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# *Beyond Covid-19: The Future of Healthcare to 2030*

December 15, 2021 – 20 minutes

New Challenges of Demographic, Epidemiological and Medical-Technological Development: Search for New Models of Healthcare Development

**Jeffrey Braithwaite,** PhD,  
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**Professor and Director**

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**Director**

Centre for Healthcare Resilience and  
Implementation Science

**President**

International Society for Quality in Health  
Care (ISQua)

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# Australian Institute of Health Innovation (AIHI)



Professor Jeffrey Braithwaite

Founding Director, AIHI

Director  
Centre for Healthcare  
Resilience and  
Implementation Science

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Science in Oncology



Professor Enrico Coiera

Director  
Centre for Health Informatics

NHMRC Centre of Research  
Excellence in Digital Health



Professor Johanna Westbrook

Director  
Centre for Health Systems  
and Safety Research

NHMRC Partnership Project in  
Digital Support for Aged Care

NHMRC  
Partnership Centre  
for Health System  
Sustainability

NHMRC MRFF  
Keeping People  
Out of Hospital

NHMRC Project  
Grant CareTrack  
Aged



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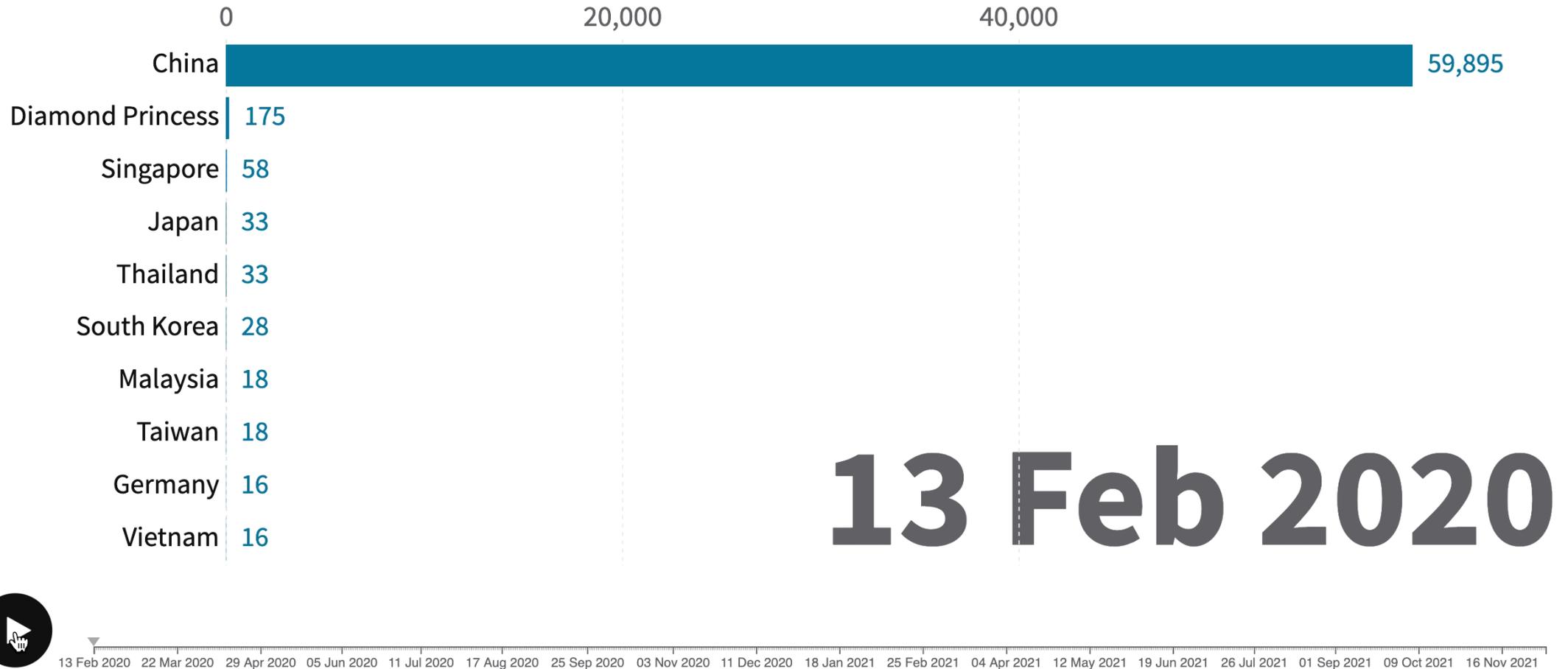
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# The current Covid-19 situation

