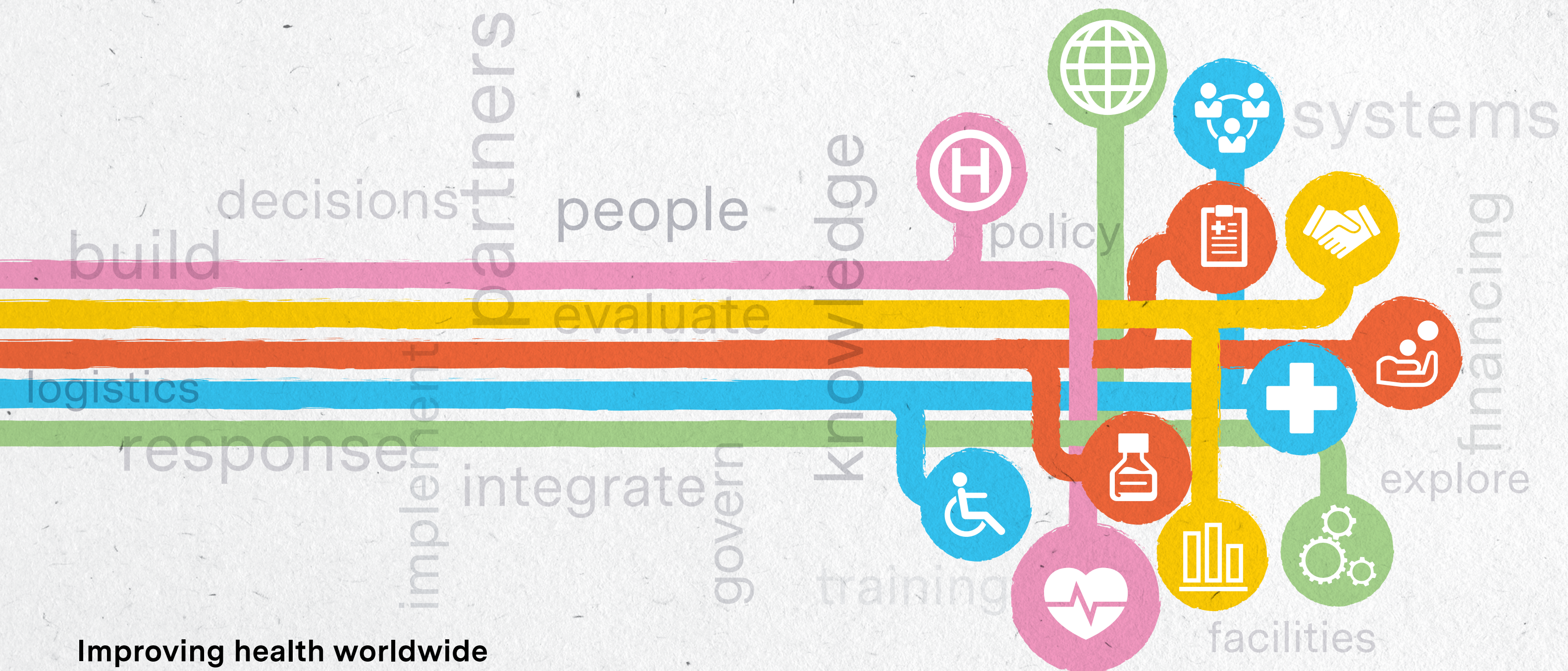




Health Policy and Systems Research



Improving health worldwide

Forewords from our partners



Dr Freddie Ssengooba, Associate Professor, Makerere University School of Public Health, Uganda

Countries across Africa have benefited from the School’s postgraduate training and research especially in the fields of health policy, health economics and health systems management. These competencies are crucial for building strong and resilient health systems that are capable of expanding and sustaining service coverage; withstanding shocks like the recent Ebola outbreaks in West Africa; and contributing to global health security.

The long-term engagements the School has established worldwide has enabled many including myself to undertake trailblazing scholarship and innovations in the field of health policy and health systems management in Uganda, Thailand, South Africa and many other countries. The mix of scholars and practitioners in the field of applied health policy and systems at the School is unmatched. This breadth of policy communities, which have been knit together by staff, graduate students, alumni and partner institutions across UK, Europe, Africa and globally, is among the greatest resource the School has created to advance public health and influence policies and systems for better health and wellbeing around the world.”



Nigel Edwards, Chief Executive, Nuffield Trust

As someone involved in trying to shape health policy, the research undertaken at the London School of Hygiene & Tropical Medicine frequently informs my work. Much of this consists of helping policy makers and leaders in healthcare make better policy choices and improve implementation. I find myself frequently using its policy research on new models of care, commissioning, approaches to evaluation and lessons from other European systems.

The development of methods in evaluation is useful but the combination of academic rigour and policy insight is particularly valuable as it offers useable answers to real life questions. Collaboration with the Policy Innovation Research Unit and the European Observatory at the School also provides insight and professional development for my staff.”



Dr Matshidiso Rebecca Moeti, Regional Director, World Health Organization Africa Region

I studied for my MSc in Community Health for Developing Countries at the London School of Hygiene & Tropical Medicine in 1986, at the height of the global AIDS epidemic. The knowledge and relationships I gained there have helped in my career in international public health. We have come a long way in the past few decades, but Africa - and the world - still face many difficult health challenges, as we have seen over the past year. As well as the support of member states, WHO needs good partners in government, civil society and the research community. I am delighted to be working with colleagues at the School to develop effective interventions and services, and to push for improvement in global health systems.”



Professor Don de Savigny, Head Health Systems and Policies Research Group, Swiss Tropical and Public Health Institute, Basel

For those of us in health research for development, it is health policies and systems that are the final conduit and crucible through which almost all of our successes and products must pass if they are truly to have impact on improving population health and health equity. It is gratifying to see the space for health policies and systems research opening up in its own right in many institutions dedicated to global health. The London School of Hygiene & Tropical Medicine is in the envious position to lead and strengthen this movement. The School has such a wide and deep spectrum of public health disciplines under its roof that both feeds to and benefits from policies and systems research. And the broad reach of the School's teaching and learning to current students and future leaders from around the world provides a rich opportunity to grow this field.

At the Swiss Tropical and Public Health Institute, our most recent joint collaboration in this field has been with the School's work in the Consortium for Health Policies and Systems Analysis for Africa. And we are currently working together to produce the first methodology handbook in Applied Health Systems: A Methodology Handbook as a way to bring theory and concepts closer to practical application. These are important relationships which exemplify mutual learning for change through our shared commitment across countries and institutions. I am confident that progress in both domestic and global health policies and systems will continue to accelerate with the strengths of the School now being brought to bear in this cohesive and collaborative way.”

Introduction

Health Policy and Systems Research at the School goes back a long way, though it has been labelled as such relatively recently. As you will see from this booklet, our work encompasses country health systems at all levels of development. However, the work in the UK and Europe on the one hand, and low and middle income countries on the other, had different origins.

A key impetus to the development of our UK research expertise was the initiation of the Department of Health funded Service Delivery and Organisation Research Programme in 1999. Its purpose was to commission research to produce evidence that improves practice in relation to the organisation and delivery of health care, and build research capability and capacity amongst those who manage, organise and deliver services. Along with the Policy Research Units described here, this programme still provides valuable lessons on how to commission research that responds to policy makers’ demands and managers’ needs for evidence.

Around the same time, the European Centre for the Health of Societies in Transition (ECOHST) was set up at the School to conduct research and analyse policies on health and health care in countries of Central and Eastern Europe and the former Soviet Union. ECOHOST is the School’s partner in the European Observatory on Health Systems and Policies, which has been a driving force in development of health policy and systems analysis. ECOHOST has been succeeded by the Centre for Global Chronic Conditions.

The School’s research tradition in low and middle income country settings had its origins in research programmes funded by the British Government’s aid ministry from 1990 onwards. Initially focusing on health economics and financing, they later broadened to health systems. Continuing themes from the earliest days have been perennial issues such as the role of the private sector and public private partnerships. In parallel the School’s tradition of policy analysis has grown, developing frameworks and methods for

understanding how policies reach the political agenda and are taken forward.

These two geographically defined fields of research are increasingly being brought together, in recognition of the scope for lesson learning across countries at all levels of development. The School’s body of health policy and systems research as a whole is characterised by:

- Disciplinary breadth and depth – drawing on the contributions of economists, sociologists, anthropologists, political scientists, geographers and historians
- Topic diversity – examining health systems and policies at the systems level (local, national and global) as well as through the lens of specific health systems elements, and specific diseases and programmes
- Diversity of settings – not just settings as defined by income level, but also including countries



Professor Dame Anne Mills FRS, Deputy Director and Provost, London School of Hygiene & Tropical Medicine

in crisis and in transition, and diverse settings within countries

- Long standing partnerships – with researchers and policy institutions across the world.

