

International Society on Priorities in Health

### **Abstract book**

12th biannual International Conference of the International Society on Priorities in Health

13–15 September 2018 Linköping, Sweden



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### Welcome

### From the President of ISPH

Dear delegate,

I am delighted to welcome over 160 participants to our 12th biennial international conference in Linköping University, Sweden. The theme of the conference is "Priorities in health: Ideas in practice'.

This theme follows up nicely on the discussions at the previous conference in Birmingham. That conference conveyed a clear message, as highlighted in an editorial in the *Int J Health Policy and Management* authored by recent presidents of the Society. "Countries around the world are experiencing an ever-increasing need to make choices in investments in health and health-care. This makes it incumbent upon them to have formal processes in place to optimize the legitimacy of eventual decisions. There is now growing experience among countries on the implementation of stakeholder participation, and a developing convergence of methods to support decision-makers within health authorities." The authors called for further interaction among health authorities and the research community, to develop best practices.

The present conference aims to do exactly that – bringing ideas in practice. And ideally not only in terms of the further development of methods, but also in the organisation, development of institutional processes and support for priority setting.

I am looking forward to your contribution to these vexing questions and wish you a fruitful conference.

Prof. Rob Baltussen
President International Society
for Priorities in Health 2016-2018



### Welcome

### From the Organising Committee

Dear delegate,

On behalf of the organizing committee I welcome you to Linköping and the 12th biennial international conference on priorities in health: Priorities 2018: Ideas in practice.

The theme of this year emphasises the interesting mix of theoretical and applied knowledge development to handle resource challenges within the health sector. The rationale for the theme is found in the fact that "old" thoughts to handle resource scarcity and priority issues, are not always able to handle the specific challenges faced in today's health sectors. Theoretical developments, arising from insights into practice and brought back to practice is needed. For this reason, our plenaries will focus on three themes where we have found further knowledge development is needed: political decision-making, the use of cost-effectiveness threshold and the ethics of bedside rationing given knowledge about human psychology. However, the program covers an even greater variety of perspectives on priorities in health given your participation.

I would like to thank the organising committee of the 2016 Birmingham conference, for all the helpful information they have provided our committee with, and the management committee of the ISPH for their support. I would also like to extend a thank you to the local organising group and the scientific committee and especially Eva Persson, the communications officer at the National Center for Priorities in Health for her efforts to keep together and handle all the practical stuff.

I hope the conference will provide fertile soil for both new thoughts and new meetings.

Lars Sandman
Chair of the organizing group

Organising committee: Lars Sandman, Eva Persson, Karin Bäckman, Peter Garpenby, Thomas Davidson and Ann-Charlotte Nedlund



### **Swedish National Centre for Priorities in Health**

The National Centre for Priority Setting in Health Care was established in 2001 as a national knowledge centre for priorities in health and social care.

Initially the Centre was commissioned by the Ministry of Health and Social Affairs, and the Swedish Association of Local Authorities and Regions. In 2010 the Centre became part of the Division of Health Care Analysis at the Department of Medical and Health Sciences, Linköping University. Today the main sponsors are the Ministry of Health and Social Affairs (through the National Board of Health and Welfare), Region Östergötland and Linköping University.

The Centre supports state agencies, regional and local authorities (the regions/county councils and municipalities), and clinical management in the health service. We are linking education, research and policy development, and work with knowledge dissemination and exchange in the form of publications, newsletters, tutorials, methodological support, conferences and seminars.

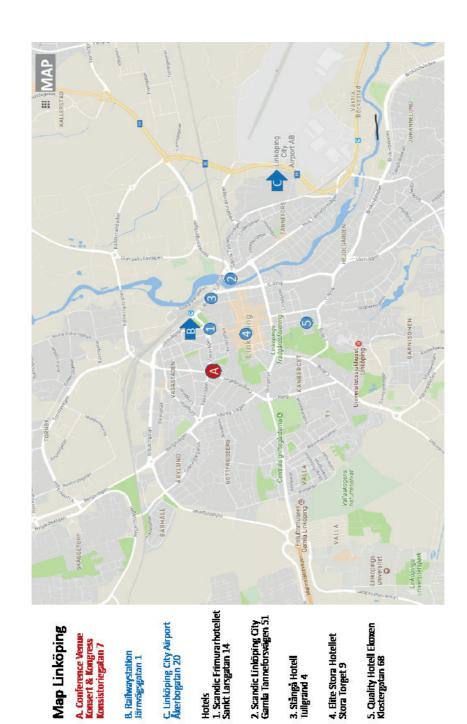
Our vision is that the decisions on all levels that affect access to health care, will be based on shared priority-setting principles. Priority setting decisions should be based on ethical principles applied in an open process, and where the justifications for various decisions are transparent to different stakeholders.



Photo credit: Emma Busk Winquist/ Co-workers at the Swedish National Centre for Priorities in Health



Photo credit: Emma Busk Winquist/ the cathedral in Linköping



### **About Linköping**

### Linköping – where ideas come to life.

Linköping is one of Sweden's fastest growing cities. The population is constantly increasing and we are now 153 000 inhabitants. We are currently Sweden's fifth largest city and a part of the expansive East Sweden Business Region. For decades the city has been characterized by world-class high technology in the fields of aviation, IT and the environment. A third of the city's workforce are engaged in areas related to aviation and the region leads the way in cleantech with a well developed industry focused on recycling and renewable fuels.

### Education and innovation.

In Linköping there is a strong force of innovation especially in Mjärdevi Science Park, which is one of Europe's leading technology parks with 6 000 employees in 300 companies. The focus areas in the park are visualization, modeling and simulation, connectivity and mobile broadband, vehicle safety and security systems. Our highly ranked university is situated next to Mjärdevi Science Park and holds more than 27 000 students. We also have a university hospital with highly specialized medical treatment and research. Linköping is supported by good transportation including two airports. Furthermore the city is characterized by a lively commerce and holds one of the nation's largest shopping areas. In addition there are a number of conferences and events throughout the year which attract visitors from all over the world.



Photo credit: Emma Busk Winguist



Photo credit: Emma Busk Winquist/ Folke Filbyter

### Heritage and culture.

Proud ancestors from the Middle Ages hover over the city. Our history lives on in the form of the well-preserved city centre, where shops, cafés and restaurants share space with the cathedral and other historic buildings. Around us we enjoy the beautiful nature. We have unique oak woodlands with a fascinating wildlife and vegetation. We can also offer swimming och boating along Kinda Canal and Göta Canal as well as many nearby beautiful lakes.

Linköping is a rich city. History, nature and development meet here. We can proudly state that we are a city of the future – the city where ideas come to life!



Photo credit: Emma Busk Winquist/ Trädgårdsföreningen Text: www.linkoping.se/international/english-engelska/about-linkoping

# | LINKÖPING KONSERT & KONGRESS



### **Delegate Information**

### **Meeting Venue**

Konsert & Kongress Konsistoriegatan 7 582 22 Linköping

Free wifi access

### Registration

The registration desk is situated outside the conference local (Garden) at Konsert & Kongress.

### **Name Badges**

Please wear your name badget at all times during the conference and to the social events. If you lose your badge at any time, please inform a member of the conference team.

## Conference Programme



### **Conference programme**

### Thursday, September 13

08.30 – 09.30 Registration, the registration desk is situated outside the conference local Garden at Konsert & Kongress.

Poster display (the whole day)

09.30 – 10.00 Conference Welcome to Priorities 2018 (in local Garden)

10.00 - 11.15 Plenary session one: Politics in priority setting

- When and how can we set limitis in welfare states? (Garden), Jonas Hinnfors and Ellen Kuhlmann

11.15 - 11.45 COFFEE BREAK

11.45 - 12.45 Parallel sessions 1

12.45 - 14.00 LUNCH

14.00 - 15.30 Parallel sessions 2

15.30 - 16.00 COFFEE BREAK

16.00 - 17.30 Parallel sessions 3

17.30 - 17.45 PAUS

17.45 – 19.00 Guided tour in Linköping

19.00 - 21.00 WELCOME RECEPTION

### Friday, September 14

- 08.30 09.00 Registration, the registration desk is situated outside the conference local Garden at Konsert & Kongress.

  Poster display (the whole day)
- 09.00 10.15 Plenary session two: Health economics in priority setting
   Priority setting with economic constraints what's the
  opportunity cost? (Garden), Werner Brouwer and Joanna Coast.
- 10.15 10.45 COFEE BREAK
- 10.45 12.15 Parallel sessions 4
- 12.15 13.15 LUNCH
- 13.15 14.00 Poster walk
- 14.00 15.30 Parallel sessions 5
- 15.30 16.00 COFFEE BREAK
- 16.00 17.30 Parallel sessions 6
- 17.30 18.30 General meeting of ISPH
- 19.00 23.00 SOCIAL DINNER

### Saturday, September 15

- 08.30 09.00 Registration, the registration desk is situated outside the conference local Garden at Konsert & Kongress.

  Poster display (the whole day)
- 09.00 10.15 Plenary session three: The role of emotions in hard decisions Which are they? (Musikalen), Paul Slovic and Bjørn Hofmann
- 10.15 10.45 COFFEE BREAK
- 10.45 12.15 Parallel sessions 7
- 12.15 12.30 Thanks, summary and awards for best poster
- 12.30 13.30 LUNCH

### **Social Programme**

### Guided Tour in Linköping,

Thursday, 13 September (17.45 –19.00)

Learn about historical places and times gone by from skilled guides. Let them show you around downtown Linköping.

We meet at the starting point outside the main entrance.

### Welcome reception,

Thursday, 13 September (19.00 – 21.00).

Do not miss our welcome reception Thursday evening with jazz music played by students from Lunnedvads Folkhögskola.

Local: Melodin (second floor).

### Social dinner,

Friday 14 September (19.00-23.00).

Friday evening we will have dinner as in the Viking period.

Local: Backstage



### Lunnevads Folkhögskola

Lunnevads Folkhögskola is one of Swedens largest and eldest folk high schools. This year the school is celebrating 150 years.

The school is owned by Region Östergötland and is situated 20 kilometers outside Linköping.

It has an esthetic profile with music, dance and art that attracts talented students from all of Sweden.

The Music Programme started in 1958 and offers different specializations as folk music, jazz or classic music.



# Parallel Sessions Programme



Thursday 13	Thursday 13 September, Parallel Session 1	Session 1			
Time	Garden	Operan	Operetten	Sonaten	Solot
11.45-12.45	PERSONAL	PUBLIC HEALTH	EFFICIENT HEALTH	CLINICAL AND RESEARCH	CHALLENGES IN LMIC
	RESPONSIBILITY		EXPENDITURE	FRAMEWORKS	
	Oral session	Oral session	Oral session	Oral session	Oral session
	Chair: Lars Sandman	Chair: Barbro Krevers	Chair: Lars-Åke Levin	Chair: Ann-Charlotte	Chair: Eva Arvidsson
				Nedlund	
	Amanda Owen-Smith:	Karin Guldbrandsson:	Mathias Barra:		Gloria Ashuntantang:
	The role of self-	Priority Setting in Public	Does inequality determine	Ana Duarte:	Priority dilemmas
	responsibility in the	Health	health expenditure?	Do Care Hubs reduce	encountered by
	rationing of obesity			hospital admissions?	physicians treating
	treatment: a qualitative	Susan Dorr Goold:	Thérèse Eriksson:	A differences-in-differences	patients with kidney
	study	Primary care, health	Effects of a value based	to support local decision	disease in sub-Saharan
		promotion and disease	reimbursement system	making	Africa
	Joar Björk:	prevention in Michigan's	<ul> <li>an example from Stockholm</li> </ul>		
	Arguing against the moral	Medicaid expansion	County Council	Hege Wang:	Beverley Essue:
	relevance of luck			Project on priority setting in	The unfunded priorities:
	egalitarianism in health	Ingrid Miljeteig:	lestyn Williams:	Norwegian hospitals	an evaluation of priority
	care priority setting	Criteria for bedside	The hidden face of rationing?		setting for non-
		priorities under extreme	An examination of capital	Lydia Kapiriri:	communicable disease
	Harald Schmidt:	resource constraints – A	spending behaviour in times	Can a similar Framework be	(NCD) control in Uganda
	Work requirements and	national survey of Ethiopian	of resource constraint in the	used for evaluating both	
	other attempts to	physicians	English NHS	priority setting for health	Wanwuri Akor:
	promote personal			interventions and health	Priority setting in the
	responsibility in Medicaid:			research?	Nigerian health system
	recent developments in				
	the USA				

Thursday 13	Thursday 13 September, Parallel Session 2	Session 2			
Time	Garden	Operan	Operetten	Sonaten	Solot
14.00-15.30	PUBLIC INVOLVEMENT	WHAT CAN WE LEARN	NORMATIVE	NATIONAL FRAMEWORKS	HTA AND PRIORITY
		FROM REAL-LIFE	METHODOLOGICAL		SETTING – EXAMPLES
		<b>EXPERIENCES OF HEALTH</b>	PERSPECTIVES		
	Oral session	ORGANIZATIONS		Oral session	Oral session
	Chair: Barbro Krevers	APPLYING STRATEGIES	Oral session	Chair: Gustav Tinghög	Chair: Lars Bernfort
		FOR PRIORITY SETTING?	Chair: Lars Sandman	:	
	Stuart Peacock:			Carleigh B Krubiner:	Tania Conte:
	Making Fair and	Workshop	Gert Jan van der Wilt:	Toward an ethics framework	HTA as a tool to support
	Sustainable Decisions		Specifying norms as a means	for health priority-setting for	priority setting and
	about Funding for Cancer	Peter Garpenby	to support priority setting in	National Health Insurance in	resource allocation in the
		Ann-Charlotte Nedlund	nealthcare		system
	Colene Bentley:		Anders Herlitz:	Myles-Jay Linton:	
	Support for reassessing		Indeterminate ethics and	A new framework for	Denise Ferreira:
	post-approval cancer		health policy	appraising the quality of	Resistance Exercise and
	drugs: results from a series		-	business cases for use in an	Women's Health - Risks
	of public deliberations on		Erik Gustavsson:	NHS Clinical Commissioning	for Urinary Incontinence
	cancer drug funding in		The role of public views on	Group setting	in Women Young Adults
	Canada		health care priority setting in		
			moral reasoning	Marissa Collins:	Fagner Luiz Pacheco
	Maarten Jansen:			Developing a framework for	Salles:
	Reimbursement Decisions		Petra Gelhaus:	priority setting in health and	Evaluation of the effect of
	In The Netherlands - A		Narrative as a complementary	social care	music therapy during
	Citizen Panel: does it		tool to principle-based		physiotherapy sessions in
	influence participants'		prioritization in Sweden: test	Mari Broqvist:	elderly patients of a
	views on healthcare		case 'ADHD'	Towards a mutual	nursing home
	priority setting?			understanding?	
				On-going discussions of how	Karin Stenström,
	Vivian Reckers:			to interpret ethical principles	Emin Hoxha Ekström:
	Does Participation in a			into a national priority	Treatment options of
	Citizen Panel Influence			setting model	arm fracturs in the elderly
	Views on Healthcare				
	Priority Setting in the				
	Netherlands?				
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	t.	OUTCOME RESEARCH	Oral session	Chair: Thomas Davidson	Louise Jackson:	Understanding young	people's priorities for	service development:	a case study of sexual	nealth services	-	Lidia Engel:	A qualitative exploration	or preference-based	medsures for use in	economic evaluation in	dementia		C.M. Dieteren:	A guilty pleasure, or two?	Exploring health	behaviour profiles and	their behavioural	determinants and	outcomes	lidis Engal·	Liuia Liigei. Measuring outcomes to	inform resource	allocation - investigating	the relationships	hetween health-related	guality of life, capability	wellbeing and subjective	wellbeing in the context	of spinal cord injury
	Solot	OUT	Oral	Chair	Louis	Unde	beob	servi	a cas	healt	-	LIGIA	A qu	ם ה			dem		S. M	A gui	Explo	beha	their	dete	ontco		Mea	infor	alloc	ther	, tad	auali	wellk	wellk	of sp
	Sonaten	PUBLIC INVOLVEMENT AND SOCIAL VALUES		Oral session	Cildii. Maii Bioqvist	Rachel Baker:	Societal values and priority	setting. What should we do	when people disagree?	Exploring approaches to	plurality		Peter Littlejohns:	Improving the effectiveness,	efficiency and fairness of	Health Care Systems through	Public Involvement		Marion Danis:	Engaging the public in	priority setting for health in	a rural setting in South	Africa: The CHAT SA project												
	Operetten	IMPLEMENTING AND EVALUATING MODELS		Oral session	Cilaii: Nai iii Backiiiaii	Barbro Krevers:	Development and	implementation of a	systematic prioritisation	model in resource allocation	in a municipality – strategies,	facilitators and barriers		Iracey-Lea Laba:	Implementing Multi-Criteria	Decision Analysis into real-	world drug decision making:	experience from a Canadian	Province		Neale Smith:	Priority setting practice	among physician engagement	initiatives in British Columbia,	Canada										
Session 3	Operan	ENSURING LEGITIMACY IN DEVELOPING HEALTH	TECHNOLOGY	ASSESSMENT	MECHANISM	2042/2010	A COLLEGE	Tessa Edeie	Melanie Bertram	Rob Baltussen																									
Thursday 13 September, Parallel Session 3	Garden	PRIORITY IMPLICATIONS WITH SHARED	DECISION-MAKING	- REPORT FROM A	KESEARCH PROGRAM	ncinnon lonco	דמוופן אתאאוסון	Gert Helgesson	Helene Bodegård	Niklas Juth	Christian Munthe	Erik Gustavsson	Lars Sandman																						
Thursday 13	Time	16.00-17.30																																	

Friday 14 Se	Friday 14 September, Parallel Session 4	ssion 4			
Time	Garden	Operan	Operetten	Sonaten	Solot
10.45-12.15	ACCOUNTABILITY AND	WHO: USING ECONOMIC	SEVERITY, LIFE	ORGANISING AT A	COST-EFFECTIVENESS
	LEGITIMACY	EVIDENCE AND TOOLS TO AID PRIORITY SETTING	EXPECTANCY AND AGE	NATIONAL LEVEL	ANALYSES
	Oral session	FOR HEALTH IN LOW-	Oral session	Oral session	Oral session
	Chair: Peter Garpenby	AND MIDDLE INCOME	Chair: Lars Sandman	Chair: Per Weitz	Chair: Thomas Davidson
	Ann-Charlotte Nedlund:		Mari Broqvist:	Corinne Gower:	Houra Haghpanahan:
	Learning priorities:	Workshop	Different aspects of an	What do we do if our	The Effectiveness and
	a framework for enabling		important priority setting	priorities don't align? A New	cost-effectiveness of
	legitimacy and	Karin Stenberg	criteria - comparisons of	Zealand study of health	tobacco control mass
	understanding welfare-	Melanie Bertram	citizens', health professionals'	priorities in an institutional	media campaigns
	state worker's creative	Kahsu Bekuretsion	and politicians views on	כסוופאו	Alemayebii Hailii:
	ambiguous directives in	John Wong		Kristine Dahle Bryde-	Cost-effectiveness of
	times of austerity		Eirik Tranvåg:	Erichsen:	combined intervention of
			Clinical Decision Making in	The Directorate of Health's	Long Lasting Insecticidal
	Katharina Kieslich:		Cancer Care: Current and	professional role in the	Nets (LLINs) and Indoor
	Does accountability for		Future Roles of Patient Age	preparation and	Residual Spraying (IRS)
	reasonableness work?			operationalization of priority	compared with each
	The political realities of		Vivian Reckers:	criteria for prioritizing	intervention alone for
	priority-setting in the		Looking Back and Moving	interventions in the health	malaria prevention in
	English NHS		Forward: On the Application	sector	Ethiopia
			of Proportional Shortfall in		
	Kristine Bærøe:		Healthcare Priority Setting in	Sari Koskinen, Reima	Johanna Wiss:
	Priority settings in		the Netherlands	Palonen:	Economic aspects of
	practice: societal			The Finnish Social and Health	social service
	consequences and		Beverley Essue:	Care Reform 2020 and the	interventions: the case of
	accountability of		Can "health system	Prioritization of Services	Treatment Foster Care
	governing strategies		strengthening" be prioritized		Oregon
			and/or evaluated?	Eva Arvidsson:	
	Eli Feiring:		A qualitative case study	National Quality Indicators	Ana Duarte:
	ine changing role or		illustrating the complexities	Improve Priority Setting In	Evaluation of complex
	academic knowledge within Norwegian priority			Primary care	Interventions: Moke lessons learnt and ways
	setting advisory				forward
	commissions				
	_		_	_	_

Friday 14 S	Friday 14 September, Parallel Session 5	ssion 5			
Time	Garden	Operan	Operetten	Sonaten	Solot
14.00-15.30	WHO CHOICE: GLOBAL EVIDENCE TO SUPPORT COUNTRY SOLUTIONS	A PANEL DISCUSSION HOW TO BASE HEALTH PRIORITIES IN ZAMBIA	ECONOMIC VALUE OF HEALTH	STAKEHOLDERS INVOLVEMENT	RATIONING
		ON THE SUSTAINABLE	Oral session	Oral session	Oral session
		DEVELOPMENT GOALS	Chair: Martin Henriksson	Chair: Mari Broqvist	Cigii. rei weitz
	Panel session	Panel session	Brayan V. Seixas:	Susan Dorr Goold:	Lars Sandman:
			Assessing value in health care:	How would low-income	Rationing non cost-
	Karin Stenberg	Jens Byskov	the horizon of existing	communities prioritize	effective treatment
	Jeremy Lauer Melanie Bertram	with several	trameworks	Medicaid spending?	through withholding and withdrawing treatment —
	Kjell Arne Johanssen		Neill Booth:	Donya Razavi:	is there an ethical
			Economic' ideas?: 'valuation',	Analysis of stakeholder	difference?
			cost' and their meanings in	setting in three districts in	Emil Persson:
			practice	Uganda: Who is in and who	Discrepancy between
			-	is out?	health care rationing at
			Jonathan Siverskog:		the bedside and policy
			In search of Sweden's cost-	Donya Razavi:	level
			effectiveness threshold	Participation of Vulnerable	
				Women in Priority Setting	Kinga Posadzy:
			Ellen Wolff:	Process in Tororo District,	The Effect of Decision
			A comparative study on	Uganda	Fatigue on Surgeons'
			willingness to pay for		Clinical Decision Making
			prophylactic vs on-demand	Lydia Kapiriri:	
			treatments in a swedish	Ideas in practice: Validating	
			context	and applying a framework	
				for evaluating priority setting	
				In low income countries	

	Solot	023	JRKS			HTA lobe
	Sonaten	HTA AND PRIORITY	SELLING – FRAMEWORKS	Oral session Chair: Jenny Alwin	_	Rob Baltussen: Value Frameworks for HTA agencies Around The Globe
	Operetten	RATIONING		Oral session Chair: Peter Garpenby		Emil Persson: Cost neglect in health care rationing decisions
ssion 6	Operan	WHAT COST-	ANALYSES CAN AND	CANNOT DO IN PRIORITY SETTING		Panel session
Friday 14 September, Parallel Session 6	Garden	WHAT IS NEEDED TO	EFFECTIVE NATIONAL	ESSENTIAL HEALTH BENEFIT PACKAGE: THE	CASE OF ETHIOPIA	Panel session
Friday 14 Se	Time	16.00-17.30				

Saturday 1!	Saturday 15 September, Parallel Session 7	Session 7			
Time	Musikalen	Operan	Operetten	Sonaten	Solot
10.45-12.15	ORPHAN DRUGS AND	FAIR DECISION – MAKING	PROFESSIONAL ROLES AND	EVALUATION METHODS	
	EFFECTIVENESS		PERSPECTIVES		
	THRESHOLDS	Oral session	Oral session	Oral session	
	-SHOULD SIZE MATTER?	Chair: Pier Jaarsma	Chair: Mari Broqvist	Chair: Thomas Davidson	
	20,535	Bjørn Hofmann:	Ann-Charlotte Nedlund:	Pia Johansson:	
	דמוותו אתאאוסוו	Informal priority setting by	The Guardians of Democracy:	What outcome measures are	
	Lars Sandman	technology	The forgotten but important	valid in economic	
	Douglas Lundin		role of the health care	evaluations of social care	
	Niklas Juth	Victoria Charlton:	professionals when setting	interventions?	
	Martin Henriksson	Plus ça change? How NICE's	limits of health care		
		evolving approach does –		Harald Schmidt:	
		and does not – promote	Anette Winberg:	The universal health	
		fairer decision making in	Making priorities in cross-	coverage cube(s):	
		healthcare priority setting	professional teams - examples	obfuscating or illuminating	
			from the Habilitation sector in	for policy and practice?	
		Victoria Charlton:	Sweden	A systematic review of an	
		Does prioritising the new		under-determined	
		promote fairness? The role	Lovisa von Goes:	visualization	
		of innovation in healthcare	Assigning priorities at the		
		priority setting in the UK	individual level		
		Axel Ågren:			
		The contrasts between			
		knowledge and values in			
		relation to death and			
		loneliness within palliative			
		care in Sweden			

# Plenary Sessions Keynote Speakers



### Politics in priority setting

### When and how can we set limits in welfare states?

Jonas Hinnfors (Professor of Political Science at the University of Gothenburg, Sweden) and Ellen Kuhlmann (PhD, MPH, Registered Nurse, is currently Research Group Leader of Health Policy and Management at the Institute of Epidemiology, Social Medicine and Health System Research, Medical School Hannover, Germany).

### Jonas Hinnfors

By definition, welfare states are built on notions of fairness. Ultimately fair policies rely on resources. Should parties follow the voters regarding the notions and the resources? This may sound like a laudable goal but what if voters hold inherently contradictory views or have only a vague sense of potential consequences? Most research would hold that parties are not merely passive transmission belts from voters to decisions. Instead, they offer ideological packages about the future. Voters can legitimately mobilise in favour of policies without being asked to set any limits. At the same time, parties legitimately need to set limits and to prioritise. Trying to combine these roles might easily backfire. This talk will elaborate on whether the circle can be squared."

### Ellen Kuhlmann

Priority for human resources for health: making a people-centred health workforce happen

The importance of a sustainable and people-centred health workforce is increasingly recognised. However, human resources for health still rank low on the priority list of health policy reforms and research programmes, and health professionals face many challenges. This talk draws on cross-country comparative research to explore how health systems respond to the new demands for an integrated people-centred health workforce. Illustrative case studies show that health workforce transformations are shaped by national contexts and governance arrangements. There is no uniform policy strategy, but trans-sectoral coordination and participation of a wide range of health professionals are important conditions to make better health workforce governance happen. The results highlight that health workforce development needs health system changes and must become a health policy priority.

### **Keynote speakers**



Jonas Hinnfors, University of Gothenburg, Sweden

Jonas Hinnfors is a Professor of Political Science at the University of Gothenburg, Sweden. He has been Member of the Board, Nordic Political Science Association (NOPSA) and Chair, Swedish Political Science Association (SWEPSA). He is affiliated at the University of Stirling, Scotland (Politics Division, School of Arts & Humanities): Honorary Senior Research Fellow. His research covers Social Democracy, Migration Policy, Parties/Party Behaviour; Ideology, Welfare State.



Ellen Kuhlmann, Medical School Hannover, Germany

Ellen Kuhlmann, PhD, is currently Research Group Leader of Health Policy and Management at Medical School Hannover, Germany, and associated Senior Researcher at Karolinska Institutet Medical Management Centre, Sweden. Ellen holds a PhD and post-doc qualification in sociology and Master in Public Health and has a professional background as registered nurse specialised in intensive care and anaesthesiology. Next to research and teaching positions in Germany, she was a Guest Professor at Aarhus University, Denmark, Senior Researcher at Karolinska Institutet, Sweden, and Senior Lecturer at the University of Bath, UK, and had fellowships at McMaster University, Canada, Kaoshiung Medical University, Taiwan, and NOVA-Norwegian Social Research Centre, Norway. She is an initiator and President of the European Public Health Association (EUPHA) 'Health Workforce Research' section.

### Health economics in priority setting

Priority setting with economic constraints - what's the opportunity cost?

Werner Brouwer (Professor of Health Economics at the Erasmus School of Health Policy & Management (ESHPM) of the Erasmus University Rotterdam, The Netherlands) and Joanna Coast (Professor in the Economics of Health & Care at the University of Bristol, UK).

Priority setting is necessary because of scarcity and constraints of resources. Increasingly, the notion of opportunity costs is mentioned when talking about priority setting and economic evaluation. The field of economic evaluation cover a wide range of theoretical, methodological, and practical issues, but this session will focus on the application of economic evaluation methods within the prioritization process.

Professor Werner Brouwer will address the relevance of opportunity costs inside and outside the health care sector for priority setting. He will do this by presenting issues as incorporating quality of life of all involved participants (including carers), productivity loss and approaches to equity.

Professor Joanna Coast will present some of the capability work and the directions it is leading in, and how that might be used in prioritisation.

### **Keynote speakers**



Werner Brouwer, Erasmus University Rotterdam, The Netherlands

Werner Brouwer is a Professor of Health Economics at the Erasmus School of Health Policy & Management (ESHPM) of the Erasmus University Rotterdam. He obtained an MSc in Economics (1996) and a PhD in Health Economics (1999) at the same university. Werner is also affiliated with the institute for Medical Technology Assessment and the Erasmus School of Economics. Moreover, he is an Honorary University Professor at the Corvinus University in Budapest, Hungary. His research focuses on the methodology of welfare economic evaluations in health care. His work has covered topics like optimal decision rules, normative foundations of economic evaluations in health, measurement and valuation of informal care and productivity costs, incorporating equity considerations in economic evaluations as well as the monetary value of health gains.



Johanna Coast, University of Bristol, UK

Joanna Coast is Professor in the Economics of Health & Care at the University of Bristol. Jo qualified with a BA (Econ) (Hons) in Economics in 1988 and an MSc in Health Economics in 1990, both from the University of York, and a PhD in Social Medicine from the University of Bristol in 2000 which focused on citizen-agency relationships in health care priority setting. She is Senior Editor, Health Economics for Social Science & Medicine, a board member for the International Health Economics Association (iHEA) and honorary Professor at the University of Birmingham, where she was previously based. Her research interests lie in the theory underlying economic evaluation, developing capability measures of outcome for use in economic evaluation, priority setting, end-of-life care and the economics of antimicrobial resistance. She also has a methodological interest in the use of qualitative methods in health economics.

### The role of emotions in hard decisions

### Which are they?

Paul Slovic (founder and President of Decision Research and Professor of Psychology at the University of Oregon, USA) and Bjørn Hofmann (Professor at the Norwegian University of Science and Technology (NTNU) at Gjøvik and an adjunct professor at the Centre for medical ethics at the University of Oslo, Norway).

### Paul Slovic

My talk will examine the psychology of hard decisions in situations of risk. Risk is perceived and acted upon in two fundamental ways. Risk as feelings refers to our instinctive and intuitive reactions to danger, guided by feelings and emotions. Risk as analysis brings logic, reason, and scientific deliberation to bear on risk assessment and decision making. Both modes are highly rational but sometimes misguide us in ways I shall describe.

### Bjørn Hofmann

With Paul Slovic's conceptual framework as a point of departure, Bjørn Hofmann will elaborate on some basic mechianisms in practical priority setting. He will explore some psychologic, emotional, epistemic, relational, and moral aspects of priority setting which make priority setting challenging in practice. He will argue that we need to take these mechanisms into account in practical priority setting.

## **Keynote speakers**



Paul Slovic, University of Oregon, USA

Paul Slovic, a founder and President of Decision Research and Professor of Psychology at the University of Oregon, studies human judgment, decision making, and risk analysis. He and his colleagues worldwide have developed methods to describe risk perceptions and measure their impacts on individuals, industry, and society. He publishes extensively and serves as a consultant to industry and government. Dr. Slovic is a past President of the Society for Risk Analysis and in 1991 received its Distinguished Contribution Award. In 1993 he received the Distinguished Scientific Contribution Award from the American Psychological Association. In 1995 he received the Outstanding Contribution to Science Award from the Oregon Academy of Science.



Bjørn Hofmann, University of Oslo, Norway

Bjørn Hofmann is a Professor at the Norwegian University of Science and Technology (NTNU) at Gjøvik and an adjunct professor at the Centre for medical ethics at the University of Oslo. He holds a PhD in philosophy of medicine and is trained both in the natural sciences and in the humanities. His main research interests are philosophy of medicine, philosophy of science, technology assessment, and bioethics. Hofmann teaches ethics, philosophy of science, and philosophy of medicine, at the levels Ba, Ma, and PhD. He has been a researcher at The Norwegian Knowledge Centre for the Health Services (2002-13) and a Harkness fellow (Commonwealth Fund) at the Dartmouth College (2014-15).

