

The Wennberg International Collaborative

Table of Contents

September 18 – 19, 2014 | Royal College Surgeons of England

Acknowledgements.....	2
Logistics.....	3
Agenda.....	4
Participant List.....	8
Participant Biographies.....	19
Abstracts.....	107

The Wennberg International Collaborative Acknowledgements

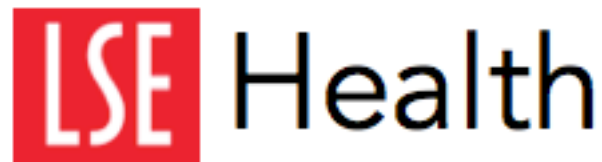
September 18 – 19, 2014 | Royal College Surgeons of England

The Wennberg International Collaborative is a partnership between the Dartmouth Institute for Health Policy & Clinical Practice and The London School of Economics and Political Science

This conference was made possible with the generous support from our sponsors listed below:



THE
Dartmouth
INSTITUTE
FOR HEALTH POLICY & CLINICAL PRACTICE



GEISEL SCHOOL OF MEDICINE
AT DARTMOUTH



THE
Dartmouth
CENTER
for HEALTH CARE
DELIVERY SCIENCE

*Cover: Full Cover Design by Greg Davini, Clay Brook Studio, LLC
Map Graphics by Erica Ison, NHS Atlas*

The Wennberg International Collaborative Logistics

September 18 – 19, 2014 | Royal College Surgeons of England

Dates & Times

September 18 | 7:30 – 17:20

September 19 | 7:30 – 17:30

Location

The Royal College of Surgeons of England
35-43 Lincoln's Inn Fields, London WC2A 3PE, United Kingdom
+44 20 7405 3474

Welcome Reception

September 17 | 18:00 – 21:00

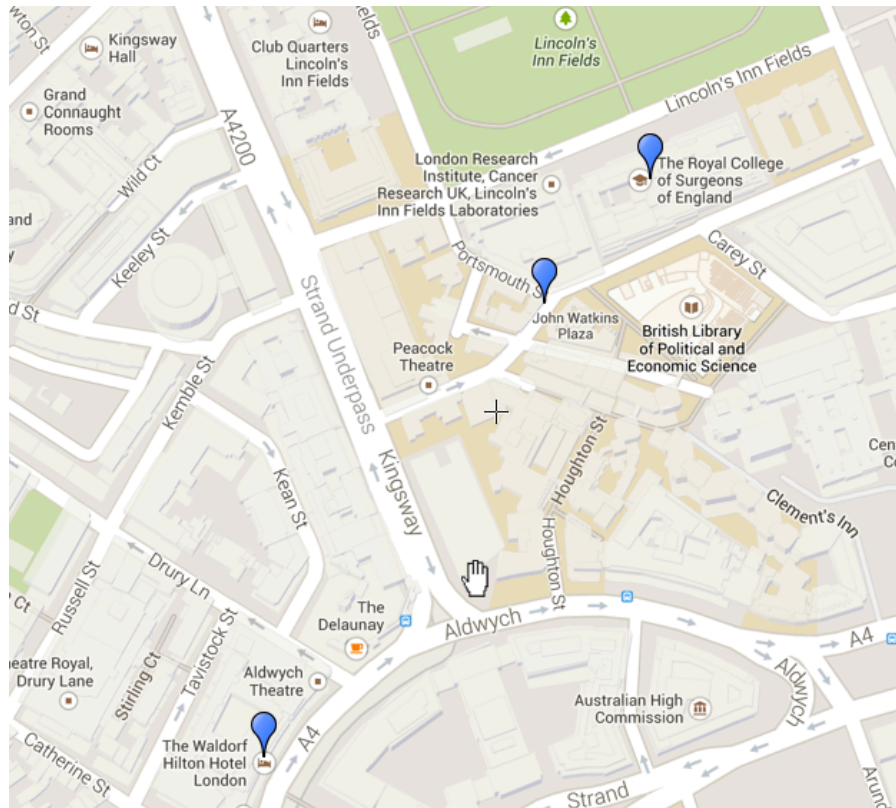
The George IV Pub
28 Portugal St, London WC2A 2, United Kingdom
+44 20 7955 77433

Dinner

September 18 | 18:30

The Waldorf Hilton
Aldwych, London WC2B 4DD, United Kingdom
+44 20 7836 2400

Map



The Wennberg International Collaborative Agenda

September 18 – 19, 2014 | Royal College Surgeons of England

Thursday, September 18, 2014

Time	Event	Room
7:30 – 8:00	Breakfast	Committee Room 3
8:00 – 8:20	Welcome Professor David Goodman, The Dartmouth Institute Professor Gwyn Bevan, London School of Economics	Council Room
8:20 – 8:45	Divya Srivastava <i>Geographic variations in health care: What do we know and what can be done to improve health system performance?</i>	Council Room
8:45 – 9:10	Sandra García-Armesto <i>Using geographic analysis to foster value for money: An estimation of the opportunity cost of lower value indation of C/S in 5 European countries</i>	
9:10 – 9:35	Céu Mateus <i>Comparison in variations between countries</i>	
9:35 – 10:00	Panel Discussion Moderator: Gwyn Bevan	
10:00 – 10:25	Break	Committee Room 3
10:25 – 10:50	Arnaud Fouchard <i>The French policy on medical practices variations</i>	Council Room
10:50 – 11:15	Luke Slawomirski <i>Exploring healthcare variation in Australia</i>	
11:15 – 11:40	Daniela Koller <i>Geographic variability in patient networks</i>	
11:40 – 12:00	Panel Discussion Moderator: Jostein Grytten	
12:00 – 13:00	Lunch	Committee Room 3

The Wennberg International Collaborative Agenda

September 18 – 19, 2014 | Royal College Surgeons of England

Thursday, September 18, 2014

13:00 – 13:25	Duncan McPherson <i>Avoidable harm, unwarranted variation and diffusion in the treatment of acute myocardial infarction</i>	Council Room
13:25 – 13:50	Phil Goodney <i>The new Dartmouth Atlas of Surgery</i>	
13:50 – 14:15	Stef Groenewoud <i>How to disclose understandable information about unwarranted variation for the public?</i>	Committee Room 3
14:15 – 14:40	Sabina Nuti <i>A quantitative method for setting targets and priorities including unwarranted variation reduction in the Italian healthcare system</i>	
14:40 – 15:05	Panel Discussion Moderator: Leonie Sundmacher	
15:05 – 15:30	Break	Committee Room 3
15:30 – 15:55	Thérèse Stukel <i>Variations in Quality Indicators across Physician Networks</i>	Council Room
15:55 – 16:20	Enrique Bernal-Delgado <i>Adding time-dependent effects to the evaluation of geographic variation</i>	
16:20 – 16:45	Yuichi Imanaka <i>Variation in mechanisms of health care quality indicators</i>	
16:45 – 17:10	Panel Discussion Moderator: Zeynep Or	
17:10 – 17:20	Closing Remarks David Goodman, The Dartmouth Institute	Council Room
18:30 – 19:00	Cocktails at The Waldorf Hilton	The Waldorf Hilton Palm Court
19:00 – 22:00	Dinner at The Waldorf Hilton	Adelphi Suite 1

The Wennberg International Collaborative Agenda

September 18 – 19, 2014 | Royal College Surgeons of England

Friday, September 19, 2014

Time	Event	Room
7:30 – 8:00	Breakfast	Committee Room 3
8:00 – 8:45	Bill Davenhall <i>Getting Noticed: Telling Better Stories</i>	Council Room
9:00 – 9:25	Claudia Berlin <i>Variation of treatment of acute myocardial infarction in Swiss hospitals: Does hospital size matter?</i>	
9:25 – 9:50	Radoslaw Panczak <i>The geography of end of life care in Switzerland</i>	
9:50 – 10:15	Xhyljeta Luta <i>Variation in mental health care use at the end of life in Switzerland</i>	
10:15 – 10:35	Panel Discussion Moderator: Philip DaSilva	
10:35 – 11:00	Break	Committee Room 3
11:00 – 11:25	Brendon Kearney <i>Demonstrating the benefits of a National Data Linkage Infrastructure</i>	Council Room
11:25 – 11:50	Philipp Storz-Pfennig <i>Variation findings and what to do about them? The current experience from Germany</i>	
11:50 – 12:15	Catherine Gerard <i>The New Zealand Atlas as a tool to facilitate change</i>	
12:15 – 12:40	Marina Davoli <i>Is quality of data challenging communication to policy makers and the general public? The example of the Italian NHS outcome evaluation program</i>	
12:40 – 13:00	Panel Discussion Moderator: Klim McPherson	

The Wennberg International Collaborative Agenda

September 18 – 19, 2014 | Royal College Surgeons of England

Friday, September 19, 2014

13:00 – 14:00	Lunch	Committee Room 3
13:30 – 14:00	Jack Wennberg <i>Future directions for improving health care</i>	Council Room
14:00 – 14:25	David Goodman <i>Little patients, big problems, unanswered questions: Neonatal Intensive Care in the 21st Century</i>	Council Room
14:25 – 14:50	Illir Hoxha <i>Determination of C-section hospital level variation</i>	
14:50 – 15:15	Dominik Graf von Stillfried <i>To what extent do we need to take account of systematic relationships between inpatient and outpatient care when analyzing regional variation?</i>	
15:15 – 15:40	Panel Discussion Moderator: Astrid Guttman	
15:40 – 15:55	Break	Committee Room 3
15:55 – 16:20	Irene Papanicolas and Alistair McGuire <i>Variations in hip replacement treatment across England and Scotland</i>	Council Room
16:20 – 16:45	Jessica Sheringham <i>Capturing variations in service use across a diagnostic pathway: patterns of primary and secondary healthcare use amongst patients diagnosed with colorectal cancer in North East London</i>	
16:45 – 17:10	Panel Discussion Moderator: Julie Bynum	
17:10 – 17:30	Wrap up & Discussion for future David Goodman and Gwyn Bevan	Council Room

The Wennberg International Collaborative Participant List

September 18 – 19, 2014 | Royal College Surgeons of England

Gábor Bányai-Márton

Assistant Lecturer, Department of Health Systems Management
and Quality Management for Health Care
University of Debrecen
98. Nagyerdei Krt. Debrecen, Hungary, H-4032
banyai@med.unideb.hu

Claudia Berlin

PhD Candidate
University of Bern
Institute for Social and Preventive Medicine
Finkenhubelweg 11, CH-3012 Bern, Switzerland
cberlin@ispm.unibe.ch

Enrique Bernal-Delgado

Senior Health Services Researcher
Health Services and Policy Research Group - ARiHSP
Institute for Health Sciences, IIS Aragón
San Juan Bosco 13, 50009 Zaragoza, Spain
ebernal.iacs@aragon.es

R. Gwyn Bevan

Professor of Policy Analysis and Co-Founder of
The Wennberg International Collaborative
The London School of Economics and Political Science
Houghton Street, London WC2A 2AE United Kingdom
r.g.bevan@lse.ac.uk

Karen Bloor

Professor of Health Economics and Policy
Department of Health Sciences
University of York
Heslington, York YO10 5DD United Kingdom
karen.bloor@york.ac.uk

Jan Böecken

Senior Project Manager
The Bertelsmann Foundation
Bertelsman Stiftung
Carl-Bertelsmann-Straße 256
33311 Gutersloh, Germany
jan.boecken@bertelsmann-stiftung.de

Paulo Alexandre Boto

Deputy Secretary of State to Minister of Health
Portugal Ministry of Health

The Wennberg International Collaborative Participant List

September 18 – 19, 2014 | Royal College Surgeons London

Av. João Crisóstomo, 9 - 4º
1049-062 Lisboa, Portugal
paulo.boto@ms.gov.pt

Julie P.W. Bynum

Associate Professor of Medicine and Community & Family Medicine
The Dartmouth Institute for Health Policy & Clinical Practice
35 Centerra Parkway, Lebanon, NH 03266
julie.pw.bynum@dartmouth.edu

Ronny Cheung

Hospital Paediatrician & Clinical Advisor
Child & Maternal health Intelligence Network
Public Health England
London WC1X 8SH United Kingdom
rccheung@gmail.com

Kerri Clough-Gorr

Assistant Professor
University of Bern
Institute of Social and Preventive Medicine,
Finkenhubelweg 11, CH-3012 Bern, Switzerland
kclough@ispm.unibe.ch

Philip DaSilva

Cluster Director of Commissioning Development
NHS Derbyshire Cluster
Cardinal Square 10 Nottingham Road, Derby DE1 3QT United Kingdom
philip.dasilva@nhs.net

Bill Davenhall

Senior Health Advisor
Esri
380 New York Street, Redlands, CA 92373 USA
bdavenhall@esri.com

Marina Davoli

Scientific Director
National Outcome Programme
National Agency for Regional Health Services
Department of Epidemiology -Lazio Region
Rome-Italy
davoli@agenas.it
m.davoli@deplazio.it

The Wennberg International Collaborative Participant List

September 18 – 19, 2014 | Royal College Surgeons of England

Judith de Jong

Program Coordinator
Netherlands Institute for Health Services Research (NIVEL)
P.O.Box 1568, 3500 BN Utrecht, The Netherlands
j.deJong@nivel.nl

Matthias Egger

Professor and Chair, Institute for Social and Preventive Medicine
University of Bern
Finkenhubelweg 11, CH-3012 Bern, Switzerland
egger@ispm.unibe.ch

Arnaud Fouchard, MD

Medical Advisor
Office "Evaluation, Models and Methods" (R5)
DGOS - Ministry of Social Affairs and Health
14 avenue Duquesne 75350 Paris 07 SP France
arnaud.fouchard@sante.gouv.fr

Sandra García-Armesto

Senior researcher ARAI+D
Health Services Research Unit - ARIHS
Gomez Laguna Av 25, 3rd floor, Room B
50009 Zaragoza, Spain
sgarciaarm.iacs@aragon.es

Catherine Gerard

Senior Analyst
Health Quality & Safety Commission
PO Box 25496, Wellington 6146, New Zealand
catherine.gerard@hqsc.govt.nz

David Goodman

Professor of Pediatrics and Co-Founder of the Wennberg International Collaboration
The Dartmouth Institute for Health Policy and Clinical Practice
35 Centerra Parkway, Lebanon, NH 03766 USA
david.c.goodman@dartmouth.edu

Philip Goodney

Assistant Professor, Vascular Surgery, Dartmouth Hitchcock Medical Center
Director, Center for the Evaluation of Surgical Care, Geisel School of Medicine
Co-Director, VA Outcomes Group, White River Junction, Vermont
Lebanon, NH, USA
Lebanon, NH 03766 USA
philip.p.goodney@hitchcock.org

The Wennberg International Collaborative Participant List

September 18 – 19, 2014 | Royal College Surgeons London

Sir Muir Gray

NHS National Knowledge Services
1st floor, Summertown Pavilion
Middle Way Oxford, OX2 7LG
muir.gray@medknox.net

Tommaso Grillo-Ruggieri

PhD Student
Laboratorio Management e Sanità
That
Piazza Martiri della Libertà 24, 56127 Pisa
t.grilloruggieri@sssip.it

Dr. A.S. (Stef) Groenewoud

Senior Researcher well
IQ healthcare
Radboud University
Postbus 9101, 6500 HB Nijmegen
Geert Groteplein 21 (route 114), The Netherlands
stef.groenewoud@radboudumc.nl

Marion Grote-Westrick

Senior Project Manager
The Bertelsmann Foundation
Carl-Bertelsmann-StraBe 256
33311 Gutersloh, Germany
marion.grotewestrick@bertelsmann-stiftung.de

Jostein Grytten

Professor of Community Dentistry
University of Oslo
Box 1052 Blindern 0316 Oslo Norway
j.i.grytten@odont.uio.no

Astrid Guttman

Senior Scientist and Chief Science Officer, Institute for Clinical Evaluative Sciences
Associate Professor Paediatrics and Health Policy, Management and Evaluation
University of Toronto
2075 Bayview Ave, Toronto, ON M4N 3M5 Canada
astrid.guttman@ices.on.ca

Finn Henry Hansen

Director
Helse Nord RHF / Northern Norway Regional Health Authority

The Wennberg International Collaborative Participant List

September 18 – 19, 2014 | Royal College Surgeons of England

8038 Bodø Norway
finn.henry.hansen@helse-nord.no

Wade Harrison

Manager of Special Projects
The Dartmouth Institute for Health Policy & Clinical Practice
35 Centerra Parkway, Lebanon, NH 03766
wade.harrison@dartmouth.edu

Dougal Hargreaves

Honorary Research Associate
UCL Institute of Child Health
30 Guilford St., London WC1N 1EH, United Kingdom
d.hargreaves@ucl.ac.uk

Ilir Hoxha

Project Advisor, Health Dialogue Program, Solidar Suisse
PhD Candidate, ISPM, University of Bern
External Advisor, Ministry of Health, Kosovo
Rruga e Shkupit/Veternik, PN, 10000 Prishtina, Kosovo
ilir.s.hoxha@gmail.com

Beate Huseby

Head of Department, Economy and Analysis
Norwegian Directorate of Health, Trondheim
P.O. Box 6173, Sluppen, N-7435 Trondheim, Norway
beate.margrethe.huseby@helsedir.no

Prof. Yuichi Imanaka, MD, PhD

Professor and Head, Department of Health Care Economics and Quality
Graduate School of Medicine
Kyoto University
Yoshida Konoe-cho, Sakyo-ku, Kyoto 606-8501, Japan
imanaka-y@umin.net

Erica Ison

Editor of the NHS Atlas
Centre for Sustainable Healthcare
8 King Edward Street, Oxford, Oxfordshire, OX1 4HL
erica_ison@yahoo.co.uk

Peter Jüni

Director, Institute of Social and Preventive Medicine & of CTU Bern
University of Bern
Finkenhubelweg 11, CH-3012 Bern, Switzerland
juni@ispm.unibe.ch

The Wennberg International Collaborative Participant List

September 18 – 19, 2014 | Royal College Surgeons London

Brendon Kearney

Clinical Professor
University of Adelaide
SA 5005, Australia
brendon.kearney@health.sa.gov.au

Ilmo Keskimäki

Research Professor, Division of Health and Social Services
National Institute for Health and Welfare
Professor, Health and Social Policy, School of Health Sciences, University of Tampere
P.O. Box 30, FI-00271 Helsinki, Finland
ilmo.keskimaki@thl.fi

David Klemperer, MD

Professor of Social Medicine and Public Health
University of Applied Sciences
Seybothstrasse 2
D-93053 Regensburg, Germany
david.klemperer@hs-regensburg.de

Daniela Koller

Research Assistant
Center for Health Economic Research
University of Southern Denmark
Campusvej P.V.Tuxensvej 3-5, 5500 Middelfart, Denmark
koller@bwl.lmu.de

Anne Zierau Kudsk

PhD Candidate, Clinical Institute
University of Southern Denmark
ampusvej P.V.Tuxensvej 3-5, 5500 Middelfart, Denmark
azkudsk@health.sdu.dk

Xhyljeta Luta

PhD Candidate
University of Bern
Institute of Social and Preventive Medicine
Finkenhubelweg 11, CH-3012 Bern, Switzerland
xluta@ispm.unibe.ch

Maud Maessen

Research Scientist
University of Bern

The Wennberg International Collaborative Participant List

September 18 – 19, 2014 | Royal College Surgeons of England

Institute of Social and Preventive Medicine
Finkenhübelweg 11, CH-3012 Bern, Switzerland
mmaessen@ispm.unibe.ch

Céu Mateus

Assistant Professor of Health Economics
National School of Public Health
University of Nova of Lisbon
Lisbon, Portugal
ceum@ensp.unl.pt

Alan Maynard

Professor of Health Economics
University of York
Department of Health Science
Seebom Rowntree Building, Heslington, York Yo10 5DD UK
alan.maynard@york.ac.uk

Alistair McGuire

Professor of Health Economics
London School of Economics & Political Science
Houghton Street, London WC2A 2AE UK
a.j.mcguire@lse.ac.uk

Dr. Duncan McPherson, FRCA

Clinical Fellow Regional Anesthesia
Department of Anesthesia
Portsmouth Hospitals NHS Trust
Tremona Road, Southampton, Hampshire SO16 6YD UK
duncan.mcpherson@nhs.net

Klim McPherson

Professor of Health Economics
Womens Centre, Level 3
John Radcliffe Hospital
Headington, Oxford OX3 9DU UK
klim.mcpherson@obs-gyn.ox.ac.uk

Toshitaka Morishima

Visiting Researcher
Dr. Foster Unit, Dept. of Primary Care and Public Health
School of Public Health, Imperial College London
3 Dorset Rise, London EC4Y 8EN UK
t.morishima@imperial.ac.uk

The Wennberg International Collaborative Participant List

September 18 – 19, 2014 | Royal College Surgeons London

Ana Moura

Research Assistant and MSc Student
National School of Public Health
University of Nova of Lisbon
Lisbon, Portugal
ana.moura@ensp.unl.pt

Albert Mulley

Director, The Dartmouth Center for Health Care Delivery Science
Geisel School of Medicine
37 Dewey Field Rd, Suite 400, Hanover, New Hampshire 03755 USA
albert.g.mulley.jr@dartmouth.edu

Mats Nilsson

Epidemiologist/Statistician
Futurum, Academy for Health and Care Jönköping County Council
Lund University
Box 117, 221 00 Lund, Sweden
mats.p.nilsson@lj.se

Professor Sabina Nuti

Professor of Management
Scuola Superiore Sant'Anna
Piazza Martiri Della Libertà, 33, Pisa, Italy
s.nuti@sssup.it

Paul Nystedt

Professor of Economics
Jönköping International Business School
Jönköping University
Box 1026, SE-551 11 Jönköping, Sweden
paul.nystedt@jibs.hj.se

Zeynep Or

Senior Economist
Institute for Research and Information in Health Economics (IRDES)
10, rue Vanvenargues, 75018 Paris, France
or@irdes.fr

Tetsuya Otsubo

Assistant Professor
School of Public Health
Kyoto University
Yoshida Konoe-cho, Sakyo-ku, Kyoto 606-8501, Japan
otsubot-kyoto@umin.ac.jp

The Wennberg International Collaborative Participant List

September 18 – 19, 2014 | Royal College Surgeons of England

Radoslaw Panczak

Research Scientist
University of Bern
Institute of Social and Preventive Medicine
Finkenhubelweg 11, CH-3012 Bern, Switzerland
rpanczak@ispm.unibe.ch

Irene Papanicolas

Assistant Professor, Department of Social Policy
London School of Economics and Political Science
Houghton Street, London, UK
i.n.papanicolas@lse.ac.uk

Devin Parker

PhD candidate (Geography)
University of Iowa
316 Jessup Hall, Iowa City, Iowa 52242 USA
devin-parker@uiowa.edu

Laura Schang

PhD Student, Department of Management
London School of Economics and Political Science
Houghton Street, London WC2A 2AE UK
l.k.schang@lse.ac.uk

Jessica Sheringham

Senior Research Associate
University College London
S UCL Partners Programme
1-19 Torrington Place, London WC1E 7HB United Kingdom
j.sheringham@ucl.ac.uk

Thomas Lyngaa Simonsen

PhD Student
Department of Clinical Epidemiology
Aarhus University Hospital
Olof Palmes Allé 43-45, DK-8200 Aarhus, Denmark
tlsi@clin.au.dk

Luke Slawomirski

Program Manager, Implementation Support
Australian Commission on Safety and Quality in Health Care
GPO Box 5480 Sydney NSW 2001
Level 5, 255 Elizabeth Street, Sydney NSW 2000 Australia
Luke.Slawomirski@safetyandquality.gov.au

The Wennberg International Collaborative Participant List

September 18 – 19, 2014 | Royal College Surgeons London

Divya Sirvastava

Health Economist

Organisation for Economic Cooperation and Development (OECD)

2 rue André Pascal, 75116 Paris, France

Divya.SRIVASTAVA@oecd.org

Dominik Graf von Stillfried

Managing Director

Central Research Institute of Ambulatory Health

Care in the Federal Republic of Germany (ZI)

Herbert-Lewin-Platz 3, 10623 Berlin, Germany

dstillfried@zi-berlin.de

Phillipp Storz-Pfennig

Consultant, Department of Medicine

GKV-Spitzenverband

Reinhardtstraße 30, 10117 Berlin, Germany

philipp.storz@gkv-spitzenverband.de

Thérèse A Stukel, Ph.D.

