD do not seek professional help. Untreated MD is associated with perceived poor health, somatization, and over-utilization of health services. Today, prior to the planned reform in the mental health services, it is unclear who is responsible for treating MD and who is eligible.

Study Question: To examine help-seeking behaviors of patients with perceived MD, barriers to receiving professional care and satisfaction with the service.

Methods: A 2007 national random phone survey using a structured questionnaire among a representative sample of 1,869 Israeli residents age 22+. Response rate: 83%.

Results: 25% of respondents reported MD in the past year which they found difficult to cope with themselves. Despite this, 22% did not seek help, and 34% turned only to their informal social network. Multinomial regression analysis revealed that controlling for severity of MD, Arabic and Russian origin and low income had an independent effect on receiving only informal care. Satisfaction with effectiveness of treatment was lower than with interpersonal aspects of care. Multivariate analysis revealed that satisfaction with psychiatrists was significantly lower than with other practitioners.

Conclusions: The results suggest that there are disparities in access to mental health care as well as need for improving the quality of services.

Health Policy Implications: To enhance equality, it is important to improve the cultural adaptation of services to the needs of Arab and Russian populations and to increase access of low SES populations. The responsibility of patients, primary care physicians and mental health practitioners for the treatment of MD will be discussed.

Lifestyle and the primary prevention of diabetes in Israel

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Background: Diabetes Type 2 presents a serious and growing problem in terms of burden of disease. Data from the National Health Interview Surveys (INHIS) indicate that rates of self-reported physician-diagnosed diabetes were 5.5% in 2003–4 and 7.2% in 2007–8. Prospective studies have shown that the majority of cases of diabetes could be prevented by a healthy lifestyle.

Aims: To assess the prevalence of modifiable risk factors associated with diabetes in a national health survey carried out at the ICDC, and to estimate the proportion of diabetes that could be prevented by healthy lifestyles.

Methods: Analyses were conducted on data collected from the INHIS carried out in 2007–8 on a random sample of the Israel population aged >21 years (N=7,432). The prevalence of risk factors for diabetes (overweight, obesity and lack of physical activity) was estimated, and rate ratios and population attributable fractions were calculated.

Results: 49.7% of the population were physically inactive, 34.2% were overweight ($25 \leq \text{BMI} < 30$) and 15% were obese ($\text{BMI} \geq 30$). Comparing "low risk" individuals (those engaging in regular physical activity at least 3 times per week and with a BMI under 25) with all other individuals, the age-adjusted odds ratios for diabetes were 2.3 (CI: 1.5–3.4) in men and 5.4 (CI: 2.9–10.0) in women. The percentage of diabetes that theoretically could have been prevented if the total population had been in the "low risk" category (population attributable fraction) was estimated at 50% in men and 78.6% in women.

Conclusions: In spite of the limitations of using prevalence data, our estimates indicate that a considerable proportion of diabetes in Israel could possibly be prevented by adopting a healthy lifestyle.

Chronic Physical Disabilities – Implications for the Health Care System

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Background: The aging of the population in western countries increased the prevalence of chronic physical disabilities and the consequent use of health services.

Study Question: Do the physically disabled suffer from an excess of chronic illnesses and are they high users of the health services?

Methods: The research is based on the National Health Survey, 2003–2004, part of the World Mental Health Survey. The population was identified as those claiming to have a physical condition lasting six months or more. The variable studied was whether the person felt that his disability interfered with everyday function. Univariate and multivariate analyses were performed, using age, gender, population group, education level, chronic disease and mental health as explanatory variables.

Results: One third of the total population of those aged 21 and over have a chronic physical disability lasting at least six months, 1.4 million people. Of these, 720,000 have recognizable difficulties in everyday activities. Three quarters of them suffer from mobility problems. Disability rates increase with age, and females above age 65 suffer 50% more than males. The rate among Arabs is significantly higher than Jews and others in all age groups. The rates for immigrants are significantly higher than for Jews and others for age groups under 65 years. The rate of chronic illness in the physically disabled population is higher than in the non-disabled population, as is the usage of health services. The rate of visits to physicians by the disabled is more than twice the rate of the non-disabled. Adjusting for age and gender, logistic regression shows a higher risk of disability for lower educated people relative to higher educated; and Arabs compared to Jews and others. Chronic physical illness increases the chance of suffering from disability.

Conclusions and Implications: Improving quality of life of this population would be beneficial both to the population itself and to society. These improvements might include allocation of financial and human resources.

Health above all? – The importance of Health in the Israeli public

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Background: The current crisis in health services is related to demographic changes and to the rapid development of medical technologies, but also to socio-political and culture factors, such as consumerism and the wide-scale development of health insurance.

Study Question: To examine the importance the Israeli public attributes to health in relation to other fields in life, at the personal as well as at the national policy level.

Methods: A phone survey was conducted with a representative sample of the Israeli adult population (N=1,225). A measure with five dilemmas was used to estimate the relative importance of health in personal life. At the social policy level a question asking to which area interviewees would transfer an extra budget was used.

Results: About one third of the population reported high priority to health matters. At the national level, the public graded health in second place after education but before security, infrastructure, support to the needy and tax reduction. Only in half of the interviewees the prioritizing of health at the personal level matched their response at the national level.

Conclusions: Contrary to prior expectations, the public's preferences for health don't change significantly along different sectors of the Israeli society. Only gender, population group and education had some influence.

Health Policy Implications: There is an increasing tendency to listen to the public for policy decision making, overall and particularly in the health arena. Decision makers often assume they know the public's standpoints and see themselves as capable to represent them. This study was designed in order to provide empirical evidence regarding the public's preferences. Information of this kind should be part of the decision making process. We maintain that even if a decision which contradicts the public opinion is made, the public's information can be useful in planning the implementation strategy.

Family Physicians' training and patients' self referrals patterns to ear-nose-throat, dermatology and orthopedics specialist

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Background: Little is known about the effect of family physicians' internship program and patients self referrals patterns to specialist (ENT(ear-nose-throat), dermatology, orthopedics) in community settings.

Study Question: To examine patients' self referrals pattern to specialists among family physicians that fulfilled internship programs in departments of ENT, dermatology and orthopedics.

Method: Descriptive study, in community settings of HMO (The Clalit Health Care Services).

Population: Family Physicians, in community urban settings of The Clalit Health Care Services, in Tel Aviv and suborns, that fulfilled internship programs in departments of ENT, dermatology and orthopedics.

Dependent variables: Standardized number of patients self referral visits per family physician to ENT, dermatology and orthopedic.