# Current Covid-19 Situation

## How confirmed cases of coronavirus have spread



# Current Covid-19 Situation



Search by Country, Territory, or Area



Covid-19 Response Fund

Donate

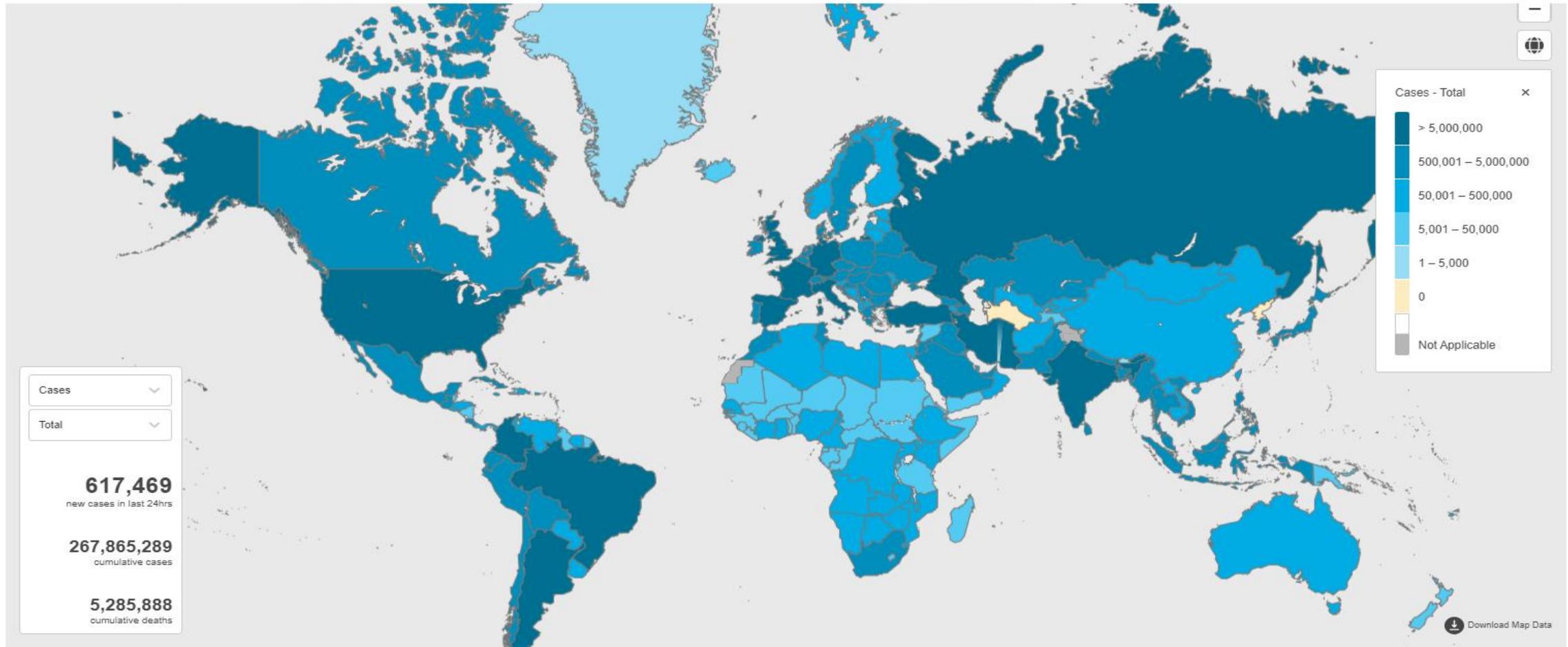
WHO Coronavirus (COVID-19) Dashboard

[Overview](#)

[Measures](#)

[Data Table](#)

[Explore](#)



Globally, as of 4:48pm CET, 10 December 2021, there have been 267,865,289 confirmed cases of COVID-19, including 5,285,888 deaths, reported to WHO. As of 8 December 2021, a total of 8,158,815,265 vaccine doses have been administered.



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# The 40 Health Systems, Covid-19 [40HS, C-19] Study

Research Article

# The 40 health systems, COVID-19 (40HS, C-19) study

JEFFREY BRAITHWAITE<sup>1,2</sup>, YVONNE TRAN<sup>1</sup>, LOUISE A ELLIS<sup>1,2</sup>  
and JOHANNA WESTBROOK<sup>3</sup>

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Received 24 June 2020; Editorial Decision 3 September 2020; Revised 30 August 2020; Accepted 8 September 2020

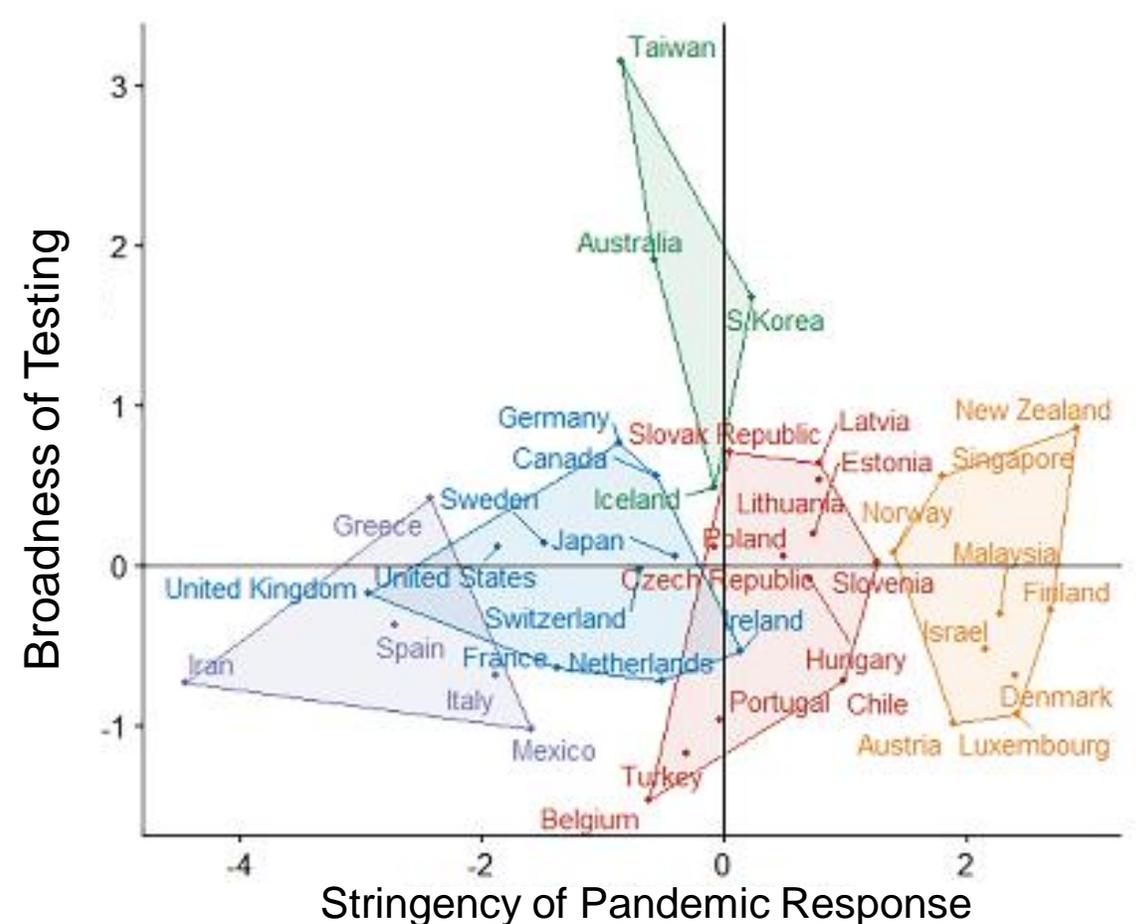
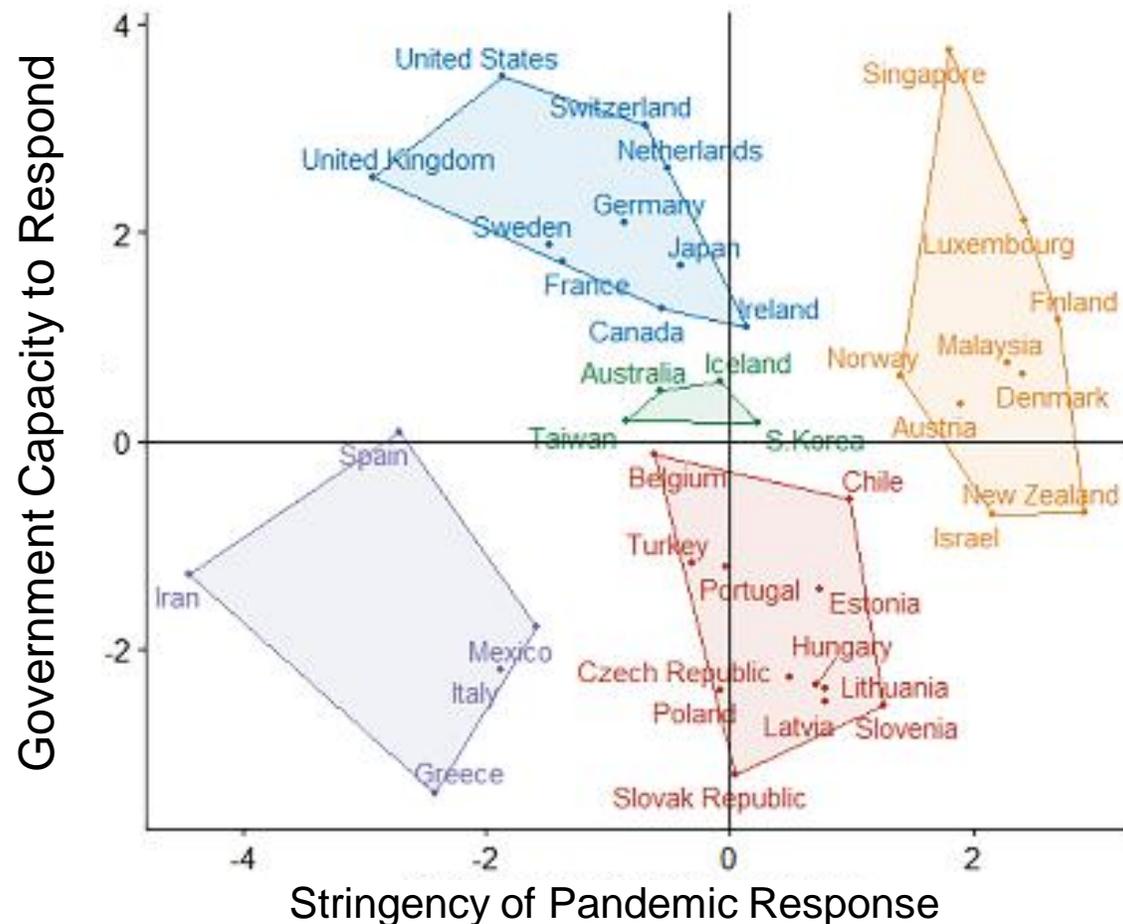
## Abstract