Biostatistician and Senior Scientist

Institute for Clinical Evaluative Sciences

G106 - 2075 Bayview Ave, Toronto, Ontario M4N 3M5, Canada

stukel@ices.on.ca

Leonie Sundmacher

Head, Department of Health Services Management

Ludwig Maximilians University

Munich, Germany

sundmacher@bwl.lmu.de

Johan Thor MD, MPH, PhD

Senior Researcher and Vinnvård Fellow in Improvement Science

Jönköping Academy for Improvement of Health and Welfare

Jönköping University

P.O. Box 1026, SE- 551 11 Jönköping, Sweden

johan.thor@hj.se

Adeline Townsend

Deputy Head of the Unity on Model and Organization Hospital's Care

General Directorate of Health Care Supply

Ministry of Social Affairs and Health

14 avenue Duquesne, 75350 Paris 07 SP France

adeline.townsend@sante.gouv.fr

The Wennberg International Collaborative Participant List

September 18 – 19, 2014 | Royal College Surgeons of England

Tatiana Vidaurre Rojas

Institutional Head
National Institute of Diseases neoplastic (INEN)
Av. This Angamos 2520, Surquillo Lima 34, Peru
dir_general@inen.sld.pe

Verena Vogt

Research Fellow and PhD Candidate
Department of Health Care Management
Berlin University of Technology
Strae des 17. Juni 135, 10623 Berlin, Germany
verena.vogt@tu-berlin.de

Federico Vola

PhD Student
Laboratorio Management e Sanità
Istituito di Management - Scuola Superiore Sant'Anna
Piazza Martiri della Libertà 24, 56127 Pisa, Italy
f.vola@sssup.it

John “Jack” Wennberg

Peggy Y. Thomson Professor Emeritus in the Evaluative Clinical Sciences
Founder and Director Emeritus
The Dartmouth Institute for Health Policy & Clinical Practice
35 Centerra Parkway, Lebanon, NH, USA
john.e.wennberg@dartmouth.edu

Mr. Joe Williams

Policy Officer
Care Quality Commission
Flat 6, Old Courthouse, 15-17 Princes Street, Brighton, BN2 1WE
joe.williams@cqc.org.uk

Judit Zsuga

Associate Professor
Department of Health Systems and Quality Management
University of Debrecen Medical and Health Science Center
98. Nagyerdei Krt. Debrecen, Hungary, H-4032
zsuga.judit@med.unideb.hu

Mr. Gábor Bányai-Márton

Assistant Lecturer
University of Debrecen
Debrecen, Hungary

Biography

Gábor Bányai-Márton, after graduating cum laude from the Faculty of Law at the University of Debrecen in 2006, immediately started working as a candidate attorney at a firm specialized primarily on labor law cases. Besides gathering experience from legal practice he also wanted to pursue an academic carrier. He enrolled in a Ph.D. program at his Alma Mater. His main interests were interdisciplinary subjects, primarily focusing on stress at the workplace and its legal aspects. In 2009 he joined the Department of Law and Human Resources at the Medical and Health Science Center of the university as a legal assistant, setting aside his academic and research ambitions. At the end of 2012 he had a chance to win a position at a newly established department as an assistant lecturer. Since then he has been working at the Department of Health Systems Management and Quality Management for Health Care teaching especially law related subjects and starting over with research in the field of health care management, focusing on workplace stress, doctor-patient relationship and communication. Additionally he has formal training in conciliation (ADR), patient advocacy, health care management, interpretation and policy analysis, with special focus on the social sector. He is also the member of the Conciliation Body of the regional Chamber of Trade and Commerce.

Selected Publications

1. **Bányai, G.** "The interpretation of the concept of equal work for equal pay by the European Court of Justice." *European Legal Journal (Európai jog)*, 2006:4. [Hungarian]
2. **Bányai, G.** "Karōshi, or the death of the employee." *Hungarian Legal Journal (Magyar Jog)*, 2008:2. [Hungarian]
3. **Bányai, G.** "Changes and current issues of employer's liability for damages." *Hungarian Legal Journal (Magyar jog)* 2010:2. [Hungarian]
4. **Bányai, G.** Zsuga J, Nádházy Zs, Bíró K: "Communication, as one of the means for managing conflicts in health care. Challenges and Lessons in Management – International Conference on the Occasion of the Foundation of the Department of Management and Enterprise (2012) Conference Publication (ISBN: 978-963-473-593-9). [Hungarian]

Claudia Berlin
PhD Candidate
University of Bern
Bern, Switzerland

Biography

Claudia is a PhD candidate at the Institute of Social and Preventive Medicine of the University of Bern, Switzerland. She is holding a degree in Geography of the University of Greifswald and has worked as a research fellow at the Institute of Community Medicine in Greifswald, Germany.

Claudia Berlin's main subjects during her PhD are Health service research and Health Geography. Her work is focused on the determinates of geographical and temporal variation in health care, the use of GIS for spatial analysis in Public Health and Epidemiology and the analysis of spatial accessibility of health care facilities and its impacts on the health outcome.

Selected Publications

1. **Berlin C**, Busato A, Rosemann T, Djalali S, Maessen M: Avoidable hospitalizations in Switzerland: A small area analysis on regional variation, density of physicians, hospital supply and rurality. In: BMC Health Service Research (under review)
2. Meinke, C.; **Berlin C.**; Pieper, C.; van den Berg, N.; Hoffmann, W. (2011): Auswirkungen des demografischen Wandels auf die Grundbedürfnissicherung der Bevölkerung in Vorpommern unter besonderer Berücksichtigung der kinder- und jugendmedizinischen Versorgung im Landkreis Ostvorpommern. Greifswald.
3. **Berlin C.**; van den Berg, N.; Hoffmann, W.: Expertise zur aktuellen Situation der medizinischen Versorgung in der Planungsregion Vorpommern. Greifswald.
4. **Berlin C.**; Rulle, M. (2009): Demographischer Wandel und Daseinsgrundfunktionen: Erreichbarkeit von Hausärzten im Uecker-Randow-Kreis, Mecklenburg-Vorpommern. Geographische Rundschau, Bd. 61, Heft 7/8, S. 54-60.
5. Rulle, M.; Brandt, S.; **Berlin C.**; Mischke, S. (2006): The Sorbian language representing an ethnic minority: dispersion, dangers and political impacts. In: ESPON (Hrsg.): The Role and Spatial Effects of Cultural Heritage and Identity.

Enrique Bernal-Delgado

Senior Health Services Researcher
Institute for Health Sciences - ISS Aragón
Zaragoza, Spain

Biography

Background

- Medical Doctor, Public Health and Preventive Medicine Specialist.
- Doctorate studies in Sociology, PhD grade in Medicine.
- Master in Health Economics.

Current position

- Senior Health Services Researcher in the Health Services Research and Health Policy Unit at ISS-Aragon (Spain).

Main ongoing projects

- Variations in Medical Practice in Spanish National Health System. (www.atlasvpm.org)
- ECHO project, Variations in Systems Performance in Europe. (www.echo-health.eu)
- Spanish Leading Institution -WHO's European Observatory on Health Systems and Policies. (<http://hspm.org/countries/spain25062012/countrypage.aspx>)
- REDISECC – Spanish Network for Health Services Research in Chronic Care.
- CHRODIS JA – Joint Action on Chronic Diseases

Other current merits

- Chief Editor -Atlas of Variations in Medical Practice in the National Health System
- Associate Editor - BMC Health

Selected Publications

1. **Bernal-Delgado E**, García-Armesto S, Peiró S on behalf of the Atlas VPM group. Atlas of Variations in Medical Practice: the Spanish National Health Service under scrutiny. Health Policy 2014; 114(1): 15-30
2. García-Armesto S, Campillo-Artero C, **Bernal-Delgado E**. Disinvestment in the age of cost-cutting sound and fury. Tools for the Spanish National Health System. Health Policy 2013; 10(2-3):180-5.
3. **Bernal-Delgado E**, García-Armesto S, Martínez-Lizaga N, Beltrán-Peribañez J, Peiró-Moreno S. Should Policy-makers and managers trust PSI? An empirical validation study of Five Patient Safety Indicators in a National Health Service. BMC Medical Research Methodology 2012; 12:19

4. Ibañez B, Librero J, Peiró S, **Bernal-Delgado E**. Shared component modelling as an alternative to assess geographical variations in medical practice: gender inequalities in hospital admissions for chronic diseases. *BMC Methods in Medical Research* 2011; 11:172 doi:10.1186/1471-2288-11-172.
5. Ibañez B, Librero J, **Bernal-Delgado E**, Peiró S, López-Valcarcel BG, Martínez N, Aizpuru F. Is there much variation in variation? Revisiting statistics of small area variation in health services research. *BMC Health Serv Res.* 2009; 9:60.

R. Gwyn Bevan

Professor of Policy Analysis and Co-Founder of
The Wennberg International Collaborative
The London School of Economics and Political Science
London, United Kingdom

Biography

R. Gwyn Bevan is Professor of Policy Analysis in the Department of Management at the London School of Economics and Political Science. He has been head of LSE's Department of Management and a Director at the Commission for Health Improvement. He is a member of the Advisory Committee on Resource Allocation that advises the Secretary of State for Health on the formulas to be used in allocating resources for health care and public health in England. His research in health care includes evaluations of the 'natural experiment' of policy differences that have developed between the different countries of the UK after devolution and applying a new approach to priority setting, STAR (socio-technical allocation of resource) <<http://www.health.org.uk/learning/star/>>.

Selected Publications

1. **Bevan G**, Karanikolos M, Exley J, Nolte E, Connolly S, Mays N. *Comparing the performance of the National Health Service in the four countries of the United Kingdom before and after devolution*. London: the Nuffield Trust, 2014. <<http://www.nuffieldtrust.org.uk/compare-UK-health>>
2. Schang L, De Poli C, Airoidi M, Morton A, Bohm N, Lakhanpaul M, Schilder A, **Bevan G**. Using an epidemiological model to investigate unwarranted variation: the case of ventilation tubes for otitis media with effusion in England. *Journal of Health Services Research and Policy*. 2014 DOI: 10.1177/1355819614536886
3. Wennberg DE, Sharp SM, **Bevan G**, Skinner JS, Freedman JO, Gottlieb DJ, Wennberg JE, A population health approach to reducing observational intensity bias in health risk adjustment: cross sectional analysis of insurance claims. *BMJ* 2014;348:g2392.
4. Schang L, Morton A, DaSilva P, **Bevan G**. From data to decisions? Exploring how healthcare payers respond to the NHS Atlas of Variation in Healthcare in England. *Health Policy* 2014 **11**(1): 79-87.
5. Appleby J, Raleigh F, Frosini F, **Bevan G**, Gao H, Lyscom T. *Variations in health care the good, the bad and the inexplicable*. London: King's Fund, 2011.

Karen Bloor

Professor of Health Economics and Policy
University of York
York, United Kingdom

Biography

Karen Bloor is a professor of health economics and policy at the Department of Health Sciences, University of York. Her research interests focus on the economics of health policy, particularly around medical labour markets, but also on health care variations, regulating the market for pharmaceuticals and various aspects of health care reform.

Karen managed the English contribution to the European Union funded European Collaboration for Healthcare Optimisation (ECHO) project, which was led by Professor Enrique Bernal-Delgado at the University of Aragon. ECHO is an international effort to bring together the hospital databases information of six of European countries along with contextual information about populations and health care systems, and make the data available via an online summary tool and an atlas of variations in access to and quality of health care.

Karen has also conducted recent research on medical workforce policy, particularly on exploring and explaining variation in activity rates of hospital consultants. Finally, she is involved in research into the economics of child health, in collaboration with the 'Born in Bradford' cohort study.

Karen has teaches graduate health services research and undergraduate medical and nursing students, and has taught for various international organisations, including the World Bank (in Washington DC, Budapest and Beirut), the World Health Organisation (in Latvia and Turkey), and for universities in Finland and South Africa.

Selected Publications

1. Lee I, **Bloor K**, Hewitt C, Maynard A. International experience in controlling pharmaceutical expenditure: influencing patients and prescribers and regulating industry - a systematic review. *Journal of Health Services Research & Policy* 2014.
<http://dx.doi.org/10.1177/1355819614545675> (e-publication ahead of print).
2. **Bloor K**, Freemantle N, Maynard A (2012). Changing consultant contracts did not lead to increases in consultant clinical activity in the NHS in England: retrospective analysis of secondary data. *J Royal Soc Med*, in press.
3. Lee I, **Bloor K**, Hewitt C, Maynard A. The effects of new pricing and copayment schemes for pharmaceuticals in South Korea. *Health Policy* 2012 104: 40-49.

4. Prady, SL, Pickett, K, Croudace, T, Fairley, L, **Bloor, KE**, Gilbody, SM, Kiernan, K & Wright, J 2013, 'Psychological Distress during Pregnancy in a Multi-Ethnic Community: Findings from the Born in Bradford Cohort Study' *PLOS ONE*, vol 8, no. 4., [10.1371/journal.pone.0060693](https://doi.org/10.1371/journal.pone.0060693)

D. Jan Böcken

Senior Project Manager
Bertelsmann Foundation
Gutersloh, Germany

Biography

Dr. Jan Böcken has a degree in political science and macro-economics. In 1997 he started his health policy career with the EU project, Patient's rights and Patient's support in Europe. In 1998 Jan Böcken worked as a program manager in the contract department at Barmer Ersatzkasse (largest European sick fund) in Wuppertal. As a senior project manager he is responsible for health-policy projects within the Bertelsmann Foundation in Gütersloh since 1999. In 2009 he received his PhD at the institute of general medicine and family medicine at the University of Witten/Herdecke.

Selected Publications

1. Altenhöner T, Philippi M, **Böcken J**, Health behaviour and changes in health behaviour - are education and social status relevant? *Gesundheitswesen*. 2014 Jan;76(1):19-25. doi: 10.1055/s-0033-1333729. Epub 2013 Feb 19.
2. Huber CA, Rüesch P, Mielck A, **Böcken J**, Rosemann T, Meyer PC. Effects of cost sharing on seeking outpatient care: a propensity-matched study in Germany and Switzerland. *J Eval Clin Pract*. 2011 Apr 26. Doi: 10.1111/j.1365-2753.2011.01679.x.[Epub ahead of print] PubMed PMID: 21518398.
3. Kempkens D, Dieterle WE, Butzlaff M, Wilson A, **Böcken J**, Rieger MA, Wilm S, Vollmar HC. German ambulatory care physicians' perspectives on continuing medical education – a national survey. *J Contin Educ Health Prof*. 2009 Fall; 29(4):259-68. PubMed PMID:19998475.
4. Rückert IM, **Böcken J**, Mielck A. Are German patients burdened by the practice charge for physician visits ('Praxisgebuehr')? A cross sectional analysis of socio-economic and health related factors. *BMC Health Serv Res*. 2008 Nov 12;8:232. PubMed PMCID: 19014476; PubMed Central PMID:PMC2605748.
5. Butzlaff M, Kempkens D, Schnee M, Dieterle WE, **Böcken J**, Rieger MA. German ambulatory care physicians' perspectives on clinical guidelines – a national survey. *BMC Fam Pract*. 2006 Jul 20;7:47. PubMed PMID: 16857051; PubMed Central PMCID: PMC1550714.

Dr. Paulo Alexandre Boto

Deputy Secretary of State to Minister of Health
Portugal Ministry of Health
Lisboa, Portugal

Biography

Education/training: Medical degree from the University of Lisbon's Medical School in 1995. Master of Science (MSc) in Health Services Management from the London School of Hygiene and Tropical Medicine in 1998. Post-graduate degree in Hospital Administration from the Portuguese National School of Public Health in 2001. PhD in health services research and outcomes from the Johns Hopkins Bloomberg School of Public Health in 2011. Thesis title: "Risk adjustment in a European primary care context: assessing the properties of Adjusted Clinical Groups (ACG) for predictive modeling, for special populations and using ATC pharmacy codes".

Work History: Member of a team commissioning primary care services for Lisbon's regional health authority from 1998 to 2004. Member of the faculty at the Portuguese National School of Public Health since 2002 (teaching quality in health care to post-graduate courses in hospital administration and health services management since 2006). Member of the Office of the Secretary of State for Health since July 2011.

Publications: Several articles, as first author and co-author in national and international peer-reviewed journals, more recently on the effect of care pathways for hip fractures, the impact of care pathways for patients with proximal femur fracture and for exacerbation of Chronic Obstructive Pulmonary Disease, and quality indicators for in-hospital management of exacerbation of chronic obstructive pulmonary disease.

Several posters and oral communications at national and international conferences (e.g. Patient Classification Systems International conferences and Academy Health Annual Research Meetings), e.g. "Potential efficiency and quality gains from using predictive modeling and case management in a primary care population", "Introducing Rx-MG, a New Pharmacy Based Risk Adjustment Tool, in an International Context", "Deriving Health Status Information for Children from Pharmacy Codes in 5 Spanish Primary Care Clinics: Implications for Risk Adjustment", "Analysing Heterogeneity in a Diabetic Population", "Accreditation, Benchmarking & Mortality", "Pharmacy data and predictive modeling in primary care".

Projects: Coordinator of a disease management study in the Northern part of Lisbon, focusing on diabetes, obesity and drug prescription in 2008. Researcher in a study on the cost-effectiveness of a rotavirus vaccine in 2009. Consultant to Lisbon's regional health authority on how to finance primary care in 2009. Consultant in a hospital restructuring project in a large metropolitan area in Portugal in 2008. Consultant/supervisor of the Portuguese participation in the European Quality of Care Pathways (EQCP) project since 2010. Member of the board of consultants to the department of quality in health since 2009. Member of the Portuguese team

for the OECD Health Care Quality Indicators project since 2011. Member of the Organizing committee of a “Quality in health care” cycle of conferences in 2011.

Julie P.W. Bynum

Associate Professor of Medicine and Community & Family Medicine
The Dartmouth Institute for Health Policy & Clinical Practice
Lebanon, NH, USA

Biography

Julie P.W. Bynum, M.D., M.P.H. is Associate Professor of Medicine at Dartmouth Medical School and at The Dartmouth Institute for Health Policy and Clinical Practice. Dr. Bynum's work is focused on assessment of health system performance for the elderly using national U.S. Medicare administrative data. Dr. Bynum has foundation and NIH funding to study quality and efficiency of healthcare delivery to high-risk elderly, particularly those with multiple chronic conditions or cognitive impairment. She has published on the cost and use of health services among people with dementia, use of screening in advanced age, and on how to measure performance of health systems using Medicare claims.

One of Dr. Bynum's contributions in this field has been the development of a method to link fee-for-service Medicare beneficiaries to the group of physicians and the hospital at which they receive care. This method of creating "virtual" physician-hospital networks allows the measurement of care delivered and its outcomes for a population served by a specific group of providers. The data from the physician-hospital networks were used to support the conceptual development of the Accountable Care Organization legislation.

Selected Publications

1. **Bynum J**, Fisher E, Song Y, Skinner J, Chandra A. Measuring Racial Disparities in the Quality of Ambulatory Diabetes Care. *Medical Care*. 2010;48(12):1057-1063. PMID:20345867
2. **Bynum J**, Song Y, Fisher E. Variation in PSA Screening Among Men Older Than 80 in Fee-For-Service Medicare. *Journal of the American Geriatrics Society*. 2010;58(4):627-814. PMID: 20345867
3. **Bynum J**, Bernal-Delgado E, Gottlieb D, Fisher E. Assigning Ambulatory Patients and their Physicians to Hospitals: A Method for Obtaining Population-Based Provider Performance Measurements. *Health Services Research*. 2007;42(1):45-62. PMID: PMC1955742
4. **Bynum J.**, Andrews A., Sharp S., McCollough D., Wennberg J.E. Fewer Hospitalizations Result When Primary Care is Highly Integrated Into A Continuing Care Retirement Community. *2011 Health Affairs* 30(5):975-985.
5. Nicholas LA, **Bynum JPW**, Iwashyna TJ, Weir DR, Langa K. Advance Directives And Nursing Home Stays Associated With Less Aggressive End-Of-Life Care For Patients With Severe Dementia. *Health Aff* April 2014; 33:667-674; doi:10.1377/hlthaff.2013.1258.

Dr. Ronny Cheung

Hospital Paediatrician & Clinical Advisor
Child & Maternal Health Intelligence Network, Public Health England
London, UK

Biography

Ronny is an acute hospital paediatrician working in London, and a clinical advisor to the Child & Maternal Health Intelligence Network in Public Health England.

He was the clinical editor of NHS Right Care's Atlas of Variation in Healthcare for Children and Young People 2012, which mapped variation across 26 indicators of child health in England. Working with Public Health England, he recently edited the 2012/13 version of the Child Health Atlas as part of the English Chief Medical Officer's (CMO) Special Report into Child Health.

He was previously seconded as a clinical advisor to the English CMO, and was a health policy advisor to the UK Cabinet Office Behavioural Insights Team in 2010-11. He was a member of the Future Forum (Phase 2), an independent committee which advised the Secretary of State for Health in England during the implementation of the Health and Social Care Bill in 2012. He remains a member of several national advisory bodies, including the English Department of Health (DH) National Stakeholder Forum, the NHS Children and Young People's Health Outcomes Forum and the NHS Child & Maternal Health Intelligence Network.

Selected Publications

1. **Cheung R** (ed.) (2012) *NHS Atlas of Variation in Healthcare for Children & Young People, March 2012*. NHS QIPP Right Care, Department of Health, London.
<http://www.rightcare.nhs.uk/index.php/atlas/children-and-young-adults/>
2. **Cheung R** (ed.) (2013) *Atlas of Variation in Healthcare for Children and Young People (October 2013)*. Annex 9 in *Chief Medical Officer's annual report 2012: Our Children Deserve Better: Prevention Pays*. Department of Health, London.
3. **Cheung CR**, Ardolino A, Lawrence T et al. (2012) The accuracy of existing pre-hospital triage tools for injured children in England – an analysis using trauma registry data. *Emerg Med J*. doi:10.1136/emmermed-2012-201324.
4. **Cheung CR**, Gray JAM. (2013) Unwarranted variation in health care for children and young people. *Arch Dis Child* 98(1): 60-5.
5. **Cheung CR**, Smith H, Thurland K, Duncan H, Semple M. (2013) Population variation in admission rates and duration of inpatient stay for bronchiolitis in England. *Arch Dis Child* 98(1):57-9.

Dr. Kerri Clough-Gorr

Assistant Professor, University of Bern
Bern, Switzerland

Biography

Kerri Clough-Gorr is an Assistant Professor at the Institute of Social and Preventative Medicine (ISPM) University of Bern, Switzerland. She also has an adjunct appointment with the Section of Geriatrics at Boston University, Boston, Massachusetts, USA and a credentialed affiliation with the Massachusetts Veterans Epidemiology Research and Information Center (MAVERIC), Veteran's Health Administration, Boston, Massachusetts, USA. She trained in epidemiology and biostatistics at Boston University in the USA. Her research interests include cancer epidemiology and health services research with a special focus on the cancer experience of older adults. She has considerable experience with epidemiologic investigations using primary as well as existing data sources, as much of her work is conducted within multi-site longitudinal studies combined with linkage to secondary data sources. Her current research projects are supported by funds from Cancer Research Switzerland, Swiss National Science Foundation, Swiss Bridge Foundation, Gabriele Charitable Foundation (Switzerland), National Cancer Institute (USA), National Institute of Aging (USA) and Veteran's Health Administration (USA). In addition, she has subcontract funding from the Swiss Group for Clinical Cancer Research (SAKK).

Selected Publications

1. **Clough-Gorr KM**, Stuck AE, Thwin SS, Silliman RA. Older breast cancer survivors: geriatric assessment domains are associated with poor tolerance of treatment adverse effects and predict mortality over 7 years of follow-up. *J Clin Oncol*. 2010;28:380-6.
2. Bachmann S, Finger C, Huss A, Egger M, Stuck AE, **Clough-Gorr KM**. Inpatient rehabilitation specifically designed for geriatric patients: systematic review and meta-analysis of randomised controlled trials. *BMJ*. 2010;340:c1718.
3. Hanchate AD, **Clough-Gorr KM**, Ash AS, Thwin SS, Silliman RA. Longitudinal patterns in survival, comorbidity, healthcare utilization and quality of care among older women following breast cancer diagnosis. *J Gen Intern Med*. 2010;25(10):1045-1050.
4. **Clough-Gorr KM**, Thwin SS, Silliman RA. Examining five- and ten-year survival in older women with breast cancer using cancer-specific geriatric assessment (C-SGA). *Eur J Cancer*. 2012;48:805-12.
5. **Clough-Gorr K**, Thwin SS, Bosco JF, Silliman R, Buist DS, Pawloski P, Quinn V, Prout M. Incident malignancies among older long-term breast cancer survivors and age-site-matched comparisons over ten-years of follow-up. *Cancer* 2013, 119(8):1478-1485.

Philip DaSilva

Cluster Director of Commissioning Development
NHS Derbyshire Cluster
Derby, United Kingdom

Biography

Phil DaSilva is a clinical leader with a strong background in quality improvement, organisational development and change management. He has led and delivered significant change in many clinical services and organisations, fiercely maintaining a focus on delivering high quality care for patients during transformation. Phil has a deep appreciation of health policy, commissioning, planning and delivery and has enjoyed a successful career in the NHS, holding several senior executive roles including; policy development, strategic planning and responsibility for direct implementation.

Phil is the co-founder of NHS Right Care, a large scale transformation programme to improve outcomes and increase value and is the joint author of the NHS Atlas of Variation. He retains his leadership role in the national Right Care programme, which has stimulated Phil's interest in the topic of variation, leading him to undertake a doctoral study into the subject; which will be defended in autumn 2014. Phil continues to work across the NHS to support organisations search for unwarranted variation and is now beginning to work with colleagues across Europe to develop a network to share examples and ideas of how to use the search for unwarranted variation as the key to unlocking resources to increase value from health care resources.

Selected Publications

1. Appleby J, Raleigh V, Fosini F et al Variations in Health Care. The Kings Fund 2011, London
2. McPherson, K., Gon, G., & Scott, M. (2013). *International Variations in a Selected Number of Surgical Procedures* (No. 61). OECD Publishing.
3. Mercuri, M., & Gafni, A. (2011). Medical practice variations: what the literature tells us (or does not) about what are warranted and unwarranted variations. *Journal of evaluation in clinical practice*, 17(4), 671-677.
4. Schang, L., Morton, A., **DaSilva, P.**, & Bevan, G. (2014). From data to decisions? Exploring how healthcare payers respond to the NHS Atlas of Variation in Healthcare in England. *Health Policy*, 114(1), 79-87.

William Davenhall

Senior Health Advisor

Esri

Redlands, California, USA

Biography

Bill Davenhall serves as the Senior Health Advisor for Esri after serving as the Global Health and Human Services Manager since 1997. Bill's experience in health and human services spans nearly four decades and includes executive leadership of hospitals, health and social service research organizations, and healthcare software and data companies. Since Bill's semi-retirement Bill continues to devote his time to illustrating the "power of place" through writing and speaking on the subject of geomedicine. Since the 2013 meeting of the Wennberg International Collaborative Bill has made presentations to the Forum for Patient Safety and Quality in Paris, the Dubai Conference on Health IT Innovation and Investment, the Health 2.0 Conference in San Jose, California, the FutureMed program in San Diego, the WIRED 2014 Health Event in London, and Founder's Forum in London. Bill earned a Masters Degree (with a concentration in Medical Behavioral Science) from the University of Kentucky. Bill continues to serve on various national boards including the Data Access and Use Working Group of the National (US) Committee of Vital and Health Statistics, Stewards of Change Institute, Health Data Consortium, Alliance for Clinical Research Excellence and Safety, and Loma Linda University Health. Bill continues to reside near Phoenix, Arizona.