In health policy and systems research, comparative analysis is a well-established method for deriving results of value to decision makers – whether comparison across the countries within the UK, across states in India, or across countries in the global South. The School’s depth and breadth of expertise provides exceptional opportunities for lesson learning across settings. It also is the foundation of our educational programmes at both masters’ and research degree levels, where students can draw on the knowledge and expertise of our researchers while developing their own research interests.

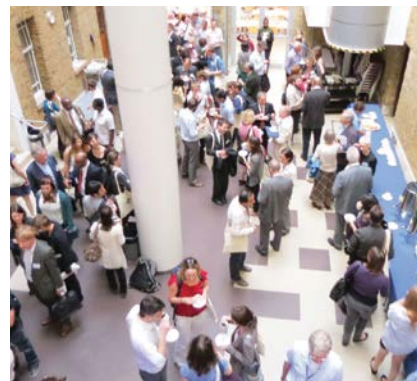
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Health policy and systems - our approach

Health policy and systems research at the London School of Hygiene & Tropical Medicine has a range of distinctive features contributing to its leading role globally. Research, policy engagement and capacity-building take place in high, middle and low income countries. This enables colleagues to share ideas, apply theoretical and methodological approaches across settings, and learn lessons on a broader scale.

Our research programmes and partnerships span clinical research, health services research, economics, history, anthropology epidemiology, and policy research, drawing on disciplinary strengths and diversity of methods. Often, several disciplines work together within large multi-partner research programmes, maximising expertise to support rigorous study designs. This also provides opportunities for taking a systems perspective and approach to understanding complex real life problems, for example in mental health, maternal and child health, chronic conditions, and neglected tropical diseases.



The range of health policy and systems research at the School encompasses work on the public sector, private sector, and from the community to the national level. This diversity enhances learning across programmes and enables conceptual and methodological innovation. It also means that we are able to respond to demands at local, national and international levels.

Our model of policy engagement seeks to answer policy-relevant questions and promote change in health systems operation and governance. Engagement occurs through close institutional and country partnerships and through the various School Centres which help to synthesise health system research findings in relation to specific diseases, topics, or geographical areas. Building relationships among researchers, practitioners, managers and service users promotes sustainable long term engagement, sharing of ideas and knowledge, and policy influence.

Research and policy engagement both contribute to the goal of **building the field of health systems and policy research** at national level, in our partner countries, and also regionally and globally. The strategies



to achieve this include training and capacity development, stimulating the communication of high-quality findings through journals and other outlets, especially social media and building communities of practice such as [Health Systems Global](#).

A unique feature of health policy and systems research at the School is the strong link between research, policy engagement and capacity building. Our staff are encouraged to make significant contributions to each of these aspects, ensuring that research is practice-oriented and pragmatic – focused on what works to promote change and improve health.

Our research

As health systems are complex, innovative research approaches are needed to understand them, looking at how individual interventions and policies work and how they interact with other elements of health and wider socio-economic systems.

At the London School of Hygiene & Tropical Medicine we conduct research across a range of high, middle and low income settings, in partnership with country level research institutions and international agencies. We also work in areas affected by conflict and undergoing socio-political and epidemiological transitions. There is an emphasis on working across common health systems themes in multiple

settings, maximising the potential for identifying patterns and learning. In practice this is achieved through multi-country research programmes and multidisciplinary Centres providing a focus for work in thematic areas.

The School is unique in the richness of the disciplinary expertise it is able to apply to health policy and systems research. Many studies involve interdisciplinary working, others retain

a single disciplinary focus to analyse health policy and systems issues, including disciplines perhaps more unusual in their application, including history. Most of the School's flagship research units, Centres and projects are multi-disciplinary, drawing together expertise to offer complementary and more holistic perspectives on a particular issue.

Understanding and comparing health policy and systems

Our health policies and systems research examines the health policies and systems of particular countries and their organisational, financial and governance arrangements. It asks how and why policies and programmes are designed and implemented, the extent to which they are put into practice and what constrains their implementation. Exploring the different health systems' organisational structures, functions and actors, and their complex interactions, often over time, adds to an in-depth understanding of why policies may succeed or fail. A second strand of work entails comparative and historical analyses of health systems, seeking to elicit patterns and triggers for health system change, taking into account the inherent path dependency within health systems to understand both intended and unintended consequences.

Children in Cabo Delgado, Mozambique. Credit: Sarah Bandali/LSHTM



Resilient and Responsive Health Systems (RESYST), led by Kara Hanson and Lucy Gilson, is a UK Department for International Development (DFID)-funded research consortium comprising 10 research institutions in Africa and Asia. It seeks to generate knowledge on how to enhance the resilience and responsiveness of health systems addressing three critical health system components: financing, governance and health workforce. Health system resilience has been high on the international agenda due to the Ebola epidemic and its devastation of the health systems of affected West African countries.

RESYST work has focused instead on 'everyday resilience' as a critical characteristic of health system

strengthening, recognising the multiple chronic stresses that every health system carries. Concern for everyday resilience highlights the particular importance of paying attention to health system software, such as leadership, health worker values and motivations, in health system strengthening.

Learning from health systems strengthening in maternal and newborn health in China to inform accelerated progress for saving lives in Africa led by Carine Ronsmans is a multi-disciplinary collaboration between the School, Peking University and Sichuan University in China. The project involves a team of health economists, health systems experts, qualitative scientists and

epidemiologists including Carine Ronsmans, Josephine Borghi, Kara Hanson and Melisa Martinez-Alvarez, and is funded by the MRC/DFID/ESRC/Wellcome Trust Joint Health Systems Research Initiative. It aims to explore how investments in the health system have contributed to dramatic improvements in maternal mortality in China, and identify lessons that could be applied to other low-income settings. Preliminary results show that changes in the way the health system is financed have important repercussions for health worker behaviour and out of pocket expenditures, and that lack of transport and low education remain important barriers to access to maternal health care.



The London School of Hygiene & Tropical Medicine is a partner in the [European Observatory on Health Systems and Policies](#), which also includes ten governments in Europe, the French National Union of Health Insurance Funds, the World Health Organization, the European Commission and the London School of Economics. Its mission is to support and promote evidence-based health policy making through comprehensive and rigorous analysis of the dynamics of health care systems in Europe and to engage directly with policy makers. It carries out a systematic range of studies, analysing and comparing health system and policy issues. A recent example is work on international comparison of health system performance, which examines current efforts to compare systems, identifies and explores the practical and conceptual challenges that arise, and presents key lessons and future priorities.

Seeking to develop methods for understanding and comparing complex systems Karl Blanchet has worked with Don de Savigny of Swiss Tropical and Public Health Institute and Taghreed Adam of WHO, to edit a handbook describing 11 methods to research health systems using systems thinking approaches.

Taking a historical lens to health systems development, the School's Martin Gorsky, Alex Mold, John Manton, Chris Sirrs, Hayley Brown, Erica Nelson and others at the Centre for History in Public Health examine how different national health systems have developed and how health systems change over time. The Centre also shows how the possibilities for future improvements to health systems are determined in part by the legacy of the past. Historical events have shaped the economic and political contexts of any given health system. The Centre is conducting focused studies in sub-Saharan Africa, the Western Pacific and Latin America, for example on The rise and fall of health system planning in post-colonial Africa by John Manton and Martin Gorsky, and on **Making Health Systems: Negotiating**

between 'lo ideal' and 'lo real' in Colombia, 1961 – 1993 by Erica Nelson and Martin Gorsky. The Centre is also engaged in comparative research on health systems development in OECD countries, for example the work by Hayley Brown and Martin Gorsky on **'Progressives to laggards'? Health system reform in Britain and New Zealand, 1948-1993'.**

Funded by a Wellcome Trust Investigator Award, **Health systems in history: ideas, comparisons, policies** led by Martin Gorsky, traces the intellectual and policy history of the concept of health systems in global health in the twentieth century. Methods include oral history, interviewing politicians and leaders; witness seminars on key political events; and archival documentary research/discourse analysis of documents produced by national and local governments, and international organisations.



Courtesy of Martin McKee

The Centre for Global Chronic Conditions seeks to improve understanding of and responses to chronic conditions in low, middle and high-income country settings through research, policy and public engagement and teaching. The Centre fosters collaboration and communication between researchers across a range of settings and disciplines. We have with a strong focus on health systems, and skills in epidemiology, economics, social and political sciences. We address chronic non communicable diseases (NCDs), and also their interaction with other chronic conditions – in particular mental health, and chronic communicable diseases such as TB and HIV/AIDS. We have a particular interest in research on

integrated approach to the prevention, treatment and management of chronic conditions.

