

Health Economics, Management & Policy

Abstract Book

From the 10th Annual International
Conference on Health Economics,
Management & Policy,
27-30 June 2011,
Athens, Greece.

Edited by Gregory T. Papanikos



THE ATHENS INSTITUTE FOR EDUCATION AND RESEARCH
2011

First Published in Athens, Greece by the Athens Institute for Education and Research.

ISBN: 978-960-9549-13-4

All rights reserved. No part of this publication may be reproduced, stored, retrieved system, or transmitted, in any form or by any means, without the written permission of the publisher, nor be otherwise circulated in any form of binding or cover.

8 Valaoritou Street
Kolonaki, 10671 Athens, Greece
www.atiner.gr

©Copyright 2011 by the Athens Institute for Education and Research. The individual essays remain the intellectual properties of the contributors.

TABLE OF CONTENTS

(In Alphabetical Order by Author)

Preface

Conference Program

- 1. Entry Time Effects and Follow on Drug Competition**
Luiz Flavio Andrade, N. Celant, S. Pichetti, C. Sermet & C. Sorasith
- 2. Analytic Approaches to Inform Research Funding Decisions - Evidence from a Systematic Literature Review**
Lazaros Andronis, Lucinda Billingham, Stirling Bryan & Pelham Barton
- 3. Price Elasticity of Demand of the Pharmaceuticals in Latvia**
Diana Araja
- 4. Online Mental Health Resources - Support for People with Mental Illness**
Christina Athanasopoulou, Heli Hatonen, Maritta Valimaki & I. Apostolakis
- 5. Infrastructural Planning and Social Cost in Hospital Industry: An Empirical Application to Flemish Hospitals**
Jos Blank
- 6. Near Miss Reporting Systems in the German Hospital Sector - Current Status and Perspectives**
Sabine Bohnet-Joschko & Claus Zippel
- 7. Patient Involvement, Empowerment and Patients' Rights: Comparison of Health Policies, Systems and their Hospital Application in England and Greece**
Markella Boudioni
- 8. Economic Analysis of Health Technology: Issues for Developing Countries**
Liliana Chicaiza-Becerra
- 9. Are School Based Health Centers Sustainable in California? Analysis of a State Policy Issue**
Denishia Clark & Sondos Islam
- 10. The Dynamics of Depression in Adolescence and Early Adulthood**
Paul Contoyannis & Jinhu Li
- 11. Expanding Health Insurance to Increase Health Care Utilization: Will It Have Different Effects in Rural vs. Urban Areas?**
Kannika Damrongplisit, Erlyana Erlyana & Glenn Melnick
- 12. Equity Aspect of Health Care Delivery in India**
LakshmiNarayan Dash
- 13. Health Care Corporations: Reconciling Profit Making Prerogatives with Moral Obligations in a Economically Disparate World**
Simeon Davies
- 14. The Excess Healthcare Costs Associated with Depression and Anxiety in Elderly Living in the Community**
Pierre Alexandre Dionne, Helen-Maria Vasiliadis, M. Preville, P-A Dion, L. Gentil, D. Berbiche & E. Latimer
- 15. Patterns of Gender Differences in Health Information Behaviour and Body Mass Index (BMI): Findings from a Finnish Population-Based Study**
Stefan Ek, Kristina Eriksson-Backa, Raimo Niemela & Maija-Leena Huotari
- 16. How Should the Market for Managed Care Be Organized?**
Alexander Ellert & Oliver Urmann

17. **Incidence of Abuse by Family and Caregivers in the Aging Male Population in Kermanshah, Iran (2010)**
Katayon Esmaeili, Farah Safei & Reza Pourmirza-Kalhory
18. **Tamoxifen vs. Aromatase Inhibitors for Breast Cancer in Risk Groups: Cost Effectiveness for Colombia**
Mario Garcia-Molina & Liliana Chicaiza-Becerra
19. **HIV / AIDS Education for Young People in Greece: Needs and Challenges**
Margarita Gerouki & Nikolaos Manesis
20. **Economic Evaluation of Recommended Immunization Policies: The Application to Pertussis and Measles**
Dorota Zdanowska Girard
21. **The Effects of Rebate Contracts on the Health Care System**
Julia Graf
22. **The Effect of Mandatory Seat Belt Laws on Socioeconomic Inequalities in Seat Belt Use**
Sam Harper, Erin Strumpf, Scott Burris, George Davey Smith & John Lynch
23. **Interactive E-health Tools on U.S. Hospital Web Sites**
Edgar Huang & Chiu-Chi Chang
24. **Long Term Care Services and Hospital Length of Stay in Norway: A Quantile Regression Analysis**
M. Kamrul Islam, Tor Helge Holmas & Egil Kjerstad
25. **Quality Of Life of Australian Chronically-Ill Adults: Smoking Has More Effect on Females than Males**
Upali Jayasinghe & Mark Harris
26. **Expenditure on Social Services for Urban Poor of Pimpri-Chinchwad Municipal Corporation, Pune, India**
Asha Khillare
27. **Health Justice, By the Numbers: Why the Choice of Measure Matters in Policies to Reduce Health Inequalities**
Nicholas King
28. **Inequality Decomposition by Population Subgroups for Ordered Response Data**
Martyna Kobus
29. **Sanitation Facilities and Health Economics: A Study on Spending Pattern and Quality of Life of Indian Rural Women**
B. Suresh Lal
30. **Promoting Valued and Integrated Healthcare: Defining and Implementing Program Budgeting Marginal Analysis in Italy**
Agnese Lazzari, Paola Galli, Emma De Feo, Ferruccio Pelone, Antonio Giulio de Belvois, Maria Lucia Specchia, Mariarosaria Gualano & Walter Ricciardi
31. **A Meta-Analytic Examination of Burnout Correlates in Nurses**
Raymond Lee, Bosu Seo & Brenda L. Lovell
32. **Building Research Capacity for Indigenous Health: An Australian Case Study of Research Funding Allocation in Policy & Practice**
Sophia Leon de la Barra, Sally Redman, Sandy Eades & Carey Lonsdale
33. **Living Positively Discourse and Thai Women Living with HIV/AIDS in Central Thailand**
Pranee Liamputtong, Niphattra Haritavorn & Niyada Kiatying-Angsulee
34. **Heterogeneous Impact Evaluation of the New Cooperative Medical Scheme in Rural China**
Dan Liu & Daniel Tsegai
35. **Disability Discrimination and Mental Health Litigation in Britain 2005-2011**
Graeme Lockwood

- 36. A Cross National Meta-Analysis of the Relationships between Medical Practice and Health Outcome Variables with Physician Burnout**
Brenda Lovell, Raymond Lee, Steven Hladkyj, Bosu Seo & Laura Schwartzmann
- 37. Productivity Change from 2008 to 2009 in the Provision of Care of Elderly when Effectiveness of Services is taken into Account**
Kalevi Luoma, Aki Kangasharju, Tero Tyni & Marja Valta
- 38. Surrogate Motherhood in France: Does Denying Access to This Practice Contrary to the Right of Founding a Family?**
Allane Madanamootho
- 39. Cost of Thalassaemia Treatment in Iran**
Simin Mashayekhi, Dorna Sheykhi, Alireza Nikanfar, Abasali Hoseinpur-Feizi & Mohammadreza Sattari
- 40. Using Organisational Change Theory to Analyse Organisational Responses to Commissioning Policy in the NHS**
Sara McCafferty
- 41. Frontier Research in Medical Sciences by Greeks: Regional Disparities in Greece and Australia**
George Messinis
- 42. The Conflict between Efficiency and Equality in Health Outcomes: Determination of SWF Parameters**
Micaela Moreira Pinho, Anabela Botelho & Paula Veiga
- 43. The Impact of Body Size on Urban Employment: Evidence from China**
Jay Pan, Xuezheng Qin & Gordon Liu
- 44. Applying the Economic Instrument of Experimental Design to Investigate Nursing Decisions in Community and the Wider Implications**
Panos Papanikolaou
- 45. Explaining Price Discrepancies between Me-Too Drugs in France**
Sylvain Pichetti
- 46. Current Knowledge on the Benefits and Disbenefits of Clinical Genetic Services from a CBA Perspective: Are New Methodologies Needed?**
Christalla Pithara
- 47. Measuring Financial Protection by National Health Insurance Programs: Evidence from the Philippines**
Stella A. Quimbo, Carlos R. Tan & Orville C. Solon
- 48. Implementation of Remotely Monitored Medical Dialysis Units: Dealing with Multiple Criteria and Multiple Decision Makers**
Gerald-Reparate Retali, Patrick Meyer & Myriam Le Goff-Pronost
- 49. Anticompetitive Impact of Pseudo-Generics**
Vasco Rodrigues, Ricardo Goncalves & Helder Vasconcelos
- 50. The Medical Insurance Program for the Poor in a Health System in Transition, Georgia**
Ekaterine Ruadze
- 51. Establishing the Connection between Livable Community Assets and Public Health**
Virginia Sisiopiku & Abdul M. Abro
- 52. Does Health Insurance Affect Health? Evidence of Medicare's Impact on Cancer Outcomes**
Erin Strumpf & Srikanth Kadiyala
- 53. Co-Payment Exemption and Competition in the Market for Pharmaceuticals: An Empirical Analysis for Germany 2007 to 2010**
Moritz Suppliet & Annika Herr

54. **Assessing the Effect of Antiretroviral Therapy on Intentional Reproductive Behaviour: A Case Study from Cameroon**
Miron Tequame
55. **African American Faculties' Career Decisions about a Predominantly Caucasian Institution in the United States**
Shirley M. Timmons
56. **SES in Emerging Adulthood: Implications for Health Behaviors**
Allison Tracy & Alice Frye
57. **Developing a Framework to Facilitate the Full Economic Evaluation of Disease Management Programs**
Apostolos Tsiachristas & Maureen Rutten-van Molken
58. **Serious Mental Health Problems and Patient Compliance in Mental Health Services: A Challenge for Policy Makers**
Maritta Valimaki, Heli Hatonen, K. Kauppi, M. Lahti & C. Adams
59. **Discerning the Impact of Vitamins and Natural Remedies (Plant Medicines) on Cardiovascular and Coronary Disease and Associated Prescription Costs**
Anastasia Ventouri
60. **Re-Balancing Cost Variations in Health Care Services: How to Leverage Top-Down Costing Approaches, Ensure Data Validity and Negotiate a Health Care System Reform**
Anna-Marie Vilamovksa, Jeni Nacheva, Ivan Markov, Maria Zareva, Petya Georgieva & Yosif Yosifov
61. **Identifying Sleep-Disruptive Noise Factors in Healthcare Environments**
Nadia Volchansky Nieves
62. **Fraud and Other-Regarding Preferences in a Health Care Market**
Christian Waibel
63. **Eliciting the Physicians' Preferences for Modern Long-Acting Insulin Therapy: A Discrete Choice Experiment**
Robert Weigelt
64. **An Introduction to Fārābī's thought**
Meryl Wheeler, Mark Lafave, Nicolas Mohtadi & Denise Chan
65. **Waiting in Hospital for Placement in a Nursing Home - Research for This Global Quandary**
Donna Wilson
66. **Evaluating the Impact of Healthcare Intelligence on Quality of Care**
Jennifer Yang-Meslet
67. **What is the Optimal Health Insurance Scheme for Aged Society? Primitive Analysis for Seeking Real Premium in Japanese New Social Health Insurance for the Aged**
Fumiaki Yasukawa
68. **The Influence of Activity Based Financing on Hospital Length of Stay for Elderly Patients Suffering from Heart Diseases**
Jun Yin, Hilde Luras, Terje P. Hagen & Fredrik A. Dahl

Preface

This abstract book includes all the abstracts of the papers presented at the *10th Annual International Conference on Health Economics, Management & Policy, 27-30 June, 2011* organized by the Athens Institute for Education and Research. In total there were 68 papers and 69 presenters, coming from 26 different countries (Australia, Bulgaria, Canada, China, Colombia, Cyprus, Finland, France, Georgia, Germany, India, Iran, Italy, Japan, Latvia, the Netherlands, New Zealand, Norway, the Philippines, Poland, Portugal, Singapore, South Africa, Switzerland, the United Kingdom, and the United States of America). The conference was organized into 16 sessions that included areas such as Health Policy – National Health Systems, Social Aspects of Health, the Health Care Industry and Market, e.t.c. As it is the publication policy of the Institute, the papers presented in this conference will be considered for publication in one of the books of ATINER.

The Institute was established in 1995 as an independent academic organization with the mission to become a forum where academics and researchers from all over the world could meet in Athens and exchange ideas on their research and consider the future developments of their fields of study. Our mission is to make ATHENS a place where academics and researchers from all over the world meet to discuss the developments of their discipline and present their work. To serve this purpose, conferences are organized along the lines of well established and well defined scientific disciplines. In addition, interdisciplinary conferences are also organized because they serve the mission statement of the Institute. Since 1995, ATINER has organized more than 100 international conferences and has published over 100 books. Academically, the Institute is organized into four research divisions and nineteen research units. Each research unit organizes at least one annual conference and undertakes various small and large research projects.

I would like to thank all the participants, the members of the organizing and academic committee and most importantly the administration staff of ATINER for putting this conference together.

Gregory T. Papanikos
President

FINAL CONFERENCE PROGRAM

Athens Institute for Education and Research **Human Development Research Division** **Research Unit of Health**

10th Annual International Conference on Health Economics, Management and Policy 27-30 June, 2011, Athens, Greece



Conference Venue: Titania Hotel, 52 Panepistimiou Avenue, Athens, Greece

Organization and Scientific Committee

- Dr. Gregory T. Papanikos, President, ATINER.
- Dr. Nicholas Pappas, Vice-President, ATINER & Professor, Sam Houston State University, USA.
- Dr. Zoe Boutsoli, Deputy Head, Health Research Unit, ATINER.
- Dr. Chris Sakellariou, Vice President of Finance & Associate Professor, Nanyang Technological University, Singapore.
- Dr. Panagiota (Nota) Klentrou, Academic Member, ATINER & Professor, Brock University, Canada.
- Dr. John Roufagalas, Head, Economics Research Unit of ATINER and Professor, Troy University, USA.
- Dr. Cleopatra Veloutsou, Head, Marketing Research Unit, ATINER & Senior Lecturer in Marketing, Department of Business and Management, University of Glasgow, Scotland.
- Dr. Andy Stergachis, Professor, University of Washington, USA
- Dr. Melina Dritsaki, Research Fellow, Brunel University, U.K.
- Dr. Stefanos Nastis, University of Wyoming, USA
- Dr. Margarita Kefalaki, Researcher ATINER.
- Ms. Persefoni Kritikou, Researcher, ATINER & Ph.D. Student, University of Athens, Greece.
- Ms. Lila Skountridaki, Researcher, ATINER & Ph.D. Student, University of Strathclyde, U.K.
- Ms. Gina M. Bondi, Researcher, ATINER.
- Mr. Apostolos Kotsaspyrou, Researcher, ATINER.

Administration

Fani Balaska, Chantel Blanchette, Stavroula Kiritsi, Eirini Lentzou,
Konstantinos Manolidis, Katerina Maraki & Syla Sakka

CONFERENCE PROGRAM

Monday 27 June 2011

08:30-09:30 Registration

09:30-10:00 Welcome and Opening Remarks

- Dr. Gregory T. Papanikos, President, ATINER.

10:00-11:30 Session I (Room A): Health Technology and Productivity

Chair: Papanikos, G.T., President, ATINER.

1. Chicaiza-Becerra, L., Associate Professor, National University of Colombia, Colombia. Economic Analysis of Health Technology: Issues for Developing Countries.
2. Yang-Meslet, J., Senior Analytical Advisor, Care Quality Commission, UK. Evaluating the Impact of Healthcare Intelligence on Quality of Care.
3. Luoma, K., Research Chief, Government Institute for Economic Research, Finland, Kangasharju, A., Director, General Government Institute for Economic Research, Finland, Tyni, T., Special Adviser, Association of Finnish Local and Regional Authorities, Finland & Valta, M., Solution Director, Finnish Consulting Group, Finland. Productivity Change from 2008 to 2009 in the Provision of Care of Elderly when Effectiveness of Services is taken into Account.
4. Retali, G.R., Ph.D. Student, Telecom Bretagne, Institut Telecom, France, Meyer, P., Telecom Bretagne, Institut Telecom, France & Le Goff-Pronost, M., Telecom Bretagne, Institut Telecom, France. Implementation of Remotely Monitored Medical Dialysis Units: Dealing with Multiple Criteria and Multiple Decision Makers.

11:30-13:00 Session II (Room A): Economic Aspects of Health I

Chair: Contoyannis, P., Associate Professor, McMaster University, Canada.

1. Davies, S., Head, Cape Peninsula University of Technology, South Africa. Health Care Corporations: Reconciling Profit Making Prerogatives with Moral Obligations in a Economically Disparate World.
2. Moreira Pinho, M., Professor, Universidade Lusitana, Portugal, Botelho, A., Associate Professor, Universidade do Minho, Portugal & Veiga, P., Professor, Universidade do Minho, Portugal. The Conflict between Efficiency and Equality in Health Outcomes: Determination of SWF Parameters.
3. Andrade, L.F., Ph.D. Student, GATE/IRDES, France, Celant, N., GATE/IRDES, France, Pichetti, S., GATE/IRDES, France, Sermet, C., GATE/IRDES, France & Sorasith, C., GATE/IRDES, France. Entry Time Effects and Follow on Drug Competition.
4. Dionne, P.A., Researcher, University of Sherbrooke, Canada. The Excess Healthcare Costs Associated with Depression and Anxiety in Elderly Living in the Community.

11:30-13:00 Session III (Room B): Disease Case Studies I

Chair: *Wilson, D., Professor, University of Alberta, Canada.

1. *Ventouri, A., Director, UNIGE, UNIL, Switzerland. Discerning the Impact of Vitamins and Natural Remedies (Plant Medicines) on Cardiovascular and Coronary Disease and Associated Prescription Costs.
2. Yin, J., PhD Student, University of Oslo, Norway, Luras, H., Professor, University of Oslo, Norway, Hagen, T., Professor, University of Oslo, Norway & Dahl, F., Professor, University of Oslo, Norway. The Influence of Activity Based Financing on Hospital Length of Stay for Elderly Patients Suffering from Heart Diseases.
3. Tsiachristas, A., Ph.D. Student, iMTA-Erasmus University Rotterdam, the Netherlands & Rutten- van Mólken, M., Professor, iMTA- Erasmus University Rotterdam, the Netherlands. Developing a Framework to Facilitate the Full Economic Evaluation of Disease Management Programs.