# **Parallel Sessions**

## **Thursday**



## The role of self-responsibility in the rationing of obesity treatment: a qualitative study

Presenting author: Amanda Owen-Smith <sup>12</sup>
Co-authors: Joanna Coast <sup>12</sup> and Jenny Donovan <sup>12</sup>

<sup>1</sup>Population Health Sciences, Bristol Medical School, University of Bristol, UK
<sup>2</sup>The National Institute for Health Research Collaboration for Leadership in Applied Health Research and Care West (NIHR CLAHRC West) at University Hospitals Bristol NHS Foundation Trust, UK

## Background.

There is an increasing interest in taking some notion of self-responsibility for health into account when making healthcare priority-setting decisions, and in the UK this is progressively impacting on commissioning policy. This is congruent with public opinion surveys, where the majority of people agree that personal culpability for health state is an important criterion for inclusion in the allocation of treatments, but incongruent with the results of more detailed qualitative studies where the complexities of cause and effect are explored further. Little is known about how self-responsibility impacts on resource allocation within micro level healthcare interactions.

#### Aim.

To investigate how clinicians take self-responsibility into account when deciding which patients should be prioritized for weight reduction surgery.

## Methods.

An ethnographic approach was used to conduct in-depth interviews with patients and clinicians (n=33) and undertake observations of clinic consultations (n=22) where decisions about eligibility for surgery were made and communicated to patients. Sampling was undertaken purposively and data analysis combined elements of a thematic and narrative approach.

### Results.

Patients and doctors worked within similar theoretical frameworks when it came to discussing self-responsibility for health and eligibility for NHS treatments. However, these perspectives diverged when mandatory behavioral targets limited access to effective treatments, including weight reduction surgery. Clinicians rarely discussed the financial context for decision-making with patients, preferring to focus on targets for behavioral change.

However, this was frustrating for patients who had usually spent many years attempting behavior change interventions in primary care and experienced these additional delays as contributing to, rather than alleviating, existing co-morbidities.

## Arguing against the moral relevance of luck egalitarianism in health care priority setting

Presenting author: Joar Björk<sup>1 2</sup>

<sup>1</sup>Department of Research and Development, Region Kronoberg, Sweden <sup>2</sup>Stockholm centre for health care ethics (CHE), LIME, Karolinska University Stockholm, Sweden

## Background.

Egalitarianism holds that to the extent possible, anything that is of value should be distributed equally between everybody. A tempered variant of egalitarianism, "luck egalitarianism", holds that this is true unless the baseline inequality has been caused by individuals' imprudent behavior. Thus, if somebody is poorer due to having squandered his or her wealth, luck egalitarianism holds that this individual's claims to redistribution are weaker or plain absent.

Some writers in health care ethics holds that a similar principle should apply in health care priority setting, so that patients with self inflicted disease should receive lower priority rank as opposed to patients with comparable health status with no history of self inflicted disease.

### Aim.

The aim of this presentation is to critically evaluate the philosophical support for luck egalitarianism as a normative theory in health care priority setting.

## Results.

I claim that luck egalitarianism, although resting on a commonsense intuition with considerable traction, fails as a principle for health care priority setting for several reasons. The first is that the above-mentioned intuition provides very little guidance in the complex world of clinical practice. The second is that luck egalitarianism, when applied to the clinical practice, is riddled with moral ambiguity to an extent that makes it ethically unconvincing. The third reason is that the effects of applying luck egalitarian principles to health care priority setting would result in far reaching inegalitarian effects which are likely unpalatable to anybody with an egalitarian mind set. The final reason that will be explored is the problem of "guilt by association" in luck egalitarianism as a normative theory in health care priority setting.

Conclusions.  I will argue that for the above reasons, luck egalitarianism is an unconvincing source of normative principles in priority setting. By extension, I will argue that talk o "responsibility for health" is problematic in the clinical practice and should likely
best be avoided.

## Work requirements and other attempts to promote personal responsibility in Medicaid: recent developments in the USA

Presenting author: Harald Schmidt<sup>1</sup>

<sup>1</sup>Department of Medical Ethics and Health Policy, Perelman School of Medicine, University of Pennsylvania, USA

## Background.

Should poor people be required to work in order to access health insurance? Breaking controversial new ground, the Centers for Medicare & Medicaid Services (CMS) recently allowed US states to implement work requirements (WRs) —such as job skills training or public service—as a condition of Medicaid eligibility. Applying to beneficiaries who are not pregnant, elderly, or disabled, CMS states these programs will "promote better mental, physical, and emotional health" and help "rise out of poverty and attain independence." CMS has approved applications from Kentucky (KY), Indiana (IN) and Arkansas (AR); 10 other states are pending. Programs differ, but central components are work or community service of about 20 hrs/week, and Medicaid lock-outs if premiums are not paid on time, or if one fails to confirm one's eligibility status.

#### Aims.

To (a) describe the scope of work requirements and other measures introduced under the guise of promoting personal responsibility in Medicaid in the three first approved states (KY, IN, AR), (b) to identify underlying drivers and central ethical issues, to (c) describe primary care physician )PCP) attitudes towards WRs in the approved states.

#### Methods.

Review of federal and state policy statements; conceptual analysis; incentivized online and mail survey of PCPs in KY, IN, AR (total N receiving survey: 9,028, i.e. all registered providers, not yet fielded at the time of abstract submission).

## Results.

The principal drivers of WRs are grounded in: economics (with different implications in states that introduced WRs for people who previously were able to access Medicaid benefits unconditionally, vs states that will only begin to cover new populations under Medicaid if they can impose WRs on them); moral and political notions of personal responsibility; behavioral economics; pragmatic health policy considerations; and the interest to further a broader notion of health.

The validity of these rationales will be critically discussed and contextualized with positions of key stakeholders, especially physicians.

Building on work that is in-press at the time of abstract submission, the paper highlights that WRs create extremely high stakes situations. WRs need not comply with the Common Rule. But practically, WRs constitute research on particularly vulnerable populations. As a minimum, CMS should provide guidance to minimize health risks, protect beneficiaries from penalties disproportional to their level of noncompliance and to clarify when harms require a state to modify or end a demonstration project. Five procedural steps towards this end are outlined. I summarize primary care physician attitudes towards WRs in the approved states.

The initial debate around WR focused on whether or not to permit them. Now,

## Conclusions.

two urgent, albeit far more difficult questions, are how to limit harm to vulnerable populations, and how to ensure that, where policies are implemented, robust evaluations be done in a way that complies with basic standards of research ethics. While, in some ways, a uniquely American feature of health policy, other states also tie accessing social benefits to meeting certain conditions. With austerity continuing to impact health spending globally, and given a wave of populism surfacing in recent European elections, such measures are unlikely to become of less interest. It is critical to be clear about how to respond to different rationales, and how to mitigate negative consequences, be these intended or unintended.

## **Priority Setting in Public Health**

## Presenting author: Karin Guldbrandsson<sup>1</sup>

Co-authors: Carina Amréus<sup>1</sup>, Lina Boström<sup>2</sup>, Mimmi Eriksson Tinghög<sup>1</sup>, Linda Maripuu<sup>1</sup>, Kajsa Mickelsson<sup>1</sup>, Martin Norman<sup>1</sup> and Jessika Spångberg<sup>1</sup>

<sup>1</sup>Department of Living Conditions and Lifestyles, Public Health Agency of Sweden <sup>2</sup>Department of Communicable Disease Control and Health Protection, Public Health Agency of Sweden

## Background.

There are many examples of priority setting models in the health care sector. In the public health area, however, such well-developed models are scarce. The Public Health Agency of Sweden (PHAS) compiles and distributes scientifically based knowledge aiming to promote health and prevent ill-health. The first step in such a process is to point out which needs in the population that are most important to act on. Thus, PHAS initiated a development work, labelled Priority Setting in Public Health, in order to suggest a transparent and structured model and process for priority setting in the public health sector at the national level in Sweden. Such a process would make it easier to better describe and explain why certain public health actions are prioritized, and others are not.

#### Aim.

The aim with the project Priority Setting in Public Health is to make prioritization of needs in the public health sector at the national level in Sweden more systematic, uniform and transparent.

#### Methods.

First, an in-house investigation was done in order to check if some methods for priority setting were already in use at PHAS. Second, national actors and organizations, mainly the Swedish National Centre for Priority Setting in Health Care, were contacted in order to gather information and experience. Finally, a scoping review was performed aiming to identify and map out scientifically published models and processes for priority setting, relevant for the public health area.

#### Results and Discussions.

No model directly applicable for PHAS was identified. However, based on results from the scoping review and built on the National Model for Open Priority Setting in Health Care a preliminary model adapted to public health conditions was developed.

To prioritize need of public health activities in the population, including risk groups, is a challenge. We argue that development of a public health relevant priority setting model must include a whole-of-population and a health promoting perspective. Level of seriousness and level of risk could be used for priority setting related to prevention of mortality, morbidity and injuries. A number of potential epidemiological priority setting components, e.g. Disability Adjusted Life Years (DALYs) are present for this purpose. Promotion of health, on the other hand, must be assessed in relation to health determinants and equity in health, areas where it is more complicated to find valid priority setting components.

Conclusions.  Although no appropriate public health related priority setting model was identified, knowledge and experience from other areas, mainly the health care sector, was used and a preliminary model was developed. The project Priority Setting in Public Health will continue during 2018, probably with pilot testing of the preliminary model.

# Primary care, health promotion and disease prevention in Michigan's Medicaid expansion

## Presenting author: Susan Dorr Goold 123

Co-authors: Tipirneni R<sup>1 2</sup>, Chang T<sup>2 4</sup>, Kirch M<sup>2</sup>, Bryant C<sup>1 2</sup>, Solway E<sup>2</sup>, Lee S<sup>5</sup>, Clark S<sup>2 6</sup>, Sears E<sup>2</sup>, Skillicorn J<sup>1 2</sup>, Ayanian JZ<sup>1 2</sup>, Kullgren J<sup>1 2</sup>.

<sup>1</sup>Internal Medicine, University of Michigan Medical School, USA
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<sup>4</sup>Family Medicine, University of Michigan Medical School, USA
<sup>5</sup>Institute for Social Research, University of Michigan, USA
<sup>6</sup>Department of Pediatrics, University of Michigan, USA

## Background.

Medicaid expansion in Michigan, known as the Healthy Michigan Plan (HMP), emphasizes establishing and using primary care (PC), and includes incentives for beneficiaries to complete a Health Risk Assessment (HRA) at a PC visit.

#### Aim.

We studied the impact of expanded access to primary care on health promotion and disease prevention.

## Methods.

A telephone survey was conducted in English, Arabic and Spanish among 4,090 non-elderly HMP beneficiaries from January–November 2016, with responses recorded in a computer-assisted telephone interviewing system (response rate = 53.7%). HMP enrollees aged 19-64 who had ≥12 months of HMP coverage and ≥10 months in a Medicaid health plan were eligible for inclusion. Surveys measured demographic factors, health status, access to and use of health care, health risks and behaviors, receipt of counseling or help with improving health risks, and knowledge of incentives for HRA completion. Sampling was stratified by income and region of the state. Utilization of primary and preventive care services was measured using claims from the state's Data Warehouse. Logistic regression models included weights for sampling probability and nonresponse.

## Results.

One-fifth (20.6%) of respondents reported that, prior to enrollment in HMP, it had been at least 5 years since their last primary care visit; 37.8% 1¬-5 years and 40.1% <1 year. Among those who reported having a primary care provider (PCP) through HMP, 85.2% reported seeing a PCP within the preceding 12 months. Of these, 91.1% said they discussed health promotion.

Nearly all (86.8%) enrollees had at least one preventive service (e.g., vaccine, cancer screening) based on claims data. Enrollees with a self-reported primary care visit in the past 12 months of HMP enrollment, or a primary care visit in claims, were significantly more likely than enrollees without a visit:

- to have claims for many preventive services when adjusted for demographic and health variables (e.g., aOR 2.13 [95% CI 1.53, 2.96] for dental visit, aOR=15.00 [4.64, 48.44] for prescription for varenicline or nicotine replacement)
- to report completing an HRA (aOR=1.85, p<.001)
- to report being counseled about exercise (aOR=3.50, p<.001), nutrition (aOR=3.39, p<.001), tobacco cessation (aOR=3.58, p<.001), or alcohol use (aOR=3.24, p=.008).
- to report a new diagnosis of a chronic condition after HMP enrollment (aOR=2.97, p<.001)

Enrollee knowledge that some services have no copayments was significantly associated with greater utilization of nearly all preventive services analyzed. Of those who knew some services had no copays, 88.6% received at least one preventive service, compared to 81.3% of those who did not know. Enrollee knowledge that completing a Health Risk Assessment (HRA) could result in lower fees was not associated with any preventive service use.

Primary care visits were associated with more disease prevention and health

#### Conclusions.

promotion counseling, as well as detection of chronic disease. Knowledge about copayments, but not incentives for HRA completion, was associated with preventive service use. Medicaid expansion emphasizing primary care has potential to improve population health. Greater knowledge of no copays for preventive services could either result from or lead to greater use of preventive services, or both.	

## Criteria for bedside priorities under extreme resource constraints: A national survey of Ethiopian physicians

## Presenting author: Ingrid Miljeteig<sup>1 2</sup>

Co-authors: Frehiwot B Defaye <sup>1 3</sup>, Paul Wakim<sup>4</sup>, Dawit Desalegn<sup>1 3</sup>,
Ole Frithiof Norheim<sup>1</sup> and Marion Danis<sup>5</sup>

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<sup>4</sup>Biostatistics and Clinical Epidemiology Service, National Institute of Health, United States

<sup>5</sup>Department of Bioethics, National Institute of Health, United States

## Background.

In low-income-countries (LIC) extremely difficult decisions on how to spend scarce health resources have to be made. With small health budgets and overwhelmingly needy populations, priority-setting can have a dramatic impact on population health. In a previous study from Ethiopia, we found that physicians face hard choices about how to distribute scarce resources among patients. Other studies of bedside rationing show how various disease-related, patient-related and society-related criteria influence physicians' priorities.

#### Aim.

To explore how much weight Ethiopian physicians give various criteria in deciding to provide costly but beneficial treatment to their patients.

## Method.

We conducted a nation-wide, cross-sectional survey of physicians working in public hospitals in Ethiopia, including specialists, GPs and residents. Respondents were recruited from 49 hospitals selected using probability sampling, proportionate to the numbers of hospitals in the randomly selected regions. The survey instrument queried about ethical dilemmas they encountered, particularly while working in a context with resource scarcity. Here we report how physicians responded to questions with following stem: "One of your patients would benefit from an intervention. This intervention is very expensive. Under these circumstances, which factors/reasons make you more or less likely to use this intervention?" Data were analyzed using descriptive statistics and factors associated with the tendency to prioritize were analyzed using ordered logistic regression analysis.

#### Results.

A total of 587 physicians responded (91 % response rate). As a whole, physicians were more likely to give greater priority to vulnerable groups (children, adolescents and pregnant women), patients who are economic providers, and to preventive services. They were less likely to prioritize inefficient care (small benefit, low probability of success and lack of evidence). The importance of a patient's position in society, attribution of the condition to the patient's unhealthy behavior, and long distance of the patient's residence from the site of care all led to no change of priority by over 50% of the respondents. Physician tendencies to prioritize various factors were correlated with physician age, level of hospital (primary, general, or specialized), region (pastoral, rural, urban), part time private practice, and perceived pressure to ration.

## Conclusions.

Our results show that there is a coherence between stated macro and micro-priorities, as Ethiopian physicians' treatment priorities largely match the Ethiopian government's stated priorities of child and maternal health, cost-effective interventions and financial protection. The variation in priorities among physicians may be explained by contextual factors and personal characteristics. Non-medical characteristics of the patients seem to influence our informants' priorities. The high priority given to patients who are the only economic provider, the lower priority given to patient who are not expected to work in the future and concern regarding patient poverty indicate that physicians are attentive not only to the health status but also the economic welfare of their patients and others who are affected by their decisions. In the LIC context of severe scarcity without a functioning welfare system, we consider whether these non-medical criteria can be ethically justifiable.

## Does inequality determine health expenditure?

Presenting author: Mathias Barra<sup>1</sup> Co-authors: Richard Cookson<sup>2</sup>

<sup>1</sup>HØKH – The Health Services research Unit, Akerhus University Hospital, Norway <sup>2</sup>Centre for Health Economics, University of York, UK

An important second question within this broad topic of research is whether or not health – as a good – is best understood as a luxury or as a necessity – and its answer has remained elusive. The answer to the is health qua good a luxury? question has important macroeconomic consequences for policy makers, because an answer to the affirmative entails that a growing economy will in a certain sense increase the total impact of the health care sector on the overall economy. Our approach constitutes taking a step back from the increasingly specialized models developed during the last decades, in order to arrive at a novel and parsimonious macroeconomic relationship between aggregated health expenditure and the income distribution. This model fits well across the full range of available data, covering several years and countries from the poorest to the wealthiest. As such, our findings constitute a significant advance in the theory of the determinants of health expenditure, since previous studies have almost without exception focused on a specific country, a specific economic stratum, or specific sub-markets of the health care sector such as private or public expenditure, and have failed to identify mechanisms which encompass the full health sector in developing and developed countries. Furthermore, we analyse for the. first time the relationship between income inequality and the income elasticity of health expenditure by using the Gini-coefficient as an independent variable in a model. Several studies mention inequality, but none have successfully identified its role as a determinant of aggregate health expenditure. We expect this interaction – which we will tentatively name the Jensen's inequalityincome interaction for hybrid luxuries – to also apply to other similar goods.

In this work we use indicator data available from the World Bank website (downloaded June 2017) on health care expenditure, Gini-coefficients and GDP. We take a demand-focused macroeconomic perspective, and fit regression models to the world bank data seeking to test the hypothesis that inequality and wealth may interact due to underlying heterogeneity in the demand curves for health care.

## Effects of a value based reimbursement system – an example from Stockholm County Council

Presenting author: Thérèse Eriksson<sup>1</sup>
Co-author: Lars-Åke Levin<sup>1</sup>

<sup>1</sup>Centre for Medical Technology Assessment, Department of Medical and Health Sciences, Linköping University, Sweden

## Background/Purpose.

It has been argued that poorly designed reimbursement systems could lead to increased health care costs without corresponding increase in patient outcomes. We investigate the effects on health care costs and patient outcome following the introduction of a value based reimbursement system (VBRS) in Stockholm, Sweden in 2013.

### Methods.

Data on patient outcomes and associated health care costs for patients living in Stockholm and had undergone spine surgery between 2006-2016 were extracted from Stockholm county council register and the spine surgery quality register (Swespine). Data from the two registries were linked using the unique personal identification number of each patient. Segmented regression analysis was used to compare costs and EQ5D-index before and after the introduction of VBRS.

## Results.

Following the introduction of VBRS the number of surgeries per month increased with 96 percent (p=.0005) and the total cost per month increased with 127 percent (p<.0001). The number of surgeries continued to increase whereas the costs stagnated during the following years after the introduction. Thus, the average cost per surgery show a decreasing trend after the introduction of VBRS. Before the introduction, the average quality of life improvement from surgery was 0.308 measured with EQ5D. After the introduction, the average quality of life improvement was 0.318 measured with EQ5D. Thus, the introduction of VBRS had no significant effect on patient outcome.

## Conclusion.

The introduction of VBRS in Stockholm dramatically increased the total health care costs. This increase was however accompanied by an increase in patients undergoing surgery. Thus, average cost decreased and access to care increased. The use of VBRS in health policy comes with both promises and pitfalls.

## The hidden face of rationing? An examination of capital spending behaviour in times of resource constraint in the English NHS

## Presenting author: lestyn Williams<sup>1</sup>

Co-authors: Allen, K<sup>1</sup> Roberts, A<sup>2</sup> and Plahe, G<sup>1</sup>

<sup>1</sup>Health Services Management /University of Birmingham, UK <sup>2</sup>The Health Foundation,UK

## Background.

Studies of rationing and priority setting typically focus on how funds are allocated towards specific services and/or patient groups. Classic typologies of rationing (e.g. Klein, Day & Redmayne 1996) include deflection, delay, denial, selection, deterrence and dilution. However, the prevalence of these types in capital spending decisions and impacts on health care provision are largely under-researched.

### Aim.

To explore priority setting and rationing in the context of capital decision making (i.e. investment in buildings, equipment and information technology) in the English NHS.

### Methods.

The study is currently part way through. Methods include:

- Semi—structured interviews with 30 Directors of Finance in English NHS organisations
- Measuring correlations between capital investment decisions and service outcomes
- Comparison of findings with the broader empirical literature on relationships between capital spending and health care service outcomes

#### Results.

Early findings suggest that a variety of strategies are employed by those charged with overseeing capital spending budgets when these are highly constrained. Strategies include:

- Scaling back or deferring medium to long term capital plans (delay)
- Prioritisation between capital spending areas (denial/selection)
- Avoiding highly complex funding application processes (deterrence)
- Selecting sub-optimal investment options (dilution).

Early findings also indicate the following implications for service outcomes:

- long-term service efficiency is deprioritized in order to meet immediate budget and safety demands
- some restrictions are likely in terms of both the quality and range of services available to patients

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Restrictions on capital spending require local health care organisations to manage scarce resources and many of the strategies echo previously identified forms of rationing. Implications for theory, research and practice are explored.

## Do Care Hubs reduce hospital admissions? A differencesin-differences to support local decision making

## Presenting author: Ana Duarte<sup>1</sup>

Co-authors: Chris Bojke<sup>2</sup>, Laura Bojke<sup>1</sup>, and Gerry Richardson<sup>1</sup>

<sup>1</sup>Centre for Health Economics, University of York, UK <sup>2</sup>Academic Unit of Health Economics, Leeds Institute of Health Sciences, Faculty of Medicine and Health, University of Leeds, UK

## Background.

Growing pressures on health care systems due to ageing populations with increased needs for longer term health and social care have spurred the need to develop more efficient models of care delivery. Integrated care programmes have been implemented in numerous jurisdictions with the aim to achieve greater efficiency and value from health delivery systems, as well as to improve patient experience. In the UK, these programmes are being commissioned by local authorities, who face many competing demands on their budgets and require good quality evidence when selecting which health care programmes to prioritise. Evidence on the effectiveness of integrated care remains mixed. The evaluation of these programmes poses challenges, as their effectiveness cannot be examined in a randomised setting. We describe a novel application of differences-in-differences to assess the impact of integrated care pilot programmes, the Care Hubs (CH), which were designed to reduce hospital admissions, using routinely collected data.

## Aim.

To quantify the effects of the CH on non-elective admissions compared to routine care in the Vale of York and inform local decision makers on whether to recommission these services.

## Methods.

We define the treatment group as including all General Practitioner (GP) practices in the Vale of York with a CH implemented between 2014 and 2015, with the remaining practices in the area constituting the control group. Enrolment to CH occurred at different time-points for each GP practice, so we estimate number of non-elective admissions per month by General Practitioner (GP) practice and demographic categories. Data is sourced from a UK administrative hospital data register. We examine time trends and apply a differences-in-differences (DiD) regression framework with random effects to estimate the differential impact of CH on admissions within age-gender patient categories within practices.

Preliminary results suggest that the CH have no effect on frequency of admission to hospital.
Conclusions.  While DiD methods have been used frequently to examine the impact of policy changes on hospital behaviour, this is to our knowledge the first study to apply the method at patient category group level within GP practices over time. This approach allows the use of good quality routinely available data to produce results of direct relevance to local decision makers and foster evidence based practice at local level.

Results.

## **Project on priority setting in Norwegian hospitals**

## Presenting author: Hege Wang<sup>1</sup>

Co-authors: Sverre Harbo<sup>1</sup> and Tove Ringerike<sup>1</sup>

<sup>1</sup>The Norwegian Directorate of Health, Norway

## Background.

A set of priority setting criteria has existed in Norway for approximately 30 years. The criteria apply to public specialized health services. The current criteria, introduced in a recently published White Paper on priority setting, are treatment benefit, resource use and disease severity. They are mostly applied to decisions at the group level, such as whether or not to fund a new drug, or regulate access to specialized health care. Clinicians make decisions throughout the patient pathway, and the White Paper states that these criteria are also applicable at a clinical level. Some examples of clinical priority decisions are which patient should be operated first on a given day, or when to end a specific treatment. There are few structured aids available that might assist in making these decisions in the hospitals.

The Ministry of Health and Care Services requested the Directorate of Health to conduct a project in collaboration with representatives from the hospitals.

## Aim.

The project aims to develop a framework in which an overall assessment of the clinical application of these criteria can be discussed.

Moreover, it is intended to support clinicians in their priority setting challenges in everyday work, and to promote a common understanding with regard to clinical priority setting. The project is limited to publicly funded hospitals. From a system perspective, it could reduce undesirable variation with regard to clinical decision-making, and contribute to uphold the values on which the public health service is based.

### Methods.

We will use a qualitative approach to identify indicators and clinical areas with pronounced priority setting challenges. Clinicians from different geographical areas in Norway will be included to account for potential local differences in practice or perspective. We will conduct group interviews in order to collect the clinicians' perceptions of the criteria, priority setting challenges and the need for support or good practice benchmarks. The data will be summarized. Based on the findings, we will make recommendations as to how clinicians and managers in hospitals can continue their work on priority setting.

Conclusions. The data will be collected during the spring of 2018. Hence, conclusions a available at the time of abstract submission. A draft report will be available b tember this year.	re not by Sep

## Can a similar Framework be used for evaluating both priority setting for health interventions and health research?

Presenting author: Lydia Kapiriri 1

<sup>1</sup>McMaster University, Canada

The link between health research and health policy has been widely discussed in the literature on evidence informed policies. However there is limited literature discussing the link between priority setting for health research and priority setting for health interventions. Moreover, the frameworks that should guide priority setting within the health system (e.g. Program budgeting and marginal analysis (PBMA); Multi-criteria discreet analysis (MCDA)) have been developed independent of approaches that have been proposed to guide priority setting for health research (e.g. Child Health and Nutrition Research initiative (CHNRI), Essential National Health research (ENHR)); although there are some visible overlaps. However, multiple frameworks used within the same sector may be burdensome and difficult to apply in parallel. Could some approaches be synchronised with minimal adjustments?

This paper responds to this question by testing the ability of a framework that was developed, validated and used to evaluate priority setting for health interventions/programs (Kapiriri, 2017) to be used for evaluating priority setting for health research with minimal adjustments.

## The objectives were:

- To assess the degree to which the parameters that were validated for use in evaluating priority setting for health interventions can be used in evaluating priority setting for health research.
- 2) To discuss findings from applying the validated framework to a case of health research prioritization
- 3) To discuss the implications of the findings for future practice.

### Methods.

Adjustment of the phrases used in the validation process of the framework for health interventions to health research and sending the survey tool for validation to researchers at the global and national levels. The validated framework was then used to evaluate priority setting for health research in Zambia.

## Findings.

Respondents overwhelmingly thought almost all the parameters were applicable to priority setting for health research with the exception of availability of incentives and impact on the health system and health outcomes. Respondents thought this was beyond the scope of health research. The application of the validated parameters to a case of national health research prioritization showed that the modified and validated framework was robust enough to be used.

These preliminary findings challenge the status quo. Since this was an evaluation

## Conclusions.

framework, future research could explore the modification and application of some of the most commonly used frameworks for use in guiding priority setting for both health interventions and research.					

## Priority dilemmas encountered by physicians treating patients with kidney disease in sub-Saharan Africa

## Presenting author: Gloria Ashuntantang<sup>2</sup>

Co-authors: Valerie A. Luyckx1 and Ingrid Miljeteig3 4:

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## Background.

Two recent systematic reviews have highlighted the plight of patients with kidney disease in sub-Saharan Africa (SSA) when they require costly therapy for survival. Among patients with acute kidney failure (AKF), mortality was 73% in children and 86% in adults who required, but could not access, dialysis. Among adult patients with end-stage kidney disease (ESKD) who did begin dialysis, 84% discontinued this life-sustaining treatment largely because of unaffordable out of pocket costs. Physicians meet these patients and have first-hand information on how decisions are made and how resources are distributed. Though, the role and experiences of health workers treating these patients in SSA are little explored.

#### Aim.

The aim of this study was to get an overview of the challenges faced on a daily basis by physicians in SSA who manage patients who require dialysis. Our special focus was if and how they handle bedside rationing situations.

## Methods.

A survey was conducted among a randomly selected group of nephrologists in SSA. The questionnaire was developed, partly based on a prior validated survey instrument used among physicians in Ethiopia. Paper copies were distributed at the African Association of Nephrology meeting and the Kenyan Renal Association in 2017. Survey responses were manually entered into Survey Money for analysis.

## Results.

39 responses were received. Of the respondents, 80% were male, 61% were aged 36-55 years and 74% had been in medical practice >10 years. Respondents represented 15 countries in sub-Saharan Africa. Most respondents worked in government and/or teaching hospitals (62%) in addition to private practice (32%).

The participants frequently saw patients in need of dialysis, though fewer patients were initiated on dialysis; 34% of respondents saw > 5 patients who required dialysis for AKF and 69% saw > 5 patients with ESKD per week, but 75% and 54% of respondents reported that <5 patients per week initiated dialysis for AKF or ESKD respectively.

Consequences of high out of pocket expenses were reported by the majority of the physicians. While 84% of respondents were concerned that laboratory testing was unaffordable to the patient often or sometimes, 81% were concerned that medication was unaffordable, 89% felt pressured by the patients' financial constraints and 85% reported the preferred course of treatment was not pursued because of costs. Often or always, most respondents have experienced inability to initiate dialysis because the patient admitted financial constraints (67%), dialysis machines or supplies were lacking (56%) or the patient died before dialysis could be started (79%). Around 75% respondents reported that patients at least sometimes reduced dialysis frequency and/or used temporary catheters to reduce dialysis costs. 38% of respondents had restricted provision dialysis to one patient because another patient needed it more.

## Conclusions.

Physicians managing patents with kidney failure in SSA frequently face resource scarcity and ethical dilemmas due to lack of patient's inability to pay. Our study is done on a small sample and can only provide a glimpse into the real-world challenges patients and providers are dealing with when expensive therapies are implemented in resource-deprived settings. Detailed studies are needed to understand how priorities concerning renal diseases are done both on macro, meso and micro level in the various SSA countries.

## The unfunded priorities: an evaluation of priority setting for non-communicable disease (NCD) control in Uganda

Presenting author: Beverley M. Essue<sup>12</sup>

Co-author: Lydia Kapiriri<sup>2</sup>

<sup>1</sup>University of Sydney, Australia <sup>2</sup>McMaster University, Canada

## Background.

The double burden of infectious diseases coupled with noncommunicable diseases poses unique challenges for priority setting and for achieving equitable action to address the major causes of disease burden in health systems already impacted by limited resources. Noncommunicable disease control is an important global health and development priority. However, there are challenges for translating this global priority into local priorities and action.

### Aim.

The aim of this study was to evaluate the influence of national, sub-national and global factors on priority setting for noncommunicable disease control in Uganda and examine the extent to which priority setting was successful.

### Methods.

A mixed methods design that used the Kapiriri & Martin framework for evaluating priority setting in low income countries. The evaluation period was 2005-2015. Data collection included a document review (policy documents (n=19); meeting minutes (n=28)), media analysis (n=114) and stakeholder interviews (n=9). Data were analysed according to the Kapiriri & Martin (2010) framework.

### Results.

Priority setting for noncommunicable diseases was not entirely fair nor successful. While there were explicit processes that incorporated relevant criteria, evidence and wide stakeholder involvement, these criteria were not used systematically or consistently in the contemplation of noncommunicable diseases. There were insufficient resources for noncommunicable diseases, despite being a priority area. There were weaknesses in the priority setting institutions, and insufficient mechanisms to ensure accountability for decision-making. Priority setting was influenced by the priorities of major stakeholders (i.e. development assistance partners) which were not always aligned with national priorities. There were major delays in the implementation of noncommunicable disease-related priorities and in many cases, a failure to implement.

Discussion and conclusions.  This evaluation revealed the challenges that low income countries are grappling with in prioritizing noncommunicable diseases in the context of a double disease ourden with limited resources. Strengthening local capacity for priority setting would help to support the development of sustainable and implementable no communicable disease-related priorities. Global support (i.e. aid) to low inconcountries for noncommunicable diseases must also catch up to align with NCDs a global health priority.	se ng n

## Priority setting in the Nigerian health system

Presenting author: Wanwuri Akor<sup>1</sup>
Co-author: Luke Vale Gregory Maniatopoulos<sup>1</sup>

<sup>1</sup>Newcastle University, UK

## Background.

Effective allocation of resources in health is important to achieve maximal benefit in health care. These resources needed to achieve good health are usually not enough to meet the needs of any country. However, each country strives to achieve the best possible health status within the limit of its resources. To achieve this, priority setting methods may be employed implicitly or explicitly in making policies and in planning programmes and budgets.