Selected Publications

1. Geomedicine: Geography and Personal Health, **Davenhall**, Esri, 2012. (Available as an eBook at [www.esri.com\geomedicine](http://www.esri.com/geomedicine)).
2. Kresse, W., Danko, D., Springer Handbook of Geographic Information, Chapter 29: GIS in Health and Human Services (**Davenhall**, W.F. and Kinabrew, C.), Springer 2012.
3. Khan OA, **Davenhall** W, Ali M, Castillo-Salgado C, Vazquez-Prokopec G, Kitron U, Soares Magalha RJ, Clements ACA. Geographical information systems and tropical medicine. Annals of Tropical Medicine & Parasitology 2010; 104 (4).
4. **Davenhall**, W. (2007). Spatial medicine to better health. *Geospatial Today*. Retrieved August 18th, 2010, from <http://www.esri.com/library/reprints/pdfs/geospatial-today-health.pdf>

Marina Davoli

Scientific Director, Italian National Outcome Program
Roma, Italia

Biography

Medical Degree in 1985 at the University of Rome “La Sapienza”

Master of Science (MSc) in Epidemiology - London School of Hygiene and Tropical Medicine in 1991

Head of the Department of Epidemiology, Regional Health Service - Lazio Region, Operational Centre of the National Outcome Program

- Member of the Regional Drug Formulary of the Lazio Region;
- Member of the Scientific Committee of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) in Lisbon;
- Member of the Steering Group of the Cochrane Collaboration;
- Coordinating Editor of the Cochrane Drugs and Alcohol Group;
- Member of the GRADE (Grading of Recommendations Assessment, Development and Evaluation) Working Group

Main activities:

Systematic reviews of the scientific literature on the effectiveness of health care interventions

Epidemiological studies on the health status of the population

Comparative effectiveness research on drugs and other health care interventions

Comparative analysis of health care outcomes across hospitals and geographical areas for the National Outcome Evaluation Programme and the Lazio Regional Outcome evaluation programme

Coordination of the work package of the EU Project DECIDE on strategies for the dissemination of evidence to policy makers

Selected Publications

1. Renzi C, Asta F, Fusco D, Agabiti N, **Davoli M**, Perucci CA. *Does public reporting improve the quality of hospital care for acute myocardial infarction? Results from a regional outcome evaluation program in Italy*. Int J for Quality in Health Care 2014; Volume 26, Issue 3
2. Kirchmayer U, Di Martino M, Agabiti N, Bauleo L, Fusco D, Belleudi V, Arcà M, Pinnarelli L, Perucci Carlo A, **Davoli M**. *Effect of evidence-based drug therapy on long-term outcomes in*

patients discharged after myocardial infarction: a nested case-control study in Italy.
Pharmacoepidemiol Drug Saf. 2013 Mar 26

3. Colais P, Pinnarelli L, Fusco D, **Davoli M**, Braga M, Perucci CA. *The impact of a pay-for-performance system on timing to hip fracture surgery: experience from the Lazio Region (Italy).* BMC Health Serv Res. 2013 Oct 7;13(1):393. [[Epub ahead of print](#)]. PMID: 24099264
4. Treweek S, Oxman AD, Alderson P, Bossuyt PM, Brandt L, Brozek J, **Davoli M**, Flottorp S, Harbour R, Hill S, Liberati A, Liira H, Schünemann HJ, Rosenbaum S, Thornton J, Vandvik PO, Alonso-Coello P, the DECIDE Consortium. *Developing and evaluating communication strategies to support informed decisions and practice based on evidence (DECIDE): protocol and preliminary results.* Implement Sci. 2013 Jan 9;8(1):6. PMID: 23302501
5. Colais P, Agabiti N, Fusco D, Pinnarelli L, Sorge C, Perucci CA, **Davoli M**. *Inequality in 30-day mortality and the wait for surgery after hip fracture: the impact of the regional health care evaluation program in Lazio (Italy).* Int J Qual Health Care. 2013 Jan 18. [[Epub ahead of print](#)]. PMID: 23335054

Judith de Jong

Program Coordinator

Netherlands Institute for Health Services Research (NIVEL)

Utrecht, The Netherlands

Biography

J.D. (Judith) de Jong, PhD, MSc is Programme coordinator Health care system and governance at the Netherlands Institute for Health Services Research (NIVEL) and scientific coordinator of the Academic Collaborative Research Centre, a cooperation between the Open University, an insurance company and NIVEL.

She has graduated in Science and Policy at Utrecht University, the Netherlands. In 2008 she defended her PhD thesis 'Explaining medical practice variation. Social organization and institutional mechanisms' (cum laude) at Utrecht University, the Netherlands. Her research topics and publications include health care system reform, medical practice variations, comparative health systems research, and consumer experiences on health care. She is president of the section on Health Services Research of the European Public Health Association EUPHA, member of the executive council and the international conference council of EUPHA and associate editor for the international journal BMC Health Services Research.

Selected Publications

1. Dijk, C.E. van, Korevaar, J.C., Koopmans, B., **Jong, J.D. de**, Bakker, D.H. de
The primary-secondary care interface: does provision of more services in primary care reduce referrals to medical specialists? *Health Policy*, 2014
2. **Jong, J.D. de**, Groenewegen PP, Spreeuwenberg P, Schellevis F, Westert GP. Do guidelines create uniformity in medical practice? *Soc Sci Med* 2010.
3. **Jong, J.D. de**. Explaining medical practice variations. Social organization and institutional mechanisms. Thesis. Utrecht, NIVEL, 2008.
4. **Jong, J.D. de**, Westert GP, Lagoe R, Groenewegen PP. Variation in hospital length of stay: do physicians adapt their length of stay decisions to what is usual in the hospital where they work? *Health Services Research*. 2006; 41(2): 374-94.
5. **Jong, J.D. de**, Westert GP, Noetscher ChM, Groenewegen PP. Does managed care make a difference? Physicians' length of stay decisions under managed and non-managed care. *BMC Health Services Research* 2004; 4 (3).

Matthias Egger

Professor and Chair, Institute for Social and Preventive Medicine
University of Bern
Finkenhubelweg 11, CH-3012 Bern, Switzerland

Biography

Education/History: After studying medicine at the University of Bern, Switzerland, and clinical training posts, Matthias Egger moved to the UK to study epidemiology at the London School of Hygiene and Tropical Medicine (LSTH&TM). Since then he has been working in academic epidemiology and public health, in the UK, Switzerland and more recently in Southern Africa. He was the recipient of a British Council Fellowship, a Swiss National Science Foundation Senior Research Fellowship (Programme for Social Medicine, Preventive and Epidemiological Research - PROSPER) and a Swiss Bridge Award for Cancer Research.

Current Position/Responsibilities: Dr. Egger is Professor of Epidemiology and Public Health and chairs the Institute of Social & Preventive Medicine at University of Bern. He is PI or co-PI of several large research projects, including the NIH funded International epidemiological Databases to Evaluate AIDS (IeDEA) in Southern Africa, the Swiss HIV Cohort Study, the Swiss National Cohort, or the CANUPIS study (Childhood Cancer and Nuclear Power Plants in Switzerland). He chairs the Public Health and Tropical Interview Committee at the Wellcome Trust and is a member of the Trust's Strategy Committee and Study Design Expert Group. He has served on several WHO, NIH, Wellcome Trust and Swiss National Science Foundation review panels, and is a member of council of research agencies in Switzerland, including Cancer Research Switzerland. He is also a member of the CONSORT (Consolidated Standards of Reporting of Trials) and STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) working groups.

Publications/Editorial Experience: Dr. Egger is Associate Editor of the International Journal of Epidemiology and Clinical Trials and manuscript reviewer for several journals, including Lancet, JAMA, Annals of Internal Medicine, BMJ, PLoS Medicine, British Journal of Cancer, Bulletin of the World Health Organisation and American Journal of Epidemiology. He has published over 200 articles and over 40 editorials and commentaries in peer-reviewed journals such as the Lancet, BMJ, PLoS Medicine, JAMA, and specialist journals, including Br J Cancer and Int J Cancer. His h index is above 50.

Research Interests: Matthias Egger's research is concerned both with methodological and substantive issues in clinical epidemiology and public health medicine, with a focus on meta-analytical research, clinical trials and analyses of large cohort studies. He analysed cancer outcomes in the Swiss HIV Cohort Study and a large consortium of HIV cohort studies. He participated in several meta-analyses in oncology, including a meta-analysis of epidemiological studies examining the role of insulin-like growth factor (IGF)-I and IGF binding protein-3 in cancer, the role of obesity in cancer or, recently, in an individual patient data meta-analysis of trials of erythropoiesis-stimulating agents and mortality in patients with cancer.

Arnaud Fouchard

Medical Advisor Office
Branch of the Regulation of Health Care Provision
Ministry of Social Affairs
Paris, France

Biography

Arnaud Fouchard is a french medical doctor, specialized in public health. He previously spent one year at the French high council for public health expertise to evaluate two national programmes (TB and Ageing well). Following, he spent one year in a regional agency to work on a plan to forecast medical resources and after he went to the national institute for health and medical research (Inserm) to evaluate three individual scores of deprivation. He is at the French ministry of health for one year and a half and is currently working on various subjects like “appropriateness of care”, “health care planning” and “forecast of needs”, “efficiency of rehabilitation hospitals”, and resources allocation between regions.

Selected Publications

1. **Fouchard**, et al. *Admission demands in palliative care units: Delays evaluation*. Médecine palliative Soins de support Accompagnement Éthique (2010) 9, p227-231
2. P-H. Bréchat, G. Bertrand, F. Pierru, **A. Fouchard**, A.Jourdain. *Eléments pour responsables de pôles d'activités de centres hospitaliers publics*. Gestions hospitalières. N°496, mai 2010.
3. Letourmy, A. **Fouchard**. *Evaluation of the national program on tuberculosis*. Actualité et dossier en santé publique. N° 72. September 2010.
4. P. Guilbert P, A. **Fouchard**. *Prospective « Santé 2030 – Prévention 2010 »* Actualité et dossier en santé publique. N° 80. Septembre 2012.
5. **A. Fouchard**, et al. *Qualitative and quantitative comparisons of three individual scores of deprivation on outpatients of a hospital free clinic in Paris*. Rev Epidemiol sante publique (ahead of print)

Sandra García-Armesto

ARAI+D Senior Researcher

Health Services Research & Health Policy Unit at the Institute for Health Sciences in Aragón
Zaragoza, Spain

Biography

Sandra García-Armesto is ARAI+D senior researcher at the Health Services Research and Health Policy Unit at the Institute for Health Sciences in Aragón (I+CS). Prior to joining the I+CS, she was health economist and policy analyst at the OECD Health Division headquarters, head of the Observatory of Madrid Health System (Regional Health Ministry), lecturer at the Public Health School of the Autonomous University of Madrid and health services researcher at the Institute of Health Carlos III (Ministry of Health). She has carried out substantive work in coordinating different lines within the OECD Health Care Quality Indicators Project. She is author of several reports and publications on OECD Health Systems Performance Assessment and has collaborated on WHO publications on international comparison of health systems. She has also contributed as expert in several European Commission Working Parties (indicators, patient safety, health systems) and liaison commissions between OECD, WHO and the European Commission.

Selected Publications

1. Bernal-Delgado E, Campillo-Artero C, **García-Armesto S**: [Health services supply and the economic crisis: either we fund goods and services according to their value or go bankrupt. SESPAS report 2014.]. Gaceta Sanitaria 03/2014
2. Bernal-Delgado E, **García-Armesto S**, Peiró S: Atlas of Variations in Medical Practice in Spain: The Spanish National Health Service under scrutiny. Health Policy 01/2014; 114(1):15–30.
3. **García-Armesto S**, Campillo-Artero C, Bernal-Delgado E: Disinvestment in the age of cost-cutting sound and fury. Tools for the Spanish National Health System. Health Policy 01/2013
4. Gené-Badia J, Gallo P, Hernández-Quevedo C, **García-Armesto S**: Spanish health care cuts: penny wise and pound foolish?. Health Policy 04/2012; 106(1):23-8.
5. Bernal-Delgado E, **García-Armesto S**, Natalia Martínez-Lizaga, Begoña Abadía-Taira, Joaquín Beltrán-Peribañez, Peiró S: Should policy-makers and managers trust PSI? An empirical validation study of five patient safety indicators in a national health service.. BMC Medical Research Methodology 02/2012; 12:19.

Catherine Gerard

Senior Analyst

Health Quality & Safety Commission

Wellington, New Zealand

Biography

Catherine Gerard is a Senior Analyst in Health Quality and Evaluation. She works with Richard Hamblin on the *New Zealand Atlas of Healthcare Variation*. Catherine's background includes clinical research, and design and implementation of a clinical research programme. Her previous role centered on the implementation of clinical guidelines, working across the health sector to deliver supports and systems for the translation of guidance into everyday clinical practice.

Selected Publications

1. Jackson G, **Gerard C**, Minko N and N Parsotam. Variation in benzodiazepine and antipsychotic use in people aged 65 years and over in New Zealand. 2014. NZMJ *in press*.

David Goodman, MD MS

Professor of Pediatrics and Co-Founder of the Wennberg International Collaboration
The Dartmouth Institute for Health Policy and Clinical Practice
Hanover, NH, USA 03766

Biography

David C. Goodman is Professor of Pediatrics and of Health Policy at The Dartmouth Institute for Health Policy and Clinical Practice; and Co-Principal Investigator, *Dartmouth Atlas of Health Care*. Dr. Goodman's has a longstanding research interest in the causes and consequences of health care variation. Recently he has initiated a research program in examining unwarranted variation in the use of neonatal intensive care.

Dr. Goodman is one of the founding investigators of the *Dartmouth Atlas of Health Care* and has led multiple Atlas projects on such topics as end-of-life cancer care, post hospital discharge care, and care for infants and children. Dr. Goodman has served on multiple journal editorial boards, and federal and Institute of Medicine committees. His research papers and editorials have been published in the *New England Journal of Medicine*, *JAMA*, *Health Affairs*, *Pediatrics*, and *The New York Times*.

Dr. Goodman received his medical degree from the State University of New York Upstate Medical Center and his master's degree in medical care epidemiology from Dartmouth College. He served his residency in pediatrics at The Johns Hopkins Hospital and received specialty training in Allergy and Clinical Immunology at Dartmouth.

Selected Publications

1. **Goodman DC**, Robertson RG Accelerating physician workforce transformation through competitive graduate medical education funding. *Health Affairs*, 2013; 32:1887-1892.
2. Weinstein SJ, House, SA, Chang CH, Wasserman J, **Goodman DC**, Morden N. Small geographic area variations in prescription drug use. *Pediatrics*, Aug. 11, 2014;[Online] DOI: 10.1542/peds.2013-4250.
3. Brown JR, Chang CH, Zhou W, MacKenzie TA, Malenka DJ, **Goodman DC**. Health system characteristics and rates of readmission after acute myocardial infarction in the United States. *Journal of the American Heart Association*. Jun 2014;3(3):e000714.
4. Munson JC, Morden NE, **Goodman DC**, Valle, LA, Wennberg JE. *The Dartmouth Atlas Report of Medicare Prescription Drug Use*. October 2013.
5. **Goodman DC**, Morden NE, Ralston SL, Chang CH, Parker DM, Weinstein SJ. *The Dartmouth Atlas of Children's Health Care in Northern New England*. December 2013.

Philip Goodney

Assistant Professor, Vascular Surgery, Dartmouth Hitchcock Medical Center
Director, Center for the Evaluation of Surgical Care, Geisel School of Medicine
Co-Director, VA Outcomes Group, White River Junction, Vermont
Lebanon, NH, USA

Biography

I am a vascular surgeon, health services researcher, Director of the Center for the Evaluation of Surgical Care at Dartmouth, and Co-Director of the VA Outcomes Group at the White River Junction, Vermont VA Medical Center. After joining the faculty at Dartmouth in 2008, I've enjoyed studying ways to determine which patients are most likely to benefit from surgical treatments and examining variation in the use and effectiveness of treatments for patients with vascular disease. I am active in regional and national quality improvement efforts in vascular surgery as well, as I serve as Medical Director of the Vascular Study Group of New England, and I am Chair of the Research Advisory Committee for the Society for Vascular Surgery's national quality improvement program, the Vascular Quality Initiative. Finally, I have been privileged to serve recently as a series Editor for the Dartmouth Atlas of HealthCare. Along with David Goodman, I've edited a series of reports that examine unwarranted variations in U.S. surgical care. These reports intend to help patients, physicians, and policymakers recognize where improvements in science have helped to limit variation and improve surgical care, identify specific clinical settings and situations where variation in the treatment of surgical conditions remain, and outline the best opportunities for improvement in surgical care that lie ahead.

Selected Publications

1. **Goodney PP**, Travis LA, Lucas FL, Cronenwett JL, Goodman DC. Variation in the use of vascular procedures in the year prior to amputation. *Circulation: Cardiovascular Quality and Outcomes* 2012 Jan; 5(1): 94-102. PMID 22147886.
2. **Goodney PP** Holman KL, Travis LA, Henke PS, Birkmeyer JD, Cronenwett JL, Fisher ES. Regional use of revascularization and amputation rates. *J. Vasc Surg* 2013 Jun 57(6): 1471-1480. PMID 23375611. PMCID in progress
3. **Goodney PP**, Travis LL, Brooke BS, DeMartino RR, Goodman DC, Fisher ES, Birkmeyer JD. The relationship between regional spending on vascular care and amputation rate. *JAMA Surgery* 2014 149(1):34-42.PMID 24258010..
4. **Goodney PP**, Travis LA, Lucas FL, Cronenwett JL, Goodman DC, Stone DH. Survival following open and endovascular thoracic aneurysm repair in the Medicare population *Circulation* 2011 Dec 13; 124 (24): 2661-9. PMID 22104552.
5. Nallamotheu BK, Gurm HS, Ting HH, **Goodney PP**, Rogers MA, Curtis JP, Dimick JB, Bates ER, Krumholz HM, Birkmeyer JD. Operator experience and outcomes with carotid stenting in Medicare beneficiaries. *JAMA* 2011 Sept 28; 306 (12) 1338-43 PMID 21954477.

Mr. Tommaso Grillo Ruggieri

PhD Student

Istituto di Management - Scuola Superiore Sant'Anna

Pisa, Italy

Biography

Mr. Grillo Ruggieri graduated in Economics and Management of Public Administrations and International Institutions at Bocconi University of Milan in 2011. He has been working at the MeS Laboratory since 2012. He is currently a Ph.D. Student in International Management (Innovation, Sustainability and Healthcare). Main research topics include hospital organization, geographic variability in healthcare services, and diabetes care.

Dr. A.S. (Stef) Groenewoud

Senior Researcher

IQ healthcare, Radbound University

Nijmegen, The Netherlands

Biography

Dr. A. S. (Stef) Groenewoud holds a PhD in Health Policy and Management (2008, Department of Medicine, Erasmus University Medical Centre Rotterdam) and he is also an applied ethicist (2013 Department of Philosophy, University of Utrecht). After/during his PhD, he worked as a consultant for KPMG healthcare for eight years, mostly in studies on value based health care (quality, costs, usage and variation). Since august 2013 Stef has been working as a senior researcher at IQ Healthcare, where he is project leader of the Dutch Atlas of Variation in Health Care.

Dr. Marion Grote-Westrick
Senior Project Manager
The Bertelsmann Foundation
Guetersloh, Germany

Biography

Marion Grote-Westrick is a Senior Project Manager at the Bertelsmann Foundation. She is responsible for health policy projects, and for the Healthcare Fact Check in particular. Having joined the Foundation in 2005, she led projects dealing with quality management in healthcare and international health policy. Marion studied in Trier and Lisbon and holds a degree in Economics. She started her career as a Research Analyst Economics at McKinsey & Company, followed by working as a Research Associate at the Chair of Social Politics and Health Economics at the University of Duisburg-Essen.

Selected Publications

1. Hans-Dieter Nolting H-D, Zich K, Deckenbach B, Gottberg A, Lottmann K, Klemperer D, **Grote-Westrick M**, Schwenk U, Healthcare Fact Check: Regional Variation in German Healthcare, Gütersloh: Bertelsmann Stiftung, 2012.
2. Schwenk, U, **Grote-Westrick M**, Qualität in integrierten Versorgungsstrukturen: Qualitätsindikatoren für Medizinische Versorgungszentren. Gütersloh: Bertelsmann Stiftung, 2010.
3. **Grote-Westrick M**, Unser Gesundheitswesen braucht Qualitätstransparenz : Transparenz für Bürger, Transparenz für Ärzte, Politik für Transparenz, Gütersloh : Bertelsmann Stiftung, 2007.
4. **Grote-Westrick M**, Schmiedt-Kaehler S, Schwenk U, Kein Wettbewerb ohne Transparenz. Die BKK, 2007, 08, 95: 356-357.

Jostein Grytten
Professor
University of Oslo
Oslo, Norway

Biography

Jostein Grytten has worked with research questions related to funding and distribution of health services. The main focus of the research has been on how competition, incentives, and different types of contract influence the availability, quality, cost and effectiveness of health services. A specific research question has been how physicians and dentists should be remunerated in order to ensure that they do not provide either too little or too much treatment.

Selected Publications

1. **Grytten J**, Skau I, Sørensen R. Do mothers decide? The impact of preferences in health care. *Journal of Human Resources* 2013; 48:142-168
2. **Grytten J**, Monkerud L, Sørensen R. Adoption of diagnostic technology and variation in Caesarean section rates: a test of the practice style hypothesis in Norway. *Health Services Research* 2012; 47: 2169-2189.
3. **Grytten J**, Skau I, Sørensen R. Do expert patients get better treatment than others? Agency discrimination and statistical discrimination in obstetrics. *Journal of Health Economics* 2011;30:163-80.
4. **Grytten J**, Grytten J, Skau I. Physician response to fee changes: using inheritance as a quasi-natural experiment. *Applied Economics*, 2011; 43: 1913-22.
5. **Grytten J**, Monkerud L, Skau I, Sørensen R. Regionalization and local hospital closure in Norwegian maternity care – the effect on neonatal and infant mortality. *Health Services Research*, 2014. DOI: 10.1111/1475-6773.12153

Astrid Guttman

Senior Scientist and Chief Science Officer, Institute for Clinical Evaluative Sciences
Associate Professor Paediatrics and Health Policy, Management and Evaluation
University of Toronto
Toronto, Ontario, Canada

Biography

Astrid Guttman is an Associate Professor of Paediatrics and Health Policy, Management and Evaluation at the University of Toronto, a General Paediatrician at the Hospital for Sick Children, and the Chief Science Officer at the Institute for Clinical Evaluative Sciences. She holds an Applied Chair in Child Health Services and Policy Research from the Canadian Institute for Health Research (CIHR) as well as numerous operating. Her research interests include health system performance reporting and the evaluation of health policies as they relate to children and youth. She sits on a number of provincial policy committees including the Child and Youth Advisory Committee to the Ontario Provincial Council on Maternal and Child Health as well as the advisory board of the Institute of Human Development, Child and Youth Health at CIHR.

Selected Publications

1. Cohen E, Yantzi N, Guan J, Lam K, **Guttman A**. Regional movement patterns of young children with chronic conditions in Ontario, Canada: a population-based cohort study. *Int J Equity Health*. 2013 Aug 20;12(1):62. [Epub ahead of print]
2. Cohen E, Berry JG, Camacho X, Anderson G, Wodchis W, **Guttman A**. Patterns and costs of Health Care Use of Children With Medical Complexity. *Pediatrics* 2012 Dec;130(6):e1463-70. 2012 Nov 26 [Epub ahead of print]
3. Li P, To T, **Guttman A**. Follow-up care after an Emergency Department Visit for Asthma and Subsequent Healthcare Utilization in a Universal-Access Healthcare System. *J Pediatr* 2012 Aug;161(2):208-13.e1.
4. Daneman N, Stukel TA, Ma X, Vermeulen M, **Guttman A**. Reduction in Clostridium difficile infection rates after mandatory hospital public reporting: findings from a longitudinal cohort study in Canada. *PLoS Med* 2012 Jul;9(7):e1001268. Epub 2012 Jul 17.
5. Benchimol EI, Langan S, **Guttman A**, RECORD Steering Committee. Call to RECORD: the need for complete reporting of research using routinely collected health data. *J Clin Epidemiol*. 2013 Jul;66(7):703-5. 2012 Nov 24 [Epub ahead of print]

Dr. Finn Henry Hansen

Director, Northern Norway Regional Health Authority
Bodø, Norway

Biography

Education: Political Science/public administration, Bergen University 1974

Degree: Cand. Polit, Bergen 1974

Research fellow, Bergen University and University of Wisconsin-Madison, 1975-79

Project Director, University of Tromsø 1979-83

Assistant Professor, Nordland College-Bodø, 1983-91

Director/CEO Health Services, Hordaland County, Bergen, 1992-97

Director/CEO, Health Services, Nordland County, Bodø, 1997-2000

Research director, National Institute of Hospital Research, Trondheim, 2001-2002

Strategy director, Northern Norway Regional Health Authority, 2002

Acting CEO, Northern Norway Regional Health Authority, 2003

Deputy CEO, Northern Norway Regional health Authority, 2004-2013

Selected Publications

1. **Hansen FH**: Health Care in the Welfare State - Rapid Growth and Distributional Challenges. *Journal of Social Research, Volume 20, 219-240, 1979*
2. **Hansen FH** et al: Health and Welfare Atlas for Hordaland county and Norway, *Hordaland County Council and Norwegian Social Science Data Service, Bergen 1996*
3. **Hansen FH** et al. The Hospital Sector in the 1990s. *The Norwegian Hospital Research Institute. Trondheim 2000*
4. **Hansen FH** The Changing Hospital Structure in Norway. *The Norwegian Hospital Research Institute, Trondheim 2001*
5. Teisberg,P, **Hansen FH**, Hotvedt, R et al: Patient Volume and Treatment Quality – A Systematic Review, *Norwegian Center for Health Technology Assessment, Oslo 2001*

Wade Harrison, MPH

Manager of Special Projects

The Dartmouth Institute for Health Policy and Clinical Practice

Hanover, NH, USA

Biography

Wade Harrison is a medical student at the Geisel School of Medicine at Dartmouth. He is currently spending a research year with Dr. David Goodman at The Dartmouth Institute during which he is concentrating on pediatric health services research, with a particular focus on variations in neonatal intensive care, and working on selected other projects including the Wennberg International Collaborative. Wade completed a Masters of Public Health at Dartmouth in 2014 where his work looked at the effects of hospital consolidation, the use of patient-reported outcome measures, and on using a patient registry to improve chronic disease care in partnership with the Karolinska Institutet in Sweden. Following this year, he will return to complete his medical training, including a residency in pediatrics.