**Background:** The health, social and economic consequences of the severe acute respiratory syndrome coronavirus (SARS-CoV-2, henceforth COVID-19) pandemic have loomed large as every

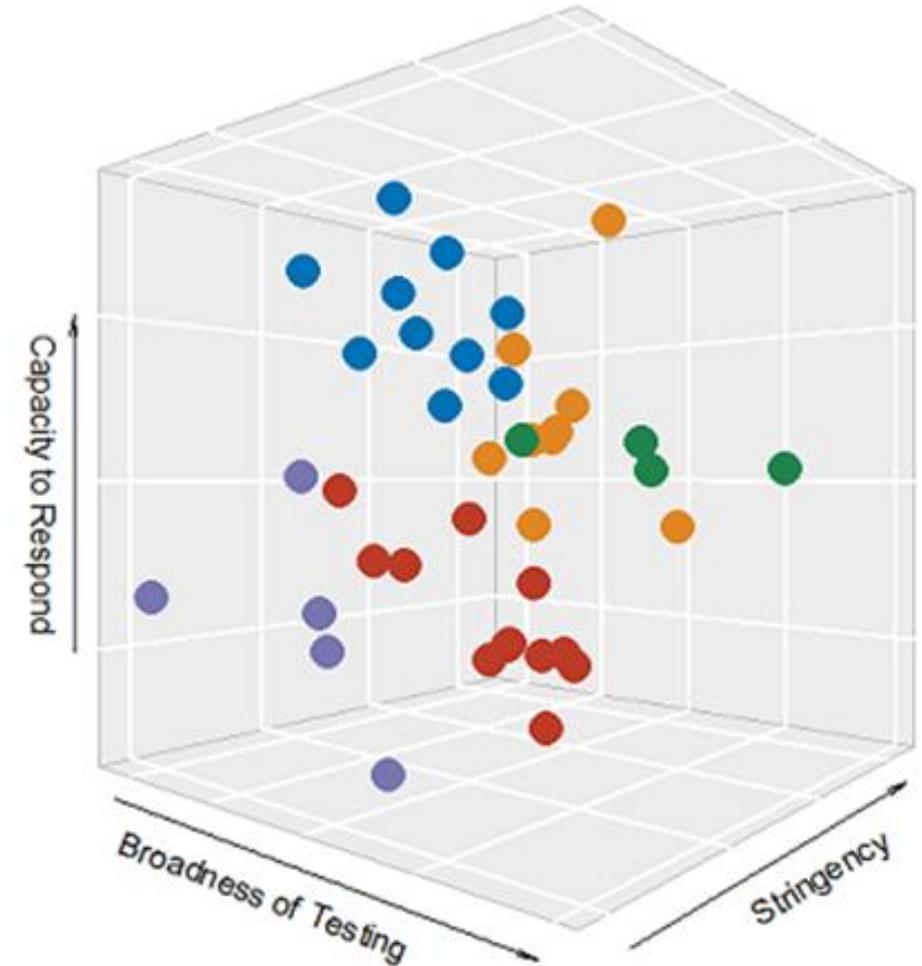
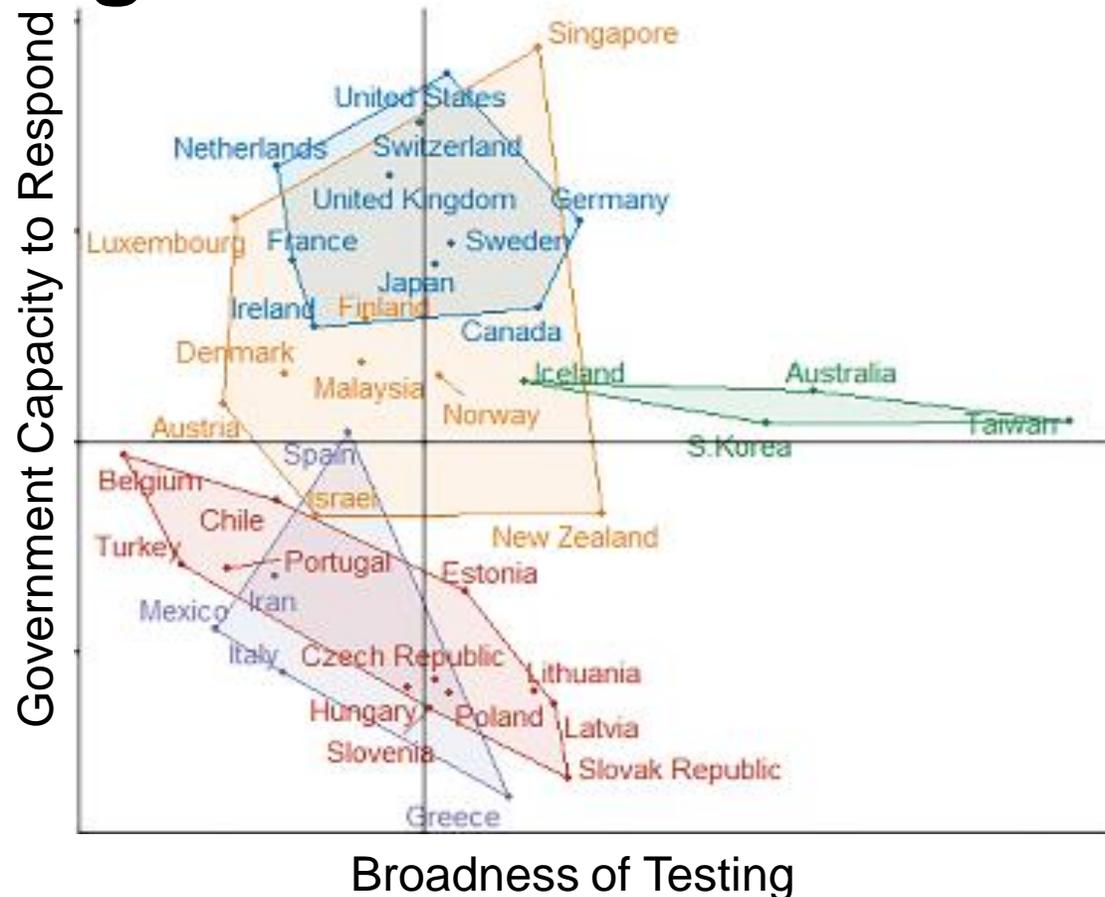
# The 40 health systems, COVID-19 Study

