Reimagining Global Health Governance in the Age of Digital Health: Learning from Thailand Experience

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Three common meanings of

Global Health Governance

globalisation and **health governance**

global governance and health

governance for **global health**

Source: Lee & Kamradt-Scott (2014)

Governance

Source: Lee & Kamradt-Scott (2014)

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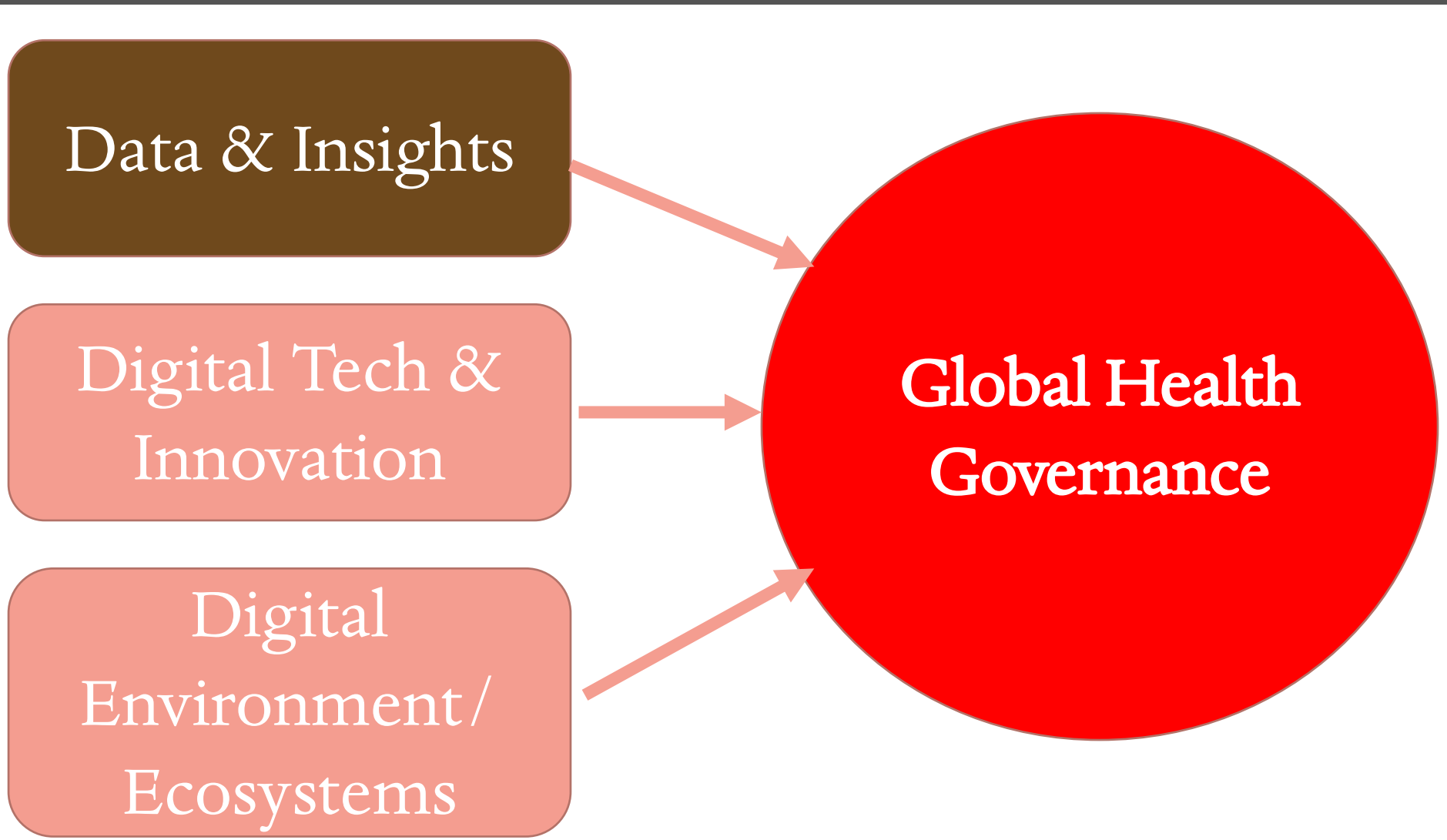
Digital Technologies

Better global health governance with new technologies, more tools, and new opportunities for better collaboration and coordination?

OR

More power to those with more resources? Exacerbation of existing inequalities in health? Concerns on privacy and security? Increasing misinformation and disinformation?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‘Good health at low cost’ 25 years on
What makes an effective health system?

