

Covid research and health equity

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18 July 2023 8.30-10.30

Plenary session 2:

Post-Covid Research Needs and Prioritization

International Hybrid Conference

"The 17th Postgraduate Forum of Health Systems and Policies: Post-Covid Health Equity"

17-18 July 2023 Faculty of Medicine, Prince of Songkla University

Scope

- Emphasis on research
- Enhancing research capacity
- How COVID-19 has changed medical research funding
- Success of vaccine discovery
- Time is running out for COVID-vaccine patent waivers
- Inequity from HIV to COVID
- Funders principles for supporting high-quality research
- Post-COVID: Gender equality will enhance research around the world
- COVID research priority in low resource setting

Emphasis on Research

- The NHS has an increasingly strong focus on evidence-based medicine, supported by internationally respected clinical researchers with funding from the [National Institute for Health Research](#), and the [National Institute for Health and Clinical Excellence \(NICE\)](#). Other countries admire NHS delivery of immunisation programmes. Our patient participation levels in cancer research are the highest in the world.

Department of Health: **Equity** and Excellence: Liberating the NHS. London: Her Majesty's Government; 2010.

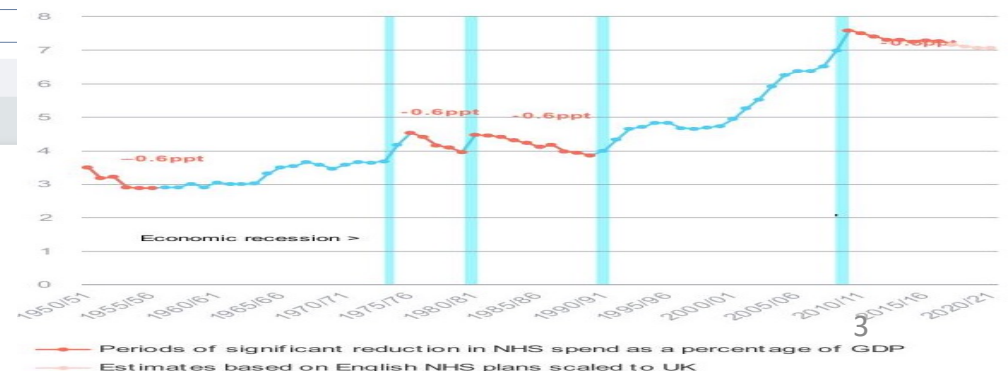


NHS 75: Shape the future

Together we can shape the future of healthcare through research.

On Wednesday 5 July, the NHS will celebrate its 75th birthday. To mark 75 years of the NHS, the NIHR is joining the national celebrations throughout 2023.

Supporting

The logo for NHS 75, consisting of the words "NHS" and "75" in a bold, blue, sans-serif font, with "75" being significantly larger than "NHS".