13:00-14:00 LUNCH

<p>14:00-16:00 Session IV (Room A): Social Aspects of Health I Chair: Valimaki, M., Professor, University of Turku, Finland.</p>	<p>14:00-16:00 Session V (Room B): The Health Care Industry and Market I Chair: *Ventouri, A., Director, UNIGE, UNIL, Switzerland.</p>
<ol style="list-style-type: none"> 1. Contoyannis, P., Associate Professor, McMaster University, Canada & Li, J., McMaster University, Canada. The Dynamics of Depression in Adolescence and Early Adulthood. 2. Harper, S., Assistant Professor, McGill University, Canada. The Effect of Mandatory Seat Belt Laws on Socioeconomic Inequalities in Seat Belt Use. 3. Lockwood, G., Lecturer, King's College London, UK. Disability Discrimination and Mental Health Litigation in Britain 2005-2011. 4. Athanasopoulou, C., Ph.D. Student, University of Turku, Finland, Valimaki, M., Professor, University of Turku, Finland, Hatonen, H., Ph.D. University of Turku, Finland & Apostolakis, I., Professor, National School of Public Health, Greece. Online Mental Health Resources - Support for People with Mental Illness. 5. Gerouki, M., Researcher, Helsinki University, Finland & Manesis, N., Educational Counselor, Prefecture of Achaia, Greece. HIVS / AIDS Education for Young People in Greece: Needs and Challenges. (Monday, 27th of June, 2011) 	<ol style="list-style-type: none"> 1. Blank, J., Professor, Delft University of Technology, the Netherlands. Infrastructural Planning and Social Cost in Hospital Industry: An Empirical Application to Flemish Hospitals. 2. Ellert, A., Ph.D. Student, University of Hamburg, Germany. How Should The Market For Managed Care Be Organized? 3. Suppliet, M., Researcher, University of Dusseldorf, Germany & Herr, A., Researcher, University of Dusseldorf, Germany. Co-Payment Exemption and Competition in the Market for Pharmaceuticals: An Empirical Analysis for Germany 2007 to 2010. 4. *Wilson, D., Professor, University of Alberta, Canada. Waiting in Hospital for Placement in a Nursing Home - Research for This Global Quandary. 5. *Papanikolaou, P., Research Fellow, Cardiff School of Nursing and Midwifery Studies, Cardiff University, U.K. Applying the economic instrument of experimental design to investigate nursing decisions in community and the wider implications.

<p>16:00-17:30 Session VI (Room A): Health Policy – National Health Systems I Chair: Clark, D., Master of Public Health Candidate, Charles R. Drew University of Medicine and Science, USA.</p>	<p>16:00-17:30 Session VII (Room B): General Health Research Issues I Chair: *Papanikolaou, P., Research Fellow, Cardiff School of Nursing and Midwifery Studies, Cardiff University, U.K.</p>
<ol style="list-style-type: none"> 1. Valimaki, M., Professor, University of Turku, Finland, Hatonen, H., Ph.D., University of Turku, Finland, Kauppi, K., University of Turku, Finland, Lahti, M., University of Turku, Finland & Adams, C., University of Nottingham, UK. Serious Mental Health Problems and Patient Compliance in Mental Health Services: A Challenge for Policy Makers. 2. Dash, L., Reader in Economics, North Orissa University, India. Equity Aspect of Health Care Delivery in India. 3. *Boudioni, M., Senior Research Capability Fellow, London South Bank University, U.K. Patient Involvement, Empowerment and Patients' Rights: Comparison of Health Policies, Systems and their Hospital Application in England and Greece. 4. Lazzari, A., Ph.D. Student, Catholic University of Sacred Heart, Italy. Promoting Valued and Integrated Healthcare: Defining and Implementing Program Budgeting Marginal Analysis in Italy. 	<ol style="list-style-type: none"> 1. Andronis, L., Research Fellow in Health Economics, University of Birmingham, UK, Billingham, L., Professor, University of Birmingham, UK, Bryan, S., Professor, University of British Columbia, Canada & Barton, P., University of Birmingham, UK. Analytic Approaches to Inform Research Funding Decisions- Evidence from a Systematic Literature Review. 2. *Messinis, G., Senior Research Fellow, Centre for Strategic Economic Studies, Victoria University, Australia. Frontier Research in Medical Sciences by Greeks: Regional Disparities in Greece and Australia. 3. *Sisiopiku, V., Associate Professor, University of Alabama at Birmingham, USA. Establishing the Connection between Livable Community Assets and Public Health. (Monday, 27th of June, 2011) 4. Timmons, S.M., Assistant Professor, Clemson University, USA. African American Faculties' Career Decisions about a Predominantly Caucasian Institution in the United States. 5. *Vilamovska, A.M., EAD Head, Ministry of Finance, Bulgaria. Re-Balancing Cost Variations in Health Care Services: How to Leverage Top-Down Costing Approaches, Ensure Data Validity and Negotiate a Health Care System Reform.

<p>17:30-19:30 Session VIII (Room A): Health Insurance Chair: *Boudioni, M., Senior Research Capability Fellow, London South Bank University, U.K.</p>	<p>17:30-19:30 Session IX (Room B): Social Aspects of Health II Chair: *Messinis, G., Senior Research Fellow, Centre for Strategic Economic Studies, Victoria University, Australia.</p>
<ol style="list-style-type: none"> 1. Damrongplasit, K., Assistant Professor, Nanyang Technological University, Singapore, Erlyana, E., Assistant Professor, California State University Long Beach, USA & Melnick, G., Assistant Professor, University of Southern California, USA. Expanding Health Insurance to Increase Health Care Utilization: Will It Have Different Effects in Rural vs. Urban Areas? 2. Strumpf, E., Assistant Professor, McGill University, Canada & Kadiyala, S., Economist, RAND-Bing Center for Health Economics, USA. Does Health Insurance Affect Health? Evidence of Medicare's Impact on Cancer Outcomes. 3. Ruadze, E., Coordinator, Health Care Development Project, The National Center for Disease Control and Public Health, Georgia. The Medical Insurance Program for the Poor in a Health System in Transition, Georgia. 	<ol style="list-style-type: none"> 1. Volchansky Nieves, N., Assistant Professor, George Washington University, USA. Identifying Sleep-Disruptive Noise Factors in Healthcare Environments. 2. Esmaeili, K., Professor, Kermanshah University of Medical Sciences, Iran, Safei, F., Kermanshah University of Medical Sciences, Iran & Pourmirza-Kalhory, R., Kermanshah University of Medical Sciences, Iran. Incidence of Abuse by Family and Caregivers in the Aging Male Population in Kermanshah, Iran (2010). 3. Tracy, A., Researcher, Wellesley Centers for Women, USA. SES in Emerging Adulthood: Implications for Health Behaviors. 4. Madanamoothoo, A., Researcher, IRDEIC, France. Surrogate Motherhood in France: Does Denying Access to This Practice Contrary to the Right of Founding a Family? 5. Tequame, M., Ph.D. Student, Paris School of Economics and University of Namur, France. Assessing the Effect of Antiretroviral Therapy on Intentional Reproductive Behaviour: A Case Study from Cameroon. 6. Kobus, M., Ph.D. Student, Warsaw University, Poland & Milos, P., Warsaw University, Poland. Inequality Decomposition by Population Subgroups for Ordered Response Data.

21:00-23:00 Greek Night and Dinner

Tuesday 28 June 2011

08:00-10:00 Session X (Room A): Social Aspects of Health III

Chair: *Yasukawa, F., Professor, Kumamoto University, Japan.

1. *Liamputtong, P., Professor, La Trobe University, Australia. Living Positively Discourse and Thai Women Living with HIV/AIDS in Central Thailand. (Tuesday, 28th of June, 2011)
2. Khillare, A., Associate Professor, MES Garware College of Commerce, India. Expenditure on Social Services for Urban Poor of Pimpri-Chinchwad Municipal Corporation, Pune, India.
3. *Lal, S., Associate Professor, Kakatiya University, India. Sanitation Facilities and Health Economics: A Study on Spending Pattern and Quality of Life of Indian Rural Women.
4. Jayasinghe, U., Senior Research Fellow, University of New South Wales, Australia. Quality Of Life of Australian Chronically-Ill Adults: Smoking Has More Effect on Females than Males.
5. Girard, D., Lecturer, University of Nantes, France. Economic Evaluation of Recommended Immunization Policies: The Application to Pertussis and Measles. (Tuesday, 28th of June, 2011, morning)

10:00-11:30 Session XI (Room A): Social Aspects of Health and Other Issues

Chair: *Liamputtong, P., Professor, La Trobe University, Australia.

1. Garcia-Molina, M., Professor, National University of Colombia, Colombia & Chicaiza-Becerra, L., Associate Professor, National University of Colombia, Colombia. Tamoxifen vs. Aromatase Inhibitors for Breast Cancer in Risk Groups: Cost Effectiveness for Colombia.
2. Liu, D., Ph.D. Student, Bonn University, Germany & Tsegai, D., Bonn University, Germany. Heterogeneous Impact Evaluation of the New Cooperative Medical Scheme in Rural China.
3. Clark, D., Master of Public Health Candidate, Charles R. Drew University of Medicine and Science, USA & Sondos, I., Associate Professor, Charles R. Drew University of Medicine and Science, USA. Are School Based Health Centers Sustainable in California? Analysis of a State Policy Issue.

10:00-11:30 Session XII (Room B): Health Policy – National Health Systems II

Chair: *Lal, S., Associate Professor, Kakatiya University, India.

1. Quimbo, S., Professor, University of the Philippines, Philippines, Tan, C.R., Researcher, UPecon Foundation, Philippines & Solon, O.C., Professor, University of the Philippines, Philippines. Measuring Financial Protection by National Health Insurance Programs: Evidence from the Philippines.
2. *Yasukawa, F., Professor, Kumamoto University, Japan. What is the Optimal Health Insurance Scheme for Aged Society? Primitive Analysis for Seeking Real Premium in Japanese New Social Health Insurance for the Aged. (Tuesday, 28th of June, 2011)
3. King, N., Assistant Professor, McGill University, Canada. Health Justice, By the Numbers: Why the Choice of Measure Matters in Policies to Reduce Health Inequalities.
4. McCafferty, S., Research Associate, Newcastle University, UK. Using Organisational Change Theory to Analyse Organisational Responses to Commissioning Policy in the NHS.

<p>11:30-13:00 Session XIII (Room A): The Health Care Industry and Market II Chair: Lee, R., Professor, University of Manitoba, Canada..</p>	<p>11:30-13:00 Session XIV (Room B): General Health Research Issues II Chair: Dash, L., Reader in Economics, North Orissa University, India.</p>
<ol style="list-style-type: none"> 1. Bohnet-Joschko, S., Professor, Witten/Herdecke University, Germany & Zippel, C., Ph.D. Student, Witten/Herdecke University, Germany. Near Miss Reporting Systems in the German Hospital Sector - Current Status and Perspectives. 2. Rodrigues, V., Professor, CEGE, Universidade Católica Portuguesa, Portugal, Goncalves, R., CEGE, Universidade Católica Portuguesa, Portugal & Vasconcelos, H., CEGE, Universidade Católica Portuguesa, Portugal. Anticompetitive Impact of Pseudo-generics. 3. Huang, E., Associate Professor, Indiana University, USA. Interactive E-health Tools on U.S. Hospital Web Sites. (Tuesday, 28th of June, 2011) 4. *Waibel, C., Ph.D. Student, University of Cologne, Germany. Fraud and Other-Regarding Preferences in a Health Care Market. 	<ol style="list-style-type: none"> 1. Ek, S., Research Doctor, Åbo Akademi University, Finland, Eriksson-Backa, K., Research Doctor, Åbo Akademi University, Finland, Niemela, R., Research Doctor, University of Oulu, Finland & Huotari, M.L., Professor, University of Oulu, Finland. Patterns of Gender Differences in Health Information Behaviour and Body Mass Index (BMI): Findings from a Finnish Population-Based Study. 2. Pithara, C., Research Associate, Open University of Cyprus, Cyprus. Current Knowledge on the Benefits and Disbenefits of Clinical Genetic Services from a CBA Perspective: Are New Methodologies Needed? 3. *Leon de la Barra, S., Research Fellow, University of Otago, New Zealand, Redman, S., CEO, Sax Institute, Australia, Eades, S., Professor, Baker Institute, Australia & Lonsdale, C., Researcher, NHMRC, Australia. Building Research Capacity for Indigenous Health: An Australian Case Study of Research Funding Allocation in Policy & Practice.

13:00-14:00 Lunch

<p>14:00-16:00 Session XV (Room A): The Human Factor in Health Care Provision and Other Employment Issues Chair: *Waibel, C., Ph.D. Student, University of Cologne, Germany.</p>	<p>14:00-16:00 Session XVI (Room B): Economic Aspects of Health II Chair: *Leon de la Barra, S., Research Fellow, University of Otago, New Zealand</p>
<ol style="list-style-type: none"> 1. Lee, R., Professor, University of Manitoba, Canada. A Meta-Analytic Examination of Burnout Correlates in Nurses. 2. Lovell, B., Research affiliate/instructor, University of Manitoba, Canada. A Cross National Meta-Analysis of the Relationships between Medical Practice and Health Outcome Variables with Physician Burnout. 3. Weigelt, R., Ph.D. Student, Jena Graduate School, GSBC, Germany. Eliciting the Physicians' Preferences for Modern Long-Acting Insulin Therapy: A Discrete Choice Experiment. 4. Pan, J., Ph.D. Candidate, Southwestern University of Finance and Economics, China, Qin, X., Southwestern University of Finance and Economics, China & Liu, G., Southwestern University of Finance and Economics, China. The Impact of Body Size on Urban Employment: Evidence from China. 5. Wheeler, M., Non-Physician Expert, Mount Royal University, Canada. The Acute Knee Injury Clinic in Calgary, Alberta, Canada: An Alternative Clinical Pathway using Non-Physician Experts. 	<ol style="list-style-type: none"> 1. Pichetti, S., Health Economist Research Fellow, Institut de Recherche et de Documentation en Economie de la Santé, Irdes, France. Explaining Price Discrepancies between Me-Too Drugs in France. 2. Islam, M.K., Senior Researcher, Stein Rokkan Centre for Social Studies, Norway, Holmas, T.H., Senior Researcher, Stein Rokkan Centre for Social Studies, Norway & Kjerstad, E., Senior Researcher, Institute for Research in Economics and Business Administration, Norway. Long Term Care Services and Hospital Length of Stay in Norway: A Quantile Regression Analysis. 3. Araja, D., Ph.D. Student, Latvia University, Latvia. Price Elasticity of Demand of the Pharmaceuticals in Latvia. 4. Graf, J., Research Assistant, Dice University, Dusseldorf, Germany. The Effects of Rebate Contracts on the Health Care System. 5. Mashayekhi, S., , Assistant Professor, Tabriz University of Medical Sciences, Iran, Sheykhi D., Pharm-D, Faculty of Pharmacy, Tabriz University of Medical Sciences, Iran Nikanfar A., Associate Professor, Tabriz University of Medical Sciences, Iran, Hoseinpur-Feizi A., Associate Professor, Tabriz University of Medical Sciences, Iran & Sattari M, Assistant Professor, Tabriz University of Medical Sciences, Iran. Cost of Thalassemia Treatment in Iran.

17:00-19:30 Urban Walk

20:00-21:00 Dinner

Wednesday 29 June 2011

Cruise: Departure at 06:30 Return at 20:30

Thursday 30 June 2011

Delphi Visit: Departure at 07:30 Return at 19:30

Luiz Flavio Andrade

Ph.D. Student, GATE/IRDES, France.

N. Celant

GATE/IRDES, France.

S. Pichetti

GATE/IRDES, France.

C. Sermet

GATE/IRDES, France.

C. Sorasith

GATE/IRDES, France.

Entry Time Effects and Follow on Drug Competition

Pharmaceutical firms have been criticized by concentrating its efforts of R&D on the so called “me-too” or “follow-on” drugs. There have been many comments against and favourable to the dissemination of these incremental innovations but few papers have broached the subject from an econometric point of view, possibly because identification of “me-too” is not so obvious. This paper focus on the impact of the entry order on “follow-on” drugs competition in the French market from years 2001 to 2007. The main question that we aim to respond is what are the main effects on market share and prices of being the first me-too in the market and how this possible competitive advantage change over time. First results are coherent with theoretical economic issues concerning the importance of being first but trends in the dynamics of pharmaceutical markets are constantly changing because of regulations and the emergence of generic consumption. We used panel data with a fixed effects model to determine the measure in which entry time effects change over time in selected groups of follow on drugs. The analysis shows that new follow on drugs enter the market with a relatively lower price compared to their predecessors but the tendency is to increase price over time to compensate less market share. Moreover first follow on drug entrants have the ability to set higher prices and capture an important amount of market share than subsequent entrants. Our analysis is conclusive in the sense that the optimal point to maximize market shares and prices in the follow on drug market is the one with a less innovative output. The policy analysis that we can draw from this paper is that regulated pharmaceutical markets such as France are succeed in using regulation to induce concurrence in the pharmaeconomics domain.

Lazaros Andronis

Research Fellow in Health Economics, University of Birmingham, UK.

Lucinda Billingham

Professor, University of Birmingham, UK.

Stirling Bryan

Professor, University of British Columbia, Canada.

Pelham Barton

University of Birmingham, UK.

Analytic Approaches to Inform Research Funding Decisions - Evidence from a Systematic Literature Review

Background

Clinical trials provide much needed evidence on the clinical and cost effectiveness of cancer treatments but they are resource intensive. Given limited research budgets, public funding bodies are required to make hard choices on which trials to fund. Such resource allocation decisions could benefit from explicit, numerical estimates of the potential value of a proposed trial. Analytic approaches to provide such estimates exist in the literature, but their potential role and value in informing priority-setting is unclear.

Aims and methods

This paper will report and discuss the results of a comprehensive review carried out to identify analytic approaches for aiding research priority-setting. This work is an essential part of a wider research project funded by the UK National Institute for Health Research through a doctoral research award.

We conducted a systematic search for analytic approaches in major electronic bibliographic databases, cited and related articles, textbooks, key articles' reference lists and the internet. Retrieved articles were selected as relevant according to predetermined criteria.

Results and further research

The review identified eight different analytic models for research priority setting. Models were classified according to their underlying principles in one of two overarching frameworks: 'cost-benefit (or payback) of research' (CBoR) and 'value of information' (VoI).