First published in 1965, the Good health at low cost report sought to describe how some developing countries were able to achieve better health outcomes than others with similar incomes. An iconic publication of its day, it highlighted the linkages between the wider determinants

Key messages

- Thailand has outperformed many other countries in improving health outcomes, achieving all the health MDGs by the early 2000s and moving towards ‘MDG plus’.
- Maternal and child health related

HARVARD PUBLIC HEALTH REVIEW

http://harvardpublichealthreview.org/universal-health-care-the-affordable-dream/

Universal Health Care: The Affordable Dream

Amartya Sen, PhD, Thomas W. Lamont University Professor and Professor of Econonomics and Philosphy, Harvard University; Nobel Memorial Prize in Economic Sciences (1998)

Twenty-five hundred years ago, the young Gautama Buddha left his princely home, in the foothills of the Himalayas, in a state of agitation and agony. What was he so distressed about? We learn from his biography that he was moved in particular by seeing the penalties of ill health—by the sight of mortality (a dead body being taken to cremation), morbidity (a person severely afflicted by illness), and disability (a person reduced and ravaged by unaided old age). Health has been a primary concern of human beings throughout history. It should, therefore, come as no surprise that healthcare for all—"universal healthcare" (UHC)—has been a highly appealing social objective in most countries in the world, even in those that have not got very far in actually providing it.

Thailand's experience in universal healthcare is exemplary, both in advancing health achievements across the board and in reducing inequalities between classes and regions.

Data for Expanding Coverage: National Civil Registration Systems with Unique Identifier in National Identification System

- Based on 13-digit personal identification number (PID) and national ID smartcard for **Thai citizens**, to verify eligibility, track service delivery, and claims processing

- Shared by the three public health insurance schemes

- Updated data on new births and deaths at the end of each day

- Health insurance benefit status routinely updated twice a month

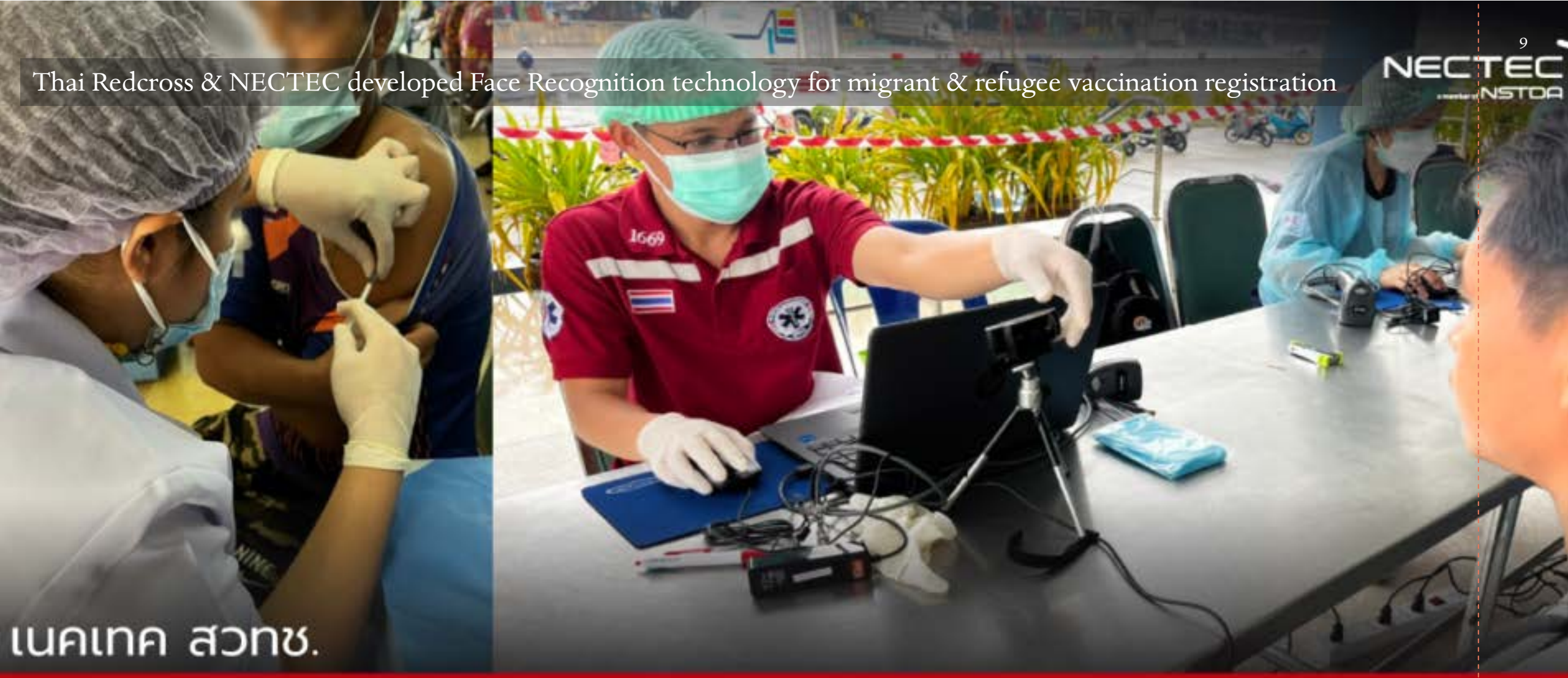
- The ID number consists of 13 digits, each with a specific meaning.
- The last digit is a checksum used to prevent fraud.
- It is unique for each Thai person from cradle to grave.
- The MOI generates the ID number at the time of birth registration.
- The ID number is printed on the national ID card.