Dr. Dougal Hargreaves

Honorary Research Associate
UCL Institute of Child Health
London, United Kingdom

Biography

Dougal Hargreaves is a UK Consultant Paediatrician with a research interest in health policy, health services research and health inequalities affecting children and young people. He recently completed a MD(Res) in Adolescent Health Services at University College London and has postgraduate qualifications in public health and health economics. In addition to UK clinical work, he has also worked as a Clinical Advisor at the English Department of Health and internationally in Turkmenistan, Pakistan and Bosnia. He recently returned from a year at Harvard Medical School/Boston Children's Hospital as a Harkness Fellow in Healthcare Policy and Practice.

Selected Publications

1. **Hargreaves DS**, Djafari Marbini A, Viner RM. Inequality trends in health and health risk among children and young people in England, 1999-2009. Arch Dis Child. 2013 Nov;98(11):850-5.
2. **Hargreaves DS**, McVey D, Nairn A, Viner RM. Relative importance of individual and social factors in improving adolescent health. Perspect Public Health. 2013 Mar;133(2):122-31.
3. **Hargreaves DS** McDonagh JE, Viner RM. Validation of You're Welcome quality criteria for adolescent health services using data from national inpatient surveys in England. J Adolesc Health. 2013 Jan;52(1):50-57.
4. **Hargreaves DS**, Sizmur S, Viner RM. Do young and older adults have different health care priorities? Evidence from a national survey of English inpatients. J Adolesc Health. 2012 Nov;51(5):528-32.
5. **Hargreaves DS**, Viner RM. Children's and young people's experience of the National Health Service in England: a review of national surveys 2001-2011. Arch Dis Child. 2012 Jul;97(7):661-6.

Ilir Hoxha

Project Advisor, Health Dialogue Program, Solidar Suisse

PhD Candidate, University of Bern, Switzerland

External Advisor, Ministry of Health, Kosovo

Biography

Ilir Hoxha is Medical Doctor, researcher and consultant from Kosovo. He holds a Medical Studies degree from University of Prishtina and Master of Science degree in Health Systems Management, from London School of Hygiene and Tropical Medicine. In addition he has record of research/academic experiences at New Bulgarian University, American University in Kosovo, Dartmouth Medical School, The Dartmouth Institute for Health Policy and Clinical Practice, Technical University of Colorado and Karl Franzens University, Graz, Austria.

In addition to work with a number of international organizations such as The World Bank, UNICEF, UNFPA, German Technical Cooperation, USAID, in Kosovo, he has been researcher and author in number of papers (see below).

His professional and academic interests lie in: measurement of variation in provision of health care services; health economics and evaluation of health services (i.e. assessment of impact on health, cost effective analysis, assessment of coverage, quality and access); Regulation of health care service delivery in public and private sector.

In 2009 he was awarded Fulbright Research Fellowship for the research project that aimed to explore the prospects and limitations for using small area variation analysis methodology in evaluation of clinical practice performance in developing countries, using Kosovo as a case study. In 2010 has served as external adviser to Mr. Bujar Bukoshi, Minister of Health of Republic of Kosovo. Today he works with for SOLIDAR Suisse as project advisor to the health dialogue program and acts as external advisor to Ministry of Health where he supports the Ministry in development of health care reform strategy. As of 2012 he is a PhD Candidate at Institute for Social and Preventive Medicine at University of Bern, under mentorship of Dr. David Goodman and Prof. Dr. Peter Juni. The focus of PhD is in systemic determinants of Medical Practice Variation for Caesarean Section.

Selected Publications

1. **Hoxha I**, Access to services in SEE: Kosovo Study. Friedrich Ebert Stiftung, 2013.
2. **Hoxha I**, A Proposal for a Health Insurance Plan: How does it affect us? Solidar Suisse, 2013.
3. **Hoxha I**, Cela L, Lenjani B, Scheter K. Analysis of the Structure of Pediatric Emergency Cases at the Emergency Center of the UCCK, AIHA, 2011.

4. **Hoxha I**, Shaipi K. Comparative analysis of health care systems in SEE. Friedrich Ebert Stiftung, 2009.
5. **Hoxha I**, Qosaj A, Haxhikadrija A. Ten years of ICPD implementation in Kosovo - Assessment Report on Achievements, UNFPA, 2009.

Beate Huseby

Head of Department, Economy and Analysis
Norwegian Directorate of Health, Trondheim
N-7435 Trondheim, Norway

Biography

Position	Research Director at the Norwegian Directorate of Health, Department of Economy and Analysis
Education	Dr. polit in Political Science, March 2000, NTNU (The Norwegian University of Science and Technology). Cand. polit. in Sociology, August 1993, NTNU (The Norwegian University of Science and Technology).
Experience:	
2009 -	Research Director at the Norwegian Directorate of Health, Department of Economy and Analysis
2006 - 2009	Research fellowship at the Department of Public Health and General Practice, Faculty of Medicine, NTNU (The Norwegian University of Science and Technology)
1999 - 2009	Research Scientist at SINTEF Health Research/NIS Unimed.
1997 - 1998	Assigned stay at the Centre of Advanced Studies at the Norwegian Academy of Science in Oslo as a member of the international research group: "The Foundations of Public Opinion".
1995 - 1999	Research fellow at the Department of Sociology and Political Science, NTNU. The scholarship was granted from the Norwegian Research Council.
1990 - 1995:	Scholarly member of the research group: Beliefs in Government from 1990 to 1995, founded by the European Science Foundation.
1993 - 1995	Research Fellow/Assistant Professor at the Department of Sociology and Political Science, NTNU. Teaching classes in statistical methods of social science.

Distinctions

Awarded with NSD's Stein Rokkan-prize in 2002 for the dr. polit. dissertation: "Government Performance and Political Support. A Study of How Evaluations of Economic Performance, Social Policy and Environmental Protection Influence the Popular Assessments of the Political System". (NSD: Norwegian Social Science Data Services). The prize is assigned every 3. - 5. year.

Professional appointments:

- 2006-2009 Deputy board member of the programme-committee on Health Services Research in The Norwegian Research Council 2006-2009
- 2013 - Deputy board member of the Department of Sociology and Political Science at the Norwegian University of Science and Technology

Selected Publications

1. Samdata spesialisthelsetjenesten (ed.)(Comparative analyses on the performance of the specialised health care sector in Norway). Annual publication from the Norwegian Directorate of Health. Contributions 1999-2014, Editor 2003, 2009-2014.
2. Sykehusstruktur og utviklingen i bruk av sykehustjenester 2003-13. (Centralisation and decentralisation in hospital use in Norway 2003-13). In Samdata spesialisthelsetjenesten 2014. The Norwegian Directorate of Health.
3. Samhandlingsstatistikk (ed). Comparative analyses on the Coordination reform in Norwegian health care; patients and resources, interaction between the community care and specialised health care in Norway. Annual publication from the Norwegian Directorate of Health.
4. Activity in somatic hospitals before and after The Norwegian Hospital Reform. In The Evaluation of the Norwegian Hospital Reform, The Norwegian Research Council 2007.
5. The Norwegian Hospital Reform and centralisation, specialisation and decentralisation of hospital services in Norway. In The Evaluation of the Norwegian Hospital Reform, The Norwegian Research Council 2007.

Prof. Yuichi Imanaka, M.D., Ph.D.

Professor and Head, Department of Health care Economics and Quality
Graduate School of Medicine, Kyoto University
Kyoto, Japan

Biography

Education & Work Experience

M.D. (University of Tokyo)
Board-Certification in Internal Medicine Clinical Practice
Government-Certification for Autopsy [Pathology]
Dr. of Medical Science (University of Tokyo)
M.P.H. (University of Michigan)
Ph.D. (University of Michigan)

Current position since 2000, through clinical experience as an internist and research/education at universities

Academic and Professional affiliations

International Journal of Quality in Health Care (Editorial Board Member)
International Society for Quality in Health Care (Executive Board Member, 1997-2003)
Japan Council for Quality Health Care (Executive Board since 2000, in charge of Planning and International Affairs)
Japanese Society of Internal Medicine, Japanese Society for Health Administration (Board Member, Human Resource Committee Chair) (51st Annual Conference Chair), Japan Society for Public Health (Board Member, Education Committee Chair), Japan Health Economics Association (Board Member)

Projects

Wide-Region Integrative Database for Healthcare Assessment, Planning and Policy (PI: Principal Investigator)

Quality Indicator/ Improvement Project (PI; approx. 400 hospital participants nationwide)

Healthcare Costing Project; Visualization Project of Organizational Culture and Patient Experience;

Human Resource Development for Effective Healthcare Management

WHO Study WPRO Expert Group. Hospitals within healthcare systems: Their capacity to meet the needs of populations. WHO, August 2001. (Imanaka Y as the principal investigator for WPRO)

OECD study of cross-national differences in the treatment, costs and outcomes of ischaemic heart disease (OECD Health Working Papers NO.3) 22-April-2003.

Stroke care in OECD countries: A comparison of treatment, costs and outcomes in 17 countries (OECD Health Working Papers NO.5) 06-June-2003.

International Hospital Federation and World Health Organization. The performance of hospitals under changing socioeconomic conditions: A global study on hospital sector reform. WHO, 2007. (Imanaka Y as the principal investigator for the Western Pacific Region)

OECD & WHO Consultation on the Health Care Quality Improvement Network (2012, 2013)

Selected Publications

1. Morishima T, Lee J, Otsubo T, **Imanaka Y***. Association of health care expenditures with aggressive versus palliative care for cancer patients at the end of life: A cross-sectional study using claims data in Japan. *International Journal for Quality in Health Care* 2014;26(1):79-86.
2. Kunisawa S, Morishima T, Ukawa N, Ikai H, Otsubo T, Ishikawa KB, Yokota C, Minematsu K, Fushimi K, **Imanaka Y ***. Association of geographical factors with administration of tissue plasminogen activator for acute ischemic stroke. *Journal of American Heart Association* 2013;2(5):e000336.
3. Sasaki H, Otsubo T, **Imanaka Y ***. Widening disparity in the geographic distribution of pediatricians in Japan. *Human Resources for Health* 2013; 11(1):59.
4. Park S, Sasaki N, Morishima T, Ikai H, **Imanaka Y ***. The number of cardiologists, case volume and in-hospital mortality in acute myocardial infarction patients. *International Journal of Cardiology* 2013;168(4):4470-1.
5. Sasaki N, Lee J, Park S, Umegaki T, Kunisawa S, Otsubo T, Ikai H, **Imanaka Y ***. Development and validation of an acute heart failure-specific mortality predictive model based on administrative data. *Canadian Journal of Cardiology* 2013;29(9):1055-61.

*corresponding author

Erica Ison

NHS Atlas of Variation in Healthcare
Public Health England
United Kingdom

Biography

Erica Ison works for Public Health England (PHE) on The NHS Atlas of Variation in Healthcare. Erica has been involved since the inception of the NHS Atlases, and was the Co-Editor with Professor Sir Muir Gray of both compendium Atlases (Atlas 1.0 and Atlas 2.0), and the subsequent specialist Atlases: Child Health, Diabetes, Kidney Care, Respiratory Disease, Liver Disease, Diagnostic Services, and Organ Donation and Transplantation. At the time of writing, PHE is determining the next phase of work for The NHS Atlases, now that responsibility for them has been handed over from the QIPP Right Care Workstream. From October 2013, Erica has also been working part-time on the Global Burden of Disease Project in the UK for PHE.

Erica is also a specialist in health impact assessment (HIA) and Health in All Policies (HiAP). She is an Expert Adviser in HIA to the World Health Organization's European Network of Healthy Cities, and has also acted as an Expert Advisor in HIA and HiAP to WHO International in Geneva, and in HiAP to WHO Western Pacific Region and the Ministry of Health in Brunei. Work for the European Union includes developing indicators for health and regeneration as part of URBACT II "Building Healthy Communities", and developing HIA methods with an equity focus for Ministries of Health throughout Europe. In 2005, she was made an honorary member of the English Faculty of Public Health, and in 2006 she was awarded the "Individual Achievement in Impact Assessment" by the International Association of Impact Assessment (IAIA), the first HIA practitioner to be given this award.

Selected Publications

1. QIPP Right Care Workstream (2010, 2011, 2012, 2013, 2014) The NHS Atlases of Variation in Healthcare. Reducing unwarranted variation to increase value and improve quality. QIPP Right Care Workstream and the NHS. Available at: <http://www.rightcare.nhs.uk/atlas/>
2. Ison E. (2002) Rapid Appraisal Tool for Health Impact Assessment. A task-based approach. Eleventh iteration. Available at: <http://www.apho.org.uk/resource/item.aspx?RID=44890>
3. Mindell J, Ison E, Joffe M. (2003) A glossary for health impact assessment. *J Epidemiol Community Health* 57;647-651.doi:10.1136/jech.57.9.647 Available at: <http://eprints.ucl.ac.uk/889/1/647.pdf>
4. Ison E. (2004) Rapid appraisal techniques. In Kemm J, Parry J and Palmer S (eds) *Health impact assessment*. Oxford University Press.

5. Ison E. (2009) The introduction of health impact assessment in the WHO European Healthy Cities Network. *Health Promot Int* 24 (suppl 1): i64-i71. doi:10.1093/heapro/dap056 Available at: http://heapro.oxfordjournals.org/content/24/suppl_1/i64.full?sid=d9e7acd8-89fb-41ad-8813-fa3a6d453927

Peter Jüni

Director of the Institute of Social and Preventive Medicine and of CTU Bern
Universität Bern

Biography

Peter Jüni is the Director of the Institute of Social and Preventive Medicine and of CTU Bern, the University hospital's clinical trials unit. He is primary investigator, methodologist in charge or member of the steering group of major clinical studies and collaborative analyses in the musculoskeletal and cardiovascular field and contributes to clinical studies, meta-analyses and methodological research in other fields. Current research topics include the benefits and harms of screening programs, problems of overdiagnosis, issues in ensuring appropriate care, and methodological aspects of randomized trials and meta-analysis.

Selected Publications

1. Windecker S, Stortecky S, Stefanini GG, daCosta BR, Rutjes AW, Di Nisio M, Siletta MG, Maione A, Alfonso F, Clemmensen PM, Collet JP, Cremer J, Falk V, Filippatos G, Hamm C, Head S, Kappetein AP, Kastrati A, Knuuti J, Landmesser U, Laufer G, Neumann FJ, Richter D, Schauerte P, Sousa Uva M, Taggart DP, Torracca L, Valgimigli M, Wijns W, Witkowski A, Kolh P, **Jüni P**. Revascularisation versus medical treatment in patients with stable coronary artery disease: network meta-analysis. *BMJ*. 2014 Jun 23;348:g3859. doi: 10.1136/bmj.g3859.
2. Biller-Andorno N, **Jüni P**. Abolishing mammography screening programs? A view from the Swiss Medical Board. *N Engl J Med*. 2014 May 22;370(21):1965-7. doi: 10.1056/NEJMp1401875. Epub 2014 Apr 16. No abstract available.
3. Stefanini GG, Kalesan B, Serruys PW, Heg D, Buszman P, Linke A, Ischinger T, Klaus V, Eberli F, Wijns W, Morice MC, Di Mario C, Corti R, Antoni D, Sohn HY, Eerdmans P, van Es GA, Meier B, Windecker S, **Jüni P**. Long-term clinical outcomes of biodegradable polymer biolimus-eluting stents versus durable polymer sirolimus-eluting stents in patients with coronary artery disease (LEADERS): 4 year follow-up of a randomised non-inferiority trial. *Lancet*. 2011 Dec 3;378(9807):1940-8. doi: 10.1016/S0140-6736(11)61672-3. Epub 2011 Nov 8.
4. Nüesch E, Dieppe P, Reichenbach S, Williams S, Iff S, **Jüni P**. All cause and disease specific mortality in patients with knee or hip osteoarthritis: population based cohort study. *BMJ*. 2011 Mar 8;342:d1165. doi: 10.1136/bmj.d1165. PMID: 21385807 [PubMed - indexed for MEDLINE]
5. Nüesch E, Trelle S, Reichenbach S, Rutjes AW, Tschannen B, Altman DG, Egger M, **Jüni P**. Small study effects in meta-analyses of osteoarthritis trials: meta-epidemiological study.

BMJ. 2010 Jul 16;341:c3515. doi: 10.1136/bmj.c3515. PMID: 20639294 [PubMed - indexed for MEDLINE]

Brendon Kearney
Clinical Professor
University of Adelaide
Adelaide, Australia

Biography

Professor Kearney presently works as a Clinical Professor in the Faculty of Medicine, University of Adelaide, practicing as a Consultant in the Haematology Unit of the Royal Adelaide Hospital (RAH) Cancer Service with a private practice based at the Royal Adelaide Hospital. He also has management responsibilities for pathology services at the RAH. He is the Chair of the Population Health Research Network Management Council.

For 10 years he was Deputy Chairman of the Medical Services Advisory Committee, Australia's Health Technology Assessment Committee for assessment and recommendations on procedures, devices and diagnostics. This involved the establishment of policies and systems for HTA assessment directly linked to reimbursement decisions.

Professor Kearney has chaired numerous committees, including, the Health Prioritizing Advisory Committee on Technology, of which he has chaired since 2003. He has been Chair and Chief Executive Office of the South Australian Health Service, Chief Health Officer and Chief Executive of the Royal Adelaide Hospital.

He has been the Director of South Australia's Institute of Medical and Veterinary Science from 1983-2008. He was a member of the Australian Productivity Commission Review that recommended the present Private Health Insurance scheme that has for two decades been a vital part of Australia's health system. He has served on the National Health and Medical Research Council for twelve years. He was awarded the Sydney Sax medal for services to health and an AM for contribution to emergency services and health research.

Dr. Ilmo Keskimäki

Research Professor

National Institute for Health and Welfare (THL)

Helsinki, Finland

Biography

Ilmo Keskimäki works as a research professor for health systems research at the Division of Health and Social Services in the National Institute for Health and Welfare (THL). He affiliates to the School of Health Sciences, University of Tampere, as Professor of Social and Health Policy and the Department of Public Health in the University of Helsinki as an adjunct professor. Formerly, he has worked as a professor of health services research in the University of Tampere and in various research and administrative positions in the National Research and Development Centre for Welfare and Health (STAKES), the Ministry of Social Affairs and Health, the National Public Health Institute, and the Universities of Helsinki and Oulu. He graduated in medicine, is a specialist in public health medicine, and has a PhD in public health from the Faculty of Medicine in the University of Helsinki. His main research activities have been in health services research. He has particularly studied practice variations and social disparities in health services and focused on developing research methods for the use of register based longitudinal data in health services research. Moreover, he has acted as a Finnish partner in several international and European projects and networks.

Selected Publications

1. Lumme S, Leyland A, **Keskimäki I**. Multilevel modeling of regional variation in equity in health care. *Medical Care* 2008;46(9): 976–983.
2. Hetemaa T, **Keskimäki I**, Manderbacka K, Leyland AH, Koskinen S. How did the recent increase in the supply of coronary operations in Finland affect socio-economic and gender equity in their use? *Journal of Epidemiology and Community Health* 2003;57:178-185.
3. **Keskimäki I**, Seitsalo S, Österman H, Rissanen P. Reoperations after lumbar disc surgery: A population-based study of regional and interspecialty variations. *Spine* 2000;25(12):1500-1507.
4. Teperi J, **Keskimäki I**, Hemminki E, Erkkola R, Meriläinen J. A population-based analysis of variation in Caesarean birth rates. *European Journal of Public Health* 1995;5:116-122.
5. **Keskimäki I I**, Aro S, Teperi J. Regional variation in surgical procedure rates in Finland. *Scandinavian Journal of Social Medicine* 1994;22:(2):132-138.

David Klemperer, MD

Professor of Social Medicine and Public Health
University of Applied Sciences
Regensburg, Germany

Biography

David Klemperer, MD, is Professor of Social Medicine and Public Health at the Faculty of Social and Health Sciences, Ostbayerische Technische Hochschule Regensburg. His research and teaching focus on evidence-based professional practice, conflicts of interest and quality of care. He initiated the Healthcare Fact Check of the Bertelsmann Foundation and is a member of the review board. He is author of the German textbook "Sozialmedizin – Public Health – Gesundheitswissenschaften" and co-editor of a German textbook „Interessenkonflikte in der Medizin“. He is past president of the German Network for Evidence-based Medicine (<http://www.ebm-netzwerk.de/english>) and member of the board of the German Society for Social Medicine and Prevention (<http://www.dgsmp.de>). Website: www.davidklemperer.de

Daniela Koller

Munich School of Management
Department of Health Services Management
Munich, Germany

Biography

Study of Social Geography, Political Science and Public Health in Munich, PhD in Public Health at the University of Bremen. Head of the special interest group for Health Geography within the German Society for Epidemiology, Harkness Fellow for Health Policy by the Commonwealth Fund/Bosch-Stiftung at the Dartmouth Institute for Health Policy and Clinical Practice. Post-doctoral researcher at the Department of Health Services Management at the University of Munich.

Selected Publications

1. **Koller, D.**, Hoffmann, F., Maier, W., Tholen, K., Windt, R., Glaeske, G. (2013). Variation in antibiotic prescriptions: is area deprivation an explanation? Analysis of 1.2 million children in Germany. *Infection*, 41(1), 121–7.
2. **Koller, D.**, Kaduszkiewicz, H., Van den Bussche, H., Eisele, M., Wiese, B., Glaeske, G., Hoffmann, F. (2012). Survival in patients with incident dementia compared with a control group: a five-year follow-up. *International psychogeriatrics*, 24(9), 1522–30.
3. **Koller, D.**, Eisele, M., Kaduszkiewicz, H., Schon, G., Steinmann, S., Wiese, B., Glaeske, G., van den Bussche, H., Schön, G., van den Bussche, H. (2010). Ambulatory health service utilization in patients with dementia - Is there an urban-rural difference? *International journal of health geographics*. 9 (1). p.p. 59.
4. **Koller, D.**, Mielck, A. (2009). Regional and social differences concerning overweight, participation in health check-ups and vaccination. Analysis of data from a whole birth cohort of 6-year old children in a prosperous German city. *BMC public health* 9. p.p. 43.

Anne Kudsk Fallesen

PhD Candidate, Clinical Institute
University of Southern Denmark
Odense M, Denmark

Biography

Anne Kudsk Fallesen is currently affiliated to the Research Unit for Quality in Healthcare, University of Southern Denmark, as a PhD-student. Her research is about regional variation in the diagnosis and treatment of cancer in Denmark; specifically focusing on lung cancer. She has a background in nursing and has a master degree in Health Science. For the past 15 years, her main occupancy has been in the field of quality improvement and patient safety in health care with a focus on among others accreditation, organizational development, indicators, guidelines, evaluation etc.

Selected Publications

1. Myrdal G, Lamberg K, Lambe M et al. "Regional differences in treatment and outcome in non-small cell lung cancer: a population-based study (Sweden)". *Lung Cancer* 63 (2009), 16-22.
2. Bilimoria KY, Ko CY, Tomlinson JS et al. "Wait times for Cancer Surgery in the United States: Trends and Predictors of Delays". *Annals of Surgery* (2011), vol.253 (4), 779-785.
3. Jakobsen E, Green A, Oesterlind K et al. "Nation-wide quality improvement in lung cancer care: The role of the Danish Lung Cancer Group and Registry." *Journal of Thoracic Oncology*, Oct. 2013, vol.8(10); pp. 1238-1247.

Xhyljeta Luta

PhD Candidate

Institute of Social and Preventive Medicine

University of Bern

Bern, Switzerland

Biography

Field of work: End - of- Life Care, Health Services Research

PhD student at the Institute of Social and Preventive Medicine, University of Bern, Switzerland
(Since 09/2012)

Research project: Regional and temporal Variations in End – of – Life Care in Switzerland

Education:

Master of Public Health (MPH), 2010 University of Sheffield, United Kingdom

Master of Public Health (MPH), Advanced Public Health Methods, 2011 University of
Copenhagen, Denmark

École des Hautes Études en Santé Publique, (2009) EUROPUBHEALTH, Public Health Rennes,
France

Selected Publications

1. **Luta, X.** and T. Dræbel (2012). "Kosovo-Serbs' experiences of seeking healthcare in a post-conflict and ethnically segregated health system." International journal of public health1-7.

Maud Maessen

University of Bern

Institute for Social and Preventive Medicine

Finkenhubelweg 11, CH-3012 Bern, Switzerland

Biography

Maud Maessen is a post-doctoral researcher in the health service research group of the institute of social and preventive medicine of the University of Bern. This health service research group studies the health care delivery system of Switzerland and how resources should rationally be distributed to fit needs in a setting of rapidly ageing populations and increasingly limited resources. The group focuses on spatial-temporal variation in the supply and demand of health care. Maud's current work includes studies on variation in end of life health care and end of life decisions. Within the research field of end of life health care, she studies palliative health care systems using administrative hospital data and health claim data. Within the research field of end of life decisions, she identifies factors associated with assisted suicide and study the use of end of life health care to provide evidence-based information on the quality of care and the debate on the legalization of assisted dying. Maud holds a PhD in social medicine from the University of Utrecht, and a Master's in Nutrition and health sciences from the University of Wageningen, Netherlands.