[@Martin McKee](#), [@Dina Balabanova](#), Bayard Roberts, Benjamin Palafox, Adrianna Murphy, Pablo Perel and colleagues participate in the Prospective Urban Rural Epidemiology (PURE) study that seeks to understand the health systems and individual-level barriers to effective prevention and treatment of cardiovascular and other non-communicable diseases worldwide. Funded by the Canadian Institute for Health Research and ESRC among others, it includes 25 countries at all levels of development, from Canada to Zimbabwe. With over 200,000 people in urban and rural areas being followed up, stark inequalities have been identified in diagnosis, treatment, and control of hypertension. Yet some countries are able to provide equitable treatment. The team also participate in a number of projects embedded within PURE, including a cluster randomised control trial of new approaches to managing hypertension in Colombia and Malaysia, based on a detailed analysis of health systems from the perspective of the users and their families that enable researchers to create a comprehensive picture of the problems faced and propose solutions to overcome them.

The multi-disciplinary [IDEAS maternal and newborn health project](#), funded by the Bill & Melinda Gates Foundation, aims to improve the health and survival of mothers and babies through generating evidence to inform policy and practice. The project uses measurement, learning and evaluation to find out what works, why and how in maternal and newborn health programmes. IDEAS focused on six outcomes in Nigeria, Ethiopia, and India related to different building blocks: tracking progress; supporting local decision-making; improved coverage measurement; understanding facility-based quality-improvement; fostering innovation sustainability; and partner engagement and integration.

Exploring policy decision making

The London School of Hygiene & Tropical Medicine is home to a large and growing body of work analysing the nuances and complexities in policy decision making. The study of power is integral to our analyses including how power is defined, who holds and claims power and how this influences policy decisions. We test and develop theory from a range of disciplines through case studies, comparative analyses and interdisciplinary research.

Researchers at the School, including Susannah Mayhew, [@Lucy Gilson](#), Johanna Hanefeld, Manuela Colombini and Ben Hawkins, and Marco Liverani, have sought to empirically test theories of policy decision making, many of which were developed in high-income settings, to better understand the influences and nuances of policy decision making in low and middle income settings. This work addresses agenda setting and policy implementation, and supports both advocacy and leadership development.

[GRIP-Health](#) is a collaborative research project which focuses on the use of evidence in policy. It seeks to improve the practice of evidence informed health policy through the application of political, institutional and sociological analysis to explore the

politicisation of health policy issues; and the institutional structures through which evidence is incorporated into the policy-making process. The project, involving Justin Parkhurst, Ben Hawkins, Elisa Vecchione, Stefanie Ettelt, Marco Liverani and others, compares the use of evidence in the UK, Germany, Ghana, Ethiopia, Cambodia and Colombia. Examples are the use of scientific evidence in legal court rulings relating to access to health care in Germany and in health policy evaluation in Ghana.

Within the IDEAS project, policy analysis of scaling-up of donor-funded maternal and newborn health programmes, led by Neil Spicer, has sought to develop an understanding of policy decision making surrounding government adoption of these externally funded interventions including policy actors' power and the

use of evidence in decision making, together with health systems factors influencing their implementation at scale. A linked policy analysis as part of the IDEAS project in India focused on strengthening evidence-informed district level decision making in Uttar Pradesh, including understanding the institutions, and attitudes that promote and undermine data sharing between the private and public sectors.

Ben Hawkins' work on the influence of the alcohol industry on health policy has shown that alcohol industry actors exercise significant long-term influence over policy to support their underlying economic interests. Despite this, effective public health policies are possible where there is strong political commitment and an effective NGO community able to promote public health interests.

Health policy and systems in the UK

As well as its international work, the School hosts a number of groups working specifically on UK policies and systems which directly inform government policies.

There have long been subtle differences in the policies and organisation of the health and health care systems of the constituent countries of the UK, while they have pursued very similar goals. However, since political devolution starting in 1998, this 'natural experiment' has become ever more interesting as policies and high level system 'logics' have diverged. This presents an opportunity to evaluate different approaches to system maintenance and improvement such as the use of market-like incentives versus a planned health care economy. Nicholas Mays has been conducting a series of studies comparing the UK countries' health care before and at intervals since devolution using publicly available performance data. There are indications that England, where a more market-oriented, competitive system of service supply had persisted, initially out-performed Scotland, which had abandoned such an approach after devolution, particularly on measures of efficiency and responsiveness. However, this gap

had disappeared by 2014. The focus of this research effort has now turned to the public health systems of the four countries.

[The Policy Research Unit on Commissioning and the Healthcare System \(PRUComm\)](#) is based jointly at LSHTM, led by Stephen Peckham and Pauline Allen, and the Universities of Manchester and Kent. The analytical work of PRUComm supports understanding of how commissioning operates and how it can improve services and access, increase effectiveness and respond better to patient needs; and of how elements of the English healthcare system interrelate. PRUComm uses a range of disciplines to undertake its work including political science and policy analysis, organisational economics and law. Examples of research undertaken include: Investigation of the development and operation of new GP-led Clinical Commissioning Groups, and investigation of the effects of the system wide changes introduced by the 2013

Health and Social Care Act in England.

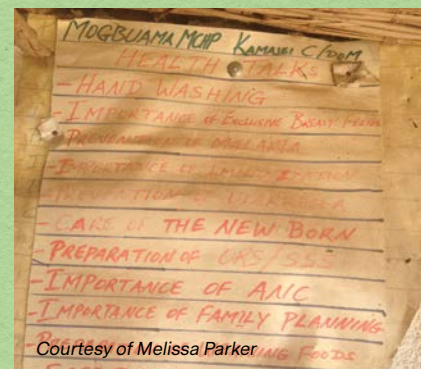
[The Policy Innovation Research Unit \(PIRU\)](#) brings together experts in health and social care research primarily to undertake evaluations of innovative policies, frequently in the form of pilots. The Unit is funded by the Policy Research Programme of the Department of Health, which commissions its work. Evaluations cover the entire portfolio of policies for which the English Department of Health & Social Care is responsible including health services, social care and public health. Current evaluations include those of the Integrated Care and Support Pioneers, the Social Impact Bond Trailblazers, the implementation of the UK Anti-Microbial Resistance Strategy and the Heatwave Plan for England. Recently completed projects include the evaluations of the Public Health Responsibility Deal, using the Friends & Family Test for improving general practice, and supporting people with dementia using technology.

Accessible and responsive frontline health systems

While effective policy designs and implementation processes are key to affordable and responsive care and thus improved health, these outcomes are often not achieved. Understanding the reasons behind the mismatch between health policy rhetoric and policies, and the reality faced by people seeking to access essential care constrained by poverty, geographical isolation and disadvantage is a key focus of our research.

Constraints to effective policy span all levels of the health system and often reflect actions and relationships at the frontline, involving providers, users and communities whose behaviour is influenced by social norms, beliefs and power relationships. Understanding these interactions at the frontline is essential to questions of health systems governance, to understanding why some health reform processes succeed and why others fail, and to understand why some health systems may be more resilient to shocks than others.

The Ebola Response Anthropology Platform was established in October 2014, led by Melissa Parker involving Fred Martineau and others. By drawing upon existing anthropological expertise and undertaking targeted fieldwork, it was possible to provide rapid, practical, real-time advice to governments, bilateral agencies and international NGOs about how to engage with crucial socio-cultural and political dimensions of the epidemic and thereby build locally-appropriate and responsive interventions. It was a novel and successful approach to increasing the effectiveness of medical humanitarian responses. Moving forward, the Platform provides a useful model enabling responses to unfolding humanitarian crises to be shaped by anthropological insights in real time.



Building upon the work of the Ebola Response Anthropology Platform, Susannah Mayhew, Melissa Parker, Dina Balabanova and Johanna Hanefeld are undertaking a study on **Building Resilient Health Systems in Post-Ebola Sierra Leone**. This brings together anthropologists and health policy and systems analysts to develop a multidisciplinary framework to analyse the ways in which the

international Ebola response affected Sierra Leone's health system and its ability to withstand future shocks. It also examines how international, national and local emergency response mechanisms can be used to build a resilient health system in Sierra Leone. It explores the interface between official health systems and the reality of local actions on the ground, understanding who took decisions and why, and whether those connected to the international response reacted against it or were independent of it.

These researchers are also analysing the resilience and responsiveness of health systems in relation to climate change to describe what a "climate-resilient" health system would look like and what can be learned from related bodies of knowledge such as disaster preparedness. Taking up similar themes, work by Karl Blanchet through the School's **Health in Humanitarian Crises Centre** studies how health systems respond to armed conflicts and humanitarian crises by developing resilience indices and studying how humanitarian interventions can disrupt health systems' structure.