ILO (2015) http://www.social-protection.org/gimi/gess/RessourcePDF.action?ressource.ressourceId=53144

Ingun (2015) Journal of the Thai Medical Informatics Association

World Bank (2018) http://pubdocs.worldbank.org/en/595741519657604541/DigitalIdentification-HealthcareReportFinal.pdf

Thai Redcross & NECTEC developed Face Recognition technology for migrant & refugee vaccination registration



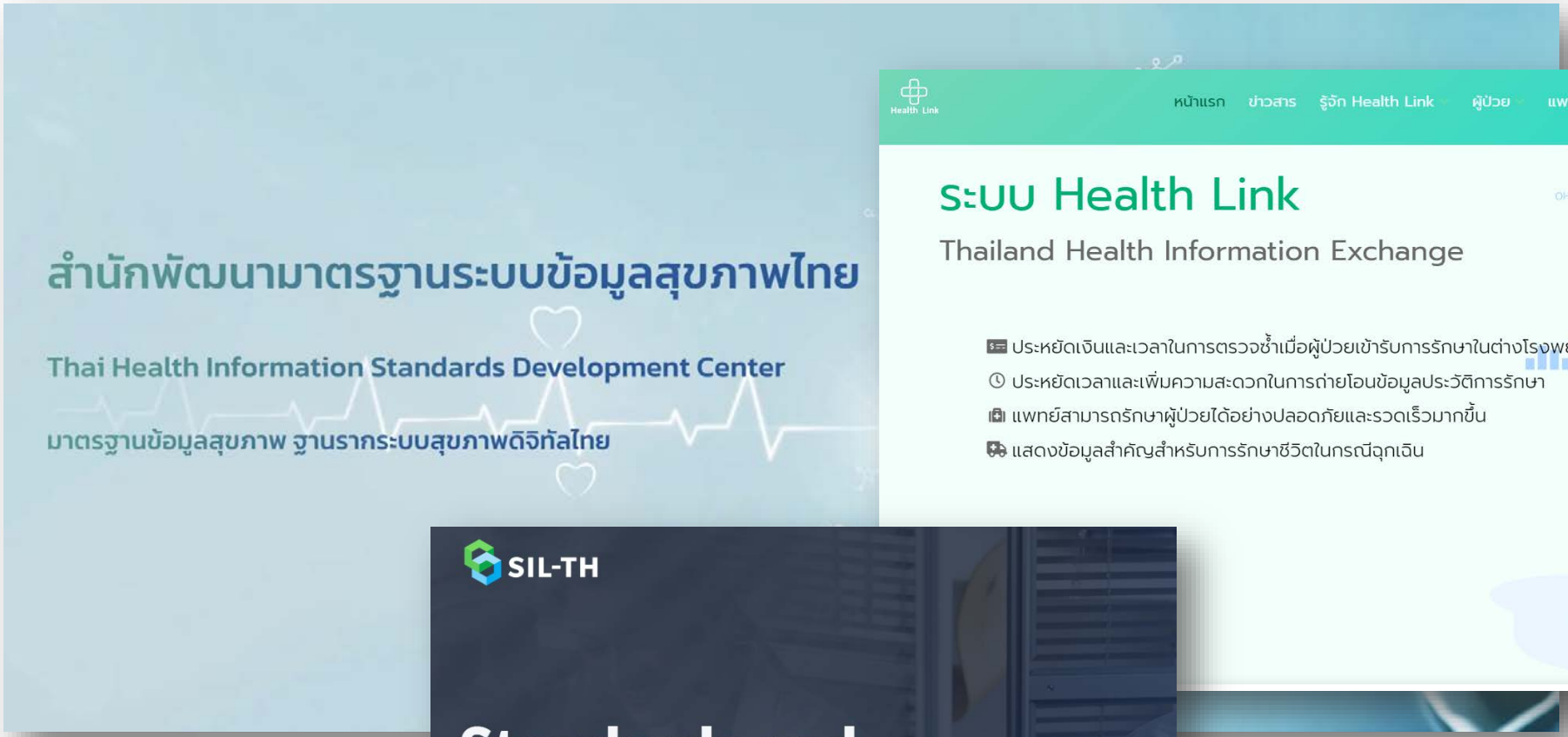
MOU between Thai CDC, Thai Redcross, NECTEC, WHO
Iris scan and Face Recognition technology for migrant & refugee identification system

