

A New Culture of Governance for an Inclusive Digital Future

Dr Dimitrios Kalogeropoulos



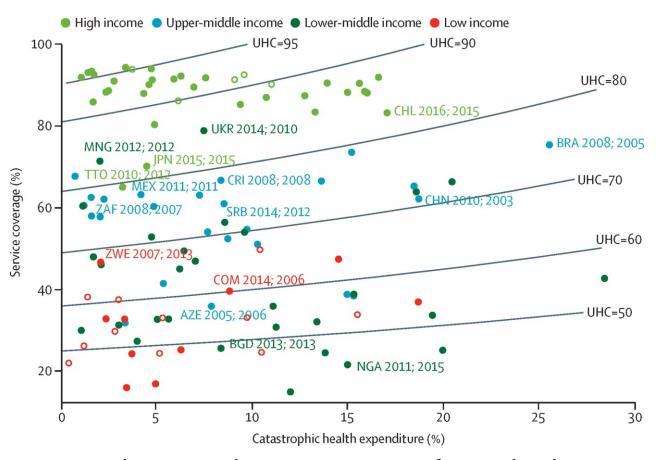
WHO's Tripple Billion Targets



690 Million

1.26

Billion



Financial Protection and Service Coverage (years) after inequality adjustment.

Wagstaff A, Neelsen S. A comprehensive assessment of universal health coverage in 111 countries: a retrospective observational study. Lancet Glob Health. 2020 Jan;8(1):e39-e49. doi: 10.1016/S2214-109X(19)30463-2.

WHO's Strategic Plan for Impact

To navigate global health challenges and hasten SDG achievement, WHO adopts three strategic directions in GPWs 13 and 14:

- 1. Leadership
- 2. Catalysing public health impact
- 3. Leveraging global public goods

The goal is to strengthen is to strengthen data capacities in developing countries

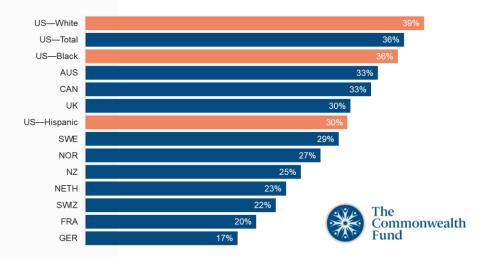


Impact of Race & Mental Health on Access to Care

2020 Commonwealth Fund International Health Policy Survey exposes significant disparities across high-income countries

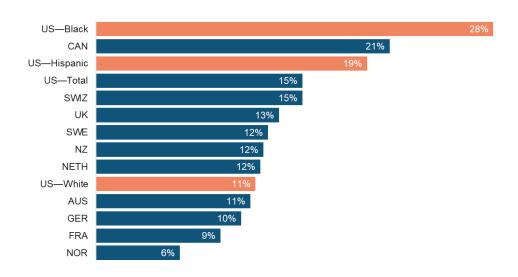
White and Black U.S. adults reported the highest rates of mental health needs.

Percentage of adults age 18+ who reported a mental health need



Black adults with mental health needs had the highest level of avoidable emergency room use across the countries.

Percentage of adults age 18+ who used the emergency room for care that could have been provided by a regular doctor or place of care, among those who reported a mental health need



Reginald D. Williams II and Arnav Shah. Mental Health Care Needs in the U.S. and 10 Other High-Income Countries - Findings from the 2020 Commonwealth Fund International Health Policy Survey. https://www.commonwealthfund.org/publications/surveys/2021/oct/mental-health-care-needs-us-10-other-high-income-countries-survey

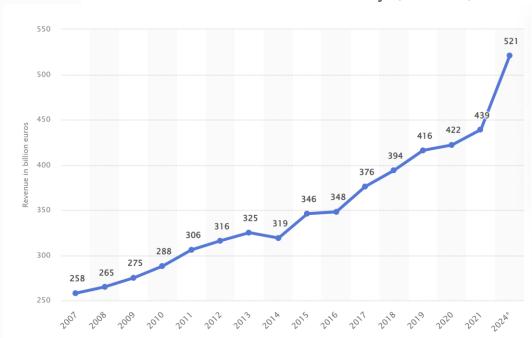
The Culture of Collaborative Leadership

- Create a safe, inclusive and trusting environment in which everyone can contribute fully
- Strengthen connections for increased staff engagement and more coordinated services
- Promote engagement across the collaboration with processes that create a more open and participatory environment
- Develop shared decision-making processes
- Design transparent processes that empower participation and contribution to decisions, further strengthening trust



Transforming the Medical Technology Industry with AI Demand-Side Initiatives for Equity

Global Revenue Medical Device Industry (Statista)