Nigeria like every other country has limited resources, which must be managed efficiently amongst competing health care needs. The use of this scarce resources is also affected by the organisation of the health system, national health policy, international health policy and influences from donor agencies. The health care systems in developing countries need quality input in effective and efficient allocation of the health resources to achieve comparable health indices with the developed countries. However, the required tools are lacking in quantity and quality.

#### Aim.

This study explored priority setting in the Nigerian context with a focus on maternal and child health. One objective of the study was to answer the question on what is known about the use of priority setting approaches in health care systems in Low- and Middle-Income Countries (LMICs). It then looked at the health care prioritization process in policy formulation and resource allocation in Nigeria. Finally, it examined the impact of a policy outcome of the prioritization process on maternal and child health.

## Methods.

A mixed methods approach was employed in the collection and analysis of data. Following a systematic review on prioritization process in LMICs, a case study comprising of 1-1 interviews and use of questionnaire instruments was undertaken. Policy makers at various levels in the health service system were sampled by snowballing technique and interviewed. Health workers in each institution where interviews took place, were given questionnaires to assess their knowledge and elicit their opinion on the prioritization process. This was then followed by a quantitative analysis of routine data from the national statistics to assess the impact of an identified prioritization process on health, using mainly maternal and child health indices.

#### Results.

The findings from this study highlights the difficulties encountered by policy makers at various levels in LMICs in employing priority setting methods in health planning and resource allocation. These findings though similar to those in developed countries, are heightened by lack of useable health data, funding constraints, and the overwhelming influence of political agenda. Specifically, in the study context, the political agenda, dictated the direction for health priorities and resource allocation. In such settings there was a lack of continuum at two levels. One of which was the varying political agenda with changing leadership and/or circumstances, leading to a near absence of continuity with previous health plans. The other identified gap was that between formulated policy and their implementation. This reflected on the findings from the impact analysis as most health indices did not generally follow an expected trend post policy implementation. However, the effect of other confounding factors on this trend may not be entirely ruled out.

## Making Fair and Sustainable Decisions about Funding for Cancer Drugs in Canada

Presenting author: Stuart Peacock 123

Co-authors: Colene Bentley<sup>1 2</sup>, Julia Abelson<sup>4</sup>, Michael Burgess<sup>5</sup>, Olivier DPayette<sup>6</sup>, John N. Lavis<sup>4 7</sup> and Michael G. Wilson<sup>4 7</sup>

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## Background.

Provincial and territorial governments face considerable challenges in making fair and sustainable drug funding decisions. In the area of cancer, expenditure on drugs has risen dramatically compared to other areas of healthcare due to costly new cancer drugs and a growing/ageing population. Public input can assist policy makers in drug funding policies that are regarded as fair, reflect citizens' values, and are socially acceptable.

#### Methods.

The project's objective was to engage Canadians through a series of deliberative public engagement events or to generate recommendations that could inform cancer drug funding decisions. The study combined the strengths of two well-established models: the McMaster Health Forum's citizen panels (www.mcmasterhealthforum. org) and the deliberative public engagement approach developed by Burgess and O'Doherty (www.cangage.ca). Six panels were held across Canada in 2016, with a total of 139 participants. Recommendations were grouped thematically, with transcript analysis identifying where participants' views converged and diverged.

## Results.

In order to achieve greater value for money, participants accepted the need to make tough funding decisions, including the potential to cease/scale back funding for some currently funded drugs. Recommendations included: the review and regular re-review of approved using 'real-world' evidence on effectiveness and cost-effectiveness; that priority be given to treatments that restore patients' independence, mental health, and general well-being; that processes for ensuring transparency of decision-making processes, decisions and their rationales are implemented; and that people with similar needs should receive the same care regardless of where in Canada they live.

### Conclusions.

collectively thought made for good, trustworthy decisions about funding for cancer drugs in a fair and sustainable way. Next steps would be to move from event-based public engagement to a more sustained model, e.g. a 'standing' public panel or incorporating the public into existing decision-making processes.						

## Support for reassessing post-approval cancer drugs: results from a series of public deliberations on cancer drug funding in Canada

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## Background.

Health system expenditures on cancer drugs have risen dramatically in recent years due to increased rates of use and high drug prices. Canada's national drug review process assesses the clinical effectiveness and cost-effectiveness of new cancer drugs to determine whether they warrant adoption. However, re-review of approved drugs is not routinely done, thereby restricting decision makers' ability to manage resources and disinvest from in-use low-value therapies. Studies show publics can be skeptical of delisting initiatives, regarding them as cost-cutting measures or because people have strong attachments to long-standing services.

#### Aim.

To engage Canadians through a series of deliberative public engagement events about their priorities for making cancer drug funding decisions fair and sustainable.

## Methods.

A hybrid two-day model of deliberation was designed for this study, based on the McMaster Health Forum's citizen panels (www.mcmasterhealthforum.org) and the deliberative public engagement approach developed by Burgess and O'Doherty (www.cangage.ca). Six public engagement events were held across Canada in 2016, with 139 participants. All events were audio recorded and transcribed. Transcripts were coded in NVivo and analyzed to identify where participants' views converged and diverged. Recommendations made by participants were grouped thematically.

Participants made 86 recommendations on a range of themes. Across all events, participants accepted the premise of resource scarcity and the need for trade-offs. They supported reassessing approved drugs as a component of regular drug funding processes and based on the principles of fairness, transparency, and funding drugs that are more versus less cost-effective. They recommended "delisting or reduced pricing" of approved drugs that are "found to be less effective than originally thought" (pan-Canadian event), and cost saving through disinvestment would be "justified" even if the less expensive comparable drug "offers slightly less quality of life and quantity of life" (Ontario event). As a matter of fairness, participants specified including a grandfather clause so that patients currently on a delisted drug can complete their course of treatment.

Participants strongly supported developing cancer drug funding processes that compare the cost-effectiveness and real-world cost effectiveness of new and post-

### Conclusions.

approval drugs in an ongoing and transparent manner. Public support for finding greater efficiencies within cancer drug budgets can help Canadian policy makers build decision frameworks that compare drugs for adoption or replacement, thus enhancing their ability to manage scarce healthcare resources.

# Reimbursement Decisions In The Netherlands - A Citizen Panel: does it influence participants' views on healthcare priority setting?

# Presenting author: Maarten Jansen<sup>1</sup>

Co-authors: Marcia Tummers<sup>1</sup>, Leon Bijlmakers<sup>1</sup> and Rob Baltussen<sup>1</sup>

<sup>1</sup>Radboud Institute for Health Sciences, Radboud University Medical Center, Nijmegen, the Netherlands

# Introduction.

The Ministry of Health in the Netherlands is increasingly confronted with public criticism on its reimbursement decisions. The citizen panel aims to identify the values and criteria that the Dutch population considers relevant regarding these decisions. By doing so, the citizen panel aims: i) to enable policy makers to better take into account the preferences of the Dutch population; ii) to stimulate the societal debate on healthcare priorities; iii) to explore options for a structured inclusion of citizens in decision-making. This study's objective was to qualitatively examine if participation in such a panel influenced participants' views on healthcare priority setting.

### Methods.

The citizen panel comprised three weekends in 2017, where 24 citizens discussed with each other on the values and criteria they find important in reimbursement decisions in the Netherlands. They did so on the basis of eight cases, e.g. expensive medication for a rare disease, hip replacement for the eldery, and orthodontic care for children. The participants had the opportunity to inquire with experts in health economics, ethics and reimbursement decisions. In interviews before and after the panel participants were asked about their views towards healthcare priority setting. Each interview was recorded, transcribed and coded to reconstruct participants' so-called interpretive frames, comprising four layers: i) experienced problems with current healthcare priority setting, ii) background theories about these problems, iii) their normative preferences and iv) judgments about solutions.

### Results.

Preliminary results show that participants more strongly acknowledge a need to make choices in healthcare; at the same time they increasingly realize the complexity of making reimbursement decisions. Final results on how and if their interpretive frames changed will be finalized in March 2018.

Conclusions.  Conclusions of the citizen panel, including full results of this qualitative study, will be reported in a background document. This will be discussed with main stakehol ders during 2018, and will result in an advice to the Ministry. All end products will be available at the time of the conference.

# Does Participation in a Citizen Panel Influence Views on Healthcare Priority Setting in the Netherlands?

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# Introduction.

Policy makers increasingly recognise the benefits of involving the public in health -care priority setting. Citizen panels can help to increase support and better align the outcomes of reimbursement decisions with societal preferences. In the Netherlands, a citizen panel was formed with the objective to come to an informed view and consultative opinion on criteria for an optimal allocation of healthcare resources. The aim of this study was to examine whether citizens' views on priority setting remained stable or evolved after participating in the panel.

### Methods.

Using Q methodology, we examined citizens' views on priority setting directly before (T0) and after (T1 participating in the panel. The citizens (n=24) gathered during three full weekends in September and October 2017, during which they discussed intensively eight cases relating to reimbursement decisions in a broad range of treatments and patient populations. The citizens were selected such that the panel was diverse, yet balanced with regard to age, gender, education and citizenship mentality. We collected the data through ranking exercises, conducted by the citizens at both T0 and T1, and performed by-person analyses to identify and interpret (evolvements in) citizens' views.

We identified three distinct views at T0 and at T1. Views 1 and views 2 at T0 and T1 had strong similarities and correlated highly (views 1: p=0.84; views 2: p=0.78). View 1 comprised an egalitarian view on priority setting that considers access to care to be a basic human right and believes that prioritisation, if needed, should solely be based on patients' need for care. At T1, less citizens were significantly associated with this view and those with this view were less strongly opposed to prioritisation in healthcare. View 2 also considers access to care to be a right, but acknowledges that available resources are limited and believes that prioritisation should be based on the health gain from treatment. At T1, citizens with view 2 more strongly believed that less costly treatments can be paid out-ofpocket. View 3 at T0 emphasized that all possible should be done to help patients in need, and favoured younger patients, patients with a family, and illnesses that pose a high burden on the family of the patient. At T1, this view was no longer observed. Instead, a more utilitarian view emerged that emphasized health maximisation and prioritisation based on patient characteristics.

The evolved views suggest that discussing issues and cases relating to healthcare priority setting leads to more informed views on this topic. Although the views of

### Conclusions.

some citizens remained relatively stable, most citizens adopted a more positive at- titude towards prioritisation after participating in the panel.					

# Workshop

What can we learn from real-life experiences of health organizations applying strategies for priority setting? And how can we use this knowledge as a pedagogical vehicle when discussing priority setting in health organizations?

# Peter Garpenby<sup>1</sup>

# Panelist: Ann-Charlotte Nedlund<sup>1</sup>

<sup>1</sup>Swedish National Centre for Priorities in Health, Department of Medical and Health Sciences, Linköping University, Sweden

# Background.

In real life, organisations responsible for health services to populations constantly face the challenge to distribute resources between different needs. Priority setting will thus be a complex interplay between e.g. applying facts of "what works" (Davies, Nutley & Smith 2000), adhere the social values (Clark & Weale 2012) which could be expressed as fluid public opinion or codified in ethical principles, and not least to secure workable relationships with stakeholders (Williams 2015). However, the real challenge seems to be how to sustain knowledge on formal priority setting in the organisation, how to promote inter-organisational knowledge flow and learning, and how to achieve systematic learning and transfer of good examples across organisations.

We will use an article by Garpenby and Nedlund (Social Science and Medicine 2016, 163: 63-70. DOI: 10.1016/j.socscimed.2016.06.046) as staring point to identify how actors in a real-life process could understand and apply strategies for priority setting. This should be regarded as an example of different forms of inter-organisational learning that materialize among health service actors and something that will be crucial for priority setting in practice.

In the article a number of strategies are visible that priority setting actors use when put in a position where different rationales (political, professional etc) have to be joined together in a formal process in a real life health care context. Among these we can notice: the suppression of disagreement, the concentration of power and the creation of alliances among health system actors.

They should be seen as limited examples and during the workshop participants are expected to contribute with their own experience and knowledge of real life priority-setting processes.

### Aim.

The workshop aims to exploratory identify nodes of practice knowledge that show the learning processes of how to deal with the different challenges in priority setting in a health care organisation. The focus is thus to identify different forms and strategies that are visible when actors in priority setting interact, and how important practice knowledge is created and accumulated among individuals. This practice panel discusses several aspects of learning and facilitation in priority setting.

During this workshop we will use a problem-based learning (PBL) and Interprofessional learning (IPL) approach. This corresponds well with the tradition of the Medical faculty at Linköping University where PBL, since 1986, together with IPL are part of the fundamental basis in its pedagogical profile.

In the workshop we will encourage participants to discuss the pros and cons with different strategies disclosed in real-life priority setting. Furthermore, participants will be asked to identify important gaps in our knowledge about strategies in organisations for carrying our priority setting.

However, the key goal of the workshop is to elicit the tacit knowledge of learning

n priority-setting and to discuss the art, dynamics, and interpretation of learning about priority setting processes and how one could act as reflective facilitators (as the workshop participants will be) with the field of priority-setting in healthcare.

# Specifying norms as a means to support priority setting in healthcare

Preseting author: Gert Jan van der Wilt<sup>1</sup> Co-author: Ole Frithiof Norheim<sup>2</sup>

<sup>1</sup>Department of Health Evidence, the Netherlands <sup>2</sup>Department of Global Public Health and Primary Care, Norway

# Background.

The desire to set priorities in healthcare derives from a commitment to justice. Such a commitment does not, however, provide practical guidance as to which services deserve priority and which services don't. At least two reasons have been put forward that might account for this: [1] justice has been conceptualized in multiple ways, leading to potentially different priorities (e.g., the utilitarian concept of justice vs. justice as fairness); [2] moral concepts such as justice are open-textured; as a result, we cannot establish what follows from our moral commitments in concrete situations using deductive argumentation.

#### Aim

To explore whether the method of specifying norms can be used to help establish priorities in healthcare.

### Methods.

The method of specifying norms was used to clarify whether the costs of a new class of drugs (PCSK9 inhibitors) for patients with hypercholesterolaemia should be covered from public sources. Applying the method of specifying norms to cases like this involves the following steps: [1] establish whether the funding of the new drug from public sources would create a moral dilemma; [2] identify the moral concepts that give rise to the dilemma; [3] elucidate how these concepts were specified, such that it gave rise to an apparent dilemma; [4] try to develop (preferably collaboratively among stakeholders) alternative specifications in such a way that the dilemma is resolved, observing the rules of specifying norms (Richardson, 1990).

In a randomized placebo-controlled trial with 27,564 participants, one of those drugs (Evolocumab) resulted in a 54% decrease in LDL cholesterol at 2,2 years follow up. The drug also resulted in a decrease of myocardial infarctions (3,4% vs 4,6%) and a decrease in strokes (1,5% vs 1,9%). It did not result in a reduction of cardiovascular death (1,8 % vs 1,7%), nor in a reduction of death from any causes (3,2% vs 3,1%). The annual costs of the drug are ca. US\$14,000 per patient. Estimating that in the US, ca. 154,823 patients would be eligible for the drug, the budget impact would be US \$ 2,08 billion per year. We propose that the question whether these new drugs should be funded from public sources can, indeed, pose a moral dilemma. This dilemma can be conceived as one that results from a conflict between the concepts of beneficence and justice: the new drugs do seem to confer a certain good to patients with hypercholesterolaemia, but it is questionable whether funding can be achieved without jeaopordizing the provision of services for other groups of patients, with potentially greater needs (e.g., patients with severe mental illness). We propose that the dilemma arises when beneficence is specified in terms of 'restoring or preserving normal functioning', and justice is specified as 'being equally protected against the consequences of ill health'. The dilemma might be resolved by re-specifying both concepts, defining beneficence in terms of protecting or preserving capability, and by adding substantive qualifications to equal protection.

# Conclusions.

yet, been rarely used to address the increasingly important problem of priorities healthcare.						

Specifying norms is a nowerful method for resolving ethical dilemmas that has as

# Indeterminate ethics and health care policy

Preseting author: Anders Herlitz<sup>1</sup>

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How should scarce health resources be allocated? In this paper, I argue that the most promising way to approach these questions is through a hybrid approach that on the one hand recognizes the importance of substantive principles that can be invoked to discard certain alternatives, and on the other hand presents a conception of how societies can bring determinacy to indeterminacy in a justified way.

Contemporary approaches to this issue can be divided into two main categories. (1) approaches that promote substantive distributive principles. In this camp, we find proponents of health maximization, weighted health maximization, principles of need, health equality, and the capabilities approach. (2) approaches that attempt to analyze and outline what a good, just or fair decision process looks like. In this camp, we find Habermasians, Rawlsians and others.

Whereas procedural approaches have well-documented difficulties explaining why certain outcomes are bad regardless of how they have been brought about, there are good reasons to be skeptical also toward approaches that rely too heavily on substantive principles. Allocation of health resources is characterized by uncertainties. Plausible principles are likely to be vague. And theories that present substantive principles are likely to be incomplete in the sense that the promoted principles fail to establish an ordinal ranking of all alternatives. Indeterminacy problems of this kind arise for pluralists, but there are well-known aggregation problems also within the domain of what looks like single values such as equality, and the very concept health actualizes the same problem: how do we put the different aspects of ill-health together so that we can assess the amount of overall ill-health?

Yet, the fact that procedural approaches fail to explain why some outcomes are bad regardless of how they have come about does not entail that they are useless, and indeterminacy problems do not warrant skepticism. I argue that rather than choosing between these two general approaches we ought to strive for a combination of them. In order to analyze what such a hybrid approach ought to look like it is helpful to start by understanding better what qualities it needs to have. I present two such conditions. First, they should be able to partition the outcome space so that certain outcomes can be discarded with reference to the substantive principles alone.

Second, they should explain how to establish a best alternative in the outcome space that remains after the partition process is completed, i.e. they should be able to explain how we ought to select an alternative course of action when no alternative is better than or as good as every other alternative. This entails that different policies might be justified in different contexts. This might be seen as a strength of these approaches.

# The role of public views on health care priority setting in moral reasoning

Preseting author: Erik Gustavsson<sup>1</sup>

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It is often assumed that societal preferences should play an important role in determining what principles should guide health care priority setting. Some people make the stronger claim that these preferences are decisive for determining these questions, whereas others believe that such preferences should have no impact on how resources ought to be distributed. I shall not adhere to any of these positions but discuss a further potential role for societal preferences in moral reasoning. Here I focus on reflective equilibrium understood as the process of working back and forward between considered moral judgments and moral principles striving towards a resting point where moral judgments cohere. There are ways to extend the process according to which one arrives at a resting point in order to increase its justificatory weight (so-called wide reflective equilibrium).

In this talk I shall focus on an extension of the process in terms of considering relevant alternative views. The more relevant alternative views one considers, before one arrives at a given resting point, the more justificatory force that resting point has. Since moral philosophers cannot take all moral opinions in to account they have to satisfy with the second best option which is to "...characterize the structures of the predominant conceptions familiar to us from the philosophical tradition, and to work out the further refinements of these that strike us as most promising (Rawls 1974-75)." Rawls mentions rather than argues for this source of alternative views. However, a further promising source of alternative views is studies of public views. Studies of people's moral views may provide the process of reflective equilibrium with alternative views which may be used in order to increase justificatory force of a given resting point. To inform the process of reflective equilibrium in this way seems as a promising role for empirical research in moral reasoning.

# Narrative as a complementary tool to principle-based prioritization in Sweden: test case 'ADHD'

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For the benefit of prioritization reflection processes, we suggest an ethical theoretical framework that includes both ethical principles and narratives. We present our suggestion in the particular case of having to choose between treatment interventions against Attention Deficit Hyperactivity Disorder (ADHD) and treatment interventions against other conditions or diseases, under circumstances of scarcity. In order to arrive at our model we compare two distinct ethical approaches: a generalist (principles) approach and a particularist (narratives) approach. Our focus is on Sweden, because in Sweden prioritization in health care is uniquely governmentally regulated by the "Ethics Platform". We will present a (fictional) scenario to analyze strengths and weaknesses of the generalist principled perspective of the "Ethics Platform" and the particularist perspective of narrative ethics. We will suggest an alternative (moderately particularist) approach of prioritization, which we dub a 'principles plus narratives' approach. Notwithstanding the undeniably central role for principles of distributive justice, we claim that also "personal" and "mediumrange narratives" concerning individuals or groups who stand to benefit or loose from ADHD prioritization practices should be read or listened to, and taken into account. These narratives are expected to ethically optimize prioritization decisionand policy-making.

# Toward an ethics framework for health priority-setting for National Health Insurance in South Africa

Presenting author: Carleigh B. Krubiner<sup>1</sup>

Co-authors: Michael DiStefano<sup>1 2</sup> and Maria W. Merritt<sup>1 2</sup>

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# Background.

South Africa has taken steps to develop and implement National Health Insurance (NHI), with expressed commitments to developing a Health Technology Assessment (HTA) process. Although ethics has long been stated as a core component of HTA, and many ethics frameworks exist in the academic literature, there are still few examples of practical, systematic inclusion of ethics analysis in HTA processes. Furthermore, many existing frameworks were not developed with low- and middle-income country contexts in mind — and may not be suited to the specific context and challenges of priority-setting in South Africa.

#### Aim.

The South African Values and Ethics for UHC (SAVE-UHC) project is supporting the development of an engagement-driven, context-specified ethics framework for NHI priority-setting. As a first step, the project aimed to inventory ethics commitments expressed in key NHI policy documents alongside those featured in prominent health priority-setting frameworks. This inventory will serve as a menu of candidate commitments that the stakeholder working group will consider and weigh in generating the final framework.

### Methods.

We conducted a thematic content analysis of explicit and implicit ethics commitments expressed in the NHI White Paper as well as referenced policy documents relevant to NHI. We then cross-coded these more granular commitments by the eight core principles for NHI set forth in the White Paper and by health systems building blocks. These thematic categories were then refined to reduce conceptual overlap and narrow the scope of commitments to those most relevant to HTA processes. These were then supplemented by additional candidate commitments from other frameworks, such as The Swedish Council on Health Technology Assessment (SBU).

The most frequent and salient ethics commitments expressed in the NHI White Paper that correspond to HTA processes fell under principles of equity, efficiency and affordability, and appropriateness with regard to population needs. Specified equity commitments included: (1) coverage of certain priority populations, such as children, women, elderly and the disabled; (2) coverage of certain types of care, such as mental health services and trauma care; (3) equity in access despite geographic locale or socioeconomic status; (4) equity in the quality of care received. Efficiency and affordability commitments included reference to cost-effectiveness analysis and use of treatment guidelines. Appropriateness commitments allowed for flexibility in meeting local needs and in being responsive to changing demographics, burdens of disease, and local circumstances. There were also multiple mentions of safety and effectiveness of interventions. Additional commitments from the literature included: severity of the condition, long-term impacts of the intervention, respect for individuals and autonomy, respect for clinician judgment, minimizing harms, and impacts on broader experiences of disadvantage.

### Conclusions.

There are a number of principles and explicit ethics commitments relevant to HIA already articulated in South Africa's policy documents and other frameworks. These will provide a strong foundation for the multi-stakeholder working group to build upon. A key area for further development will be further specification of broad principles and guidance on how to navigate inevitable tradeoffs that arise across the multiple commitments comprising the framework.

# A new framework for appraising the quality of business cases for use in an NHS Clinical Commissioning Group setting

# Presenting author: Myles-Jay Linton<sup>1 2</sup>

Co-authors: Amanda Owen-Smith<sup>1 2</sup> and Joanna Coast<sup>1 2</sup>

<sup>1</sup>Health Economics at Bristol, Population Health Sciences, Bristol Medical School, University of Bristol, UK

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# Background.

Clinical Commissioning Groups (CCGs) across the National Health Service (NHS) in England are under intense and growing financial strain. Nonetheless, CCGs are periodically required to judge and decide on the outcome of proposals for investing in new programs of care, each with differing implications for expenditure. There is currently limited guidance available on how to develop high quality and efficient business cases specifically tailored to a CCG context.

### Aim.

To develop a conceptual framework containing a set of key quality indicators for healthcare-related business cases, for use in a CCG context.

### Methods.

We undertook online searches to identify available guidance on the quality of healthcare-related business cases. Available guidance documents were synthesised in narrative form and key components were identified. The framework was then applied to 15 past business cases (covering the period between 2014 and 2017), to determine the extent to which these key components are covered within existing business cases.

# Results.

Seven existing guidance documents were identified, resulting in the identification of eight key components central to the quality of business cases: (1) rationale, (2) priorities, (3) options, (4) outcomes, (5) costs, (6) risks, (7) management, and (8) progression. Each component is detailed within a visualized figure and accompanied by an extended written explanation. Application of the framework to existing business cases is in progress, to investigate whether some of the identified quality indicators are better accounted for than others.

Conclusions.  A set of consistent quality concerns emerged from the available guidance on health care related business cases. The framework presented is practically relevant to both the development and the appraisal of business cases. Ongoing research is needed to evaluate the acceptability, applicability and appropriateness of the framework in CCG settings.

# Developing a framework for priority setting in health and social care

# Presenting author: Marissa Collins<sup>1</sup>

Co-authors: Rachel Baker<sup>1</sup>, Micaela Mazzei<sup>1</sup>, Alec Morton<sup>2</sup>, Lucy Frith<sup>3</sup>, Keith Syrett<sup>4</sup>, Paul Leak<sup>5</sup> and Cam Donaldson<sup>1</sup>

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 <sup>5</sup> Directorate of Health and Social Care, Scottish Government, UK

# Background.

There is a move, internationally, towards greater integration of health and social care. Integration, it is argued, should reduce budgetary boundaries and facilitate sharing of resources across health and social care. At local levels, delivery organisations need to alter the balance of care from acute settings to people's own home or similar community environments. The need to shift the balance of care and reprioritise spending within an integrated context and against a background of increasing austerity is challenging. To facilitate this shift, there is a need to use robust processes for allocating resources to make difficult decisions and to create interdisciplinary priority setting frameworks involving economists, ethicists, lawyers and decision scientists. In 2014, the Scottish Government established Health and Social Care Partnerships (HSCPs) to deliver this agenda, creating single commissioners for health and social care and unifying budgets. This paper presents the early stages of a research project funded by the Chief Scientist Office, part of the Scottish Government Health Directorates.

### Aim.

In this on-going project, our aims are to develop and implement an enhanced, multi-disciplinary framework for priority setting, for use by the new HSCPs, and assess its impact on decision-making and resource allocation.

# Methods.

To develop the framework, a literature review was conducted to identify and bring together elements of existing approaches/decision frameworks. This combined framework was presented to a multi-disciplinary workshop of academic colleagues, local and national-level stakeholders to gain feedback in order to refine and develop it further.

The aim is to implement this combined framework in four HSCPs in Scotland using a Participatory Action Research approach. This approach will explore how the framework functioned within complex settings, and how HSCP participants engaged with the framework, and consider how the framework can be adapted to the institutional setting as well as vice versa. Before and after interviews will be conducted.

# Results.

The framework is underpinned by principles from economics (opportunity cost), decision-analysis (good decisions), ethics (justice) and law (fair procedures). It includes key stages for those undertaking priority setting to follow. These key stages include: framing the question, looking at current use of resources, defining options and criteria, evaluating the options and criteria and a review stage. Each of these has further sub-stages to be followed and it includes a focus on how the content of the process and the framework interacts with the consultation and involvement of patients, public and the wider staff.

# Next steps.

Four HSCPs are now taking forward the combined framework for priority setting and looking to use this in their locality with a focus on a specific area of care.

To assess its impact, the four sites using the framework will be compared with the remaining 27 HSCP sites. The aim of the comparison is to establish the extent to

which the remaining sites use elements of the frame cesses used for decision-making, and whether decisi based resource shifts.	ework; the principles and pro-

# Towards a mutual understanding? On-going discussions of how to interpret ethical principles into a national priority setting model

# Presenting author: Mari Broqvist<sup>1</sup>

Co-authors: Lars Sandman<sup>1</sup>. Arvid Widenlou Nordmark<sup>2</sup> and Ulrike Edin<sup>31</sup>

<sup>1</sup>Swedish National Centre for Priorities in Health, Department of Medical and Health Sciences, Linköping University, Sweden

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# Background.

In Sweden the health-care system is guided by the ethical principles of human dignity, need-solidarity, and cost–effectiveness decided by the Swedish parliament in 1997. These overarching ethical principles have been operationalised into a National Model for Transparent Prioritisation. The model offers a structure for qualitative ranking of different conditions and their interventions. The ranking includes an evaluation of the severity level of the condition, the patient benefits and the cost-effectiveness of the intervention, and the evidence for benefits and cost-effectiveness, intended to serve as a base for informing resource allocation. The model is used both by government authorities and county councils to inform resource allocation.

Already in 1997 the Swedish government stated that priority setting principles and criteria must be an on-going discussion, ready to be revised in the light of new evidence or arguments. Ever since the first version of the National model was designed by multi-professional and interdisciplinary groups, the ambition has been to revise it, as the empirical experience grow from applying the model in real-life priority processes. This has now been done for the third time, and a new version of the model was published in 2017.

### Aim.

In this presentation we want to describe how we performed the revision in order to make the process as transparent and inclusive as possible, incorporating many different perspectives. But foremost, we want to present what kind of ethical discussions that have been taken place during the process: what problems are perceived when trying to interpret the ethical principles and what standpoints have been taken in order to balance these standpoints.

# Methods.

The revision process has been jointly organized by the National Centre for Transparent Priority setting in Health Care and the National Board of Health and Welfare. During the process several meetings have been held with representatives of professional organizations, patient organizations, health care authorities and county councils/regions.

# Results/Conclusions.

human discussion during the revision process has concerned how to interpret the human dignity principle in relation to the need-solidarity principle. We will e.g. present the discussion on how to take the risk of premature death into account when at the same time not paying attention to chronological age, and the discussion or how to realize the importance of severity when deciding upon priority level.						

# HTA as a tool to support priority setting and resource allocation in the British Columbia health system

# Presenting author: Tania Conte<sup>1</sup>

Co-authors: Gavin Wong<sup>1</sup>, Selva Bayat<sup>1</sup>, Meghan Donaldson<sup>1</sup>, Craig Mitton<sup>1</sup> Stirling Bryan<sup>1</sup> and Mohsen Sadatsafavi<sup>1</sup>

<sup>1</sup>Centre for clinical epidemiology and evaluation, University of British Columbia, Canada

# Background.

The health care system in British Columbia was facing a decision problem to increase access to treatments for advanced Parkinson Disease (PD) patients. The system had already been offering Deep Brain Stimulation (DBS) surgeries, but under current capacity, wait times for surgery were becoming unacceptably long (>3 years). A health technology assessment (HTA) was conducted to determine the impact of DBS compared to intestinal levodopa infusion (Duodopa) as a key input into the Province wide priority setting and planning process.

### Aim.

The HTA aimed to evaluate the relative safety, effectiveness, cost-effectiveness and budget impact of treating advanced PD patients with DBS or Duodopa.

### Methods.

Following the standard technology assessment/ re-assessment process developed by the BC Provincial Ministry of Health and with an explicit understanding that HTA is an evidence based tool to support priority setting decisions, this HTA included patient engagement (focus groups, interviews with patients and care partners, review of the literature on patient experiences), clinician and other interviews, a jurisdictional scan, an extensive review of the clinical and economic literature on both technologies, development of a model-based economic evaluation tailored to BC, and a budget impact analysis.

### Results.

From clinician, patient and caregiver perspectives, both treatment options represent a tremendous improvement in symptom control and quality of life compared to remaining solely on routine oral medication. Patient preferences were expressed between the options in terms of treatment invasiveness, potential side effects and financial burden due to travel costs, lost productivity and implications of eligibility on the public drug insurance scheme.

The clinical literature directly comparing DBS to Duodopa is limited, with available evidence indicating some incremental benefit of DBS over Duodopa. The cost-effectiveness analysis estimated that, within a 10-year time horizon, DBS is a dominant alternative providing more QALYs (0.43), LYs (0.08), and time without dyskinesia (336 days), at lower total costs (\$309,155) per patient. The total cost to manage the disease and provide DBS to all new referred patients, as well as to end the existing waitlist, was estimated at approximately \$155.7 million over the next 10 years.

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An HTA comprising of the policy problem, barriers for implementation, cost-effectiveness analysis and budget impact, including patient and other key stakeholder perspectives, allows for critical assessment of choosing treatment options, enabling decision makers to discuss re-allocation to optimize the use of resources and maximize the benefits for patients. This analysis of an existing technology serves to demonstrate how HTAs are used in BC through a Province-wide priority setting and planning process and importantly exemplifies best practice in health technology management at a system level.