Independent variables: Demographic variables of physicians (age sex, country of medical studies, and year of immigration to Israel, number of years of medical practice, clinical training, and average number of patients per year). Demographic variables of patients (age sex, affiliation with medical clinic). Socio-economic ranking of the clinic in which the physician works.

Results: Training during residency in department of dermatology and orthopedics did not result in less self referral patients to these specialists.

Self referral of patients to ENT specialists was significantly less among physicians that were trained in this department.

Conclusions: The added value of training during residency in the dermatology and orthopedics during residency on preventing patients' self referrals to these specialists should be reassessed.

Health Policy Implications: Training of family physicians is one of the most important challenges and concern of health policy makers. Training programs in the department of dermatology and orthopedics should be aligned to patients' self referrals needs to these specialists.

Deficits and Excesses in the Israeli Diet: Findings of the Israeli National Health and Nutrition Survey, ages 65 and over (MABAT zahav)

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Background: National timely data on food intake and surveillance are vital to identify trends and potential problems and to plan interventions to prevent and control chronic diseases, especially in the elderly. Recently, the Israel Ministry of Health (MoH) completed a National Health and Nutrition Survey in the Israeli elderly (MABAT Zahav).

Study Question: What is the nutritional intake of the Israeli elderly, compared to age and gender-specific dietary reference Intakes?

Methods: 1,853 Israelis aged 65 and over, insured in one of the two largest HMOs in Israel (covering over 85% of this population), were interviewed in their homes in 2005-6, including 24-hour dietary recalls and anthropometric measurements. Reported dietary intakes were analyzed using the MoH Tzameret software on the BINAT food and nutrient database.

Results: Macronutrient intake as a percentage of total energy intake was generally within the recommendations, except for higher than recommended intake of saturated fatty acids. Potassium, calcium and fiber intakes were lower (44-81%) while sodium intake was higher (192-258%) than the recommendations across gender, population and age groups. Vitamin E, folate and thiamin intakes were lower (35-75%) than the recommendations across gender, population and age groups.

Conclusions: Israeli elderly present with dietary imbalances that are known to be associated with chronic morbidity and may potentially impact population health.

Health policy implications: These findings may assist in designing an evidence-based health promoting policy and in tailoring strategies such as food fortification, price control over certain food groups and education programs.

Primary physicians' burnout and referrals to diagnostic tests and to other providers of health services

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Background: Burnout is a syndrome of emotional exhaustion, depersonalization and low personal accomplishment that leads to decreased effectiveness at work. Chronic stresses in medical practice increase physicians' vulnerability to burnout. The effects of burnout on objective measures of behavior in the medical encounter have rarely been studied empirically.

Study questions: What is the prevalence of burnout among primary care physicians and how is it associated with personal and job characteristics? 2. Is physician burnout associated with the rates of referring patients to diagnostic tests and to other providers of health services?

Methods: 136 primary care physicians in community clinics in one district of one Israeli HMO (97% response rate) responded to a structured questionnaire in an interview on perceived personal and job characteristics. Burnout was assessed by the Maslach Burnout Inventory. The rates of the various referrals were obtained from the HMO's data bases.

Results: 56% of the physicians had high burnout levels. Burnout was not associated with any of the socio-demographic characteristics. Burnout was predicted by subjective workload and job satisfaction. Only the rate of referrals to expensive imaging tests (e.g. MRI) was predicted independently by burnout, but the association was modest.

Conclusions: Burnout was associated with perceived personal and job characteristics but had almost no effects on the objective parameters examined and therefore it had minor economic implications to the HMO.

Health Policy Implications: 1. Follow up burnout levels among primary care physicians and devise organizational-level interventions for reducing its prevalence, to preserve work-life quality and prevent physicians from searching for alternative professional and occupational opportunities. 2. Replicate the study in a larger and more homogenous sample.

The National Community Surveillance Program: A Retrospective Analysis

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Background: The Ministry of Health (MOH) oversees the implementation of fundamental healthcare laws: The National Health (1994) and the Patient's Rights (1996). These laws define the State's responsibility to guarantee high quality medical care and the content of the National Health Basket. Here we describe the tools developed and their implementation in the National Community Surveillance Program (NCSP).

Study Question: Is there a change in the extent of implementation of the NCSP in 2009 as compared to 2006/7?

Methods: Site visits of HMO districts in 2006/7 and in 2009 were compared. Participating MOH personnel included experts in Primary Care and Specialized Medicine, Dentistry, Nursing, Pharmacy, Physiotherapy, Social Medicine, Nutrition, financial and Laboratory Medicine. Corresponding personnel were assigned by the HMOs. The pre-defined parameters and the level of implementation are specified below.

Results: Shown in the following table:

Parameter present	Estimated level of implementation (0 = not checked; 5 = full)		
	2006/7 (n=26)	1-6/2009 (n=12)	Change
Operations according to guidelines	1-3	4-5	+2-4
Basic clinical services	1-3	3-4	+2-3
Professional services	3	4-5	+1-2
Chronic disease management	2-3	4	+1-2
Family violence control	2-3	3	+0-1
Medical documentation	1-3	4	+1-3
Risk management	2	3-4	+1-2
Internal surveillance processes	2	4	+2
Professional staff development	2	4	+2
Processes to guarantee pt.s' rights	0	3	+3
Charging according to guidelines	0	4	+4
Adequate facilities	2-3	3-4	+1-2

Conclusions: Implementation of the NCSP has been extended to additional parameters and better implemented in 1-6/2009 as compared to 2006/7.

Health Policy implications: It is expected that the NCSP will be further developed in the near future in full collaboration with the HMOs, towards improvement in outpatient healthcare.

The Association of Education, Cultural Background and Lifestyle with Medical Symptoms among Women at Midlife: The Women's Health at Midlife Study

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Background: Studies on the menopausal transition indicate that both physiological and socio-cultural factors are related to the differences observed in symptom reporting across cultural groups.

Study Question: This study aimed to examine differences in symptom clusters among women in midlife from different cultural origins and identify sociodemographic, lifestyle, and health characteristics that could account for the differences between the cultural groups in symptom reporting.

Methods: Israeli women aged 45–64 were randomly selected according to age and population strata of the three groups: Long-term Jewish residents (LTR), immigrants from the former Soviet Union, and Arab women. Interviews were conducted with 540 LTR, 151 immigrants, and 123 Arab women. The survey instrument included the occurrence and rating of how bothersome to everyday function were 16 symptoms.