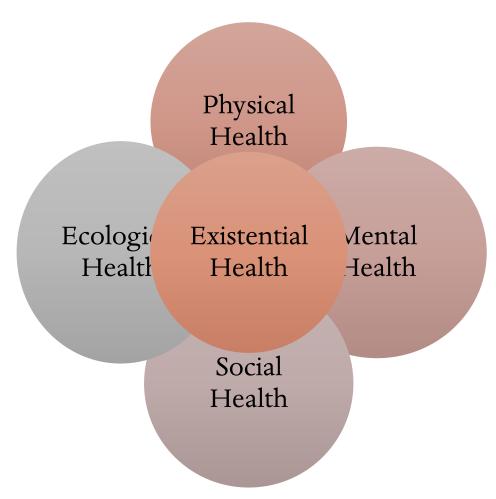


Mammograph Density Mammograph Density Mammograph Density Mammographs / 1m population USA Australia Austria Belize Canada Denmark

Source: WHO Global Atlas Of Medical Devices 2022

Governing Upstream Change

- Digital technologies can fill the predictive spaces between existential polarities and healthcare events
- AI has a heightened role in this context bridging information gaps and disparities with Social Determinants of Health
- Through this lens, "working together and innovating" together must get an overhaul and lead to new paths for resilience and equity



Webster, P. Six ways large language models are changing healthcare. Nat Med (2023). https://doi.org/10.1038/s41591-023-02700-1 Song J, Topaz M, et al. Using natural language processing to identify acute care patients who lack advance directives, decisional capacity, and surrogate decision makers. PLoS One. 2022 Jul 11;17(7):e0270220. doi: 10.1371/journal.pone.0270220. PMID: 35816481; PMCID: PMC9273092.

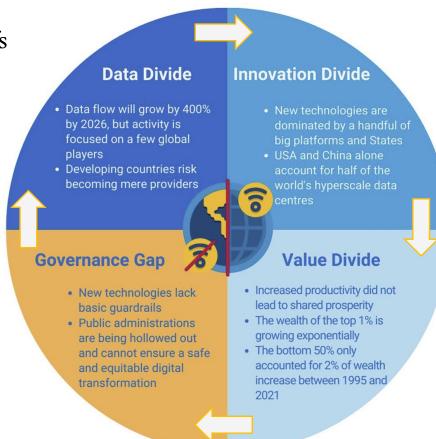
Friday, December 8, 2023

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The Digital Divide Challenge

"The Digital World is one of Divides"— Our Common Agenda Report, UN Policy Briefs

- Governance Gap
- Data Divide
- Innovation Divide
- Value Divide

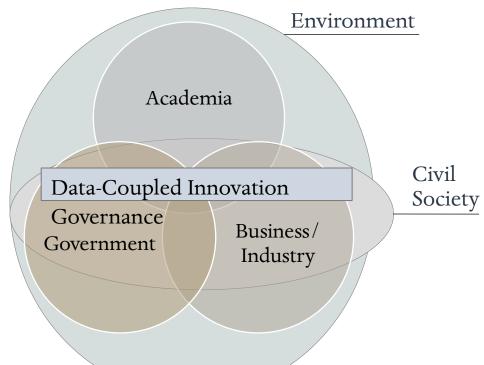






The Clinical Trials Industry— Gatekeeper for Social Innovation

- Current global clinical trials market* is \$50 billion annually
- Roughly 2% of the global market revenue (\$2 Trillion)
- 20% is data curation for one of the innovation delivery stages
- In the case of AI model training, data curation accounts for a staggering 80% of project budget
- Quality-of-care consensus conferences keep reiterating the lack of research data
- Yet we generate so much of it, it has become a climate issue