https://mgronline.com/qol/detail/9660000073468

Data for Health Care Financing

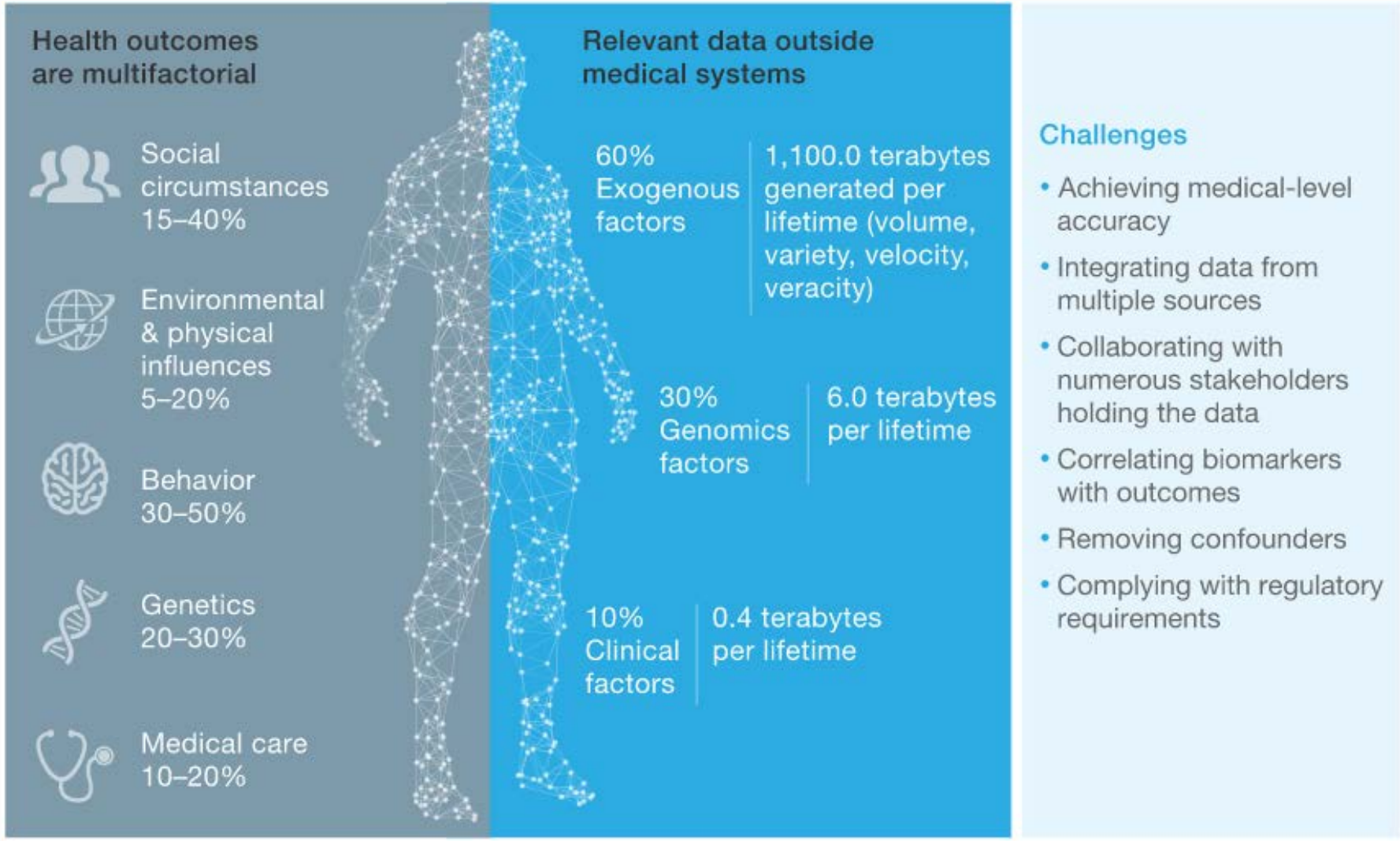
"Strategic" purchasing: change from supply side budgeting towards performance and output-based payments

- Requires individual level utilization data for claims processing => more data collection and frameworks for data sharing that protect privacy and security
- Needs to integrate data across providers and geographical areas => need data standards
- More investment in IT & Health information systems by health care providers => financial and human resource investment and incentives


สำนักพัฒนามาตรฐานระบบข้อมูลสุขภาพไทย
Thai Health Information Standards Development Center
มาตรฐานข้อมูลสุขภาพ ฐานรากระบบสุขภาพดิจิทัลไทย

Health Link
หน้าแรก
ข่าวสาร
รู้จัก Health Link
ผู้ป่วย
แพทย์
โรงพยาบาล
คำถามที่พบบ่อย
ติดต่อเรา
เข้าสู่ระบบ
ระบบ Health Link
Thailand Health Information Exchange
ประหยัดเงินและเวลาในการตรวจซ้ำเมื่อผู้ป่วยเข้ารับการรักษาในต่างโรงพยาบาล
ประหยัดเวลาและเพิ่มความสะดวกในการถ่ายโอนข้อมูลประวัติการรักษา
แพทย์สามารถรักษาผู้ป่วยได้อย่างปลอดภัยและรวดเร็วมากขึ้น
แสดงข้อมูลสำคัญสำหรับการรักษาชีวิตในกรณีฉุกเฉิน
แชท

SIL-TH
Standards and Interoperability Lab Thailand (SIL-TH)
We enable a more connected healthcare system for better health.



Source: "The relative contribution of multiple determinants to health outcomes," *Health Affairs*, August 21, 2014

Envision a holistic approach to healthcare in which all relevant data shape decisions in real time.