Our research includes a strong concentration on policy analysis approaches focused on **frontline health systems**, specifically in low and middle income countries. Work by Johanna Hanefeld, Lucy Gilson and Dina Balabanova has focused on understanding how human interaction and organisation affect health system performance and health outcomes. For example, Johanna Hanefeld has explored how management structures of clinical staff in district facilities in Zambia affect performance, and how mechanisms intended to increase community participation at facility and district level succeed or fail.

Similarly, work by the **Integra Initiative**, led by Susannah Mayhew, Anna Vassall and others has examined the interactions of mid-level managers and frontline providers with structural health systems components. The longitudinal study, evaluating different models of integrated reproductive health and HIV care provision and costs in Kenya and Swaziland, highlighted how systemic barriers to integrated care can be overcome by effective team-working and initiative-taking by management and frontline staff within the system. It also demonstrated potential trade-offs in costs which managers and policy decision makers need to consider.



Courtesy of Melissa Parker



Courtesy of Benjamin Palafox

The Responsive and Equitable Health Systems - Partnership for NCD (@RESPONDncd) funded by a Wellcome Trust/Newton Fund-MRC Humanities and Social Science Collaborative award seeks to create the building blocks for better treatment and control of NCD among poor and vulnerable households in Malaysia and the Philippines. Recognising the complexity of care seeking behaviour, Martin McKee, Dina Balabanova, Alicia Renedo, Benjamin Palafox, Maureen Seguin, with collaborators from the University of the Philippines - Manila, UCSI University Malaysia, Universiti Teknologi MARA and Universiti Putra Malaysia, are working with patients from poor and vulnerable communities in Malaysia and the Philippines. The team is tracing their journeys through the health system and their ability to adhere to treatment for hypertension, a major cause of disability and premature death, yet one which is easily detected and treated. The project will provide robust evidence on the barriers to hypertension control faced by low-income households and on how to promote optimal management of hypertension. Surveys and qualitative methods are combined with innovative open-source mobile technology to capture participant-generated content on their lived experience in real-time.

The interaction between households and health systems in low-income settings frequently involves significant costs and may lead to household impoverishment. This is the subject

of Adrianna Murphy's Wellcome Trust funded **study of care seeking for NCDs** in South Africa, Tanzania and Zimbabwe, linked to the PURE study, which seeks to capture the burden of health care costs for non-communicable diseases on patient households, using longitudinal household expenditure diaries and qualitative interviews.

Recognising the diverse pathways to care and the role of local governance, John Porter has conducted work with the Health Governance Hub at the Public Health Foundation of India on **policies affecting traditional and complementary practitioners and local healers** in India and also on health policies related to nursing governance. Working with the Transdisciplinary University at the Foundation for Revitalisation of Local Health Traditions in Bangalore, he has undertaken collaborative research in primary health care policy demonstrating the important role of community based local health traditions in strengthening health systems. For the **Integrated Diagnosis Approach (IeDA) study** in Burkina Faso, Karl Blanchet and collaborators are using realist evaluation with a stepped wedge trial to investigate the effect of the introduction of a computer-based clinical support tool at the primary health care level on local health systems exploring dynamics between teams, between health staff and district authorities, and how these influence the organisation of service delivery.

There is a current policy consensus in England that better coordination within

and between the NHS, local government and other services should lead to more 'person-centred, coordinated care' and more efficient services, and should improve individuals' experiences and outcomes of care. The Policy Innovation Research Unit (PIRU) was commissioned by the English Department of Health to undertake an evaluation of the **Integrated Care and Support Pioneer Programme**, which covers integration initiatives in 25 local areas throughout the country. Starting in 2015, this five-year evaluation is a unique opportunity to examine not only whether the Pioneers result in better coordinated care, provided in a more cost-effective way, but also whether any benefits and savings continue over time.

In two collaborative projects in the UK, Cicely Marston and Alicia Renedo examine the meanings and values of patient experience and citizen participation, delivering people-centred healthcare, and novel forms of knowledge and services co-production. One is an ethnographic study of patient participation in health research and the second, **This Sickle Cell Life**, is a longitudinal qualitative study exploring how social context affects transitions from paediatric into adult healthcare for young people with sickle cell. It uses a sociological approach to look beyond the purely clinical realm into other areas affected by transitions to adulthood such as education and relationships.

Financing health systems

The goal of Universal Health Coverage has once more focused attention on how health systems are financed to ensure access to services and to protect households from impoverishing health care expenditures. Health financing systems are responsible for mobilizing resources, pooling them to allow for risk sharing and cross-subsidy, and transferring resources to health care providers in ways that encourage equity, efficiency and quality.

RESYST research on financing for Universal Health Coverage in South Africa, Kenya and Nigeria has shown that it is possible to substantially increase domestic tax revenue, even in low-income countries, by expanding the tax base and improving the efficiency of tax collection systems. This source of revenue is more stable and sustainable than donor funding, and more equitable than insurance schemes, which often exclude the poorest and most marginalised populations. However, the research also reveals that Ministries of Health face a critical challenge in making a case for health so as to expand its share of government spending.

A team at RESYST led by Kara Hanson and colleagues from the University of Cape Town has advanced the concept of 'strategic purchasing', ie. the way in which money raised from taxes or insurance contributions is transferred to health providers. The strategic purchasing framework considers key purchasing actions in relation to citizens, providers and governments. This has involved comparative analysis across ten countries in Africa and Asia,

showing a lack of strategic purchasing in most countries.

Josephine Borghi and colleagues at the Ifakara Health Institute, and Christian Michelsen Institute in Norway have been researching **the effects of payment-for-performance (P4P)** on the health system. They found that P4P was associated with improvements in the availability of drugs and supplies, and more frequent supportive supervision, and improved relationships between providers and their managers. The study also found that initially facilities serving wealthier groups were more likely to meet targets and obtain bonus payouts than those serving poorer groups, but that there was convergence in performance over time.

The School is also leading two major **health systems financing studies in the Asia-Pacific region** led by Virginia Wiseman with colleagues including Marco Liverani, Lorna Guinness and Anne Mills, in collaboration with the University of New South Wales, Thailand Ministry of Public Health, National University of Timor Leste, Fiji National University and the University of Cape Town. The first is the Sustainable



Courtesy of Patti Shihi

Health-financing in Fiji and Timor Leste (SHIFT) Project funded by Australian Aid, Department of Foreign Affairs and Trade and the second is the Cambodia Health Equity and Financing (CHEF) Project funded by the Australian Research Council. These studies represent the first attempt to quantify financing and benefit incidence for the entire health systems of these countries. This evidence will help ensure the poor are not left behind in health financing reform.

Courtesy of RESYST



Human resources in health systems

Health workers sit at the frontline of the health system. The supply and distribution of health workers is an important influence on access to health care; their attitudes and behaviours influence patients' experience of using the health service. Health system managers carry responsibility for implementing policies that contribute to health system development. Yet they often work under challenging circumstances, with constrained resources and shifting priorities.



Community health volunteers from the Health Development Army in Ethiopia - courtesy of Dina Balabanova

RESYST research has explored a number of issues related to nursing labour markets in low and middle income countries. A cohort of South African nursing graduates was followed for a number of years to investigate their job choices, with a focus on retention in rural areas. Other work in Thailand, India and Kenya investigated the expanding role played by private nurse training institutions, identifying a range of challenges relates to integration of graduates from these programmes into the public health system.

Lucy Gilson works in South Africa with wider teams of researchers, educators and health managers on a **Health system leadership and change programme**. This programme combines research around leadership and management issues with educational activities and direct and regular engagement with health policy makers and managers. It has supported the development of a leadership competency framework and strategy, directly impacted on managerial practices and enabled curriculae review

and revision to support leadership development as a long-term health system intervention.

Community health volunteers as mediators of accessible and responsive community health systems: lessons from the Health Development Army in Ethiopia - Funded by MRC/DFID/ESRC/Wellcome Trust Joint Health Systems Research Initiative, Dina Balabanova, Martin McKee, Susannah Mayhew and Mirkuzie Woldie Kerie and team in Jimma University are studying whether community volunteers can improve appropriateness and acceptability of health services, and improve access and the uptake of essential interventions. The project explores the role of community volunteers in Oromia region known as the Health Development Army, serving as mobilisers, service providers and intermediaries between the population and the health system, as well as agents for good governance. Focus group discussions, semi-structured and key informant interviews and policy analysis in locations characterised with

different health system performance, are combined with self-directed video diaries to enable volunteers to provide authentic narratives and allow co-production of research findings.

Other HPSR work includes understanding the health systems conditions promoting effective task shifting of HIV/AIDS treatment roles to nurses in Uganda based on mixed quantitative and qualitative methods, and philanthropic foundations' strategic priority setting and grant making decisions based on qualitative key informant interviews supervised by Neil Spicer.