Enhancing research capacity: individual & partnership

Whitworth et al 2012

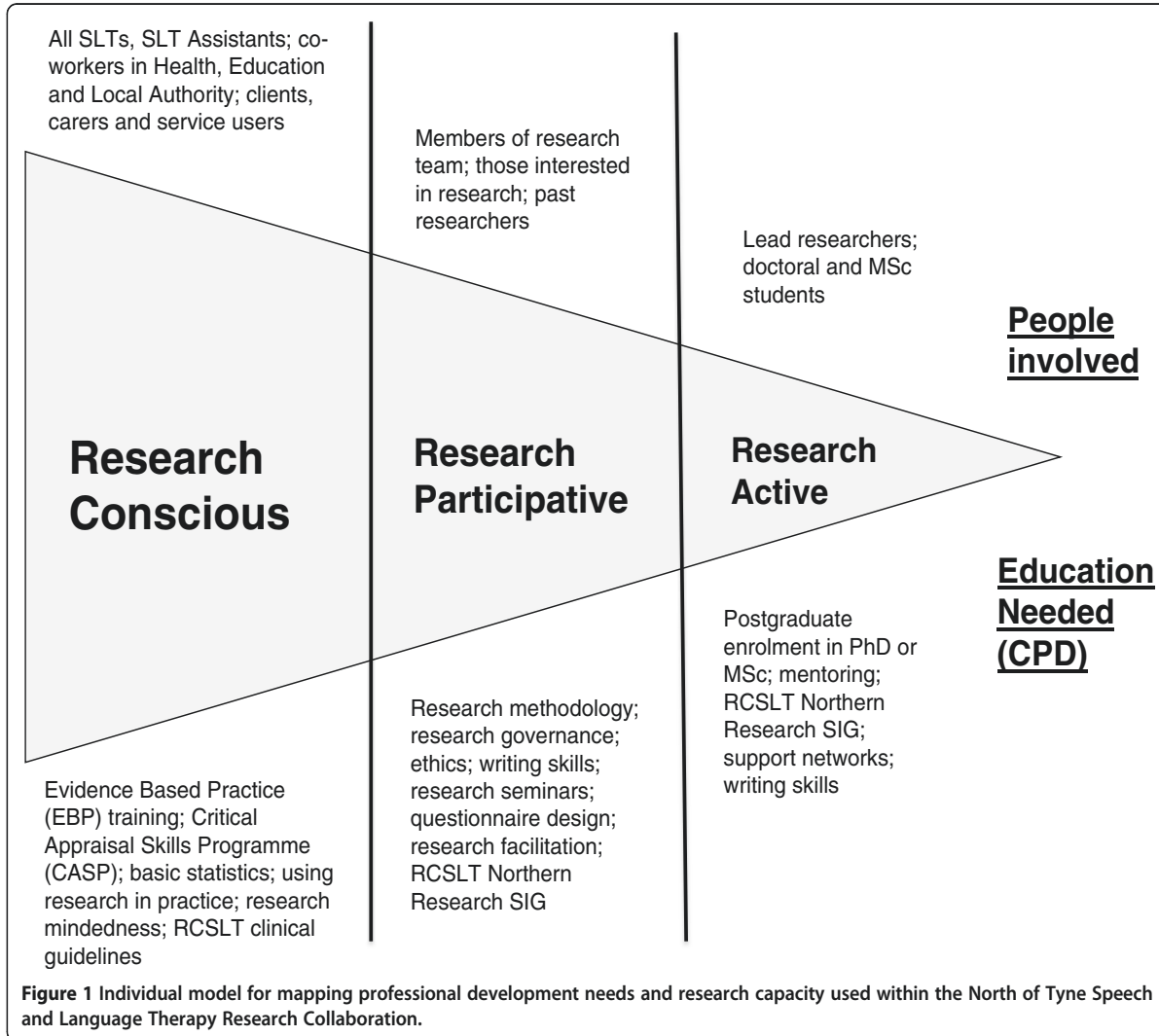


Figure 1 Individual model for mapping professional development needs and research capacity used within the North of Tyne Speech and Language Therapy Research Collaboration.