Selected Publications

1. Avoidable hospitalizations in Switzerland; A small area analysis on regional variation, density of physicians, hospital supply and rurality. Berlin C., Busato A., Rosemann T, Djalali S., **Maessen M**; BMC Health service research. Under review.
2. Suicide assisted by right-to-die associations: a population based cohort study. Steck N, Junker C, **Maessen M**, Reisch T, Zwahlen M, Egger M; Swiss National Cohort. Int J Epidemiol. 2014 Apr;43(2):614-22.
3. Euthanasia and assisted suicide in selected European countries and US states: systematic literature review. Steck N, Egger M, **Maessen M**, Reisch T, Zwahlen M. Med Care. 2013 Oct;51(10):938-44.
4. Requests for euthanasia: origin of suffering in ALS, heart failure, and cancer patients. **Maessen M**, Veldink JH, van den Berg LH, Schouten HJ, van der Wal G, Onwuteaka-Philipsen BD. J Neurol. 2010 Jul;257(7):1192-8.
5. Trends and determinants of end-of-life practices in ALS in the Netherlands. **Maessen M**, Veldink JH, Onwuteaka-Philipsen BD, de Vries JM, Wokke JH, van der Wal G, van den Berg LH. Neurology. 2009 Sep 22;73(12):954-61.

Céu Mateus

Assistant Professor of Health Economics
National School of Public Health
University of Nova of Lisbon
Lisbon, Portugal

Biography

Céu Mateus is Assistant Professor of Health Economics at the National School of Public Health at University Nova of Lisbon. She worked for the Institute of Management and IT (Ministry of Health) in the Department of Information Systems Development from 1995 until 2000, where she was the Executive responsible for the Financing System/Classification System in Diagnoses Related Groups. She worked in the development and improvement of the funding model for NHS hospitals in what concerns inpatient care and, at the same time, was a member of the team that was being developing a capitation model for resource allocation in primary health care. She is currently undertaking studies of inequalities in the treatment in hospital care and variations in clinical practice. She was President of Patient Classification Systems International from 2002 until 2009. She is the President of the Portuguese Association of Health Economics since 2011.

Selected Publications

1. Azevedo H, **Mateus C**. Cost effects of hospital mergers in Portugal. *European Journal of Health Economics*. (Forthcoming) (DOI: 10.1007/s10198-013-0552-6).
2. Yazdanpanah Y, Perelman J, Dilorenzo M, Alves J, Barros H, **Mateus C**, Pereira J, Mansinho K, Robine M, Park Je, Ross E, Losina E, Walensky R, Noubary F, Freedberg K, Paltiel D. (2013) Routine HIV Screening in Portugal: Clinical Impact and Cost-Effectiveness. *PLoS ONE* 8(12): e84173 (DOI: 10.1371/journal.pone.0084173)
3. Busse R; Geissler A; Aaviksoo A; Cots F; Häkkinen U; Kobel C; **Mateus C**; Or Z; O'Reilly J; Serdén L; Street A; Świderek M; Tan SS; Quentin W (2013) Diagnosis related groups in Europe: moving towards transparency, efficiency, and quality in hospitals? *BMJ* 2013;346:f3197
4. Perelman, J; Fernandes, A; **Mateus C**. (2012) Gender disparities in health and healthcare: results from the Portuguese National Health Interview Survey. *Cad. Saúde Pública*, Rio de Janeiro, v. 28, n. 12, Dec. 2012 .
(<http://dx.doi.org/10.1590/S0102-311X2012001400012>)
5. Perelman J, **Mateus C**, Fernandes A. (2010). Gender equity in treatment for cardiac heart disease in Portugal. *Social Science and Medicine* 71(1):25-9.

Alan Maynard

Professor of Health Economics
University of York
York, United Kingdom

Abstract

Alan Maynard is Professor Emeritus of Health Economics, Department of Health Sciences, University of York. He was Founding Director of the Graduate Programme in Health Economics, University of York (1997-1983), and Founding Director of the Centre for Health Economics, University of York (1983-95). He is the Founding editor of the journal Health Economics (1992-) and a Fellow Academy of Medical Sciences (2002-). He has received honorary doctorates from the Universities of Aberdeen and Northumbria. He has written and edited a dozen books and published extensively in academic journals and the media.

In addition to his academic work he has worked in the National Health Service for 30 years being Chair of York Hospitals NHS Foundation Trust (1997-2010) and is currently Chair of the Vale of York NHS Clinical Commissioning Group

Selected Publications

1. **Maynard, A**, Contracting for Quality in the National Health Service: putting the Francis report in perspective, OHE Annual Lecture, Office of Health Economics, London 2013.
2. **Maynard, A**, Health care rationing: doing it better in public and private health care systems, Journal of Health Politics, Policy and Law, 38,6,1103-1126, 2013
3. Yip, W, Hsiao, W, Chen, W, Hu, S Ma, J and **Maynard, A**, Early appraisal of China's huge and complex health-care reforms, Lancet 379, 833-42, 2012

Alistair McGuire

Professor of Health Economics
London School of Economics and Political Science
London, United Kingdom

Biography

Professor Alistair McGuire [B.A. (Econ); M.Litt (Econ); Phd (Econ)] is the Professor of Health Economics at LSE Health and Social Care, within the Department of Social Policy at the London School of Economics and Political Science. Prior to this he was Professor of Economics at City University, London after being a Tutor in Economics at Pembroke College, University of Oxford. He has been a visiting Professor at Harvard University, the University of Sydney, the University of York and the Universitat Pompeu Fabra, Barcelona. He has been interested in the economics of health care for over 30 years, with extensive teaching experience and has written numerous books, articles and reports in this area on a wide range of subject matter. He has acted as an advisor to a number of governments and governmental bodies (including the UK government, the UK Competition Commission, the UK Medical Research Council, the UK Economic and Social Science Research Council, the UK National Institute for Clinical Excellence (NICE), the German Institut für Qualität Wirtschaftlichkeit im Gesundheitswesen (IQWiG)), as well as for a number of international bodies (including the World Bank and WHO) and pharmaceutical companies.

Selected Publications

1. Costa-i-Font, Joan and **McGuire, Alistair** and Varol, Nebibe (2014) Price regulation and relative delays in generic drug adoption. *Journal of Health Economics*. Forthcoming
2. Costa-Font, Joan and **McGuire, Alistair** and Stanley, Tom (2013) Publication selection in health policy research: the winner's curse hypothesis. *Health Policy*, 109 (1). 78-87
3. Serra-Sastre, Victoria and **McGuire, Alistair** (2013) Information and diffusion of new prescription drugs. *Applied Economics*, 45 (15). 2049-2057
4. Serra-Sastre, Victoria and **McGuire, Alistair** (2012) "Technology diffusion in health care: conceptual aspects and evidence" In: McGuire, Alistair and Costa-Font, Joan, (eds.) *The LSE Companion to Health Policy*. Edward Elgar, Cheltenham, UK, 177-194
5. Costa-Font, Joan and **McGuire, Alistair** and Serra-Sastre, Victoria (2012) The "Weisbrod Quadrilemma" revisited: insurance incentives on new health technologies. *The Geneva Papers on Risk and Insurance Issues and Practice*, 37 (4). 678-695

Dr. Duncan McPherson, FRCA

Department of Anaesthesia
Queen Alexandra Hospital
Portsmouth, UK

Biography

Duncan is an anaesthetist (anesthesiologist) with a sub-specialty focus in acute pain management and regional anaesthesia. He also works on improving patient safety systems.

While working at the former National Patient Safety Agency in London, he investigated potential quantitative measures of system level patient safety. This led to a thesis that is nearing completion for a higher degree. The thesis attempted to quantify avoidable harm caused by unwarranted variation in availability of an innovative technological treatment in England. It illustrated the problem of joint geographic and temporal variation and modelled these using advance Bayesian statistics. The disease studied was acute myocardial infarction and the treatment was primary angioplasty. In order to study this area, Duncan had to generate his own map of Hospital Service Areas for England specific to heart attack treatment, and invented a computerized algorithm for doing this based on the original HSA definition of the Dartmouth Atlas.

Duncan is also a co-opted member of the Safe Anaesthesia Liaison Group.

Selected Publications

1. (in draft) McPherson, D. *Avoidable harm, unwarranted variation and diffusion in the treatment of acute myocardial infarction*. MD thesis. Imperial College London, London, 2014.
2. McPherson, D., Griffiths, C., Williams, M., Baker, A., Klodawski, E., Jacobson, B., & Donaldson, L. (2013). Sepsis-associated mortality in England: an analysis of multiple cause of death data from 2001 to 2010. *BMJ Open*, 3(8), e002586-. doi:10.1136/bmjopen-2013-002586

Toshitaka Morishima

Visiting Researcher

Dr. Foster Unit, Dept. of Primary Care and Public Health,
School of Public Health, Imperial College London

Biography

I am currently working for Dr. Foster Unit, Dept. of Primary Care and Public Health, School of Public Health, Imperial College London as a visiting researcher.

I graduated from Kyoto University medical school, Japan and served my clinical residency in internal medicine, with an emphasis on respiratory medicine. After starting my studies toward a doctoral degree at Department of Healthcare Economics and Quality Management, Kyoto University Graduate School of Medicine in 2009, I had been trained in the disciplines of health services research, epidemiology, biostatistics, and economic evaluation under the supervision of Prof. Yuichi Imanaka.

In March 2013, I was awarded a Ph.D degree. After spending one year as a post-doctoral researcher at Kyoto University Graduate School of Economics, I started a one-year sabbatical visit to Dr. Foster Unit, Imperial College London in April 2014 to pursue research and study opportunities in health services research outside Japan, sponsored fully by the main Japanese governmental research funding agency.

My research themes have mainly focused on the quantitative analyses of institutional and regional variations in the provision of healthcare services, using large administrative datasets for a variety of diseases. Several of my studies have already been published in international peer-reviewed journals.

Selected Publications

1. **Morishima T**, Lee J, Otsubo T, Imanaka Y. Association of healthcare expenditures with aggressive versus palliative care for cancer patients at the end of life: a cross-sectional study using claims data in Japan. *International Journal for Quality in Health Care* 2014;26(1):79–86. PubMed PMID: 24225269.
2. Kunisawa S, **Morishima T**, Ukawa N, Ikai H, Otsubo T, Ishikawa K, Fushimi K, Yokota C, Minematsu K, Imanaka Y. Association of geographical factors with administration of tissue plasminogen activator for acute ischemic stroke. *Journal of the American Heart Association* 2013;2(5):e000336. PubMed PMID: 24045119.
3. Park S, Sasaki N, **Morishima T**, Ikai H, Imanaka Y. The number of cardiologists, case volume and in-hospital mortality in acute myocardial infarction patients. *International Journal of Cardiology* 2013;168(4):4470–4471. PubMed PMID: 23871346.

4. **Morishima T**, Lee J, Otsubo T, Ikai H, Imanaka Y. Impact of hospital case volume on quality of end-of-life care in terminal cancer patients. *Journal of Palliative Medicine* 2013;16(2):173–178. PubMed PMID: 23140184.
5. Lee J, **Morishima T**, Park S, Otsubo T, Ikai H, Imanaka Y. The association between health care spending and quality: an analysis of regional variations in stroke patients in japan. *Journal of Health Services Research & Policy* 2013;18(2):77–82.

Ana Moura

MSc Student

National School of Public Health,

Universidade Nova de Lisboa

Lisbon, Portugal

Biography

Ana Moura is a research assistant at the National School of Public Health, Universidade Nova de Lisboa. She holds an undergraduate degree in Economics (2010) and an MSc in Economics (2012), both awarded by Nova School of Business and Economics, Universidade Nova de Lisboa. Ana developed her master thesis on the use of technology in hospital setting and has collaborated in several research projects mainly devoted to the Portuguese pharmaceutical sector. She has presented research work in conferences at both national and international level. Between 2012 and 2014, Ana was employed at the National Accounts Department of Statistics Portugal. She is currently a member of the board at the Portuguese Health Economics Association and is also collaborating with Nova Healthcare Initiative, a university research unit.

Dr. Albert G. Mulley

Director, The Dartmouth Center for Health Care Delivery Science
Geisel School of Medicine
37 Dewey Field Rd, Suite 400, Hanover, New Hampshire 03755 USA

Biography

Dr. Mulley is Director of The Dartmouth Center for Health Care Delivery Science and Professor of Medicine at the Geisel School of Medicine at Dartmouth. Before joining The Dartmouth Center, Dr. Mulley spent 35 years on the Harvard faculty and the staff of Massachusetts General Hospital where he was the founding Chief of the General Medicine Division and Director of the Medical Practices Evaluation Center. He is founding Editor of the text, *Primary Care Medicine* now in its 7th edition, and founding Director of the Informed Medical Decisions Foundation.

Dr. Mulley's research focuses on measurement of processes, outcomes, and patient preferences to improve the quality of health care decision making and delivery. This work includes development of approaches to support clinical teams and patients in shared decision making and in collaborating in co-management of chronic conditions. It has been used to catalyze learning collaboratives and clinical trials that have shown that increased patient knowledge and attention to patients' informed preferences can be associated with decreased utilization of high cost medical and surgical interventions and better health outcomes.

Dr. Mulley is a member of the Institute of Medicine of the National Academy of Sciences. In 2011, he was named the first International Visiting Fellow at the King's Fund in London and appointed by the Health Foundation, also in London, as an inaugural member of the Improvement Science Development Group. That same year, he was named International Consultant to the Chinese Hospital Association and co-chair of the steering committee for a five-year strategic partnership between Dartmouth and the Ministry of Health of the People's Republic of China to advance health care reform globally. In 2013, he was appointed to the adjunct faculty of the Tsinghua Institute for Hospital Management Research.

Selected Publications

1. Barry MJ, **Mulley AG**, Fowler FJ, Wennberg JE. Watchful waiting vs immediate transurethral resection for Symptomatic Prostatism: The importance of patients' preferences. *J Amer Med Assoc.* 1988;259(20):3010–3017.
2. **Mulley AG**. Assessing patients' utilities. Can the ends justify the means? *Med Care.* 1989;27(3 Suppl):S269–81.
3. **Mulley AG**. Inconvenient truths about supplier induced demand and unwarranted variation in medical practice. *Brit Med J.* 2009;339:b4073.

4. **Mulley AG**, Trimble C, Elwyn G. Stop the silent misdiagnosis: Patients' preferences matter. *Brit Med J*. 2012;345:e6572.
5. **Mulley AG**. The global role of health care delivery science: Learning from variation to build health systems that avoid waste and harm. *J Gen Intern Med*. 2013:ePub ahead of print.

Mats Nilsson

Epidemiologist/Statistician

Futurum, Academy for Health and Care Jönköping County Council

Lund University

Lund, Sweden

Biography

Employment: Works as an epidemiologist/statistician at Futurum - academy for Health and Care Jönköping County Council, Sweden

Tutor for PhD students, lecturer in statistics and epidemiology.

Education:

B.Sc. in Statistics and Economics

Ph.D. student in Statistics

M. Sc. in Public Health, Umeå University Sweden, 2003

Ph.D. in medical science at Umeå University Sweden, 2005

Thesis: Cobalamin Communication in Sweden 1990 – 2000, Views, knowledge and practice among Swedish, Umeå University, Sweden, 2005.

Area of interest: Main interests are public health, Patient Reported Measures, Quality registers, analysis of ordered categorical data, children's health, odontology and skiing safety. Have experience of working in the public health area for more than 25 years.

Selected Publications

1. Oliva D, Sandgren A, **Nilsson M**, Lewin F. Variations in self-reported nausea, vomiting, and well-being during the first 10 days post-chemotherapy in women with breast cancer. *Clin J Oncol Nurs*. 2014 Apr;18(2):E32-6. doi:10.1188/14.CJON.E32-E36. PubMed PMID: 24675268.
2. Isaksson H, Birkhed D, Wendt LK, Alm A, **Nilsson M**, Koch G. Prevalence of dental erosion and association with lifestyle factors in Swedish 20-year olds. *Acta Odontol Scand*. 2013 Nov 28. [Epub ahead of print] PubMed PMID: 24286494.
3. Andersson BÅ, Lewin F, Lundgren J, **Nilsson M**, Rutqvist LE, Löfgren S, Laytragoon-Lewin N. Iasma tumor necrosis factor- α and C-reactive protein as biomarker for survival in head and neck squamous cell carcinoma. *J Cancer ResClin Oncol*. 2014 Mar;140(3):515-9. doi: 0.1007/s00432-014-1592-8. Epub 2014 Jan 31. PubMed PMID: 24481866.
4. Skogar O, **Nilsson M**, Törnhage CJ, Lökk J. National surveys: a way to manage treatment strategies in Parkinson's disease? Pharmaceutical prescribing patterns and patient experiences of symptom control and their impact on disease. *J Multidiscip Healthc*. 2013 Jul 3;6:239-47. doi: 10.2147/JMDH.S44451. Print 2013. PubMed PMID: 23847426;

Sabina Nuti

Professor
Health and Management Laboratory
Scuola Superiore Sant'Anna
Pisa, Italy

Biography

Sabina Nuti is professor of Management and Prorector to the Organization and Budget at Scuola Superiore Sant'Anna, Pisa. She is in charge of the performance evaluation system for the health care sector in Tuscany and for a network of other nine Italian Regions. She is a Member of the Scientific Committee for planning in healthcare at the Italian Ministry of Health, a Member of the Regional Commission for selection procedure of candidates for the role of General Director of Health care facilities in the frame of the General Direction of the Tuscany Region and a Member of the Independent Evaluation Organism for the Tuscany Region. She is responsible for European and national research projects regarding healthcare management, performance evaluation and policies, reviewer for ISI magazines of Health Management and author of various national and international publications.

Selected Publications

1. A.M. Murante, M. Vainieri, D. C. Rojas, **S. Nuti** (2014), Does feedback influence patient - professional communication? Empirical evidence from Italy. , Health Policy.
2. **S. Nuti.**, Seghieri C. (2014), Is variation management included in regional healthcare governance systems? Some proposals from Italy , Health Policy , pp. 71-78.
3. Barsanti S., **S. Nuti.** (2013), The equity lens in the Health care performance evaluation system, International Journal of Health Planning and Management.
4. **S. Nuti.**, Vainieri M., Zett S., Seghieri C. (2012), Assessment and improvement of the Italian Healthcare system: first evidences from a pilot national performance evaluation system, Journal of Healthcare Management, Vol. 57, No. 3, pp. 182-199.
5. **S. Nuti** i, Bonini A, Vainieri M (2010), Disinvestment for reallocation: a process to identify priorities in healthcare, Health Policy, Vol. 95, pp.137-143.

Paul Nystedt

Professor of Economics
Jönköping International Business School
Jönköping University
Box 1026, SE-551 11 Jönköping, Sweden

Biography

Nystedt is professor in economics at Jönköping International Business School and Jönköping Academy. His main line of research concerns the association between health, labour market and marital outcomes over the life course, and the interplay between individuals and institutions from this respect. The considered processes are studied in modern as well as historical societies.

Selected Publications

1. Lundborg, P., **Nystedt, P.**, and Rooth, DO. Long-run Labor Market Effects of Teenage Overweight and Obesity. The Importance of Skills. Accepted. Demography.
2. van den Berg, GJ., Lundborg, P., **Nystedt, P.**, and Rooth, DO. Critical Periods During Childhood and Adolescence. Accepted. Journal of the European Economic Association.
3. Dribe, M., **Nystedt, P.** Is there an Intermarriage Premium for Male Immigrants? Exogamy and Earnings in Sweden 1990-2009. Accepted. International Migration Review.
4. Lundborg, P., **Nystedt, P.**, and DO Rooth. (2014) Height and Earnings: The Role of Cognitive and Non-Cognitive Skills. Journal of Human Resources, vol 49(1), 141-166.
5. Dribe, M. and **Nystedt, P.** (2013) Educational Homogamy and Gender-Specific Earnings: Sweden 1990–2009. Demography, vol 50(4), 1197-1216.

Zeynep Or

Senior Economist

Institute for Research and Information in Health Economics

Paris, France

Biography

Zeynep Or is a senior economist at the Institute for Research and Information in Health Economics (IRDES).

She specialises in issues related to health system performance at the macro level, including the determinants of health outcomes, measures of health expenditure, equity and health care quality. She has been involved in a number of innovative studies in France, as well as internationally, concerning the measurement of variations in health care, health outcomes, health care cost and quality within and across countries and the interaction between institutional and policy settings and health system performance.

Zeynep has been at IRDES since 2005 and has worked previously as a health economist and consultant for the OECD and for the French National Institute of Medical Research (INSERM/CREGAS). She is an active member of a number of international networks such as International Health Policy Monitor, European Health Policy Group.

She has a Masters Degree in Health System Management and a PhD in Economic Analysis from Sorbonne Paris-I.

Selected Publications

1. Regional variations in hospital practice in France: an analysis of the prostatectomy rates, **Or Zeynep**, Verboux Dorian. *IRDES, Working Paper*, n° 59. 2014/04.
2. DRGs and variations in resource use for child delivery across 10 European countries. *Health Economics*, **Or Z.**, Renaud T., Thuilliez J., Lebreton C. (2012), vol 21, S2, 2012/08, 55-65.
3. Paying for hospital care: the experience of activity based funding in five European countries, *Health Economics Policy and Law*, O'Reilly J, Busse R, Hakkinen U, **Or Z**, Street A, Willey M. (2012), **7**:73-101.
4. Disparities in Regular Health Care Use in Europe. Sirven N. **Or Z.** (2010), *Health, Ageing and Retirement in Europe: First Results Book*, Springer, Berlin.
5. Are health problems systemic? Health reforms under Beveridge and Bismarck systems, **Or Z.**, Cases C, Lisac M, K. Vrangbæk, U. Winblad, Bevan G. (2010), *Journal of Health Economics Policy and Law*, **5**, 269-93.

Tetsuya Otsubo

Assistant Professor at the School of Public Health
Kyoto University
Kyoto, Japan

Biography

Dr. Tetsuya Otsubo is an Assistant Professor at the Department of Healthcare Economics and Quality Management, School of Public Health, Graduate School of Medicine, Kyoto University, Japan.

He obtained a Masters of Engineering degree from Waseda University, Japan, and completed his Doctoral degree in Public Health (Healthcare Economics and Quality Management) at Kyoto University. He then worked for one year as Assistant Professor by Special Appointment before being appointed as an Assistant Professor in 2010.

His primary research focus is the use of an applied systems approach in the field of health economics and policy. Specifically, these interests include the economics of health care delivery systems, national health insurance, health care utilization, cost accounting and management, and health care financing. His research is broadly based on the manipulation of administrative databases, such as claims data. Dr. Otsubo has supported local governments in the design of regional health care system from 2009.

His current research interests include investigating regional variations in spending, outcomes, and access topics such as travel times to obtain specialized care and ambulance travel times. These investigations utilize a combination of GIS, administrative claims databases, annual routine health check databases, as well as qualitative studies conducted in collaboration with hospitals and local governments. Research results are consistently provided in feedback to hospitals and local governments, and in-depth discussions with clinicians, hospital management staff, and policymakers supports a dynamic approach to research themes; ensuring that research with real-world applications is conducted.

He was on academic sabbatical at The Dartmouth Institute for Health Policy & Clinical Practice from January to June 2014 to learn how to develop and manage large-scale research projects at this world-leading health services research institution under Dr. David Goodman's supervision. He is currently continuing his sabbatical at the Institute for Clinical Evaluative Sciences in Toronto from July until Dec 2014 under the guidance of Dr. Jack Tu.

Selected Publications

1. Sasaki H, **Otsubo T**, Imanaka Y. Widening disparity in the geographic distribution of pediatricians in Japan. Hum Resour Health. 2013;11:59. doi: 10.1186/1478-4491-11-59.

2. **Otsubo T**, Imanaka Y, Lee J, Hayashida K. Evaluation of resource allocation and supply-demand balance in clinical practice with high-cost technologies. *Journal of Evaluation in Clinical Practice*. doi: 10.1111/j.1365-2753.2010.01484.x
3. Lee J, Imanaka Y, Sekimoto M, Ikai H, **Otsubo T**. Healthcare-associated infections in acute ischemic stroke patients from 36 Japanese hospitals: risk-adjusted economic and clinical outcomes. *International Journal of Stroke* 2011; 6(1): 16-24.
4. **Otsubo T**, Imanaka Y, Lee J, Hayashida K, Matsuda S. Determinants of return on resource input based on the cost database of a patient classification system: cases of percutaneous coronary intervention and gastrectomy. *Proceedings of the 25rd Patient Classification Systems International conference*. 2009
5. Hayashida K, Imanaka Y, **Otsubo T**, et al. Development and analysis of a nationwide cost database of acute-care hospitals in Japan. *Journal of Evaluation in Clinical Practice*. 2009;15(4): 626-633.

Radoslaw Panczak

Research Scientist

University of Bern, Institute of Social and Preventive Medicine

Bern, Switzerland

Biography

Radoslaw Panczak studied Geography (BSc and MSc), GIS (PgDip), Information Management (MSc), and Health Sciences (PhD; area of specialization – Epidemiology). Previously, Radoslaw worked as a member of teams investigating spatial patterns of suicide (Swansea University), eosinophilic esophagitis activity index (University of Bern) and spatio-temporal patterns of variation in BMI (University of Zurich). Currently he is part of the Health Services Research group at the University of Bern and contributes to the project tracking regional differences and determinants of the end of life care in Switzerland. His main areas of interest include social epidemiology and visualizations and modelling of spatio-temporal health data.