- 
- Investigated relationships between governments' capacity to respond (CTR), their response stringency, scope of COVID-19 testing and COVID-19 outcomes
  - Data over March and April 2020 were extracted for 40 national health systems
  - Multidimensional scaling (MDS) and cluster analysis were applied. Outcomes were tested using multivariate and one-way analyses of variances and Kruskal–Wallis H tests.

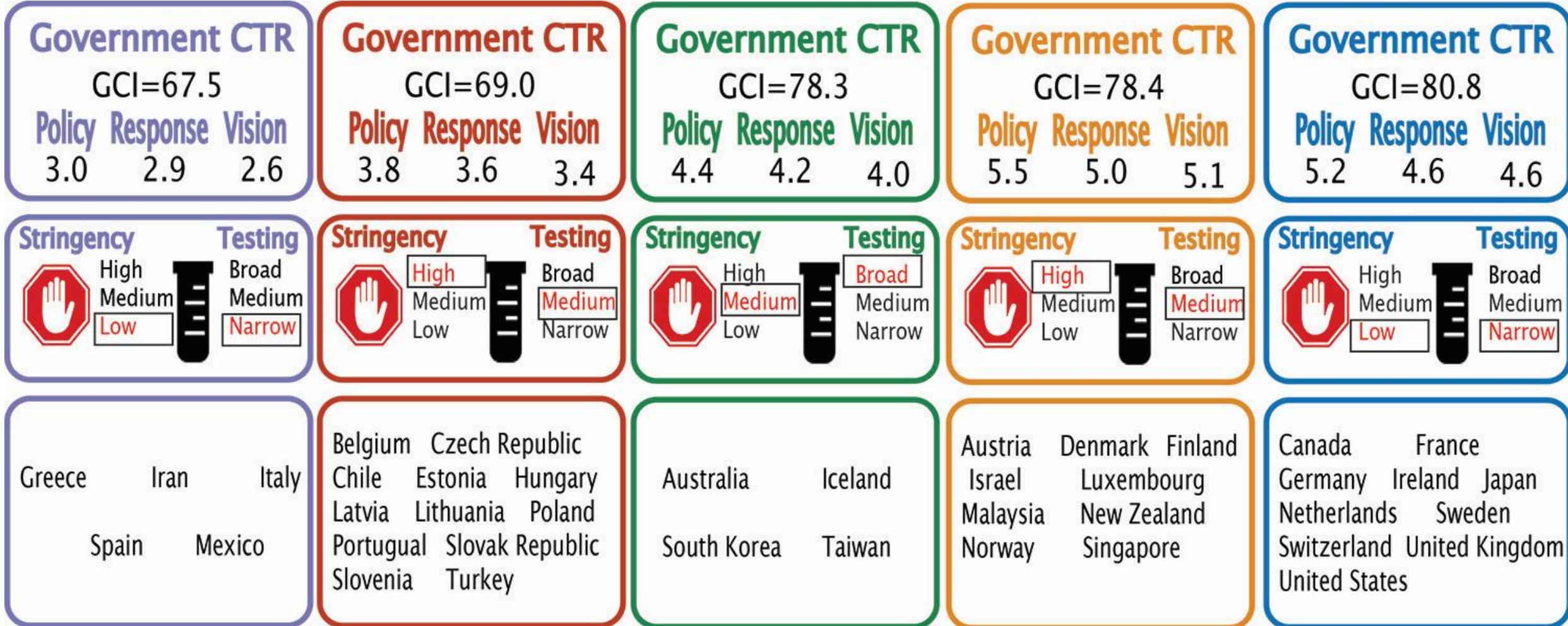
# National health systems' cluster performance on capacity to respond, stringency of response, and approach to testing



# National health systems' cluster performance on capacity to respond, stringency of response, and approach to testing



# National health system's capacity to respond, adoption of early stringency measures and approach to COVID-19 testing



# Results

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- Early stringency measures and intrinsic national capacities to deal with a pandemic are insufficient.
- Extended stringency measures, important in the short-term, are not economically sustainable.
- Broad-based testing was key to managing COVID-19.