Both frameworks can be potentially useful in informing research priority-setting, nonetheless it is unclear how they perform with respect to practicality, fit into existing prioritization processes; ability to inform a 'cost-effective' trial design and potential to inform different funding decision points such as funding a *de novo* Phase III trial or continuation of funding for seamless Phase II / III trial.

This will be explored by applying the approaches directly to proposed trials in the areas of hormone-refractory prostate cancer and advanced non-small cell lung cancer. Our study will be addressing a significant evidence gap. Due to the fact that these analytic methods have the potential to improve transparency and can help to achieve a more efficient allocation of the available research resources, a study that can resolve significant uncertainties regarding the role, value and appropriateness of using analytic approaches is greatly needed.

Diana Araja

Ph.D. Student, Latvia University, Latvia.

Price Elasticity of Demand of the Pharmaceuticals in Latvia

Introduction

Using of the knowledge of pharmacoeconomics is gaining popularity and recognition all over the world due to the introduction of increasingly new technologies in medicine and pharmacy that facilitate achieving inexperienced summits in treating patients, however at the same time make the treatment process more expensive. Consequently the issue about cost-effectiveness of the applied technologies, including medicines, becomes topical. By this reason the price elasticity of demand plays an important role in forecasting the results of a market. The price elasticity of demand shows the percentage variation in the quantity demanded of a good as a result of a price variation of one percent and it is substantial tool for evaluation of consumption data.

Methods

Data of consumption are investigated by dividing medicines into groups according to their application based of the ATC/DDD classification system. Data have been collected by compiling and analysing sales figures submitted by the wholesalers to the State Agency of Medicines. Data of consumption of the reimbursed medicines are obtained in the Health Payment Centre.

Results

Taking into account the raise of the Value Added Tax for pharmaceuticals in 2009 and other economic impacts, the price increase in comparisons to a previous year was sufficient for investigation of the price elasticity of demand.

The main results of the research are following:

- overall price elasticity of demand of pharmaceuticals in Latvia is inelastic;
- however in particular groups, for instance, "Respiratory system" price elasticity of demand is elastic;
- price elasticity of demand for the reimbursed medicines shows that the consumption is very sensitive to the co-payment and price elasticity of demand in major groups is elastic.

Discussion

Discussion is oriented on the comparison of data obtained in this research with data of the classic models. The results of the research can improve the forecasting of the consumption of medicines and relevant health statistic data in case of the cutting of the reimbursement levels by reason of the limited resources.

Christina Athanasopoulou

Ph.D. Student, University of Turku, Finland.

Heli Hatonen

Ph.D. University of Turku, Finland.

Maritta Valimaki

Professor, University of Turku, Finland.

I. Apostolakis

Professor, National School of Public Health, Greece.

Online Mental Health Resources – Support for People with Mental Illness

The Internet has been regarded as a valuable way to deliver health information because of its cost-effectiveness and easy access to a variety of populations. There is already an extremely wide range of health related resources on the Internet. However, the resources are ranging in accuracy, reliability, and value. One cause for this is that no standards are required for publishing health information on the Internet. Moreover, the main reasons for visiting a medical website is to acquire information about a health condition, its treatment and symptoms and advice about them; while it is not uncommon for patients to apply the information they have read on the Internet to their own lives, providing reliable online health information is a necessity for the improvement of the patients' quality of life. Therefore, these issues need to be considered in developing online mental health resources.

The purpose of this paper is to describe Greek and Finnish websites, which include mental health information and they are likely to be visited from the average Internet user, thus, from a person with a mental diagnosis. The online mental health information was searched from the patient's perspective. Identification of online mental health resources were performed using the search engine "Google". The evaluation of the websites will be done based on the methodology of Morel et al. (2008) by dividing the websites affiliations into five categories according to their declarations of affiliation: commercial, university, non-profit organization, governmental, personal pages. The websites' assessment will be done by rating accountability, presentation, interactivity, readability and content quality. The preliminary results of the analysis will be discussed. This study will enlighten the quality of health information that Greek and Finnish people with mental problems receive, every time they make an online search using the most popular search engine.

Jos Blank

Professor, Delft University of Technology, the Netherlands.

Infrastructural Planning and Social Cost in Hospital Industry: An Empirical Application to Flemish Hospitals

Social welfare has often been presented in the hospital research area in terms of travel costs and or distances. Most hospital cost studies only focus on the private costs generated by hospitals caring for patients. However, patient inputs in terms of patient travel cost and time cost are often neglected. In this paper, we combine both these factors in order to achieve two objectives. First, can hospital and patient costs be modeled in order to optimize internal efficiencies including patient travel costs? Second, can the results from this modeling approach be utilized to identify hospitals where expansion of costly technologies, for instance radio therapy, should be located so that both hospital costs and patients' costs are minimized? We apply a cost function to estimate how costs depend on the size of the hospital resulting in a "J" shaped average cost curve based on revalidation (long term care) and acute care hospitals operating in the Flemish region of Belgium during the period 2005-2009. We also include distance traveled by the patients separately composed of charge for one kilometer traveled, time costs per hour, cost of travel to the hospital, how many times the patient went to the hospital and number of family visits. In this study, we point out that as the population (and patient base) increases, existing hospitals would have to expand moving further along the average cost curve into the region where decreasing returns to scale would prevail and by definition, higher cost. Building another hospital could both relieve the pressure on existing hospitals as well as decrease aggregate patient travel costs, i.e., social costs. By dividing the district into regions, we are able to establish the optimal number (and size) of hospitals. We found that the Flemish region should not be divided too much even though travel costs are minimized since the hospitals would be too large and too costly.

Sabine Bohnet-Joschko

Professor, Witten/Herdecke University, Germany.

Claus Zippel

Ph.D. Student, Witten/Herdecke University, Germany.

Near Miss Reporting Systems in the German Hospital Sector - Current Status and Perspectives

Purpose: In the last years, German hospitals have implemented different measures to increase patient safety. Special importance has been attached to Critical Incident Reporting Systems (CIRS) as instruments for risk identification in health care, instruments that promise high potential for organizational learning. To gain insight into the current status of instruments for clinical risk management, a survey was carried out in 2009. Questions covered a process of six steps: from risk strategy to methods for risk identification, to risk analysis and risk assessment, to risk controlling and risk monitoring.

Methods: Structured telephone interviews were conducted with 341 German hospitals, featuring in their statutory quality reports those predefined key terms that indicated the concluded or planned implementation of clinical risk management.

Results: The implementation of near miss reporting systems in German hospitals has been constantly rising since 2004: in 2009, 54% of the interviewed hospitals reported an implemented CIRS; of these, 72% reported the system to be hospital-wide. An association between CIRS and private, public or NPO-operator could not be detected; however, the degree of CIRS implementation was significantly increasing with the size of the hospital, (e.g. the number of beds). 62% of the hospitals interviewed reported the maintenance of a risk management committee, but only 14% reported the implementation of risk analyzing techniques. As to clinical risk management, 92% of the hospitals see potentials for internal improvement; 44% have already communicated with external consultants.

Conclusion: While identification of clinical risks with near miss and other incident reporting systems meets increasing acceptance, the learning potential based on incident reporting is not yet appropriately being used. There is a deficit regarding systematic and comprehensive risk assessment and controlling; this will have to be met by improving the organizational framework for clinical risk management.

Markella Boudioni

Senior Research Capability Fellow, London South Bank University, UK.

Patient Involvement, Empowerment and Patients' Rights: Comparison of Health Policies, Systems and their Hospital Application in England and Greece

'Patient involvement' refers to the active participation of patients/carers, as partners in their own care and treatment at various levels (Kelson, 1997). *'Patient empowerment'* refers to the mechanisms enabling patients to gain control and make choices in their health (O'Cathain et al, 2005). More choice, more information, more personalised care may be some elements that lead to patients' real empowerment. *'Patients' rights'* have been introduced in many countries as an extension of human rights in health; fundamental rights are the rights of information and complaining; the underpinning values of all rights are respect for the *voice* and *choice* of the individual citizen (Fallberg and Mackenney, 2004).

Internationally the concept of patient empowerment is enshrined in the Ottawa Charter (WHO, 1986), the Jakarta health promotion declaration (WHO, 1997) and the European Commission White Paper (COM, 2007). Patient involvement and empowerment linked to patient-centeredness, responsiveness and services' quality have been frequently used terms in health policies, systems and services across Europe in the last 20 years; recent health service reforms emphasise them (Coulter and Magge, 2004; Brodie et al, 2009; Lister, 2007; WHO, 2006). Various public participation models and terminology have been adopted, however, in different countries (Lister, 2007; Tanner, 2008; WHO, 2006).

For example, national patient involvement mechanisms and various initiatives such as choice have been adopted in England; patient's rights legislation has been reinforced in Greece. These models and their application in public hospitals are discussed in this paper, which forms part of a PhD study. This paper will:

- 1) Identify national strategies and structures of patient involvement and empowerment in the two countries
- 2) Explore the application of these strategies and structures, related organisational structures and systems in selected cases-hospitals
- 3) Identify differences and similarities between cases and between countries
- 4) Make recommendations on patient involvement and empowerment.

Liliana Chicaiza-Becerra

Associate Professor, National University of Colombia, Colombia.

Economic Analysis of Health Technology: Issues for Developing Countries

One of the challenges for health systems around the world is the appropriate choice of health technology contributing to the improvement of the population's health. Economic analysis of health technology is a tool, among others, for this process. This work presents the role economic analysis has had in the priority settings in the Colombian health system. The experience of the making of 13 economic analyses linked to evidence-based clinical practice guidelines. Three of them were performed for cancer patients, the others for high complexity hospitals. From this basis, the key aspects are highlighted to be taken into account in the case of developing countries, such as the impact of economic analysis and evidence based clinical practice guidelines in decision making, the effects of country-based differential price setting by pharmaceutical firms, the disparities of physicians acceptance of the results, the ability to pay by developing countries, the effect of social and geographical inequalities on economic analysis results, the problems in identifying homogeneous quality measures, the capacity-development needs for economic analysis, and the lessons for international cooperation. Some challenges for developing countries arising from these topics are stressed.

Denishia Clark

Master of Public Health Candidate, Charles R. Drew University of
Medicine and Science, USA.

Sondos Islam

Associate Professor, Charles R. Drew University of Medicine and
Science, USA.

**Are School Based Health Centers Sustainable in
California? Analysis of a State Policy Issue**

Out of the 50 states in the United States of America, 46 have School Based Health Centers (SBHCs). Nationally there are 9 states (including California) that do not specifically allocate funds to support SBHCs. Such centers enable students to access quality comprehensive physical and mental health services that accentuate prevention and early intervention. The inability to access quality health care results in many children and adolescents attending schools everyday while suffering from conditions that seriously impact their ability to learn and to succeed; thus causing interferences not only in their learning process but in their quality of life as well. Many California children are uninsured, thus the state lacks health policies that support SBHCs. A review of the literature on SBHCs suggests that school health services and policies are significantly effective in combating health issues due to accessibility. This analysis uses a health advocacy perspective based on the Methodology for the Analysis of the Rationality and Effectiveness Prevention and Health Promotion Strategies (MAREPS) theory; to provide a conceptual framework for policy recommendation, as a result of conveying the need of a policy that supports SBHCs in California. This article consists of a detailed review of SBHCs and the analysis plan is as follows: 1. identifies benefits and consequences of SBHCs, 2. an extensive review of SBHCs research articles, 3. identifies barriers in addition to lack of policy support and funding issues, 4. explores the effectiveness of SBHCs in California in comparison to other states who directly allocate funds, 5. reveals up-to-date details on existing SBHCs in California and plans of forthcoming centers, 6. examines other states that allocate from state funds for SBHCs, 7. provides recommendations for a policy that supports California's SBHCs. This analysis suggests SBHCs are beneficial and effective in providing health care to youth. Therefore there is a need of a statewide policy, law, program, or a funding infrastructure to ensure the sustainability of SBHCs in the state of California.

Paul Contoyannis

Associate Professor, McMaster University, Canada.

Jinhu Li

McMaster University, Canada.

The Dynamics of Depression in Adolescence and Early Adulthood

Depression is one of the most common mental health problems in the transition period of childhood to adolescence. Adolescents who experience depression at an early age often struggle with depression throughout their lives, and early onset of depression is predictive of more severe depression during adulthood. In the period of adolescence itself, depression is associated with poor health and behavioral outcomes, lower achievement on tests, and poorer peer relationships. Our study examines the roles of family socio-economic status, child cognitive abilities, early childhood life-events, unobserved heterogeneity and state dependence in explaining the distribution of depressive symptoms among adolescents and young adults using panel data from the children of the US National Longitudinal Survey of Youth 79 (NLSY79) sample. It provide a series of estimates from increasingly complex models including those for a dynamic panel instrumental variables conditional quantile regression model with fixed effects that was recently proposed by Galvao (2011), while adapting the estimation procedure for the count nature of the depression scores using 'jittering' as suggested by Machado and Santos Silva (2005). By using conditional quantile regression instead of the traditional conditional mean estimation, our study attempts to provide estimates of the effect of these factors in explaining depression dynamics across the distribution of depression scores, and to explore the source of discrepancies found in the existing empirical studies in the effects of parental SES and childhood life-events. The most important of our results is that the state dependence of depression symptoms varies across the distribution of depression. The marginal effects across different quantiles suggests that it is more difficult for the young adults who encounter worse initial depression symptoms to recover.

Kannika Damrongplasit

Assistant Professor, Nanyang Technological University, Singapore.

Erlyana Erlyana

Assistant Professor, California State University Long Beach, USA.

Glenn Melnick

Assistant Professor, University of Southern California, USA.

Expanding Health Insurance to Increase Health Care Utilization: Will It Have Different Effects in Rural vs. Urban Areas?

Objectives: This study investigates the importance of medical fee and distance to health care provider on individual's decision to seek care in developing countries. It also examines how socioeconomic-demographic variables affect provider choice in Indonesia.

Methods: The estimation method used is a mixed logit model. We employ the third wave of the Indonesian Family Life Survey, which was collected in 2000, to conduct our empirical analysis. The key variables of interest include medical fee and distance to different types of health care provider, and many individual characteristic variables.

Results: Our results suggest that for rural dwellers medical fee has insignificant impact on individual's decision to choose health care provider while distance is a critical factor affecting the decision. For urban residents, medical fee strongly impacts individual's health services utilization while distance has no significant influence. For both rural and urban samples, the most important individual characteristic affecting the choice of health care provider is self-reported health status.

Conclusions: People living in urban area are sensitive to the monetary cost of medical care while for those who reside in rural area they are sensitive to the non-monetary cost of care as measured by travel distance. As a result, policy makers must implement different sets of policy instruments when attempting to expand health services' usage in urban and rural areas of Indonesia. Our main recommendation is to further expand health insurance coverage to lower out-of-pocket medical expenditure in the urban area while to build up more medical infrastructure especially in remote part of the country to shorten commuting distance in the rural region.

LakshmiNarayan Dash

Reader in Economics, North Orissa University, India.

Equity Aspect of Health Care Delivery in India

Equity in health care in India has been expressed in various policy documents of the Government of India. India is now at the crossroads. Its growth rate at the moment is nearing 9 percent. But the present growth cannot be sustained without adequate healthcare for all. Therefore, the present paper makes an attempt to assess the extent to which the goals are realized. It is important to carry out such an assessment because government provision of health does not always promote the objective of equity. This has been found out in the studies of Castro-Leal and Others (1999), Meesook (1984 and Van de Walle (1992) carried out in the context of other countries of the world. Further such a study will provide some insight into the required policy changes for achieving the equity goals. The following are the objectives of the study.

1. Distribution of inpatient days, outpatient treatment, immunization, obstetric care, ante and post-natal care in different regions of the country.
2. Distribution of public health subsidies by socio-economic category.
3. Distribution of health care according to various income quintile and social categories will be discussed.
4. Inequalities and disparities both in terms of access to care as well as health outcomes will be discussed.

It has been found that health subsidies are not well targeted to the poor in India. The pro-rich bias varies across categories and types of health spending. Outpatient care in primary care facilities shows a slight pro-poor bias, while spending on both inpatient and outpatient hospital care is biased towards the rich. Preventive care, immunization and prenatal visits show a more equitable distribution than most types of curative care. Finally, it has been concluded that achieving the national health goals and related MDGs entails addressing the challenges of equity in health care delivery in India. Therefore, necessary policy changes need to be brought about for the purpose.

Simeon Davies

Professor & Head of Department, Cape Peninsula University of
Technology, South Africa.

Health Care Corporations: Reconciling Profit Making Prerogatives with Moral Obligations in a Economically Disparate World

Corporations operating in the health economy, notably pharmaceutical companies depend on research to ensure market relevance and to optimise their profit making potential. While corporations may be construed in law to be legal persons, do they have moral obligations and responsibilities that go beyond what law requires of them? This paper examines the quasi juristic-moral dimensions that constitute modern corporations and considers how these relate with research bioethics, along with broader moral obligations in terms of economic disparities, especially with regard to the developing world.

The paper forwards arguments based on Richardson (2003) reconciliation of divergent moral principles via his pragmatist notion of practical intelligence that seeks to inform us that we must remain open to revising our conception of what is good and what is right. If one considers that of the one hundred largest economies in the world, fifty-one are corporations and have in many respects become a more immediate presence to many citizens and modern democracies than either governments or organs of civil society (IoD, 2002). Singer (2002) believes that while it would be good for the richer countries to care about the world's poor out of compassion, it will be more strategic, politically, to argue for reducing global disparities based on self interest. Implying that corporations are ill advised to follow a narrow and selfish profit making prerogative that culminates in the exploitation of communities and resources, because the long term repercussions in the form of social instability, industrial action and even terrorism will invariably and negatively affect the bottom line. It is forwarded that health care corporations that employ a business approach based on pragmatist notion of practical intelligence are likely to adhere to research bioethics, stimulate sustainable economic development in marginalised economies, thus increasing market potential and reputation, and fundamentally increase profitability.

Pierre Alexandre Dionne

Researcher, University of Sherbrooke, Canada.

Helen-Maria Vasiliadis

Assistant Professor, University of Sherbrooke, Canada.

M. Preville

University of Sherbrooke, Canada.

P-A Dion

University of Sherbrooke, Canada.

L. Gentil

University of Sherbrooke, Canada.

D. Berbiche

University of Sherbrooke, Canada.

E. Latimer

University of Sherbrooke, Canada.

The Excess Healthcare Costs Associated with Depression and Anxiety in Elderly Living in the Community

Objectives: Estimate the excess health care costs attributable to depression and anxiety in a public managed care system.