Natasha Howard and Elizabeth Speakman have been working with colleagues from the Royal Tropical Institute Amsterdam, Médecins Sans Frontières, and Jhpiego to assess initiatives to train and embed skilled midwives within remote under-resourced communities as a means of strengthening health services provision and improving maternal and neonatal survival in fragile and conflict-affected settings.

Examining disease-specific programmes

A significant strand of health systems research focuses on analytical and empirical work which examines disease-specific programmes and interventions from a health systems perspective. Such studies ask: how well do these programmes fit given the organisational, financial and governance arrangements, and what are the health systems barriers and facilitators that affect the performance and outcomes of such programmes. These studies are often undertaken alongside clinical trials, intervention and epidemiological studies testing disease-specific interventions.

Vaccination programmes - Research on the interface between health systems and vaccination programmes by Sandra Mounier-Jack and Tracey Chantler has included several studies on how to optimise the delivery of the immunisation programme in the UK, recommending the development of partnerships to mitigate systems fragmentation, and making practical recommendations to improve the delivery of adolescents vaccines. Together with PATH, Deborah Watson-Jones, Katherine Gallagher, Sandra Mounier-Jack, and Natasha Howard led the first comprehensive review of lessons learned from Human papilloma virus (HPV) vaccine delivery experiences across 46 countries, examining planning, communication, delivery, achievements and sustainability, and identifying the pitfalls informing Global Alliance for Vaccines and Immunisation's strategic work on HPV vaccine scale up.

Tuberculosis (TB) control and health systems - the Communicable Diseases Policy Research Group led by Richard Coker with Mishal Khan, James Rudge, Fatim Lakha and colleagues, has worked closely with national TB control programs

to conduct epidemiological studies to evaluate and inform tuberculosis control policies and systems in China, Myanmar and Cambodia. These studies have investigated whether prolonged delays to diagnosis of TB persist even when global case detection targets are being met and whether weaknesses in primary public health services may contribute to emergence of drug resistant TB.

James Rudge is working at the interface of health systems and livestock production systems analysing risk and pandemic influenza in Cambodia. Also working on pandemic preparedness, Liz Speakman is evaluating governance arrangements across the EU. Fatim Lakha is working at the interface between health systems and biopharmaceutical and animal vaccine production in Thailand and neighbouring SE Asian countries exploring existing programs and developing roadmaps to enable establishment of new programs and build capacity.

[Optimising health systems to improve delivery of decentralized care for patients with drug resistant tuberculosis](#) - South Africa has a high burden of drug-resistant TB, with an

estimated 24,000 new cases per year, only 22% of whom are successfully treated. Since 2012, implementation of universal testing for resistance to rifampicin, a key first line drug, has resulted in increased numbers of patients identified and some reduction in time to appropriate drug treatment. In order to increase access to DR-TB treatment, South Africa moved to a policy of decentralized treatment provision in 2011, providing DR-TB treatment at lower levels of the health system, with less reliance on hospital treatment; the policy has been variably implemented across the country.

Work by Mark Nicol of the University of Cape Town, Karina Kielmann of Queen Margaret University with Mosa Moshabela of the Africa Health Research Institute, South Africa, and Alison Grant of LSHTM is using a policy review, systems modelling and realist evaluation methods to assess health system factors that enhance or undermine access and quality of treatment for DR-TB, in order to determine what works and why, across different settings.

Courtesy of Deborah Watson-Jones



Pieter ten Hoopen / The Lancet Maternal Health Series

Cardiovascular disease in Russia: strengthening evidence about causes, mechanisms, prevention and treatment has focused on Russia which has one of the highest burdens of cardiovascular disease in the world. Working in 13 cities across Russia, a team coordinated by Martin McKee and David Leon have examined the management of individual patients with heart attacks, looking at their contacts with the health system before their acute illness, and their management in hospital and subsequently. They track how considerable progress has been made, with increasing number of patients getting rapid access to revascularisation. Work at national level is focused on understanding how best to bring about change in Russian hospitals, to ensure that good practice developed in one place can be adopted elsewhere.

Integrated health systems for the prevention of malaria in pregnancy and infancy - Katherine Theiss-Nyland and Jo Lines have explored strategies for strengthening the policies and implementation systems for distributing insecticide treated nets used for malaria prevention; specifically examining the opportunities to integrate routine health services, especially giving nets to pregnant women through antenatal clinics and to infants through immunisation services. Some key findings include the under-supply of nets to these distribution channels, and the lack of integrated monitoring and evaluation for integrated health services.

De-worming strategies in Kenya (TUMIKIA) funded by DFID / MRC /

Wellcome Trust Joint Global Health Trials led by Rachel Pullan with Dina Balabanova and Mishal Khan, recognises that disease specific programmes are often implemented in isolation, and are donor-dependent and unsustainable. Research is underway to interpret the findings of a cluster randomised trial of school-based deworming compared with deworming delivered by community health workers to interrupt the transmission of soil-transmitted helminths in Kenya. The research examines the health system barriers and facilitators to implementing the two treatment models, in the context of currently promoted decentralisation, exploring the feasibility and sustainability of different programme configurations, governance and stakeholder relationships.

[The Centre for Global Mental Health](#) is an international centre of excellence in mental health systems research, run jointly by the London School of Hygiene & Tropical Medicine and King's College London Institute of Psychiatry, Psychology and Neurosciences. Members are conducting research on how best to scale up services in order to increase access to quality mental health services to suit Nigeria's unique health infrastructure, as well as mixed-methods implementation research to identify best practices in mental health information systems and monitoring and evaluation in sub-Saharan Africa. **PRIME** is a research collaboration investigating the integration of mental health into primary care in Ethiopia, India, Nepal, South Africa, Uganda, through a combination of formative research, district level implementation research, and large-scale

implementation research following scale-up to multiple districts.

A body of work on **health systems challenges in responding to violence against women** in Europe, Middle East, North America, Asia and sub-Saharan Africa and Latin America has been developed by Gender Violence and Health Centre members Manuela Colombini, Loraine Bacchus and Susannah Mayhew. This body of research draws together different disciplines including health services research, health systems and policy analysis and social science. Researchers have undertaken HPSR evaluations of different intervention models: One Stop Crisis Centres in Asia, health policy analysis of the integration of intimate partner violence into primary health care, sexual and reproductive health care and HIV settings in Nepal, South Africa, Sri Lanka, Palestine and Brazil. Currently LSHTM are Co-Directing an NIHR Global Health Group on Health Systems Responses to Violence against Women.



Courtesy of Tina Bonde Sørensen

Health systems and the new global architecture

Understanding health policy and systems development, operation and outcomes at national and local levels requires an understanding of global processes such as globalisation, inequalities, migration, trade and how health systems respond to these. Given these processes, global health governance and global actors have an important influence on health policy and systems development.

Recent research undertaken by Johanna Hanefeld has included a focus on how **health systems can adapt and respond to increased patient mobility and migration**. This has spanned work in the UK, Thailand and most recently in South Africa. Research funded by MRC/DFID/ESRC/Wellcome Trust Joint Health Systems Research Initiative and undertaken with the Africa Centre for Migration and Society at the University of Witwatersrand focused on how patient mobility and migration affect health systems and outcomes in maternal and child health.

Work has also examined how global guidelines are translated to national level in Uganda and Ghana, taking the examples of WHO treatment Guidelines and, in partnership with Imperial College London, the UNAIDS 90-90-90 target. Questions asked include: how do the actions and interests of global health actors influence what happens at clinic level? By which processes are internationally defined targets translated, and how can the global

policies and actors best support those implementing programmes at national and local levels to achieve universal coverage, to ensure health systems are more resilient to shocks and more people-centred.

[Historical perspectives on international policy towards health systems](#). There are many agencies today, including WHO, the World Bank, and NGOs for whom health systems are a global health priority. However, for many low-income countries early experiences of development began as impositions during the colonial era. Since decolonisation, planning has led both to successes, where political will and resources have aligned, and failures, due to misplaced optimism and poor understanding. Staff at the Centre for History in Public Health are applying historical analyses to health systems. Wellcome Trust funded projects include: The politics of international health system metrics, 1924-2010 (Martin Gorsky, Chris Sirrs); the rise and fall of health system planning in post-colonial

Africa (John Manton, Martin Gorsky); and the Idea of a Health System: its Application in International Health Policy, with reference to the African and Western Pacific regional offices of the WHO (John Manton). National studies are ongoing in Nigeria, China, The Philippines, Britain and New Zealand.

Using a governance and accountability lens, the [Climate Governance](#) project led by Susannah Mayhew examined the accountability and responsiveness of global intergovernmental agencies to climate change challenges and the framing of “health” within this discourse. It examines interactions between institutional structures and policies and the influence of individual leaders and their discourse both at the helm of institutions but also at middle -management levels. They also examined accountability, including the changing pressures from client countries and member states on climate change action.