# Resistance Exercise and Women's Health - Risks for Urinary Incontinence in Women Young Adults

Presenting author: Denise Maciel Ferreira1,

Co-authors: Fagner Luiz Pacheco Salles<sup>2</sup> and Maira Reuter Sampaio<sup>3</sup>

<sup>1</sup>Associação Vitoriana de Ensino Superior - FAVI, Brazil <sup>2</sup> Faculdade Estácio de Sá de Vitória, Brazil <sup>3</sup>Faculdade Estácio de Sá de Vitória, Brazil

# Background.

Population culture and behavior are important indicators of the health / disease process and may indicate priorities in population health management. In recent history the practice of physical activity has created new behaviors that have established themselves as a culture among all age groups and, if on the one hand, science points out the importance of physical activity for disease prevention and quality of life, the use of resisted physical activity as a means of modifying the body and obtaining improvements in appearance may be causing several types of disorders in the health of young people with future consequences on the health of the population. It is already possible to observe in the literature the association of practice of resistance exercises or high-impact exercise with the development of urinary incontinence (UI) in women, although this phenomenon has not yet been fully clarified from the epidemiological point of view.

### Aim.

To compare the prevalence of urinary incontinence in sedentary young women and resisted physical activity practitioners.

### Methods.

A total of 472 women, a statistical sample of the population of women from the State of Espírito Santo, Brazil, between 20 and 40 years of age, nulliparous and with body mass index considered normal, participated in the study. The women were classified into two groups: Group A practicing resistance exercises for more than 1 year with a minimum frequency of 3 times a week and Group B: Sedentary women for more than 1 year. The International Consultation on Incontinence Questionnaire (ICIQ-UI / SF) was used. To verify if a person's chances of having Urinary Incontinence increase or decrease between groups, simple logistic regression was used. The total scores of the groups were organized by mean ± standard deviation. The analysis of the means differences of the scores by group was statistically evaluated with ANOVA, and the T'Student test was used to compare the means.

The results showed to a statistically significant difference in the prevalence of UI between the groups, indicating that among those who practice resisted exercises there is a higher prevalence of UI (p = 0.013). Logistic regression indicated that practitioners of resisted physical activity had 2,002 (OR) times more chance of developing UI.

Conclusions.

The results of the study indicate a high prevalence of UI among young women practicing resistance exercises, with no risk indicators for this disorder. The literature reports that this phenomenon may be related to the increase in intra-abdominal pressure caused by the use of excessive loads in resistance exercise. The observation that UI can lead to other abdominopelvic dysfunctions and reduce women's quality of life strongly supports the understanding that this cultural phenomenon can impact health services and should be taken into account in the organization of women's health services, as well as in the orientation of allied professionals the practice of physical exercises and women's health.

# Evaluation of the effect of music therapy during physiotherapy sessions in elderly patients of a nursing home

# Presenting author: Fagner Luiz Pacheco Salles<sup>1</sup>

Co-authors: Denise Maciel Ferreira<sup>2</sup> and Carlos Luis Arriaza Vicencio<sup>3</sup>

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# Background.

Active aging, according to the World Health Organization (WHO), is a process of improving health, safety and participation opportunities with the aim of improving the quality of life. This has gained space in political and social discussions, with the aim of preventing an artificial population aging, promoted only by technological and medical advances.

Depression is a mental illness that occurs more frequently in the elderly (4-14%) and is related to a high degree of psychic suffering. The risk of mobility and clinical mortality increase in elderly people hospitalized with general illnesses or in nursing homes due to forgetfulness of the family. The term quality of life means a broad concept of well-being, depending on a self-judgment, ie whether or not it is satisfied with the subjective quality of its life related to historical, cultural, social and individual patterns. According to WHO it is "the individual's perception in their life regarding expectations, goals, concerns".

Music, relate to lived experiences and stimulates self-esteem and behavior. Depending on the choice, music can aid in relaxation or stimulation, providing body movements, helping to improve musculoskeletal problems and reactivating motor functions. Sound memory opens channels of communication and rescues healthy points.

#### Aim.

This study aimed to evaluate the effect of music therapy during the physiotherapy session in the elderly of a nursing home.

# Methods.

Data were collected in the elderly of a nursing home. Fifteen elderly, divided into control group (physiotherapy) and test group (physiotherapy and music therapy) participated in the study. Elderly people with physical or mental disabilities were excluded.

The level of depression was assessed using the Beck Depression Inventory (BDI), the instrument has 21 items. For each of them there are four (with score varying from 0 to 3). Quality of life was measured with the SF-12v2 questionnaire Ware & col. (2009) investigating multidimensional aspects of physical and mental health. His construct consists of eight items: physical functioning, role physical, bodily pain, general health, vitality, social functioning, role emotional, mental health, and converted into a physical component summary (PCS) and a mental component summary (MCS). The instruments were applied on a Likert scale of 3 and 5 points.

Quantitative variables were expressed by means of mean and standard deviation and the qualitative variables were expressed by means of frequency and percentage. Two-tailed p values equal to or less than 0.05 were considered statistically significant and the 95% confidence interval was used to calculate the results.

The treatment groups were described by mean (M) and standard deviation (dp). To compare the groups we used the t-student test and the Mann-Whitney U test, the probability of p <0.05 was considered statistically significant. The data were analyzed by the Statistical Package for the Social Sciences for Mac (SPSS), version 22.0.

### Results.

Of the people who attended asylum the average age was 74,44(sd = 5.5) years for the group that received physiotherapy and music therapy, 66.6% of the male gender and 33.4% of the female gender. The control group had mean age (79.00, sd = 11.97 years), 57.1% of males and 42.9% of females.

The results showed that the mean difference of the final evaluation (5.4) between the two groups for depression was statistically significant (t = 1.92 (11); p = 0.040, Cohen d = 0.56) mean effect. There was no statistically significant difference within the group.

The quality of life presented a significant difference for the sum of the physical components (PCS) (t = 3.06 (11); p = 0.005, Cohen d = 0.84), role physical (U = .00, z = -2.21; p = 0.017, Cohen d = 0.27), general health (U = 4.0, z = -2.58; p = 0.007, Cohen d = 0.49) and vitality (U = 8.5, z = -1.98; p = 0.036, Cohen d = 0.42) all with a small effect. The other components showed no statistically significant difference. This study aimed to evaluate the effect of music therapy during the physiotherapy session in the elderly of a nursing home.

#### Conclusions.

The results show that physiotherapy associated with music presented a positive response in the levels of depression, in the component and in the physical aspect, in general health and vitality in the elderly.

The music proved to be a modulating element of the mood, improving the emotional part of the participants and in this way the socialization between the elders and the employees of the home for the ederly. Improvement in individual well-being has rescued the ability to interact with new events.

# Treatment options of arm fracturs in the elderly

# Presenting authors: Emin Hoxha Ekström<sup>2</sup> and Karin Stenström<sup>2</sup>

Co-authors: Emelie Heintz<sup>1</sup>, Agneta Brolund<sup>2</sup>, Carl Ekholm<sup>3</sup>, Per Olof Josefsson<sup>4</sup>, Lina Leander<sup>2</sup>, Cecilia Mellstrand Navarro<sup>5</sup>, Peter Nordström<sup>6</sup>, Lars-Eric Olsson<sup>7</sup> and Lena Zidén<sup>8</sup>

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# Background.

In Sweden, approximately 12 000 women and 2500 men per year fracture their wrists, and shoulder fractures are reported annually for more than 6000 women and almost 2000 men. The treatment of patients with arm fractures varies throughout Sweden.

### Aim.

The objective of this health technology assessment was to assess different treatment options for arm fractures in the elderly from a medical, economic, ethical and social perspective.

### Methods.

A systematic review was undertaken following the PRISMA statement. A literature search covering January 1990 to December 2016 was conducted. Studies had to be published in a peer reviewed journal in English, or Scandinavian languages. RCTs, non-randomised controlled studies and egistry studies comparing different treatment options were included. The included outcomes were function, grip strength, quality of life, complications, social costs or cost-effectiveness in elderly patients ( $\geq$ 60 years old). The evidence was assessed using the GRADE system. Intervention costs for each treatment alternative was calculated using a bottom up approach.

Quantitative evidence – Effects and complications of different treatment options for arm fractures in the elderly.

Of the 9815 articles identified in the literature search, 49 RCTs and 31 nonrandomised controlled or register studies met the inclusion criteria for this report and were classified as having moderate or high quality.

### Distal radius fractures

No clinically significant difference in functional outcome could be detected between treating less complex wrist fractures with locking plates or external fixation/pinning compared to plaster cast at one-year follow-up. In addition, treatment with a plaster cast resulted in fewer minor complications compared to external fixation/pinning.

In a comparison between plate fixation and external fixation/pinning, there were no clinically significant differences in function, grip strength, quality of life or minor complications at one year of follow-up. Nevertheless, treatment with plate fixation had more major complications requiring additional surgical intervention.

The intervention cost is at least EUR 1300 higher for treatment with locking plates and at least EUR 900–1000 higher for external fixation/pinning compared to plaster cast, excluding the costs for complications.

# Proximal humerus fractures

A statistically but not clinically significant difference in functional outcome was identified between reverse shoulder arthroplasty (RSA) and hemiarthroplasty (HA) in patients with complex shoulder fractures. No clinically significant difference in functional outcome at one-year follow-up was detected between HA and the non-surgical treatment (sling) for patients with simple or less complex fractures of the shoulder.

Treatment with plate fixation compared to non-surgical treatment did not show any clinically relevant difference in functional outcomes, quality of life or major complications.

The intervention cost for HA and plate fixation is at least EUR 5000 and EUR 3500 higher than non-surgical treatment, excluding any costs for complications. The cost of RSA is at least EUR 1950 higher than for HA, excluding costs for complications.

# Conclusion.

This health technology assessment shows that the present scientific evidence indicates no clear benefit from choosing surgical fixation methods over the less costly non-surgical treatment options for elderly with less complex arm fractures.

#### Panel session

# Priority Implications with Shared Decision-Making - Report from A Research Program

# **Gert Helgesson**<sup>1,</sup> <sup>1</sup>Karolinska Institute, Sweden

#### Panelists:

Helene Bodegård, Karolinska institute, Sweden Erik Gustavsson, Linköping university, Sweden Niklas Juth, Karolinska institute, Sweden Christian Munthe, Gothenburg University, Sweden Lars Sandman, Linköping university, Sweden

# Background.

During the last 10-15 years person centered care is on the top agenda of most health-care systems, driven by the ambition to adapt health-care to the perspective of the patient or person in need. A central tenet of person centered care is shared decision-making (SDM), i.e. that the patient and professional should engage in a joint dialogue and, ideally, end up in a common decision. Obviously, there are strong ethical rationales for SDM both to make health-care relevant to the persons in need, but also autonomy and possible adherence reasons. In a four year Swedish research program we have explored the ethical obstacles and opportunities with person centered care (including SDM). One such area of exploration have been priority aspects in relation to SDM. SDM has the potential of mitigating problems in priority setting approaches like individual accountability and co-payment to some extent, but also give rise to new priority setting issues, e.g. how SDM relate to and should account for persons health-care need.

### Aim.

To present and discuss a number of implications of SDM for priority setting in health-care.

### Workshop

# Ensuring legitimacy in developing Health Technology Assessment mechanisms

# Tessa Edejer

World Health Organization, Switzerland

### Panelists:

Melanie Bertram, World Health Organization, Switzerland Rob Baltussen, Radboud University, Netherlands

# Background.

Health Technology Assessment (HTA) mechanisms are generally considered best-practice for developing benefit packages for Universal Health Coverage. HTA involves a process whereby interventions are considered for reimbursement based on a set of established criteria (such as safety, effectiveness, cost-effectiveness, budget impact, equity and financial risk protection) though a stakeholder dialogue which makes recommendation to the decision maker. The process is applied consistently across different health care interventions which use the same pot of money for reimbursement. The World Health Organization secretariat was requested to assess the status of HTA at country level, and to support the development of appropriate principles to use HTA in health systems priority setting and decision-making, in the context of implementing policies towards universal health coverage (UHC). Guidance on "How-to" develop an HTA mechanism has been developed by WHO and will begin pilot testing within 2018.

### Aim.

This session will present the guidance document, provide information on the ongoing pilot testing process, and focus particularly on the issue of ensuring legitimacy in the process.

# Development and implementation of a systematic prioritisation model in resource allocation in a municipality — strategies, facilitators and barriers

Presenting author: Barbro Krevers<sup>1</sup>
Co-author: Karin Bäckman<sup>1</sup>

<sup>1</sup>Swedish National Centre for Priorities in Health, Department of Medical and Health Sciences, Linköping University, Sweden

# Background.

Sweden has a decentralised democracy with direct elected politicians in county councils (responsible for hospital care and primary care) and municipalities (responsible for e.g. older peoples' home care, social care, children's education, environment, community planning, water and waste). More than 20 years has passed since the Swedish Parliament's ethical principles and guidelines for priority setting in health care were established. Mainly these principles and guidelines have been operationalised at bodies on national level and in county councils. The municipalities are also concerned by these, although, few municipalities has operationalised these principles and guidelines in practice. However, one example is a municipality that has carried out a long term work to develop priority setting based on these principles for all different welfare sectors in the municipality. Their aim was to achieve a transparent systematic resource-allocation process that combines ethical principles with political goals, and embrace all decision levels from operational managers to politicians.

#### Aim.

Our aim is to present five years of development and implementation of a priority setting model and process in a municipality, and to show strategies and factors that were facilitators or barriers in that process.

### Methods.

Action research in a development project in collaboration with a municipality management, from idea to put into routine. Data: questionnaires, observations, documents and field notes from different activities as dialogues, meetings and workshops, related to the development and implementation process.

#### Results.

As strategy the development took place gradually in small improvement cycles in an iterative process. By this, knowledge and learning has been built within the organization and the work has been characterised by long-term perspective to ensure sustainability. An important strategy amongst others was to provide timely and relevant information to include different key actors in the development process and also to involve actors in order to reach acceptance for the new procedure. One vital challenge and achievement was to operationalise established national ethical principles for priority setting in health care in to a municipality context and combine them with political goals and strategic plans in the municipality. After five years of development, a systematic prioritisation model and process were implemented and embedded in the plan- and follow-up process, as a part of the budgeting routine in the management system of the municipality.

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new procedure for systematic priority setting. The barriers and challenges the se were solved and managed in a pragmatic way and contributed to new know and learning used in their work process.				

### Implementing Multi-Criteria Decision Analysis into real-world drug decision making: experience from a Canadian Province

Presenting Author: Tracey-Lea Laba<sup>1 2</sup>

Co-author: Craig Mitton<sup>1</sup>

<sup>1</sup>School of Population and Public Health, Centre for Clinical Evaluation and Epidemiology,
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#### Background.

Globally, health systems are asked to make decisions about funding new, high cost drugs amidst constrained health budgets. Processes that rely heavily on incremental cost-effectiveness ratio thresholds to make one-off decisions about individual drugs cannot adequately consider opportunity cost, nor systematically incorporate other criteria that are key to decisions. Multi-criteria decision analysis (MCDA) is an alternative approach that can assess value on the basis of multiple criteria, however there is no single agreed approach to incorporate budget impact and issues of opportunity cost. Furthermore, very little guidance exists about how to implement MCDA into a functioning drug decision-making process.

#### Aim.

To describe the implementation of an MCDA-tool into a Canadian provincial public drug reimbursement decision-making process and identify the aspects of the tool and the context that promoted its uptake.

#### Methods.

Narrative summary of information from key stakeholders about the how, when and why of implementing MCDA.

#### Results.

Faced with a fixed budget, a pipeline of expensive but potentially valuable drugs, and potential delays to drug decision-making, the Ministry of Health (i.e. decision-makers) and its independent expert advisory committee (i.e. end users) sought alternative values-based processes that could promote consistent and transparent decisions while considering issues of opportunity cost. Priority setting and resource allocation frameworks including MCDA were presented to end-users and decision-makers, and included practical local examples that highlighted use, advantages and disadvantages.

MCDA was considered highly compatible with current processes, but the ability as a stand-alone intervention to address issues of opportunity cost were unclear. Despite these limitations, a decision to implement an MCDA tool was championed by end-users with expertise in health economics and ethics, but was collaboratively voted upon by all end-users with guidance from decision-makers. A tool was externally developed in conjunction with end-users. After several months of engagement and piloting with end-users, implementation was rapid and leveraged the strong formal and informal communication networks established between end-users and between the end-users and decision-makers. The end-users as a whole now rate new submissions using the MCDA tool. This rating serves as an input into the deliberative process, but is not the decision-point per se. Evaluation of the tool is planned. Application to already funded drugs to inform discussions about opportunity cost and delisting low-value drugs are also being considered as evidence on how best to incorporate such issues in MCDA emerges.

MCDA can be a highly adaptable and testable tool that can be implemented into a functioning drug reimbursement setting despite the present limitations with add-

#### Conclusions.

i) a truly lin makers; iii) framework ven the cur and evalua	mited budget, using criteria for decision-r rent limitation ting later refl	; ii) a shared that was alre making rathe ns of MCDA, i ects a practio	vision for cheady delibera r than relying implementin cal solution t	on appeared ange by end- ted upon; iv) v g on the rating g an imperfect to the real-tim be faced by d	users and deliewing the to as the decision academic to be fiscal cons	cision ol as a on. Gi- ol first traints

### Priority setting practice among physician engagement initiatives in British Columbia, Canada

#### Presenting author: Neale Smith<sup>1</sup>

Co-authors: Yashna Bhutani<sup>2</sup>, Graham Shaw<sup>2</sup>, Jean-Louis Denis<sup>3</sup>, Chris Lovato<sup>2</sup>, and Craig Mitton<sup>2</sup>

<sup>1</sup>Centre for Clinical Epidemiology, University of British Columbia, Canada <sup>2</sup>School of Population and Public Health, University of British Columbia, Canada <sup>3</sup>Universite de Montreal, Canada

#### Background.

British Columbia's Ministry of Health, Doctors of BC (the peak association representing physicians), and the province's six health authorities (integrated health planning and service delivery organizations) are partners in a multi-year project intended to increase physician engagement at individual hospital sites across the province – the Facility Engagement Initiative (FEI). The FEI will ultimately include up to 75 sites, from small rural to large urban acute care hospitals. Physicians at each site receive dedicated funding -- based upon size (# of beds) -- to spend upon locally selected priorities for actions which should increase physician engagement in health system leadership and decision making.

#### Aim.

Many sites in the FEI are using some form of competitive request for proposals to allocate resources. The FEI evaluation therefore offers a unique opportunity to investigate a large number of priority setting processes occurring within a single political jurisdiction at the same time.

#### Methods.

This study —an external, independent evaluation — aims to assess processes and outcomes in the FEI. The evaluation is employing a mixed-method approach. Qualitative data are collected through document review, naturalistic observations, indepth interviews or focus groups with stakeholders and participants including physicians, facility administrators/managers, facilitators employed to assist with the initiative, and provincial-level stakeholders. Quantitative data are collected through cross-sectional surveys, a dedicated project management system, and secondary data analysis.

#### Results.

We can report upon descriptive statistics and qualitative data relating to:

- Processes chosen, and the extent to which the design of these draws upon existing priority setting models from the literature, and/or through diffusion of approaches among FEI sites. While sites may draw lessons from elsewhere, they may also have independently developed processes to meet local needs, which may or may not be similar to those employed elsewhere.
- Criteria used by sites to choose priorities; these can be compared —with reference to existing published literature -- against those used by hospital-based priority setting projects elsewhere in Canada or other comparable national or regional health systems.
- Projects/activities selected, assessed against different categories of institutional work identified in the literature as central to successful physician engagement efforts, and against a typology of approaches used by physician engagement strategies as identified in a systematic rapid review of the literature conducted by the authors.

The findings can be interpreted to reflect the patterned variation in engagement

#### Conclusions.

concerns among BC acute care facilities, as well as knowledge of priorit and resource allocation methods at the medical practitioner level and th to which PSRA processes used in these sites produce 'evidence-informed' a	e extent

### Societal values and priority setting. What should we do when people disagree? Exploring approaches to plurality

Presenting author: Rachel Baker<sup>1</sup>
Co-authors: Helen Mason<sup>1</sup> and Neil McHugh<sup>1</sup>

<sup>1</sup>Glasgow Caledonian University, UK

In recent decades there has been growing emphasis on the views and values of members of the public in health care priority setting. Incorporating the 'views of the public' in decision making is challenging however; there are many different 'publics', and there are many matters about which publics will disagree, even in relatively homogeneous expert groups.

Drawing on a body of empirical research this presentation will illustrate plurality in societal values in relation to priority setting and discuss implications. Assuming that 'the public' will present a number of competing perspectives — both in terms of allegiances with different high-level principles and with respect to specific choices — how should researchers and policy makers respond? In this paper we explore the potential of a mixed methods approach based on a framework of Incompletely Theorised Agreements as a means of addressing plurality and setting priorities.

We raise questions for future interdisciplinary research in relation to plurality in societal values and the emphasis that research might place on consistency, coherence and consensus.

### Improving the effectiveness, efficiency and fairness of Health Care Systems through Public Involvement

#### Presenting author Peter Littlejohns<sup>1</sup>

Co-authors: Katharina Kieslich<sup>1</sup>, Tim Stokes<sup>2</sup>, Georgina Richardson<sup>3</sup>, Emma Tumilty<sup>3</sup>, Paul Scuffham<sup>4</sup> and Albert Weale<sup>5</sup>

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<sup>4</sup>Griffith University Australia
<sup>5</sup>University College London; UK

#### Background.

In order to create effective and sustainable health systems many countries are introducing ways to prioritise health services which involves making difficult decisions concerning who gets (and who does not get) healthcare interventions. Priority setting requires technical judgements of clinical effectiveness (what works) and cost effectiveness (is it worth the money). But these judgements are embedded in a wider set of social (societal) value judgements that underlie justifiable reasoning about priorities, including fairness, responsiveness to need and nondiscrimination, and obligations of accountability and transparency. Even when these decisions are based on the best available evidence they face legal, political, methodological, philosophical, commercial and ethical challenges. Through international, multidisciplinary, collaborative working we are developing new ways of addressing these concerns.

#### Aim.

To generate public acceptance of the need for health prioritisation we have developed a novel way of encouraging key stakeholders, including patients and the public, to become involved in the prioritisation process.

#### Methods.

Through a multidisciplinary collaboration involving a series of international workshops (funded by the Nuffield Trust, the Wellcome Trust and the Brocher Foundation) we have applied ethical and political theory (including accountability for reasonableness) to develop a practical way forward. We have tested this approach in a range of Clinical Commissioning Groups (responsible for commissioning health services) in England using a mixed methods approach.

#### Results.

Out of the first workshop emerged a social values framework that consists of content and process that has been converted into a decision-making audit tool (the DMAT). Working with a design company we have now created an interactive digital online version that allows internal and external audit of how an institution is incorporating values into its decision making http://www.priorities4health.com/. The conclusion of the second workshop exploring the international experience of public involvement in health prioritisation was that we need to bring alive the issues of health prioritisation in a way that makes sense to stakeholders, patients and the public (3). To achieve this we have collaborated with young film makers from the KCL Entrepreneurship Institute to produce a health prioritisation film relevant to the UK as the first step in producing a series of country specific films highlighting prioritisation issues "The lottery of Devolved Cancer Care" https://youtu.be/gHNY-Ac6njTA .This film depicts variation in access to expensive cancer drugs in the four home countries of the UK. Results of the evaluation of how values underpin CCG prioritisation decisions will be presented at the conference. Our approach has been applied in New Zealand and Chile and is being extended to Australia, Peru, Sierra Leone and Thailand.

#### Conclusions.

We have developed an easy to use method to help stakeholders (including the public) to understand the need for prioritisation of health services and to encourage their involvement. Our experiences are being collated into a prioritisation website accessible to the general public in order to act as resource to further encourage public involvement. This has been funded by the Rockefeller Foundation as part of their Bellagio Residency Programme in February 2018.

### Engaging the public in priority setting for health in a rural setting in South Africa: The CHAT SA project

#### Presenting author: Marion Danis<sup>2</sup>

Co-authors: Aviva Tugendhaft<sup>1</sup>, Nicola Christofides<sup>3</sup>, Kathleen Kahn<sup>4</sup>, Agnes Erzse<sup>1</sup> and Karen Hofman<sup>1</sup>

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<sup>4</sup>MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt) School of Public Health, University of the Witwatersrand, South Africa

#### Background.

In South Africa, public participation in decision making processes is entrenched in policy documents and formalised in the national Health Act yet practical applications are lacking. As the country aims to delivery Universal health Coverage through a National Health Insurance (NHI) by 2025, policymakers will face challenges in terms of who and what to cover with their limited budget. Engagement methods that are deliberative could be useful in ensuring the public is included in the priority setting process for NHI, and developing the capacity of the public to understand the need for rationing and trade-offs.

#### Aim.

To prepare for such a deliberative process in South Africa, we aimed to modify a specific deliberative engagement tool- the CHAT (Choosing Healthplans All Together) tool for use in a rural community. Here we present the completion of the modification process which involved an unusually high degree of participation of community leadership.

#### Methods.

Desktop review of published literature and policy documents, as well as 3 focus groups and modified Delphi method were conducted to identify 6-10 health needs and related interventions for inclusion in the CHAT decision exercise that would be appropriate for a rural community in South Africa. We followed a novel approach in this modification process whereby public engagement principles were applied.

The focus groups and modified Delphi technique included 13 community members as well as 8 national policymakers, and 7 provincial and local policymakers and consisted of two rounds of feedback from participants. Cost information was drawn from various national sources and an existing actuarial model that had been used in previous CHAT exercises. Our approach enabled a participatory and consultative process in order to identify and select the health needs and related interventions to include in the CHAT board.

#### Results.

There was significant overlap between the interventions prioritised by the community members and the provincial and local policymakers while those prioritised among national policymakers differed. Based on the outcomes, 7 areas of health need and related interventions specific for a rural community context were identified and costed for inclusion in the CHAT board. These include maternal, newborn and reproductive health; child health; woman and child abuse; HIV/AIDS and TB; lifestyle diseases; quality/access; and malaria.

The study provides practical lessons for the modification of the CHAT tool for dif-

#### Conclusions.

ferent country contexts. Methodologies that include engagement principles a useful for the modification of engagement tools like CHAT and can be applied in a ferent country contexts in order to ensure these tools are relevant, however so challenges exist particularly in terms of time constraints.	dif

### Understanding young people's priorities for service development: a case study of sexual health services

Presenting author: Louise Jackson<sup>1</sup>

Co-authors: Hareth Al-Janabi<sup>1</sup>, Tracy Roberts<sup>1</sup> and Jonathan Ross<sup>2</sup>

<sup>1</sup>Health Economics Unit, University of Birmingham, UK <sup>2</sup>Sexual Health & HIV, University Hospitals Birmingham, UK

#### Background.

Globally, adolescents and young people are particularly at risk for sexually transmitted infections (STIs). In the UK, rates of diagnoses in those aged 16-24 are twice as high in men and seven times as high in women compared with those aged 25-59 (2016). As STIs are frequently asymptomatic, screening is seen as imperative in many healthcare systems to ensure appropriate detection and treatment, and to prevent onward transmission. It is important that STI screening provision reflects the needs and priorities of young people, given that they bear the greatest burden of disease.

STI screening services have changed significantly over the last few years. Provision has been introduced in a wider range of settings such as GP surgeries, community-based pharmacies, and is available via the internet. At the same time, pressures on healthcare budgets mean that there is a need to focus on what really matters to young people. This research aimed to improve our understanding of young people's priorities for sexual health services and predict uptake for different service configurations.

#### Aim.

The specific aims of the study are:

- To assess how young people prioritise different characteristics of STI screening and the trade-offs they are willing to make between different service options;
- To analyse whether there are differences in terms of priorities across different socio-demographic groups;
- To predict participation rates for different service configurations.

#### Methods.

A series of eight qualitative focus groups were used to design a discrete choice experiment (DCE) to analyse the choices made by young people in relation to STI screening. DCEs are an attribute-based survey method which involve respondents making choices between hypothetical scenarios, comprising two or more alternatives.

The DCE included the following service characteristics: waiting times for appointments, waiting times for results, type of consultation, staff attitude, type of screening test, STIs tested for, and setting. The DCE was administered to 2000 young people who were part of an online panel in the UK, with quotas set to ensure inclusion of minority ethnic groups.

#### Results.

Analyses indicated that all seven service characteristics investigated were statistically significant factors for participants. Feeling that staff were non-judgemental was the most important characteristic to young people. Being tested for all STIs, having a full consultation and getting results quickly were also characteristics identified as important. Further analyses revealed some heterogeneity in priorities by gender, ethnicity and age group.

This study provides valuable insights into the service characteristics that are seen as the most important by young people, and allows the preferences of young people.

#### Conclusion.

### A qualitative exploration of preference-based measures for use in economic evaluation in dementia

#### Presenting author: Lidia Engel<sup>1</sup>

Co-authors: Jessica Bucholc<sup>1</sup>, Cathrine Mihalopoulos<sup>1</sup>, Julie Ratcliffe<sup>2</sup>, Brendan Mulhern<sup>3</sup>, Mark Yates<sup>4</sup> and Lisa Hann<sup>1</sup>

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#### Background.

Dementia will become the third largest source of health and residential aged care spending within two decades. Therefore, the health care system must ensure that the best quality care is delivered as efficiently as possible to reduce the economic burden. Assessing the cost-effectiveness of interventions for people with dementia, based on cost per quality-adjusted life years (QALYs) gained, requires that the measures used to derive QALYs are preference-based whilst also being valid, feasible to use, comprehensible and acceptable for people with dementia.

#### Aim.

To explore the face and content validity of six preference-based quality of life measures for use in economic evaluations in people with dementia and carers of people with dementia in Melbourne, Australia.

#### Methods.

Focus groups and in-person interviews were conducted with community-dwelling individuals with mild dementia and carers of people with dementia (all severity levels), where 3 quality of life measures were explored in each session. The measures considered in this study are all preference-based and, therefore, suitable for use in economic evaluations. However, two measures (the EQ-5D-5L and AQoL-8D) largely focus on health-related quality of life (HRQoL), two measures (the ASCOT and ICECAP-O) focus on broader aspects of wellbeing and social care-related quality of life, whereas two focus on dementia-specific quality of life (the DEMQOL-U derived from the DEMQOL and AD-5D derived from the QOL-AD). A random mix of one HRQoL measure, one wellbeing measure, and one dementia-specific measure was explored in each session. All sessions were audiotaped and transcribed verbatim. Thematic analysis was used to analyze the qualitative data.

#### Results.

In total, 9 individuals with mild dementia and 17 carers of people with dementia participated across 4 focus groups and 10 in-person interviews. Five broad themes were identified that described barriers and facilitators to eliciting quality of life data via preference-based measures: (1) clarity and simplicity of questions and response options, (2) relevance and comprehensiveness of the questionnaire, (3) context-related aspects (e.g., disease severity, timing, medication) (4) willingness to respond (e.g., disclosing information, feeling judged or offended), and (5) proxy-related characteristics (e.g., ability to complete on behalf of the person with dementia). There was no clear preference for one of the six explored measures; participants identified advantages and disadvantages across all measures. Interestingly, although particularly designed for individuals with dementia, dementia-specific measures were not always favored over non-specific measures.

This study has provided important findings on the perceptions of individuals with dementia and carers of people with dementia towards six preference-based mea-

#### Conclusions.

sures. However, to guide further the selection of measures for research, empirical comparative analyses are necessary.	future	dementia

### A guilty pleasure, or two? Exploring health behaviour profiles and their behavioural determinants and outcomes

Presenting author: C.M. Dieteren<sup>1</sup> Co-author: JN.J.A. van Exel<sup>1</sup>

<sup>1</sup>Health Economics, ESHPM, Erasmus University Rotterdam, The Netherlands

#### Background.

The effect of lifestyle on disease and mortality is increasingly recognized. Engagement in a healthy lifestyle may be influenced by a variety of factors. In this context, health behaviours (SNAP, i.e. Smoking, Nutrition, Alcohol intake, Physical activity) are often studied and addressed in policy separately, while an unhealthy lifestyle can be particularly harmful when unhealthy behaviours are combined. This study aims to contribute to a better understanding of lifestyle choices and to inform comprehensive prevention policies.

#### Aim.

To explore health behaviour profiles in terms of clustering of lifestyle choices and the relation of such choices to the behavioural determinants risk attitude, time orientation and subjective life expectancy and the outcomes subjective health and well-being.