Cavlan et al. McKinsey & Co. (2018)

https://www.mckinsey.com/industries/pharmaceuticals-and-medical-products/our-insights/real-world-evidence-from-activity-to-impact-in-healthcare-decision-making

“Over there, they have much more data than all that we have here”.

a national public health institute director

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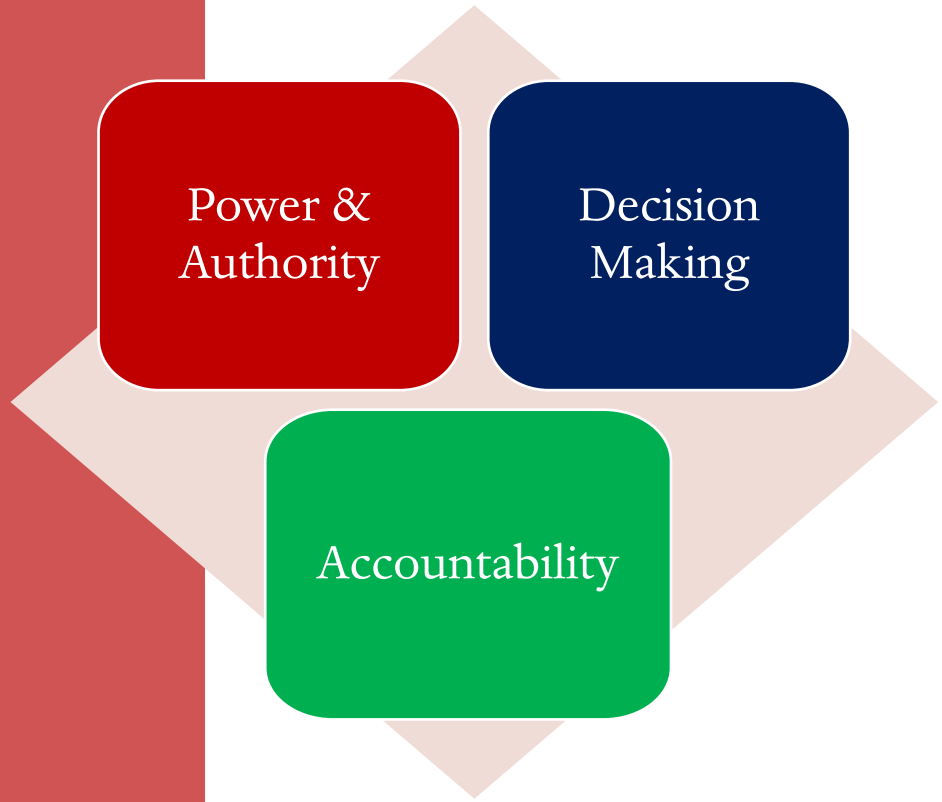


Good data and information can provide valuable benefits for better global health governance.

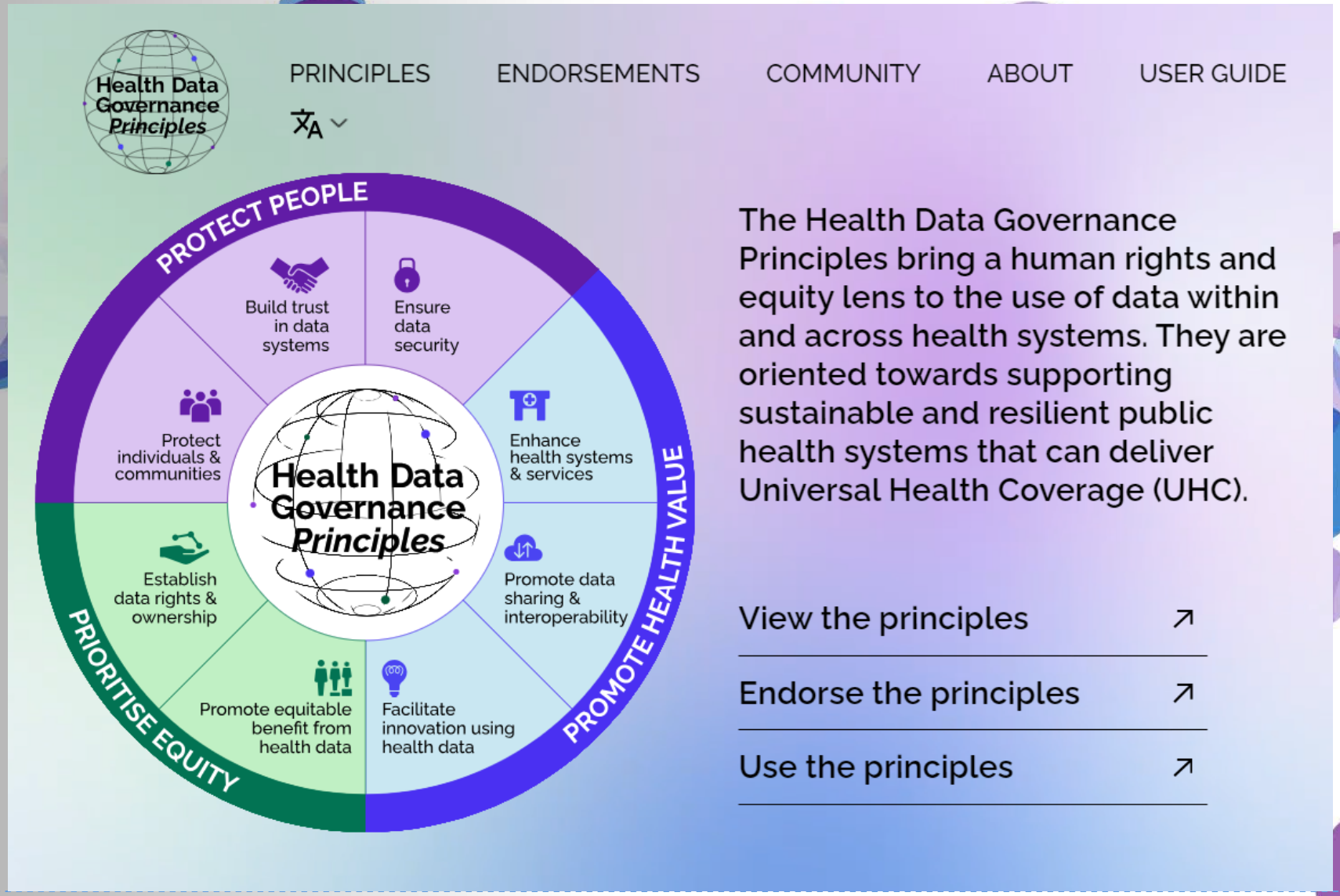
To harness the power of data for GHG, we should strengthen health data governance at all level.