Results: Multivariate logistic regression showed that Immigrants and Arab women (compared to LTR) had significantly lower risk of reporting mental/emotional and vasomotor symptoms. Low education (<9 years) and depression were significantly associated with most of the studied symptoms. Hormonal status was significantly related only to hot flashes; conducting a non-healthy lifestyle was associated with various somatic symptoms while chronic morbidity was associated with mental/emotional and somatic symptoms. Patterns of seeking health care for the above reported symptoms will be presented.

Conclusions: These findings support the proposition that cultural factors play a role in the observed differences between the study groups and emphasize the need to strengthen clinicians' sensitivity to women from diverse cultural backgrounds.

Health Policy Implications: Our findings have implications to primary care physicians and public health professionals responsible for women's quality of life at midlife, promoting healthy lifestyle and treatment of depressive symptoms as part of individual care.

Competition among Israel Health Funds, as reflected in advertising placed in the daily press and the internet during the years 1997–2007

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Background: In January 1995, a Compulsory Health Insurance Law was affirmed in Israel. The law has generated an intensive competition among the four health funds in order to attract a maximum number of members to join their respective funds. Such competition was prominently expressed in advertising that appeared in the mass communication media.

Objective of the Research: Examines the changes that took place in competition among the health funds, the impact on the daily press advertising and the Internet during the years 1997–2007.

Methodology: Advertisements appearing in the daily papers and the leading Internet sites (Ynet, Nrg) between 1997–2007 were collected. The advertisements were categorized by content, target population, advertising that served the public, advertising that served the fund, and financial aspects of the publicity.

Findings: Competition among the health funds in terms of their advertisements changed significantly between 1997 and 2007. From general advertising, the content became more specific, and most was designed to encourage usage of special services in auxiliary health domains that required additional/out-of-pocket payments such as: nutrition, food supplements, pregnancy tests and obstetric services, pediatric dentistry, child development, sport and complimentary medicine.

Health Policy Implications: There is a good reason to stipulate what topics the health funds must publicize in order to provide the insured with information that is necessary for their wellbeing; to reduce the use of advertising for unwarranted profit-generation via clear directives; to prevent discrimination against certain insurers in advertising content and to limit advertising that encourage consumption of 'services' such as food supplements and so forth, whose benefit has not been proved scientifically.

Israeli adolescents with mental disorders: What is the role of the primary care practitioner?

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Background: Few adolescents with psychiatric disorders consult a professional or informal mental health service provider. However, many of the adolescents with a psychiatric disorder visit a primary care practitioner (PCP) with seemingly unrelated symptoms.

Study Question: This paper deals with the opportunity of PCPs to identify, treat and/or refer these adolescents with psychiatric disorders who are not cared for by any other service provider.

Methods: A representative community sample comprising 954 adolescents aged 14 – 17 and their mothers were interviewed at home in 2004 – 2005. Needs were determined by the presence of psychiatric disorders diagnosed with the Development and Well-Being Assessment (DAWBA) inventory and consequent clinicians' verification. Use of services was assessed by means of the Services Utilization Questionnaire.

Results: 11% of adolescents in Israel have a psychiatric disorder, but only 40% of their mothers consulted a professional or informal mental health service provider in the 12 months preceding the interview. However, during this period, 81.2% of adolescents with a mental disorder visited a PCP and, among these, 56% had not received help from any professional service provider in the past 12 months.

Conclusion: The PCP has the opportunity and an important role in the identification, treatment and referral of adolescents with psychiatric disorders.

Health Policy Implications: Coordination is needed to integrate the primary care and the educational systems with the specialized mental health services so that more severe cases are referred to the specialized mental health services while treatment of milder cases could be addressed by primary care.

Medications and supplements use in the elderly – How many and why? Results from the Mabat Zahav Survey

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Background: The Mabat Zahav Survey- the national health and nutrition survey of community- dwelling elderly, age 65 and over, carried out by the Ministry of Health, included dietary intake, lifestyle factors, health data and sociodemographic variables. Use of medications and supplements was checked, including dosages and knowledge of indications (reasons).

Study Question: Which health characteristics and sociodemographic profiles are associated with polypharmacy, and lack of knowledge of indications?

Methods: 1853 randomly chosen elderly were interviewed in their homes. Medications and supplements were recorded, and reasons (as stated by the interviewee). The ATC/DDD WHO-approved system was used for coding. Physical abilities, cognitive status and emotional state were assessed.

Results: The average number of medications and/or supplements was 6, increasing with age and women used more. 13% took 9 or more. Usage was higher among those who had recently visited their doctors/ geriatrician. The average number (8.8) was higher in those with physical limitations, with emotional stress (7.1) and with several chronic medical conditions (8.9). Indications were unknown for 8.2% and 20.2% of medications taken by Jews and Arabs respectively. This was the same for anti-diabetic medications, anti-depressants, and anti-hypertensives.

Conclusion: Polypharmacy, increasing with age, exists among the elderly in Israel. Lack of knowledge exists regarding indications. These results can assist health professionals and policy makers make informed decisions and develop tailored intervention programs. Routine monitoring should be carried out by doctors and pharmacists, to ensure compliance, avoid errors, and achieve better clinical results. Suitable interventions should include utilization of the geriatric assessment clinics. Further research is needed to assess effectiveness of increased involvement of pharmacists.

Impact of loss of public health insurance on employment and productivity

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Background: The lack of health insurance negatively impacts health. Less is known about the consequences of loss of public insurance on health and on economic productivity. The state of Tennessee disenrolled 170,000 persons from its Medicaid program (known as TennCare) in 2005, providing a natural experiment to examine the effects of public insurance loss.

Study Question: Does insurance status after the loss of public insurance influence employment, worker productivity, and health status?

Methods: Data from computer-assisted telephone surveys of a state-wide, representative sample of TennCare disenrollees conducted 8 (Survey I, n=513) and 18 (Survey II, n=330) months after disenrollment were analyzed. Surveys assessed current insurance coverage, health status, employment, and health-related workplace productivity, including absolute and relative absenteeism (absence from work) and presenteeism (productivity while at work) using the Health Productivity Questionnaire.

Results: In Survey I, 68.7% of disenrollees remained uninsured. Of those, 73.0% remained uninsured in Survey II; of those insured at Survey I, only 47.6% remained insured at Survey II. Those who regained insurance at Survey II had higher rates of employment than those remaining uninsured (56.3% vs. 43.7%, p<.001). Among those who were employed, measures of absenteeism and presenteeism were lower (p<.05) for the uninsured than for the insured in Survey II. Health status (graded as excellent to poor) was also lower in the uninsured than the insured in Survey II and lower health status significantly correlated with greater relative presenteeism.