#### Methods.

Data was collected in 2016 through an online questionnaire. A sample of 989 respondents was drawn from a panel to be representative for the population of the Netherlands in terms of age, gender and level of education. Agglomerative hierarchical cluster analysis was applied to identify health behaviour profiles based on SNAP behaviours. Further analyses included ANOVA, chi2 tests and OLS regression. Analyses were conducted in Stata 14.0.

#### Results.

Eight behaviour profiles were identified, which can be combined into four more general groups: the "healthy", "one guilty pleasure", "shiny in one behaviour" and "much to gain" groups. About 8% of the respondents combined all unhealthy choices for SNAP and had "much to gain" in terms of a healthy lifestyle, while almost one third (31%) of the respondents was in the "healthy" group. A poor diet and low physical activity was the largest clustering of unhealthy behaviours (21%).

Unhealthy profiles, and in particular those including smoking behaviour, were associated with lower risk aversion and future orientation. Average subjective life expectancy ranged from 79 years in the "much to gain" to 86 years in the "healthy" groups. Also, healthier profiles were associated with higher subjective health and happiness.

#### Conclusions.

SNAP behaviours cluster in different ways, and a considerable proportion of people adopts a healthy lifestyle. Unhealthy lifestyle choices are related to lower risk attitude, future orientation and subjective life expectancy, as well as lower subjective health and well-being. These findings are similar to those found for separate behaviours, but this study shows that they are most substantial when SNAP behaviours are combined. The causality of these relations requires further study. More attention to combinations of SNAP behaviours in prevention policies seems warranted, as different groups may require different interventions, and addressing shared behavioural determinants may contribute to change in more than one behaviour.

# Measuring outcomes to inform resource allocation - investigating the relationships between health-related quality of life, capability wellbeing and subjective wellbeing in the context of spinal cord injury

#### Presenting author: Lidia Engel<sup>1 2</sup>

Co-author: Stirling Bryan<sup>3</sup> <sup>4</sup>, Vanessa K Noonan <sup>5</sup> <sup>6</sup> and David GT Whitehurst<sup>1</sup> <sup>3</sup> <sup>6</sup>

<sup>1</sup>Faculty of Health Sciences, Simon Fraser University, Canada <sup>2</sup>Faculty of Health, Deakin University, Australia <sup>3</sup>Centre for Clinical Epidemiology and Evaluation, Canada <sup>4</sup>School of Population and Public Health, Canada <sup>5</sup>Rick Hansen Institute, Canada <sup>6</sup>International Collaboration on Repair Discoveries (ICORD), Canada

#### Background.

While current economic evaluations typically embrace 'health maximization' as the maximization objective using quality-adjusted life years (QALYs), there is now an increasing interest in the measurement of subjective wellbeing (SWB) and capability wellbeing for informing policy decisions.

#### Aim.

The aim of this study was to investigate the relationships between health-related quality of life (HRQoL), capability wellbeing, and SWB through direct and mediated pathways within a particular clinical context – here, the context of spinal cord injury (SCI).

#### Methods.

Data were used from individuals living with SCI who previously completed a web-based, cross-sectional survey that included questions about quality of life and secondary health conditions. Path analysis was used, where effects of secondary health conditions were studied simultaneously on HRQoL, capability wellbeing and SWB through direct and mediated pathways. Two separate models were considered; one that measured HRQoL using the EQ-5D-5L (Model 1) and a second model that measured HRQoL using the Assessment of Quality of Life 8-dimension questionnaire (AQoL-8D) (Model 2). Capability wellbeing was assessed using the ICECAP-A, and SWB was based on a single life satisfaction item [0-10 rating scale].

#### Results.

The sample comprised 364 individuals living with SCI, 70% of whom were more than 10 years post injury. Mean scores were: 0.492 (EQ-5D-5L), 0.573 (AQoL-8D), 0.761 (ICECAP-A) and 6.319 (SWB). Beta coefficients indicated that secondary health conditions had the greatest negative impact on individuals' capability wellbeing ( $\beta$ ICECAP-A= -0.480,  $\beta$ AQoL-8D= -0.411,  $\beta$ EQ-5D-5L= -0.375,  $\beta$ SWB= -0.146). Capability wellbeing mediated the effect of secondary health conditions on HRQoL as well as on SWB. The indirect effect of secondary health conditions on SWB through HRQoL was not statistically significant in Model 1 but two indirect effects were found in Model 2, one through HRQoL only and one through both capability wellbeing and HRQoL.

#### Conclusions.

This study has shown that secondary health conditions have different impacts or HRQoL, capability wellbeing and SWB. Our results suggest that the ability of individuals with secondary health conditions to achieve good health functionings de pends on their level of capability. Complementing QALY results with individuals capability wellbeing can better inform economic evaluations, focusing not only or 'observed health' but the 'capability to achieve good health', which takes into ac count personal factors (e.g., impairment) and circumstantial characteristics (e.g.
environment).

### **Parallel Sessions**

### **Friday**



#### Learning priorities: a framework enabling legitimacy and understanding welfare-state worker's creative ways of practicing ambiguous directives in times of austerity

Presenting author: Ann-Charlotte Nedlund<sup>1</sup>

<sup>1</sup>Swedish National Centre for Priorities in Health, Department of Medical and Health Sciences, Linköping University, Sweden

#### Background.

Harold Lasswell (1936) summarized politics into a classical question of who gets what, when and how. This question captures politics in its essence since a key responsibility of the welfare system is to allocate limited resources and provide health and social care and support for its citizens. Also, the allocation of resources entails ideas that are closely connected to the authoritative distribution of public values. The governance of priorities is thus in many ways ambiguous and for welfare-state workers, having face to face meeting with the citizens, there are many pressures that need to be handled, and are thus also handled.

#### Aim.

The aim is to explore forms of learning priorities, including where and how learning occurs among care-managers in four municipalities in Sweden. The paper aims to further broaden the debate on how to understand the practice of priority setting as a way of learning.

#### Methods.

This study is based on 19 interviews with care-managers in four different municipalities in Sweden. The data is analysed by an thematic content analysis.

#### Results.

The study serves as an example of how to practice ambiguous policy directives. It shows that the care-managers encountered various types of pressures that they had to handle, pressures that seldom were in harmony. In order to manage situations, the care-managers interacted, interpreted and negotiated in different locations, and together institutionalised the policy. Learning occurred in this interaction with other actors and was integrated in when grasping, interpreting and constructing what to do.

Conclusions.  Governance of rationing is not a simple act of craftsmanship by an elusive category of "policy makers", rather it is an interactive work of juggling that involves several actors. The study contributes to research on legitimacy when setting priorities by offering a framework of how to understand the crucial process of learning and being creative when handling issues related to priorities in times of austerity and further related to legitimacy.

### Does accountability for reasonableness work? The political realities of priority-setting in the English NHS

#### Presenting author: Katharina Kieslich<sup>1</sup>

Co-authors: Peter Littlejohns<sup>1</sup> and Clare Coultas<sup>1</sup>

<sup>1</sup>School of Population Health & Environmental Sciences, King's College London, UK

#### Background.

Clinical commissioning groups (CCGs) in England were established under new health care legislation in 2012. They are responsible for making decisions on which health care services to fund, and how to prioritise at a local level. Given the continued financial pressures of the National Health Service (NHS), it has been assumed that CCGs will make difficult priority-setting decisions. They provide a good set of cases against which to test some of the dominant theories of fair and legitimate priority-setting, including accountability for reasonableness (A4R).

#### Aim.

To present the findings of a qualitative study on how local commissioners make priority-setting decisions, and on how this is perceived by other stakeholders such as patient and public representatives, with the aim to discuss the implications for frameworks such as A4R.

#### Methods.

The study employed a comparative case study approach. Governance and policy documents of 12 South-London CCGs were analysed using the decision-making audit tool (DMAT) (Kieslich and Littlejohns, 2015), which is based on a social values framework (Clark and Weale 2012), that in addition to the process values of A4R identifies content values through which to assess priority-setting (e.g. costand clinical-effectiveness, and quality of care). The data was triangulated with data from stakeholder interviews that included decision-makers from CCGs, patient and public representatives, and local Healthwatch (the statutory organisations set up to bring the patient and public voice into the commissioning process).

#### Results.

The DMAT proved a useful tool for analysing CCG policy and governance documents. The most prevalent themes arising from the CCG documents were patient and public participation, transparency and quality of care. These themes also featured prominently in the interviews. However, a distinct set of themes emerged from the interviews that the DMAT, and by extension the most prevalent theories about fair and legitimate priority-setting, did not capture. These included themes about the effects of health care reform and concerns about the continuing restructure requirements that are implemented by NHS England, the public organisation that leads the NHS. At a local level, confusion and different interpretations exist about the roles of different actors, their statutory mandates and the ultimate goal towards which the NHS is steering.

#### Conclusions.

At a normative level, priority-setting frameworks such as A4R are useful to hold commissioners and other health care decision-makers to account. However, the results of this study highlight the importance of understanding the political context in which priority-setting decisions are made. Process values presuppose a degree of organisational stability that, in most health systems, is difficult to achieve. This context, along with different conceptualisations of content values such as quality of care, contributes to stakeholder concerns about commissioning roles, mandates and goals. These findings can be explained with political science approaches such as principal-agent approaches. Moreover, the sustained changes in the NHS indicate a possible shift in advocacy coalitions between different actors in the health care system. Approaches such as A4R are necessary, but not sufficient, frameworks for understanding and informing fair priority-setting. Political science offers valuable prisms that can supplement current schools of thought in health prioritisation.

### Priority settings in practice: societal consequences and accountability of governing strategies

Presenting author: Kristine Bærøe<sup>1</sup>

<sup>1</sup>University of Bergen, Norway

#### Background.

Today it is uncontroversial to claim that decisions-makers should be accountable for healthcare distribution and that priority-settings in health should take place in a transparent manner. However, exactly what the decision-makers should be accountable for in practice is much less discussed. And closely related as a crucial prerequisite for accountability, what is the scope of information about the decision-making that should be made transparent to the public? We do expect decision-makers to make reasonable and fair decisions, but how far should we, as citizens and stakeholders, go in requiring justification of the priority decisions and accounts of how these decisions are reached? Ideally, what do we need to know to be sufficiently informed to accept authorities' healthcare prioritisations as legitimate? And realistically, what can we reasonably expect to get to know in terms of a minimum standard of feasible conditions for accountable priority-setting?

#### Aim.

In this presentation, I look into one aspect of a minimum standard for accountability of priority-setting in health. I focus on how priority-setting processes in health are implemented within a broad, social context of distributed powers and I question to what extent governing health authorities should be held accountable for how their decisions influence the order of political control. The over all aim is to explore the scope of justification we should reasonably expect healthcare authorities to have, and to openly expose, when they choose to organise real world, health priority-settings in one particular way rather than another.

#### Methods.

The presentation is based on literature review and normative reasoning and argumentation.

#### Results.

To structure this reflection, I first present a model that i) visualises how priority setting decision-making in health care can occur as different versions of political governing strategies ('democracy', 'technocracy', and 'professionocracy'/rule by the healthcare professionals) and ii) shows how these different versions partly overlap each other within a huge 'grey zone area' of political decision-making calling for further clarification. Second, I describe a variety of procedural conditions and value trade-offs that when combined in different ways cause distinctive distribution of powers and support particular forms of political governance. Finally, I argue that it is not unreasonable to expect health authorities to take the broader societal implications of implemented governing strategies into account when organising priority-setting in practice, as well as to transparently communicate their over all justification for their chosen strategy to allow for critical assessments by stakeholders.

As part of a minimum standard for accountability, health authorities should provide

#### Conclusions.

an account for the chosen priority-setting strategy that a) addresses and justif how it promote fairness, b) exposes central value trade-offs the process is bas on, and c) discusses the expected impact on the distribution of societal powers a political control.		

### The changing role of academic knowledge within Norwegian priority setting advisory commissions

Presenting author: Eli Feiring<sup>1</sup>

<sup>1</sup>Department of Health Management and Health Economy, University of Oslo, Norway

#### Background.

Contemporary policymaking is a complex task and relies on expert advice and scientific knowledge. In the Nordic countries, ad hoc advisory commissions located at the intersection of politics and science play an important role in the preparation of public policy. The government or a ministry may constitute a commission who reports on different salient political issues and publish its findings as an official report. Various stakeholders are invited to be part of the process and the group represents professional experts, authorities and users. Thus, the knowledge provided by these commissions is closer to policymaking than scientific research. A growing reliance on academics in commission work over time is, however, documented.

This trend may be welcomed by proponents of evidence based policy-making, who stress the primacy of science in its relationship to politics and believe that experts should enlighten or even replace politicians in the policymaking on complex issues. Others worry that scientisation processes imply a crowding out of lay influence and in effect, represent a challenge for democratic legitimacy. They see expertise input as part of the political struggle over which view wins out in defining the public interest. This worry is especially salient when policymaking involves explicitly normative or moral considerations: Moral expertise is contested.

To deal with the need for a principles approach to priority setting in Norwegian healthcare, several ad hoc commissions have been appointed. Their reports give advice about guidelines for priority setting and are based on normative frameworks. The reports are recognized as a legal source in Norwegian jurisprudence. The objective of this paper is to better understand the role of expert knowledge in commission work and to examine possible implications for democratic legitimacy.

#### Aim.

Specifically, the paper raises the following questions: Has a growing reliance on academic knowledge affected Norwegian priority setting commissions over time? If so, what kind knowledge has the different priority setting commissions provided (Instrumental; Conceptual; Political-strategic; Procedural)? Do the findings constitute a legitimacy problem?

#### Methods.

The study includes all ad hoc commissions appointed to examining priority setting a healthcare that published a Norwegian Official Report (NOU) and submitted their eport to the Ministry of Health and Care Services (N=3). The study uses the reports a data sources. The following information is extracted from the texts: Members hairmen and secretaries; affiliation; framing of issue; evidence acknowledged; citions. The analysis the commissions' considerations and proposals follows the approach of qualitative content analysis.

#### Workshop

### Using Economic Evidence and Tools to aid Priority Setting for health in Low- and Middle Income Countries

#### Karin Stenberg<sup>1</sup>

Panelists:
Melanie Bertram<sup>1</sup>
Kahsu Bekuretsion<sup>2</sup>
John Wong<sup>3</sup>

World Health Organization, Switzerland
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#### Background.

Quantitative analysis to inform priority setting requires large amounts of data and a strong capacity to produce and analyse results. Through the WHO-CHOICE (CHOosing Interventions that are Cost-Effective) programme, the World Health Organization provides tools and datasets to facilitate health care priority setting processes, with particular focus on low- and middle income countries.

The WHO-CHOICE approach is unique in that it allows comparison of costs and benefits of doing one thing vis-à-vis another (generalized cost effectiveness analysis, or GCEA). The GCEA has major benefits in that it removes constraints related to path dependence. The more traditional incremental cost-effectiveness analyses are restricted to assessing the efficiency of adding a single new intervention to the existing set, or replacing one existing intervention with an alternative. Using WHO-CHOICE, the analyst is no longer constrained by what is already being done, and policymakers can revisit and revise past choices if necessary and feasible. They will have a rational basis for deciding to reallocate resources between interventions to achieve social objectives.

A new WHO Cost-Effectiveness Tool set will be launched in 2018, fully populated with country-specific background epidemiological and economic data and disease projection models that allow country users to model the cost-effectiveness of a wide range of health interventions. This new tool set allows users to conduct GCEA as well as to assess incremental cost-effectiveness for budget increases, depending on the particular policy context.

Once an economic evaluation has been carried out to inform initial discussions around the design of a health benefits package, the OneHealth Tool (OHT) can be used to model out the projected resources needed over a short to medium time frame; to assess health system barriers and capacity constraints for the roll-out, and to project the health gains that will be achieved on a year-by-year basis. WHO is one of many agencies governing the development of the OHT through an InterAgency Working Group. Since the first official version of the Tool was released in May 2012, it has been applied in over 40 countries, most of which in sub-Saharan Africa.

The WHO Cost-Effectiveness Tool and the OHT are linked tools, sharing the same software platform and underlying country databases. Data can thus be transferred from one application to the other, facilitating data entry and consistency in assumptions between the cost effectiveness analysis and the budget impact projections.

Aim.
This session will demonstrate how the WHO-CHOICE Cost-effectiveness and OHI tools have been designed to allow for cost-effectiveness analysis and projections of additional resource needs. The rationale, scope and format of the tools will be presented and discussed. The country level perspective of using these tools to inform priority setting will be discussed. The group will share reflections on the usefulness of these tools, and how this fits into broader priority setting processes.
or these tools, and now this into should priority setting processes.

## Different aspects of an important priority setting criteria comparisons of citizens', health professionals' and politicians' views on severity of ill health

#### Presenting author: Mari Broqvist1

Co-authors: Peter Garpenby<sup>1</sup>, Lars Sandman<sup>1</sup> and Barbro Krevers<sup>1</sup>

<sup>1</sup>Swedish National Centre for Priorities in Health, Department of Medical and Health Sciences, Linköping University, Sweden

#### Background.

Sweden has a democratically, highly regionalized publicly funded health care system. Sweden is also an example of a country where parliamentary decided ethical principles for priority setting have been established, and efforts have been made to operationalize them. According to this decision more health care resources should be allocated to those with the most severe ill health (as long as cost-effective interventions exist and there is no human rights violation). Limited guidance has been given by the Swedish parliament on how to interpret this criteria and in Sweden, as in many other countries, there is an on-going discussion on how to understand the characteristics of the most severely ill and how to weigh different aspects of severity against each other.

It has been argued that when vague ethical principles and criteria for priority setting in healthcare are to be more precisely defined, agreement among different actors may deteriorate. To overcome disagreement and create legitimacy for resource allocation in health care, it has been suggested that different interests should be allowed to contribute with their perspective in the priority setting processes.

#### Aim.

The aim of our study was to compare citizens', health professionals' and politicians' ranking of different aspects of severity, when used in a criteria for resource allocation in health care in Sweden.

#### Methods.

A cross-sectional survey study was conducted using a structured questionnaire on a randomized sample of Swedish citizens and health professionals and on all elected officials (politicians) in four county councils/ regions. The 13 aspects of severity of ill health addressed in the questionnaire originated from aspects described in the governmental bill, and from a previous qualitative study on Swedish citizens' views on aspect important for deciding severity level in resource allocation situations.

Results/Conclusions. This is one of the rare comparisons made between politicians, health professionals and citizens on the issue of priority setting in healthcare. The findings showed that a larger proportion of politicians differed compared to both citizen and health professional respondents, in their views on what aspects are important in characterizing the highest severity. The differences will be presented and drawing on the findings we discuss the potential implications of different views between actors on severity especially in relation to strategies to achieve legitimacy for the setting of priorities in a democratic context.

### Clinical Decision Making in Cancer Care: Current and Future Roles of Patient Age

Presenting author: Eirik Tranvåg1

Co-authors: Trygve Ottersen<sup>2</sup> and Ole Frithjof Norheim<sup>1</sup>

<sup>1</sup>University of Bergen, Norway <sup>2</sup>University of Oslo, Norway

#### Background.

Patient age is among the most controversial patient characteristics in clinical decision making. In personalized cancer medicine it is important to understand how individual characteristics do affect practice and how to appropriately incorporate such factors into decision making. Some argue that using age in decision making is unethical, and how patient age should guide cancer care is unsettled. This article provides an overview of the use of age in clinical decision making and discusses how age can be relevant in the context of personalized medicine.

#### Methods.

We conducted a scoping review, searching Pubmed for English references published between 1985 and May 2017. References concerning cancer, with patients above the age of 18 and that discussed age in relation to diagnostic or treatment discussions were included. References that were non-medical or concerning patients below the age of 18, and references that were case reports, ongoing studies or opinion pieces were excluded. Additional references were collected through snow-balling and from selected reports, guidelines and articles.

#### Results.

347 relevant references were identified. Patient age can have many and diverse roles in clinical decision making: Contextual roles linked to access (age influences how fast patients are referred to specialized care) and incidence (association between increasing age and increasing incidence rates for cancer); patient-relevant roles linked to physiology (age-related change drug metabolism) and comorbidity (association between increasing age and increasing number of comorbidities); and roles related to interventions, such as treatment (older patients receive substandard care) and outcome (survival varies by age).

Conclusions.  Patient age is integrated into cancer care decision making in a range of ways that makes it difficult to claim age-neutrality. Acknowledging this and being more trans parent about the use of age in decision making are likely to promote better clinical decisions, irrespective of one's normative viewpoint. This overview also provides a starting point for future discussions on the appropriate role of age in cancer care decision making, which we see as crucial for harnessing the full potential of personalized medicine.

# Looking Back and Moving Forward: On the Application of Proportional Shortfall in Healthcare Priority Setting in the Netherlands

Presenting author: Vivian Reckers<sup>1</sup>

Co-authors: Job van Exel<sup>1 2</sup> and Werner Brouwer<sup>1</sup>

- <sup>1</sup> Erasmus School of Health Policy & Management, Erasmus University Rotterdam, the Netherlands
- <sup>2</sup> Erasmus School of Economics, Erasmus University Rotterdam, the Netherlands

#### Background.

The increasing demand for healthcare and the resulting pressure on available budgets render priority setting inevitable. If societies aim to improve health and distribute health(care) fairly, equity-efficiency trade-offs are necessary. In the Netherlands, proportional shortfall of quality-adjusted life-years was introduced to quantify 'necessity of care', allowing a direct equity-efficiency trade-off.

Proportional shortfall received broad support from politicians, health economists, and policy makers, and was incorporated into the assessment phase of healthcare decision making. As such, the Netherlands is one of the first countries to explicate the equity criterion in this context.

#### Aim.

The aim of this study is twofold. Firstly, the aim is to describe the history and application of proportional shortfall in the Netherlands and examine the theoretical and empirical support for proportional shortfall as well as its current role in healthcare decision making. Secondly, building on the first aim, to examine how members of the public trade off between preferences for proportional shortfall and age, and to gain insight into the deliberations of respondents during the preferenceelicitation process.

#### Methods.

We reviewed the international literature on proportional shortfall from 2001 onwards, along with publicly accessible meeting reports from the Dutch appraisal committee, Adviescommissie Pakket (ACP), from 2013 to 2016. Subsequently, in December 2017, we presented a survey to a sample (n=1,143) representative of the adult population in the Netherlands in terms of age, gender, and education level.

The survey was based on the findings from the literature review and included six choice tasks and six person-trade-off tasks in which respondents were asked to state a preference between two patient groups with different levels of proportional shortfall and/or ages. To gain insight into respondents' deliberations during the different tasks, respondents were additionally asked to express the level of importance they addressed to the attributes proportional shortfall and/or the age of patients, for their preference between patient groups.

#### Results.

The results of our review indicate that, although consensus has not yet been reached and alternative ways to quantify necessity of care were observed in ACP reports, proportional shortfall is generally supported and since 2015 increasingly applied in the Netherlands because it enables a uniform framework for priority setting across healthcare sectors. However, empirical support for proportional shortfall among the public is limited, as it insufficiently reflects societal preferences regarding age and reducing lifetime-health inequalities. The data of the preference study are being analysed, findings will be discussed during the conference.

# Conclusions.

Despite increasing support among researchers and decision makers, further investigation into refinement of proportional shortfall is required. Adjustment proportional shortfall for age-related preferences appears warranted for operat nalising the equity-efficiency trade-off in healthcare decision making according societal preferences.	

# Can "health system strengthening" be prioritized and/or evaluated? A qualitative case study illustrating the complexities

Presenting author: Beverley M. Essue<sup>1 2</sup>

Co-author: Lydia Kapiriri<sup>2</sup>

<sup>1</sup>University of Sydney, Australia <sup>2</sup>McMaster University, Canada

# Background.

Health systems are critical to the realization of UHC. They are fundamental for implementing sustainable health programs and for providing the necessary infrastructure and resources to achieve population health outcomes. In low income countries (LICs), where there are often meagre resources available for health, the importance of strengthening the health system to ensure it is sustainable and equitable cannot be over-stated. While health system strengthening is a global health priority, there has been little attention given to the evaluation of priority setting (PS) for health system strengthening within LICs, including evaluation of the local capacity to identify and implement priorities that align with this global health objective. Without effective national PS processes, LICs may struggle to prioritise and implement policies that support and further develop their health system, instead reinforcing support for vertical programs. This paper fills this gap in the literature by exploring the complexities of priority setting for health system strengthening, using Uganda as a case study.

#### Aim

To describe and evaluate the complexities of PS for the health system in Uganda.

#### Methods.

A mixed methods design that used the Kapiriri & Martin framework for evaluating priority setting in LICs. The evaluation period was 2005-2015. Document analysis of key health policy and health system strategic plans (n=19) were triangulated with data from interviews (n=58) with global, national and subnational stakeholders. Data were analysed according to the Kapiriri & Martin (2010) framework.

This evaluation used 19/22 framework parameters. The evaluation highlighted challenges in each of the five evaluation domains. Relevant contextual factors, in addition to scarce resources included: weak political leadership to champion for the health system, a culture of aid dependency which reinforced the vertical approach in the health system and a history of corruption that compromised confidence in the PS institutions. Uganda had in place key pre-requisites to support PS including, credible and legitimate institutions and extensive consultation that was perceived to incentivize engagement in PS activities and foster buy in for implementation. However the actual processes were often circumvented by a lack of resources and influential actors with disease focused rather than system oriented interests. There were defined processes with explicit criteria for identifying priority areas, in which evidence has highly valued. But these processes were often compromised resulting in a malalignment between resource allocation and priorities, sub-optimal transparency on decision making and weak accountability for decisions. While health system strengthening was highly valued, the priority setting processes did not result in the implementation of strategies and policies to support this objective. Implement gaps further compromised the integrity of the processes and, in effect, maintained the status quo, stalling progress in the achievement health service and health outcomes.

# Discussion and conclusions.

This evaluation revealed important lessons for Uganda and other LICs on the complexities of prioritizing health system strengthening. It also revealed insights on areas within the PS processes that should be addressed if countries are to be effective in strengthening the core health system Building Blocks and achieving the global and national agenda to build sustainable and equitable health systems.

# What do we do if our priorities don't align? A New Zealand study of health priorities in an institutional context

Presenting author: Corinne Gower<sup>1</sup>

<sup>1</sup>Health Services Research Centre, University of Wellington, New Zealand

# Background.

In the 1990s New Zealand went further than most countries in its efforts to develop comprehensive public sector performance accountability systems. Government health priorities cascade down to New Zealand District Health Boards (DHBs) which, since 2001, have been the institutions held publicly accountable for the funding and planning of health services to a target population and for public hospital operational management. Elective service delivery is closely monitored by a performance regime which financially rewards and publicly recognises DHB achievement of government priorities.

Hybrid institutions are seen as contradictory environments to research because the workforce needs to manage different jurisdictions and reconcile multiple definitions of success and failure. DHBs as hybrid public sector institutions face additional challenges because they depend on a highly specialised professional workforce that is used to autonomous decision making and expects to act in a patient's best interests.

# Aim.

To examine a shift in New Zealand government elective service priorities over a ten year timeframe (2006-2016) and to understand how different DHB managerial and clinical roles have made sense of external priorities and reconciled them with organisational practices.

#### Methods.

The study has used mixed methods. New Zealand government published performance data from 2006-2016 was analysed to identify how an elective surgery heath target and patient flow indicators have contributed to a cultural shift in DHB priorities. Cross-case study interview data was analysed using a blend of neo-institutional theories and an institutional logics perspective.

The study finds that role is influenced by priority compatibility, stakeholder inter-dependence, the level of critical stakeholder support and perceived legitimacy of a priority. DHB managerial roles tend to be strongly influenced by the government's use of targets and indicators whilst clinical roles are ambivalent about performance targets and are more influenced by service improvement initiatives. DHBs have implemented alternative service delivery models and strengthened inter-organisational alliances but it is difficult to observe the impact of these changes in publicly reported performance results.

### Conclusions.

This study highlights the challenges faced by hybrid state sector institutions. There is a need to meet government priorities and preserve legitimacy. Where priorities and practices are not aligned then collaboration, compartmentalisation and integration options are used. If New Zealand wishes to expand its evaluation of health service delivery to include patient-reported outcomes measures (PROMs) then this study suggests there is a need for greater understanding of how priorities are perceived according to role.

# The Directorate of Health's professional role in the preparation and operationalization of priority criteria for prioritizing interventions in the health sector

Presenting author: Kristine Dahle Bryde-Erichsen<sup>1</sup> Co-author: Kjartan Sælensminde<sup>2</sup>

<sup>1</sup>Department of Health Economy and Financing, Norway <sup>2</sup>The Norwegian Directorate of Health, Norway

# Background.

The Directorate of Health is an executive agency and professional authority under the Ministry of Health and Care Services and has the role as an executive agency, as a regulatory authority and as an implementing authority in areas of health policy.

In 2016, the Ministry of Health and Care Services published a white paper on the principles of priority setting in the health care sector in Norway. The Directorate of Health has provided guidance and advice through participation in working groups and by submitting consultation responses to various background documents. The Norwegian Directorate of Health has also helped to administer the prioritization policies by updating the guidelines for economic analysis in accordance to the white paper. The Directorate of Health are responsible for guidelines for economic analysis in the health sector as well as the guidelines for economic analysis of interventions with health effect outcomes, implemented in other sectors.

The white paper states that analyzes of interventions in the health sector should be conducted in an expanded health service perspective. This means that productivity gains are not included. While for health interventions in other sectors, analyzes must be conducted in a societal perspective and include production gains. The white paper states how the severity of the illness is to be measured and how severity should be weighed against the opportunity cost and the cost effectiveness of the intervention. Unlike other sectors, the willingness to pay for health benefits is not public knowledge in the health sector. The white paper also states how future benefits and costs are to be discounted. This is also different from analyzes in other sectors.

There are several examples where interventions involve different sectors. The Directorate of Health has, in the work with both guidelines, attempted to sort between analyses of interventions done in different perspectives.

Aim.  To illustrate the Directorate of Health's professional role in the preparation and operationalization of priority criteria for prioritizing interventions in the health sector.

# The Finnish Social and Health Care Reform 2020 and the Prioritization of Services

Presenting authors: Sari Koskinen¹ and Reima Palonen¹
Co-author: Taina Mäntyranta¹

<sup>1</sup>Council for Choices in Health Care in Finland (COHERE Finland), Ministry of Social Affairs and Health (MSAH), Finland

# Background.

The aim of the Finnish social and health care reform is to transfer the organization of health and social services from the municipalities to the 18 new autonomous counties as of 1 January 2020. At present there are about 200 operators in Finland organizing health and social services (mainly municipalities).

The reform serves to increase customer focus, modernize services and to improve the sustainability of general government finances by reforming the structure, services and funding of publicly funded health and social services. The aim is to provide people with services on a more equal basis, level out differences in health and well-being and to curb cost increases. In addition, basic health and social services will be strengthened, individuals will have more freedom of choice and information technology will be used more effectively across the services.

The counties will be responsible for integrating the services into client-oriented packages and effective service and care chains. This applies to health and social services both at the primary and specialized level. The central government shall have primary responsibility for financing health and social services, and all financing will flow through the counties to the service providers. The municipalities will no longer organize, provide or finance health and social services, but they will continue to have a duty to promote health and wellbeing.

Clients will have a wider range of health and social services from which to choose. The provider of a publicly funded health or social service may be public, private and third-sector operator. Freedom of choice will become the main principle underlying primary level services. Where appropriate, the same principle will also be used in specialized-level health and social services.

In connection with the reform, central government steering of healthcare and social welfare will be strengthened to provide people with equal services. The steering will be based on continuous negotiations between ministries and counties. The steering model is going to be a combination of normative, information-based and resource steering (hybrid model). Council for Choices in Health Care in Finland (COHERE Finland) is in charge for defining the national service basket. It is the main organ for health care prioritization in Finland.

From the beginning of the year 2018 national coordination of Health Technology Assessment (HTA) operations has been given to Finnish Coordinating Center for Health technology Assessment (FinCCHTA). MSAH is also investigating possibilities to steer social services via method assessment.

#### Aim.

The aim of the presentation is to present the current status of the social and health care reform and how the steering of services will be organized in Finland.

The presentation will answer following questions:

- how social and health care services are organized and produced in Finland after 2020
- how they will be financed and how the financial steering works
- how the hybrid steering model works
- how HTA-functions are organized in Finland
- how HTA is used in priority setting
- how priority setting steers health care services
- how the wider freedom of choice needs to be taken into account in steering and priority setting

Methods.	
Non-scientific descriptive presentation.	