Security Privacy Transparency

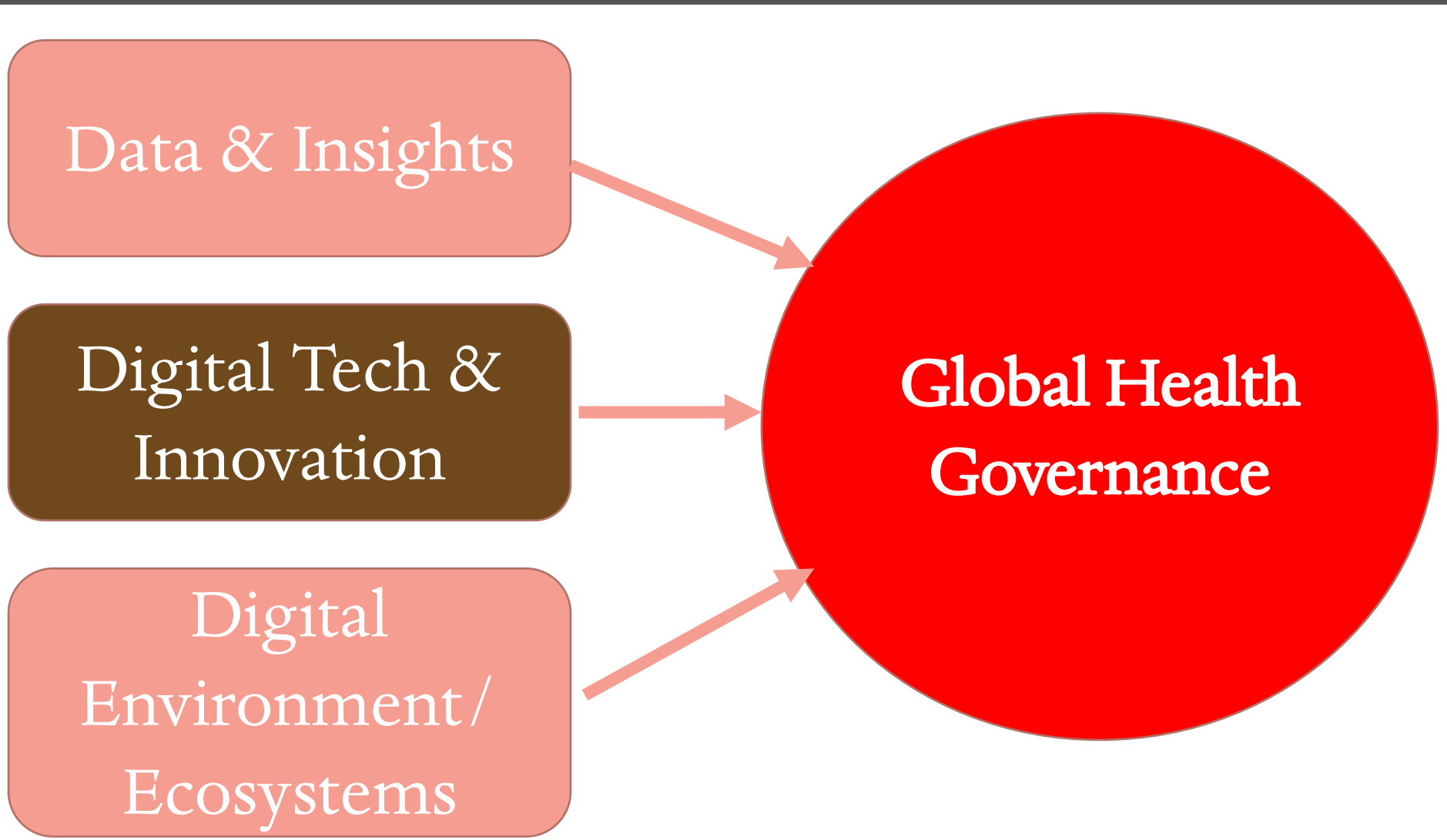
Infrastructure Capacity building

Stakeholder participation Coordination and cooperation

"The collection, processing, storage, analysis, use, sharing and disposal of health data has grown in complexity. This exponential increase in data use necessitates robust and equitable governance of health data."