Conclusions: Lack of health insurance after loss of public health insurance is persistent, and is associated with both lower labor market participation and lower productivity.

Health Policy Implications: Personal, business and macroeconomic losses resulting from reductions in public health insurance displace savings from the reduction in insurance costs, and must be considered as part of the net impact of insurance cuts.

Health Impact Assessment (HIA): Implications from Berkeley to Israel

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Background: HIA is a combination of procedures, methods and tools that assesses the health impacts of policies, programs and projects. HIA emphasizes the responsibility of decision makers regarding health impacts in all fields, including planning, transportation, welfare, labor and education.

Study Question: How HIA as a policy supporting tool can be implemented in Israel according to existing models abroad.

Methods: Analysis of experience gained working with the UC Berkeley Health Impact Group (UCBHIG), for its implications for HIA practice in Israel.

Results: Two case studies will be presented: (1) an HIA of redevelopment of public housing in San Francisco which was retrospective, and based on primary, qualitative data, and (2) an HIA of reducing the speed limit on California highways, which was prospective, and based on secondary, quantitative data.

Conclusions: The Israeli HIA Forum (established 2007) promotes HIA practice in Israel. A rapid desktop HIA took place in 2008, and the first prospective HIA which will include primary data is being planned. The experience gained in Berkeley will be applied to the new practice of HIA in Israel. It will contribute to choosing suitable cases, applying appropriate tools and methods, analyzing the data, working with various stakeholders, engaging diverse populations and communicating the findings to policy makers.

Health Policy Implications: The engagement with the Californian experience is relevant to Israel regarding incorporation of health considerations into “non health” policies generally, and environmental impact assessment particularly. The fact that HIA involves diverse procedures, and its goal to effect policies in many fields, make the “hands on” experience particularly valuable for promoting and implementing the practice in Israel.

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Health Insurance as an Instrument of Health Care Reform in Poland

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After extensive discussion, measures are being planned in Poland (as in a number of other countries) designed to stabilise the health care system. A significant role in boosting the efficiency of this system is expected to be played by private health insurance. The principal aim of this paper is to assess new concepts of private health insurance currently being considered by the Polish Chamber of Insurance and the Ministry of Health.

This presentation will examine the following important questions: What are the principal conditions for using private health insurance? What are the main obstacles to using it? What kind of positive or negative phenomena could affect the reforms?

The first part of the presentation is concerned with the areas in which changes will occur after the introduction of private health insurance; the second part briefly characterises the projects by comparing the basic assumptions of health care system reform; and the third part analyses the consequences of implementing health care reforms.

The introduction of these models may help stabilize the system by increasing finances. It may also raise health care efficiency levels by improving the quality of services, making better use of resources, and improving access to services, for example by shortening waiting lists. The proposals incorporate a principle of social solidarity which assumes a division of insurance premium by age and gender alone. However, these may also cause negative phenomena like the anti-selection of risk and an increase in public spending (tax relief).

The introduction of health care reform, which must of course be in conformity with the Constitution, is politically highly sensitive as it will certainly affect the competitive interests of individuals and parties.

Correlates of 10- year survival among patients with End Stage Renal Disease (ESRD) undergoing hemodialysis treatment

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Background: End Stage Renal Disease (ESRD) without dialysis or transplantation will lead to death. According to the database of the National Registry of End Stage Renal Disease located at the Israel Center for Disease Control, the incidence of ESRD per 100,000 in Israel increased from 11.3 in 1990 to 19.3 in 2007. The proportion of patients in the registry with diabetes (a major risk factor for ESRD) increased markedly during the same time period.

Aims: To examine the factors predicting 10-year survival in patients with ESRD undergoing hemodialysis.

Methods: We examined the 10-year mortality of patients undergoing hemodialysis, using Cox proportional hazards regression analysis. Patients who entered the database between 1.1.1990 and 31.12.2008 were included in the analysis. Factors included in the analysis were sex, age, country of origin, population group, presence of diabetes and other causes of renal failure.

Results: 10-year survival rates were lower in patients who began treatment at an older age ($HR=1.05$; 95%CI: 1.04–1.06) and among patients who entered the database during the three earlier periods included compared with the group entering in 2005–2008. Survival rates were slightly lower among Jewish patients than Arab patients ($HR=1.15$; 95% CI: 1.1–1.2). No differences were found in the survival of men and women. The most important prognostic factor was diabetes, which diminished the chances of survival by a factor of 5.4, compared to patients without diabetes.

Conclusions: Prevention and control of diabetes with its devastating consequences is vital both for the prevention of ESRD and for the survival of patients with the disease.

Handover incident reporting in one UK general hospital

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Background: Clinical handover is the transfer of patient care between health professionals. Although previous studies have investigated the nature of problematic handovers focusing on the association between handovers and adverse events, the prevalence and characteristics of handover incidents remain under-investigated.

Study question: What is the occurrence of handover incidents? What are their characteristics in terms of type, clinical setting and reported severity?

Methods: We examined the electronic records of clinical handover incidents reported over a three year period (2006–2008). Incidents were categorized and analysed by a multidisciplinary team.

Results: Handover incidents account for 2% of total incidents reported. The number of incident increased over the study period (χ^2 square $p < 0.01$). The transfer of patient's care within the same speciality was the most problematic area across all types of clinical settings. In particular, the subcategory of shift to shift accounted for 75% of incidents. The speciality that reported the most incidents was Obstetrics followed by Medicine for Elderly and General Medicine. The most frequent scenarios included incomplete transfer information or no handover at all which resulted in overlooking essential elements of patient's condition (50% of cases) such as: presence of a viral disease or of diabetes. No handover lead to patients admitted to wards without informing the staff (20%) or failure to review critical patients (15%). Reported severity was generally low (99%).

Conclusions and Health Policy Implications: Although the number of incidents increased significantly, the reporting rate was still low if compared with prospective studies highlighting underreporting. Many incidents resulted in modest harm to patients; however their potential risk was not taken into account. This study shows the need for a new handover reporting system, able to assess potential severity of incidents and to encourage reporting.

Continuity of care - a phenomenological study

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Background: Chronic patients without sufficient family resources return to hospital admissions quicker and sicker. Hospital staff were frustrated in this revolving door syndrome and felt responsible for the outcome of the discharge. Management sought away to address this issue. Contact with a community agent began a process whereby these patients were assured continuous care and were followed through from the hospital to the community.