Selected Publications

1. **Panczak, R.**, Zwahlen, M., Woitek, U., Rühli, F. J., & Staub, K. (2014). Socioeconomic, Temporal and Regional Variation in Body Mass Index among 188,537 Swiss Male Conscripts Born between 1986 and 1992. *PLoS ONE*, 9(5), e96721. doi:10.1371/journal.pone.0096721
2. **Panczak, R.**, Galobardes, B., Spoerri, A., Zwahlen, M., & Egger, M. (2013). High life in the sky? Mortality by floor of residence in Switzerland. *European Journal of Epidemiology*, 28(6), 453–62. doi:10.1007/s10654-013-9809-8
3. Spoerri, A., Zwahlen, M., **Panczak, R.**, Egger, M., & Huss, A. (2013). Alcohol-selling outlets and mortality in Switzerland-the Swiss National Cohort. *Addiction*. doi:10.1111/add.12218
4. **Panczak, R.**, Zwahlen, M., Spoerri, A., Tal, K., Killias, M., & Egger, M. (2013). Incidence and Risk Factors of Homicide–Suicide in Swiss Households: National Cohort Study. *PLoS ONE*, 8(1), e53714. doi:10.1371/journal.pone.0053714
5. **Panczak, R.**, Galobardes, B., Voorpostel, M., Spoerri, A., Zwahlen, M., & Egger, M. (2012). A Swiss neighbourhood index of socioeconomic position: development and association with mortality. *Journal of Epidemiology and Community Health*, 66(12), 1129–36. doi:10.1136/jech-2011-200699

Irene Papanicolas

Assistant Professor

Department of Social Policy at the London School of Economics

London, United Kingdom

Biography

Dr. Irene Papanicolas is an Assistant Professor in the Department of Social Policy at the London School of Economics. In the past she has worked as a researcher at the Health Economics Research Centre at the University of Oxford and the Department of Economics at London Business School. She holds a PhD in Health Economics from the London School of Economics, and MSc degrees from the University of Oxford and University College London. Her current research interests are focused on performance measurement, international comparisons of health systems and performance based payment systems.

Selected Publications

1. **Papanicolas**, Irene and Cylus, Jonathan and Smith, Peter C. (2013) An analysis of survey data from eleven countries finds that 'satisfaction' with health system performance means many things *Health Affairs*, 32 (4). 734-742. ISSN 0278-2715
2. **Papanicolas**, Irene and Smith, Peter, eds (2013) Health system performance comparison: an agenda for policy, information and research. Policy summary, 4. Open University Press, Maidenhead, UK. ISBN 9780335247264
3. **Papanicolas**, Irene and Kringos, Dionne and Klazinga, Niek S. and Smith, Peter C. (2013) Health system performance comparison: new directions in research and policy *Health Policy*, 112 (1-2). 1-3. ISSN 0168-8510
4. **Papanicolas**, Irene and Smith, Peter C. (2014) Theory of system level efficiency in health care In: Culyer, A. J., (ed.) *Encyclopedia of health economics*. Elsevier, Philadelphia, USA, 386-394. ISBN 9780123756787

Devin Parker

PhD candidate (Geography)

University of Iowa

Iowa City, Iowa, USA

Biography

Devin Parker is a PhD candidate in Geography at the University of Iowa. Her research focuses on health services research and landscape genetics, with particular interest in geographic patterns related to pediatrics, economics, and healthy policy. During the course of her Masters of Science at Dartmouth in 2014, Ms. Parker focused on pediatric variation research, the development of a quality assessment tool for Accountable Care Organizations, and data analysis in cost-effective and utilization. Prior to coming to Dartmouth, Ms. Parker researched health outcomes and access to resources through a range of projects at the Harvard School of Public Health. Using map technology, Ms. Parker focused on spatial and data analysis for projects both in the U.S. and internationally.

Selected Publications

1. James P, Arcaya M, **Parker D**, Subramanian SV. "Do minority and poor neighborhoods have higher access to fast-food restaurants in the United States?" *Health and Place*. 2014. Publication pending.
2. Ralston S, Nichols L, **Parker D**, Lanter P, Comick A. "Quality Improvement in Bronchilitis." *Pediatrics*. 2014. Publication pending.
3. Dartmouth Atlas of Children's Health Care in Northern New England. "Tympanostomy Tube Placement." The Dartmouth Institute for Health Policy and Clinical Practice. 2013.

Laura Schang

PhD Candidate, Department of Management
London School of Economics and Political Science
London, UK

Biography

Laura Schang is a PhD Candidate at the London School of Economics and Political Science. Her research focuses on decision making about performance in local systems of healthcare, combining the technical and social dimensions of healthcare resource allocation. Recent work has focused on developing an epidemiological model to investigate unwarranted variation in chronic middle ear disease. Laura has also evaluated healthcare payers' responses to the NHS Atlas of Variation in England, using a nationwide survey and interviews. She holds an MSc in International Health Policy/Health Economics from the LSE, a BSc in European Public Health and an Honours Research Certificate in Governance of Healthcare Innovations from Maastricht University.

Selected Publications

1. **Schang, L.**, Morton, A., DaSilva, P., & Bevan, G. (2014). From data to decisions? Exploring how healthcare payers in England respond to the NHS Atlas of Variation in Healthcare. *Health Policy* 114 (1): 79-87.
2. Thomson, S., **Schang, L.** & Chernew, M.E. (2013). Value-Based Cost Sharing In The United States And Elsewhere Can Increase Patients' Use Of High-Value Goods And Services. *Health Affairs*, 32, 704-712.
3. **Schang, L.**, Cypionka, T., & Thomson, S. (2013). Strengthening care coordination: comparative analysis of reform implementation in Austria and Germany, with options for Austria. Report prepared for the Main Association of Austrian Social Security Institutions. London: LSE Health.
4. **Schang, L.**, & Morton, A. (2012). LSE/ Right Care project on NHS Commissioners' use of the NHS Atlas of Variation in Healthcare. Case studies of local uptake. London: NHS Right Care and Department of Management, LSE.
5. **Schang, LK**, Czabanowska K, & Lin V. (2011). Securing funds for health promotion: lessons from health promotion foundations based on experiences from Austria, Australia, Germany, Hungary and Switzerland. *Health Promotion International* 27(2), 295-305.

Jessica Sheringham

Senior Research Associate
University College London
UCL Partners Programme
London, United Kingdom

Biography

Jessica Sheringham is a Senior Research Associate at University College London in England. She completed a Medical Research Council Fellowship/ PhD at UCL, examining socioeconomic inequalities in access to chlamydia testing in young people in December 2011. She is also a Fellow of the Faculty of Public Health, Visiting Fellow at the Nuffield Trust (a health think-tank in England) and holds an honorary Consultant in Public Health contract with a group of Clinical Commissioning Groups in North East London.

Jessica's interest in applied health research began whilst working at England's healthcare regulator, the Healthcare Commission (now the Care Quality Commission), where she developed and evaluated methods for monitoring healthcare quality in the NHS. Her current focus is on research questions that can have an impact on reducing inequalities in healthcare and access to appropriate healthcare. Her research spans different medical specialties using both qualitative and quantitative data collection and analysis methods. She is, at present, involved in studies examining pathways to a cancer diagnosis from primary care and studies of care for chronic obstructive pulmonary disease (COPD) from both patient and professional perspectives, all through an inequalities lens.

Selected Publications

1. Syred, J., Engler, B., Campbell, L., Baraitser, P., **Sheringham, J.** (2013) Exploration of gender differences of Chlamydia trachomatis infection amongst young people reveals limitations of using sexual histories to assess risk in high prevalence areas. *Int J STD AIDS*. doi: 10.1177/0956462413515451
2. **Sheringham, J.**, Mann, S., Simms, I., Stafford, M., Hart, G.J., Raine, R.(2013). It matters what you measure: a systematic literature review examining whether young people in poorer socioeconomic circumstances are more at risk of chlamydia. *Sex Transm Infect*; 89:175-80.
3. **Sheringham, J.** Baraitser, P., Simms, I., Hart, G., Raine, R. (2012). Chlamydia screening in England: a qualitative study of the narrative behind the Policy. *BMC Public Health*; 12:317.
4. **Sheringham, J.** (2010). Screening for Chlamydia. *BMJ*; 340:c1698.
5. Lewis, G. **Sheringham, J.** Kalim, K. & Crayford, T. (2008). *Mastering Public Health: A postgraduate guide to examinations and revalidation*. 1st edition. Royal Society of Medicine Press, London. [2nd edition in press]

Luke Slawomirski

Program Manager Implementation Support
Australian Commission on Safety and Quality in Health Care
Sydney, Australia

Biography

Luke Slawomirski is a health economist and a former physiotherapist. Currently Luke is Program Manager, Implementation Support, at the Australian Commission on Safety and Quality in Health Care, and a Visiting Fellow at the University of Technology, Sydney. In addition to healthcare variation, Luke's professional interests are in culture and political economy of health care, change management, and open disclosure.

Divya Srivastava

Health Economist

Organisation for Economic Cooperation and Development

Paris, France

Biography

Divya Srivastava is a health economist at the Organisation for Economic Cooperation and Development (OECD) in Paris. She is involved in projects relating to value for money which include investigating medical practice variations and payment systems across OECD countries. She is also a visiting fellow at the London School of Economics and Political Science (LSE) and an associate editor of the journal *Globalization and Health*, an open access online journal.

She holds a B.Sc in Statistics from the University of Manitoba (Canada), a M.A. in Economics from McMaster University (Canada), MSc. in International Health Policy from the LSE and a PhD from the LSE. Research interests include comparative health policy, health economics and pharmaceutical policy.

Selected Publications

1. **Srivastava D** and McGuire AJ. (2014), Analysis of prices paid by low-income countries - how price sensitive is government demand for medicines? *BMC Public Health*, 14: 767.
2. Corallo AN, Croxford R, Goodman DC, Bryan EL, **Srivastava D**, Stukel TA (2013) A systematic review of medical practice variations in OECD countries, *Health Policy*, Volume 114, Issue 1, January 2014, Pages 5–14.
3. Mladovsky P, **Srivastava D**, Cylus J, Karanikolos M, Evetovits T, Thomson S, McKee M. (2012). Health policy responses to the financial crisis in Europe. Policy Summary 5, World Health Organization, on behalf of the European Observatory on Health Systems and Policies, Copenhagen: WHO European Regional Office.

Dominik Graf von Stillfried

Managing Director

Central Research Institute of Ambulatory Health Care in the Federal Republic of Germany (ZI)
Berlin, Germany

Biography

Dominik is presently managing director of ZI, the central research institution for ambulatory health care in Germany.

ZI is a charitable foundation supported by the 17 Regional Associations of Statutory Health Insurance Physicians (KVs) in Germany and the Federal Association of Statutory Health Insurance Physicians (KBV) who are responsible for equitable access to ambulatory care for 72 million statutorily insured Germans and for the certification of office-based physicians, certificate-need planning, collective bargaining with third party payers, claims processing, quality management for roughly 140.000 physicians and psychological psychotherapists in Germany.

ZI collects pseudonymised prescription drug data and claims data from all 17 regions in Germany for purposes of health services research.

Dominik has held his present position since 2008. Prior to this he had been head of the Health Policy and Research Division at KBV for ten years, where he had been responsible for the development and introduction of nationwide disease-management programs and of a health risk adjusted physician payment scheme in Germany. Before joining KBV Dominik had been working for statutory health insurance organizations where his responsibilities included the introduction of a series of managed care projects.

Dominik has been trained as a health economist at the Universities of Bayreuth (Germany) and York (UK). He holds a PhD in Economics from the University of Bayreuth which was jointly supervised by Prof. Peter Oberender (Bayreuth) and Michael Arnold (Tuebingen) while Dominik was a research fellow at the medical faculty at the University of Tuebingen (Germany).

Selected Publications

1. Riens, **von Stillfried**, Bätzing-Feigenbaum, (2014), Gut versorgt bei Herzinsuffizienz, 03/2014, KVB Forum 3/2014
2. Swart, Enno; **Stillfried, Dominik Graf von**; Koch-Gromus, Uwe (2014), Kleinräumige Versorgungsforschung - wo sich Wissenschaft, Praxis und Politik treffen, In: Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz. - Berlin : Springer, Bd. 57.2014, 2, S. 161-163

3. **Von Stillfried**, Czihal T. (2013), Welchen Beitrag liefern funktional definierte Populationen zur Erklärung regionaler Unterschiede in der medizinischen Versorgung? Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz. 2014 Feb; 57(2):197-206.
4. **Von Stillfried**, Czihal T. (2014), Ärztliche Arbeitszeit beim Orientierungswert berücksichtigen, 01/2014, Deutsches Ärzteblatt
5. **Stillfried, D**, Czihal, T, Jansen, K (2011) Leistungsverlagerungen zwischen Krankenhäusern und niedergelassenen Ärzten – Ein Beitrag zur Methodik der Messung von Verlagerungseffekten und grobe Abschätzung der Bedeutung. Das Gesundheitswesen 73: 124-133

Philipp Storz-Pfennig

Consultant, Department of Medicine
GKV-Spitzenverband
Berlin, Germany

Biography

Philipp Storz-Pfennig holds master degrees in Sociology and Public Health, and after working for a privately owned health research institute (IGES GmbH, Berlin) up to 2009 in a number of health research related areas (technology assessment, health services research), he currently is with the GKV-Spitzenverband working on technology assessment and quality measurement and improvement.

Selected Publications

1. **Storz-Pfennig P**, Schmedders M, Dettloff M. Trials are needed before new devices are used in routine practice in Europe. *BMJ*. 2013 Mar 18;346:f1646
2. **Storz-Pfennig P**. Geografische Variationen in der stationären Versorgung. Internationale Erfahrungen [Geographic variation in hospital care. International experiences], in: *Krankenhausreport 2012*; ed. AOK-Bundesverband, Schattauer 2012, p. 33-44 [in German with an English abstract]
3. **Storz-Pfennig P**. OECD Project on “Medical Practice Variations”. Country Report Germany [forthcoming. To be published in Autumn 2014]

Thérèse A. Stukel, PhD

Professor of Health Policy, Management & Evaluation and Biostatistics, and Senior Scientist
Institute for Clinical Evaluative Sciences, University of Toronto
The Dartmouth Institute for Health Policy and Clinical Practice
Toronto, Canada

Biography

Thérèse A. Stukel, PhD, is a biostatistician focusing on health services and health policy research. She was statistical director of the Dartmouth Atlas of Health Care from 1995 to 2003 and co-authored two influential publications on the U.S. healthcare system demonstrating that higher healthcare spending did not lead to better outcomes, and a recent publication showing that in Canada, higher spending hospitals was associated with better outcomes for acute care patients. Other research interests are the analyses of observational studies, particularly the use of instrumental variables to remove unmeasured confounding and survival bias.

Her current research interests are on the effects of health system resources and organization on delivery of care and outcomes in Canada and the U.S., including international comparative studies. With the support of a Canadian CIHR Team Grant, she has created Ontario Multispecialty Physician Networks, virtual physician networks that mimic Accountable Care Organizations (ACOs), and is evaluating their efficiency (quality vs. costs) in managing patients with chronic disease. She has published over 180 peer-reviewed articles in medical and statistical journals. She was nominated Fellow of the American Statistical Association in 2007.

Selected Publications

1. Corallo AN, Croxford R, Goodman DC, Bryan E, Srivastava D, **Stukel TA**. A systematic review of medical practice variation in OECD countries. *Health Policy* 2014;114:5-14. Special issue on “Geographic Variation in Health Care – 40 Years of “Small-Area Variation”.
2. **Stukel TA**, Glazier RH, Schultz SE, Guan J, Zagorski BM, Gozdyra P, Henry DA. Multispecialty physician networks in Ontario. *Open Medicine* 2013; 7(2):40-55.
3. **Stukel TA**, Fisher ES, Alter DA, et al. Association of hospital spending intensity with mortality and readmissions in Ontario hospitals. *JAMA* 2012; 307(10):1037-45.
4. **Stukel TA**, Fisher ES, Wennberg DE, et al. Analysis of observational studies in the presence of treatment selection bias: effects of invasive cardiac management on AMI survival using propensity score and instrumental variable methods. *JAMA*. 2007;297(3):278-285.
5. **Stukel TA**, Lucas FL, Wennberg DE. Long-term outcomes of regional variations in intensity of invasive vs. medical management of Medicare patients with acute myocardial infarction. *JAMA*. 2005; 293(11):1329-1337.

Leonie Sundmacher

Head, Department of Health Services Management
Ludwig Maximilians University
Munich, Germany

Biography

Leonie Sundmacher graduated from the University of York with a MSc in Health Economics and from the Free University in Berlin with a MA in Political Science. After working for the Health Economics Research Group at Brunel University in London, she joined the Department of Health Care Management in Berlin to work as a senior research fellow. In 2009 Leonie completed her PhD in Health Economics from the Berlin University of Technology and was appointed Assistant Professor for Economics of Primary Care three years later. Since October 2013 Leonie is the head of the Department of Health Services Management at the Ludwig Maximilians University in Munich. Her main research interests are management in health care, quality management and regional health care research.

Selected Publications

1. **Sundmacher L**, Kopetsch T (2014): The impact of office-based care on hospitalizations for ambulatory care sensitive conditions. *European Journal of Health Economics*, in press
2. Vogt V, Siegel M, **Sundmacher L** (2014): Examining regional variation in the use of cancer screening in Germany. *Social Science & Medicine*, in press
3. **Sundmacher L** (2012): Trends and levels of avoidable mortality among districts: "Healthy" benchmarking in Germany. *Health Policy*
4. **Sundmacher L** (2012): The effect of health shocks on smoking and obesity. *European Journal of Health Economics*. 13(4): 451-460
5. **Sundmacher L**, Busse R (2011): The impact of physician supply on avoidable cancer mortality in Germany. *Health Policy* 103: 53-62

Johan Thor

Vinnvård Fellow of Improvement Science
The Jönköping Academy for Improvement of Health and Welfare
Jönköping University
Jönköping, Sweden

Biography

Johan Thor was drawn to medicine by his interest in natural sciences and his interest in working with, and helping, fellow human beings. As he entered practice as a junior doctor, he discovered to his dismay that the healthcare system he worked in did not support him or fellow health professionals to consistently provide the best care possible. This dissonance drove him to try to improve care; a challenge he found he had not been prepared for in medical school. Studies in public health at Harvard University – where he learned about Wennberg's work on small-area variation, about management, health economics, and quality improvement – helped fill that gap and propelled his on-going pursuit of healthcare improvement both in academia and in practice.

A specialist in social medicine, Dr. Thor earned his MD at Karolinska Institutet (KI) in Stockholm, Sweden, in 1989; his MPH at Harvard University in 1995; and his PhD in Medical Management at KI in 2007. Working with quality improvement at the Karolinska University Hospital in Stockholm, he was recruited in 2009 to lead the Jönköping Academy for Improvement of Health and Welfare, a center for research and graduate education. In 2013, he started a 3-year fellowship in improvement science in which he studies how Swedish National Quality Registers are used, and could be enhanced, for clinical improvement efforts.

Selected publications

1. **Thor J**, Lundgren C, Batalden PB, Andersson Gäre B, Henriks G, Sjö Dahl R, et al. Collaborative improvement of cancer services in Southeastern Sweden – striving for better patient and population health, better care, and better professional development. In: Batalden PB, Foster T, editors. *Sustainably Improving Health Care: Creatively linking care outcomes, system performance and professional development. Culture, Context and Quality in Health Sciences Research, Education, Leadership and Patient Care*. London: Radcliffe Publishing; 2012. p. 175-92.
2. **Thor J**, Herrlin B, Wittlov K, Ovretveit J, Brommels M. Evolution and outcomes of a quality improvement program. *Int J Health Care Qual Assur*. 2010;23(3):312-27.
3. Mazzocato P, Savage C, Brommels M, Aronsson H, **Thor J**. Lean thinking in healthcare: a realist review of the literature. *Qual Saf Health Care*. 2010;19(5):376-82.
4. Pukk-Harenstam K, Ask J, Brommels M, **Thor J**, Penalosa RV, Gaffney FA. Analysis of 23 364 patient-generated, physician-reviewed malpractice claims from a non-tort, blame-free,

national patient insurance system: lessons learned from Sweden. *Qual Saf Health Care*. 2008;17(4):259-63.

5. **Thor J**, Lundberg J, Ask J, Olsson J, Carli C, Harenstam KP, et al. Application of statistical process control in healthcare improvement: systematic review. *Qual Saf Health Care*. 2007;16(5):387-99.

Adeline Townsend

Deputy Head of the Unit on Model and Organization Hospital's Care
General Directorate of Health Care Supply
Ministry of Social Affairs and Health
Paris, France

Biography

Adeline Townsend is the Deputy Head of the Unit on Model and Organization Hospital's Care in the General Directorate of Health Care Supply, Ministry of Social Affairs and Health. She has 10 years experience working at various levels of the Ministry of Health, with a strong focus on hospital reforms: introduction of DRGs, and planning of hospital care. Her main areas of expertise are: Law, Health Policy Analysis and Health Economics. She currently works at the French Ministry of Social Affairs and Health on reforms of hospital financing models, such as introduction of volume based decrease of hospital tariffs and specific models for rural hospitals, and the introduction of new regulatory instruments for regional hospital planning. Prior to joining the Ministry, she worked in at the ATIH (Agency for Information on Hospital Care). She has received degrees in Law and Health Economics at the CNAM in Paris.

Tatiana Vidaurre Rojas

Institutional Head

Instituto Nacional de Enfermedades Neoplásicas (INEN)

Lima, Peru

Biography

Dr. Tatiana Vidaurre Roja is a specialist in medical oncology, and currently is the Institutional Head of the National Institute of Neoplastic Diseases (INEN) of Lima, Peru. She's a professional with extensive experience in the healthcare field. She attended undergraduate and graduate school at Universidad Peruana Cayetano Heredia. In 1998, she graduated as medical surgeon from that university.

Thanks to her expertise in research and public health, she has received accreditation from the National Cancer Institute of the United States as a Principal Investigator, being responsible in Peru to perform the specialized course "Principles of Clinical Pharmacology", through which she shows her knack for teaching, encouraging continuing education and training levels of excellence for new oncologists.

She is the author of several articles published in professional journals and has participated as a speaker at events for academics and scientists. She has conducted postgraduate studies in clinical research and public health, in Peru and other countries.

She joined INEN in 2000 for her Medical Residency, graduating three years later as a specialist in Medical Oncology. After that, she did a year of Special Fellowship in the same institute. In June 2004 she joined as staff of the Medical Oncology Department of that hospital.

Before taking her current position as Institutional Head of INEN, she worked as Director of the Office of Support Services Diagnostic and Treatment (DISAD) (from June 2010 to March 2011).

As chief of INEN, she is leading momentous changes in the fight against cancer, as in the case of technical assistance to the National Cancer "Plan Hope". During her tenure she has implemented the Immune Protective Services Neutropenic and Marrow Transplantation of Endocrinology and technological advances in implementing various computer care and administrative processes of Endocrinology, resulting in improved quality of patient care.

She is promoting a comprehensive approach in addressing cancer based on personalized service with quality and warmth to the patient.

Professionally she belongs to various scientific societies, such as the American Society of Clinical Oncology - ASCO (2010), American Association for Cancer Research - AACR (2009), Mastology Peruvian Society (2004), Peruvian Society for Medical Oncology (2003), European Society for Medical Oncology - ESMO (2003) and Peruvian Society of Oncology (2003), and others.

Her research has been acknowledged by the medical community. In that context, she has won the Award for Best Project Incentives Physicians Assistants - INEN (2011) entitled "Cancer Worldview within the Andean Cultural Context Women with Breast Cancer Therapeutic en route at the NIE" Award Best Abstract presented at the V Congress Peruvian Mastology - Mastology Peruvian Society (2004): "Endothelial Growth Factor (VEGF) as a prognostic factor in patients with Breast Cancer Axillary nodal Operated and" Best Project Award Cancer Research - Universidad Peruana Cayetano Heredia (2004): "On expression of topoisomerase II alpha as a predictor of response to anthracycline in Breast Cancer: Evaluation of Expression Proteomics Multifactorial Profile" Incentive Award for Best Research Paper Resident Doctors at the National Institute of Neoplastic Disease (2004) Incentive Award for Best Resident Doctors Project - INEN (2002-2003): "Detection of Epstein Barr Virus in Breast Cancer", "Vascular Endothelial Growth Factor (VEGF) as a prognostic factor in patients with Breast Cancer Axillary lymph node and Operated. "(2002), "Frequency of Infection with Epstein Barr virus in patients diagnosed with peripheral T-cell lymphoma, unspecified" (2002), and also earned her Fludara Prize Award - Schering Peruana SA (2002) with her work entitled: "Non-Hodgkin Lymphoma hepatosplenic Gamma Delta, National Institute of Neoplastic Diseases" Dr. Eduardo Cáceres Graziani, "presented at the First Course of Oncology - Hematology".

Among other distinctions, she has been honored for promoting and supporting the ideals and objectives of the Rotary Club Lima Century (March 2011). She has also received a Motion of Greetings and Congratulation from Congress for her social labor for patients with breast cancer (May 2010).

She's identified and is very committed to the needs of cancer patients, motivation that led to the founding in 2006 the "Club of the INEN Mama", an organization which develops the promotion of population health and prevention, principally, comprehensive support for patients affected by breast cancer.

Selected Publications

1. Trends in head and neck cancers in Peru between 1987-2008: Experience from a large public cancer hospital in Lima. Walter L, **Vidaurre T**, Gilman RH, Poquioma E, Olaechea C, Gravitt PE, Marks MA. Head Neck. 2013 Apr 25. doi: 10.1002/hed.23369. [Epub ahead of print]
2. The role of the National Institute of Neoplastic Diseases in the control of cancer in Peru. Salazar MR, Regalado-Rafael R, Navarro JM, Montanez DM, Abugattas JE, **Vidaurre T**. Rev Peru Med Exp Salud Publica. 2013 Mar;30(1):105-12. [Spanish].
3. Mutation profiling identifies numerous rare drug targets and distinct mutation patterns in different clinical subtypes of breast cancers. Santarpia L, Qi Y, Stemke-Hale K, Wang B, Young EJ, Booser DJ, Holmes FA, O'Shaughnessy J, Hellerstedt B, Pippen J, **Vidaurre T**, Gomez H, Valero V, Hortobagyi GN, Symmans WF, Bottai G, Di Leo A, Gonzalez-Angulo AM,

Pusztai L. Breast Cancer Res Treat. 2012 Jul;134(1):333-43. doi: 10.1007/s10549-012-2035-3. Epub 2012 Apr 27.