Design: Prospective observational study

Setting: Population-based health survey in the province of Québec, Canada.

Participants: 2494 community dwelling adults aged ≥ 65 years participating in the ESA (*Étude sur la Santé des Aînés*) study.

Measurements: Depression and anxiety were assessed using DSM-IV criteria and measured at 2 time points one year apart. Annual healthcare costs considered included: hospitalisations, emergency and outpatient visits, physician fees and outpatient medications. Health service use and costs were identified from provincial administrative databases. Costs were studied as a function of the presence (yes/no) of depression and anxiety; and as persistence, incidence/remission and no illness. Generalized linear models with a gamma distribution (log link) were used to control for a number of factors.

Results: Participants with depression had higher outpatient mental health related costs. Participants with anxiety had higher total health care costs and specifically outpatient costs and inpatient costs. As opposed to people without depression and anxiety, persistent cases had higher costs followed by people with the disorders for only part of the year. Most of these differences were explained by socio-demographic and clinical factors. The excess annual health care costs of depression, anxiety and co-morbid depression and anxiety reached \$27.4, \$80.0 and \$119.8 million per 1 000 000 population of elderly, respectively.

Conclusion: The excess costs of depression and anxiety in community dwelling elderly are just as significant as those observed for adults even when productivity losses are not considered. Adequately managing depression and anxiety in the older adult population may lead to important healthcare cost savings for society.

Stefan Ek

Research Doctor, Åbo Akademi University, Finland.

Kristina Eriksson-Backa

Research Doctor, Åbo Akademi University, Finland.

Raimo Niemela

Research Doctor, University of Oulu, Finland.

Maija-Leena Huotari

Professor, University of Oulu, Finland.

Patterns of Gender Differences in Health Information Behaviour and Body Mass Index (BMI): Findings from a Finnish Population-Based Study

BACKGROUND: Although general public health and well-being among the Finnish population has improved during the last decade, the disparities in health between men and women have not decreased to any significant extent. E.g., in the year 2000, the life expectancy at birth of females exceeded that of males by 6.9 years (81.0 versus 74.1 years); in 2009 the corresponding number was 6.7 years (83.2 versus 76.5 years). Thus, in spite of a substantial growth of life expectancy in general, the gender gap had decreased by merely 0.2 years.

OBJECTIVE: To shed light on how gender affects health information behaviour in different age groups. The paper will also explore the relationship between Body Mass Index (BMI) and gender in different age cohorts (18–35, 36–50, 51–65).

MATERIAL AND METHOD: The material consists of data procured via a postal survey, which in the spring of 2009 was posted to a representative sample group consisting of 1500 Finnish citizens aged 18–65 years. The response rate was 46%. The statistical analysis consists of F-tests for means and cross tab-analyses (chi-square).

RESULTS: Gender is a strong predictor of health information behaviours. Women were significantly more interested in health related information and, e.g., more attentive to monitor and gather information on potential worldwide pandemics than men. Furthermore, women in all age groups were far more active health information seekers and attentive to how the products they buy affect their health. The frequency of those who gained health related information from relatives and friends/workmates was also significantly higher among women than men, whereas the mean BMI of men was significantly higher than that of the women in all age cohorts.

CONCLUSION: Gender plays a crucial role in health information behaviour patterns and needs to be taken into account when designing health promotion/intervention programmes and activities. The gender gap in health information behaviours should be taken into serious

consideration, in particular, in the prevention work of lifestyle-related diseases (e.g. obesity).

Alexander Ellert

Ph.D. Student, University of Hamburg, Germany.

Oliver Urmann

University of Hamburg, Germany.

How Should the Market for Managed Care Be Organized?

Due to demographic change and the rapid technological progress in medicine the long run financial viability of a best possible medical care cannot be ensured. Hence, the relevance of differentiated managed care programs (e.g. access to certain physicians networks) is increasing. The question arises how the market for managed care programs should be organized. In order to give a policy recommendation to the government the competition and its implications need to be analyzed. We investigate the competition of health care companies in a theoretical framework, where the firms can choose different qualities for their managed care programs. The firms are either output maximizing nonprofit sickness funds or profit maximizing private health insurance companies, facing variable costs of quality improvement in a business that has to be self-financing. We examine market equilibria and show that in the mixed competition the firms differentiate and the private health insurance company is the high quality provider. Compared to the social optimum the nonprofit sickness fund provides a too low quality while the private health insurance company provides almost the optimal quality but takes a high mark-up. Our welfare analysis shows that the market should be privately organized. This result remains valid if the firms can collude.

Katayon Esmaeili

Professor, Kermanshah University of Medical Sciences, Iran.

Farah Safei

Kermanshah University of Medical Sciences, Iran.

Reza Pourmirza-Kalhory

Kermanshah University of Medical Sciences, Iran.

Incidence of Abuse by Family and Caregivers in the Aging Male Population in Kermanshah, Iran (2010)

Introduction: As medical service quality is rising, fatality rate is declining. The population of the world, including Iran, is aging. Our study focuses more specifically on family/caregiver mistreatment and abuse toward the elderly. There are no statistics on elderly abuse in third-world countries, but in Iran, there are few studies on elderly abuse; recently, it has become a topic of interest in the scientific community. The aim of this study is to obtain the rate of mistreatment and abuse, and to compare the rate of incidents to the individual differences in the elderly in the city of Kermanshah in Iran.

Materials & Methods: This is a descriptive cross-sectional study done in 2010 on a randomly selected group of 135 patients, male and female, registered in the Imam-Reza Hospital of Kermanshah, Iran. The subjects were selected out of a poll of volunteers. Requirements for the subjects included being in decent physical health, in decent psychological state, and capable of responding to the questionnaires. A four part questionnaire was used, and data were gathered using SPSS software, analyzed by Chi-Square and ANOVA.

Findings: Of the 135 subjects of the original study, 64 were male. The information in the present study is obtained from the male subjects alone. During the course of the study, the average age of the participants was 73 (age ranged between 60 and 99 years old) and 90% of the participants were married. Our findings showed that 94.1% of the participants reported experiencing financial abuse within the past year, and 5.9% experienced such abuse within the past month. All the subjects reported experiencing some amount of physical abuse within the past year. However, patients with better financial status, as well as patients with more advanced age, experienced higher amounts of financial abuse ($P=0.012$); the other patients expressed having more emotional abuse.

Conclusion: This study revealed that 5.9% of the subjects experienced some sort of abuse from their family caregivers within the month prior to the study. Men with better financial status were

It is essential to develop a socially constructed and culturally based plan specifically for the elderly population in order to insure a healthy, more meaningful later stage in life. The plan should offer a variety of support and services that should be given to personnel including, but not limited to, caregivers, geriatric nurse practitioners, and geriatric care physicians. These groups should work together in order to benefit the elderly uniformly around a country to insure the elderly that they will receive proper service regardless of their location. We suggest such a plan to be based on standard existing models that are both largely used and successful.

Mario Garcia-Molina

Professor, National University of Colombia, Colombia.

Liliana Chicaiza-Becerra

Associate Professor, National University of Colombia, Colombia.

Tamoxifen vs. Aromatase Inhibitors for Breast Cancer in Risk Groups: Cost Effectiveness for Colombia

A cost-effectiveness analysis was conducted comparing tamoxifen and aromatase inhibitors (Anastrozol and Letrozol) in treatment of hormone receptor-positive, post-menopausal early breast cancer patients in risk groups (tumors larger than 2 centimeters and ganglia). Effectiveness was defined as disease-free survival. By means of a Markov model we estimated the cost effectiveness of Tamoxifen alone for 5 years vs. Aromatase inhibitor. The model included the adverse events of both drugs. The perspective for costs was the society's one, including all direct medical costs. Unlike economic analyses performed for developed countries, the Tamoxifen therapy is cost effective in the Colombian case, due to the country's lower ability to pay and the relative prices of aromatase inhibitors.

Margarita Gerouki

Researcher, Helsinki University, Finland.

Nikolaos Manesis

Educational Counsellor, Prefecture of Achaia, Greece.

HIV / AIDS Education for Young People in Greece: Needs and Challenges

This paper presents and discusses the areas of concern and the topics of interest of upper secondary students in Greece relative to HIV/AIDS.

Data collection was based on a needs assessment approach for planning health education interventions, which at the moment are limited and rather fragmented within the Greek educational context, as this work also discusses. In 2007 a number of upper secondary students attended a presentation about HIV/AIDS from a group of experts in their schools. At the end of the presentation students were prompted to write down anonymously their questions, considerations or any other relative issue to the topic of the presentation.

Here we briefly present the program and the context it has been implemented. Then we explore in depth students' responses. First, we categorise the responses according to the three components of sex education, namely: knowledge, skills, and values. Then we use a thematic analysis approach to examine them. As we discuss, students in Greece pose a number of questions and particular themes can be highlighted while examining those. These refer for example to basic knowledge around contraception; to a number of misconceptions about the virus; to more value laden concerns such as discrimination of HIV carriers.

Our aims in this research is primarily to investigate areas of students concern as well as gaps in their knowledge in order to propose the development health education implementations in the future.

Research shows that evidence based educational implementations have more possibilities to meet their aims and goals. HIV/AIDS is a matter of concern in most populations. Data from Greece shows an alarming increase over the years in both HIV/AIDS infections and / or cases, thus making the need for educational interventions even more apparent.

Dorota Zdanowska Girard
Lecturer, University of Nantes, France.

Economic Evaluation of Recommended Immunization Policies: The Application to Pertussis and Measles

The aim of this study is to quantify the impact of a potential modification in vaccination coverage on the incidence of each disease, and to evaluate direct and indirect costs connected with the application of highly recommended vaccination programs for pertussis and for measles.

A two-step procedure is carried out. Firstly, we applied the ARIMA transfer function intervention model to analyse epidemiological data of pertussis and measles in England and Wales for the period 1970-2009. For each disease we examine the relationship between the level of vaccination coverage and the number of reported cases. The expected number of cases related to particular vaccination coverage was forecast using the parameters of the model fitted respectively to the data of pertussis and measles.

Secondly we performed the economic evaluation of the cost of vaccination programs at various vaccine uptake rates. The 94% rate for pertussis and 85% rate for measles, currently observed in England and Wales, were considered as the basic immunization strategies. These were separately compared to programs fixed at 90%, 95% and 98%. The cost of each program for pertussis and for measles was assessed on the basis of the costs of expected morbidity and mortality due to the disease, and the costs of vaccination and adverse reactions associated with vaccines. The costs were investigated in relation to estimators of the price of vaccine, the value of a child's life and levels of vaccination rate.

We apply the criterion of minimization of the total social cost of pertussis and measles infectious and that of maximization of the total social net benefit to find out if the highest vaccination coverage, close to the level of 98%, is the best cost saving non-compulsory immunization strategy.

Julia Graf

Research Assistant, DICE University, Dusseldorf, Germany.

The Effects of Rebate Contracts on the Health Care System

Group Purchasing Organizations (GPOs) increasingly gain in importance with respect to the supply of pharmaceuticals. GPOs are founded in order to increase the bargaining power of small buyers. GPOs frequently use multiple or exclusive rebate contracts to exercise market power. Although this may be justified, the effect of these rebate contracts on overall welfare is unclear. The question is whether or not exclusive rebate contracts lead to decreasing consumer surplus due to a reduction in product variety. This paper aims to study the effects of both kinds of rebate contracts on consumer surplus and on firms' profits.

We use a Hotelling duopoly model with two manufacturers located at the opposite ends of a unit interval, serving consumers with linear transportation costs. The consumers are all part of one GPO and originally served by one pharmaceutical manufacturer. In case they want to change the provider, one fraction of GPOs' members incurs low switching cost while the remaining fraction faces high switching costs. The introduction of quantity rebates and the possibility for the GPO to conduct either multiple contracts (with both pharmaceutical firms) or exclusive contracts (with just one firm) affect consumer surplus and firms' profits.

As expected, pharmaceutical manufacturers strictly prefer multiple contracts over exclusive contracts as exclusive contracts induce fierce competition.

However, we find that both multiple and exclusive contracts lead to highest consumer surplus in some cases. Which contract form maximizes consumer surplus depends on the proportion of consumers with low switching costs. If this proportion is sufficiently large, total consumer surplus increases with exclusive contracts. If a certain proportion of low switching cost members is not reached, multiple contracts increase consumer surplus. This is due to the trade-off between the higher amount of total rebates granted, reached by exclusive contracts, and product variety, secured by multiple contracts.

Sam Harper

Assistant Professor, McGill University, Canada.

Erin Strumpf

McGill University, Canada.

Scott Burris

McGill University, Canada.

George Davey Smith

McGill University, Canada.

John Lynch

McGill University, Canada.

The Effect of Mandatory Seat Belt Laws on Socioeconomic Inequalities in Seat Belt Use

Previous research suggests individuals of lower socioeconomic position are less likely to use seat belts, putting them at increased risk of motor vehicle injury and death. The contribution of mandatory seat belt laws to social inequalities in seat belt use is unknown, but may plausibly widen inequalities if disadvantaged individuals are less likely to respond to legislation. We investigated the effect of passing mandatory seat belt laws on socioeconomic differences in seat belt use among adults ages 25 and over using US microdata from 1984-2008 (n=1,371,733). We identified the effect of legislation using a difference-in-difference model based on state differences in the timing of the passage of mandatory laws, and controlling for state and year fixed effects, age, race, gender, ethnicity, household income, marital status, and other behavioural risk factors. Overall we find that mandatory laws reduce socioeconomic differences in seat belt use, and the marginal effects on the socioeconomic gradient were substantial. Our results imply that a state moving from no law to the strictest law reduced the difference between low and high education groups in the probability of not always wearing seat belts from 21.3% (95% CI: 13.5, 29.1) to 8.0% (95% CI: 4.6, 11.4). For low and high income groups the corresponding decline was from 12.0% (95% CI: 5.1, 18.9) to 1.0% (95% CI: -2.6, 4.7). We did not observe similar results for other groups typically at-risk of inadequate seat belt use such as men, heavy alcohol users, and smokers. Results were robust to different model specifications and additional factors that could plausibly have been changing with seatbelt laws (drunk driving laws, speed limits, lagged motor vehicle rates). The adoption of mandatory seat belt laws improves both population levels and socioeconomic differences in seat belt use.

Edgar Huang

Associate Professor, Indiana University, USA.

Chiu-Chi Chang

Associate Professor, Shippensburg University, USA.

Interactive E-health Tools on U.S. Hospital Web Sites

E-health, a combination of interactive information technology and healthcare business management, has been discussed for a decade. Its benefits from cost saving to users' easy access to health records, have been evangelized and touted; its real-world application in some hospitals have resulted in tangible fruit. Nevertheless, physicians' habitual practices, concerns about invasion of their autonomy, and high cost have deterred many healthcare institutions from implementing e-health on their Web sites. As of today, no comprehensive data have ever been collected to show to what extent e-health has been implemented in the U.S. healthcare systems. It is not clear whether, for most U.S. hospitals, e-health is still staying on the blueprint stage or is being practiced, and if practiced, what has been done. This study attempts to answer three research questions:

1. What user-related interactive tools are U.S. hospitals using today to conduct business online?
2. How are the interactive tools designed to meet users' needs?
3. What kinds of hospitals are taking advantage of these tools?

A systematic probability sample of 765 sites were drawn out of the 6125 U.S. hospital Web sites for a content analysis of the following interactive features:

1. Finding a physician by type, specialty, and location
2. Making doctor's appointment
3. Accessing patient medical records
4. Paying bills
5. Ordering prescription refills
6. Inpatient/outpatient pre-registration or registration
7. Purchasing gifts for a loved one being hospitalized, ordering new baby's photos, or generating patient greeting cards electronically
8. Getting interactive patient education or taking a health risk assessment
9. Interacting with others in a support group or a chat room
10. Functional interactive features, such as Google Search, Google Maps, RSS feed, and feedback forms

The purpose of this study is to provide empirical evidence for strategic planning regarding e-health development in U.S. hospitals.

M. Kamrul Islam

Senior Researcher, Stein Rokkan Centre for Social Studies, Norway.

Tor Helge Holmas

Senior Researcher, Stein Rokkan Centre for Social Studies, Norway.

Egil Kjerstad

Senior Researcher, Institute for Research in Economics and Business Administration, Norway.

Long Term Care Services and Hospital Length of Stay in Norway: A Quantile Regression Analysis

In Norway, the organization of primary healthcare and long term care services is the responsibility of the municipalities, while providing hospital services is the responsibility of the state. There may have potential countervailing incentives between hospitals and the home municipalities to elderly inpatients in terms of length of stay (LOS), and given an activity based payment system, the risk of bed blocking is not only a risk of high costs but also a risk of foregone additional earnings for the hospitals. This paper aims to analyze whether the capacity and quality of the long term care services at municipalities influence hospital LOS. The data set was constructed by merging patient, hospital, and municipality data from four different data sources for the period 2000 to 2009. We use simultaneous quantile regression (QR) techniques to study how different quantiles of the LOS may be affected differently by the certain municipality characteristics. Controlling for hospital and time fixed-effects, our analysis shows that individual and municipality factors have significant influence on hospital LOS. For example, patients that are transferred to a nursing home have considerably longer LOS than others; a strong positive effect if there is a hospital located in the patient's home municipality or if the patient comes from an urban municipality. The capacity (e.g. recipients of home care services 80 years and over) and quality (e.g. physician hours per week per residents in nursing homes) indicators of the long term care services at municipalities have significant influence on hospital LOS, however, with different magnitudes and directions, depending on the location of the distribution of hospital LOS. The quality indicator seems negatively influence the hospital LOS both top (90th, 95th) and bottom (25th) quantiles, but the capacity indicator seems to be positive and significant for the bottom, but rather trivial for the top quantiles.

Upali Jayasinghe

Senior Research Fellow, University of New South Wales, Australia.

Mark Harris

Professor & Executive Director, University of New South Wales,
Australia.

Quality Of Life of Australian Chronically-Ill Adults: Smoking Has More Effect on Females than Males

Background. To study the differences in prevalence of smoking and its impact on health-related quality of life (HRQOL) among subgroups of patients by gender, age, income (home and car ownership), education, employment, marital status, number of chronic diseases, satisfaction with care, practice size and practice location.

Methods. Cross sectional study with 60 general practices and 2358 type 2 diabetes and hypertension/ischaemic heart disease patients aged 18 years or more using standard SF-12 version 2. SF-12 physical component score (PCS-12) and mental component score (MCS-12) were derived using the standard US algorithm. Multilevel regression analysis (patients at level 1 and practices at level 2) was applied to relate PCS-12 and MCS-12 to smoking and other patient and practice characteristics.