Study Question: Does a need exist for follow up between a volunteer and vulnerable patients (without resources) after hospital discharge.

Method: Definition of the specific population group. Building of the work process between hospital health professionals (nurses and social workers) and community staff members (Yad Sarah). Training of all sectors of medical staff members. Training of community volunteers in 12 workshops over a four month period. Planned discharge and follow up procedures. Interviews with the representative of the volunteers of what issues were raised in this contact.

Results: 100 patients received this service. Content analysis was performed. The main theme that appeared was loneliness. Patients expressed great satisfaction of this service.

Conclusions: This intervention was significant for the patient, staff members and volunteers. Patients reported that they received support (emotional and tangible). This process improved the transitional care from hospital to community and emerged the unique contributions of social work and nursing professions.

Health Policy Implications: Taking into account the rise in both chronic illness and the number of aged patients in the community, hospitals should be encouraged to include volunteers in health delivery as a cost benefit strategy.

Non-prescription drugs reform in Israel – a survey of health-policy decision makers

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Background: In 2005, the Israeli non-prescription drugs market has undergone a major reform, enabling consumers to purchase some drugs without consulting a physician or a pharmacist in non-pharmacy locations.

Study Question: How senior health-policy decision-makers and other stakeholders perceive the reform and its expected impact on health-consumers and public health?

Methods: A survey of 37 health-policy decision-makers and stakeholders was conducted by face-to-face interview using a structured questionnaire analyzed qualitatively.

Results: Most Ministry of Health (MOH) officials thought that the reform would have slight benefit for the population, especially in terms of increased access and availability. A recurrent concern was that this reform would increase the frequency of poisonings due to inappropriate use of drugs.

Sick-funds officials were either neutral or slightly against the reform while MOH officials were mostly in favour of it.

Conclusions: The decision-makers interviewed largely thought that the OTC reform would slightly benefit the Israeli population by increased availability and access of those medications, without increasing healthcare expenditures. Though many decision-makers expressed a concern that this reform might slightly compromise public health, especially due to increased risk of poisonings, there was a slight support or indifference towards the reform.

Health policy implications: There is a constant conflict between the regulator's duty to assure public health and the people's desire to have more responsibility over their health in an era of highly informed and educated patients. The results of this work show the determination of health-policy decision makers to leap-forward in giving more personal responsibility to health consumers, while acknowledging the potential risk embedded in such a decision.

Clalit's Organizational Computerized Performance Management (CPM) System

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Background: Clalit Health Services (CHS) is the largest HMO in Israel, second worldwide in size, providing health services to approx. 3.8 million clients. CHS is a strategy focused organization, using the Balanced Scorecard method for strategy management and implementation, supported by an advanced and comprehensive organizational BI system that operates in synergy with organizational management processes' development.

Objectives: To create a direct link between the organizational strategy and the managerial ongoing activities; To enable the uncovering of problems in a short time, and to facilitate the managerial focus on the main issues; To create standardization measurement unity, and transparency between organizational levels; To enable flexibility.

Methods: The System's application operates on PerformancePoint - an innovative tool by Microsoft, using the Scorecard element for performance management. The system is incorporated within the organizational BI, exploiting its components: data warehouse, OLAP tools, cutting and loading tools, analyzing and displaying tools. The CPM provides the solution for the organizational complexity and diversity, maintaining a unified evaluation system.

Results: The components included: An integrative organizational measurement tree, top to bottom performance measurements, reflecting the organizational central and essential processes; Scorecard - performance measurements, objectives, accomplishments, trends and weights; Dynamic graphics specifying measures' periodic behavior and compared to comparable units; Strategic maps containing measurements, weight and scores for every unit at each level; Referrals for operative reports and a direct link to the organizational management information system for further analysis.

Conclusions and contribution to health quality: The system is currently in its implementation phase, already contributing to focus the organizational capabilities, resources and procedures towards strategy realization, organizational excellence, objectives' achievement promotion and supporting CHS's values, vision and main goal – all in favor of granting qualitative health services to Clalit's numerous clients.

"Tobacco-control Policy and Decision-Making: Actors and Influences"

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Background: Tobacco use—although preventable—contributes heavily to Israeli morbidity and mortality. Tobacco-control (including prevention and cessation) policies should be a national priority. Understanding these policies requires attention to a diverse set of actors and forces involved in their formulation, enactment, and enforcement.

Study Questions: 1) What are the full range of actors and influences on tobacco-control policy?, 2) In what contexts do they operate?, 3) Do actors' own tobacco-related behaviors and attitudes relate to their tobacco-control policy behaviors?, 4) How much does scientific evidence influence various sectors of tobacco-control?

Methods: This study involves qualitative, semi-structured interviews with those involved in formulating, enacting, and enforcing Israeli tobacco-control policies. We are currently entering the second half of interviews. The sample, totaling around 25 interviewees, is directed to key players in various sectors. Some names emerged, snowball-fashion, from earlier interviews. Interviews, using a new, 18-item interview guide, are being audio-taped and transcribed. Transcripts are being analyzed for emerging themes and patterns.

Results: Key actors include Knesset members, Ministry officials, local authorities, various non-governmental organizations (NGOs), activists, and lobbyists. There is evidence of various inter-relationships amongst the Knesset, NGOs, and the public. The Finance Ministry emerges as especially significant. Scientific evidence appears to have only limited direct impact, but provides justification, policy ideas, and in-depth knowledge.

Conclusions: Tobacco control involves diverse actors and forces, operating independently and synergistically to shape policy.

Health Policy Implications: This study is informing development of a closed-question instrument for a planned national survey of public and official attitudes towards tobacco-control policy in Israel. The role of science in tobacco-control policy needs closer exploration.

{This study is being conducted with funding from the Israel National Institute for Health Policy and Health Services Research}

Premature Births in Israel 2000–2007

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Background: Preterm birth is the predominant cause of neonatal morbidity and mortality. Infants born prematurely constitute the largest group of children at risk for developmental and physical disability. While children born before 32 weeks are at the highest risk, even those born between 33–36 weeks are at increased risk for both morbidity and mortality. Increasing maternal age, increased numbers of pregnancies resulting from fertility treatments and increased numbers of interventions in the end of pregnancy have resulted in a rise in the prevalence of premature birth reported in developed countries.

Study Question: What are the populations at risk for preterm births in Israel?