From https://healthdataprinciples.org/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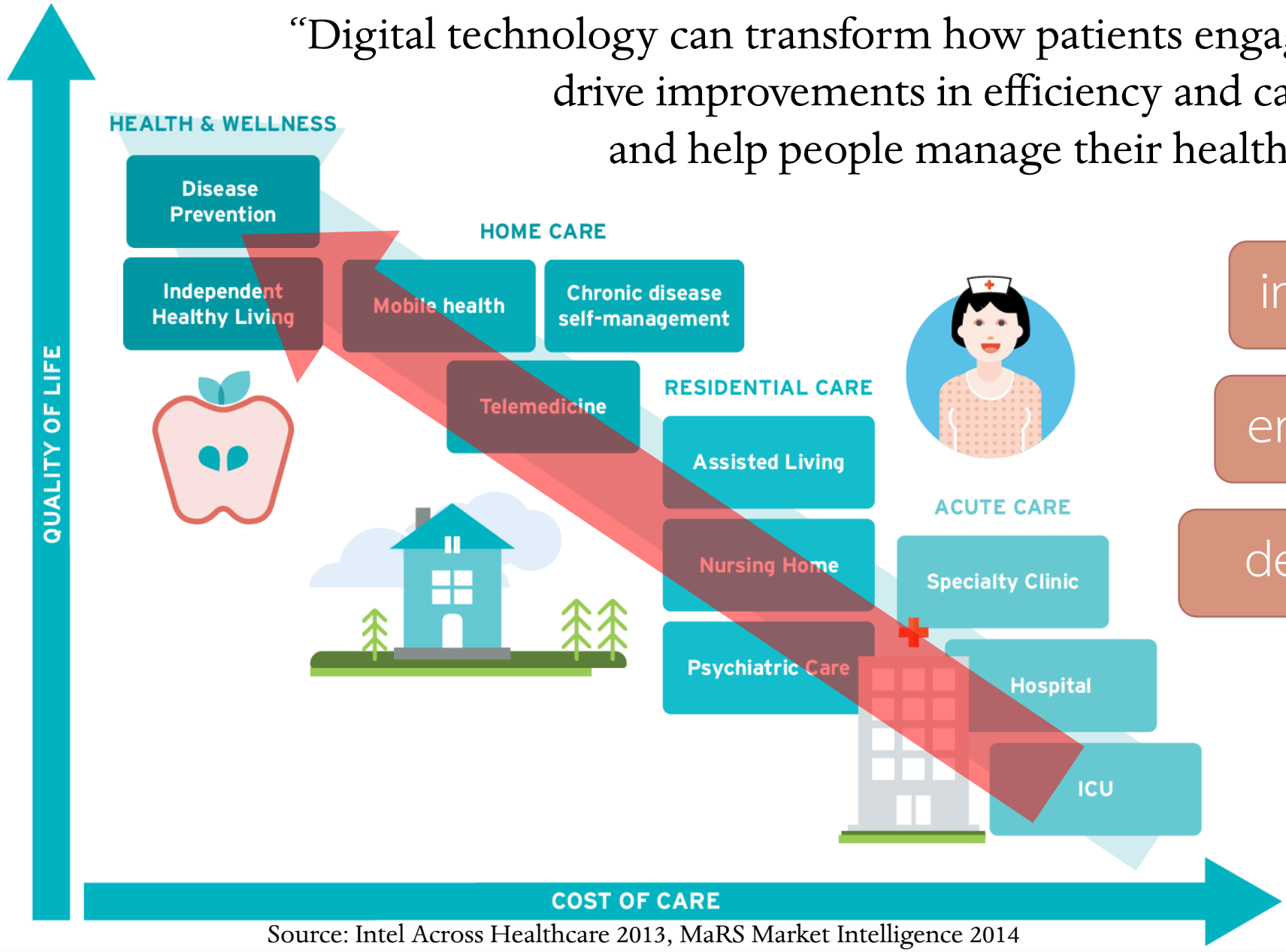
ผลสำรวจ ปชช.ทุกข์ใจ รพ.รัฐ รอคิวนาน

Tue, 2017-02-28 12:30 -- hfocus

ผลสำรวจซูเปอร์โพล ประชาชนระทมทุกข์ใช้บริการ รพ.ของรัฐ รอคิวนาน แพทย์ไม่ใส่ใจรักษา
อันดับหนึ่ง ตามมาด้วย รพ.รามาอันดับสาม รพ.ราชวิถีและ รพ.จุฬาฯ ได้เท่ากันอันดับ 3 "นพดล
ใส่ใจความรู้สึกประชาชน นำไปแก้ไข เพิ่มประสิทธิภาพการบริการอย่างบูรณาการ

Figure 3: 'Shifting Left' to Reduce Cost of Care while Improving Quality of Life

"Digital technology can transform how patients engage with services, drive improvements in efficiency and care coordination, and help people manage their health and wellbeing."