4. A randomized trial of combination anastrozole plus gefitinib and of combination fulvestrant plus gefitinib in the treatment of postmenopausal women with hormone receptor positive metastatic breast cancer. Carlson RW, O'Neill A, **Vidaurre T**, Gomez HL, Badve SS, Sledge GW. Breast Cancer Res Treat. 2012 Jun;133(3):1049-56. doi: 10.1007/s10549-012-1997-5. Epub 2012 Mar 15.
5. A genomic predictor of response and survival following taxane-anthracycline chemotherapy for invasive breast cancer. Hatzis C, Pusztai L, Valero V, Booser DJ, Esserman L, Lluch A, **Vidaurre T**, Holmes F, Souchon E, Wang H, Martin M, Cotrina J, Gomez H, Hubbard R, Chacón JI, Ferrer-Lozano J, Dyer R, Buxton M, Gong Y, Wu Y, Ibrahim N, Andreopoulou E, Ueno NT, Hunt K, Yang W, Nazario A, DeMichele A, O'Shaughnessy J, Hortobagyi GN, Symmans WF. JAMA. 2011 May 11;305(18):1873-81. doi: 10.1001/jama.2011.593.

Verena Vogt

Research Fellow and PhD Student in the Dept. of Health Care Management
Berlin University of Technology
Berlin, Germany

Biography

Verena Vogt is a research fellow and PhD candidate at the Berlin University of Technology's Department of Health Care Management. Previously she worked as a research fellow at the department of Epidemiology & International Public Health of the University of Bielefeld. She studied Public Health at Bielefeld University and at the University of Sheffield. Her research interests are social inequities in health and health care, regional variations in outpatient care and health care services research.

Selected Publications

1. **Vogt V**, Siegel M, Sundmacher L (2014): Examining regional variation in the use of cancer screening in Germany. *Social Science and Medicine* 110: 74-80.
2. Voigtländer S, **Vogt V**, Mielck A, Razum O (2014): Explanatory models concerning the effects of small-area characteristics on individual health. *International Journal of Public Health* 59: 427-438.
3. Siegel M, **Vogt V**, Sundmacher L (2014): From a conservative to a liberal welfare state: Decomposing changes in income-related health inequalities in Germany, 1994–2011. *Social Science and Medicine* 108:10-19.
4. Sundmacher S, Götz N, **Vogt V** (2014): Statistische Methoden in der kleinräumigen Versorgungsforschung. [Statistical methods in small-area health care services research] *Bundesgesundheitsblatt* 57: 174-179.

Federico Vola

PhD Student in the Laboratorio Management e Sanità
Istituto di Management - Scuola Superiore Sant'Anna
Pisa, Italia

Biography

I graduated in Political Science from the University of Torino (Italy). I subsequently attended a second Masters in Healthcare Economics at CORIPE (Consortium for Research and Continuing Education in Economics) - Real Collegio di Moncalieri (Torino - Italy). I worked for the Management Control Department at ASL TO5 (Healthcare Trust) from January 2011 to March 2012. I'm currently enrolled as a PhD Student in Management, collaborating on the Tuscany Healthcare System evaluation project.

John E. Wennberg, MD, MPH

Peggy Y. Thomson Professor Emeritus in the Evaluative Clinical Sciences
Founder and Director Emeritus
The Dartmouth Institute for Health Policy & Clinical Practice
Lebanon, NH, USA

Biography

John E. Wennberg, M.D., M.P.H., is the Peggy Y. Thomson Professor Emeritus in the Evaluative Clinical Sciences and Founder and Director Emeritus of The Dartmouth Institute for Health Policy and Clinical Practice. He has been a Professor in the Department of Community and Family Medicine since 1980 and in the Department of Medicine since 1989.

He is a graduate of Stanford University and the McGill University Faculty of Medicine. His post-graduate training was in internal medicine and nephrology at Johns Hopkins University, but he became interested in the application of epidemiological principles to the health care system while pursuing his Master's degree in Public Health at Johns Hopkins.

Wennberg and colleague Dr. Albert Mulley are co-founders of the Informed Medical Decisions Foundation, a non-profit corporation providing objective scientific information to patients about their treatment choices using interactive media.

Dr. Wennberg is the founding editor of The Dartmouth Atlas of Health Care, which examines the patterns of medical resource intensity and utilization in the United States. The Atlas project has also reported on patterns of end of life care, inequities in the Medicare reimbursement system, and the underuse of preventive care.

He is also the author of Tracking Medicine: A Researcher's Quest to Understand Health Care, which provides a framework for understanding and remedying the health care crisis in the United States.

Selected Publications

1. Wennberg DE, Sharp SM, Bevan G, Skinner JS, Gottlieb DJ, and **Wennberg JE**. A population health approach to reducing observational intensity bias in health risk adjustment: cross sectional analysis of insurance claims. *BMJ* 2014;348:g2392.
2. **Wennberg JE**, Staiger DO, Sharp SM, Gottlieb DJ, Bevan G, McPherson K and Welch HG. Observational intensity bias associated with illness adjustment: cross sectional analysis of insurance claims. *BMJ* 2013;346:f549.
3. Welch HG, Sharp SM, Gottlieb DJ, Skinner JS, **Wennberg JE**. Geographic variation in diagnosis frequency and risk of death among Medicare beneficiaries. *JAMA*. 2011;305(11):1113–1118.

4. Song Y, Skinner J, Bynum J, Sutherland J, **Wennberg JE**, Fisher ES. "Regional Variations in Diagnostic Practices." *N Engl J Med* May 12, 2010;363:45-53.

Joe Williams

Policy Officer

Care Quality Commission

London, England

Biography

Joe joined the Healthcare Commission in London, England in 2007. He worked there in a number of analytical roles before moving to clinical policy development for the NHS Primary Care Trusts in Kent, Surrey, and Sussex in 2009. He has been employed by the Care Quality Commission, the health and social care regulator for England, since late 2011. He has recently worked on the development of a ratings system for NHS hospitals and the use of information in prioritization of primary care inspections. He was appointed as Visiting Scientist at The Dartmouth Institute for Health Policy and Clinical Practice in New Hampshire, USA for three months in autumn 2013. During this time he undertook a piece of research comparing breast cancer screening in England and the United States. The manuscript for this work will soon be submitted to a peer-review journal. He is undertaking a postgraduate degree in public health at Brighton and Sussex Medical School.

Judit Zsuga

Associate Professor in the Department of Health Systems and Quality Management
University of Debrecen Medical and Health Science Center
Debrecen, Hungary

Biography

Dr. Judit Zsuga (MD, MSc, PhD) has research experience in the field of neuroscience and pharmacology. She is a board certified neurologist and clinical pharmacologist, psychotherapist (cognitive and behavioral therapy). She is currently working on the establishment of the Hungarian Stroke Surveillance System and a related Stroke Atlas. She has experience in conducting clinical trials (protocol development, data capture and analysis) and she is a skilled medical writer. Additionally she has formal training in health care management, and statistical analysis.

Selected Publications

1. BÍRÓ K, **Zsuga J**, Kormos J, Ádány R. The effect of financing on the allocation and production efficiency of the Hungarian health care system: Placing primary care into focus. *Society and Economy* 5: 1-19. (2011)
2. **Zsuga J**, Gesztelyi R, Kemeny-Beke A, Fekete K, Mihalka L, Szabo AM, Kardos L, Csiba L, Bereczki D. Different effect of hyperglycemia on stroke outcome in non-diabetic and diabetic patients - a cohort study. *Neurological Research* 34:(1) 72-79. (2012) IF: 1.522
3. **Zsuga J**, Gesztelyi R, Juhasz B, Kemeny-Beke A, Fekete I, Csiba L, Bereczki D. Prior transient ischemic attack is independently associated with lesser in-hospital case fatality in acute stroke. *Psychiatry and Clinical Neurosciences* 62:(6) 705-712. (2008) IF: 1.394
4. **Zsuga J**, Torok J, Magyar M T, Valikovics A, Gesztelyi R, Keki S, Csiba L, Zsuga M, Bereczki D. Serum asymmetric dimethylarginine negatively correlates with intima-media thickness in early-onset atherosclerosis. *Cerebrovascular Diseases* 23:(5-6) 388-394. (2007) IF: 2.534
5. **Zsuga J**, Torok J, Magyar MT, Valikovics A, Gesztelyi R, Lenkei A, Csiba L, Keki S, Zsuga M, Bereczki D. Dimethylarginines at the crossroad of insulin resistance and atherosclerosis. *Metabolism-clinical and Experimental* 56:(3) 394-399. (2007) IF: 2.647

Divya Srivastava

Health Economist

Organisation for Economic Cooperation and Development

Paris, France

***Title:** Geographic variations in health care: What do we know and what can be done to improve health system performance?*

Abstract

The presentation summarizes the main findings of this project on geographic variations in health care use across and within a number of OECD countries, and identifies a range of policy levers that can be used to reduce unwarranted variations, defined as variations that cannot be explained by patient needs and/or preferences. This summary draws mainly on the 13 national reports from Australia, Belgium, Canada, the Czech Republic, Finland, France, Germany, Israel, Italy, Portugal, Spain, Switzerland and the United Kingdom (England). The analysis focuses on a selected set of health care activities and procedures, including hospital medical admissions and some high-volume and high-cost diagnostic and surgical procedures. The results show that large variations in health care use persist, across and within countries, even after taking into account differences in demographic structures. While the analysis in this study does not allow to determine precisely how much of these variations are unwarranted, some of these variations are too large to be explained solely by patient needs and/or preferences. A number of policy interventions have been used in different countries to address unwarranted variations in health care use, including public reporting, the development and monitoring of clinical guidelines, the diffusion of decision aids for patients to complement the information they receive from physicians, and changes in financial incentives to try to reduce the inappropriate use of certain procedures.

Sandra García-Armesto

ARAI+D Senior Researcher

Health Services Research & Health Policy Unit at the Institute for Health Sciences in Aragón
Zaragoza, Spain

Title: Using geographical analysis to foster value for money: an estimation of opportunity cost of lower value indications of c-section in five European countries

Authors: Sandra Garcia-Armesto¹, Ester Angulo-Pueyo¹, Natalia Martínez-Lizaga¹, Ceu Mateus³; Inês Joaquim³; Terkel Christiansen² and Enrique Bernal-Delgado¹ on behalf of the ECHO consortium

1. Institute for Health Sciences in Aragon, Spain
2. University of South Denmark; Denmark
3. Public Health School, University Nova Lisbon; Portugal

Abstract

The conceptual framing of this analysis is simple: utilisation of lower-value care entails a loss of value-for-money in the health system (allocation of resources that leads to lower quality and safety of care i.e. inefficiency). Typically, these phenomena occur at local level, giving way to differential exposure or access to services depending on the place of residence (often coined as “*post-code lottery*”). To exemplify our approach the presentation will focus on care for low-risk deliveries using c-section. C-section is considered a highly effective procedure in avoiding maternal and child mortality at birth as well as complications derived from foetal distress. However, in the last decade, literature is abounding in evidence of overuse, and, particularly, misuse in lower-value indications such as low risk and normal births.

The analysis conducted yields two kinds of knowledge useful for action: on the one hand, it quantifies the magnitude of the problem in each health care system, setting it in reference to other relevant European countries; on the other, it actually maps out and identifies those areas within each country showing higher potential for realignment into value-based provision of care on the basis of national benchmarks (less prone to cultural and organisational biases, so relevant in this cluster of care).

Methods

Using routine administrative databases containing individual-level data patients receiving publicly funded care in giving birth between 2002 and 2009, we assigned each patient to their place of residence to derive age-standardised utilisation rates of c-section and vaginal normal delivery for low risk births per 10,000 women in reproductive age and per 1000 births in each area are calculated and mapped for each year of study and country. Primary analyses elicit the Systematic Component of Variation (SCV) and its confidence intervals. Changes in the evolution of the rates and the CSV over the period of study are also analysed.

The study covered all circumscriptions in five countries: Denmark, England, Portugal, Slovenia and Spain. The analysis is conducted at health policy relevant small circumscription, region and country levels.

Two separate scenarios of optimisation of lower value c-section use were built; the more conservative sets the desirable utilisation level at percentile 25th of area rates, the other uses percentile 10th as reference. Estimating excess-utilisation in each area entails comparing the observed number of cases to those expected under the “optimal rate” (p25 or p10 depending on the scenario).

We test hypotheses regarding whether national differences are associated with territorial variations in burden of disease and intensity of C-section use in any indication, as well as area average income and education gradients. Some other factors related to supply and arrangements are also explored.

Procedures unit costs allow for proxy estimations of the corresponding opportunity costs (incremental expenditure/resources deployed on lower value care that could be used otherwise) in each country.

Céu Mateus

Assistant Professor of Health Economics
National School of Public Health
University of Nova of Lisbon
Lisbon, Portugal

Title: *Comparisons on variations between countries*

Abstract

Introduction: Performing international comparisons on efficiency has usually two main drawbacks: lack in the comparability of data from different countries and the appropriateness and adequacy of data selected to perform the efficiency measurement. With patient level data concerning inpatient discharges for four countries, some of the problems of data comparability, usually found in international comparisons, were mitigated. There was an opportunity to assess efficiency and to compare the performance of hospitals between the participating countries.

Objectives: The objectives are to assess and to compare hospitals' efficiency level within and between countries using stochastic frontier analysis (SFA) with both cross-sectional and panel data.

Methods: Data from English (2005-2008), Portuguese (2002-2009), Spanish (2003-2009) and Slovenian (2005-2009) hospital discharges and characteristics are used. Based on available resources, weighted hospital discharges were considered the production outputs while hospital resources such as number of employees, physicians, nurses and beds were selected as inputs of the production function. Stochastic frontier analysis using both cross-sectional and panel data were performed, as well as, Ordinary Least Squares analysis (OLS). Tests on the adequacy of the data, namely Kolmogorov-Smirnov and Breusch-Pagan/Cook-Weisberg, were done. The likelihood ratio test on the non-random part of the error term was also analyzed.

Results: Data available results redundant to perform efficiency measurements using stochastic frontier analysis with cross-sectional data. The Kolmogorov-Smirnov test for the normality of the unstandardized residuals does not reject the null for neither Portugal nor Slovenia but rejects the null for Spanish estimates. The Breusch-Pagan/Cook-Weisberg test reveals the presence of heterocedasticity in the Slovenian and Spanish estimates. The likelihood ratio test reveals that in cross-sectional data SFA is not statistically different from OLS in Portuguese data, while SFA and OLS estimates are statistically different for both Spanish and Slovenian data. In the panel data, the inefficiency term is statistically different from 0 in the four countries in analysis though for Portugal it is still close to 0. There is no consensus between countries on how resources affect the productive process. Efficiency dispersion is similar in Spain, England and Slovenia with some hospitals presenting lower efficiency scores than the average, while in Portugal outliers are not only the hospitals with low efficiency scores but also the outstanding.

Conclusions: Efficiency measurement using production frontier estimation is adequate but the data available to perform it is, in most of the cases, insufficient to provide reliable estimates. Panel data is preferred over cross-section analysis because results are more robust. However, conclusions on efficiency should be taken with caution.

Arnaud Fouchard

Medical Advisor Office
Branch of the Regulation of Health Care Provision
Ministry of Social Affairs
Paris, France

Title: *The French policy on medical practices variations*

Abstract

The French Ministry of Health has been working on appropriateness of care for a few years. In 2011, thirty-two topics have been selected on 3 criterions: an important growth in volume, the act has severe consequences and there are high variations in consumption. A group led by the ministry of health has been created with the French high authority on health, the national insurance, the technical agency for information on hospitalization and several regional health agencies. The first goal, achieved in 2013, was to build a method in order to help regions to analyze regional variations in health care consumptions and choose two or more topics to make a plan onto. In 2013, they all made the diagnosis and they now have to work with health professionals and hospitals to change their practices.

In the mean time, geographic variations in health care, is becoming a public issue. This kindly approach, from a medical practice's point of view, is not enough. These variations are seen as a lack of quality. In addition, economical context lead us to go further ahead. Therefore, The French ministry of health is creating a law to give more tools to regional agencies in their struggle against inappropriateness: regional agencies will be able to compel hospitals to sign a contract with quantitative and qualitative objectives on professional practices improvement. There will be financial consequences if the objective is not reached.

Luke Slawomirski

Program Manager Implementation Support
Australian Commission on Safety and Quality in Health Care
Sydney, Australia

Title: *Exploring healthcare variation in Australia*

Abstract

While geographic variation in healthcare provision and utilisation have previously been explored at regional level, Australia's participation in the OECD Healthcare Variation Study was the first time small-area variation has been examined nationally.

This presentation will:

- a. provide an overview of the Australian healthcare system and its unique challenges,
- b. present findings of the study, and
- c. describe the Australian Commission on Safety and Quality in Health Care work program aiming to identify and address unwarranted variation, and enhance appropriateness of care across Australia.

Daniela Koller

Munich School of Management
Department of Health Services Management
Munich, Germany

Title: *Geographic variability in Patient networks*

Authors: Daniela Koller, Leonie Sundmacher

Abstract

In ambulatory care in Germany, patients have free choice of providers both for primary and specialist care. However, the regional distribution of providers is regulated by law. Only a restricted number of statutory health care providers can practice in specific regions. The regional entity of this “capacity planning” has been adapted recently to a smaller area unit for PCPs. This regional unit was not constructed to define health-based regions, an empiric evaluation of utilization patterns by specific – functional – patient groups is therefore needed (as suggested by Stillfried et al. 2014) both to evaluate variation in access and supply and to define provider groups that deliver care to specific patients.

For the present study, the concept of Physician-Hospital-Networks (Bynum et al 2007) has been adapted to define networks in the German context. The networks have then been visualized to a) compare measured health utilization of this specific group to the area units used in the physician capacity planning and b) to evaluate variation in size of the networks, both geographically and in the number of included providers and patients.

Heart failure was chosen to include a sample of chronic patients that seek regular care. Networks were constructed based on the methods defined by Bynum et al (2007) and adapted Stukel et al (2013) that had to be modified to German health insurance data and the patient characteristics. Using data of one health insurance fund, we could include a sample of 500,000 patients. They were assigned to their usual provider (PCP, internist, cardiologist). Providers were then assigned to the hospital that treated most of their patients.

We identified 941 networks. The networks vary in size, both geographically and for included providers (IQR: 28.0) and patients (IQR: 398.5). In more rural areas, the networks are a lot larger than in inner-cities or in more densely populated regions, showing a possibly limited accessibility. The total number is comparable to the regional unit used for the primary care provider capacity planning. The main difference is that the networks show a more detailed pattern in big cities which are considered as one planning entity.

It has to be noted that the German system has a rather strict separation between the ambulatory sector and the inpatient sector, the creation of networks centered around hospitals therefore needs further adaption. The assignment of patients to a provider and a group of providers that deliver care and the geographic visualization of those networks can then serve two main purposes: it can improve care monitoring and be an indicator for accessibility. It can also be used as a quality instrument: While most people have a primary care provider, not all do, so there is no clear responsibility for care. Defining those provider groups can thus be a helpful step to define responsibility for care, especially for chronic patients.

Dr. Duncan McPherson, FRCA

Department of Anaesthesia
Queen Alexandra Hospital
Portsmouth, UK

Title: Avoidable harm, unwarranted variation and diffusion in the treatment of acute myocardial infarction

Abstract

An effective, safe and equitable healthcare system aims to ensure that the best treatments are available to reduce risk to patients. Current small area analysis methods in England do not reflect access to acute treatments well because they are based on administrative areas and the concept of unwarranted variation does not easily incorporate innovation in healthcare. The aims were to study heart attack treatments, and find a more accurate way of reflecting the patients' experience of geographical variation and, secondly explore the variation in availability of an innovative treatment.

Previous work has shown that geographic variation exists in the use of primary percutaneous coronary intervention (pPCI) in England. All adults resident in England and suffering an acute myocardial infarction between 2005 and 2009 were studied. The most appropriate zoning for small area analyses was based on hospitals' catchment areas, but there was no adequate zoning. This thesis presents an automated and extended version of the Hospital Service Area algorithm. Hospital service areas showed better localisation of treatment than administrative areas. There was wide variation in the use of pPCI between service areas. Administrative areas were not the same as hospital service areas.

New statistical computing methods allow geographic and temporal and patient specific factors to be considered simultaneously. By adapting these, in particular Integrated Nested Laplace Approximation, to the situation of healthcare treatments, rather than diseases, accurate models were made.

The best model at discriminating between receiving and not receiving pPCI was a multilevel model, although one using only geographic and time information was orders of magnitude faster and nearly as accurate. These models are excellent at discriminating between those who do and do not receive pPCI. The area of residence was a more accurate predictor than all patient level factors combined. There was an increase in use of pPCI over the years studied because of a diffusion process. There was variation in the use of pPCI in England, which was unwarranted. At the end of the study, the use of pPCI was 75% in early adopter areas, but 30% in laggard areas. In hospital mortality was 10% for residents of laggard areas, but 7% for residents of early adopter areas. A positive correlation existed between the time of adoption by an area and the time of adoption of its neighbours. There may be a specific benefit of residence within a high innovative-ness area separate from the increased probability of receiving pPCI.

This thesis showed that there was unwarranted variation in the use of pPCI linked with the slowness of diffusion and that this led to excess mortality, but variation due to innovation may need to be in a separate category. Further work is needed to understand how the benefit of innovativeness is produced and the nature of influence between service areas. Policies should be developed that increase the rate of adoption of known best treatments and possibly to encourage innovativeness generally.

Philip Goodney

Assistant Professor, Vascular Surgery, Dartmouth Hitchcock Medical Center
Director, Center for the Evaluation of Surgical Care, Geisel School of Medicine
Co-Director, VA Outcomes Group, White River Junction, Vermont
Lebanon, NH, USA

Title: *Variation in the Care of Surgical Conditions: A New Dartmouth Atlas of Health Care Series*

Abstract

As the scope and quality of surgical care continues to advance, there is still much that remains to be done to optimize care for patients. For many conditions, surgery is one of several care options, and in some instances, there are several types of surgical procedures available. Research into the effectiveness and adverse effects of a surgical procedure compared to alternatives is often incomplete. While quality has generally improved over time, outcomes can differ across hospitals and surgeons. Too often, treatment options, whether medical or surgical, are recommended without patients fully understanding the choices and participating in the decision; and these recommendations can vary markedly from one physician to the next.

In a new series of Dartmouth Atlas reports, we use several examples to illustrate not only where progress has been made in helping patients receive the best outcomes with surgery, but also the settings where challenges remain. We will describe, across a broad spectrum of conditions, advances in surgical decision-making, including shared decision-making, which have resulted in less variation in care, improved patient satisfaction, and better outcomes. We will also describe settings wherein these strategies have been less successful and variation in surgical decision-making persists. In these latter cases, we will outline the potential to improve surgical practice by refining the methods we use to select patients for intervention.

In summary, we will review a new series of Atlas reports that are intended to help patients, physicians, and policymakers recognize where improvements in science have helped to limit variation and improve surgical care. But more importantly, for each of the surgical conditions studied in our reports, we hope to identify specific clinical settings and situations where variation in the treatment of surgical condition has been persistent and outline the best opportunities for improvement in surgical care that lie ahead.

Dr. A.S. (Stef) Groenewoud

Health Scientist

IQ healthcare, Radboud University

Nijmegen, The Netherlands

Title: *How to disclose understandable information about unwarranted variation for the public?*

Abstract

Value based health care combines high health care quality, low costs and appropriate use. In order to give all relevant stakeholders good grip on all of these components, IQ healthcare develops an “Atlas for Value in Health Care”. We have started with an “infographic-based atlas” for patients with Hernia Nuclei Pulposi (HNP). In 2014, we will develop this toward an interactive, “clickable” tool for six more diseases. In our presentation we will dive into the process of realization, the atlas itself and the challenges for the future.

Sabina Nuti

Professor
Health and Management Laboratory
Scuola Superiore Sant'Anna
Pisa, Italy

Title: A quantitative method for setting targets and priorities including unwarranted variation reduction in the Italian healthcare system

Abstract

The Italian Health Care System is a public health system which provides universal coverage for comprehensive and essential health services through general taxation. Since the early 1990s, a strong decentralization policy has taken place in Italy and the State has gradually ceded its jurisdiction to the 20 Italian Regions. These Regions now have the political, administrative, and financial responsibility for the provision of health care to their residents. This shift of power has created some interregional differences in the quality of healthcare services.

However, ten Italian Regions have adopted the same Performance Evaluation System (PES) since 2008. It was designed and implemented to monitor about 160 indicators. The Regional Network has offered valuable information and the opportunity to adopt managerial tools that can be used to drive performance improvement, achieve equity and reduce unwarranted variation.

The presentation will firstly describe the methodology followed by the ten Regions in defining their priorities and setting their targets, relying on the multidimensional data the Inter-Regional Performance Evaluation System provides considering geographic variation.

Thérèse A. Stukel, PhD

Professor of Health Policy, Management & Evaluation and Biostatistics, and Senior Scientist
Institute for Clinical Evaluative Sciences, University of Toronto
The Dartmouth Institute for Health Policy and Clinical Practice
Toronto, Canada

Title: *Variations in Quality Indicators across Physician Networks*

Abstract

We examined physician network-level variations in quality indicators representing five dimensions of the health care system: evidence-based medications, evidence-based screening, good transitions, adverse outcomes, poor end of life (EOL) care and overuse, and per capita overall and sector-specific spending for populations linked to multispecialty physician networks. We studied variations in the individual quality indicators and in the aggregated domains across networks, and we evaluated the association between quality of care and per capita population costs. All indicators were measured using Ontario health administrative databases.