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# International survey of COVID- 19 management strategies study

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Original Research Article

# International survey of COVID-19 management strategies

**RICCARDO TARTAGLIA<sup>1</sup>, MICAELA LA REGINA<sup>1</sup>, MICHELA TANZINI<sup>1</sup>,  
CHIARA POMARE<sup>2</sup>, RACHEL URWIN<sup>3</sup>, LOUISE A. ELLIS<sup>2</sup>,  
VITTORIO FINESCHI<sup>4</sup>, FRANCESCO VENNERI<sup>5</sup>, CHIARA SEGHERI<sup>6</sup>,  
PETER LACHMAN<sup>7</sup>, JOHANNA WESTBROOK<sup>3</sup> and  
JEFFREY BRAITHWAITE<sup>2,7</sup>**

<sup>1</sup>Italian Network for Safety in Health Care, Italy, <sup>2</sup>Centre for Healthcare Resilience and Implementation Science, Australian Institute of Health Innovation, Macquarie University, Sydney, Australia, <sup>3</sup>Centre for Health Systems and Safety Research, Australian Institute of Health Innovation, Macquarie University, Sydney, Australia, <sup>4</sup>University La Sapienza, Rome, Italy, <sup>5</sup>Public Hospital, Florence, Italy, <sup>6</sup>Sant'Anna Pisa School of Advanced Studies, Pisa, Italy and <sup>7</sup>International Society for Quality in Health Care, Dublin, Ireland

Address reprint requests to: Professor Jeffrey Braithwaite, E-mail: [Jeffrey.braithwaite@mq.edu.au](mailto:Jeffrey.braithwaite@mq.edu.au)

Received 6 September 2020; Editorial Decision 17 October 2020; Revised 7 October 2020; Accepted 20 October 2020

## Abstract

**Background:** While individual countries have gained considerable knowledge and experience in

# New PCHSS research on the global impact of COVID-19

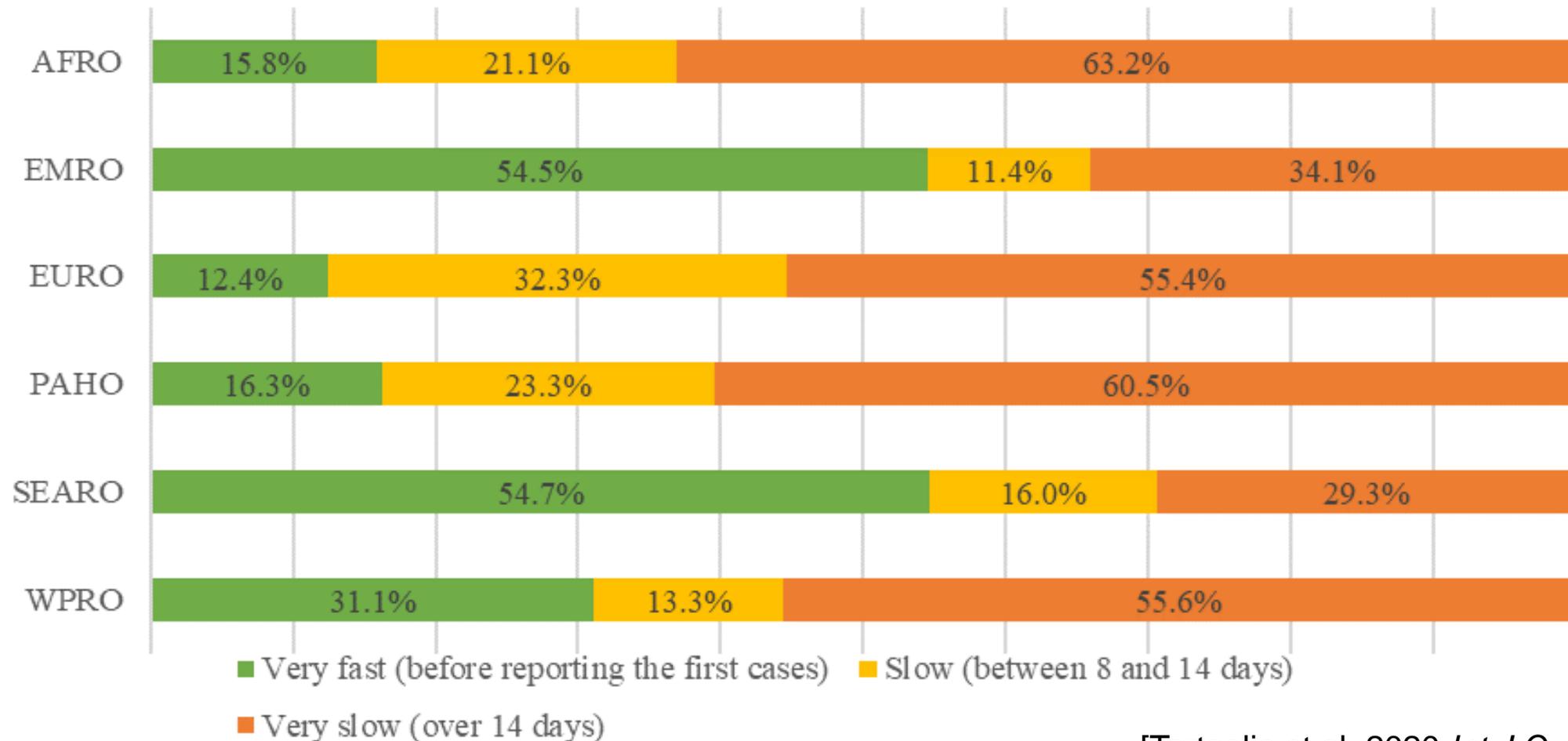
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A survey of 1,131 people across 97 countries with 3 in particular: Italy, Australia and India – May-July 2020.

Key findings:

1. pandemic responses differed across countries and WHO regions
2. by the end of July most countries had adopted measures to handle the pandemic but some had further progress to make

# Perceptions of Reaction Time for Infection Prevention and Control in Health Care Organizations



# Results

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- 1,131 survey responses from 97 countries
- Most (70% plus) said they had an effective plan
- Most (almost 80%) said they established a task force
- Most (almost 60%) said they reported testing
- Most (over 80%) now had PPE
- All responses differ across WHO regions



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# Where Healthcare is Heading Globally?



Health System  
Across t  
Success Stories



Edited by  
Jeffrey Braithwaite  
Russell Mannion  
Yukihiro Matsuyama  
Paul Shekelle  
Stuart Whittaker  
Samir Al-Adawi



# Healthcare Systems

Future Predictions for Global Care



Edited by  
Jeffrey Braithwaite  
Russell Mannion  
Yukihiro Matsuyama  
Paul G. Shekelle  
Stuart Whittaker  
Samir Al-Adawi



<https://www.amazon.com.au/Healthcare-Systems-Future-Predictions-Global/dp/1138052604>

## Perspectives on Quality

## The future of health systems to 2030: a roadmap for global progress and sustainability

JEFFREY BRAITHWAITE<sup>1,2,3,4</sup>, RUSSELL MANNION<sup>1,2</sup>,  
YUKIHIRO MATSUYAMA<sup>1,3,5</sup>, PAUL G. SHEKELLE<sup>6</sup>,  
STUART WHITTAKER<sup>7</sup>, SAMIR AL-ADAWI<sup>1,8</sup>, KRISTIANA LUDLOW<sup>1</sup>,  
WENDY JAMES<sup>1</sup>, HSUEN P. TING<sup>1</sup>, JESSICA HERKES<sup>1</sup>,  
ELISE MCPHERSON<sup>1</sup>, KATE CHURRUCA<sup>1</sup>, GINA LAMPRELL<sup>1</sup>,  
LOUISE A. ELLIS<sup>1</sup>, CLAIRE BOYLING<sup>1</sup>, MEAGAN WARWICK<sup>1</sup>,  
CHIARA POMARE<sup>1</sup>, WENDY NICKLIN<sup>4</sup>, and CLIFFORD F. HUGHES<sup>1,4</sup>