Results. In Australia 17.7 % of women and 21.1 % of men were classified as current smokers. Consistent with other studies we found that smoking is higher prevalence among younger or middle age and there is a clear socio-economic gradient with smoking. For example, those who live in low-income households, are unemployed, are single, separated, widowed or divorced, and have low levels of education were more likely to be current smokers. There were no significant associations between lower PCS-12 or MCS-12 score and smoking status except for female smokers who were more likely to have worse mental health. This study provides the comprehensive data on how smoking status interacted with gender in predicting mental health of chronically-ill patients in Australia after adjustment for other important confounding factors and cluster effect using multilevel analysis.

Conclusions. This study documents for the first time the impact of the smoking on HRQOL using SF12 version 2. The results show chronically-ill female smokers reported poorer mental health than male smokers.

Asha Khillare

Associate Professor, MES Garware College of Commerce, India.

Expenditure on Social Services for Urban Poor of Pimpri-Chinchwad Municipal Corporation, Pune, India

Introduction:

Local bodies can contribute more effectively in the development process and provide the citizens with better living conditions. Local Government can directly improve social and economic condition through local finance. . Hence this paper tried to analyze its allocation of expenditure on social welfare activities.

Objectives:

1. To study pattern of expenditure of Pimpri-Chinchwad Municipal Corporation (PCMC) on social services contributing social determinants of health for urban poor.
2. To analyze trends of revenue expenditure and capital expenditure on social services.
3. To compare allocation among different social activities.

Methodology:

This study is based on secondary data collected from Annual Budgetary documents and Audit Reports of PCMC. Simple statistical tools are used for the purpose in hand. The study period is confined to 5 years (2004-05 to 2008-9).

Observations:

Social services like Slum Improvement and Rehabilitation, Women and Child Development Project, Integrated Child Development Programme, Labor Welfare and Urban Community Development Scheme are social determinants of health. Of the total expenditure (Capital and Revenue expenditure) on social services, PCMC spent 53.52 percent on Women-Child Development Project, 34 percent on Slum Improvement and Rehabilitation, 9.53 percent on Urban Community Development Scheme, Labor Welfare 2.93 percent and 0.01 percent on Integrated Child Development Programme. The Revenue expenditure of PCMC on an average 72.86 percent is relatively more than Capital expenditure that is 27.14 percent. It is also to be noted that PCMC spent a large proportion of amount on establishment (70.22 percent) than on actual services like public toilet cleanliness expenditure (18.99 percent), urban poverty alleviation Scheme (6.74 percent) etc.

Conclusions:

Recurring expenditure of PCMC exceeded capital expenditure which needs to be rationally allocated. Urban health policy should

consider rational allocation of funds on social activities for urban poor. Local government can contribute in poverty eradication effectively by proper allocation of funds on social services.

Nicholas King

Assistant Professor, McGill University, Canada.

Health Justice, By the Numbers: Why the Choice of Measure Matters in Policies to Reduce Health Inequalities

Quantitative estimates of the magnitude, direction, and rate of change of health inequalities play a crucial role in creating and assessing policies aimed at eliminating the disproportionate burden of disease in disadvantaged populations. It is generally assumed that the measurement of health inequalities is a value-neutral process, providing objective data that are then interpreted using normative judgments about whether a particular distribution of health is just, fair, or socially acceptable. We discuss three examples in which normative judgments play a role in the measurement process itself, either through selection of one measurement strategy to the exclusion of others, or the selection of the type, significance, and weight assigned to the variables being measured. We find that many commonly-used measures of inequality are value-laden, and that the normative judgments implicit in these measures have important consequences for interpreting and responding to health inequalities. Because values implicit in the generation of health inequality measures may lead to radically different interpretations of the same underlying data, we urge researchers to explicitly consider and transparently discuss the normative judgments underlying their measures. We further urge policymakers and other consumers of health inequalities data to pay close attention to the measures upon which they base their assessments of current and future health policies.

Martyna Kobus

Ph.D. Student, Warsaw University, Poland.

Piotr Milos

Warsaw University, Poland.

Inequality Decomposition by Population Subgroups for Ordered Response Data

While measuring inequality we are typically interested in the dispersion of inequality values with respect to sex, race, gender, age, education level etc. Such information is of tremendous importance for policy, because it enables policymakers to target particular inequalities most effectively. Therefore decomposition by population subgroups is considered a highly desired property of inequality indices. In terms of standard inequality theory decomposition was developed by Shorrocks (Econometrica 1980, 1984). Yet conventional mean-based indices are not well-suited for ordered response data such as for example selfreported health surveys (Allison and Foster, JHE 2004); hence inequality indices were proposed that account for the nature of the data (Naga, JHE 2004). The problem of decomposability has not been considered. This paper fills this void by presenting the class of decomposable indices for ordered response data. We say that an index is decomposable if it can be decomposed into some function of inequality values in subgroups and subgroup sizes (and possibly a scale, that is, numerical values assigned to health categories). This class is also characterized by standard axioms of inequality measurement theory, namely continuity, normalization (inequality values are between zero and one), scale invariance (invariance of an index with respect to proportional changes) or scale independence. With scale independence the functional form of an index is very easy since it is a weighted sum of frequencies in particular health categories. We apply our methodology to Swiss health survey. Population subgroups are seven statistical regions of Switzerland. Depending on the vector of weights health inequality in Switzerland is between 0.35 and 0.43; contribution values almost do not change with respect to weights. Middle Land contributes the most (23 percent) and Ticino the least (9 percent). Contributions reflect population sizes because of the similarity of health status distribution Swiss among regions.

B. Suresh Lal

Associate Professor, Kakatiya University, India.

Sanitation Facilities and Health Economics: A Study on Spending Pattern and Quality of Life of Indian Rural Women

Background: The safe drinking water supply and basic sanitation facilities are vital human needs for good health and efficiency. All the ill-health and waterborne diseases causes for death in developing countries including India are attributed to the lack of these essentials. About 30,000 people die every day in the world due to unsafe water consumption and insufficient sanitation facilities (WHO). Tens of millions of women spend half of their day walking under hot sun, to carry home polluted drinking water, which poisons their health and their families' health too. The status of sanitation in rural areas is even worse than the water supply scenario. Further, more than 82 percent of the rural villages and houses are not connected with proper drainage and toilets facilities in India. It is observed that, the toilets are not available for close to 50 per cent of the semi-urban and 80 percent of the rural population in India.

Objectives: The paper focuses the effects of sanitation facilities on women's health conditions, to examine people open defecation patterns, to identify the factors responsible for poor sanitation facilities in the rural areas and also to identify women's spending pattern, problems and quality of life in the rural areas.

Findings and Discussion: The study find out that major reasons for the persistence of communicable diseases are non-health determinants such as unsafe drinking water, environmental pollution, poor sanitation, open defecation and lack of hygiene. Outbreaks of communicable diseases continue to pose a major challenge for public health in India. The 80 percent incidence of diarrhoea, malaria, cholera, Japanese encephalitis, yellow fever, dengue fever, sleeping sickness, filariasis, hepatitis occurs and other water-related vector-borne diseases are transmitted by mosquitoes, tests flies in large numbers year after year in the study areas. In the study areas open defecation nearby roads, riverbeds and canal banks is still prevalent. Most of the women generally go for defecation either early morning before 6 AM or night after 6 PM as a result they are exposing to poisonous insects bites, women abuse and it is one of the main causes for many dreaded diseases. Thus, Indian rural women losing their quality of life and increasing their spending on medical treatment, thereby they are leading pathetic/ miserable life.

Agnese Lazzari

Ph.D. Student, Catholic University of Sacred Heart, Italy.

Paola Galli

Catholic University of Sacred Heart, Italy.

Emma De Feo

Catholic University of Sacred Heart, Italy.

Ferruccio Pelone

Catholic University of Sacred Heart, Italy.

Antonio Giulio de Belvis

Catholic University of Sacred Heart, Italy.

Maria Lucia Specchia

Catholic University of Sacred Heart, Italy.

Mariarosaria Gualano

Catholic University of Sacred Heart, Italy.

Walter Ricciardi

Catholic University of Sacred Heart, Italy.

Promoting Valued and Integrated Healthcare: Defining and Implementing Program Budgeting Marginal Analysis in Italy

Background

The new millennium challenges have shifted the focus from medical dominance, technical efficiency and allocative efficiency to a citizens-centred care oriented to create value.

The changing context has put much pressure over Italian decision-makers, urging to set top priorities to be met using clearer, evidence-based methods of resources allocation. Nowadays, planning and priority setting at macro level are determined on Essential Benefits Packages (LEA) requirements and policies are still focusing on the bureaucratic dimension of services delivery, hindering better value and integrated healthcare.

The purpose of the present project is to analyze, define and apply PBMA to the Italian healthcare context, on footprints of the English NHS experience, to (1) support and inform decision maker's and citizens' choices, (2) guarantee resources to be optimized and (3) public health needs to be satisfied within integrated system, network and pathways of care.

Methods

PBMA maximizes the impact of healthcare resources on the population needs, integrating both clinical and economical criteria/outcome. Programs of care on epidemiological and financial priorities (i.e. female cancers) will be selected. An accurate feasibility plan, considering data availability and cultural obstacles, will be edited

and pilots launched to exercise a PBMA model practicable and repeatable. Expenditures will be connected to each program budget category and related to outcome data. A map, aimed to (1)strengthen the link between the economical and outcome performance and(2)better understand where public investments/resources are and with what benefits/returns, will be produced.

Results

Panel of consultants will be trained to daily follow PBMA. Guidelines to guarantee its successful implementation will be edited. Easy-friendly tools for communicating results and improvements will be provided.

PMBA can produce better integrated healthcare, allocating resources on the entire pathway of diseases management. Shifting resources from a health program to another will be more feasible and transparent, seeing marginal effects in re-allocating resources in different services which need to be improved to add them value.

Raymond Lee

Professor, University of Manitoba, Canada.

Bosu Seo

University of Manitoba, Canada.

Brenda L. Lovell

Research Affiliate, University of Manitoba, Canada.

A Meta-Analytic Examination of Burnout Correlates in Nurses

Aim

Inadequate working conditions are linked to global nursing shortages. Our aim is to examine how emotional exhaustion (EE) and depersonalization (DP) are associated with work environment drivers and constraints in nurses around the world.

Method

Using the words “nurses” and “burnout” in our database search, we found 50 studies that covered 27 drivers and constraints. The sample r was corrected for measurement unreliability after all effect sizes were converted to r 's. We then computed the corrected weighted mean correlation (ρ_c).

Results

The ρ_c 's of the work engagement drivers with EE ranged from -.30 for feedback to -.65 for adequate resources; the ρ_c 's with DP ranged from -.21 for congruent values to -.50 for adequate resources. The ρ_c 's of the work engagement constraints with EE ranged from .18 for inadequate resources to .54 for workload; the ρ_c 's with DP ranged from .21 for position-specific demands to .46 for inadequate skills.

The ρ_c 's of the health and safety drivers with EE ranged from -.27 for teamwork to -.64 for professional support; similar ρ_c 's with DP were found. The ρ_c 's of the health and safety constraints with EE were .35 for incivility/violence and .53 for poor health symptoms; the ρ_c 's with DP were .44 and .46, respectively.

The ρ_c 's of work attitude drivers were -.54 with EE and -.49 with DP. The ρ_c 's of the work attitude constraints were .47 with EE and .51 with DP.

The ρ_c 's of adaptive coping with EE ranged from -.20 for social support to -.30 for internal/problem-focused; similar ρ_c 's with DP were found. The ρ_c 's of external/emotion-focused coping were .41 with EE and .42 with DP.

Conclusion

Future policies should reduce workloads, provide adequate resources and support, as well as promote a respectful climate. These

interventions will reduce burnout, and improve well-being, job satisfaction, and professional commitment.

Sophia Leon de la Barra

Research Fellow, University of Otago, New Zealand.

Sally Redman

CEO, Sax Institute, Australia.

Sandy Eades

Professor, Baker Institute, Australia.

Carey Lonsdale

Researcher, NHMRC, Australia.

Building Research Capacity for Indigenous Health: An Australian Case Study of Research Funding Allocation in Policy & Practice

Background: Since entering as a partner into the tripartite agreement with Canada and New Zealand, Australia has rearticulated its policy perspective to reiterate the importance of strengthening research practices and building research capacity among Aboriginal and Torres Strait Islanders. How have these policies influenced and shifted health research expenditure over time? This paper examines the policy climate and practicalities of building Aboriginal health research capacity in Australia.

Methods: A decade of successful research funding applications were reviewed and evaluated for the following research capacity indicators: total annual expenditure on Aboriginal health, total annual expenditure allocated to researchers who identify as Aboriginal & Torres Strait Islander, the distribution of intervention-based studies; engagement of Aboriginal community members and organisations in the research project; and the participation of Aboriginal researchers.

Results: Four years after the policy landmark to allocate 5% of research funding, about 2.9% of the annual expenditure on all People Support funding was for Aboriginal health research. Through main-stream funding models, there was no increase in expenditure for researchers who self-identify as Aboriginal & Torres Strait Islander. Fifty-five percent (55%) of main-stream funding recipients failed to engage Aboriginal community members consistently in research development and implementation. An alternative funding stream based on a collaborative mentoring model was more successful at engaging Aboriginal community members; this alternative funding model allocated research funding to more than twice as many researchers who identify as Aboriginal & Torres Strait Islander.

Conclusions: While significant policy changes occurred from 1997 to 2002 to better support Indigenous health research in Australia, there remains a need for further evaluation and reform to optimise research outcomes for Aboriginal & Torres Strait Islander people. There is

considerable opportunity to learn from experiences in Australia and internationally to develop policy & research funding models that better support health researchers from Indigenous backgrounds.

Pranee Liamputtong

Professor, La Trobe University, Australia.

Niphattra Haritavorn

La Trobe University, Australia.

Niyada Kiatying-Angsulee

La Trobe University, Australia.

Living Positively Discourse and Thai Women Living with HIV/AIDS in Central Thailand

The HIV/AIDS epidemic has entered its third decade, and continues to be a major public health problem worldwide. It has now tremendously affected women around the globe. In Asia, the AIDS epidemic continues to grow, and at the end of 2005, the number of women living with HIV was estimated at 2 million. Thailand is one of the Asian countries that have been hit hard by the epidemic of HIV/AIDS.

Living with an incurable illness such as HIV/AIDS is a stressful experience. Culturally, HIV in Thai society is still perceived as a “death sentence”. As physical and moral appearances are important in Thai society, shame is experienced by Thai people infected with HIV/AIDS. The continuing high rates of HIV/AIDS and the shame and stigmatisation attached to the epidemic are due mainly to inadequate understanding of the infection and its transmission among Thai people.

However, many HIV positive individuals are able to maintain their emotional well-being. This begs the question of what strategies these individuals employ to allow them to do so. In this paper, I examine how Thai women living with HIV/AIDS learnt about their health status, what feelings they have, and how they deal with the illness. In-depth interviews were conducted with 26 women in central Thailand. The women adopted several strategies to deal with their HIV status including taking care of own self, accepting one’s own faith (*kam*), disclosing their HIV status to family and joining AIDS support groups. These strategies can be situated within the “living positively” discourse which helps to create a sense of optimism to combat the HIV epidemic among the women. Additionally, the acceptance of their HIV status plays an essential role in the meaning making process, as it assists the women to sustain the equilibrium of their emotional well-being. The findings of this study have implications for health service management and policy for women living with HIV/AIDS in a resource-poor nation like Thailand and elsewhere. For many individuals, in particular those who lack or have limited access to sufficient health care, adopting

positive living advice offers a possible means to change the course of HIV/AIDS.

Dan Liu

Ph.D. Student, Bonn University, Germany.

Daniel Tsegai

Bonn University, Germany

Heterogeneous Impact Evaluation of the New Cooperative Medical Scheme in Rural China

Objectives To settle illness-led poverty and the poor state of healthcare in rural China, since 2003, Chinese government introduced a heavily subsidized voluntary health insurance named New Cooperative Medical Scheme (NCMS) for rural residents. This paper explores determinants for enrollment and estimates the exposure impact of NCMS on its beneficiaries, and in the process to contribute to an analysis of program heterogeneity impact on distinct income groups and intra-household resources allocation.

Methods To effectively measure impact in observational study, propensity score matching method and with difference in differences are used to infer the causal effect of NCMS. China Health and Nutrition Survey data (CHNS) is adopted to provide prolific cross section and longitudinal information respectively on demand and supply side. A total sample of 13,589 individuals and 4,842 households are included in the analysis.

Results Results indicate that there is no systematic adverse selection in NCMS' enrollment. The NCMS has limited efficacy for recipients to improve medical service utilization and little impact on reducing medical expenditures. Contrary to the very purpose of the NCMS to some extent, the rich benefitted more from the NCMS than the poor contributing to the fact the poor subsidize. The welfare is distributed towards to the rich with the development of NCMS. There is also little evidence reveal that the NCMS helpfully provide more resources to low-productive members such as children and old people.

Conclusions The findings suggest that improving equity and benefit package of the NCMS might enhance welfare of the program and efficiency in using of public funds.

Graeme Lockwood

Senior Lecturer, King's College London, UK.

Disability Discrimination and Mental Health Litigation in Britain 2005-2011

Background

In Britain, Disability Discrimination first entered the legal landscape in 1995. The Disability Discrimination Act, passed by Parliament in 1995 and amended in 2001 and 2005, covers people in Britain with physical or mental impairments that have a substantial and long-term adverse effect on their ability to carry out normal day-to-day activities. Discrimination on the grounds of mental health is common in the labour market and action is necessary reduce discrimination by employers (only 37% of employers in 2001 reported that they would employ someone with a mental health problem for example; [Bunt *et al*, 2001](#)). Since 40% of those on incapacity benefit have a mental health problem as their primary impairment – rising to 60% if secondary impairments are included (HM [Government, 2006](#)) – the issue of rights to inclusion of people with mental health conditions has suddenly moved from the periphery of disability rights policy to a central position in employment policy. The extant research has established beyond doubt that widespread discrimination adds to the disability of people with mental illness. For example, a survey in 15 European countries showed that 87% thought that people with mental health problems or learning disabilities would have less chance of finding a job than anyone else (Eurobarometer 2003).

This research focuses on those with mental health problems and the difficulties they face in gaining access to the labour market, the problems of discrimination they face in employment and the nature of disability discrimination cases citing mental health discrimination that are brought to the Employment Appeal Tribunal (EAT). The paper explores the medical, organizational and legal context in which parties to claims are operating and presents a preliminary analysis of the population of mental health disability discrimination cases.