Spending varied by about 1.6-fold across networks; there were large variations in the percentage of the network population in the top 1, 5, 10 % of spending. Evidence-based prescription rates varied about 1.1-fold. There were large variations in other quality domains across networks.

There were strong positive associations among domains reflecting poor care (poor EOL, adverse outcomes, overuse) and among domains reflecting good care (evidence-based screening, good transitions). There were also large negative associations between domains measuring good and poor care. Evidence-based prescription rates were not associated with other domains. The relationships between overall physician and primary care physician spending and the quality domains were mixed although there were strong positive correlations with good transitions.

Despite being an ecological study, quality domains reflecting good and poor care demonstrated strong relationships, although the domains were generally unrelated to population spending.

Enrique Bernal-Delgado

Instituto de Investigación Sanitaria - ISS Aragón
Zaragoza, Spain

Title: *Adding time-dependent effects to the evaluation of geographic variation*

Authors: Enrique Bernal-Delgado, Julián Librero-López

Abstract

Over time, health care systems experience numerous changes: the introduction of a specific policy, the uptake of a new guideline, the adoption of a new technology, the implementation of an organizational intervention, etc. Those changes will likely have an effect on healthcare providers' variation estimates.

Usually, trends change is observed analysing independently cross-sections of data (e.g. average rate change) as if data in year 2 were independent of year 1, and health care providers had evolved homogeneously.

With the use of disease mapping techniques, it is possible to estimate standardized ratios, flagging those areas that, over time, have experienced a significantly differential change over the expected. Several case studies are used to explain the added value of disease-mapping techniques in the analysis of geographic variation.

Prof. Yuichi Imanaka, M.D., Ph.D.

Professor and Head, Department of Health care Economics and Quality
Graduate School of Medicine, Kyoto University
Kyoto, Japan

Title: *Variation in Mechanisms of Variation in Healthcare Quality Indicators*

Authors: Yuichi Imanaka, Noriko Sasaki, Toshitaka Morishima, Tetsuya Otsubo, Hiroshi Ikai

¹ Department of Healthcare Economics and Quality Management, Graduate School of Medicine, Kyoto University, Japan

Abstract

Background: We have been finding variations and disparities among the quality of care across institutions and regions. Knowing more about the mechanism of variation, it will help us to manage the variation or disparity and to lead to further improvement in health care.

Aim: The study aimed to examine the factors and mechanisms which would influence the quality of care in various diseases and conditions.

Methods: We utilized various databases, including a nation-level database of Quality Indicator/Improvement Project (QIP), the national administrative database, wide-region integrated database of health care and long-term care. We also used the data of the characteristics of institutions and regions. For outcome indicators, logistic regression models were used across hospitals or regions to adjust patient characteristics.

Results and Discussion: We compared and summarized factors for quality indicators with intent to develop theoretical mechanism models on variation of quality of care. Relative importance of various factors in relating with quality indicators was different among diseases and conditions. Case volume has been shown to be related to high quality, particularly in some surgical areas where the quality is dependent on the skill of one surgeon. The number of physicians of relevant subspecialty is very important in medical emergencies which require immediate intervention and the integrated teamwork of specialists and staff with 24-hour coverage, such as acute myocardial infarct and severe stroke. To improve such outcome quality, we have to take comprehensive measures to establish a strong structure for the care. On the other hand, some process indicators such as aspirin in AMI are apt to change and can improve rapidly. Such indicators are regarded to be dependent on physician's knowledge or intention.

The results from our study may lead to the concept of “**resource dependency**” as a source of practice variation. "Resource" here can be manpower volume, technical skills of a doctor which will take long to be established, or a doctor's knowledge which can be relatively easily obtained.

Conclusion: Important sources and mechanisms of variation in quality of care are considered to be different among diseases and conditions. Manpower volume, as well as a doctor's technical skills, is also important factors for quality in some areas.

Bill Davenhall

Senior Health Advisor

Esri

Redlands, CA

Title: *Getting Noticed: Telling Better Stories*

Abstract

The presentation will feature a review on how three countries are promoting their geographic variability research – on and off the web. I will share a draft design for how countries might better leverage their work so that the growing body of knowledge can be communicated more easily to their intended audiences. The presentation will include story-telling examples and audience engagement techniques that drive viewership.

Claudia Berlin

University of Bern, Institute for Social and Preventive Medicine
Bern, Switzerland

Title: *Variation of treatment of acute myocardial infarction in Swiss hospitals*

Authors: Claudia Berlin, Peter Jüni, Olga Endrich, Marcel Zwahlen

Abstract

Cardiovascular disease (CVD) is the leading cause of death worldwide although it is decreasing in high-income countries. In 2010, CVD caused 35% of all deaths in Switzerland, followed by cancer (26%) and problems with the respiratory system (6%). Our broader aim is to describe factors associated with variation in health care for cardiovascular diseases in Switzerland. In this specific project the objective was to assess differences in treatment of acute myocardial infarction (AMI) patients in Swiss hospitals from 2010 to 2011.

We used the hospitalizations and hospital datasets of the Swiss Federal Statistical Office (SFSO). The hospitalization dataset includes mandatory information reported on all patients hospitalized for at least one day in a Swiss hospital and contains patient information on age, sex, place of residence, date of admission, date of discharge, main and concomitant diagnoses, and provided treatments. The hospital dataset comprises data on the infrastructure (e.g. number of beds, number of physicians and nurses) and location of all Swiss hospitals.

We included all AMI patients with ST-segment elevation myocardial infarction (STEMI) as their main diagnosis identified by International Classification of Diseases, Injuries and Causes of Death (ICD) 10 codes I21.0 - I21.3. Using the unique patient identifier as provided by SFSO, we constructed patient-specific STEMI treatment episodes which integrated information from multiple hospital stays if they related to the same patient and were sequential with maximal one day between discharge and admission to the next hospital. The STEMI information had to appear at the first or second hospitalization record with predefined restrictions if only mentioned on the second record.

Treatment was identified by available treatment information coded according to the Swiss operation classification system (CHOP). We then classified patients into 4 groups based on the available treatment information: (1) CHOP codes indicate a percutaneous coronary intervention (the PCI group), (2) CHOP codes indicate a coronary artery bypass grafting (the CABG group), (3) codes indicating other treatments but not PCI or CABG (the other treatment group), and (4) patients for whom no CHOP codes were available (the missing CHOP codes group).

The hospitalization dataset for 2010 and 2011 included 2.66 million records, from which we constructed 11,106 patient-specific STEMI treatment episodes with 53.3% in the PCI group (N=5,916), 3.4% in the CABG group (N=376), 35.7% in the other group (N=3,969), and 7.6% in the missing CHOP codes group (N=845). The majority (61%) of all men and less than half (45%) of all women had either a PCI or a CABG treatment. The patients in the PCI and CABG treatment groups were the youngest (mean age of 62.6 and 66.2 years, respectively). Patients in the other

and missing CHOP group were the oldest (mean age of 69 and 71.3 years, respectively). Of the 955 patients that died, 73% were in the other treatment group.

We will present further analyses from multilevel logistic regression to assess the variation of receiving PCI by type of the first hospital in this patient-specific treatment episode, by having been transferred at least once while accounting for patient characteristics such as age, sex and comorbidity. We will explore effect modifications with patient's age, level of comorbidity and area of residency.

Radoslaw Panczak

Research Scientist

University of Bern, Institute of Social and Preventive Medicine

Bern, Switzerland

Title: *Regional variation in end of life care (EOL) costs in Switzerland*

Authors: Panczak, R., Maessen M., Zwahlen M., Egger, M., Luta X., M., Clough-Gorr K.

Abstract

There is a wide variation in the costs of health care use for seriously ill and dying patients. However, little is known about determinants of this variation in Switzerland and how to overcome these in order to improve quality of care.

We included 119,507 Swiss residents that died in between 2008 and 2010 who were insured by one of six major health insurance providers (64% of the deceased Swiss population in the same timeframe). All in- and out-patient health insurance claims of these individuals during the 12 months prior to death were analyzed in order to investigate variation in EOL care costs. Potential influencing factors included gender, age, disease type, geography, supplementary insurance, provider and care site characteristics.

We examined overall costs and structure of costs associated with EOL care across individual socio-demographic characteristics, major causes of death and settings of care provision. Finally, we visualized and compared results across regions of Switzerland.

Xhyljeta Luta

PhD Candidate

Institute of Social and Preventive Medicine

University of Bern

Bern, Switzerland

Title: *Variation in mental health care use at the end of life in Switzerland*

Authors: Xhyljeta Luta, Radoslaw Panczak, Marcel Zwahlen, Matthias Egger, Kerri-Clough Gorr

¹ Institute of Social and Preventive Medicine, University of Bern, Switzerland

Abstract

Background: Previous studies have documented high levels of psychiatric issues among people approaching death. We aimed to examine use of mental health services (MHS) among Swiss residents during the end of life (EOL).

Methods: The study population included 118,718 Swiss residents with federally mandated health insurance coverage who died between 2008-2010. We used insurance billing records to identify MHS 12 months before death. We categorized MHS by medical tariffication codes into four types of care: active psychotherapy (APT), phone consultation (PC), ambulatory psychiatric services (APS), and treatment of psychiatric crisis (TPC). Provider type was categorized as primary care, specialists, and inpatient services. Socio-demographic characteristics included age, urbanicity, language region and Swiss Socioeconomic Position Index (SSEP). We modelled total cost of mental health claims (MHIC) using multiple linear regression adjusting for sex, age, language region, urbanicity, SSEP and time to death.

Results: We identified 5,218 persons who used MHS in their last 12 months of life corresponding to 54,815 MHIC. The mean age of the study population was 68.3 years and included slightly more females (53.4%).

Type of MHS varied by socio-demographic characteristics. Persons 85+ received the most APT (85.9%) and least TPC (4.7%). Persons with lower SSEP used more APT and fewer APS. The Italian language region had the highest TPC (7.6%).

Males used more inpatient care (52.9%) less specialist (41.8%) and primary care (5.2%). Specialist care decreased with age (48.5%, 44.8%, 40.5%, 37.9%) and increased with SSEP (37.8%, 40.5%, 50.4%). Provider type varied by language region, with the least primary and inpatient care and the highest amount of specialists in the Italian speaking region.

The mean MHIC during EOL was 890 CHF and varied by socio-demographic characteristics. MHIC costs decreased with age, with the oldest having 56.3% (0.40-0.46) lower claims. The costs were lower in the Italian-speaking region by 22.4% and French-speaking region by 12.3% (1.05-1.19). MHIC costs were less in persons with lower SSEP 15.9% (0.76-0.91) and in the last month of life 59% (0.37-0.42).

Conclusions: Socio-demographic factors such as age, language region and SSEP contribute to the variation in MHS at the EOL in Switzerland.

Brendon Kearney
Clinical Professor
University of Adelaide
Adelaide, Australia

Title: *Demonstrating the benefits of a National Data Linkage Infrastructure*

Abstract

Since 2009 the Australian Government has made substantial investment in building data linkage infrastructure for Australia through the establishment of the Population Health Research Network (PHRN). Five years on, Australia now has the facilities and capabilities to link and provide access to linked data in all States and Territories. It also has the facilities and capability to link data from different jurisdictions, to transfer data securely via a data delivery system and to provide removed access to linked datasets in a secure environment. This has meant that researchers have been able to conduct research using linked Australian population data, which, prior to the establishment of the PHRN, was not possible. Since 2009, 158 research projects have used the PHRN infrastructure. Preliminary analysis of traditional research output measures suggests that to date approximately 30 peer reviewed journal articles have been published from the analysis of this linked data. These cover a range of areas including cancer, cardiovascular disease, diabetes and infection. A number of research publications will be showcased, each that demonstrate the unique opportunity that the data linkage provides.

Philipp Storz-Pfennig

Consultant, Department of Medicine
GKV-Spitzenverband
Berlin, Germany

Title: *Variation findings and what to do about them? The current experience from Germany*

Authors: Philipp Storz-Pfennig¹, Marion Grote Westrick², Jan Böcken²

¹National Association of Statutory Health Insurance Funds (GKV-Spitzenverband)

²Bertelsmann Foundation

Abstract

Addressing medical practice variations in a comprehensive fashion is a comparatively recent endeavor in Germany. Based on the work of the Bertelsmann Foundation and its “Initiative for High-Quality Healthcare (Faktencheck Gesundheit)” and on the forthcoming German country report within the OECD project on medical practice variation, the subject has now gained some prominence in the general public as well as for major healthcare stakeholders in Germany.

Recent work has convincingly shown that unwarranted or unexplained practice variation is a problem in Germany as well as in other countries. We will show a number of significant results from the German country report of the OECD project and from the ongoing Bertelsmann Foundation “Faktencheck Gesundheit” project, covering a wide range of interventions (e. g. frequent surgical procedures, cesarean sections, depression treatment).

The planned contribution will also focus on the question of how to address the variation problem apparent in the current German policy context. This includes communication strategies for political and health care stakeholders as well as citizens and patients. A tentative “mapping” which health policy interventions and which health care interventions may be suited in particular for what kind of clinical interventions looked at and what kind of problems detected will be attempted. Impressions from a joint OECD/Bertelsmann Foundation conference on this issue to be held in Germany immediately before the Wennberg International meeting (on 16 September in Berlin, Germany) will, as far as possible, be included.

Discussions are evolving in Germany in preparation of the joint OECD/Bertelsmann Foundation conference and also in regard to the possible unfolding of the ambitious and quality centered health care agenda of the new federal German coalition government. We believe that the contribution will be of interest to the international community of variation research – in particular regarding an evolving agenda of policy action upon, sometimes long-standing, results of unwarranted or at least unexplained variation, still signaling serious problems of overall healthcare quality.

Catherine Gerard

Senior Analyst, Health Quality & Safety Commission
Wellington, New Zealand

Title: *The New Zealand Atlas as a tool to facilitate change*

Abstract

A key challenge for national Atlases of healthcare variation is how they can stimulate action. A recent review of the NHS Atlas¹ found that half of surveyed Primary Care Trusts had not used the Atlas and concluded that “many payers were unable to use information on small area variations in expenditure, activity and outcome”.

Research by Appleby et al² has demonstrated that while ensuring mechanisms are in place to allow for local analysis, benchmarking, individual feedback and regular audit are important, on their own these have modest success.

This talk will discuss ways the Health Quality and Safety Commission has considered the mechanisms and incentives for change and sought to address these through linkages with external developments in addition to Commission-led work.

¹ Schang et al. From data to decisions? Exploring how healthcare payers respond to the NHS Atlas of Variation in Healthcare in England. Health Policy (2013)

² Appleby J, Raleigh V, Frosini F et al. Variations in health care: the good, the bad and the inexplicable. The King’s Fund, 2011.
<http://www.kingsfund.org.uk/publications/variations-health-care>

Marina Davoli

Scientific Director, Italian National Outcome Program
Roma, Italia

Title: *Is quality of data challenging communication to policy makers and the general public? The example of the Italian NHS outcome evaluation program*

Abstract

The National Health Care Outcome Evaluation Program (PNE) has introduced in Italy the comparative evaluation of outcomes of health care. PNE, undertaken in 2010 through an initiative sponsored by the Ministry of Health is running now the fourth edition. The aim of this program is to measure the outcome variability among providers and/or health professionals and among Local Health Units (ASL) in Italy, with possible applications in terms of accreditation, remuneration as well as patient information.

PNE publishes data on about 100 indicators in different clinical areas. The analysis of each indicator poses different methodological issues. The aim of the talk will be to address some of the methodological challenges which might impair the use of some indicators, at least for the purpose of public disclosure. In particular, examples of uncertainty in the following methodological steps will be addressed:

- Case definition
- Exposure ascertainment
- Outcome ascertainment
- Controlling for confounding with particular focus on residual confounding for severity of disease

The examples used will be variability among providers in 30 day mortality for myocardial infarction (ranging from 1.68% to 41.37% with an average of 9.98%) and primary caesarian section rates (ranging from 4.64% to 93.61% with an average of 26.27%). The data will show how low mortality rates for myocardial infarction might be explained by potential biased case definition, as well as low primary caesarian section rates might be explained by opportunistic coding of confounding variables. On the other side, data will show how residual confounding for severity of disease might not be a relevant issue in comparing myocardial infarction mortality data across providers. Eventually, warning and caution in using comparative outcome data, particularly for the purpose of public disclosure, should be used when quality of data is still an issue. In order to improve health care quality and equity in Italy, auditing on both quality of data and clinical/organizational aspects should represent the main use of PNE.

David Goodman, MD MS

Professor of Pediatrics and Co-Founder of the Wennberg International Collaboration
The Dartmouth Institute for Health Policy and Clinical Practice
Hanover, NH, USA 03766

Title: *Little patients, big problems, unanswered questions: Neonatal Intensive Care in the 21st Century*

Abstract

Neonatal intensive care has been highly successful at reducing newborn mortality and morbidity, but the quality of care, outcomes, and efficiency has been poorly documented and understood. In particular, improving the *value* of care has been elusive, in the absence of outcomes-adjusted efficiency measures of specific neonatal intensive care units (NICUs). We propose the first large scale population-based study of neonatal intensive care for the live birth cohorts of 31 states insured by commercial and Medicaid plans. (> 3 million birth-years) The proposed analyses will examine overall and regional variation in newborn care, focusing on the illness-adjusted (e.g. birth weight and other perinatal risk factors and diagnoses) use of intensive care (i.e. defined as Levels II, III, IV care) by different newborn conditions and associated utilization and health outcomes. Patient and provider factors associated with the variation in NICU use will also be studied to reveal potential opportunities for improvement in care.

This project will answer questions such as: Which newborns are admitted to NICUs today, and at what level of care, what are their problems, and how much do the admission patterns vary across health systems? What are the system and community determinants of NICU care? Do the benefits always outweigh risks of intensive care when newborns are not critically ill? What are the costs of NICU care for different types of patients, and is better care sometimes less expensive?

The specific aims are:

1. To measure the probability of NICU admissions by newborn characteristics (e.g. birth weight) across states and neonatal intensive care regions.
2. To measure the association of risk adjusted NICU admissions with provider/community characteristics, including measures of capacity (i.e. NICU beds and neonatologists).
3. For those newborns admitted to NICUs, to measure regional and hospital variation in risk-adjusted utilization of NICU services (e.g. length of stay, level of care, imaging, allowed charges) and outcomes including (e.g.) inpatient mortality, readmissions, and ER) and their association with provider/community characteristics.

The long-term goal of this work is stimulate further inquiry into the care provided to newborns, and to develop better systems of public reporting and improvement that will improve care and moderate costs.

Ilir Hoxha

Project Advisor, Health Dialogue Program, Solidar Suisse

PhD Candidate, University of Bern, Switzerland

External Advisor, Ministry of Health, Kosovo

Title: *Determinants of C-section hospital level variation*

Abstract

The increase of C sections has become a concern in many countries. This increase has been steady over last two decades. The encounter of variation in C section rates among regions, hospitals, and physicians, has been another major observed phenomenon. While, the variation of C section rates across hospitals, regions and even countries has raised questions about appropriateness of use of such a procedure, the study of it may well be the moment that may help investigators in understanding the determinants, benefits and adverse effects of high rates of C sections. Understanding the determinants of such variation, especially variation not explained by maternal or fetus medical condition will help clinicians, hospital managers and policy makers to improve care.

We performed a systematic review of literature looking for studies that have investigated variation in C section rates at hospital (meso) level with the aim of understanding better the determinants of C section variation at that level. In this study we employed a systematic review of literature using PRISMA guidelines. A three level search strategy was constructed, tested and employed to identify relevant articles. We searched MEDLINE (using the search software PubMed), Embase (Ovid), and The Cochrane Library. Two screenings were performed by two independent researchers. Full text review was followed after this and was performed at the same time with data extraction process. The extraction sheet was designed to capture general data about individual papers, data on the participants and sample size, study design, statistical analysis that was performed, the differences in C section rates that were reported and last but most important the data on determinates and effect sizes for such determinants. In addition, the reference lists of all identified studies and previous systematic reviews were searched manually for additional studies which may be included in systematic review. Data analysis was primarily descriptive, in sense that it was aimed at describing and organizing the findings from the papers that were included in full text review. The data reveal that many systemic determinants such as volume of services provision, supply of human resources and medical technology, status of hospital and other, play an important role in shaping the variation of C section rates across hospitals.

Dominik Graf von Stillfried

Managing Director

Central Research Institute of Ambulatory Health Care in the Federal Republic of Germany (ZI)
Berlin, Germany

Title: To what extent do we need to take account of systematic relationships between inpatient and outpatient care when analyzing regional variation?

Abstract

The presentation will provide findings based on German health care claim data supporting the notion that for many conditions meaningful interpretation of regional variations in health care cannot be based on the analysis of either inpatient or outpatient data separately. At the regional level, there are different divisions of labor between the inpatient and outpatient care system that need to be taken into account.

Descriptive data analysis show that even in the highly regulated German health care system in which capacity planning for outpatient care is based on nationwide and for inpatient care on statewide standards there is substantial variation on the county-level in the provider structure both in the ambulatory and in the hospital sector. Some of this variation is leveled by patient mobility. Yet, there remains an influence of this variation in provider structure on utilization.

Overall variation in use of inpatient care (no of admissions) is much more variant than use of outpatient care (no of treatment cases). Higher/lower utilization of inpatient care is also associated with social structure. This can be shown for neighborhoods with varying social status within cities as well as for Germany in total (socio-demographic-index models). Utilization of inpatient care is typically lower in areas characterized by high mobility and urban lifestyle; these areas show higher utilization of ambulatory specialty care and psychotherapy.

In addition, recent studies indicate an inverse relationship between the overall level of outpatient care and inpatient for Germany. After adjusting for risk and social structure of patients there is substantially less utilization of inpatient care in regions with an abundant ambulatory care structure and high utilization of ambulatory services. This effect is relevant for all inpatient care as for the so-called ambulatory sensitive conditions (ASC). High admission rates are typically associated with a weak ambulatory care structure.

We identified the 21 counties (5% of all counties in Germany) with the lowest adjusted services rate of inpatient care and an at least average adjusted services rate of outpatient care. All in all in these 21 counties the rate for inpatient services is 15% below the nationwide average and the rate for outpatient services is 13% above the average. Furthermore the regions are characterized by an above-average physician density (with 221 physician per 100.000 inhabitants vs. nationwide 170 physician per 100.000 inhabitants) and a below-average hospital- bed density (749 beds per 100.000 inhabitants vs. nationwide 815 beds per 100.000 inhabitants). For the population of these 21 counties we observe 2.230 ASC admissions per 100.000 inhabitants. This is well below the nationwide average of 3.100 admissions per 100.000. Considering that low admission rates for ASC often feature among area indicators for

patient safety/overall quality of ambulatory care system, and given that ambulatory care is less expensive than inpatient care, we suggested to call these 21 counties "best-practice regions".

It is suggested to use such studies to identify a group of "best-practice regions" for specific services in Germany to encourage processes in capacity planning which can be linked to quality indicators targeting desired levels of care in both the inpatient and the outpatient sector. The inverse relationship between inpatient and outpatient services varies in different geographic regions over time. This needs to be better understood. For the future it is necessary to develop strategies to exploit the potential of outpatient care in more regions based on such studies. This, of course, does not replace additional analyses of variations in practice patterns, also within and between "best-practice regions", to identify questionable deviation from clinical guidelines.

Irene Papanicolas

Assistant Professor

Department of Social Policy at the London School of Economics

London, United Kingdom

Title: *Variations in Hip Replacement treatment across England and Scotland: Implications for policy*

Authors: Irene Papanicolas and Alistair McGuire

Abstract

Following devolution in 2000, England and Scotland's health systems have diverged. One of the major differences that have ensued is the use of payment policies introduced for hospitals, where England adopted a case payment mechanism from 2003/4 and Scotland continues to pay by global budgets. This paper investigates the role this financial incentive has played in the selection of treatment performed for Hip Replacements across the two countries.

Cemented and uncemented prosthesis for Hip Replacement have been around since the 1970s and clinical evidence suggests that both prostheses have comparable rates of success. While the vast majority of Hip Replacements performed in the UK have historically used cemented prostheses, the number of uncemented Hip Replacements performed in England and Scotland has increased throughout the past decade, albeit at a noticeably different pace. In 2013 in England about half of the total number of hip replacements used uncemented prosthesis, compared to about 20% in Scotland. Despite recommendations for the National Institute for Clinical Excellence for the cemented prostheses, the financial reimbursement for uncemented Hip Replacement in England has been more generous than for its cemented counterpart. In Scotland, as providers are not reimbursed for cases treated, this financial incentive does not exist.

This paper explores the extent to which this financial incentive, present only in England, is associated with an increase in the take up of this procedure as compared to Scotland. Our results indicate that financial incentives are linked to the faster uptake of uncemented Hip Replacement in England.

Jessica Sheringham

Senior Research Associate
University College London
UCL Partners Programme
London, United Kingdom

Title: Capturing variations in service use across a diagnostic pathway: patterns of primary and secondary healthcare use amongst patients diagnosed with colorectal cancer in North East London

Abstract

Patients diagnosed with cancer as a result of a visit to the emergency department often have poorer outcomes than those diagnosed following a referral from their family doctor. Generally older patients and those in deprived areas are more at risk of their cancer being diagnosed in this way. This study, conducted at a local level in England, set out to examine possible explanations for why some patients in England are diagnosed through emergency departments, using linked data sources across hospital and primary care services. This analysis, at a local level from England, and illustrates how linked data sources across different healthcare services can be used to explore causes of observed healthcare variations; our interim findings suggest that in this instance, patients' increased use of one service (the emergency department) appeared to be compensated by reduced service use in another (primary care).