# National Quality Indicators to improve Priority Setting in Primary Care

Presenting author: Eva Arvidsson<sup>1 2</sup>

<sup>1</sup>Primärvårdens FoU-enhet, Futurum, Region Jönköpings län; Jönköping Academy for Improvements of Health and Welfare, School of Health and Welfare, Jönköping University; <sup>2</sup>Swedish National Centre for Priorities in Health, Department of Medical and Health Sciences, Linköping University, Sweden

# Background.

According to Swedish law, patients with the greatest need should be prioritised in health care, both in primary care and in hospitals. However, we know that this does not always happen in everyday care. In primary care, it has been increasingly difficult in recent years. One reason is that national authorities have strongly emphasised accessibility for all patients primary care, which also has been monitored with public figures on a national level. In addition, e-health visits (video consultations) are increasing. These visits are largely about simple, self-healing diseases like minor infections. Remuneration to e-health care providers is taken from the joint primary care budget. Moreover Sweden has a shortage of staff in primary care, especially GPs.

This situation has caused an increasing concern among primary care staff that patients with great needs, who might not easily make their voice heard, such as the elderly and people with chronic diseases, are being excluded in favour of those with minor needs.

# Methods.

An attempt to improve the situation is the introduction of national quality indicators for priority setting in primary care. As far as we know, Sweden is the first country to use this method to increase fair distribution of health care. The indicators are developed by doctors, nurses and physiotherapists in primary care. Data is automatically extracted from the medical records and the results are available both on national and local level. The indicators reflect e.g. treatment and follow-up of chronic disease and comorbidity. The main purpose is to inspire and facilitate quality improvement work at the GP practices, i.e. scrutinise and improve routines and working methods at the health centres, as well as find individual patients in need of care.

Results.  Around 50 % of all GP practices now have access to the indicators. So far reports and data from some of them show improvement, i.e. more focus and better accessibility for patients with greater needs.		

# The effectiveness and cost-effectiveness of tobacco control mass media campaigns - a population level analysis in Scotland

# Presenting author: Houra Haghpanahan<sup>1</sup>

Co-authors: Kathleen Boyd², Daniel M Mackay,² Emma McIntosh² Jill Pell² and Sally Haw²

<sup>1</sup>University of Glasgow, UK <sup>2</sup>University of Glasgow/ University of Stirling

Television-based smoking cessation mass media campaigns (MMCs) —as a public health intervention-aimed at preventing uptake of smoking and encourage cessation are an important mode of tobacco control. With vast coverage, they can target specific populations. The aim of this study was to assess the effectiveness and potential cost-effectiveness of anti-tobacco TV advertising MMCs in reducing smoking prevalence.

## Methods.

A different dataset for the Scottish population (2003-2009) was used to examine the reduction in the number of adult smokers due to MMCs. Time series regression with ARIMA error was used. The cost-effective of the MMC intervention in comparison to background quit attempts (do-nothing), was estimated by extrapolating number of quit attempts attributable to MMCs, to 4-week and 52-week sustained quits, calculating an incremental cost per 52-week sustained quitter. Markov modelling was employed for lifetime analysis, reporting the incremental cost per quality-adjusted life-year (QALY) gains.

## Results.

Each month, one increase in television viewer ratings (TVRs) led to 20 additional quit attempts in the Scottish population. Given an average of 243.5 TVRs per month, the MMCs led to an additional 58,440 quit attempts per annum compared to no TV. TV MMC resulted in an incremental 0.003 quits per annum compared to no MMC, with an additional cost of £0.66 per smoker in the Scottish population. The incremental cost per 52-week quitter was £204. The lifetime model which incorporated the future cost of smoking related diseases to the NHS, resulted in a discounted cost saving of £375 per person (95% CI: -£974, -£31) and a gain of 0.018 QALYs (95% CI: 0.0017, 0.048).

Conclusions.  The 1 year outcomes show MMCs to be extremely cost-effective in comparison to a do- nothing, while the lifetime analysis determined MMC to be dominant strategy demonstrate uncertainty in both the cost and QALY outcomes over a wide range or cost-effectiveness thresholds.

# Cost-effectiveness of combined intervention of Long Lasting Insecticidal Nets (LLINs) and Indoor Residual Spraying (IRS) compared with each intervention alone for malaria prevention in Ethiopia

# Presenting author: Alemayehu Hailu<sup>12</sup>

Co-authors: Bernt Lindtjorn<sup>1</sup>, Wakgari Deressa<sup>3</sup>, Taye Gari<sup>4</sup>, Eskinder Loha<sup>4</sup> and Bjarne Robberstad<sup>1 5</sup>

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# Objective.

The effectiveness of Long Lasting Insecticidal Nets (LLINs) and Indoor Residual Spraying (IRS), for malaria prevention, was established in several studies. However, evidence is limited about the additional resources required for a combined implementation (LLIN+IRS) with respect to the added protection afforded. Therefore, the aim of this study was to compare the cost-effectiveness of combined implementation of IRS and LLINs, compared with LLINs alone, IRS alone, and routine practice in Ethiopia.

### Methods.

This study was based on a Randomized Controlled Trial conducted in Adami Tullu district, in Ethiopia, from 2014 - 2016. Markov life-cycle model was employed. In addition, literature-based cost-effectiveness analysis—using effectiveness information from systematic review of published articles was conducted. Costing of the interventions was done from the providers' perspective. The health-effect was measured using Disability Adjusted Life Years (DALYs) averted.

The current trial-based analysis had shown that the routine practice dominates both the combined intervention and singleton intervention. The literature-based analysis had shown that combined intervention had an Incremental Cost-Effectiveness Ratio (ICER) of USD 459 per-DALY averted; and USD 117 per-DALY averted was estimated for LLIN alone. In order for the ICER for implementation of combined intervention to be in a range of 1-GDP per-capital compared with LLIN alone, the malaria incidence in the area should be at least 5.5%, and the protective-effectiveness of combined implementation should be at least 55%.

Based on the current trial-based analysis, combination of LLINs and IRS is less likely to be cost-effective option compared with singleton intervention at Willingness-

### Conclusion.

to-Pay (WTP) threshold of 1-GDP-per capital per-DALY averted. However, based or the literature-based analysis, the combined intervention had potential to be a cost effective alternative. The malaria endemicity and protective-effectiveness were key determinant of cost-effectiveness of the interventions. Therefore, malaria programs should maintain the protective-effectiveness of IRS and LLIN high.

# Economic aspects of social service interventions: the case of Treatment Foster Care Oregon

Presenting author: Johanna Wiss<sup>1</sup>
Co-authors: Åström Therese<sup>1</sup> and Johansson Pia<sup>1</sup>

<sup>1</sup>SBU (Swedish Agency for Health Technology Assessments and Assessments of Social Services), Sweden

# Background.

Societal resources are limited and, in all sectors, there is a need to prioritize between competing programs and interventions. The social services are no exception. An important target group for the social services, that has received much attention, are youth with severe behavioral problems. There are several interventions available for this group that differ with regards to effectiveness and resource consumption. The Swedish Agency for Health Technology Assessment and Assessment of Social Services (SBU) set out to perform a health technology assessment (HTA) of one such intervention, Treatment Foster Care Oregon (TFCO), compared to treatment as usual (TAU). Treatment as usual include residential care and private group care. This presentation focusses on the economic aspects of the HTA.

### Aim.

To assess the relation between costs and effects for TFCO compared to TAU when placing children with severe behavioral problems. This case will be used as the starting point for a broader discussion on economic aspects of social service interventions. For example: What short-term and long-term cost are relevant to consider? What is needed to perform a meaningful cost-effectiveness analysis (CEA)?

#### Methods.

A systematic literature search was performed to identify relevant literature on the economic aspects of TFCO compared to TAU. Program costs were calculated for TFCO as well as for TAU.

Only one study with sufficient quality was found in the economic systematic literature review—a Danish cost benefit analysis (CBA) that presented a positive net present value for youth receiving TFCO compared to TAU over a life-time span. The SBU project meta-analysis presented the effects of TFCO compared to TAU, and showed reduced criminality, reduced substance use, and improved mental health for youth receiving TFCO (follow-up: 12-36 months). The costs of a TFCO placement were, if assuming the same duration of the interventions, somewhat higher than costs of private group care, but lower than costs of residential care. Incremental cost-effectiveness ratios (ICER) were not calculated based on the results from the SBU meta-analysis as treatment effects were expressed as standard mean difference (SMD). Instead, point estimates from an individual study were used to perform a cost analysis to illustrate potential cost-savings of TFCO compared to TAU.

TFCO appears to be more effective regarding some important outcome measures

# Conclusions.

and is not always costlier than TAU. To evaluate the cost-effectiveness of TFCO an similar interventions, valid outcome measures need to be presented. There is als a need to know decision-makers' willingness to pay to avoid e.g. criminality an substance abuse.		
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# Evaluation of complex interventions: MoRE lessons learnt and ways forward

# Presenting author: Ana Duarte<sup>1</sup>

Co-authors: Rita Faria<sup>1</sup>, Bryony Beresford<sup>2</sup>, Fiona Aspinal<sup>3</sup>, Rachel Mann<sup>2</sup> and Helen Weatherly<sup>1</sup>

<sup>1</sup>Centre for Health Economics, University of York, UK <sup>2</sup>Social Policy Research Unit, University of York, York, UK <sup>3</sup>University College London, UK

# Background.

Complex interventions are widely regarded as difficult to evaluate given their multiple components and multi-dimensional benefits. Reablement is an example of a complex intervention. Reablement involves professionals from multiple backgrounds working together to help people retain or regain the ability to live at home independently whilst reducing the need for health and social care services.

#### Aim.

The Models of Reablement Evaluation (MoRE) project aimed to evaluate the effectiveness and cost-effectiveness of different ways to provide reablement in England (reablement models). This presentation reports the results of the economic analysis, reflects on the findings and suggests ways forward for future evaluations of complex interventions.

#### Methods.

We conducted a prospective cohort study comparing three reablement models. We developed a new questionnaire to collect data from service users at entry into the reablement service, discharge and 6 months post-discharge. The questionnaire covered socio-demographics, quality of life (EQ-5D, ASCOT), resource use and costs and informal care time. We examined the patterns of costs over time by sector (hospital costs, community health care costs and social care costs), and investigated their predictors using regression analysis.

The questionnaire was completed well by service users and provided good quality data to calculate quality of life, resource use, and costs over multiple time points. Based on the regression analysis, we found that the type of provider (outsourced vs. in-house) was statistically significantly associated with higher hospital costs but lower social care costs. This may reflect differences in the case-mix that out-sourced providers tend to receive that we were unable to control for, or differences in the way that reablement is delivered and its implications for service use. Other statistically significant predictors of costs during reablement were socio-demographics (age, gender, perceived wealth, housing tenure, region's level of wealth), co-morbidities, and the problem leading to reablement. A full cost-effectiveness analysis was not possible due to under-target recruitment.

In the context of limited data, an economic analysis provides valuable evidence on

## Conclusions.

the feasibility of data collection and suggests the most important predictors of costs and quality of life that should be included in future evaluations. Given the challenges in the evaluation of complex interventions, we suggest that future evaluations require creative thinking, innovative solutions and flexibility in data collection and analytical techniques applied in order to undertake well-controlled studies.

### Panel session

# WHO CHOICE: global evidence to support country solutions

# Melanie Bertram<sup>1</sup>

Panelists:

Karin Stenberg<sup>1</sup>, Jeremy Lauer<sup>1</sup> and Kjell Arne Johanssen<sup>2</sup>

<sup>1</sup>World Health Organization, Switzerland <sup>2</sup>University of Bergen, Norway

# Background.

The heads of state approved the Sustainable Development Goals at the UN General Assembly last September 2015. The health SDG has eight sub goals which carry over the unfinished agenda of HIV, tuberculosis, malaria, maternal and child health and in addition now addresses non communicable disease and injuries. Universal health coverage (UHC) is sub goal number eight that seeks to ensure that all people will have access to an essential set of services and will not suffer financial catastrophe when accessing the services. In this context, UHC serves as an overarching mechanism for achieving the other health sub goals while providing financial protection.

In order to achieve the Sustainable Development Goals, the two main health-financing challenges are how to raise more resources to support the interventions that need to be implemented, and how to prioritize and get the best value for money for current AND future resources. This requires analysis of the efficiency of the current benefit package (allocative efficiency) and of the delivery of that benefit package (technical efficiency) in order to avoid the 20-40% waste seen in many health systems.

The Department of Health Systems Governance and Financing, and in particular the Economic Analysis and Evaluation Unit (EAE) has a long standing and worldwide recognised expertise in the field of economic evaluation, and the team produces global public goods including methods guidelines, tools, predictive models and price databases for the explicit purpose of modelling efficiency and resource needs. Predictive models such as those developed by EAE play a key role for allowing decision makers to look at future priorities and better anticipate critical changes that should be considered when developing health policies, strategies and reform processes.

WHO's Choosing Interventions that are Cost-Effective (CHOICE) programme has been a global leader in the field of economic evaluation, specifically cost-effectiveness analysis for almost 20 years. Cost-effectiveness analysis plays two roles in the global health landscape, firstly as a quantitative assessment of allocative efficiency within a health system, supporting priority setting processes, and secondly through analysing the value for money of alternative investment options in the decision-making process. Combined, these applications can ensure an optimal use of financial resources within the health care sector, ensuring the greatest health gain possible is achieved given the fiscal space for health.

The WHO-CHOICE programme, based at WHO since 1998, uses a form of "generalized" cost-effectiveness analysis that serves the needs of priority setting in the health system, more so than decision making which draws on "incremental" cost-effectiveness analysis. We distinguish the two applications of cost-effectiveness analysis because the former asks the question, What is the best that can be done, in the long run, relaxing all constraints? Whereas decision-making asks the question, What is the best thing to do now within the current political environment and available fiscal space?

This panel will present the new 2017 CHOICE results for three major disease groupings — non-communicable diseases, maternal neonatal and child health and HTB and malaria, exploring different applications of the CHOICE analyses and a storal analysis across 20 disease and risk factor areas, using a common methodolo will be presented. Finally, we will present a country application of the toolkit Ethiopia.	

#### Panel session

# A panel discussion how to base health priorities in Zambia on the Sustainable Development Goals

# Jens Byskov<sup>1</sup>

Co-authors: Joseph Zulu<sup>1</sup> and Adam Silumbwe<sup>1</sup>

Panellists: With several

<sup>1</sup>School of Public Health, University of Zambia, Zambia

# Background.

The ever increasing evidence and technical developments supporting population health have not yet reached the goal of health for all. The decision making for population health has not led to optimally accountable, fair and sustainable solutions. Technical experts, politicians, managers, service providers, community members, and beneficiaries each have their own values, expertise and preferences, to be considered for necessary buy in and sustainability.

- National democracies result in policy based choices that are not necessarily helpful at implementation and community levels
- Evidence may just show the evident that if one comprehensively addresses a particular disease burden it does decrease, but limits other action
- The Sustainable Development goals include democratic processes in their formulation, but the targets still tend to receive funding from conventional competing sectors and programs

Evidence is required to contribute to national social-economic development through achievement of Zambia's Sustainable Development Goals (SDG). Recently the World Health Organization has launched the initiative to include health in all policies. The health sector can contribute to but not alone reach the health targets in the sustainable development goal number three. Is then a balance is needed of the roles and resource requirements of the health sector for service based contributions to population health.

Is it an ethical necessity to focus on Universal Health Coverage (UHC), for health care. This remains the core business and resource need for the health sector. However, it is also an ethical imperative for the health sector to advise on action impacting on population health of other sectors and partners based on their resource base for supporting the SDGs. If so this places population health expertise in the centre of the SDG priority setting and can through the HMIS provide one of the strongest routine monitoring systems for combined impact achievement of all SDGs.

Recent health systems assessments have been factored into the latest national health strategic plan. However other health systems project preparatory assessments provide a background to discuss whether latest health research results, health systems assessments and strategy developments are sufficiently consistent.

Health Research in Zambia has over the last decades been much extended and broadened its scope. At the same time the health sector has undergone several changes. Both areas have been influenced by similar regional and global developments and changes. Zambia as a case is therefore able to document and compare in some detail how these elements have or have not developed in coordination, most recently in relation to main principles of the SDGs.

We shall draw on selected Zambian examples of studies and programmatic sector developments.

#### Aim.

To assess whether the Sustainable Development Goals (SDGs) should stood as a game changer for the health sector to increasingly engage in a collaboration for achieving population health improvement.	

# Assessing value in health care: the horizon of existing frameworks

Presenting author: Brayan V. Seixas<sup>1</sup>

Co-authors: Tania Conte<sup>2</sup>, François Dionne<sup>3</sup> and Craig Mitton<sup>1 2 3</sup>

<sup>1</sup>School of Population and Public Health, University of British Columbia, Canada <sup>2</sup>Centre for Clinical Epidemiology& Evaluation, Vancouver Coastal Health, Canada <sup>3</sup>Prioritize Consulting, Canada

# Background.

The alarming scenario of continuous growth in health care expenditures worldwide over the past decades has led researchers and decision-makers to pursue novel strategies to maximize efficiency in the process of priority-setting and resource allocation. However, in order to choose efficient pathways of investment, it is firstly crucial to determine the value (in the sense of health outcomes achieved per dollar spent) of services, drugs, devices and processes used in health care systems.

#### Aim.

The present work seeks to answer the following question: What approaches have been used to assess the value of health care interventions for the purposes of reallocating resources from low-value areas of care to perceived higher value areas?

# Methods.

In order to answer our research question, we conducted a systematic literature review and a gray literature search, looking for actual cases of value measurement as opposed to theoretical frameworks. The peer-reviewed literature search yielded 1176 results. After a two-stage screening process, we applied our data extraction tool in 38 articles. In addition, the gray literature review consisted of two strategies. First, a search was conducted on the websites of institutions found in previous systematic reviews to gauge some degree of work in disinvestment/reassessment; and second, we explored the websites of highly reputable HTA agencies and other relevant organizations in search of any pertinent piece. A total of 1390 documents were identified, of which 52 qualified for full review.

23 distinct approaches to assess the value of health care interventions were found among the 38 articles obtained from the systematic review. For these approaches, we developed a classification system based on four questions: (1) Is the method to measure benefits based on one consideration or multiple considerations? (2) Should the considerations/criteria be disease-specific or generic? (3) Should considerations/criteria be more process-related as a proxy for outcomes or should they be patient-focused outcomes? (4) What input should be sought to measure performance and what is the 'evidence' that should be accepted? Thus, we found that 19 (out of 23) use multiple criteria, 13/23 use criteria that are disease-specific, 18/23 focus on outcomes-oriented criteria and 13/23 have performance measurements that are mostly-data driven. In turn, in the gray literature search, empirical work related to value assessment was few and far between. We highlight two particularly promising approaches: the disinvestment/reassessment frameworks developed by OSTEBA and Avalia-T.

## Conclusions.

Three main messages emerge from our findings. First, there is widespread interest amongst health care providers and funders in improving value assessment due to growing financial pressures. Second, although cost-effectiveness analysis (a single criterion approach) is still the most widely used and cited method, the majority of the 23 frameworks identified utilize multiple criteria, reflecting the fact that decision-makers typically face a broad set of objectives when assessing value. Lastly, the definition of what should be included in value has expanded significantly, including other types of evidence. Overall, our findings indicate that there is no single approach likely to apply in most situations and that a diversity of tools is necessary to account for the multiplicity of outcomes and specific objectives in health care systems.

# 'Economic' ideas?: 'valuation', 'efficiency' and 'opportunity cost' and their meanings in practice

Presenting author: Neill Booth<sup>1</sup> Co-author: Stephen Birch<sup>2</sup>

<sup>1</sup>Faculty of Social Sciences, University of Tampere, Finland <sup>2</sup>Centre for the Business and Economics of Health (CBEH), University of Queensland, Australia

# Background.

Priority-setting processes typically combine evidence and values in order to reach decisions about relative value. Economic ideas, and economic evidence, relating to 'valuation', 'efficiency' and 'opportunity cost' are thought by many to be important for such processes. However, different approaches to using economics exist, leading to some confusion about what the most appropriate roles for 'economic' ideas might be in priority setting.

#### Aim.

The objective of our presentation is to clarify the terminology and clarify the meanings of different 'economic' approaches. Our study reviews the meaning, and interpretation, of 'health-economic evaluation' aimed at informing prioritisation processes. We do this due to what can be seen as a misapplication or abuse of some 'economic' terminology surrounding health-economic evaluation in general, as well as when referring to 'valuation', 'efficiency' and 'opportunity cost' in particular.

#### Methods.

We use a seminal article as a starting point and then used a variety of search techniques, including bi-directional citation searching, to obtain evidence relating to the study objective. We perform a critical review, mainly covering the last 50 years of literature. We summarise three main 'economic' approaches used in 'health-economic evaluation', then provide a clarification, and an assessment, of some of the related terminology.

Although economic concepts relating to health-economic evaluation are defined in a variety of ways, we find that some process of 'valuation' is fundamental to all approaches in practice. We describe how three main approaches: the extra-welfarist, the welfarist, and the classical, tend to be practiced, promoted and understood. Central to these three approaches are differences in the way in which valuation occurs: e.g., what 'efficiency' means or does not mean, and what 'opportunity costs' are taken into account or are left out. We find that differences in the meaning of these terms, and of other terminology related to economic evaluation, is, at least in principle, important for priority setting.

# Conclusions.

Our critical review provides those interested in prioritisation with a timely reminder that economic terms can, and should, be thought of as largely context- and content -specific. Indeed, economic approaches are, perhaps, best understood in relation to their congruence with any objective(s) of the healthcare system in question, as well as in relation to each healthcare system's budgetary or resource capabilities. Instead of one single approach to economics, there are at least three main, but somewhat conflicted, approaches. All three approaches have something to offer priority-setting processes, but they also all have their limitations. Given the variation within the 'health-economic evaluation' sub-discipline of economics, plenty of thought should always be given to what 'economic' ideas might really mean in practice.

# In search of Sweden's cost-effectiveness threshold

Presenting author: Jonathan Siverskog<sup>1</sup>
Co-author: Martin Henriksson<sup>1</sup>

<sup>1</sup>Centre for Medical Technology Assessment, Department of Medical and Health Sciences, Linköping University, Sweden

# Background.

Incremental cost-effectiveness ratios, the typical main result of health economic evaluations, have to be compared to a cost-effectiveness threshold in order to determine whether an intervention is cost-effective or not. Depending on perspective, cost-effectiveness thresholds may represent either a population's willingness to pay for health gains or the marginal cost at which healthcare is generating health. For Sweden, and many other countries, there is no empirical estimate of the latter kind. This is a problem, since without one, we cannot really say whether reimbursement decisions or other prioritisation decisions are expected to increase population health, or decrease it by displacing other more productive healthcare services. Since such decisions are likely to be made by decision makers with limited control over what is going to be displaced, it would seem appropriate to use aggregate level data to form expectations about the productivity of displaced services. However, this task is complicated by the bidirectional nature of the relationship between healthcare expenditure and health outcomes.

#### Aim.

The aim of this study is to investigate the viability of estimating the cost-effectiveness threshold for healthcare in Sweden using publicly available data on aggregate expenditure and mortality.

#### Methods.

In this study, we analyse the relationship between years of life lost per capita and healthcare expenditure per capita. We use publicly available data with annual frequency to construct a nation-level time series for 1970-2016 and a panel for 2003-2016, including data for twenty regional councils. The time series is used to estimate a vector autoregressive model, where we test for cointegration and causality using the Johansen and Granger tests, respectively. The panel data set is analysed using two-stage least squares regression. We consider a number of instrumental variables reflecting exogenous shocks to councils' costs and labour market conditions to address the issue of endogeneity.

Our time series approach reveals a negative long-run relationship between healthcare expenditure and life years lost. However, the results indicate that decreases in mortality are causing increases in expenditure, rather than other way around, which might be interpreted as longevity driving healthcare costs. Analysis of our panel data set points to a positive relationship between years of life lost and healthcare expenditure, which is consistent with higher spending in regions with an older population, or simply poorer health. When instrumenting for expenditure, we find a negative relationship, which translates to a marginal cost per life year of 367 thousand SEK in 2016. This estimate varies wildly with the set of instruments, however, and none of the instruments considered are sufficiently strong to generate reliable or significant estimates.

There are many different channels through which healthcare expenditure and mortality influence each other. Our regression analyses reveal some of these, but fail

# Conclusions.

to uncover the one relevant for the estimation of a cost-effectiveness threshold Therefore, in lack of some ingenious (and exogenous) instrument, our provisiona conclusion must be that Sweden's cost-effectiveness threshold is not to be found using aggregate level data.			

# A comparative study on willingness to pay for prophylactic vs ondemand treatments in a Swedish context

Presenting author: Ellen Wolff<sup>1 2</sup>
Co-author: Sofie Larsson<sup>12</sup>

<sup>1</sup>The Public Health Agency of Sweden, Sweden <sup>2</sup>Department of Medicine, Health metric unit, Sahlgrenska Academy, Gothenburg University, Sweden

# Background.

In health economic evaluation an intervention is considered cost effective if it, in comparison to the next best treatment, has a cost per quality-adjusted life year (QALY) that is lower than the willingness to pay threshold. Willingness to pay usually differs depending on the severity of disease. However, society may value on-demand treatment differently than prophylaxis, since events occurring in the future, i.e., preventive measures as prophylaxis, should be valued less according to economic theory. In order to prioritize between health care interventions, it is important for decision makers to know the societal value, measured as willingness to pay, for different types of health care.

#### Aim.

The aim with the study is to investigate whether the willingness to pay in society differ between interventions that may prevent a future disease (prophylactic treatment) compared to an intervention that has a direct effect (on-demand treatment) on a disease. Result from this study will be helpful for decision makers that evaluate cost-effectiveness from different treatments or interventions.

#### Methods.

We constructed a survey that asked respondents about their willingness to pay out-of-pocket for interventions that either treats or prevents a disease. Respondents were part of a project at the Public Health Agency where they respond to surveys once a month concerning different public health issues. This group is randomly selected, and can be considered a representative sample of the Swedish population. The survey described a skin disease, where the severity of disease and the risk reduction with on-demand treatment or prophylaxis differed. Respondents were asked to indicate how much they were willing to pay, out-of-pocket, to access on-demand treatment or prophylaxis treatment.

We used regression analyses to investigate if the willingness to pay differed between prophylactic and on-demand treatment, with a dummy variable indicating when it was a prophylactic treatment. The econometric analyses were performed in Stata. The dependent variable was the indicated willingness-to-pay divided with the risk reduction. The independent variables included, among others, the severity of disease, gender, age, and socioeconomic background variables to control for individual characteristics among the respondents.

#### Results.

Results on the comparative study on willingness to pay for prophylaxis in comparison with on-demand treatment are not yet finalized. However, from studying the collected data, we can conclude that the severity of disease had a great impact on the amount of out-of-pocket payments, which is in line with theory. The results from the analyses will be presented in full at the conference.

Conclusions.			
The results from this study	are of interest to I	health economists a	nd other related

fields. It can also be a support for decision makers in their budget process, and when they assess cost-effectiveness for different treatments and interventions.		

# How would low-income communities prioritize Medicaid spending?

# Presenting author: Susan Dorr Goold<sup>1 2 3</sup>

Co-authors: Myers CD<sup>4</sup>, Szymecko L<sup>1 2</sup>, Kim HM<sup>5</sup>, Salman C<sup>1 2</sup>, Fendrick AM<sup>1 2 6</sup>, Kieffer E<sup>2 7</sup>, Danis M<sup>8</sup>and Rowe Z<sup>9</sup>

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# Background.

Budget constraints pose difficult tradeoffs about who is eligible for Medicaid - the health coverage provided to some low-income and disabled Americans - and what Medicaid funds will cover. Federal and state lawmakers are considering changes in eligibility, scope of services, cost-sharing, work requirements and other features, and perhaps how the federal government shares in the cost of Medicaid with states and beneficiaries. The insights, experiences, priorities and concerns of those most affected by decisions about Medicaid should inform policies.

#### Aim.

We report how minority and underserved community members prioritize tradeoffs between Medicaid eligibility, coverage, and cost-sharing before and after informed group deliberations.

# Methods.

Academic-community partners adapted the CHAT (CHoosing All Together) exercise to engage low-income community members in Michigan in setting priorities for Medicaid. Sessions began with a video that answered basic questions about Medicaid, e.g., Who pays for it? Who is covered?

Data collected included demographics, knowledge and attitudes about health insurance and Medicaid, individual priorities before and after group deliberations, and group priorities.

We estimated independent associations between each post-deliberation priority selection for each spending category, and various individual-level (e.g., demographics) and group-level characteristics (e.g., urban vs. rural) using a multi-level logistic regression model.

## Results.

Low-income participants ranged from 18 to 81 years old ( $\bar{x}$ =48.3); 61.6% were women and 64.6% self-identified as minority race or ethnicity. Most (65.9%) had a chronic condition.

Before CHAT, most participants prioritized expanded Medicaid eligibility and a broad range of covered services.

Nearly all (86.4%) deliberation groups chose levels of eligibility comparable to expanded Medicaid. Meds and Supplies, Mental Health, Dental Care, Hospitals, Primary Care, Home Care, Hospice, and Emergencies were also selected, at least at the minimum level, by nearly all groups. Priority for community health, equity, and quality varied across groups. Groups gave less priority to facility care, transportation, and telehealth.

Deliberating in groups caused individuals to increase allocations to Who is Covered (eligibility) (Mean change in markers allocated=0.16, p<.01), Medications and Supplies ( $\bar{x}$ d=0.17, p<.01), and Mental Health ( $\bar{x}$ d=0.14, p<.05), and decrease allocations to Specialty care ( $\bar{x}$ d=0.16, p=.01), Healthy communities ( $\bar{x}$ d=0.20, p<.05), and Primary care ( $\bar{x}$ d=0.17, p<.05). Most accepted daily copays for elective hospitalization (71.6%) and restricted access to specialists (60.2%). Some demographic characteristics were associated with initial priorities. For instance, African-Americans allocated less to Medications and Supplies and Specialty care, but more to Primary Care than non-Hispanic whites. Those with chronic conditions, compared to those without, allocated more to Specialty care and less to Dental care.

# Conclusions.

Low-income, minority community members in Michigan prioritized expanded eligibility and broad service coverage. Deliberation increased the priority given to eligibility, medications, and mental health.

# Analysis of stakeholder participation in priority setting in three districts in Uganda: Who is in and who is out?

# Presenting author: Donya Razavi<sup>1</sup>

Co-authors: David Cyrus Okumu<sup>2</sup> and Lydia Kapiriri<sup>3</sup>

<sup>1</sup>Health Policy, McMaster University, Canada <sup>2</sup>School of Public Health, Makerere University, Uganda <sup>3</sup>Health, Aging & Society, McMaster University, Canada

# Background.

Stakeholder participation is relevant in strengthening priority setting processes for health worldwide because it allows for inclusion of alternative perspectives and values which can enhance the fairness, legitimacy, and acceptability of decisions. Low-income countries operating within a decentralized system recognize the role played by sub-national administrative levels such as districts in prioritization processes for health. In Uganda, decentralization is a vehicle to facilitate stakeholder participation. However, there is a paucity of literature on discrepancies between mandated structures for participation, as required in Uganda, and actual participation at the district level for a full range of stakeholders, especially vulnerable groups.

#### Aim.

To examine district level decision makers' perspectives about participation of different stakeholders, including challenges related to their participation. We further seek to understand the leverages which allow these stakeholders to influence the priority setting process.

### Methods.

This was a qualitative study involving interviews and document review. A total of 27 district level decision makers, from three districts in Uganda, were interviewed.

# Results.

Respondents identified the following key stakeholders: politicians, technical experts, donors, NGOs, cultural/traditional leaders, and the public. Politicians were found to have the strongest influence over PS, followed by technical experts and donors, then NGOs, and finally cultural/traditional leaders and the public. The main leverages for politicians were control over the district budget and support of their electorate

However, the potential for competing interests between political priorities and evidence-informed priorities was a challenge to their participation. Expertise was a crosscutting leverage for technical experts, donors, and NGOs. While financial and technical resources were leverages for donors & NGOs. Cultural/traditional leaders' leverages included cultural knowledge and influence over their followers. The public's leverage is indirect and exerted through their electoral power. Respondents made no mention of participation for vulnerable groups. The public, particularly vulnerable groups are left out of the PS process for health at the district.