<sup>1</sup>Centre for Healthcare Resilience and Implementation Science, Australian Institute of Health Innovation, Level 6, 75 Talavera Road, Macquarie University, Sydney, NSW 2109, Australia, <sup>2</sup>Health Services Management Centre (HSMC), University of Birmingham Park House 40 Edgbaston Park Road, Birmingham, B15 2RT UK, <sup>3</sup>The Canon Institute for Global Studies, 11th Floor, ShinMarunouchi Building 5-1 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-6511, Japan, <sup>4</sup>International Society for Quality in Health Care (ISQua), 4th Floor, Huguenot House 35-38 St Stephens Green Dublin 2, Ireland, D02 NY63, <sup>5</sup>Chiba University of Commerce, 1-3-1 Konodai, Ichikawa-shi, Chiba 272-8512, Japan, <sup>6</sup>VA Greater Los Angeles Healthcare System, 1301 Wilshire Blvd, Los Angeles, CA 90073, USA, <sup>7</sup>School of Public Health and Family Medicine, Faculty of Health Sciences, University of Cape Town Observatory Rondebosch, Cape Town, 7700, South Africa, and <sup>8</sup>College of Medicine and Health Sciences, Sultan Qaboos University, PO Box 35, Alkoudh.123 Sultanate of Oman Seeb, Muscat, Oman

Address reprint requests to: Jessica Herkes, Centre for Healthcare Resilience and Implementation Science, Australian Institute of Health Innovation, Level 6, 75 Talavera Road, Macquarie University, Sydney, NSW 2109, Australia.

Tel: +61 2 9850 2401; Fax: +61-298-502-499; E-mail: jeffrey.braithwaite@mq.edu.au

Editorial Decision 16 October 2018; Accepted 6 December 2018

### Abstract

Most research on health systems examines contemporary problems within one, or at most a few, coun-

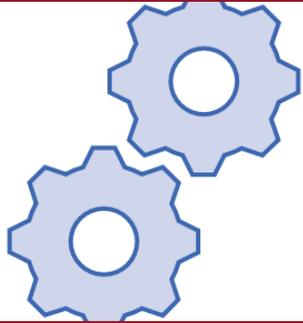
# Five Main Trends

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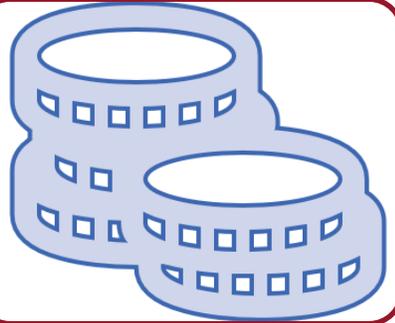
The trends shaping health systems of the future:

- Sustainable health systems
- The genomics revolution
- Emerging technologies
- Global demographic dynamics
- New models of care

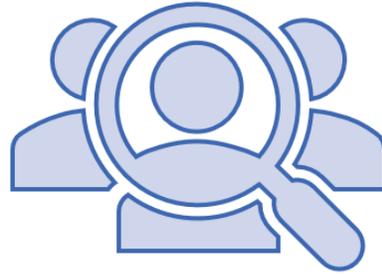
# Nine Main Themes



1.  
Integration  
of  
healthcare  
services



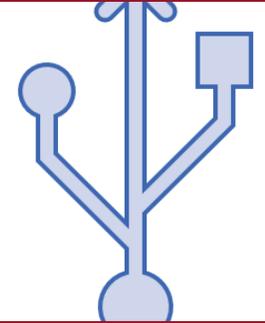
2.  
Financing,  
economics  
and  
insurance