Methods: The research is based on birth records from Ministry of Interior and Ministry of Health. We examined the risk for birth before 37 weeks, 34, and 28 weeks. We performed univariate and multivariate analyses with maternal age, educational level, region of residence, nationality, country of birth, marital status, number of children, gender and major congenital malformations as explanatory variables. Because of the strong association between multiple gestation and premature birth, the model examined the risk indicators for singleton births only.

Results: The overall rate of preterm birth, less than 37 weeks, was 7.9% in 2000 and 8.2% in 2007. Preterm birth was significantly associated with young age, low educational attainment, unmarried mother, first born, male and major congenital malformations.

Conclusions and Health Policy Implications: Monitoring of rates of premature birth is important for identifying at risk populations for premature birth. Identifying risk populations is the first step in identifying risk factors that amenable to intervention. Even small reductions in the rates of late premature birth can have significant public health impact as these infants constitute the largest group of infants born prematurely.

Choosing a Medical Specialty by Israeli Medical Students: Preliminary Results

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Background: Medical students' career choices significantly impact healthcare system performance. Therefore, it is important to understand how/why such choices are made.

Study Question: What selection criteria are important to 6th year Israeli medical students?

Methods: Questionnaires distributed to two 6th-year classes (Hebrew University – Hadassah Medical School – 2008 & 2009). The categories of important/very important on a 5-point Likert scale were combined and percentage of students making these ratings reported.

Results: 134 (75%) questionnaires were returned, 49% from women. The leading criteria were "interesting and challenging specialty" (90%), "direct patient care" (78%), "time with family" (76%), "controllable life-style" (70%) and "time for raising children" (66%). High salaries were less important/very important to women (31%) than men (68%), as was "procedure-oriented specialty" (men – 66%; women – 31%). This was reflected in great/very great inclination of men towards orthopedics (men – 41%, women – 2%) and surgical subspecialties (men – 41%, women 9%). Females were inclined towards internal medicine (women – 32%, men – 21%), medical subspecialties (women – 44%, men – 28%), pediatrics (women – 44%, men – 26%) and family medicine (women – 32%, men – 14%). Obstetrics/gynecology showed little gender difference (women – 31%, men – 29%). Least favorite specialties were pathology (3%), anesthesiology (4%) and psychiatry (10%).

Conclusions: In addition to an interesting specialty and direct patient care, controllable family-oriented lifestyle is an important criterion when choosing a specialty. There were major gender-related differences, with more women than men interested in primary care.

Health Policy Implications: Specialties not considered supporting controllable family-oriented lifestyle, e.g. anesthesiology, general surgery, will have trouble attracting graduating medical students, especially since 50% of students are women. The healthcare system needs to address this issue.

Implementation of Clinical Pharmacy services in Israel as a means to improve organizational performance

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Background: Clinical Pharmacy (CP) was introduced in the USA in the 60's. It is defined as an umbrella of pharmaceutical services aiming to improve the quality of therapeutic outcomes while maintaining rational and cost effective utilization of drugs. Although practiced worldwide and well recognized for its beneficial effect, CP is less established in Israel.

Study Question: How decision makers perceive CP and what elements influence its implementation in Israel?

Methods: A survey of 47 government decision-makers and stakeholders in hospitals and HMOs by face-to-face interview using a semi-structured questionnaire, analyzed by using qualitative, constant comparison method.

Results: CP is generally perceived as a positive service for the organization. However, it usually evolves as a local top-down initiative. There are three key players: The change manager – pharmacy director, the change agent – clinical pharmacist and the customer – physician. The major catalyst for change was, "self will". Most interviewees did not use any systematic change model, nor measured outcomes to evaluate the process. The main resistance for CP was its acceptance by physicians and non-clinical pharmacists. Barriers were overcome by negotiation and collaboration with stakeholders and clients.

Conclusions: Our results demonstrate the importance of setting outcome measures, defining professional boundaries, and most importantly selecting a clinical pharmacist with an appropriate persona as the change agent. The deficiency in these parameters may hinder the implementation of CP in Israel.

Health Policy Implications: To minimize implementation barriers, it is important to use a structured, systematic established model when attempting change. One should combine vision and expectations with practical issues taking into consideration human factors that may influence the entire process.

Is the Process of Updating the National List of Health Services in Israel Legitimate and Fair?

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Background: The Israeli National Health Insurance Law stipulates a National List of Health Services (NLHS) to which all residents are entitled from their HMOs. This list has been updated annually for a decade using a structured review and decision-making process. Although this process has been described and scrutinized in detail in previous papers, none of these have fully addressed its legitimacy and fairness.

Study Question: We examined the legitimacy and fairness of the process of updating the NLHS in Israel.

Methods: We assessed the priority-setting process for compliance with the four conditions of accountability for reasonableness outlined by Daniels and Sabin (relevance, publicity, appeals, and enforcement). These conditions emphasize transparency and stakeholder engagement in democratic deliberation.

Results: Our analysis suggests that the Israeli process for updating the NLHS does not fulfill the appeals and enforcement conditions, and only partially follows the publicity and relevance conditions, outlined in the accountability for reasonableness framework. The main obstacles for achieving these goals may relate to the large number of technologies assessed each year within a short time frame, the lack of personnel engaged in health technology assessment and the desire for early adoption of new technologies.

Conclusions and Health Policy Implications: The process of updating the NLHS in Israel is unique and not without its merits. Changes in the priority-setting process should be made in order to increase its acceptability among the different stakeholders.

Persons with Severe Mental Problems: An Analysis of an Integrated National Administrative Database

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Background: Integrating the information currently divided within and across ministries about the population with severe mental problems and the services they receive, is essential for the planning and development of systems of care from a national perspective.

Study question: The study illustrates how an integrated database can shed light on the overall size of this population, their characteristics and trends over time. Moreover, a special interest is in understanding the extent of receipt of rehabilitation services among the eligible population and others who might benefit from rehabilitation services and changes over time.

Methods: We integrate national administrative databases at the individual level to create an integrated multi-year database. It includes data from National Insurance Institute disability benefits and rehabilitation system and Ministry of Health psychiatric hospitalization, rehabilitation system and addiction units and a more limited one-year file from the Ministry of Social welfare, along with an older governmental mental health clinics file. Special measures were taken to assure full adherence to regulations concerning data confidentiality.

Results and Conclusions: The overall number of persons with severe mental problems is much larger than apparent from the separate data bases.

There are substantial changes in the number and characteristics of people receiving mental health rehabilitation services over time. Still the vast majority of those eligible by law for mental health rehabilitation services (i.e., receive disability benefit and have at least 40% psychiatric disability) have not received them at any time.