The strength of a stakeholder's leverage affects their level of influence over the PS

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process. Power imbalances between the identified stakeholders shape the exten to which they can influence PS. Therefore, stakeholders holding less power are sys tematically excluded.			
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# Participation of Vulnerable Women in Priority Setting Process in Tororo District, Uganda

Presenting author: Donya Razavi<sup>1</sup>
Co-author: Lydia Kapiriri<sup>2</sup>

<sup>1</sup>Health Policy, McMaster University, Canada <sup>2</sup>Health, Aging & Society, McMaster University, Canada

# Background.

Relevant stakeholder participation in priority setting within health systems is thought to lead to legitimate, more acceptable decisions. However, the majority of the literature focuses on the concept of stakeholder participation for priority setting in high-income countries with little emphasis placed on participation of vulnerable populations in highly resource constrained setting. In practice, participation of vulnerable populations in low income countries (LICs) may present a variety of unique challenges.

#### Aim.

To understand, from the perspective of both district decisionmakers and rural women, how vulnerable women in low-income countries (LICs) are currently being engaged in priority setting processes for health.

To establish how these women can meaningfully participate in priority setting for health, from the perspective of both women and district decision makers.

# Methods.

This was a qualitative case study. Semi-structured interviews were conducted with decision makers at the district (12 District Health Management Team members) and sub-county (10 sub county decision makers), and with 35 vulnerable women living in rural villages in Tororo District in Uganda. Coding was done using QSR NVivo 11 software and conventional content analysis was used identify emerging themes.

# Results.

Decentralization in Uganda provides for participatory structures; namely, the local council system. Perceptions of participation vary depending on the administrative level. At the village level, women appear to be more actively participating in both formal and informal meetings, including local council meetings, than men.

However, at the sub county and district administrative levels, it was reported that not only do men participate more, but also men are perceived to be the group that ultimately makes decisions. District and sub county level decision makers identified that vulnerable groups were either underrepresented or not being meaningfully engaged in setting priorities for health within the district. A variety of barriers prevent vulnerable women living in rural settings in Tororo from effectively participating in local decision-making processes. These barriers will be presented from the different stakeholder perspectives; specifically, barriers identified by the rural women, juxtaposed with those presented by the district decision makers. Barriers to participation include lack of knowledge (education/literacy), lack of information about participation (rights/opportunities), transport (distance/cost), hunger, lack of feedback, perceived laziness/disinterest, lack of incentives, & poverty.

Conclusions.
While there are significant barriers to participation in this setting, existing participatory structures can be strengthened since decentralization is designed to address many of the identified barriers. Incentives for participation may not be necessary if the public feels like their views are heard and valued, and that when they do participate, their voices affect change.

# Ideas in practice: Validating and applying a framework for evaluating priority setting in low income countries

Presenting author: Lydia Kapiriri 1

<sup>1</sup>McMaster University, Canada

While there has been progress in developing frameworks to guide priority setting for health interventions in LICs, there has been limited discussion on how to evaluate priority setting within low income countries (LIC). Moreover, frameworks that are developed without input or validation from the potential users may fail to achieve buy in and eventual use. Kapiriri & Martin (2010) developed a framework to evaluate priority setting in low income countries. This paper describes the process of validation of the framework – its quality indicators (parameters) and means of verification- and its application at the global level as well as potential users in low income countries.

The specific objectives of this presentation are to:

- 1) Describe the validation process and findings.
- 2) Based on case studies (HIV, Emergencies, New technologies) Where the frameworks was applied, discuss the strengths, limitations and key lessons that can be shared with regards to the application of the evaluation framework.

#### Methods.

Multi- methods approach involving cross-sectional, follow-up and exit interviews, review of documents and newspapers.

#### Results.

The framework was well accepted at the global and the LIC context, almost all the quality indicators were deemed relevant to evaluating priority setting within these contexts. The data requirements were all accessible. In applying the framework to different cases of priority setting, the framework was found to be robust yet flexible enough to be applied across different programs within the health sector. While it was relatively easy to access the information related to the contextual, pre- requisite and priority setting process; information on the implementation and impact of priority setting on the priority setting institution, as well as the health system was not always easily accessible.

Conclusions.  The framework enabled us to assess the degree to which priority setting was successful. The accessibility of the information required to evaluate priority setting using the framework makes it accessible to decision makers in LICs. However, while the means of verification are accessible, they require that evaluation is integrated into the initial stages of the priority setting process to ensure that the necessary information is collected.

# Rationing non cost-effective treatment through withholding and withdrawing treatment – is there an ethical difference?

Presenting author: Lars Sandman<sup>1</sup>
Co-author: Ian Liliemark<sup>2</sup>

<sup>1</sup>Swedish National Centre for Priorities in Health, Department of Medical and Health Sciences, Linköping University, Sweden <sup>2</sup>SBU, Stockholm, Sweden

#### Background.

In health-care priority setting, decision makers sometimes end up with decisions not to reimburse available treatment due to lack of cost-effectiveness. This implies that patients will be withheld access to such treatment. However, for different reasons, patients might already have access to treatment, through inclusion in a clinical study, taking part in a compassionate use program or through some other access route. Should such treatment then be withdrawn from patients? Among professionals there seems to exist a fairly strong attitude that there is a crucial ethical difference between withdrawing and withholding treatment for patients, based on empirical findings about loss aversion. In a recent study from the Netherlands it was shown that both the public and policy makers did find it more difficult to withdraw than to withhold treatment, resulting in accepting a higher cost per QALY for treatments with which patients are already treated. Several different strands of thought can be relevant in relation to this issue: consequences for equality and fairness, emotional impact on professionals and patients, relationship to the doing vs allowing distinction, professional duties and promises to the patient, professional character and its impact on the issues etc.

Aim.

To present and discuss different perspectives on the ethical difference between withdrawing and withholding treatment for cost-effectiveness reasons.

Methods.

Normative analysis.

#### Results.

Even accepting the doing-allowing distinction it does not lend any support to the distinction between withholding and withdrawing treatment. That it would be unfair to withdraw but not withhold treatment would only find support in some version of a libertarian theory of justice, something which is hard to align with the general distributive principles of a welfare based health-care system. That withdrawing treatment would break an explicit or implicit promise to or contract with the patient or a professional duty to care for the patient in one's care could perhaps give some support to a distinction. First, it is difficult to see why duties or promises to patients would include not withdrawing treatment but would accept withholding available treatment. Third, professional duties involve also duties to patients in general in terms of fair distribution of scarce resources. This could also be related to the professional character, if professionals find it more difficult to withdraw treatment, it is explored whether this could be viewed as a flaw in character rather than a commendable character trait. Finally, we explore the distinction from a consequentialist perspective and argue that to the extent withdrawing treatment actually give rise to more suffering etc., this should be taken into account and needs to be balanced by a better use of resources. In essence, this could require that some criteria for alternative use are fulfilled in order to accept withdrawing treatment.

#### Conclusions.

between withdrawing and withholding treatment for cost However, accepting some differences between the two coul to combine early access with information about possible who to make promises that prevent later withdrawal. Further must be convinced that there is an alternative use of resour extra cost of withdrawal.	effectiveness reasons. d require professionals ithdrawal later on, i.e. more, decision-makers

# Discrepancy between health care rationing at the bedside and policy level

### Presenting author: Emil Persson<sup>1</sup>

Co-authors: David Andersson<sup>1</sup>, Lovisa Back<sup>1</sup>, Thomas Davidson<sup>2</sup>, Emma Johannisson<sup>1</sup> and Gustav Tinghög<sup>1 2</sup>

<sup>1</sup>Department of Management and Engineering, Division of Economics, Linköping University, Sweden

<sup>2</sup>Swedish National Centre for Priorities in Health, Department of Medical and Health Sciences, Linköping University, Sweden

#### Background.

Whether doctors at the bedside level should be engaged in health-care rationing is a controversial topic that has spurred much debate. From an empirical point of view, a key issue is whether there exists a behavioral difference between rationing at the bedside and policy level. Psychological theory suggests that we should indeed expect such a difference, but existing empirical evidence is inconclusive.

### Objective.

To explore whether rationing decisions taken at the bedside leve are different from rationing decisions taken at the policy level.

#### Method.

Behavioral experiment where participants (n=573) made rationing decisions in hypothetical scenarios. Participants (medical and non-medical students) were randomly assigned to either a bedside or a policy condition. Each scenario involved one decision, concerning either a life-saving medical treatment or a quality-of-life improving All scenarios were identical across the bedside and policy condition except for the level of decision making.

#### Results.

We found a discrepancy between health-care rationing at policy and bedside level for scenarios involving life-saving decisions, where subjects rationed treatments to a greater extent at the policy level compared to bedside level (35.6% vs. 29.3%, p<0.001). The effect was larger for medical students compared to other students.

Follow-up questions showed that bedside rationing was more emotionally bur densome than rationing at the policy level, indicating that psychological factor likely play a key role in explaining the observed behavioral differences. We found no difference in rationing between bedside and policy level for quality-of-life improving treatments (54.6% vs, 55.7%, p=0.507).
Conclusions.  Our results indicate a robust "bedside effect" in the life-saving domain of health care rationing decisions. This has implications for the design of fair and efficien priority-setting policies in health care.

# The Effect of Decision Fatigue on Surgeons' Clinical Decision Making

Presenting author: Kinga Posadzy<sup>1</sup>

Co-authors: Emil Persson<sup>1</sup>, Andreas Meunier<sup>2</sup>, Per Aspenberg<sup>2</sup> and Gustav Tinghög<sup>1 3</sup>

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 Swedish National Centre for Priorities in Health, Department of Medical and Health Sciences, Linköping University, Sweden

### Background.

Decision fatigue refers to the deteriorating quality of decisions made by an individual after a long session of decision making. Since long shifts are common in medicine, the effect of decision fatigue could be substantial and have important implications for patient outcomes. Understanding how the quality of medical decisions depend on when the patient is seen is important for achieving both efficiency and fairness in health care.

#### Aim.

To investigate whether orthopedic surgeons' decisions to operate depend on the sequence of patient appointments throughout the day. We hypothesized that decision fatigue would increase the tendency to choose default treatment towards the end of the shift.

#### Methods.

Retrospective data analysis of hospital registry data regarding decision to operate in relation to sequential time point of appointment. The scheduling of patients to time slots was performed without regard for case characteristics, and could be regarded as random, meaning that the decision to operate was plausibly not confounded by patient characteristics.

### Results.

Patients who meet a surgeon towards the end of his or her work shift were 33 percentage points less likely to be scheduled for an operation compared to those who were seen first. In the regression analysis, the probability of operation was estimated to change with an average of -2.1 percentage points (95% confidence interval -3.5 to -0.7; P=0.01) for each additional patient appointment in the doctors' work shift. We performed the same type of analysis separately for first visits and revisits; the estimates for first visits were -2.9 (-5.9 to 0.07; P=0.054) and for revisits -1.8 (-4.1 to 0.6; P=0.12).

Conclusions.
Decision fatigue appears to influence surgeon's decisions. We propose policy implications to decrease the effect of decision fatigue on decision to operate.

#### Panel session

# What is needed to make a fair and cost effective national essential health benefit package: the case of Ethiopia

### Kjell Arne Johansson<sup>1</sup>

#### Panelists:

Getachew Teshome <sup>1 2</sup>, Lelisa Fekadu <sup>1 2</sup>, Mahlet Kifle Habtemariam<sup>2 3</sup> and Ole Frithjof Norheim <sup>1 3</sup>

> <sup>1</sup>University of Bergen, Norway <sup>2</sup>Ministry of Health (Ethiopia) <sup>3</sup>Harvard T.H. Chan School of Public Health

### Background.

Designing, updating and implementing a national publically financed essential benefits package is a critical in health system development. We illustrate this with the case of Ethiopia where we pursued key analyses gathering evidence toward this objective, and highlight the challenges and lessons learnt for other settings.

Improving access to health care for all while ensuring financial risk protection is a major objective of WHO's Universal Health Coverage policy agenda and is central to the UN Sustainable Development Goal (SDG) for health (SDG 3).

Ethiopia faces severe financial resources constraints, which makes priority setting a necessity. Yet, Ethiopia has significantly improved its population health (e.g. substantial decreases in under-five mortality) over the last 25 years, while implementing a variety of targeted health sector and non-health sector strategies, particularly in pursuing the achievement of the Millennium Development Goals and in the context of designing the country's essential health benefits package in 2005.

With the onset of the post-2015 agenda and the SDGs, the rapidly changing disease burden profile including the rise of non-communicable diseases and injuries (NCDIs), population ageing and the rapid urbanization in the country, revising and expanding Ethiopia's essential health benefits package has become a priority. Efficiency and the effectiveness of the interventions are key to public finance and delivery by the health sector in the country. In this context, establishing a process to provide evidence to support policymaking toward updating the country's essential benefits package is paramount.

Equity and fairness are also important in selection of interventions to the benefits package. With these objectives in mind, the Disease Control Priorities-Ethiopia (DCP-E) project was launched to generate evidence for this process and to build capacity and provide support in economic evaluation research as input to decisions on expanding interventions in the essential benefits package while considering dimensions of value for money, equity, and financial risk protection.

Aim.
In this session, we present an overview of the important considerations to examine in the revision of Ethiopia's essential benefits package, and preliminary evidence and priority setting methods generated by the DCP-E project toward this important policy and research agenda. We also describe the challenges faced and the lessons learnt from this work which could be valuable for other low- and middle-income countries.

#### Panel session

# What cost-effectiveness analyses can and cannot do in priority setting

#### Thomas Davidson<sup>1</sup>

#### Panelists:

Lars Bernfort<sup>1</sup>, Erik Gustavsson<sup>1</sup>, Martin Henriksson<sup>1</sup> and Lars-Åke Levin<sup>1</sup>

<sup>1</sup>Centre for Medical Technology Assessment, Department of Medical and Health Sciences, Linköping University, Sweden <sup>2</sup>Swedish National Centre for Priorities in Health, Department of Medical and Health Sciences, Linköping University, Sweden

### Background.

The role of cost-effectiveness analyses in the priority setting process has been long debated. Perhaps most commonly when considering how much total health we may be willing to give up in order to achieve what can be perceived as a fairer distribution of health. This classical dilemma, often manifested by attempts to balancing a QALY maximization principle with a principle that accounts for disease severity, or patient needs, is not the only tension involving cost-effectiveness and priority setting however. Other aspects include how to deal with uncertainty in health outcomes of new interventions and rarity, two issues often arising when considering how to prioritize orphan drugs. This begs the question what cost-effectiveness analysis can and cannot contribute to in health care priority setting.

#### Aim and contents.

In this session issues related to assessing the cost-effectiveness of medical technologies is contrasted with issues related to prioritization of medical technologies in an attempt to illuminate that these are related, but still separate challenges. Hence, the aim of this session is to search for a reasonable role of cost-effectiveness in health care priority setting. Especially cost effectiveness in relation to health care priority setting according to need will be investigated. Practical examples will be used throughout in order to facilitate a discussion at the end of the session.

# Cost neglect in health care rationing decisions

Presenting author: Emil Persson<sup>1</sup> Co-author: Gustav Tinghög<sup>1 2</sup>

<sup>1</sup>Department of Management and Engineering, Division of Economics, Linköping University, Sweden

<sup>2</sup>Swedish National Centre for Priorities in Health, Department of Medical and Health Sciences, Linköping University, Sweden

### Background.

It has been widely demonstrated that cognitive limitations and biases affect our decision making in profound ways. To date, however, little is known about the influence of these biases in the domain of health care priority setting. Filling this knowledge gap is important from a practical as well as theoretical point of view. In health care priority setting it is fundamentally important to carefully weigh all relevant information at the point of decision making. Costs is a key factor in this sense since the need to ration medical care at all is, primarily, the upshot of resource scarcity. However, previous research has shown that people often fail to consider cost-related information in other decisionmakingdomains. We investigate two types of costrelated biases from the perspective of health carepriority setting. The first is opportunity cost neglect. Opportunity cost is a fundamental premise toeconomics, and it is central to priority setting in that resources used for one purpose is always done at the expense of using those resources for something else. Several studies on consumer choice haveshown that when alternative choices are not explicitly represented, they are often ignored or underweighted. Opportunity cost neglect could influence health care priority setting, especially when making decisions at the bedside since resources spent on prioritized patients or treatments are typically not explicit at the point of decision. The second bias we investigate is cumulative cost neglect, which refers to people's inability to aggregate and understand the magnitude of many small events. Decision makers might hesitate before spending large sums or set aside large portions of their time for a specific cause. A long series of decisions involving smaller costs might seem more attractive, since the total cost or resources spent becomes less visible. The prominent health policy debate about whether society should give special considerations for drugs to treat rare diseases potentially highlights a case of cumulative cost neglect in practice.

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To explore whether opportunity cost neglect and cumulative cost neglect affect health care priority setting.

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Large-scale behavioral experiment where participants from the general population make rationing decisions in hypothetical scenarios. Participants will be randomly assigned to one experimental condition. Across conditions (i.e., between subjects we vary whether (a) an explicit opportunity cost statement is present or absent ir all scenarios, (b) the cost of treatment is presented as a sum total or as a series or smaller installments in all scenarios, and (c) decisions are taken at the bedside of policy level. Each scenario will involve one decision, concerning a potentially life saving medical treatment. The experiment will be conducted and analyzed March-April 2018.

# To Achieve Regional Compliance with Orphan Drugs Recommendations – The Example from The New Therapies Council in Sweden

### Presenting author: Gerd Lärfars<sup>1</sup>

Co-authors: Mårten Lindström<sup>2</sup>, Lars Sandman<sup>3</sup> and Sofie Alverlind<sup>4</sup>

<sup>1</sup>Stockholm County Council, Sweden
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Sciences, Linköping University, Sweden
<sup>4</sup>Swedish Associations Local Authorities and Regions, Sweden

#### Background.

In a highly regionalized health-care system as the Swedish, where each county council and region is largely autonomous when it comes to health-care — priority setting is a challenge. Surveys show differences when it comes to prescription of new therapies. In 2015 the joint association of county councils and regions set up the New Therapies-council (NT-council) to provide recommendations on new, generally expensive of otherwise challenging therapies. Since the start, the council has mainly provided recommendations on pharmaceuticals but are now also taking on medical technology. A specific challenge has been recommendations on orphan drugs, where it has been difficult to get compliance with negative recommendations since professionals find it difficult to abstain from treatment.

#### Aim.

To present the model for decision-making on orphan drugs developed within the NT-council, using the example of Spinraza for Spinal Muscular Atrophy (SMA).

#### Overview.

The presentation will start by introducing how the Swedish Ethical Platform on priority setting is interpreted and implemented in the decision-making of the NT-council and how the process of decision-making takes place. The process of decision-making will be exemplified by Spinraza for SMA. Given the high price for an orphan drug like Spinraza, recommendations in the NT-council tend to be negative or highly restrictive. In order to handle prescription in exceptional cases, and maintaining equality over different regions — the NT-council have initiated national expert groups with regional representation. Such a group consists of medical experts having a deep knowledge of the disease as well as experience from priority work. Thenational expert group on an orphan drug is supposed to review and decide on whether treatment is indicated in individual patient cases.

The cases will be brought to the expert group from treating physicians around Sweden, and the NT-council will regularly follow up the use of the drug. Conclusions. Rationing treatment for severely ill people is a challenge, given professional motives to provide patients with best possible care. Potential risks are both inequality and difficulty to contain the recommended use of use of extremely costly treatments. The use of expert groups to interpret recommendations in individual patient cases could be one route forward.

# Implicit rationing in outpatient care: a qualitative interview study

## Presenting author: Michael Lauerer<sup>1</sup>

Co-authors: Joana Weller<sup>1</sup> and Eckhard Nagel<sup>1</sup>

<sup>1</sup>Institute for Healthcare Management and Health Sciences, University of Bayreuth, Germany

### Background.

Limited resources lead to a competition between publicly funded health care and other sectors, as well as among different health needs and claims within health systems worldwide. Growing demand in consequence of demographic/epidemiological transition as well as medical progressions are countered by cost containment measures (such as lump sums and fixed budgets). Against this background, implicit rationing prevails in the daily routine of care: Clinicians are forced to make allocation decisions without having predetermined criteria and guidelines available. This can overexert clinicians, harm the physician-patient-relationship, lead to an unfair allocation of resources and jeopardize the quality of care.

#### Aim.

Since implicit rationing is well analyzed for inpatient care but not (at all) for outpatient care in Germany, the present study aims at investigating implicit rationing in outpatient care from the perspective of licensed physicians.

#### Methods.

We conducted semi-structured interviews in a face-to-face setting if possible and via telephone if necessary. The purposive sampling strategy considered discipline and professional experience. The interviews were audio-taped and transcribed verbatim. Using the MAXQDA software, a qualitative content analysis (according to Mayring) was performed.

#### Results.

In total 17 physicians were interviewed. Main result is a category system. This system covers on the first level (i) determinants of implicit rationing (e.g. the statutory reimbursement system, a low density of specialists and the entitlement mentality of patients), (ii) the extent and frequency of rationing, (iii) rationing criteria used, (iv) the decision making process, implementation and manifestation of implicit rationing, as well as (v) consequences of rationing (e.g. for the physician-patient-relationship, quality of care and job satisfaction). Sublevels and frequencies will be presented at the conference in detail. Results indicate differences between specialized fields of care.

Conclusions.  The study explored the phenomenon of implicit rationing in outpatient care. As fa as we know, this is a pioneering work for the case of Germany. We suggest to build on the exploration and conduct a standardized, descriptive survey to quantify fin dings and to obtain representative results.

# Health care professionals' experience with priority dilemmas in daily practice

Presenting author: Inger Lise Teig<sup>1</sup> Co-author: Gry Wester<sup>2</sup>

<sup>1</sup>Department of global public health and primary care, University of Bergen,
Norway

<sup>2</sup>Department of Global Health and Social Medicine Department, King's College London, UK

#### Background.

To explore health care professionals' decisions about care in daily clinical or managerial work, as well as the "justifications" they articulate in defense of these decisions.

#### Aim.

We aimed to explore the different kinds of decisions health care professionals make in the different roles they have in their respective hospital wards, as well as the range of considerations and values on which their decisions are based. We also aimed to explore the extent to which health care professionals were familiar with and related to a range of legal, political, economic, bureaucratic and professional regulatory instruments in their daily work, as well as their perceptions about how these instruments affected their work – whether these instruments constrained or supported them in their daily practice.

#### Methods.

Qualitative methodology with 15 semi-structured in-depth interviews with doctors, managers and nurses in cardiology at two large Norwegian hospitals.

#### Results.

Health care professionals experienced various kinds of challenges and often felt restricted from providing the level of care they deemed best.

#### Conclusions.

The health care professionals handle apparently contradictory principles by justifying their decisions and actions in a language that conceals these dilemmas. They use compromises to deal with conflicting values in the practice of making sound decisions in daily clinical work. The results demonstrate that health care professionals establish, maintain and recraft justifiable compromises when faced with emerging value conflicts or «orders of worth» in Boltanski and Thévenot's (2006) terminology.

### Value Frameworks for HTA agencies Around The Globe

Presenting author: Rob Baltussen<sup>1</sup>
Co-authors: Maarten Jansen<sup>1</sup> and Wija Oortwijn<sup>1</sup>

<sup>1</sup>Radboud umc, the Netherlands

Health technology assessment (HTA) practices around the world all employ value frameworks when making recommendations and/or reimbursement decisions. These frameworks vary widely in their theoretical underpinning and content. Some HTA practices mainly focus on the development and use of evidence (e.g. Argentina, Sweden), while others explicitly combine the use of evidence with procedural aspects, involving relevant stakeholders (e.g. Brazil, Canada). The design of a value framework may have far-reaching implications for the development of reimbursement decisions. More specifically: suboptimal value frameworks may seriously comprise the legitimacy of these decisions. This indicates the need but also potential for HTA practices to improve their value frameworks.

This session provides an overview of current value frameworks used across the globe and their potential implications. It also presents an overarching framework to improve current HTA practice by using 'evidence-informed deliberative processes' (EDPs) that are specifically geared towards legitimate decision-making.

# The Value of Health Technology Assessment: a mixed methods framework

### Presenting author: Eleanor Grieve1

Co-authors: Hannah Hesselgreaves<sup>1</sup>, Olivia Wu<sup>1</sup>, Kalipso Chalkidou<sup>2</sup>, Francis Ruiz<sup>2</sup>, Peter Smith<sup>2</sup>, Ryan Li<sup>2</sup>, Laura Morris<sup>2</sup> and Andrew Briggs<sup>1</sup>

<sup>1</sup>Health Economics and Health Technology Assessment, Glasgow University, UK <sup>2</sup>Global Health and Development Group, Imperial College London, UK

### Background.

The benefits concerning the link between health technology assessment (HTA) and outcomes in terms of health improvements have rarely been quantified. The global expansion of HTA, its variable implementation resulting in sub-optimal impact, the lack of quantified evidence on health outcomes, along with an increasing investment in these processes at the systems level in low- and middle-income countries (LMICs) has generated greater interest from policy makers and donors about the value and return on investment (ROI) of HTA. A lack of longer-term impact assessment may undermine its importance and value. To address this, we have developed a mixed-methods framework to quantify the value of HTA.

#### Aim.

This research aims to provide a methodological framework and evidence base to i) quantify the returns on investment in HTA and ii) produce explanatory programme theory that considers individual, interpersonal, institutional and systems-level components and their interactions on the mechanisms by which HTA impact can be optimised.

#### Methods.

We use a mixed-methodology aimed at building up a rich picture of process, uptake and impact. The aim is to get over the concepts of potential population health benefit and realised population health benefit – and what we can attribute to the HTA process. Central to understanding this is the 'value of implementation' (VOImp). Theory-driven approaches will be used to generate and test contextual explanations for a gap between expected and actual gains in population health.

#### Results.

We present the framework as: 1) a mixed methods Realist Evaluation which uses quantitative data to capture a credible measure of uptake (stopping) of a technology following an HTA recommendation plus qualitative data to understand what it is about the context that has led to this level of implementation; and 2) an interlinked ROI framework which uses the quantitative data to estimate a return on investment in HTA. We will test the framework empirically using country case studies, and will present an example of applying the framework in a middle-income country.

#### Conclusions.

We envisage the use of this research to support learning and help optimise the impact of HTA in an era of investment and expansion through better understanding of its translation into health outcomes and estimates of its value for money. In particular, for LMICs, we want them to have a forward-looking model in the way that high-income countries have perhaps taken implementation and outcomes for granted. We envisage this research, by synthesising economic and more qualitative methods, will provide a framework to quantify the value and impact of HTA on health and economic outcomes, as well as evidence informed theory and recommendations to produce guidance as how to do HTA by context in order to optimise its impact on health.

# HTA in its right place: within a broad priority-setting framework

Presenting author: Brayan V. Seixas<sup>1</sup> Co-author: Craig Mitton<sup>1 2</sup>

<sup>1</sup>School of Population and Public Health, University of British Columbia, Canada <sup>2</sup>Centre for Clinical Epidemiology& Evaluation, Vancouver Coastal Health, Canada

#### Background.

Although efficiency in resource allocation constitutes one of the few consensual goals in managing health systems, the instruments whereby this target can be achieved are debatable. Extraordinary effort is placed on HTA to support decision-making regarding adoption of new interventions. The current paradigm of efficient spending has been limited to one-off funding decisions based on traditional cost-effectiveness analysis, often using simplistic ICER threshold decision rules.

#### Aim.

Here we aim to unpack the argument that the dominating rationale underlying decision-making in resource allocation misses the mark of the actual role of HTA, which should be arguably an input of a broader priority setting framework.

#### Methods.

This paper provides a conceptual reflection about the complexities around resource allocation and the limitations of HTA as the central instrument for efficient allocation. We demonstrate that although much methodological improvement has been achieved in economic evaluation, this is not enough to provide decision-makers the tools to perform a consistent and comprehensive analysis.

#### Results.

Health economists worldwide have spent much energy with issues pertaining technology adoption. Yet, the big decisions around resource allocation are still largely based on historical allocations and rarely incorporate the ideas of opportunity cost, marginal analysis and budget impact systematically. Moreover, broader social impacts of such decisions are poorly considered.

Conclusions.  Health systems will need to abandon their current obsession with technology adoption and instead pursue novel resource-allocation strategies that formally take into consideration the notions of opportunity cost and marginal analysis. It is important to move healthcare systems in the direction of a novel paradigm of management using broad frameworks of priority-setting and resource allocation that involve many stakeholders in multi-criteria decision analyses informed by evidence and oriented by societal values, health outcomes and impact budget analysis. Thus, the information obtained by HTA will serve as another fundamental piece of evidence but will no longer play a central determining role.

# Improving competence in priority setting among hospital leaders - an example of a training module

Presenting author: Ingrid Miljeteig1

<sup>1</sup>Department of Global Health and Primary Health Care, University of Bergen, Norway

Priority setting in health in Norway is regulated by law and regulations. In the latest white paper concerning priority setting (2015), health care leaders are identified as important stakeholders. They should act as active participants in planning and implementation of local priorities, as well as follow up on national decisions. While their roles and responsibilities are clearly stated, it is less clear how they are, and should be, prepared to handle these often ethically challenging situations. At Haukeland University Hospital, the leadership asked for a course to improve the leaders' awareness, skills and knowledge concerning priority setting. The hospital has 12000 employees and the around 500 leaders are invited to join a leadership program, which now include a full day course on priority setting and ethics. The aim of this paper is to present a training module on priority setting and ethics for leaders, to map out the priority dilemmas experienced and shared by the leaders and report the participants' self-evaluations.

#### Methods.

The course was developed in close collaboration with a selected group of experienced clinical leaders and was pilot tested on various leaders from 14 different departments. The aim the course is to initiate self-reflection on priority decisions and decision-maker roles among the leaders; to provide relevant information about priority principles and criteria, regulations with their rationale and implications as well as ongoing policy discussions; and provision of tools and methods to improve priority setting processes. Interactive teaching methods are used and a set of key questions guide the discussions and group works. Before and during the course, the participants presents their experienced priority dilemma and their ways of handling them. These cases are collected and analyzed. The evaluation forms are analyzed by descriptive statistics.

#### Results.

Many leaders reported how they often dealt with tough priorities concerning denying or delaying treatment of patients, most often due to lack of staff or available room/equipment or because national priorities set limits. Depending on clinical department, position and profession the leaders varied in how they felt they could influence priorities. Many reported to be stretched between patients, next of kin and personnel in own department and the national policies and hospital economic interests. Inefficient or unjust priorities due to continuing futile care of some patients or provision of very costly treatment, were also reported and discussed. Although national decisions of not funding new medicines were presented as difficult in individual cases, dilemmas following insufficient staff were fronted as the most challenging in their job.

While the overall evaluation of the course is good, many reported that their competence in priority setting is less developed and that a one day course is insufficient for their need. More insight in cost-effectiveness measurements, equity concerns and support in challenging situations were particular asked for.

Leaders at various levels in hospitals face multiple priority decisions and in our

#### Conclusions.

study, we found that many felt insufficiently trained in how to deal with these si tuations. To increase competence in making fair priorities, hospital leaders should be provided with relevant and contextual training, tools and support mechanisms.						

# **Parallel Sessions**

# **Saturday**



#### Panel session

# Orphan drugs and different cost-effectiveness thresholds – should size matter?

#### Lars Sandman<sup>1,</sup>

<sup>1</sup>Swedish National Centre for Priorities in Health, Department of Medical and Health Sciences, Linköping University, Sweden

#### Panelists:

Douglas Lundin, TLV, Sweden Niklas Juth, Karolinska Institute, Sweden Martin Henriksson, Centre for Medical Technology Assessment, Linköping University, Sweden

#### Background.

During the last few years the number of orphan drugs, i.e. drugs for rare and severe conditions, on the market have increased. Given development cost and profit margins, these drugs tend to be highly costly per patient and have difficulty meeting general cost-effectiveness demands. Thus, they pose a considerable challenge to most health-care systems. Different strategies are suggested to handle this problem, including price negotiations, specific orphan drugs funds etc. This has also given rise to a discussion on whether other cost-effectiveness thresholds should be accepted for orphan drugs. In Sweden, policy- and decision-makers have recently accepted an argument put forward by Sandman and Gustavsson (2017) and now accept a higher cost per QALY for orphan drugs under certain conditions. The argument draws on a principle of formal equality and argues that we under certain conditions have reasons to accept a higher cost per QALY for orphan drugs in order to reduce the extent that irrelevant factors like size or the fact that drugs are developed on a forprofit-market to influence equal access to existing treatment. This argument has been challenged by Juth (2014) who claims that compensating for irrelevant factors in this way fails to distinguish between directly and indirectly relevant factors and would imply that cost is discounted altogether in the assessment. From an economic efficiency point of view the consequences of accepting a higher threshold can be defined as opportunity costs in terms of forgone health, posing the inevitable question; if we should pay more for treatments in rare diseases, how much more?

#### Aim.

To discuss whether we have reason to accept other cost-effectiveness thresholds for orphan drugs and If so, under what conditions.