3.  
Patient-  
based care  
and  
empowering  
the patient

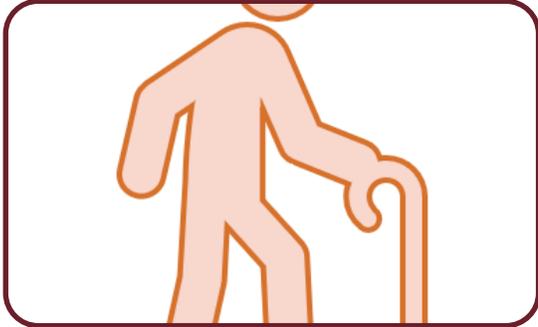


4.  
Universal  
healthcare



5.  
Technology  
and  
information  
technology

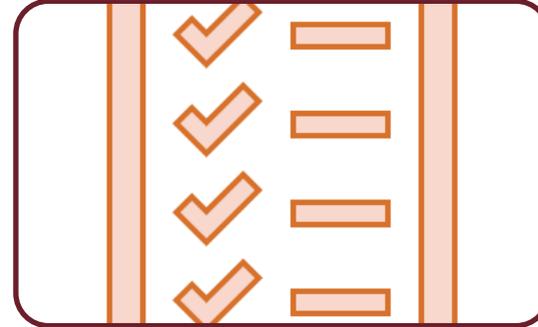
# Nine Main Themes



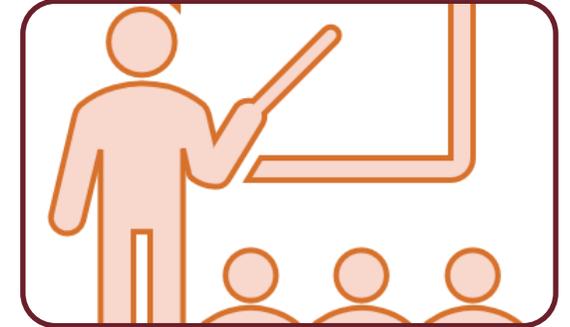
6.  
Aging  
populations



7.  
Preventative  
care



8.  
Accreditation,  
standards  
and policy



9.  
Human  
development,  
education  
and training

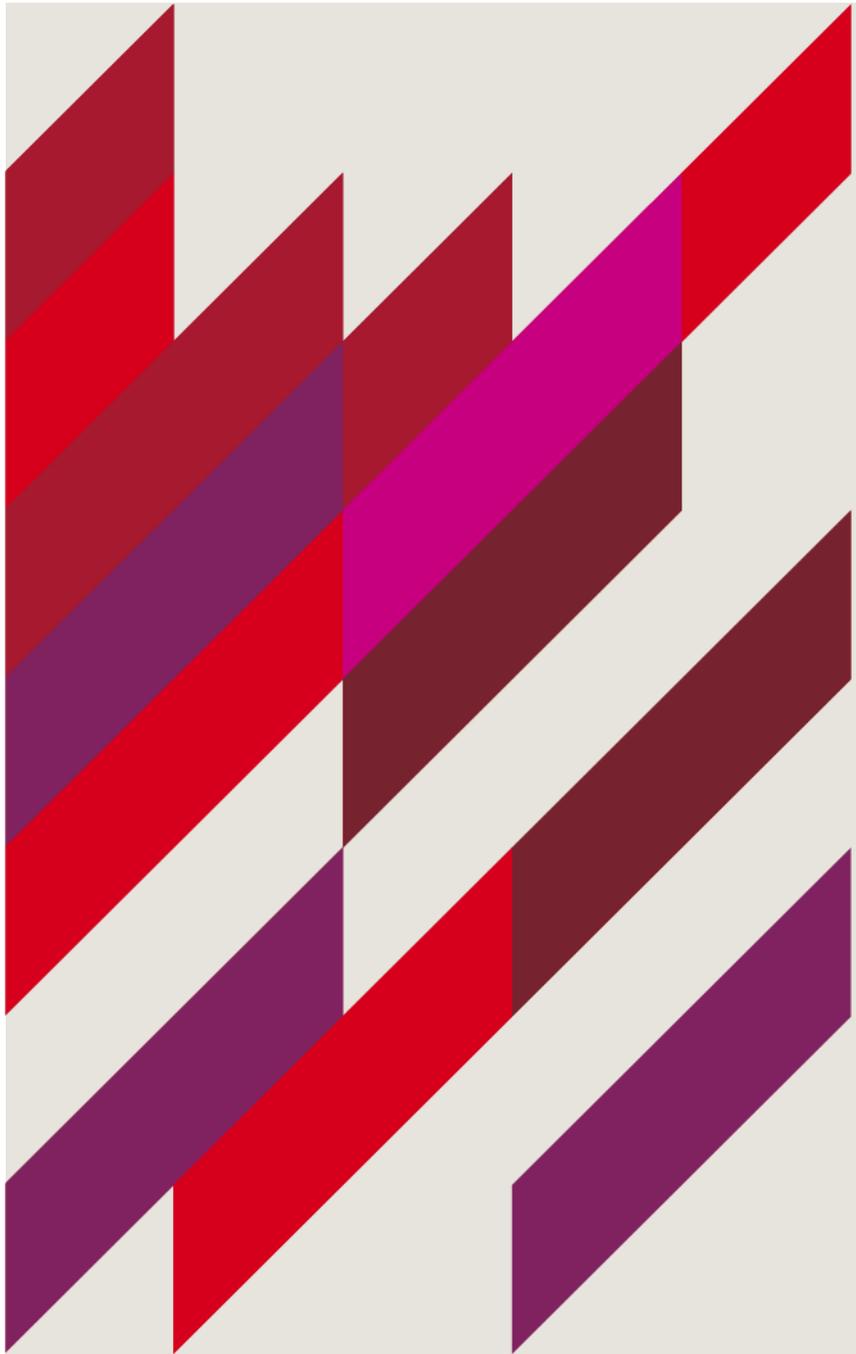


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# More Global Perspectives



# CROSSING THE GLOBAL QUALITY CHASM

## Improving Health Care Worldwide

Committee on Improving the Quality of Health Care Globally  
Board on Global Health

Board on Health Care Services  
Health and Medicine Division

A Consensus Study Report of  
The National Academies of  
SCIENCES • ENGINEERING • MEDICINE

THE NATIONAL ACADEMIES PRESS  
Washington, DC  
www.nap.edu



Photo: David Lee/Corbis/PhotoDisc/Getty Images

**HQSS**  
The Lancet Global Health  
Commission on  
**High Quality Health Systems**  
in the **SDG Era**

The Lancet Global Health Commission

## High-quality health systems in the Sustainable Development Goals era: time for a revolution

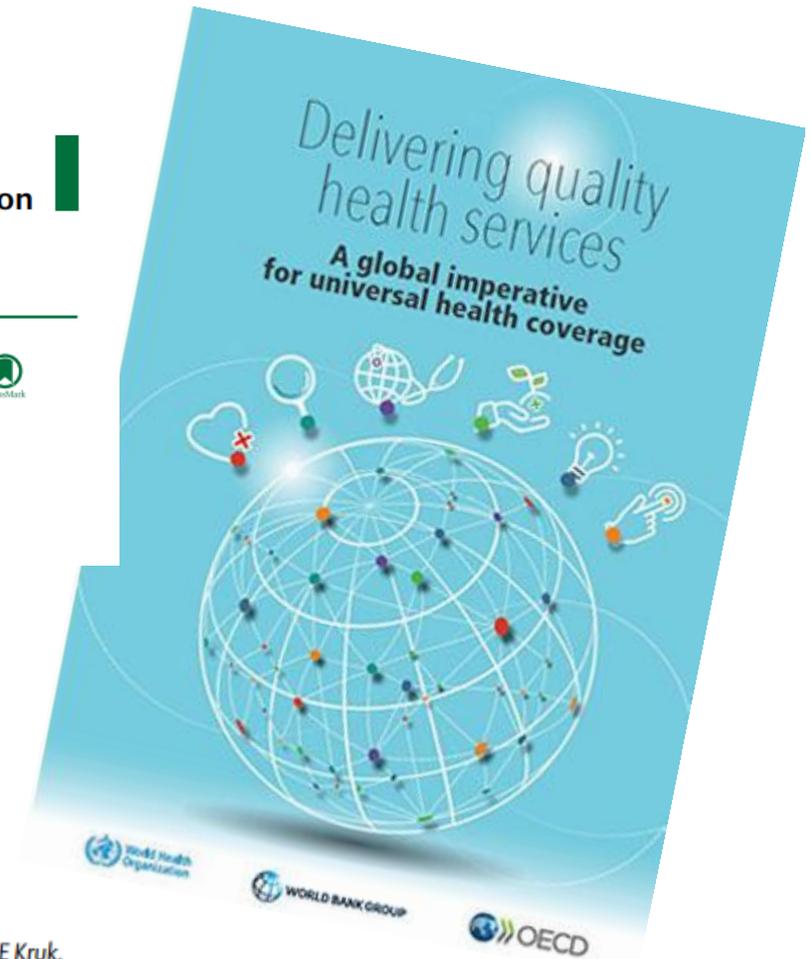
Margaret E Kruk, Anna D Gage, Catherine Arseneault, Keely Jordan, Hannah H Leslie, Sanam Roder-DeWan, Olusoji Adeyi, Pierre Barker, Bernadette Daelmans, Svetlana V Doubava, Mike English, Ezequiel Garcia Elorrio, Frederico Guanais, Oye Gureje, Lisa R Hirschhorn, Lixin Jiang, Edward Kelley, Ephrem Tekle Lemanga, Jerker Liljestrand, Address Malata, Tanya Marchant, Malebona Precious Matsoso, John G Meara, Manoj Mohanan, Youssoupha Ndiaye, Ole F Norheim, K Srinath Reddy, Alexander K Rowe, Joshua A Salomon, Gagap Thapa, Nana A Y Twum-Danso, Muhammad Pate