References

- Bunt, K., Shury, J. & Vivian, D. (2001) *Recruiting Benefit Claimants: Qualitative Research with Employers in ONE Pilot Areas* (Research Series Paper No. 150). Department for Work and Pensions.
- Eurobarometer, *Discrimination in Europe, For Diversity against Discrimination*, Brussels: European Commission 2003.
- HM Government (2006) *A New Deal for Welfare: Empowering People to Work* (Green Paper), The Stationery Office.

Brenda Lovell

Research Affiliate/Instructor, University of Manitoba, Canada.

Raymond Lee

Professor, University of Manitoba, Canada.

Steven Hladkyj

University of Manitoba, Canada.

Bosu Seo

University of Manitoba, Canada.

Laura Schwartzmann

University of Manitoba, Canada.

A Cross National Meta-Analysis of the Relationships between Medical Practice and Health Outcome Variables with Physician Burnout

Aim

The ability to meet the demands of medical practice impacts physician burnout. Our aim is to examine how emotional exhaustion (EE) and depersonalization (DP) are associated with work environment drivers, constraints, health and coping, among physicians around the world.

Method

Using the words “physicians” and “burnout” in a database search, we found 67 studies that covered 19 drivers and constraints, and 6 health and coping outcomes. The sample r was corrected for measurement unreliability after all effect sizes were converted to r 's. We then computed the corrected weighted mean correlation.

Results

For the work engagement (WE) drivers, autonomy was related to EE -.36 and DP -.24. For the WE constraints, workload was related to EE .66 and DP .36, and organizational structure was related to EE .45 and DP .47. The work attitude (WA) drivers (e.g., job satisfaction) were related to EE -.47 and DP -.36; the WA constraints (e.g., turnover intentions) were related to EE .46 and DP .32. For the health and safety (HS) drivers, quality and safety (e.g., patient-care satisfaction) was related to EE -.34 and DP -.35, and professional development was related to EE -.31 and DP -.18. For the HS constraints, incivility and violence was related to EE .41 and DP .51, and safety and quality (e.g., inadequate physical environment) was related to EE .42 and DP .34.

Work-life conflict was related to EE .49 and DP .34. Contributors to good health were related to EE -.32 and DP -.15; contributors to poor health were related to EE .62 and DP .34. Adaptive coping through social support was related to EE -.26 and DP -.21; ineffective coping was related to EE .32 and DP .24.

Conclusion

Future policies should address unmanageable workloads, as well as promote a safety climate. These interventions will reduce burnout, and improve physician health.

Kalevi Luoma

Research Chief, Government Institute for Economic Research, Finland.

Aki Kangasharju

Director, General Government Institute for Economic Research,
Finland.

Tero Tyni

Special Adviser, Association of Finnish Local and Regional Authorities,
Finland.

Marja Valta

Solution Director, Finnish Consulting Group, Finland.

**Productivity Change from 2008 to 2009 in the
Provision of Care of Elderly when Effectiveness of
Services is taken into Account**

According to Statistics Finland productivity in the provision social services has fallen on average by 1.5 percent a year between 2000 and 2008. These productivity estimates have been criticized for failing to take into account changes in the quality and effectiveness in the service provision. This paper measures productivity of elderly care units taking into account effectiveness of care. Effectiveness is measured as the effect of care units on the functional ability of the elderly receiving care. The study is based on two data sets. First, altogether 21 municipalities have submitted data on costs and output of their own production and of outsourced services. Second, the effectiveness of care is evaluated using the individual level data on so-called RAVA index, which describes the older person's need for care and nursing. Results for effectiveness of care are obtained by means of regression analyses where the dependent variable is the change in the RAVA index from 2008 to 2009. Results show that the estimate of productivity including effectiveness is 0.5 percentage points higher than that excluding effectiveness. Further, productivity including effectiveness is higher in the municipalities' own production than in services outsourced to private providers. Finally, care units having lower unit costs have lower effectiveness of care, suggesting that reducing unit costs come with a cost of lower effectiveness of care.

Allane Madanamootho
Researcher, IRDEIC, France.

Surrogate Motherhood in France: Does Denying Access to This Practice Contrary to the Right of Founding a Family?

Surrogacy is one among the great bioethical debates that raises major social, ethical and legal issues. Today, many countries have legalized or tolerate this practice in the world for pronatalist or infertility's equality reasons. This is true in most states in the U.S.A and Canada, the United Kingdom, the New Zealand, Israel, Russia, Ukraine, the Netherlands, Brazil, Argentina, South Korea, India, Australia, Iran or Greece. In France this practice is still forbidden on the basis of certain fundamental principles: the respect of human dignity, particularly the dignity of the woman who cannot be reduced to an instrument of gestation and that of the child who cannot be considered as a contract between adults, in line with the principle of non-commodification of the human body.

However, the French attitude can be subject to criticism since the law seems inconsistent with other principles such as the right to found a family or subject to discrimination compared to other medically assisted procreation practices. Indeed, on the one hand, the law enables and assists a woman who can carry on with the stage of gestation but not of ovulation by an egg donation. On the other hand the legislator denies another woman in the opposite situation. Also, regarding the unborn child's situation surrogate motherhood is as risky as when a child is born with an egg donation. Finally, it is even less disadvantageous since it will be possible to restore his history through a narration.

This research paper aims at showing the contradictions and discriminations that might exist between the major principles that regulate assisted reproduction under French law.

Simin Mashayekhi

Assistant Professor, Tabriz University of Medical Sciences, Iran.

Dorna Sheykhi

Pharm-D, Faculty of Pharmacy, Tabriz University of Medical Sciences, Iran.

Alireza Nikanfar

Associate Professor, Tabriz University of Medical Sciences, Iran.

Abasali Hoseinpur-Feizi

Associate Professor, Tabriz University of Medical Sciences, Iran.

Mohammadreza Sattari

Assistant Professor, Tabriz University of Medical Sciences, Iran.

Cost of Thalassemia Treatment in Iran

Health care funders are struggling to meet the rising costs of medical treatments. Thalassemia, a disease which needs lifelong therapy, is a costly disease. Our aim was to examine the economic burden of thalassemia treatment in Iran.

All thalassemic patients, registered in two hematology clinics of Tabriz were invited into our study, a non-interventional study. Those who consented were asked to complete a simple questionnaire.

100 patients took part in the study. The median age range was 14.25 ± 11.06 . The mean duration of diagnosed disease and its treatment were 11.50 ± 0.76 and 11.34 ± 0.75 . Total duration of diagnosed disease and its treatment in 100 subjects were 1149.74 and 1133.74 years, respectively.

The total cost of treating thalassemia was €1,730.52 per patient/year. The total annual direct cost of therapy (Transfusion, Iron chelating, Co-committed medications, Hospitalizations, Physician visits, Nursing, Laboratory/paraclinical tests and Instrumental tests) was €146,621.49 and indirect cost (Transportation, Hotel and Productivity losses) was €26,430.22 for 100 patients. Major cost was for blood transfusion (33.6%) and nursing charges (19.3%), which were paid by government. The disease and its treatments had caused educational fallback for 60% of subjects. Number of days in which patients or their parents missed work because of their treatment procedures was 130 days/month, which equaled to €11,040.12/year.

It is estimated that up to €26 million/year is spent for treatment of all registered thalassemic patients in Iran (€0.40 per Iranian citizen/year).

This study showed that a large amount of money is paid for thalassemia treatment by government and patients. Most of these patients were not in an appropriate financial state and there was a need for improvement in patients' work and education status. These

improvements will increase household income which is directly related to patients' knowledge on thalassemia which is positively correlated with follow-up visit and medication adherence.

Sara McCafferty

Research Associate, Newcastle University, UK.

Using Organisational Change Theory to Analyse Organisational Responses to Commissioning Policy in the NHS

Background

Commissioning, in the National Health Service (NHS) in England, is the process of ensuring that the health and care services provided effectively meet the needs of the population. Primary care trusts (PCTs) were created in 2002 and charged with a budget of (GBP) £76bn upwards, and have since been given the challenge of delivering best health care for patients and best value for money for taxpayers. The latest Health and Social Care Bill (2011), represents a radical change for the NHS and will transfer commissioning responsibility to GPs by 2013.

Aim

This paper uses organisational change theory to analyse organisational responses to commissioning policy change, in one case study site.

Methods

Three data collection points were used to gather information from one primary care organisation in the North East of England. The first collection point was winter 2009, prior to the introduction of the new Government, the second point was autumn 2010, post White Paper launch, and the third will be May 2011 following the release of the Health and Social Care Bill.

Directors and managers were recruited from the PCT site, the supporting strategic health authority, and clinicians involved in practice based commissioning, latterly GP commissioning. At each point a series of in-depth interviews were conducted with participants (n=12-15).

Semi-structured and free-text questions were used to explore commissioning processes and emerging policy aiming to identify the key behaviours, relationships, structures and contexts which underpin this function.

Interviews were audio-recorded, with participants' consent, transcribed and analysed. Analysis was subsequently used to develop a model of organisational change.

Results

This presentation will describe the analytical framework developed in this study, as well as an outline of the model for organisational behaviour change. These preliminary results will be shared in the context of emerging UK health care policy.

George Messinis

Senior Research Fellow, Centre for Strategic Economic Studies, Victoria
University, Australia.

Frontier Research in Medical Sciences by Greeks: Regional Disparities in Greece and Australia

Over the last 20 years, there has been an explosion of public interest in health and education in the OECD. Education and scientific research provide the backbone in medical innovation, health care and wellbeing. This article utilizes scientific bibliometrics data to examine research capacity and quality in life and medical sciences in Greece and Cyprus. The paper pays attention to regional disparities in Greece and makes an assessment of the performance of researchers of Greek background in four cities in Australia. The evidence shows that there are huge regional disparities in Greece and Greek-Australian researchers are leaders in medical sciences

Micaela Moreira Pinho

Professor, Universidade Lusíada, Portugal.

Anabela Botelho

Associate Professor, Universidade do Minho, Portugal.

Paula Veiga

Professor, Universidade do Minho, Portugal.

The Conflict between Efficiency and Equality in Health Outcomes: Determination of SWF Parameters

Introduction:

Priority setting in health care is a process of choice between alternative services and/or between patients or groups of patients. Traditionally, health economists have proposed maximizing the additional health gain measured in QALYs as a way of setting priorities and maximizing social welfare. The results of a literature review suggest that potential health gain is not a single relevant determinant of value. The social value of a health gain appears not to be linear in terms of mortality and morbidity, or neutral vis-à-vis people's characteristics or the ultimate distribution of health in society.

Objectives:

The operationalization of an efficiency-equity trade-off is plagued with numerous difficulties. Health economics have used a more general specification of the social welfare function, known as the CES_SWF, to explore the trade-off between equality and efficiency in health. The CES_SWF depends on the degree of society's aversion to inequality (r parameter) and the weight given to different groups for reasons unrelated to their health (α parameter). In this paper we intend to elicit Portuguese preferences over the equality-efficiency trade-off in health, and use these data to determine the parameters of the CES_SWF.

Methods:

To calculate the isoelastic SWF parameters we collect data from a convenience sample of 442 college students using a questionnaire. The survey includes three questions, designed and tested by international researchers, presented in graphical forms that allow the elicitation of individuals' preferences over maximising life expectancy and reducing inequalities in life expectancy between higher and lower socio-professional groups. The first question allows respondents to reveal their efficiency-equality trade-off in an anonymity context enabling the direct definition of the r parameter. The second question (similar to the first one) does not permit the definition of any parameters because respondents reveal their trade-off with the identification of the groups by socio-professional status. However, by combining the responses of

the median respondent to the two questions, it is possible to infer the value of the SWF parameters. The third question allows the identification of the α parameter.

Findings and Discussion:

From these inference procedures we conclude for the existence of aversion to inequality among population groups, and that existing deviations from anonymity promote the group more economically/socially disadvantaged.

Jay Pan

Ph.D. Candidate, Southwestern University of Finance and Economics,
China.

Xuezheng Qin

Southwestern University of Finance and Economics, China.

Gordon Liu

Southwestern University of Finance and Economics, China.

The Impact of Body Size on Urban Employment: Evidence from China

This paper tests whether body size affects employment status in the Chinese urban labor market. Based on Urban Resident Basic Medical Insurance (URBMI) survey data, we found that body size has an inverted U-shaped effect on the probability of being employed when human capital and other factors are controlled, indicating the existence of “body size discrimination”. Further studies show that the discrimination is most pronounced among people in their early career (age 18-30) and among obese females and underweight males. Based on our results, the optimal BMI for employment is estimated to be 20.1 for female and 24.7 for male. Our model also suggests that discrimination against female is partially based on “aesthetic channel”, while the male discrimination is mostly based on “health channel”. Furthermore, we found that the employment type (formal employment vs. informal employment) is also affected by body size. Our paper provides new evidence on the impact of body size on employment, and reveals new characteristics of the Chinese urban labor market.

Panos Papanikolaou

Research Fellow, Cardiff School of Nursing and Midwifery Studies,
Cardiff University, U.K.

**Applying the Economic Instrument of Experimental
Design to Investigate Nursing Decisions in
Community and the Wider Implications**

Sylvain Pichetti

Health Economist Research Fellow, Institut de Recherche et de
Documentation en Economie de la Santé, IRDES, France.

Explaining Price Discrepancies between Me-Too Drugs in France

The development of so-called “me-too” drugs by the pharmaceutical industry is highly controversial. It is considered by some as a way to provide more therapeutic options and to increase price competition while others argue that me-too drugs are duplicative and wasteful. For the latter, these market latecomers which do not differ significantly from earlier products add little to physician’s arsenal and only drive up the costs of health care.

The aim of this study is to analyse price discrepancies between me-too drugs in 36 different Anatomical Therapeutic Chemical (ATC) groups. In a given group, the price gap is measured by the difference between each drug and the first drug in the group. Each group only contains me-too drugs with strictly identical therapeutic indications.

The price variable is the Daily Treatment Cost which corresponds to the ratio of the price divided by the number of treatment days contained in the drug pack.

Higher innovation explains higher price. To take innovation into account, we build a cumulative index of innovation which reflects the total amount of innovation in each me-too group.

Innovative drugs show higher price discrepancies than non-innovative drugs. Furthermore, the price gap is higher for the first innovative drugs than for the followers. It is also higher in elder me-too classes. Other factors -price levels of the first in the class, presence of generic drugs, market shares- were also tested.

Christalla Pithara

Research Associate, Open University of Cyprus, Cyprus.

Current Knowledge on the Benefits and Disbenefits of Clinical Genetic Services from a CBA Perspective: Are New Methodologies Needed?

Clinical genetic services (CGSs) comprise a range of activities including genetic risk assessment, genetic testing, and genetic counselling. UK government investment into genetic services has generated concerns on the impact of such investments on funding for other services, bearing in mind that health care budgets are finite and so are resources for health care delivery. Decision-making should be based on comprehensive evaluations of CGSs, but recent reviews provide evidence that such evaluations are scant and do not take into account the full range of potential outcomes.

The majority of economic evaluations reported so far have been cost-effectiveness and cost-utility analyses. These techniques however do not address issues of allocative efficiency and insufficient evidence is available on the overall welfare impact from providing such services. The only way of assessing whether it is worth providing a service based on its overall costs and consequences is through a cost-benefit analysis (CBA).

A number of steps are required for conducting CBAs including detailed understanding of the intervention, programme or service to be evaluated, and knowledge of its overall costs and consequences. In the case of CGSs psychosocial consequences on the wider family are common, but consideration of these has been largely absent within the health economics literature. The questions that are posed are whether the existing knowledge of the consequences of CGSs is adequate for the design of CBA and whether the existing outcome measures available to health economists are suitable for capturing these psychosocial outcomes. Current knowledge is discussed and the need to introduce in health economics methodologies from other disciplines like health psychology is proposed.

Stella A. Quimbo

Professor, University of the Philippines, Philippines.

Carlos R. Tan

Researcher, UPecon Foundation, Philippines.

Orville C. Solon

Professor, University of the Philippines, Philippines.

Measuring Financial Protection by National Health Insurance Programs: Evidence from the Philippines

In the Philippines, the largest third-party payer of health care services is the National Health Insurance Program (NHIP). Although the NHIP reportedly covers 86 percent of the population, the Philippine National Health Accounts (PNHA) indicates that less than 10 percent of total health care expenditures are financed by NHIP. This huge gap between coverage rate and expenditure share can be explained by weaknesses in the rest of the benefit delivery chain, namely, eligibility of members for insurance benefits, availability of accredited health care providers, use of insurance benefits by sick eligible beneficiaries and finally, magnitude of insurance support.

In this paper, we propose a measure of financial protection provided by the NHIP that reflects the entire benefit delivery chain. The “benefit delivery rate” (BDR) incorporates information on the following operational parameters: (i) the extent of NHIP population coverage (NHIP coverage rate), (ii) the use of NHIP benefits by sick beneficiaries (NHIP availment rate), and (iii) the share of NHIP reimbursements to total charges incurred by sick NHIP beneficiaries who avail of NHIP benefits (NHIP support value).

We use data from the NHIP and national surveys to estimate national BDR and generate disaggregation by marginalized sectors (e.g., poor, children, women), and by geographical location (e.g., regions and provinces).

We argue that the BDR is a robust measure of financial protection by showing that the national BDR estimate approximates the proportion of NHIP payments to total health care expenditures estimated in the PNHA. We also test the viability of the BDR as a measure of local performance by examining variations in BDR across regions and provinces.

Our initial estimates show how relatively high NHIP membership is easily diminished by low availment rates and support values. We argue that the BDR can be used as a monitoring tool to help improve financial protection.

Gerald-Reparate Retali

Ph.D. Student, Telecom Bretagne, Institut Telecom, France.

Patrick Meyer

Telecom Bretagne, Institut Telecom, France.

Myriam Le Goff-Pronost

Telecom Bretagne, Institut Telecom, France.

Implementation of Remotely Monitored Medical Dialysis Units: Dealing with Multiple Criteria and Multiple Decision Makers

Objectives: The aim of this paper is to present a multicriteria evaluation methodology involving multiple decision makers for the establishment of remotely monitored medical dialysis solutions.