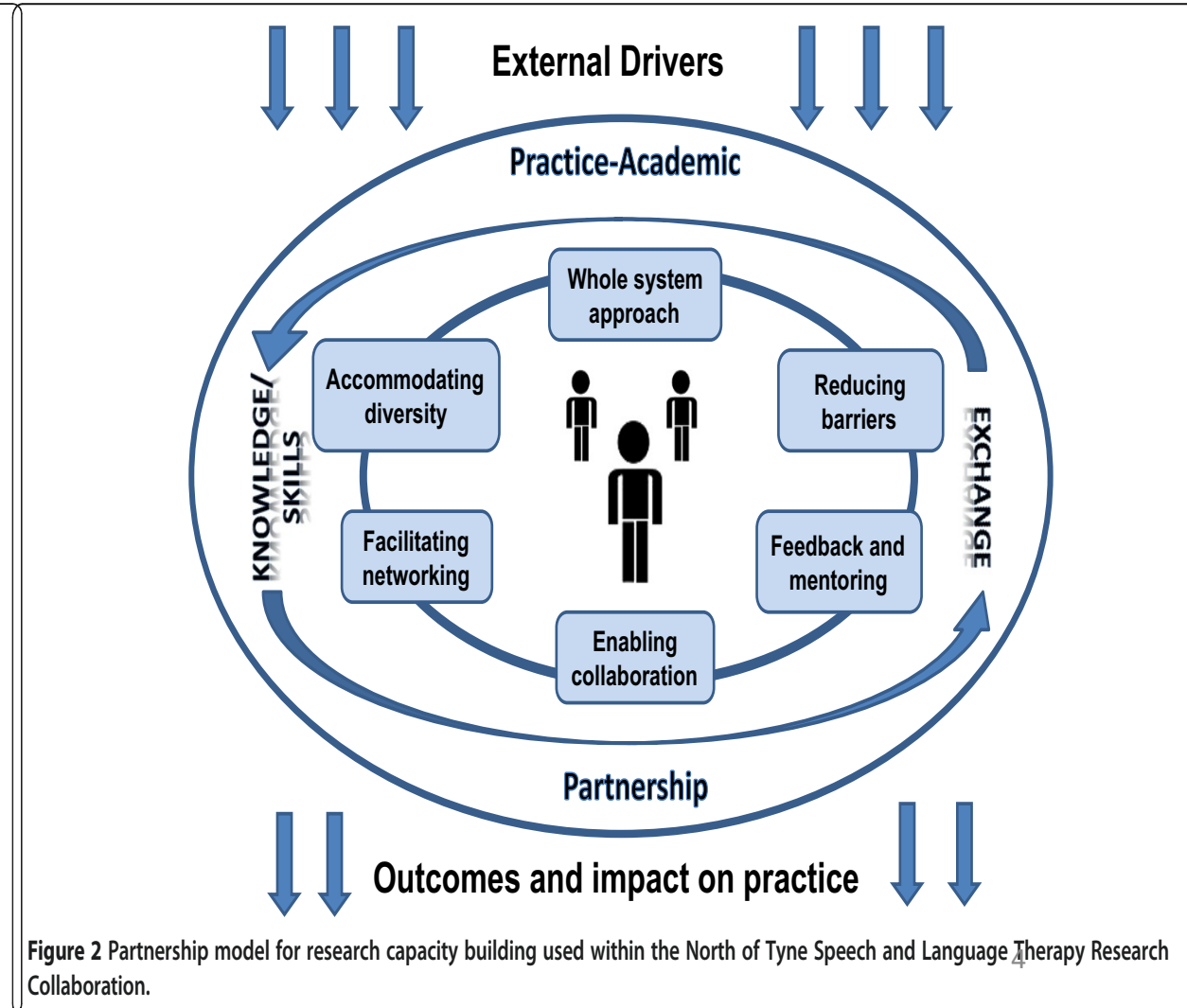


Figure 2 Partnership model for research capacity building used within the North of Tyne Speech and Language Therapy Research Collaboration.

How COVID-19 has changed medical research funding

- Multi-faceted approach
 - Need for speed
- Benefits of long-term investments in medical research
 - Vaccines
 - Clinical trials
- National core studies