# Informal priority setting by technology

Presenting author: Bjørn Hofmann<sup>1 2</sup>

<sup>1</sup>Institute for the Health Sciences, The Norwegian University of Science and Technology (NTNU), Norway

<sup>2</sup>Centre for Medical Ethics, University of Oslo, Norway

#### Background.

Despite a wide range of explicit principles and criteria for priority setting, these are not always adhered to. One reason for this is that there are also many implicit factors influencing priority setting. One set of such factors are related to the status and prestige of technology.

#### Aim.

To investigate how informal and implicit factors of technology influences priority setting in practice.

#### Methods.

A study of specific cases is used to illustrate and discuss a set of general factors and mechanisms in implicit priority setting. Among the cases are robotic surgery, cardiotocography (CTG), positron-emission-tomography (PET), and pulse-oxymetry.

#### Results.

A series of informal factors and drivers are identified, such as strong professional interests (including "White elephants"), vicarious reasons, hidden reasons, symbolic meaning, unwarranted enthusiasm, rationalism (without validation), defensive medicine/just-in-case thinking, cognitive inclinations ("more is better," "advanced is better," "early is better"), technological determinism, and slippery slope (an crow bar) effects.

# Plus ça change? How NICE's evolving approach does – and does not – promote fairer decision making in healthcare priority setting

### Presenting author: Victoria Charlton<sup>1</sup>

<sup>1</sup>Department of Global Health and Social Medicine, King's College London, UK

#### Background.

Since 1999, the UK's National Institute for Health and Care Excellence (NICE) has played a key role in determining which health technologies are covered by the National Health Service. NICE's approach to fairness in healthcare priority setting is based on what has been termed an "ethics of opportunity costs", a distributive justice framework for evaluating the acceptability of investing in some technologies over others. According to this framework, technologies are judged primarily on their cost effectiveness as compared with alternative available treatments. However, in a transparent deliberative process, a range of other social and ethical values also influence coverage decisions in order to reflect concerns about justice and equity.

While this overall approach has remained consistent over time, several aspects of its application have evolved. The pattern of these changes and their implications for justice have not hitherto been examined.

#### Aim.

To explore how the processes and methods of NICE's technology appraisal programme have changed over time and the implications of these changes for the fairness of NICE decision making, as based on the Institute's own ethics of opportunity costs framework.

#### Methods.

Utilising a methodology informed by grounded theory, all NICE process and methods guides from 1999 to 2017 were reviewed and relevant content systematically identified and collated. This content was coded and analysed to identify key changes to NICE's approach and the potential implications for justice. Semi-structured interviews with eight individuals closely involved in NICE technology appraisal were conducted to validate emerging findings. This analytical work was supported by a semi-systematic literature review.

#### Results.

Although there is much about NICE's approach that has remained constant, three key changes were identified. First, guidance on the methods of technical assessment has become more detailed and prescribed over time, providing appraisal committees with a more standardised resource on which to base deliberations. Second, the decision-making of appraisal committees has also become more prescribed through the introduction of decision-rules which instruct them how to respond to complex social and ethical considerations. Several of these are based on somewhat arbitrary numerical criteria and act to increase the cost effectiveness threshold applied in specific circumstances. Thirdly, NICE's approach has become more tolerant of uncertainty, allowing recommendations to be made more promptly, on the basis of less evidence and less exhaustive evaluation than previously.

#### Conclusions.

NICE's move to a more prescribed approach supports increased consistency of decision-making but can undercut sensitivity to the complexities of specific cases. While this may lead to improved fairness in some cases, in others the loss of discretion and opportunity for deliberation may mean that relevant considerations are not fully accounted for and that unjust decisions are reached.

NICE's more tolerant approach to uncertainty, taken alongside decision-rules that

act to increase the effective cost-effectiveness threshold, have also encourage committees to say 'yes' to technologies that they would previously have said 'ito. This represents a change in the opportunity cost considered acceptable by N and a shift in prioritisation, away from the average NHS patient and towards the groups whose interests are served by a NICE recommendation.	

# Does prioritising the new promote fairness? The role of innovation in healthcare priority setting in the UK

Presenting author: Victoria Charlton<sup>1</sup>
Co-author: Annette Rid<sup>1</sup>

<sup>1</sup>Department of Global Health and Social Medicine, King's College London, UK

#### Background.

Since 1999, the UK's National Institute for Health and Care Excellence (NICE) has played a key role in determining which health technologies are covered by the UK National Health Service. NICE's approach to fairness in healthcare priority setting is based on what has been termed an "ethics of opportunity costs", a distributive justice framework for evaluating the acceptability of investing in some technologies over others. This operates as part of NICE's broader commitment to "accountability for reasonableness" and fair decision making.

According to the ethics of opportunity costs, technologies are judged primarily on their cost effectiveness as compared with alternative available treatments. However, a range of other social and ethical values also influence coverage decisions in order to reflect concerns about justice and equity. NICE advises its appraisal committees that "the innovative nature of the technology" is one such potential value. However, it is unclear how committees have interpreted this advice and how value judgements concerning innovation are actually made in practice. It is also unclear how, or if, innovation can be supported as a social or ethical value on the basis of NICE's stated approach to fairness in healthcare priority setting.

#### Aim.

To explore how NICE appraisal committees have interpreted the Institute's advice regarding the use of innovation as a value in health technology appraisal. Further, to conduct an ethical analysis to explore whether these interpretations are commensurate with NICE's stated approach to fairness in healthcare priority setting.

#### Methods.

The empirical aspect of the research follows a case study approach. Purposively sampled documents detailing three NICE technology appraisals in which innovation has been a consideration will be subjected to thematic analysis, utilising a systematically developed analytical guide developed and piloted as part of a wider project exploring NICE's use of social or ethical value judgements.

The documentary analysis will be supplemented by extracts from a series of semistructured qualitative interviews conducted with NICE committee members, staff and external stakeholders. For the ethical analysis, key theories of distributive justice will be invoked to evaluate the extent to which the value of innovation coheres with NICE's stated approach to fairness in healthcare priority setting. Specifically, these theories will be used to scrutinise whether innovation, as interpreted and employed by NICE's appraisal committees, can be meaningfully linked to different metrics or currencies of justice.

#### Results and conclusions.

This work is currently underway and conclusions are still being finalised. Preliminary results suggest that NICE appraisal committees interpret the institute's guidance on innovation as a social value in a range of different ways. However, the effect is consistently to allow the recommendation of technologies of relatively poor cost-effectiveness for coverage when this is not justified by other considerations. Common metrics or currencies of justice, such as well-being or capabilities, lend only limited support for this use of innovation as a value and the loss of efficiency that it brings about.

# The contrasts between knowledge and values in relation to death and loneliness within palliative care in Sweden

Presenting author: Axel Agren<sup>1</sup>

<sup>1</sup>Swedish National Centre for Priorities in Health, Department of Medical and Health Sciences, Linköping University, Sweden

One healthcare context which have received increased attention in later years in Sweden is palliative care. Consequently, this context have been subject to knowledge-production which in different ways attempt to steer and define what "good palliative care" is. This knowledge production is, at current, published in documents such as national guidelines and educational programs from different organisations on national level as well as municipal action-plans. One recurring vision presented in several documents is the idea that no one should die alone within the Swedish healthcare system. This vision which was first launched in a governmental report in 2001 has gained considerable attention and evoked debates in the public sphere, in the media, within politics and the healthcare context. The same year, a report on national level stated that palliative care should have the highest priority within the Swedish healthcare system. Furthermore, several studies have found experiences of loneliness at the end of life to be distressing leading to feelings of existential loneliness, anxiety and pain. Despite increased focus on this issue, research and the media claim that a large amount of people die alone within the Swedish healthcare system every year. The question, which is crucial in this study, is how the idea of not dying alone has become acknowledged and presented as knowledge and meanwhile being based on societal values. Here, the dominating societal understanding of loneliness as something negative and togetherness with others as a basic existential need throughout life and at the end of life, becomes of relevance to study in relation to visions of how palliative care should be conducted.


#### The Guardians of Democracy: The forgotten but important role of the health care professionals when setting limits of health care

Presenting author: Ann-Charlotte Nedlund<sup>1</sup>

<sup>1</sup>Swedish National Centre for Priorities in Health, Department of Medical and Health Sciences, Linköping University, Sweden

Based on theoretical arguments and empirical examples this paper discusses what role and responsibility health care professions have and should take for making priorities in health care in a publicly funded and democratic political system. Public resources should be allocated based on need and should therefore be subject for legitimacy and trust from the citizens. In this democratic context and following the thoughts by the Lundquist (1998), health care professions, in addition to their central role to exercise their profession and expertise – as being "servants of democracy - the health care profession also have a different role - as "guardians of the democracy". In this latter role they must guarantee democratic values, such as democratic processes, equality and justice, predictability, equal treatment mm. The healthcare professions therefore have a moral and political responsibility. They should alarm and whistle blow if decisions etc. do not take into account democratic values. In many ways the health care professions form the link between politicians and citizens. They have an important function and a significant responsibility for the future of the quality of care. Lundquist emphasizes, however, that the role of guardians should not prevail over the politicians' or citizens' tasks, and that the role as a guardian is a personal role. Hence, Lundquist sheds light on the moral and political responsibility of health workers to consider and protect public values. The consequences of taking this responsibility might have an impact on the shaping of both the procedural aspects as well as the substantive outcome of setting priorities. The paper argues that there is a shared responsibility for how to actually manage various priority-setting dilemma. Following that, a sustainable governance on priorities and organization of healthcare should include transparency and openness in the form of involving various stakeholders, having dialogues and by that highlighting and giving space for different values.

# Making priorities in cross-professional teams - examples from the Habilitation sector in Sweden

Presenting author: Anette Winberg<sup>2</sup> Co-authors: Ulrike Edin<sup>1</sup> and Mari Broqvist<sup>3</sup>

<sup>1</sup>Region Skåne, Sweden
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<sup>3</sup>Swedish National Centre for Priorities in Health, Department of Medical and Health
Sciences, Linköping University, Sweden

#### Background.

It is sometimes claimed that priority setting is harder to make the more different professions involved, with different health paradigms and skills. At the same time developing methods and processes for teamwork priorities are of great importance, because a large part of the healthcare system is organized in different kinds of team that are built around the patient.

Habilitation is such example of a complex organization, organized in cross-professionals team. It is also complex in that meaning that it provide interventions for a very heterogeneous target group, including persons with congenital or early acquired disabilities that may be some form of disability, developmental disorder and/or autism spectrum states.

#### Aim

For the last ten years there have been several activities within habilitation organizations in different county councils/regions in Sweden, where systematic priority setting processes have been performed. Some of them are small units, others involve a large amount of workplaces. The aim with this presentation will be to describe experiences from different ways of organizing such multi-professionals processes.

#### Methods.

The priority setting processes within Habilitation in Sweden have been internal evaluated in different ways. In some councils longitudinal before-after studies have been performed. Over time, when more and more county councils/region have performed such work, network between some of them has been organized in order to exchange experience, and different ways of organizing team-based priorities have been compared.

Results/ Conclusions.
Few disadvantages of the cross-professional approach have been identified, buseveral advantages. Creation of holistic and shared views and less territorial thinking are some of these advantages. Increased internal transparency and knowledg about each other's competence are others. In 2018 The Swedish Association of Habilitation Officers' [Föreningen Sveriges Habiliteringschefer] will be considering
initiating a national network for advising and further developing priority settin activities within Habilitation in Sweden. It would be wise also for other health services, irrespective of specialty, that want to refine their team-based priority processes, to take advantage of such solid, experience-based knowledge.

#### Assigning priorities at the individual level

#### Presenting author: Lovisa von Goes<sup>1</sup>

Co-authors: Pernilla Lundberg<sup>1</sup>, Anette Winberg<sup>2</sup>, Mari Broqvist<sup>3</sup> and Jeanette Adolfsson<sup>4</sup>

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Sciences, Linköping University, Sweden
<sup>4</sup>The National Board of Health and Welfare, Stockholm, Sweden

#### Background.

As healthcare providers, county councils, regions and municipalities in Sweden have a duty by law to offer individuals with disabilities assistive devises (e.g wheelchairs, communication devices, devices for cognitive assistance). In 2014, about 10 % of Sweden's population uses such devises. From the beginning of the 21st century, more and more regional health authorities have chosen to transition to a needs-oriented approach in drafting regulations for prescribing assistive devices, instead of focusing on diagnosis or whether the product in question is included in a procured range. Such a need-oriented approach increases the necessity of rigor and clarity in what aspects the appraisal of needs, made by each prescriber, should include. Unclearness have created a risk of unequal prescription, depending on what prescriber you may meet.

Several attempts have been made to create decision support to the prescribers. However, it has not been obvious how these decision support systems correspond with the parliamentary decided ethical principles in Sweden. In contrast, substantial efforts have been made to operationalize these principles into a more guiding model for resource allocation on group level, i.e. between patient groups or health care services.

#### Aim.

In order to make the appraisal of peoples' needs of assistive devices a) more equal between different prescribers, and b) more in line with decided ethical principles for priority setting in Sweden, a decision support for priorities at the individual level have been developed and implemented.

#### Methods.

The National Model for Transparent Prioritisation in Swedish Health Care (used by regional health authorities or governmental agencies) has been adopted to be used at the individual level, by a multi-professional group, and tested in a division of habilitation in Uppsala County Council. Evaluation of the usefulness of the tool has been made by focus group interviews and surveys with prescribers and assistive technology consultants. The tool has then been implemented in another county, the County of Jönköping, where several activities have been made to support the implementation process. A pilot study is planned for 2018 by The National Board of Health and Welfare to decide whether or not the tool will be part of a national webb-support.

The results cover a presentation of the priority setting tool but also the develop-

#### Results/Conclusions.

ment process, including the evaluation results. We also want to focus on experiences from the implementation process. Even if a decision support tool can contribut to achieving consistency and equity, it cannot create it by itself. A well-organize implementation process also need to be in hand.		

## What outcome measures are valid in economic evaluations of social care interventions?

Presenting author: Pia Johansson<sup>1</sup>
Co-authors: Lina Leander<sup>1</sup> and Johanna Wiss<sup>1</sup>

<sup>1</sup>SBU (Swedish Agency for Health Technology Assessments and Assessments of Social Services), Sweden

#### Background.

Social care interventions are an important part of the Nordic welfare system, but there is lack of knowledge on effective and cost-effective interventions. The Swedish HTA agency SBU has been commissioned to apply HTA (health technology assessment) systematic review methods to aid in priority setting within the Swedish social service sectors. One key aspect in HTAs is the cost-effectiveness of interventions, where method recommendations are based on economic evaluations in health and medicine.

#### Aim.

To discuss the applicability of customary HTA methods for cost-effectiveness systematic reviews on social care interventions, with a focus on valid outcome measures. An example from a recent HTA on child welfare services is presented.

#### Method.

The HTA included a systematic review of the international cost-effectiveness literature. Program costs reflecting current Swedish practice were calculated for some manual-based programs. Partial cost-effectiveness analyses were performed using outcomes as reported from the HTA meta-analyses and the estimated program costs.

#### Results.

As the HTA population was very restricted, i.e. families where the children are known to be subjected to violence or maltreatment, no relevant economic evaluations were found in the systematic review. The estimated program costs for the seven manual-based interventions varied between SEK 3 200 (around EUR 320) and SEK 25 000 (EUR 2 500). For three programs, the HTA meta-analysis results were considered strong enough (GRADE level XXOO) to be used for an economic evaluation and the outcomes possible to express in an appropriate way, i.e. in number of children in a more favorable situation out of 100 participants.

Two of the outcome measures were similar enough to enable an incremental analysis where two programs were compared. The ICER obtained was SEK 75 000 (EUR 7 500) per child with no further experience of violence or maltreatment. No outcomes measuring long-term nor short-term child wellbeing or quality of life were available from the HTA.

#### Conclusions.

The methods in this HTA cost-effectiveness analysis are not in accordance with recommended health economic evaluation methods. The lack of standardized outcome measures within the subject area precludes the inclusion of long-term society costs, only enabling a partial cost analysis. In the literature, there are examples of more suitable outcome measures but also examples of measures that SBU currently deems as inappropriate. The presentation includes a discussion on the SBU position on valid outcome measures within child welfare economic evaluations.

# The universal health coverage cube(s): obfuscating or illuminating for policy and practice? A systematic review of an underdetermined visualization

#### Presenting author: Harald Schmidt<sup>1</sup>

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#### Background.

The World Health Organization's 2010 coverage cube is one of the most recognizable memes in health policy. While frequently reproduced in identical form, there are also numerous significant variations. These differ centrally in which issues or tradeoffs in pursuing Universal health coverage (UHC) they foreground, and which they relegate to the periphery—or place out of sight altogether. Do these variations strengthen or weaken the cube's utility? What role should the coverage cube play in moving towards UHC globally?

#### Aim.

To systematically review the range of published coverage cubes, to identify rationales underlying different designs and uses of the cube, and to propose a practical way forward to maximize utility of using the cube in working towards UHC.

#### Method.

We conducted a systematic review in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. We searched PubMed, Web of Science, Scopus, and Embase using the search string: ("universal health coverage" OR ("universal coverage" AND health) in title, abstract and keywords). We supplemented our search of the above-mentioned databases with a Google Scholar search. Because Google Scholar allows for full-text searching, we used a more targeted search string: ("universal health coverage" OR ("universal coverage" AND health)) AND (cube OR (box AND (dimension OR dimensions OR axis OR axes OR plane OR planes)))). Timeframe: (2010-2016. After excluding duplicate records, non-English items, conference abstracts, and items with full-text unavailability, we conducted a full-text search of all remaining documents for instances of the coverage cube.

Each document was searched independently by two members of the study team (HS, MM, JG, MD) using two methods: a visual inspection of the entire document and a text search for the terms "cube" and "box". We analyzed each identified cube (or other shape referring to the 2010 cube) using a 7-category data extraction tool relative to the 2010 cube.

#### Results.

We found 44 cubes differing from the WHO version. In this presentation, we describe our findings under 4 headings: Cases in which authors felt the need to multiply the cube between 1-4 times (N=8), where axes were relabeled (N=99), stratified (N=29), and/or replaced (N=15). The identified versions of the coverage cube differ centrally in which issues or tradeoffs in pursuing UHC they foreground, and which they relegate to the periphery—or place out of sight altogether.

#### Conclusions.

Instead of seeking to integrate all identified variations into a single cube, or returning to the 2010 WHO cube, or to a particular variation published since then, we propose what we term the essential UHC cube and a complementary checklist for fairness considerations (the latter can also be used alongside any other version of the coverage cube). Our proposed approach can help to consider not only inter-dimensional trade-offs that the 2010 cube emphasizes, but also intra-dimensional ones, that have surfaced in much of the commentary since 2010 and have particular relevance for maximizing fairness in moving towards UHC.

# Poster Abstracts



#### Priority setting and clinical decision making as viewed by Swedish physicians

- Physicians' experiences in clinical care and attitudes towards the ethical platform for priority setting and national guidelines -

#### Presenting author: Catharina Drees1

Co-authors: Barbro Krevers<sup>2</sup>, Niklas Ekerstad<sup>3</sup> and Alena M. Buyx<sup>1</sup>

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#### Background.

There are many different stakeholders involved in priority setting in health care. While policy-makers on different levels set the framework for resource allocation and priority setting in health care, it is mostly individual physicians as well as other health professionals who make the final clinical priority decisions on a daily basis.

The Swedish National Board of Health and Welfare has developed national guidelines in collaboration with experts and health care professionals, to function as support to decision makers in health care. The guidelines include recommendations for priority setting of different interventions, based on the ethical platform for priority setting in health care. The platform was established by parliament in the mid 1990's; resulting national guidelines can be regarded as a type of knowledge governance in the pursuit of equal health care.

So far, few studies exist on physicians' perception of clinical priority setting – almost exclusively in the field of cardiology and general practice, as the first national guideline concerned cardiology. Thus there is still lack of knowledge how clinicians of different departments perceive the ethical platform and national guidelines in their everyday clinical work and on which basis they make their clinical decisions. Open questions include: How do physicians experience their clinical conditions regarding resources and decision making? What are physicians' knowledge of and attitudes towards the ethical platform for priority setting and national guidelines? Do views differ between cardiologists and physicians from other specialties?

#### Methods.

Data were collected through an online questionnaire from two different groups of physicians between August 2016 to January 2017. Group 1 represented 162 out of 331 physicians from twelve different departments at a University hospital, all caring for patient groups who were covered by national guidelines, response rate: 48,9%. Group 2 consisted of 166 out 923 physicians who were members of the Swedish society of cardiology, response rate: 18,0%.

#### Results.

Preliminary results show that the view of the cardiologists and the heterogeneous group of physicians from different departments were congruent in almost every examined field. Clinical care was rather often perceived optimal and according to the three ethical principles of the ethical platform. Most physicians faced scarcity of resources more often than once a month and did not feel well prepared to handle it. The biggest influence on physicians' decision making was their own medical assessment directly followed by guidelines; the latter included, as most important ones, local guidelines as well as national guidelines and in case of the cardiologists European guidelines. About one third knew a lot or very much about the ethical platform; about half of the physicians in mixed departments and three quarters of the cardiologists a lot or very much about national guidelines. About half of both groups would like to get further knowledge and training for the ethical platform as well as national guidelines.

#### Conclusions.

There is a need for support to handle the present clinical scarcity of resources. Guidelines have a lot of influence on physicians. Physicians wish to know more about the ethical platform and national guidelines. The ethical platform, as the basis of Swedish health care priority setting, is less known than national guidelines and should be addressed specifically, particularly in future training.

# Evidence-based medicine as basis for priority setting: a focus group study

Presenting author: May Dao Van<sup>1</sup>

Co-authors: Michael Lauerer<sup>1</sup> and Eckhard Nagel<sup>1</sup>

<sup>1</sup>Institute for Healthcare Management and Health Sciences, University of Bayreuth, Germany

#### Background.

In the debate about the distribution of scarce resources in health care, the principles of Evidence-Based Medicine (EBM) are being discussed as a possible basis of prioritization. From a professional perspective, EBM is already broadly accepted. It has become a fundamental component for the assessment of medical interventions. For instance, the methods of the German Institute for Quality and Efficiency in Health Care (IQWIG) strictly apply to the EBM paradigm. These methods determine the reimbursement of drugs in the statutory health insurance in Germany. In the general public, however, EBM is discussed more controversially.

#### Aim.

Against this background we elicited public preferences concerning EBM as basis for the allocation of scarce resources. To analyze whether preferences are context-sensitive (quality of life enhancing measures vs. life saving measures) we used three different scopes: reimbursement of dentures as well as analog insulin and organ allocation.

#### Methods.

Two focus group interviews were conducted to elicit public preferences for EBM as a prioritization criterion. Focus group sessions were audio-taped and transcribed verbatim. Using MAXQDA 11, a qualitative content analysis (according to Mayring) was performed.

#### Results.

In total, 14 participants joined the two focus groups (24 min/ 70 min). Generally, the principles of EBM as basis for prioritization were predominantly accepted as a supplementary criterion (besides other criteria for instance "need" in the context of organ allo cation). Arguments concerned e.g. the body of evidence and the consideration of case-by-case decisions. Costs and benefits as well as regulations for exceptions were identified as important aspects in the discussion about the reimbursement of dentures and analog insulins. In the context of organ allocation, EBM standards for deduction or identification of prioritization criteria were vital in the discussion.

#### Conclusions.

The exploratory study indicates that the principles of EBM are a supplementary criterion for prioritization within the three considered contexts. Using a qualitative approach seemed reasonable, because it was possible to inform the participants about the complexity of the issue at hand before and during focus group discussions. However, it was challenging for the study participants to grasp those principles as a prioritization criterion. Besides, aspects like publication bias or lack of scientific independence were not addressed at all. To profoundly evaluate the complex principles of EBM on their eligibility as a prioritization criterion from a laymen perspective, further research using a more extensive participative approach might be necessary.

# Citizen dialogue between elected representatives and citizens of Region Östergötland – a method of management for good health and democratic participation

#### Presenting author: Christoffer Martinelle<sup>1</sup>

Co-authors: Henning Sand<sup>1</sup>, Monica Ulriksson<sup>1</sup> and Annica Öhrn<sup>1</sup>

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#### Background.

The political management of healthcare in County Council of Östergötland in Sweden aims to improve the health of the region's inhabitants. Investigations to assess and uncover the underlying needs of the population lie at the core of the region's efforts. An important component of these investigations is the citizen dialogue. The first citizen dialogues conducted by the County Council occurred in the mid-1990s, and the concept has ever since been the subject of continuous development.

#### Aim.

The model, in which elected political representatives conduct dialogues with citizens, was developed with the double aim to obtain relevant information and to increase participation. The purpose was to explore and understand the perspective of the citizen, thus acknowledging that this perspective constitutes an important complement to medical science and professional experiences.

#### Methods.

A group of seven elected representatives form a drafting committee, which, with the support of an official, conducts dialogues with citizens, usually in the form of a focus group interviews. There are five Drafting committees for citizen dialogue in the County Council, each conducting a year-long dialogue with a specific group of citizens each year. The drafting committees receive an instruction from the Healthcare Committe in January regarding what particular groups will be the subject of the coming year's dialogues. Typically, a dialogue focuses on meetings with patients and relatives within a given disease group, for instance diabetes. The dialogues are conducted through a series of focus group interviews. In the semi-structured interviews, the elected representatives ask open-ended questions to a group of 3 to 10 citizens. During the year approximately 6 – 8 focus group interviews are held by each drafting committee. The result is analyzed and the Drafting committees for citizen dialogue present their respective conclusions to the Healthcare Committee in November each year.

The conclusions are then reformulated and worked into the formal agreements between the Healthcare Committee and the healthcare clinics (County Council of Östergötland is organized according to a client-contractor model). The agreements, and thus the conclusions of the citizen dialogues, are followed up after a year.

#### Results.

The citizen dialogue is an important tool. It serves as a complement to scientific research and expertise, and together with the two latter builds trust in healthcare. Recurring results from the citizen dialogues show that citizens and patients, among other factors, view the following issues as vital to their experience of health care; a sense of participation and involvement; being treated and spoken to in a respectful manner; being able to trust that different clinics and care centers, as well as other governmental and municipal authorities, inform each other, thus not making the patient herself the primary carrier of information. The collaboration between authorities in Östergötland has been improved as a result of the citizen dialogues.

#### Conclusions.

It is important that the conclusions of the dialogues are written into the agreements with the clinics and thus are turned into manageable assignments in the healthcare system. The experiences and knowledge of the citizens must be used in the management and development of health care in Östergötland. The participation of the citizens must not stop with mere dialogues. However, by using citizen dialogues, important aspects of healthcare, rarely engaged by medical research and scientific guidelines, have been identified and improved.

#### Models for priority setting in Public Health - a scoping review

Presenting author: Linda Maripuu<sup>1</sup> Co-author: Jessika Spångberg<sup>1</sup>

<sup>1</sup>Department of Living Conditions and Lifestyles, Public Health Agency of Sweden

#### Background.

The Public Health Agency in Sweden (PHAS) has initiated a project aiming to suggest a transparent and structured model to set priorities for the public health sector at the national level in Sweden. A scoping review was conducted to identify existing models applicable to the process of priority setting in the field of public health.

#### Aim.

To present the findings and highlight central components in priority setting models identified in the scoping review. Furthermore, to discuss potential implications of the findings in the development of a workable model for prioritization of public health needs at the national level in Sweden.

#### Methods.

PubMed, Cochrane, SweMed, Scopus and Uppsala University Library databases were searched in March of 2017 and was supplemented with articles that was seen as gold standard by the project group at PHAS. The work followed the PHAS guidelines for a rapid scoping review. Only articles written in English, Swedish or Norwegian and published after 2000 were eligible for inclusion. Furthermore, the models described had to be applicable for public health. The search included original articles and systematic reviews.

#### Results and discussions.

652 articles were screened for eligibility, 21 articles were then read in full text and 10 of these were included in the final analysis. One of the included articles was a systematic review, in which slightly different inclusion criteria were used. This served as a partial validation to our results. No model was directly applicable to the public health setting. However, components and perspectives which recurred and seemed to be useful were merged into six general components. These components could be divided in two groups: one that was related to needs and one to interventions. Equality was both a central component and a part of the process of priority setting in several models.

The assessment of the components and weight given to components in the model varied across the included studies. Besides of components, the findings raised the need of being transparent in the process of identifying the areas to prioritize within as well the prioritization itself.

The results from this scoping review highlights the lack of models that allow for a transparent process for priority setting in public health. A salutogenous perspective or health determinants was rarely considered. However, the scoping review identified both useful elements in a priority setting process and components that can be incorporated into the PHAS model.

Conclusions.

No priority setting model was directly useful for the public health sector in Swede However, six general and probably useful components were identified.		

#### Law and Priority Setting in Healthcare: Regulatory Approaches in Steering Prioritization in Finland

Presenting author: Kaisa-Maria Kimmel<sup>1</sup>

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#### Background.

Finnish healthcare faces multiple long-term challenges in terms of rising demand in healthcare. As opportunities for treatment expand, the cost of healthcare rises. The Finnish health care system has to set priorities for medical treatment, and regulation provides the legal framework for decision-making on priorities.

#### Aim.

This presentation outlines, which regulatory approaches are used in Finland for steering and regulating health care practice and priority setting, and discusses the lawmaker's reasoning regarding the chosen method of regulation.

#### Methods.

I use regulation theory to approach the topic, focusing on the choices of the lawmaker in shaping the system for steering prioritization. I have carried out an analysis of legislative acts, decisions of the Finnish Parliamentary Ombudsman, government bills and other preparatory material for legislation, such as submissions for stakeholder hearings.

#### Results.

Legislative acts steer priority setting by providing a framework concerning the organization of the health care system, standards for medical practice and patient rights. Written norms are flexible, with only a few explicit rules set concerning priorities, such as the health care warranty. The greater part of substantive norms concerning prioritization are included in soft law instruments and self-regulation, such as clinical practice guidelines. In 2013, Finland established the National Council for Choices in Health Care (PALKO), a decision-making body tasked with providing explicit national recommendations for defining whether the public health care system will cover a given service or medical intervention. The Finnish lawmaker did not carry out a comprehensive study on priority setting in connection with establishing PALKO. Rather, the motivation behind defining the selection of services was to prevent a scenario, where Finland would be obligated to reimburse its citizens for services not provided in Finnish public health care, when citizens travel to receive treatment in other EU member states under the Patient's Cross-border Mobility Directive (Dir 2011/24/EU).

Conclusions.  The analysis of statutory and soft law norms concerning prioritization revealed a number of tensions between legal steering and the internal logic of health care and priority setting. The lawmaker has not taken an active role in steering priority setting with use of legislation. PALKO works as a national body for decision-making However, as a new institution it is still defining its practices and role in the nationa scene. This calls for further research on the impact PALKO's recommendations or health care practice.

## Ethical reflection on daily basis - Priorities and dilemmas for Health Care Professionals

Presenting authors: Cecilia Lundmark<sup>1</sup> and Sara Widin<sup>1</sup>

<sup>1</sup>Ethical forum, Sahlgrenska University Hospital, Sweden

#### Background.

The Ethical forum at Sahlgrenska University Hospital works toward the ethical perspective highlighted in decision making and at all levels by bringing the ethical principles into practical action, to raise ethical skills so that the ethical reflection and dialogue are being kept alive.

The Ethical Forum offers lectures and ethical guidance/supervision in workgroups or individually.

Our personal values matter in the way we interact with others. Attention to and consciousness of our values is important in developing ethical awareness. Ethical reflection around the principles Autonomy, Do good, Do no harm and Justice is a way to develop and maintain awareness of every patient's dependence and vulnerability.

#### Method.

Group dialogue with 5-15 HCP for 45 to 60 minutes, on a regular basis. The discussion is led by a facilitator, i.e. a Registered Nurse with supervision and ethical education. All participants are invited to bring up any ethical dilemma or issue related to patients.

#### Example of ethical dilemmas:

A woman is undergoing treatment for a recurring cancer. She no longer wants any treatment. Nurses feel compromised when attempting to meet the patient's needs when the doctor is wanting to persevere/pursue with treatment.

A man is diagnosed with depression and antidepressants are recommended. The patient informs the nurse that he would prefer not to take the medication because it adversely affects his sexual performance.

A nurse at the intensive care unit reports on three patients, all with several competing needs. The nurse finds it difficult to prioritize and effectively ration the time as the patients' needs vary between being either of a technical nature or requiring specific nursing care.

The figure illustrates a tool of how to use ethical principles by placing the patien in the middle of the figure. Every principle has the same value and the dialogue around the principles will help to argue for what way to act.
Conclusions. Ethical reflection is a form of training to keep ethical ability and compassion alive.

Figure.

#### **Exhibitors:**



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