The private healthcare sector in low-income settings

The private sector is responsible for a large and growing share of treatment provision in many low and middle income countries, encompassing a heterogeneous set of providers, from international-standard corporate hospitals, to small-scale clinics, pharmacies, drug shops, and in some settings general retailers and itinerant drug vendors. While some people value the increased access and breadth of service provision they provide, others are sceptical about the incentives of for-profit providers and the equity implications. Moreover, regulatory implementation is typically poor, and there are substantial concerns about the quality of care provided by some private provider types.



In our research on the private sector, we aim to enhance understanding of the operation of private providers, to evaluate interventions and policies to improve this, and consider the place of private provision in the evolution of the broader health system. We also strive to enhance methods for studying the private sector, and in particular for assessing their quality of care.

Informal and unlicensed providers are an important source of care for the rural poor in India. **Social, behavioural and economic drivers of inappropriate antibiotic use by informal private healthcare providers in rural India**, led by Meenakshi Gautham and colleagues in collaboration with the Liver Foundation in West Bengal, explores the role of this important group of providers, seeking to understand how and why they use antibiotics and what interventions would be most effective in rationalising their antibiotic use.

The School's **Maternal healthcare markets evaluation team (MET)** led by Catherine Goodman and Caroline Lynch, is seeking to understand the role of the private sector in providing reproductive and maternal healthcare

as part of its evaluation of the Merck for Mothers initiative. Projects being evaluated include social franchising for maternal health in India and Uganda and contracting out of supply chains for family planning to private operators in Senegal. The team is also investigating in which sector women seek care worldwide through multi-country analyses of Demographic and Health



Surveys, and examining the nature of competition between private providers.

Evaluating quality improvement strategies. In collaboration with the

implementing NGO, PharmAccess International, Catherine Goodman and Timothy Powell-Jackson are conducting a randomised controlled trial of the SafeCare model for facility quality improvement in private facilities in Tanzania, assessing the impact of the programme on technical and perceived quality, while using qualitative methods to understand the experiences of participating facilities, and the effect of the programme on the broader market and policy environment.

A growing body of our work concerns **health-related regulation**. In Pakistan and Cambodia Jo Hanefeld and Mishal Khan are applying newly developed research methods to investigate motivations and incentives of a wide range of public and private actors with a stake in antibiotic regulation and access. In Kenya Catherine Goodman is exploring experiences and perceptions of innovations in health facility inspection. Finally, Kara Hanson is leading an analysis of recent developments in LMIC healthcare markets, identifying the challenges and opportunities these pose for designing fit-for-purpose regulation.

Policy engagement

Our research on health systems contributes directly to health policy and practice in the UK and around the world. Here we give a few – of the many – examples of our impact.

Policy embedded research

Much of our research is embedded within existing institutions and processes to maximise its influence on policy. Many projects and programmes of research, including **RESYST** in Kenya and South Africa and the **Integra Initiative** in Kenya and Swaziland work closely with Ministries of Health to enhance policy and practice on enabling health systems to be more resilient and responsive. The work in South Africa and Kenya has pioneered the idea of a 'systems learning site' approach - as a form of embedded research, implemented at 'district level' and enabling direct effects on local managerial practices as well as supporting bottom up lesson drawing around policy implementation and health system development.

Staff and Centres also collaborate in Global networks and with WHO to embed their research into policy. For example, **The Centre for Global Mental Health** at LSHTM jointly coordinates the Mental Health Innovation Network, a global online community with WHO, which has influenced international initiatives such as the 2016 WHO-World Bank meeting on global mental health.

The School's **Centre for Global Non-Communicable Diseases** and the World Heart Federation have co-produced 'Roadmaps' identifying health system roadblocks and solutions on the road to effective prevention, detection and management of various cardio-vascular diseases in low and middle income countries, which are now used to promote development of national policies and health systems strategies for reducing premature mortality.

A recent study on funding priorities for TB control identified critical gaps and contributed to WHO's decision to set up a global R&D observatory to track spending and prioritisation of research, with the School's **TB Centre** developing a prototype R&D prioritisation tool that can be applied to different disease areas.

Working with UK policy bodies

Staff across the School regularly give

evidence to Parliamentary Select Committees and enquiries, to All Party Parliamentary Groups and Parliamentary Hearings influencing, for example, the UK Government's decision to support family planning research once again and to combine its reproductive health and HIV programmes within DFID. In addition, LSHTM has long tradition of engagement with national health policy making bodies. It is part of the **NIHR School for Public Health Research (SPHR)** funded by the National Institute for Health Research and led by Mark Petticrew. SPHR identifies and undertakes research that highlights the public health costs and benefits of local government policies, including in the areas of housing, transport, policing and public safety, licensing, education and other local authority systems. SPHR research explicitly takes a system focus, and is developing new approaches to evaluating change in complex systems.

The Policy Innovation Research Unit (PIRU) directed by Nicholas Mays and Bob Erens, is a Department of Health-funded multi-disciplinary collaboration between LSHTM, LSE and Imperial College London Business School. It negotiates its commissioned projects directly with officials in the Department of Health & Social Care and the other arm's length bodies trying to take account of both their immediate needs and longer term strategic issues. Evaluation findings are typically communicated throughout the research process.

This approach has achieved impact in: raising the government temperature threshold for triggering a cold weather alert; improving the invitations to tender for evaluations by the Department of Health & Social Care and therefore ensuring better value for money from subsequent evaluations; and an internationally used report on indicators of progress in integrated care. It is currently examining the implementation of the UK anti-microbial resistance strategy.

The Policy Research Unit on Commissioning and the Healthcare System (PRUComm) is led by Stephen Peckham and Pauline Allen at LSHTM and Kent, and Kath Checkland at Manchester. The empirical and evidence synthesis work of PRUComm supports greater understanding of how elements of the English health and social care system interrelate; and how commissioning can best be used to improve the operation of that system. PRUComm uses a range of disciplines to undertake its work including political science and policy analysis, organisational economics and law. Examples of research undertaken include: investigation of the effects of the system wide changes introduced by the 2012 Health and Social Care Act in England; and an increasing focus on attempts to improve integration of services and organisations across the health and social care system.



The Public Health Research Consortium directed by Mark Petticrew at the School, funded by the UK Department of Health & Social Care, co-ordinates researchers across eight universities, a survey research agency, and a children's charity, with the aim of strengthening the evidence base for interventions to improve public health, with a strong emphasis on tackling socioeconomic inequalities in health. The consortium's research programme is developed in consultation with the Department of Health and is informed by current priority needs identified by the Department of Health policy teams.

Influencing research agendas in the EU and the European region

Key to the mission of the **European Observatory on Health Systems and Policies** a unique partnership of governments, universities, and international agencies, is its role as a high-quality knowledge broker based on the principles of transfer (bridging between policy makers and researchers and between information users and producers), trust (providing high-quality evidence and a neutral stance recognising the real context and pressures of health systems), tailoring (to the specific needs of policy makers) and timeliness (responding to policy maker's needs and requests when and where required). Staff engaged in direct policy engagement through policy dialogues which are particularly useful in times of transition when policy-makers take stock of past achievements and explore strategic options for further health system reform.

Staff involvement in influential European panels also influences policy. Martin McKee, as immediate past president of the European Public Health Association (EUPHA) has steered the field of public health to encompass health systems issues and research questions. He has been a member of the European Commission's Expert Panel on Investing in Health and is a former chair of WHO's European Advisory Committee on Health Research.

Global advisory and advocacy roles

The London School of Hygiene & Tropical Medicine is actively involved in international advocacy and agenda setting for health systems research through leadership and participation in organisations, societies and networks. Staff at all levels are involved with donor, technical and implementing agencies—as members and invited speakers of technical panels and advocacy efforts related to health

systems, such as WHO expert groups and technical consultation panels. For instance, Lucy Gilson sits on the Scientific and Technical Advisory Committee of the Alliance for Health Policy and System Research; and Andy Haines is a member of DFID's Research Advisory Group. Work by Cicely Marston and team in the UK NHS on how community participation can improve health systems has been incorporated into the Global Strategy for Maternal, Newborn and Adolescent Health.

Staff members have sought to raise the profile of health systems research and knowledge translation through participation in diverse public health and medical services organisations. Bayard Roberts has contributed to promoting and shaping the health systems research for NCDs with Médecins Sans Frontières. School staff serve on key on key funding panels including the ESRC, MRC and the Wellcome Trust.