Methods: To reach a decision, the hospital director wishes to take into account various indicators identified in the literature (cost, accessibility, acceptability and quality), and the preferences of the physicians and the dialysis patients. In order to explicit these preferences, we suggest to consider that the patients and the physicians are decision makers which have to express a ranking of care modalities evaluated on multiple criteria. To solve this problem, we use techniques both from social choice theory and multicriteria decision analysis. First we propose to aggregate the individual rankings of the patients on the potential multicriteria care modalities into a patient-wide order, which is then used in the multicriteria preference elicitation phasis of the physicians. The individual rankings of the latter ones is then aggregated into a physician-wide ranking which is then combined with the patients' one and further economical criteria to elicit the hospital director's preferences on the care modalities.

Results: The preferences of all the stakeholders of this decision process are representable by additive value models. The preferred alternative among the patients and the physicians is the medical dialysis unit with remote monitoring. The criterion which has the highest impact on the patients' (resp. physicians') decision is the distance to the dialysis unit (resp. the patients' satisfaction). Finally, the analysis shows that the most important criteria for the hospital director are the physicians' and the patients' preferences.

Conclusion: This work shows that it is important to consider the heterogeneity and the multiplicity of viewpoints and actors in the evaluation of the implementation of remotely monitored medical dialysis solutions via multicriteria decision support techniques.

Vasco Rodrigues

Professor, CEGE, Universidade Católica Portuguesa, Portugal.

Ricardo Goncalves

CEGE, Universidade Católica Portuguesa, Portugal.

Helder Vasconcelos

CEGE, Universidade Católica Portuguesa, Portugal.

Anticompetitive Impact of Pseudo-Generics

Competition between branded and generic products is an important dimension of the dynamics of modern pharmaceuticals markets. A puzzling feature of those markets is that sellers of branded pharmaceuticals will, sometimes, sell generic versions of their own branded products, either directly or through license agreements. Apparently, these pseudo-generics, as they are often called, cannibalize the sales of the, more profitable, branded products and so should reduce the firm's profit. Thus, it is often suggested that their introduction must have some type of anti-competitive effect that justifies their use. The extant theoretical literature, however, is limited and the mechanism through which that anti-competitive effect materializes has not been satisfactorily identified.

This paper proposes a new theoretical rationale for the fact that the introduction of pseudo-generics may have anti-competitive effects. Contrary to most existing models, we assume that firms compete in prices and do not presuppose first-mover advantages for the seller of the branded product. The main feature of our model is that it combines horizontal and vertical product differentiation: branded products are vertically differentiated towards generics, and generics are horizontally differentiated among themselves. In this context, we show that the producer of the branded product will not sell the pseudo-generic unless faced with competition and that, if he does so, in some circumstances, all prices raise to the benefit of all competitors and the detriment of consumers.

Although developed with the pharmaceuticals' market in mind, our model could be extended to other markets where vertical and horizontal differentiation coexist, particularly, markets in which branded and private label products compete.

Ekaterine Ruadze

Coordinator, Health Care Development Project, The National Center for Disease Control and Public Health, Georgia.

The Medical Insurance Program for the Poor in a Health System in Transition, Georgia

Background: Georgia has been experiencing major health care reforms, including health care financing, since 2005. This has included partial privatization of service provision and the development of a health insurance system. A state-financed Medical Insurance Program (MIP) for the population below the poverty line was introduced in 2006, with the objective of ensuring access to health services for poorer households. From 2008, private insurance companies gradually took responsibility for administering the program. The Georgia Health and Social Projects' Implementation Center, under the Health Sector Development Project, commissioned Health Utilization and Expenditure Survey (HUES) in 2007 and 2010 and, Evaluation of the Impact of the Medical Insurance Program, in 2008. These studies provided an assessment of trends in health service utilization and expenditure during a period of rapid reform, and an assessment of the impact of the MIP.

Aim and objectives:

The aim of this study is to estimate the changes of health care utilization *among MIP beneficiaries* during the three year period: 2007-2010, by finding out:

- how self-assessed health status has changed;
- whether usage of health consultation, village ambulatories, polyclinics and hospitals has increased amongst acute and chronic patients;
- whether the extent of self-treatment has changed;

Methods: Secondary data analysis will be conducted on data collected from HUES 2007 and 2010. These two population-based household surveys conducted with similar methodology and thus are comparable. The data from MIP impact study will be employed to establish the consistency between the findings of MIP and HUES studies, while bearing in mind methodological differences. Simple proportions will be calculated and the statistical significance of differences will be assessed using tests that allow for the cluster design of the sample.

Virginia Sisiopiku

Associate Professor, University of Alabama at Birmingham, USA.

Abdul M. Abro

Graduate Research Assistant, University of Alabama at Birmingham, USA.

Establishing the Connection between Livable Community Assets and Public Health

The traffic implications from an automobile-dependent society are well documented. Urban sprawl, traffic congestion, air quality, global warming, fuel consumption, and deterioration of downtown areas are some of the many negative consequences of the traditional model that make it unsustainable in the future.

In the recent years, additional concerns are raised relating to health and social impacts. Physical inactivity, obesity and social isolation are far less prominent in communities that promote easy access to services and destinations through a variety of transportation options, including non-motorized modes. Still, limited research currently exists defining the connection between transportation options and urban planning development forms and public health.

This work bridges this gap by proposing and testing a methodology to identify and measure attributes of the transportation and built environment and study their correlation with health outcomes, such as obesity rates. The methodology utilizes a ranking scheme to measure the quality of the attribute of interest against a preset set of standards. The ranking methodology results in an index value that allows for population-level patterning of weight status at the community level. The proposed methodology is being tested in two urban communities in the Birmingham, Alabama region to demonstrate its feasibility and practicality. This effort involves:

- a. Gathering primary and secondary data needed to populate the proposed measurement model, and
- b. Testing of the measurement model to identify the most significant livability contributing factors that explain variation in weight status.

This paper documents the methods and findings from the study and provides guidelines to be used as a recommended practice.

Erin Strumpf

Assistant Professor, McGill University, Canada.

Srikanth Kadiyala

Economist, RAND-Bing Center for Health Economics, USA.

Does Health Insurance Affect Health? Evidence of Medicare's Impact on Cancer Outcomes

Despite the intuitive appeal of a positive effect of health insurance on health, only a few of the well-identified studies in this literature find any evidence of such an effect, often in the context of an incident health condition. In order to better understand the mechanisms determining any such causal effect more generally, we examine a chronic disease context where prevention, screening, and treatment are all relevant margins.

Specifically, we use a regression discontinuity design to examine the effect of U.S. Medicare coverage on cancer detection. At age 65, 10% of Americans gain Medicare coverage and the quality of insurance coverage may improve for many others. Our identification comes from the sharp change in eligibility for Medicare coverage at age 65 while most other covariates that are likely to affect cancer detection (marital status, age, income) change smoothly across that threshold. We calculate age-specific cancer screening rates from the U.S. Behavioral Risk Factor Surveillance System survey (BRFSS) and age-specific cancer detection rates from the Surveillance Epidemiology and End Results (SEER) cancer registry, both 2000-2006.

We find substantial increases in cancer detection rates precisely at age 65, with regression discontinuity estimates indicating that the switch to Medicare coverage leads to a diagnosis of approximately 100 additional cancers per 100,000 individuals. This is a 6.4% increase in cancer detection relative to age 64 and is nearly 116% larger than the trend in cancer detection that occurs approaching age 65. Consistent with the hypothesis that increased quantity and quality of insurance coverage should improve access to recommended cancer screenings, we find larger increases in breast, colorectal and prostate cancer detection rates relative to other cancers. Finally, we estimate that nearly 50% of the increase in cancer detection at age 65 is among individuals who were uninsured prior to Medicare eligibility.

Moritz Suppliet

Researcher, University of Dusseldorf, Germany.

Annika Herr

Researcher, University of Dusseldorf, Germany.

Co-Payment Exemption and Competition in the Market for Pharmaceuticals: An Empirical Analysis for Germany 2007 to 2010

Co-payments are a common instrument of health insurers to lower their pharmaceutical expenses. Tiered drug co-payment schemes, e.g. lower co-payments for generic drugs, incentivize patients to buy certain products and, hence, steer drug consumption pattern. Since 2007, the German Statutory Health Insurance (SHI) follows an innovative and unique regulation by differentiating drug co-payments with regard to the drug's price relative to the reference price: patients pay 10% of the drug's list price but they are exempted from any drug co-payment for some drugs priced 30% below the reference price. The co-payment exemption was introduced for 185 of 281 therapeutic clusters since 2007. Thus, pharmaceutical firms' pricing strategies determine patients

co-payments. We ask how effective this co-payment exemption policy is

in order to reduce overall prices for pharmaceutical products.

We analyze prices of all 40,820 drugs marketed in reference price clusters in Germany using quarterly data from Jan 2007 to Dec 2010 published by the Federal Association of Statutory Health Insurance Funds in Germany. We find empirical evidence of differentiated price setting strategies. To allow patient copayment exemptions for some clusters seems to be most effective for firms setting prices above the reference price; on average their prices decrease by 4%. However, the effects reverse for drugs marketed with prices below their reference price; on average prices increase towards the reference price by 13% under the new policy. Prices tend to converge towards their reference prices. The results even hold when we estimate dynamic linear panel data models and control for the heterogeneity of active ingredient's

clusters, autocorrelation, heteroscedasticity, and cross-sectional

dependency.

Furthermore, we identify for both groups significant negative price effects of firms' entries and increased competition measured by the number of firms or number of products in the same market.

The introduction of competition seems to be a powerful method to lower pharmaceutical prices.

Miron Tequame

Ph.D. Student, Paris School of Economics and University of Namur,
France.

Assessing the Effect of Antiretroviral Therapy on Intentional Reproductive Behaviour: A Case Study from Cameroon

HAART treatment is crucial as a global response to HIV/AIDS but little is known how treatment availability might lead to controversial undesired effects when proper prevention strategies are not taken into account. In this paper we link individual health information on treatment initiation to fertility preferences and pregnancies. We take the advantage of a unique data-set collected in Cameroon. Retrospectively,

with birth recalling, we construct a panel data-set where for each pregnancy we are able to identify if the individual wanted to be pregnant at that moment and link this information to her medical history. We exploit the partial ongoing treatment status of patients to carefully pair individuals who are treated with those not yet on treatment but potentially eligible. We use a popular diff-in-diff method to characterize the short run impact of treatment on pregnancy, desired and undesired. Compared to patients not yet on treatment, we find that HAART increases desired pregnancy after one year of treatment by 7%. We do not find any effect of HAART on interrupted pregnancies, both naturally occurred or induced. Moreover, given initial level of CD4 count, this positive effect on desired pregnancy persists suggesting behavioral response in fertility, other than health gain, due to treatment. This, associated with the lack of adherence in mother-to-child prevention strategies (properly taken ART therapy, no breastfeeding, etc.) might induce a raise in prevalence due to HAART. A further value added of our analysis is the immediate effect on desired childbearing, right after HAART initiation. Identification of this phenomenon would suggest special prevention strategies and family planning right after treatment initiation for young HIV+ women.

Shirley M. Timmons

Assistant Professor, Clemson University, USA.

African American Faculties' Career Decisions about a Predominantly Caucasian Institution in the United States

Background: There is a dearth of research about recruitment/retention of 'faculty of color' (African American, Hispanic, Native American, Asian) related to employment within predominantly Caucasian institutions (PCIs) of higher learning in the United States (US). Even less is known about career decisions of African American faculty, a workforce believed to enhance education and scholarship efficiency of all faculties/students. **Methodology:** Qualitative

descriptive research using in-depth interview and constant comparative data analysis were used to address study aims: 1) describe factors that influence African American scholars' decisions to accept employment at a PCI, 2) identify factors that influence African American scholars' career decisions within a PCI, and 3) uncover factors that influence African American scholars' decisions to leave PCI employment.

Results (pending): Will be completed prior conference date.

Sample Characteristics--All participants (n=10) held earned doctorates; had a mean age of 42.2 years (SD, 7.6); mean number of years in current faculty position of 8.05 (6.7), and the mean number of years as resident of the state (of employing PCI) was 15.55 (SD, 15.8). Ranks of assistant and associate professor, and professor were held by 20%, 40%, and 40% of participants, respectively. Two (20%) respondents held 12-month appointments and eight (80%) held 9-month appointments. Most (90%) were married and reported an annual income of >90,000 and only one (10%) was single and had an annual income of \$60,000 to \$69,999.

Conclusions (pending):

Implications--Findings can help to understand and predict PCIs' workforce diversity outcomes within the US.

Allison Tracy

Researcher, Wellesley Centers for Women, USA.

Alice Frye

Wellesley Centers for Women, USA.

SES in Emerging Adulthood: Implications for Health Behaviors

Socioeconomic status (SES) has been shown to have a profound impact on physical and mental health among children and adults. However, little is known about the structure and health effects of SES during emerging adulthood, as one's own household and material capital replace one's parents'. Interventions aimed at promoting healthy

behaviors in this transitional period have promise. Clearly, research targeting SES and health among emerging adults is needed.

Research on SES has been hampered by a lack of conceptual and methodological consensus. Latent class analysis (LCA), which has not previously been used in the measurement of SES, is *uniquely* well-suited to the measurement of SES and can be used to address this shortcoming. LCA empirically identifies and describes the prevalence of distinct profiles of SES using multiple indicators. This paper describes a study that (1) uses LCA to identify the empirical structure of SES in emerging adulthood, (2) examines the relevance of profiles of SES to mental and physical health, and (3) tests policy-relevant predictors of identified SES disparities. In a nationally representative sample of over 4,500 emerging adults (19-24) in the U.S, we used 4 material capital indicators (income to needs ratio using annually adjusted federal poverty thresholds, the proportion of personal income to household income, home ownership, and the presence of debt) to identify 4 latent classes of SES, each with unique material capital profiles. These classes reveal complex relationships with both physical (nutrition and exercise behaviors, substance use, risky sexual behavior) and mental health (depression, suicidality). Controlling for age, prior SES profiles and health behaviors in middle adolescence, achievements and aspirations, labor market participation, civic involvement, and the presence of a significant mentor are examined as important determinants of class membership. Overall, latent classes of SES reveal hidden health disparities and promising avenues for early intervention.

Apostolos Tsiachristas

Ph.D. Student, iMTA- Erasmus University Rotterdam, the Netherlands.

Maureen Rutten-van Molken

Professor, iMTA- Erasmus University Rotterdam, the Netherlands.

**Developing a Framework to Facilitate the Full
Economic Evaluation of Disease Management
Programs**

Background: Chronic conditions are a major threat to population health and have strong economic impact on health care systems worldwide. Considering the increasing implementation of disease management programs (DMPs) as means to integration of chronic care, their economic evaluation is crucial for the efficient and sustainable

investment in chronic care. The lack of a methodological framework to facilitate the full economic evaluation of DMPs has led to inconclusive results in the current literature.

Aim: The aim of this paper is to understand the distinctive characteristics of DMPs, address the methodological challenges in their evaluation, identify potential solutions to overcome them, and develop a methodological framework able to facilitate the full economic evaluation of DMPs. The framework should be able to incorporate all relevant costs and relate them to a wide variety of outcomes which are weighted using multi-criteria analysis. We develop this framework for a large study in which we evaluate 22 different DMPs for different chronic diseases in the Netherlands.

Methods: We have used various research methods including searching for previously published economic evaluations of DMPs and for inspiration from related research fields (priority setting, quality improvement, and implementation strategies), practical field experience in the ongoing broad HTA of the 22 DMPs, and personal discussions with integrated care providers, health insurers, scientific and practical experts in the integrated chronic care field. We also studied previous applications of multi-criteria decision analysis (MCDA).

Results: The framework distinguishes between the development and implementation phase of DMPs and incorporates organizational, professional, and patient DMP interventions. As Figure 1 illustrates, the implementation of DMPs effects a) the patient behavior, for example with respect to smoking, diet, self-management, and/or physical activity, b) care delivery with regards to disease management level, coordination level and overall performance according to care standards, c) intermediate health outcomes (e.g. blood pressure etc.), d) changes in HR-QoL, and e) final health outcomes (such as QALY's and life expectancy). The costs during the implementation phase (i.e. DMP implementation costs, treatment costs, direct non-medical costs borne by the patient, costs of informal care, and costs of productivity loss) are added to the development costs in order to calculate the total costs of the DMPs. Multi-criteria analysis is then implemented to compare a DMP and usual care based on all five categories of outcome measures and total costs. We illustrate the implementation of MCDA with a numerical example in which the performance matrix and scoring of the two alternatives are demonstrated.

Conclusion: Our methodological framework could be used by HTA researchers for a comprehensive economic evaluation of DMPs and provide comparable results between their studies. As a consequence, decision makers on governmental level as well as health insurers could use these results to improve the efficiency of chronic integrated care delivery.

Maritta Valimaki

Professor, University of Turku, Finland.

Heli Hatonen

University of Turku, Finland.

K. Kauppi

University of Turku, Finland.

M. Lahti

University of Turku, Finland.

C. Adams

Professor, University of Nottingham, UK.

**Serious Mental Health Problems and Patient
Compliance in Mental Health Services:
A Challenge for Policy Makers**

Schizophrenia is associated with long-term illness with relapses and poor compliance. It is evident that non-adherence is the single most important predictor of relapse and readmission affecting more costs to the society, and disturbing everyday lives of patients and their families. While schizophrenia guidelines in different countries emphasis a meaning of patient medication together with other psychosocial supportive treatments to prevent relapse, health care staff spend much time encouraging people to continue to take medication. Therefore, it is important to find widely accepted and effective methods to support patient attendance at follow up at out-patient services and compliance with medication.

The purpose of this paper is to describe a development process of semi-automated SMS text-based intervention to be used in mental health. It aims to encourage people with serious mental illnesses, for whom antipsychotic medication is indicated, to accept care and medication in out-patient care. Participatory design was used in this study phase. The researchers worked together with service user, organizations and their staff to plan acceptable and usable text messages and protocol to be used to evaluate the effectiveness of the text message to increase patient compliance. A series of focus group interviews for service users and health care personnel have been organised and run. They have ensured that semi-automated SMS text-based intervention to be used in this study is acceptable. In addition, by working with service user and health care organization we have encouraged people to accept a new intervention and therefore to support patients whom antipsychotic medication is indicated, to accept care and medication. Today, 15 hospital districts (out of 21) and 5 cities are involved in this study. The experiences of user's involvement for policy making will be discussed.

Anastasia Ventouri

Director, UNIGE, UNIL, Switzerland.

Discerning the Impact of Vitamins and Natural Remedies (Plant Medicines) on Cardiovascular and Coronary Disease and Associated Prescription Costs

Background:

Does the consumption of vitamins and natural remedies have a measurable effect on adult health?