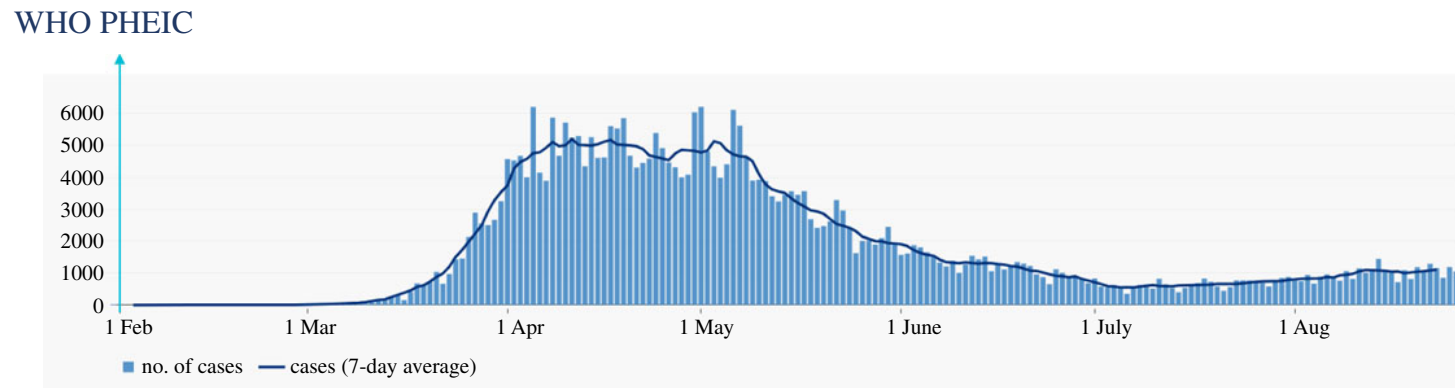


Figure 1. Timeline of COVID-19 funding calls with MRC involvement. UK cases shown.

Success of Vaccine Discovery

- *...was built on the researchers' experience of developing an adenovirus-based vaccine against the MERS coronavirus with support from the UK Vaccines Network... The MERS vaccine had already been tested in clinical trials and so was known to be safe and able to provoke efficient immune responses. The COVID-19 vaccine work was supported by £2.6 million through the UKRI/NIHR rapid response grants in March, which provided funding to conduct pre-clinical investigations and a phase I/II trial, and scale up the vaccine to 1 million doses by summer 2020.*
- *...an initial grant of approximately £2 million leveraged pharma investment 100-fold*

Time is running out for COVID-vaccine patent waivers

- *Two years into the pandemic, fewer than 15% of people in low-income countries have had at least one dose of a vaccine, whereas in some high-income countries, people are being offered fourth doses.*
- *...companies ... have little incentive to change their business model... Pfizer, ... BioNTech, ... distributed more than 3 billion mRNA vaccines, reported a net profit of almost US\$22 billion for 2021 — more than double the amount for 2020.*
- *During the past two years, no company has been granted a compulsory licence to make a COVID-19 vaccine.*
- *...applications were made for 417 COVID-19 vaccine-related patents between... 2020 and... 2021. ... it takes an average of 18 months between an application being filed with a patent office and the application being published.* Editorials