Sir Andy Haines, Susannah Mayhew and President Joyce Banda launch Integra findings at UK parliament - courtesy of Finn Warren

Building the field of health policy and systems research

As well as providing training through its wide variety of London-based and distance learning Masters degrees and PhD programmes, the London School of Hygiene & Tropical Medicine is contributing to building the field of health policy and systems research:



Wikimedia commons (Itsyoungrapper)

Innovative teaching approaches and development

School staff contributed to and learnt from [the Collaboration for Health Policy & Systems Analysis in Africa \(CHEPSAA\)](#), - an unusual Southern-led capacity development network comprised of university-based health policy and systems researchers from 7 African and 4 European countries. Between 2011 and 2015 CHEPSAA developed innovative HPSR teaching materials as open educational resources, whilst supporting a network of Emerging Leaders in the African universities well as wider networking between educators, researchers and health system decision-makers across organisational, national and regional levels. The CHEPSAA website and teaching materials continue to be used widely globally. They are being absorbed into formal Master's in Public Health programmes within Africa and more widely.

Short courses

CHEPSAA materials were adapted by a team from LSHTM and the West China Research Centre for Rural Health Development to provide a week-long short course in health policy and

systems research methods; a similar course will be offered in Sierra Leone. LSHTM staff provided training for UNICEF staff in health economics and financing through a mix of distance and face-to-face learning.

Leading journals

The School with [Oxford University Press](#) produces [Health Policy and Planning \(@HPP_LSHTM\)](#), the leading journal of health policy and systems research, edited by Sandra Mounier-Jack and Virginia Wiseman. Content includes original research articles, literature reviews, "How to do or not to do" guidance on application of novel research methods, "10 best resources on..." offering 10 most useful resources facilitating a better understanding of a particular issue in global health. Reports and commentaries are also available from policymakers and managers taking action to strengthen health systems as well as high quality topical supplements.

[The Journal of Health Services Research & Policy](#) explores the ideas, policies and decisions shaping health services globally; and raises critical issues in healthcare policy and research.

Long term partnerships

Many research collaborations are based on long term relationships between

LSHTM staff and overseas collaborators. These long-term partnerships ensure HPSR research reflects national realities, enabling it to be responsive to changing national policy needs and to provide windows on how global imperatives play out at national levels. They also offer the vital benefit of shared learning opportunities and mutual capacity development - as LSHTM staff engage with, mentor and learn from partners, managers and policy makers, also contribute to their broader programmes of research and teaching. The Wellcome Trust /Newton Fund Project in Malaysia and the Philippines enables real time communication between users and researchers using a multimedia platform to ensure needs are met.

Health Systems Global

HSG is emerging as the leading organization in HPSR, helping to shape the field through its biennial Symposium and by facilitating exchange between policymakers, researchers and practitioners to strengthen health systems. Anne Mills, Lucy Gilson and Dina Balabanova have participated at board level to shape the development of the society. School staff are chairing and active in a number of the Thematic Working Groups, such as the TWG on Teaching and Learning Health Policy and Systems Research, co-chaired by Dina Balabanova, and Social Science Approaches for Research and Engagement in Health Policy & Systems (SHAPES), co-convened by Johanna Hanefeld.



Courtesy of Health Policy and Planning



Walaiporn Patcharanarumol
Senior Researcher,
International Health Policy Program, Ministry of Public Health, Thailand

Many developing countries, including Thailand, have gained enormous benefits from the School in strengthened capacity for health policy and system research. No fewer than 25 health professionals have graduated from the School's postgraduate training programmes, and after graduation, we all returned to Thailand and have contributed to health system development in the country. At least eight of us were supervised by Professor Dame Anne Mills and many of her students have become senior policy makers in the Thai health system.

The reputation of being trained from the School benefits greatly to our individual professional careers. School staff continue to collaborate with a range of Thai agencies on health systems research. RESYST, a LSHTM-led consortium of 10 research institutes around the World, including Thailand, has helped to further develop the intellectual capacity of Thai researchers and expand our research networks to include African collaborators. The Anne Mills Fellowship Program, managed by the International Health Policy Program (IHPP) in Thailand, provides financial and technical support to talented and committed researchers from the South East Asian region. Current recipients are from Vietnam, Sri Lanka, Inner Mongolia and Maldives. The ongoing support of the School to both individuals and institutions has advanced health policies and systems around the world."

The following departments, centres and groups at the School cited in this publication are involved in HEALTH POLICY AND SYSTEMS RESEARCH:

Faculty of Public Health and policy

Department of Global Health and Development

Communicable Diseases Policy Research Group

Department of Health Services Research and Policy

Policy Innovation Research Unit (PIRU)

@PIRULSHTM

Public Health Research Consortium (PHRC)

@PHRC2017

The NIHR School for Public Health Research

@LSHTM @SPHRatLSHTM

Policy Research Unit on Commissioning and the Healthcare System (PRUComm)

Department of Social and Environmental Health Research

Centres and other groups

Centre for Global Chronic Conditions

@LSHTM_CGCC

Centre for Global Mental Health

@GMentalHealth

Centre For Health Economics In London (CHIL)

@LSHTM_CHIL

Centre for History in Public Health (CHiPH)

@LSHTMhistory

European Observatory on Health Systems and Policies

@OBShealth

Health in Humanitarian Crises Centre

@LSHTM_Crises

Health Protection Research Unit in Immunisation

(NIHR funded)

Maternal, Adolescent, Reproductive and Child

(MARCH) Centre

@MARCH_LSHTM

TB Centre

@LSHTM_TB

Collaboration for Health Policy & Systems Analysis in

Africa (CHEPSAA)

@hpsa_africa

IDEAS maternal and newborn health project

@LSHTM_IDEAS

Maternal healthcare markets evaluation team (MET)

@MET_LSHTM

Resilient and Responsive Health Systems (RESYST)

@RESYSTresearch

Health Systems Group | @HSR_LSHTM

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SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



Health Policy and Systems Research

New Projects



Responding to new challenges and opportunities in a changing world

Regulators and new approaches to regulation

A growing body of our work concerns health-related regulation. Regulation should be a key foundation of government stewardship of both public and private sector actors, but performance of this function is generally very weak, with serious consequences for quality of care and patient safety. Our work aims to better understand existing regulatory policies and practices and provide insights on how these can be improved.

Johanna Hanefeld and Mishal Khan are applying newly developed research methods to investigate motivations and incentives of public and private actors with a stake in the introduction and implementation of regulations on access to antibiotics. In Pakistan, a multidisciplinary team with both human and animal health expertise, are researching policy actors and their networks to identify how social constructions, power relations and contextual factors shape policy maker support for different regulatory approaches. In Cambodia, research is being undertaken to identify unregistered, for-profit drug sellers who are often 'invisible' because they do not sell from shops. It will investigate governance approaches for improving the sale of antimicrobials through this poorly studied segment of the health system.

In Kenya, Catherine Goodman is exploring regulatory innovations in health facility inspection, which have

been implemented across both public and private facilities to improve quality and safety. Alongside the Kenya Patient Safety Impact Evaluation (KePSIE) - a randomised controlled trial to assess the impact of these interventions, Catherine's research aims to gain a better understanding of how these interventions are implemented in practice, and why they are (or are not) effective. Using qualitative methods, the study is exploring the mechanisms and processes involved in the regulatory failures and successes observed, and the experiences and perceptions of both the regulators and the regulated.

Research has also explored ways to support policy decision making. Sandra Mounier-Jack and Natasha Howard led an evaluation of National Immunisation Advisory Technical Groups (NITAGs) in LMICs that showed that appropriately supported, NITAGs in lower resources settings were providing effective evidence based decision making in vaccine policy. Publications are in preparation.

Finally, Kara Hanson is leading an analysis of recent developments in low and middle income countries (LMICs) healthcare markets, identifying the challenges and opportunities these pose for designing fit-for-purpose regulation. Regulation in LMICs can seem frozen in time, rarely incorporating modern perspectives and ill-suited to manage the needs of evolving health systems. Kara's work is reviewing trends in private sector development and regulation in Nigeria, India, and Kenya: three countries

with rapidly changing healthcare markets. It will explore relevant insights from the experience of upper-middle and high-income countries and from recent advances in regulatory theory and practice.

Tackling corruption in public health care

LSHTM is part of the [Anti-Corruption Evidence consortium programme](#), ([@ACE_soas](#)), which addresses a major challenge to the delivery of quality public health care: corruption. Funded by UK Aid, SOAS-ACE will explore novel and politically-grounded approaches to regulation and anti-corruption policy and practice in Bangladesh, Nigeria and Tanzania. It aims to generate evidence on how to deter individuals and institutions from rule breaking and suggest feasible, high-impact strategies to tackle corruption. The research will focus on the situation of health workers who often face dilemmas on how to provide the care patients need whilst prioritising their own gains, often due to badly designed incentive structures in health systems.