Cardiovascular considerations:

There exists little reliable data to prove the efficacy of vitamin supplementation, other than for classic vitamin deficiency states. That natural remedies are so persistent throughout the ages may be because

of their efficacy or because of popular misconceptions. Certain substances have even been proven to have deleterious effects (e.g. black cohosh, mistletoe).

Hence vitamins and natural remedies are most often prescribed – in the absence of unequivocal indications – in response to patient demand, rather than through a process of rational choice by the physician.

Rationale & objectives:

This study measures the pharmacoeconomic impact of prescribed vitamins (hl) or natural remedies (mc) on the treatment of cardiovascular and coronary disease, as measured by co-prescription of antiplatelet drugs and statins.

Using a regional longitudinal data sample, total medical costs per patient are calculated over five years, including the cost of all prescribed medicines and the estimated cost of consultations.

If the proportion of people taking antiplatelet drugs and statins is lower in the treatment group (those taking vitamins or natural remedies) than in the control group (taking no supplements), we might infer a beneficial effect of vitamin supplementation or use of natural remedies.

One might then argue that complementary drugs such as vitamins and plant extracts should be included in basic health insurance coverage.

Methods:

The database of ofac, a co-operative regrouping prescription from 80% of swiss pharmacies for administrative (billing) purposes, was used to extract a five year sample of medical records.

The total file includes 17304 swiss patients born between 1945 and 1960.

We identified and tagged 3120 patients in our sample that used vitamins (complementary medicines).

We then identified a similar control group – based on age, sex and co morbidities – which used no preventive or complementary medicines.

The prevalence of cardiovascular amelioration was compared between the treatment and control groups using the prescription of antiplatelet and statins as a proxy (an indicator).

Results:

This is an ongoing study, the full study results are expected end of May.

Discussion:

If however, the results show that preventive medicine doesn't influence cardiovascular status (or any other marker of health status, found by comparing total cost of all other treatments between treatment and control groups) we must conclude that this population costs more to the health insurance without evidence of strong health benefits.

This would mean that vitamins and plant extracts need to remain at the charge of the patient and not be included in the basic health insurance policy.

However, if this is the case, it is contradictory to the actual clinical research findings and further clinical and observational studies needs to be done.

Anna-Marie Vilamovska

EAD Head, Ministry of Finance, Bulgaria.

Jeni Nacheva

Ministry of Finance, Bulgaria.

Ivan Markov

Ministry of Finance, Bulgaria.

Maria Zareva

Ministry of Finance, Bulgaria.

Petya Georgieva

Ministry of Finance, Bulgaria.

Yosif Yosifov

Ministry of Finance, Bulgaria.

Re-Balancing Cost Variations in Health Care Services: How to Leverage Top-Down Costing Approaches, Ensure Data Validity and Negotiate a Health Care System Reform

The recent HealthBasket study showed how micro-costing approaches can be used to identify sources of variation in the cost of providing health care services across and within EU Member States – a must-pass step towards shaping and negotiate a health care system reform. But what can policymakers do when: a) no micro-costing data can be quickly and reliably collected to support urgent reforms; b) strong evidence exists that current reimbursement practices create adverse incentives and allow data manipulation; and c) initial results indicate that some healthcare services are undervalued, but any increases in reimbursement rates can only come from reductions in others (in lieu of fiscally conservative governance in the climate of a continued economic crisis)? This paper attempts to critically present the data collection approaches, analytic methods, sensitivity analysis and key results of the expert work done by the Ministry of Finance team behind the first empirical-analysis-based amendment of reimbursement policies for publicly-provided health care services in Bulgaria (carried out during the fall of 2010). To inform policymakers and researchers facing similar complex policy and management problems, the paper further highlights the critical steps in the political implementation process that underpinned the success of the 2010/11 healthcare services re-valuation process in Bulgaria.

Nadia Volchansky Nieves

Assistant Professor, George Washington University, USA.

Identifying Sleep-Disruptive Noise Factors in Healthcare Environments

Noise, a recognized environmental stressor, contributes to poor patient satisfaction and is known to disrupt patient sleep. This study investigated the relationship between noise sources and sleep disruption in three units of a large urban hospital. A volunteer sample of 61 discharged patients completed a survey asking about the sleep disruptive nature of 33 (25 noise related and 8 non-noise related)

environmental factors. The results revealed that a total of 17 factors were found to be sleep-disruptive by at least one-third of the patients.

Based on these findings a set of design recommendations was developed to address each harmful stressor identified by at least one third of the respondents. Two key design recommendations consist of incorporating all private patient rooms and decentralizing nurses' stations. Additional recommendations include relatively specific design changes to prevent or reduce the noise at its source, and also to provide a space capable of preventing the transmission of sound once it is generated. Finally, recommendations were made as related to the behavioral/operational factors and non-noise factors.

Overall the study found that noise is a factor, which negatively affects patient sleep. The presence of noise can be reduced with a well-informed design approach.

Christian Waibel

Ph.D. Student, University of Cologne, Germany.

Fraud and Other-Regarding Preferences in a Health Care Market

This paper analyzes the impact of other-regarding preferences on the level of fraud in a health care market. Medical services are considered to be credence goods, i.e. goods for which customers do not know which quality they need (Darbi/Karni 1973). In the US about 2.3 trillion USD are spent for health care per year (OECD 2009), an estimated 200 billion of which are due to fraud (FBI 2007).

We introduce other-regarding preferences into Wolinsky's (1993) credence goods framework. Wolinsky investigates the physician's incentive to overcharge a patient when patients can consult another physician for a second opinion. When receiving the diagnosis of a major disease, patients trade off between accepting the diagnosis and costly searching for a second opinion. The physicians decide about whether to overcharge patients with a minor disease or whether to treat them honestly. While defrauding yields higher monetary payoffs it includes the risk that patients might consult another physician.

In our model, physicians do not only care about monetary incentives but also have "conscience costs" if they overcharge their patients. Physicians care about the social norm of being honest (Dulleck/Kerschbamer/Sutter 2009) and often swear the Oath of Hippocrates when they start their career. Patients do not only care about their monetary costs of the treatment but also incur "annoyance costs" if they are charged for the major treatment (Krause 2006). This is because patients anticipate that they may have been overcharged. A first intuition would lead to the conclusion that introducing the above mentioned preferences lowers the level of fraud in the market. We show that this intuition does not necessarily hold.

Given that the physicians' "conscience costs" are low, we show that the introduction of the above mentioned preferences leads to a decrease in the level of overcharging if the level of fraud in the market used to be low. If, on the other, the level of fraud used to be high, the level of overcharging increases. This is because physicians anticipate that many of their patients are on their second visit and therefore accept any diagnose. Given that "conscience costs" are high, only an equilibrium without fraud remains.

Robert Weigelt

Ph.D. Student, Jena Graduate School, GSBC, Germany.

Eliciting the Physicians' Preferences for Modern Long-Acting Insulin Therapy: A Discrete Choice Experiment

Discrete choice experiments (DCE) are being increasingly used in health service research, especially to examine the preferences of patients for medical services. When evaluating the benefits of medical services the elicitation of physicians' preferences can be as informative as that of patients, as it is often the opinion of physicians that influence the

decisions and consequently the treatment of patients. Moreover, this study is connected with the introduced cost-effectiveness standard for pharmaceutical innovation in Germany. In Germany, the pharmaceutical bill is paid by the statutory health insurance (GKV) if the pharmaceutical product is part of the GKV. Before the health care reform 2007, pharmaceutical innovations had to meet only safety and efficacy benchmarks to be integrated in the reimbursement system of the GKV. Now, they also have to fulfil a cost benefit analysis by the Institute for Quality and Efficiency in Health Care (IQWiG). In case of the long-acting insulin therapy, the IQWiG recommend to drop long-acting insulin analogues from the benefit list. The co-payments for already long-acting insulin treated patients would increase dramatically if these patients do not use human insulin again.

Objectives: This study aimed to investigate preferences and heterogeneity in preferences for modern long-acting insulin therapy using long-acting insulin analogue in comparison to longacting human insulin (current status quo), from the physicians' perspective.

Method: A DCE with a D-optimal design was conducted using an online questionnaire. Physicians in Germany who are responsible for the treatment of diabetes patients in university hospitals completed the questionnaire. The DCE contains three clinical attributes (number of nocturnal hypoglycemic events (with 3 levels), weight change (2) and clinical long-term experience (2)), two convenience attributes (time of bedtime injection (2) and through-mixing of insulin (2)) and one cost attribute (co-payments of patients (3)). The attributes and levels describe the differences of the two types of insulin and were chosen after a systematic review of published comparative clinical trial data.

Preliminary Results: As expected, the preliminary results show a high relative importance of the clinical attributes. The study will also investigate the heterogeneity in physicians' preferences based on gender, age and regional differences.

Conclusion: This study provides information to health care policy makers in Germany concerning physicians' perspectives of patients' preferences for modern long-acting insulin therapy.

Meryl Wheeler

Non-Physician Expert, Mount Royal University / University of
Calgary, Canada.

Mark Lafave

Associate Professor, Mount Royal University, Canada.

Nicolas Mohtadi

Clinical Professor, University of Calgary, Canada.

Denise Chan

Research Associate, University of Calgary, Canada.

The Acute Knee Injury Clinic in Calgary, Alberta, Canada: An Alternative Clinical Pathway using Non-Physician Experts

Traditionally, acute knee injuries are evaluated by primary care physicians in any one of the multiple ambulatory settings in Canada: family physician's office; acute walk-in clinic; emergency department. Over 15.5 million visits are made to ambulatory physicians in Canada for a MSK problem annually.¹ It has also been estimated that up to 27.8% of patient visits to family physicians are musculoskeletal (MSK) in nature.² Very little time (2.26 % in Canada) is spent in undergraduate medical education curriculum on MSK injury.² Further, primary care management of MSK disorders involves too many practitioners who lack the necessary expertise¹ and confidence in MSK examination.³⁻⁶

There is a significant burden of MSK disorders on the Canadian healthcare system and that further emphasizes the need for improved patient flow and integrated services throughout the MSK clinical care pathway. The Government of Alberta prioritized this theme in their 2010-13 Health and Wellness business plan, stating that patients receiving health services from several different care providers and in different settings must experience seamless care and that patients need to be supported at every stage of the care process.⁷ (pg. 151) A proposed solution to this demand with acute knee injuries is a pilot project currently underway in Alberta where a new healthcare provider, the Non-Physician Expert, works in an interdisciplinary acute knee injury clinic to evaluate and manage these injuries. Success of the pilot project has been defined by three primary outcomes: 1) reduce costs through a reduction in the total MRI's need to accurately diagnose acute knee injuries; 2) improved access as defined by patient satisfaction; 3) improved standards of care from the current baseline which is 2.2%.

References

1. Power J, Perruccio A, Desmeules M, Lagace C, Badley E. Ambulatory physician care for musculoskeletal disorders in Canada. *J Rheumatol.* 2006;33(1):133.
2. Pinney S, Regan W. Educating Medical Students about Musculoskeletal Problems. *Journal of Bone and Joint Surgery.* 2001;83-A(9):1317.
3. MacKay C, Canizares M, Davis A, Badley E. Health care utilization for musculoskeletal disorders. *Arthritis Care Res (Hoboken).* 2010;62(2):161.
4. Glazier R, Dalby D, Badley E, Hawker G, Bell M, Buchbinder R. Determinants of physician confidence in the primary care management of musculoskeletal disorders. *J Rheumatol.* 1996:351.
5. Lillicrap M, Byrne E, and Speed C. Musculoskeletal assessment of general medical in-patients--joints still crying out for attention. *Rheumatology (Oxford).* 2003;42(8):951.

6. Matheny J, Brinker M, Elliott M, Blake R, Rowane M. Confidence of graduating family practice residents in their management of musculoskeletal conditions. *Am J Orthop (Belle Mead NJ)*. 2000;29(12):945.
7. Government of Alberta. Alberta Progress on the 10 Year Plan to Strengthen Health Care. . 2007.
8. Lau B, Mohtadi N, Butterwick D, Donnon T. The development and validation of a health care access and patient satisfaction questionnaire (HAPSQ). *Clinical Journal of Sport Medicine*. 2009;19(3):260.

Donna Wilson

Professor, University of Alberta, Canada.

Waiting in Hospital for Placement in a Nursing Home - Research for This Global Quandary

In all developed and many developing countries, population aging is raising much concern. However, one of the most established concerns is the high use of hospitals by older persons who are simply waiting for a nursing home bed to become available. Much debate and surprisingly little research has focused at the prevalence of persons waiting placement, and the economic and other consequences of this use. Few studies have also sought to consider the impact of waiting placement on the older persons themselves. This is a report of two studies, the first, an analysis of two years of complete hospital utilization data for the province of Alberta, and the second a phenomenology study of the lived experience (through mainly qualitative interviews) of older persons waiting for placement at two accessible full-service hospitals in the province. The findings of both studies are surprising and although they should be replicated to assess for regional or cross-border differences, they provide some strong direction for reconsidering the issue of waiting placement. Less than 300 of the nearly 276,000 persons admitted each year ended their stay by waiting placement. This is a very small proportion of patients (0.07%) and total bed days (0.001%) each year. Although the overall impact on the health care system is minimal, the impact of waiting for placement is immense. Not only did these patients have to wait and wait indefinitely, with nothing to do, but they were grieving a loss of home and health. This presentation will provide the findings and begin to outline the implications of these findings for discussion.

Jennifer Yang-Meslet

Senior Analytical Advisor, Care Quality Commission, UK.

Evaluating the Impact of Healthcare Intelligence on Quality of Care

OBJECTIVES

For the past 15 years, a panoply of French magazines have been publishing hospital league tables by clinical specialty. The aim of these publications is to inform the public of the best and the worst performers, to support patient choice. But are patients given the right information, in the right format? Moreover, we investigate for the first time in France, the impact of such publications on the quality of care provided by one of the best health care systems in the world.

MATERIALS & METHODS

Meetings were held with French healthcare officials, practitioners, users and journalists. Two in-depth case studies were also conducted. Qualitative data were collected through semi-structured interviews using open-ended questions, transcribed and analysed using theme analyses. Quantitative data were collected using a one-page survey disseminated to the Chief Executives (CEOs) of all acute public healthcare organisations in France. Analyses were conducted using ANOVA and Tukey's Honest Significance test. An archive search was also performed on all communications sent to a weekly magazine producing league tables.

RESULTS

38% survey respondents claimed that the publication of league tables drives positive change, of which approximately 68% stated it led to two or more quality improvement activities per year. CEOs felt that the impact on hospital reputation was significantly greater than the impact on quality of care ($p < 0.001$), through staff motivation and internal clinical audit activities. The impact of league tables on patient choice remains ambiguous. Conclusions from qualitative analyses demonstrated a widespread confusion around the definition of quality of care. 57% survey respondents were not able to provide an estimate of their organisation's allocated budget for quality.

CONCLUSION

Hospital league tables acted as catalysts for healthcare reforms after 1997, in the absence of data dissemination by French officials. These publications support patient empowerment. Their impact on quality of care provision is difficult to determine.

Fumiaki Yasukawa

Professor, Kumamoto University, Japan.

What is the Optimal Health Insurance Scheme for Aged Society? Primitive Analysis for Seeking Real Premium in Japanese New Social Health Insurance for the Aged

Purpose: After the introduction of new social health insurance for aged people started from 2008, strong resistances against that policy from aged people have brewed and the government has been obliged to reform the scheme. The most critical point of the argument is whether they should be required the payment of insurance premium because, in former scheme, they were exempted it even if receiving huge benefits in kind at the time of illness. This paper addresses to seek whether they think about the present health insurance scheme, and how much premium they intend to pay as a source for sustainable health care system.

Method: Over 2000 aged people over 65 years old had been asked by questionnaire survey to reply their health status, straightforward opinion against the optimality and fairness of new insurance policy scheme, the expected way to join the social health insurance system through the expense - benefit relations, and the willingness to burden if they might be required to pay as a price of receiving care. From a regression analysis, we found that; 1) many aged people did prefer to pay some amount of money as a source of realizing *ideal* health care, but; 2) they intended to pay the tax more instead of the premium for the insurance when they may prefer the socialization of healthcare; further 3) if the alternative of private insurance policy may be placed to the main scheme of healthcare, only those who could pay more money would be as a survivor.

Discussion: Since the most crucial situation is to misread the will of the aged people in the payment and receiving benefit. To realize the optimal and fair scheme for both young and old generations, expense-benefit conflict among them should be settled through establishing the consent to their real opinion respectively.

Jun Yin

PhD Student, University of Oslo, Norway.

Hilde Luras

Professor, University of Oslo, Norway.

Terje P. Hagen

Professor, University of Oslo, Norway.

Fredrik A. Dahl

Professor, University of Oslo, Norway.

The Influence of Activity Based Financing on Hospital Length of Stay for Elderly Patients Suffering from Heart Diseases

Activity based financing (ABF) of hospitals give incentives to treat many patients and reduce the length of each hospital stay and give, in most cases, no incentives to avoid re-admissions. On the contrary, some extra days of hospitalisation may reduce the risk of a re-admission, make the patient more self-reliant and reduce the need for future formal care. Norms and quality standards may on the other side reduce and even remove the adverse incentive effects of ABF-systems. Hence, whether ABF actually implies that hospitals systematically reduce hospital length of stays is an empirical question that needs investigation.

To answer whether ABF actually influences how patients are treated in hospitals, hospital length of stay is analyzed as a response to changes in the activity based component of the financing system of 49 Norwegian public hospitals in the period from 2000 to 2007. In this period the activity-based component has changed several times, which makes the basis of the study. Our main hypothesis is that an increase in the activity based component decreases the length of each hospital stay because DRGs are largely independent of length of stay.

The empirical analysis is based on a repeated cross-sectional data set, originating from the Norwegian Patient Register (NPR). The individual patient data set includes patients with three ischemic heart diseases (IHD): myocardial infarction (MI), angina pectoris (AP) and congestive heart failure (CHF). The data set contains individual information, such as age, sex, DRG weight, diagnoses, number of comorbidities, hospital admission type and length of stay.

Data are aggregated by pseudo-panel techniques, and are analyzed by random, fixed effects models and Hausman-Taylor estimation. By using pseudo-panel aggregation we can control the unobserved heterogeneities in the repeated cross section data set where the ordinary OLS estimation is inconsistent and biased. The result shows that

increasing the activity based component significantly decrease the length of each hospital stay among patients 70 years and older suffering from ischemic heart diseases and stroke. It indicates that hospitals respond to economic incentives. In the final version of paper different empirical models are compared. We conclude by discussing potential conflicts between economic incentives designed to increase efficiency and the health policy goal of efficient use of the total health care resources.