nature

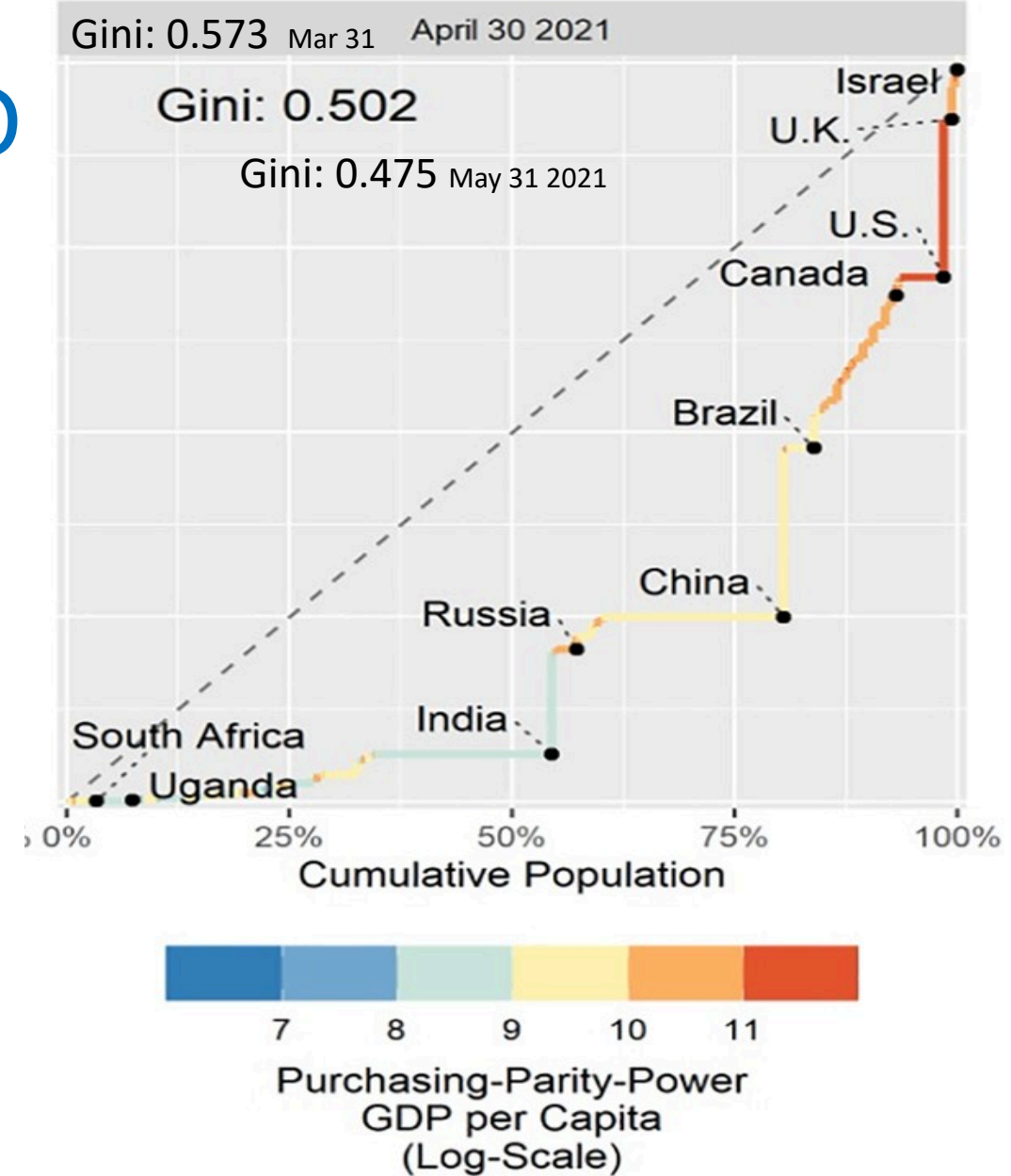
31 March 2022

Inequity from HIV to COVID

- *Three decades later, HIV treatment is widely available around the world, mostly free of charge, delivered by a robust healthcare workforce, based on stable global financing, and supported by the highest levels of global governance. With all the flaws of the response, from the vantage point of the present, it is clear that progress and greater equity in the response to the HIV epidemic have occurred.*
- *...the COVID-19 pandemic presents a critical threat but also potentially a window to catalyze international collective action that can shape the post-COVID-19 landscape and ensure that global responses to future health threats are more equitable and effective. The barriers to using these steps to achieve greater equity in the global response to COVID-19 are myriad: Not all influential actors globally prioritize equity...*