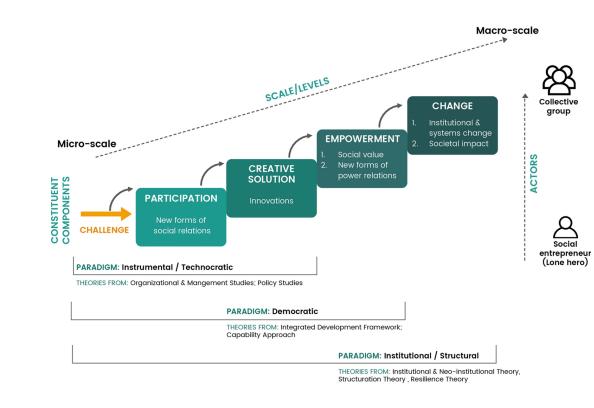


Quintuple Innovation for Socio-Economic Growth

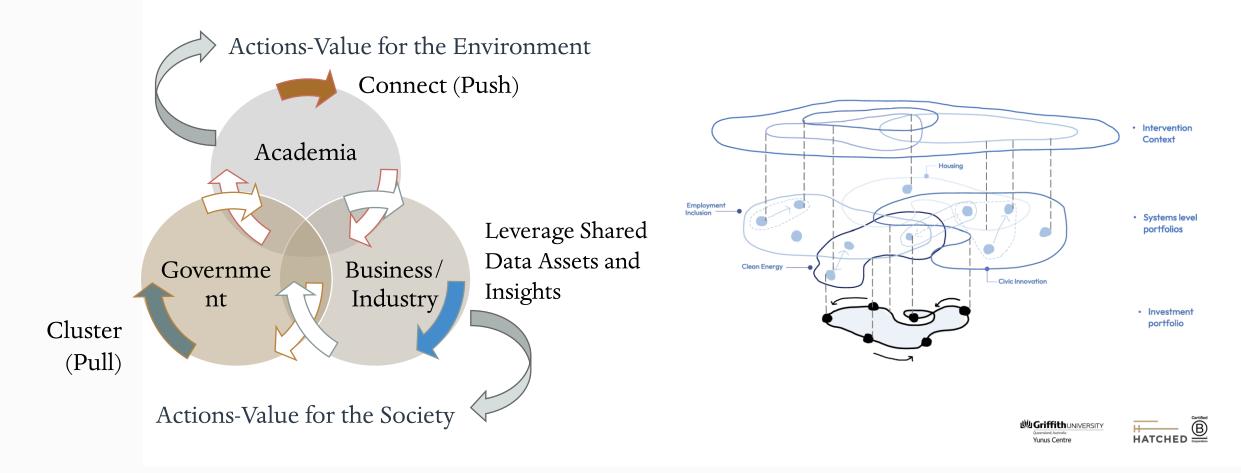
^{*} pharmaceutical & biotechnology companies, medical device companies, and academic institutes.

Can AGI Promote Social Innovation?

- Resists the ephemeral, reductionist, siloed view to innovation, in favour of scalable, transformational, sustainable, health innovation that drives systemic change with equity and inclusion
- Innovation usually provides novel solutions to "wicked" problems
- Solutions for which the value created accrues primarily to society rather than individuals
- Democratic institutional voids are exploited to allow new forms of participation by a range of actors with complementary objectives—leading to collaborative innovation ecosystems



A Global Digital Compact to Accelerate SDGs Role of Systems Capital



UK Secure Data Environments

• SDEs are health data research hubs for real world evidence that support clinicians, researchers and scientists to:



Recruit patients to studies



MIMMINITURE

Develop new treatments



Manage and prevent health conditions



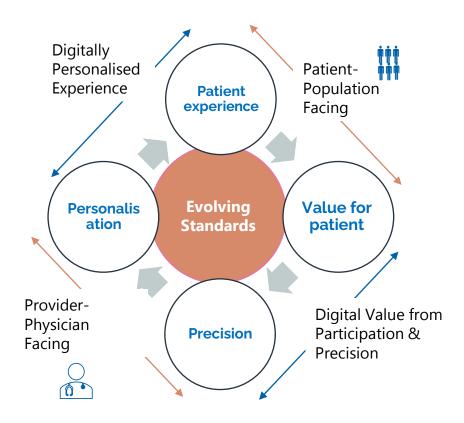
Test and evaluate innovations

U.S. Federal AI Investment Strategy

- Long-term investments prioritizing foundational capabilities such as population representation and advancing data-focused methodologies for knowledge discovery
- Focused federal investments to strengthen reciprocity and collaboration in research and application
- Fine-grained data representations to underpin effective standards setting for robust innovation translation
- Actions to address the information asymmetries undermining equitable outcomes and impact the quality and reliability of the evidence accessible, thus reinforcing the need for improving equity in universal health coverage

Data Recycling And Circular Economies

- Connected innovation ecosystems are inherently capable of creating shared evidence and value, and shorter learning and translation cycles
- Data recycling is defined as the shared use of health and clinical data along the care continuum, emphasising disease progression to build up and integrate clinical and policy insights into common, reused datasets
- This requires seamless interoperability between medical devices and continual learning (regulatory) policies that support the adoption of new industry-wide participatory health informatics concepts with standards



Kalogeropoulos, D. and Barach, P. (2023). Telehealth's Role Enabling Sustainable Innovation and Circular Economies in Health. Telehealth and Medicine Today, 8(1). https://doi.org/10.30953/thmt.v8.409
Denecke K, Gabarron E, Petersen C, Merolli M. Defining participatory health informatics - a scoping review. Inform Health Soc Care. 2021 Sep 2;46(3):234-243. doi: 10.1080/17538157.2021.1883028.

New Policy Options

- Retool adaptive leadership
- Modernise and develop the clinical trials industry to retool global health
- Align data protection policies with multi-ownership concepts
- Facilitate agile learning with just-in-time adaptive interventions
- Adopt telehealth as a strategy for equity, inclusion and participatory care
- Incorporate telehealth in value-based reimbursement (affordability)
- Integrate evidence sandbox facilities and services to accelerate inclusive innovation

Maslow's hierarchy of (Digital) Global Health Needs

- Global knowledge mobilization
- International collaborative leadership
- Preparedness to respond to upcoming threats such as climate change and future pandemics

UN SDGs

Governance for Data-Coupled Innovation Collaboration

Standards that enable and empower broad participation for Social Innovation

- The European Health Data Space Regulation aims to enable crossjurisdictional data flows
- UK Government's International Data Transfer Expert Council says it is necessary to identify and define the characteristics of the most appropriate solution

Thank you!