Working to improve the health of people affected by conflict

LSHTM is a member of the EU funded [STRENGTHS project](#), which aims to scale up psychological interventions for Syrian refugees based in eight countries in Europe, the Middle East and North Africa. LSHTM is leading the health systems research to outline the



Conducting house to house surveys in Uganda



Courtesy of UNHCR - Achilleas Zavallis

necessary steps to help scale-up and integrate the Problem Management Plus (PM+) intervention into the health systems of the participating countries. This involves conceptual work, health system rapid appraisals, cross-sectional surveys and qualitative research.

In October 2017, the LSHTM Health in Humanitarian Crises Centre was commissioned by the Ministry of Public Health in Afghanistan, with financial support from the Bill & Melinda Gates Foundation, to coordinate the priority-setting process to develop a revised package of health services ('Development of a priority package of health services in Afghanistan' project). With support from Disease Control Priorities (DCP3) and UCL, the research has reviewed the burden of disease in Afghanistan. It is now conducting a health systems assessment and cost-effectiveness analyses using novel modelling methods to guide decisions on defining the new package of health services, with inputs from a national and international expert group. The study is led by Karl Blanchet with Neha Singh.

The Health in Humanitarian Crises Centre has a free online course looking at the health needs of those affected by humanitarian crises, the challenges of delivering healthcare and what needs to be done. Find out more at www.lshtm.ac.uk/humanitarian-crises-course

A health systems approach to researching maternal and child health

With strong expertise in the analysis of health systems, researchers at the [Maternal, Adolescent, Reproductive and Child \(MARCH\) Centre](#) are studying maternal healthcare within the context of the broader healthcare system. One project is seeking to learn from health systems strengthening in maternal and newborn health in China

to inform interventions aimed at saving lives in Africa. In India, researchers are assessing the nature of competition for maternal health services within the vibrant health sector, and evaluating private sector approaches such as social franchising, seeking to improve the quality of maternal healthcare.

The management of children with fever is one of the most common and important problems facing health care workers. Trying to correctly identify which child needs antibiotics or admission can be very difficult. Many children undergo hospitalization, invasive investigation and are treated with antibiotics for presumed bacterial infection when, in fact, they have a self-limiting viral infection, with resulting costs and consequences including antibiotic resistance. PERFORM is a 10-country* collaborative project funded by an EU Horizon 2020 grant. It aims at improving the diagnosis and management of febrile children, through the development of a new diagnostic test. LSHTM researcher, Dr Shunmay Yeung and her team are leading an integrating workpackage which is using mixed methods to describe and compare the current management of febrile children, to understand variability in uptake of diagnostic tests from a health systems perspective, and to evaluate the likely costs and consequences of introducing the new point-of-care tests in different health systems in Europe.

(*Austria, Germany, Greece, Netherlands, Latvia, Slovenia, Spain, United Kingdom, the Gambia and Nepal.)

<http://www.perform2020.eu/>
[twitter: @PERFORM_2020](https://twitter.com/PERFORM_2020)

The Every Newborn Measurement Improvement Roadmap is being led by LSHTM with the World Health Organisation. As part of this, the MARCH Centre coordinates two large multi-

country studies:

- EN BIRTH, a facility-based observational study of 20,000 births in Bangladesh (with icddr), Tanzania (with Ifakara Health Institute) and Nepal (with UNICEF), to validate indicators of coverage and quality of care;
- EN-INDEPTH, a population-based research study to randomly compare household survey modules to assess capture of pregnancy outcomes, especially stillbirths. This is in partnership with the INDEPTH network sites in Uganda, Bangladesh, Ethiopia, Ghana, and Guinea-Bissau.

Also in Tanzania, the COSMIC study, led by LSHTM in collaboration with Ifakara Health Institute and University of Zambia, will apply advanced research methods rooted in complexity science to understand and optimise payment for performance (P4P) interventions aimed at improving maternal, newborn and child health. This study will build a system dynamic and an agent-based model of the Tanzanian health system and its response to P4P, which will be tested for the Zambian context. The study is conducted by Jo Borghi and Karl Blanchet, with Zaid Chalabi and Neha Singh as co-Investigators, and is funded through the Health Systems Research Initiative.

PhD candidate Meghann Gregg uses complexity theory to describe health seeking behaviour for postpartum haemorrhage treatment in biomedical facilities in Nigeria and globally. She is building a mathematical process model which examines elements that influence behaviour through a dynamic, interacting and non-linear setting. The model will identify patterns, interactions and drivers within multilevel environments, and will help to illustrate the scale and nature of the system.

Emerging and complex health conditions

New research in Brazil will focus on how the health system responds to people with disability, investigating both access to general primary healthcare as well as specialised disability-specific services (e.g. physiotherapy, ophthalmology). It will seek to draw wider lessons on how to ensure efforts to achieve UHC and the Sustainable Development Goals are inclusive of people with disability. This project, funded by the Newton Fund, is led by Hannah Kuper and involves Loveday Penn-Kekana and Johanna Hanefeld.

In South Africa, a project uses a whole systems approach to infection prevention and control for drug-resistant tuberculosis. This project, led by Alison Grant, aims to project the potential impact of a health systems intervention to reduce transmission of drug resistant Tuberculosis (DRTB). DRTB transmission happens in hospitals and clinics, but it is not known how much this exposure contributes to transmission overall. Using an interdisciplinary approach, the project will examine the social, biological and infrastructural dynamics of transmission.

New research possibilities with mobile technology

The development of new wearable technologies for health monitoring, such as smartwatches and fitness trackers, is a promising but little explored technological innovation, with great potential to support programmes for the prevention and control of non-

communicable diseases. In LMICs, these devices could be introduced, for example, to conduct surveys on risk factors for preventable diseases and their distribution across population groups, providing important information to health policymakers. Wearable health monitors can also be used to deliver individualised messages to users, helping them to achieve health targets and reduce risks. The BIOS project, funded by the Joint Health Systems Research Initiative, involving Marco Liverani, Pablo Perel, Virginia Wiseman, Zoltan Bozoky, and Por Ir at the National Institute of Public Health in Cambodia, aims to conduct a pioneering field evaluation of this potential.

Advances in policy analysis

LSHTM is contributing to the development of best practice in health policy analysis in LMIC as well as mentorship initiatives. Lucy Gilson is editing a Reader of Health Policy Analysis in LMICs for the WHO Alliance of Health Policy and Systems Research, to which Johanna Hanefeld is also contributing. The Reader seeks to support emerging Health Policy Analysts both by highlighting critical areas of work and issues to think about in future research, as well as presenting selected papers to illustrate the current knowledge base in the field. Lucy Gilson is also leading the Health Policy Analysis Mentorship initiative, supported by the WHO Alliance for Health Policy and Systems Research, which provides support and mentorship to a cohort of doctoral students who are currently enrolled in LMIC universities.

Drawing on the School's tradition in health policy analysis, staff have been exploring policy processes in relation to health systems in LMIC. Here colleagues, including Johanna Hanefeld, Richard Smith and Helen Walls, have been analysing the impact of population mobility and migration on health systems on maternal and child health outcomes, focusing in particular on Southern Africa. Research undertaken in partnership with Joanna Vearey at the Africa Centre for Migration and Society (ACMS) at the University of Witwatersrand and with the South African Department of Health.

Finally, Johanna Hanefeld is collaborating with colleagues at Imperial College London, and the University of Sao Paulo in Brazil to contribute policy analysis to an evaluation of the estratégia de saúde da família programme in Rio de Janeiro. The evaluation will assess the impact of the rapid scale up of the intervention on health outcomes and differences in health, funded by the Health Systems Research Initiative.

Knowledge synthesis

The Cochrane Effective Practice and Organisation of Care (EPoC) Group, funded by NIHR, undertakes systematic reviews of educational, behavioural, financial, regulatory and organisational interventions designed to improve health systems; the co-ordinating editor role is shared by Sasha Shepperd (LSHTM) and Simon Lewin (Norwegian Institute of Public Health).

New courses

The Executive Programme for Global Health Leadership

[The Executive Programme for Global Health Leadership](#) is LSHTM's flagship health leadership course that launched in September 2017. [hyperlink: The programme was developed in response to the need for strong strategic leadership for those working at high levels within

global health or on multi-national projects and LSHTM's commitment to strengthening health systems leadership. Structured around three residential weeks in London, Geneva and Cape Town, each week focuses on a unique theme: getting things on the agenda; operating successfully

on the global stage; and developing leadership skills and insights to ensure the successful implementation of projects on the ground.

Karl Blanchet organises a new [short course on health systems assessment in humanitarian crises](#). This course will familiarise participants with a health systems approach to health care for communities in low- and middle-income countries affected by humanitarian crises, through using practical interactive examples and case studies, and taught by experts who come from or have lived and worked in low- and middle-income countries during or after humanitarian crises.