Geng et al 2021

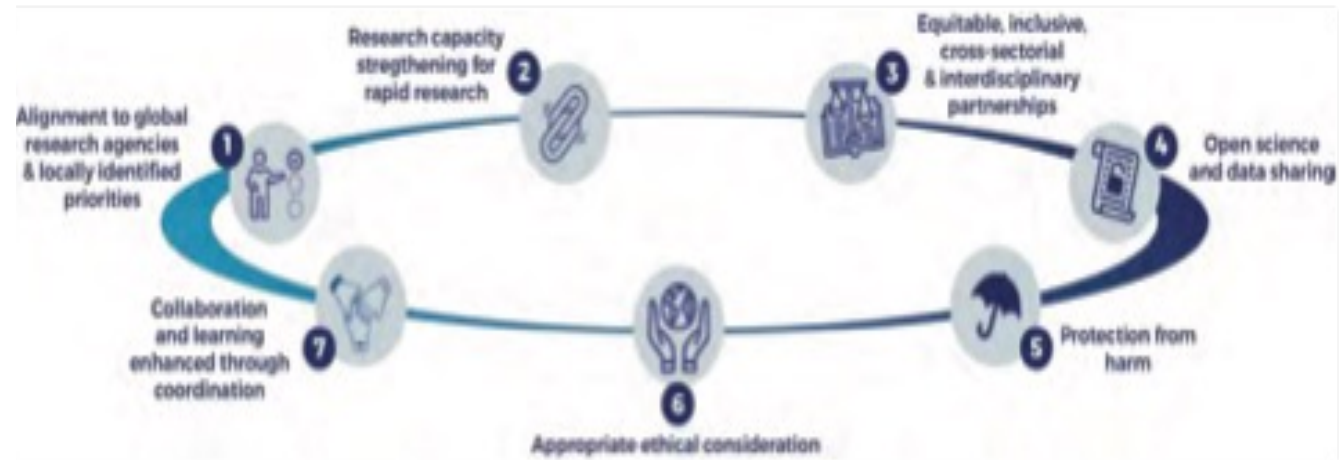
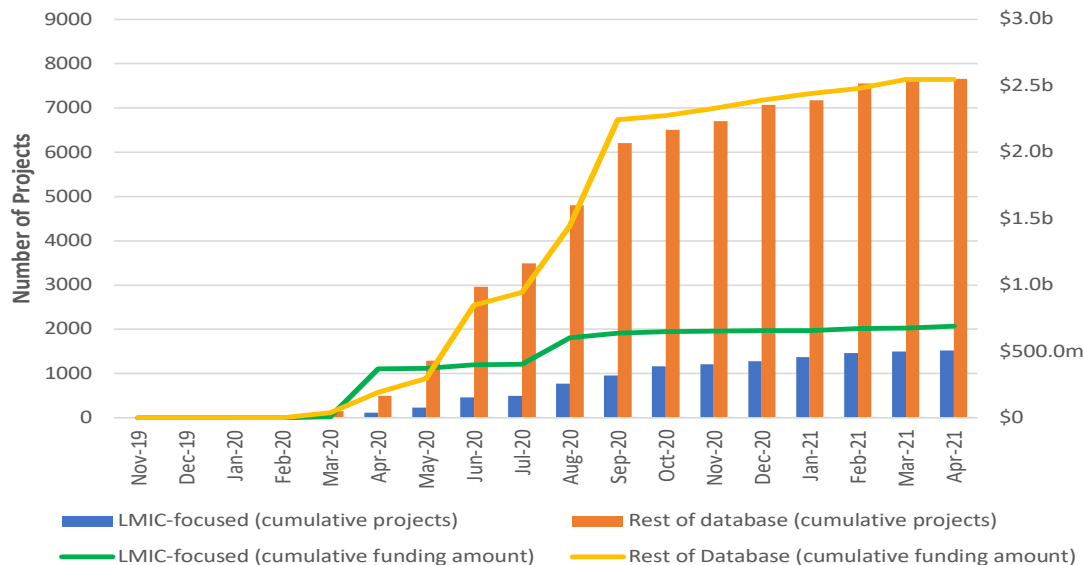
Equity of global distribution of COVID-19 vaccine



Funders Principles for supporting High-Quality Research

- Funding for COVID-19 research studies across LMICs has been thinly spread, with few multi-country research projects globally. This has resulted in a proliferation of heterogeneous small studies with limited impact for populations in LMICs (3). This has been compounded by equity issues relating to access to the products of globally funded research.