Health policy implications: The partial overlap among the systems, particularly the partial receipt of rehabilitation services, raises questions about the processes of outreach, referral, the appropriateness of services available and the definition of the need for rehabilitation.

The study has been carried out with the support of the Laszlo N. Tauber Family Foundation Inc.

Diabetes mellitus in primary care: situation in Lithuania

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Background: The family doctor is responsible for management and treatment of patients with diabetes mellitus. The treatment of this chronic disease is a very important problem in primary care, because diabetes mellitus is one of the most common dysfunctions. Epidemiological studies show, that morbidity of type 2 diabetes mellitus is 4,28 percent among 35–65 years old population in Lithuania.

Purpose: To evaluate the situation of glycemic control among patients with diabetes mellitus.

Methods: Cross – sectional, epidemiological study was organized in primary care institutions. Family doctors filled in given questionnaires data of patients with diabetes type 1 and 2 (treatment, glycosylated hemoglobin (HbA1c), diabetes duration complications: retinopathy, cardiovascular disease, nephropathy, neuropathy).

Results: Cross-sectional data were collected from 1 December 2007 until 1 May 2008, from randomly selected patients previously known to the family doctors. For this poster presentation we analyzed only data of the pilot study. We received the results of 572 patients with diabetes mellitus type 1 and 2 from 36 family doctors. Women 358 (62,6 percent) made up the biggest group of patients, men – 214 (37,4 percent). Patients average age was $62,83 \pm 14,19$.

The disease duration is very important for diabetes progression and management. The diabetic patients disease duration average was $7,37 \pm 6,35$.

The target for good glycemic control is HbA1c < 7,0 percent. The average of HbA1c was $7,37 \pm 1,70$. 51 percent of patients had HbA1c < 7,0 percent, 36 percent – HbA1c 7 – 9 and 13 percent – HbA1c > 9.

We analyzed also the relationship between treatment of diabetes and HbA1c size. 31,3 percent patients, who had HbA1c > 9 had treated with peroral antidiabetic drugs. The study showed that 83,2 percent patients had hypertension and 39,7 – retinopathy.

Conclusions:

- ◆ The half of the investigated patients with diabetes mellitus attain the HbA1c target glycemic control (HbA1c < 7,0 percent).
- ◆ 31,3 percent patients, who had HbA1c > 9 had treated with peroral antidiabetic drugs.
- ◆ The study showed, that most of the patients had hypertension and less than half – retinopathy.
- ◆ Investigation is ongoing and we expect about 5500 patients' data will be analyzed.

Attitudes of emergency department staff toward family presence during resuscitation

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Background: The prevailing attitude in hospitals toward family presence during resuscitation (FPDR) has recently changed in many countries, and there is a tendency to allow the bedside presence of family during resuscitation. While FPDR has been researched extensively in the international and especially American medical literature, in Israel this subject has rarely been researched. Indeed, FPDR policies do not exist at any Israeli medical institution. Because such policies have become common practice in many countries, it is important to investigate the attitudes of health care staff in Israeli emergency departments (EDs) to better understand the potential implication of adopting such policies.

Objective: To examine the attitudes of the doctors and nurses in the ED of Soroka Medical Center toward FPDR

Methods: Both qualitative (partly structured open interviews with 10 emergency department staff members from various medical professions) and quantitative (an anonymous questionnaire that collected socio-demographic, professional, and personal data) methods were used.

Results: The qualitative and quantitative results showed that most staff members opposed FPDR. The main reasons for objecting to FPDR were concern of family criticism, the added pressure that would be put on the staff members, fear of law suits, fear of hurting the feelings of the families, and the danger of losing ones "objectivity" while treating patients. Physicians objected more strongly to FPDR than did nurses.

Conclusions: More research is needed on FPDR in Israel, including an examination of its medical, ethical, legal and logistical aspects. In addition to the views of the medical staff, the attitudes of patients and their families should also be examined.

Choosing a Medical Specialty by Israeli Medical Students: Methodological Insights

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Background: The selection of specialties by medical students has major ramifications for the health care system. Therefore, it is important to understand what influences such decisions.

Study Question: Can a modified marketing research approach (consumer vs product) help understand how 6th year Israeli medical students select specialties?

Methods: Questionnaires, distributed to the 2009 6th-year Hebrew University - Hadassah Medical School class, queried students (consumers) about factors influencing their specialty choices and their perceptions of different specialties (products). Categories of important/very important and much/very much on a 5-point Likert scale were combined and percentage of students making these ratings reported.

Results: 67 (76%) questionnaires were returned. The leading factor in specialty choice was "interesting/challenging specialty" (96%). Students' rated specialties as "interesting/challenging": pediatrics (33%), anesthesiology (33%), general surgery (59%), orthopedics (40%), obstetrics/gynecology (62%) and family medicine (16%). Other important factors were "controllable life-style" (64%) and "time with family" (75%). Specialties considered permitting "controllable lifestyles"/"allowing family time": pediatrics (62%/61%), anesthesiology (14%/18%), general surgery (0%/0%), orthopedics (6%/8%), obstetrics/gynecology (11%/5%) and family medicine (95%/97%). "High salary" was rated important/very important (43%). Specialties considered "high paying": obstetrics/gynecology (86%), orthopedics (83%), family medicine (38%), pediatrics (25%), general surgery (25%) and anesthesiology (6%). Specialties deemed having "reasonable relationship between lifestyle and salary": pediatrics (59%), anesthesiology (11%), general surgery (3%), orthopedics (49%), obstetrics/gynecology (50%) and family medicine (84%).

Conclusions: Modified marketing research methodology provided insight into both student's selection criteria and their perception of various specialties.

Health Policy Implications: To attract more medical students, undersubscribed specialties, e.g. anesthesiology, general surgery, may need to tailor themselves to meet the perceptions/expectations of students. This represents a major change in how the healthcare system operates.

How do Israeli family physicians rank diseases and medical specialties?

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Background: National estimates in Israel forecast a shortage of physicians in the near future. In order to prepare for this occurrence, there is a need to expand the understanding of physicians' perceptions regarding their occupation, the diseases they treat and their medical specialties.

Study question: Which level of prestige do family physicians assign to diseases and specialties and what are the characteristics associated to these rankings.

Methods: A structured questionnaire was distributed among family physicians working in Clalit Health Services. Participants were asked to rank 38 diseases and 23 specialties on a scale of 1 (lowest prestige) to 9 (highest prestige). Information regarding their socio-demographic and professional characteristics was also collected.