## Three global health-care quality reports in 2018

Universal health coverage (UHC) is the central thread of Sustainable Development Goal (SDG) 3. However, without improvements in the quality of the health system, UHC will prove an empty vessel and billions of people will not gain from benefits that could arrive from UHC. Instead, they will be victims of patient safety hazards, underuse of evidence-based care, overuse of inappropriate care, lack of patient-centred care, delays, inefficiency, inequity, financial insecurity, collusion, and corruption. For example, injuries from failures in patient safety are estimated to take as many lives as tuberculosis or malaria globally.<sup>3</sup> Safety failures account for 15%

<sup>3</sup>Donald M Berwick, Edward Kelley, Margaret E Kruk, Sania Nishtar, Muhammad Ali Pate  
Institute for Healthcare Improvement, Boston, MA 02109, USA (DMB); Service Delivery and Safety, World Health Organization, Geneva, Switzerland (EK); Department of Global Health and Population, Harvard T H Chan School of Public Health, Boston, MA, USA (MEK); Heartfile, Islamabad, Pakistan (SN); and Duke Global Health Institute, Duke University, Durham, NC, USA (MAP)  
donberwick@gmail.com



# A Global Call to Arms

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- Globally, quality of care needs improvement
- Poor quality of care leads to a detrimental human health and economic burdens, in all countries
- Improvements are possible by redesigning health systems, developing the workforce and with dedicated attention to quality by healthcare leaders
- The public, if engaged, can be a huge resource
- Updated measurements and transparency are key

# Transformational Improvement: a Summary

Braithwaite *et al. BMC Medicine* (2020) 18:340  
<https://doi.org/10.1186/s12916-020-01739-y>

BMC Medicine

CORRESPONDENCE

Open Access

## Transformational improvement in quality care and health systems: the next decade



Jeffrey Braithwaite<sup>1\*</sup> , Charles Vincent<sup>2</sup>, Ezequiel Garcia-Elorrio<sup>3</sup>, Yuichi Imanaka<sup>4</sup>, Wendy Nicklin<sup>5</sup>, Sodzi Sodzi-Tetty<sup>6</sup> and David W. Bates<sup>7</sup>

### Abstract

**Background:** Healthcare is amongst the most complex of human systems. Coordinating activities and integrating newer with older ways of treating patients while delivering high-quality, safe care, is challenging. Three landmark reports in 2018 led by (1) the Lancet Global Health Commission, (2) a coalition of the World Health Organization, the Organisation for Economic Co-operation and Development and the World Bank, and (3) the National Academies of Sciences, Engineering and Medicine of the United States propose that health systems need to tackle care quality, create less harm and provide universal health coverage in all nations, but especially low- and middle-income countries. The objective of this study is to review these reports with the aim of advancing the discussion beyond a conceptual diagnosis of quality gaps into identification of practical opportunities for transforming health systems by 2030.



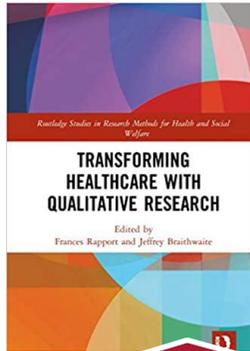
# So ...

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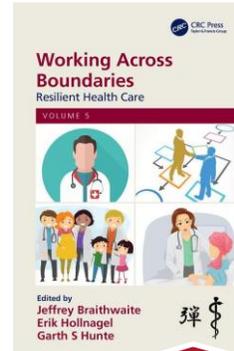
- **2018 = the year of analysis and reports**
- **2020s = the decade of action?**



# Recently published books



2020 – Transforming Healthcare with Qualitative Research



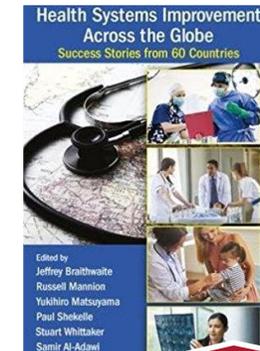
2019 – Working Across Boundaries



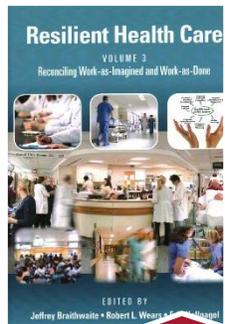
2018 – Delivering Resilient Health Care



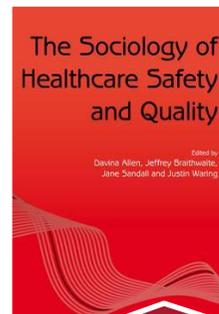
2018 - Healthcare Systems: Future Predictions for Global Care



2017 - Health Systems Improvement Across the Globe: Success Stories from 60 Countries



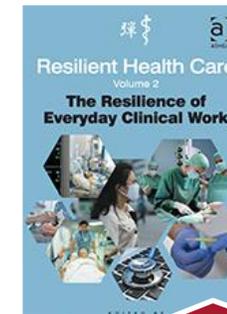
2017 – Reconciling Work-as-Imagined and Work-as Done



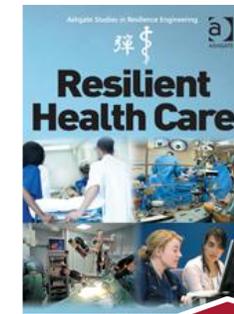
2016 – The Sociology of Healthcare Safety and Quality



2015 - Healthcare Reform, Quality and Safety: Perspectives, Participants, Partnerships and Prospects in 30 Countries



2015 - The Resilience of Everyday Clinical Work



2013 - Resilient Health Care

# Forthcoming books

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Gaps: the Surprising Truth  
Hiding in the In-between



Surviving the Anthropocene



Living in the Modern World



Counterintuitivity: How your  
brain defies logic



Muddling Through With  
Purpose

# Jeffrey Braithwaite PhD

## CONTACT DETAILS

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	AIHI website:	<a href="http://aihi.mq.edu.au">http://aihi.mq.edu.au</a>
	Twitter:	<a href="https://twitter.com/JBraithwaite1">@JBraithwaite1</a>
	Wikipedia:	<a href="http://en.wikipedia.org/wiki/Jeffrey_Braithwaite">http://en.wikipedia.org/wiki/Jeffrey_Braithwaite</a>