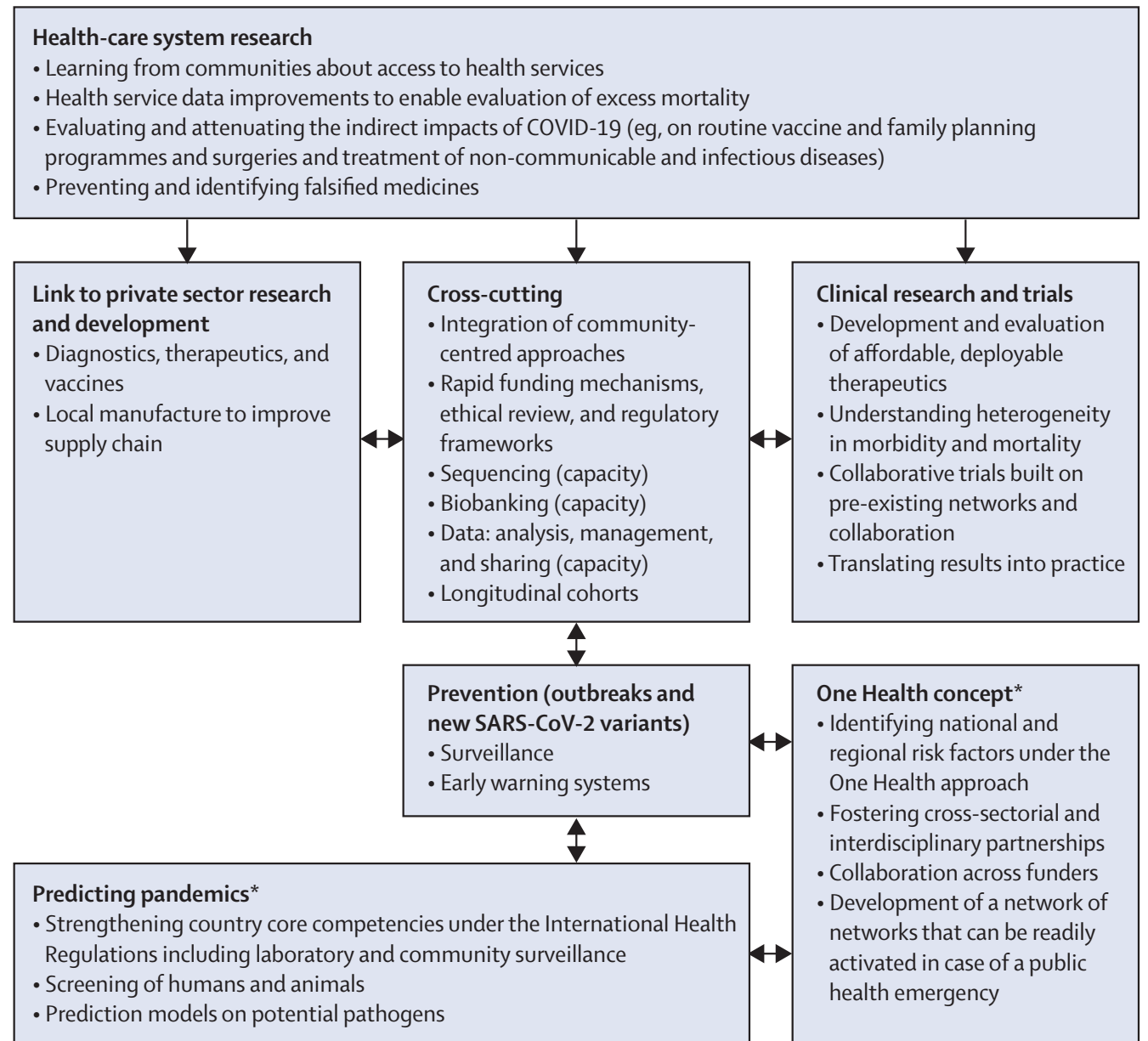
Figure 1 - Cumulative number of projects and known funding amounts by publication date of award information of projects on tracker



Post-Covid: Gender equality will enhance research around the world

- Breaking Barriers for Gender Equity Through Research: gender equity in sustainable development, and how women's lives are affected by crises such as wars, climate change and the current pandemic
- The COVID-19 pandemic has been particularly hard on female researchers. Even before SARS-CoV-2 emerged, women, on average, published less than men, and faced additional and potentially long-lasting career setbacks.
- Compounded discrimination — intersectionality: SDGs to end hunger, boost employment and achieve universal education.
- European Union's science funding programmes are embedding requirements on sex and gender equality into the grant application stage

Covid Research Priority in Low Resource Setting



Fairer Research Assessment: equity in research

- *'...just counting citations in well-known journals doesn't do justice to other important work, such as building databases and software, and engaging with the public.'* (Nature Editorial 2023a)
- *In doing so, it will help to create a research culture that reflects the best possible values that research should represent.* (Nature Editorial 2023a)
- Focus more on the research process: kindness, teamwork or quality of mentorship (Nature Editorials 2023b).
- Use these ten principles to guide research evaluation: The Leiden Manifesto for research metrics. (Hicks D et al. 2015).

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