Results: Full questionnaires were received from 120 physicians (50% female, mean age = 48.2, mean seniority = 18.6). A clear hierarchy of diseases and specialties was found. Myocardial infarction and brain tumor received the highest grade, while fibromyalgia and inguinal hernia ranked at the lowest end of the list. Among the medical specialties, neurosurgery and cardiology were top graded; anesthesia and geriatrics were the lowest. Older physicians and those who studied abroad assigned a higher rank to diseases and specialties which younger physicians and those who studied in Israel graded the least prestigious.

Conclusions: Diseases and specialties associated with high and invasive technologies are perceived as more prestigious by Israeli physicians.

Health policy implications: In an effort to increase the number of physicians in Israel in the near future, there is need to expand our understanding of their perceptions regarding diseases and specialties. This information should be included in the decision-making process for stimulating medical curriculum and socialization.

The Policy of Care for Frail Elderly- Balancing between State and Family Responsibilities

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Background: The research focuses on the reciprocal relations between the individual, family and state during the age of need and distress. Nowadays, as life expectancy lengthens, there is also an increase in the rate of infirmed and needy elderly.

Study Question: The main objective of the study is to examine the different aspects of balancing the formal and the informal systems alongside with evaluating the proper division of responsibilities between them. This is in order to enable and ensure the quality of life of the elderly and their families. The concept of balance between the formal and informal systems is examined here comprehensively from theoretical, methodological, and empirical dimensions.

Methods: The methodology combines quantitative and qualitative research methods. The sample includes 121 frail elderly (65+), who live in the Haifa area, and their family members caregivers (121). The sample consists of three sub groups: those who are able enough to attend day care centers, those who are confined to their homes and those who are bed ridden. The data analysis revealed that most of the research hypotheses were confirmed.

Results: The results show that meeting the needs of the elderly is largely perceived as the responsibility of the state and that balancing the two support systems is directly linked to quality of life.

Conclusions: The study highlighted the consumers' expectations for greater involvement of the state in caring for the frail elderly as well as pinpointing the extent, scope and specific services needed to high-risk sub-categories.

Health Policy Implications: The research results provide an important informational basis in determining policy, with the goal of maintaining the quality of life of the elderly and their children care-givers.

Achieving International Accreditation: A New Change Management Model

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Background: In 2006, Meir Medical Center volunteered to be one of the first Israeli healthcare centers attempting accreditation from the Joint Commission International, to improve patient safety and quality of care. Human Resources (HR) was entrusted to implement the broad processes and to focus on ensuring the Staff Qualifications & Education (SQE) Standard was met. To accomplish this, HR spearheaded a broad-based management team for two years.

Study Question: This work describes how patient safety and quality of care were improved, using a newly developed change management model.

Methods: Management staff from medicine, nursing, other health professions, and HR measured the needs, developed and instituted processes and tools for ongoing training and education, and new employee orientation, as well as procedures to certify clinical staff documentation and licensure.

We developed a nine-step model for change management (the DNA model) based on Kotter's theory of change management (2006).

Results:

1. Developed tools and processes: Standardized new employee recruitment, orientation, and training. Policies for ongoing training and evaluation. Instituted intradepartmental trainers for Infection Control and Patient Education
2. Improved organizational measures – 2008: Safety incidents – 66% decrease, Patient Education – 100% in accreditation review, increased satisfaction in patient education and privacy. Fewer acquired infections – first place in Israel, Decreased medication errors.

Conclusions: By recruiting managers to act as change agents, HR processes to improve patient safety and quality of care were successfully implemented, using a newly-developed change management model.

Health Policy Implications: The model developed here can be used by other healthcare systems to achieve organization-wide improvements in Patient Care Quality and Safety.

This project won first prize in the 2009 Excellence in Human Resources competition of the Israel Management Center.

Clalit's Management of the Frail Elderly in Israel

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Background: 700,000 residents above the age of 65 live in Israel, comprising 10% of the total population. In the 60 years of statehood their numbers have increased 7.7 fold as compared to a 3.7 fold increase in the general population. Clalit Health Services is the largest Health Maintenance Organization in Israel. 74% of the 65+ age group is insured by Clalit, a much higher proportion than any other HMO. A high proportion of the elderly suffer from at least one chronic illness, with many suffering from more than one. Clalit Health Services established a unique program for the comprehensive care of the frail elderly at risk of functional deterioration. This program is based upon a Care Management Model that has proven its efficacy, according to professional literature. The program aims to improve the quality of care provided to the elderly and to increase levels of patient and family satisfaction.

Study Question: Does this program based on the Care Management Model enable the identification of those elderly susceptible to deterioration?

Methods: Each elderly person underwent geriatric evaluation and a specific plane of care was created for each person according to his/her individual needs.

Results: From our Frail Elderly Program, after four years of operation we can see a reduction in the number of hospitalizations and emergency room visits and an improvement in clinical measurements.

Conclusions and Health Policy Implications: Implementation of the program required the training of multi-disciplinary teams and the creation of intervention strategies following the success of this program, similar plans are being designed for other sectors of the population.

Motivators and barriers related to the elderly client's decision for re-hospitalization as seen from the elderly patient's viewpoint

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Background: The proposed research engaged in the phenomenon of re-hospitalization from the elderly patient's viewpoint. The study focused on an examination of the motivators and barriers to decisions by elderly patients released from hospital to re-hospitalize themselves. Many studies have cited the failure to obey medical recommendations as the major factor in re-hospitalization. The organizational-financial viewpoint dominates in research studies whose major source of information is medical records.

Research goal: The research goal is a deeper understanding and an illumination of the elderly in-patient's viewpoint and personal experience so as to provide important data for understanding and reducing this phenomenon.

Method: Approximately 200 in-patients age 65+, hospitalized in a large medical center in central Israel for congestive heart failure or chronic obstructive pulmonary disease, were interviewed during their stay in hospital, using a structured questionnaire. Three months later, data were collected from hospital records examining whether respondents were re-hospitalized since their release.

Major findings and conclusions: The resulting picture shows that even in acute health crises, elderly patients do not choose to be hospitalized arbitrarily, but decide in a rational decision-making process. The decisions are personal, depending on their relationship with their environment and circumstances, and are impacted by the individual's system of expectation and values. It was found that the decision, as seen by the elderly individual, depends mainly on the perception of the overall community support received. The integrative research design, focusing on the elderly individual's viewpoint, provides the foundation for developing instruments to evaluate populations of elderly at risk for re-hospitalization, and to formulate a policy to provide proper, more comprehensive care for them.