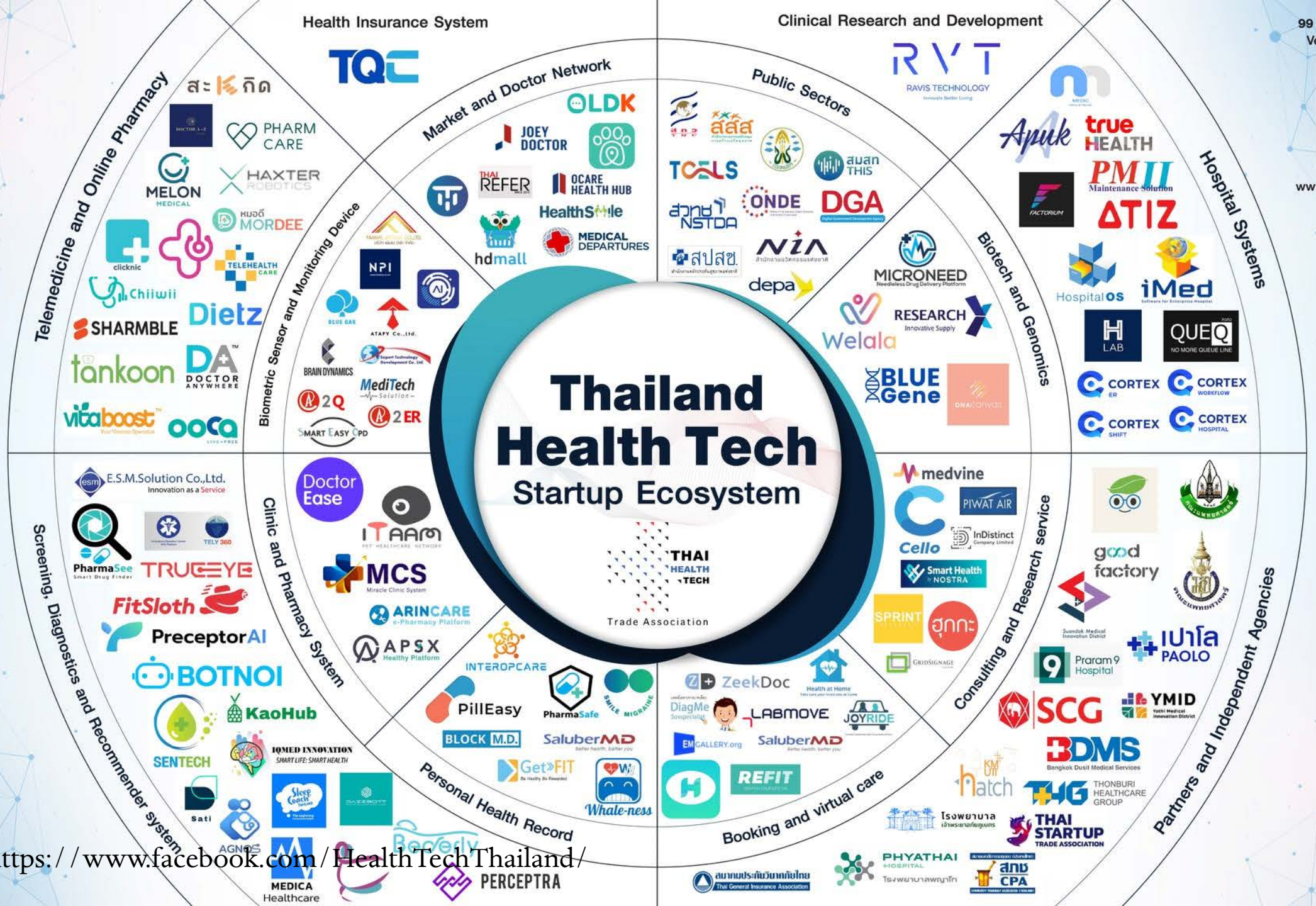


improve access

enhance quality

decrease costs

Source: Intel Across Healthcare 2013, MaRS Market Intelligence 2014



Source: https://www.facebook.com/HealthTechThailand/

global POLICY

"the abiding lesson of that history is that

technology *can* be a force for health equity depending on how innovation is governed"

Storeng et al. 2021

Volume 12, Issue S6
Special Issue:Digital technology and the political determinants of health inequities
Pages: 1-114
July 2021
Issue Edited by:
Sakiko Fukuda-Parr, Katerini T. Storeng, Manjari Mahajan, Sridhar Venkatapuram

there are direct and indirect consequences to the creation and harvesting of, and trade in, new **health data commodities** that go beyond the reach of any single government.

There is also currently a lack of accountability for the largest **technology corporations** anywhere, or for any digital health technology actors operating in resource poor or conflict settings.

Storeng et al. 2021

Good digital health governance is an important foundation for strong global health governance

Figure 3: Principles of Good Digital Health Governance

Source: Adapted from Good Governance Guide, which can be found in: http://www.goodgovernance.org.au/about-good-governance/what-is-good-governance/.

Source: Marcelo et al. 2018

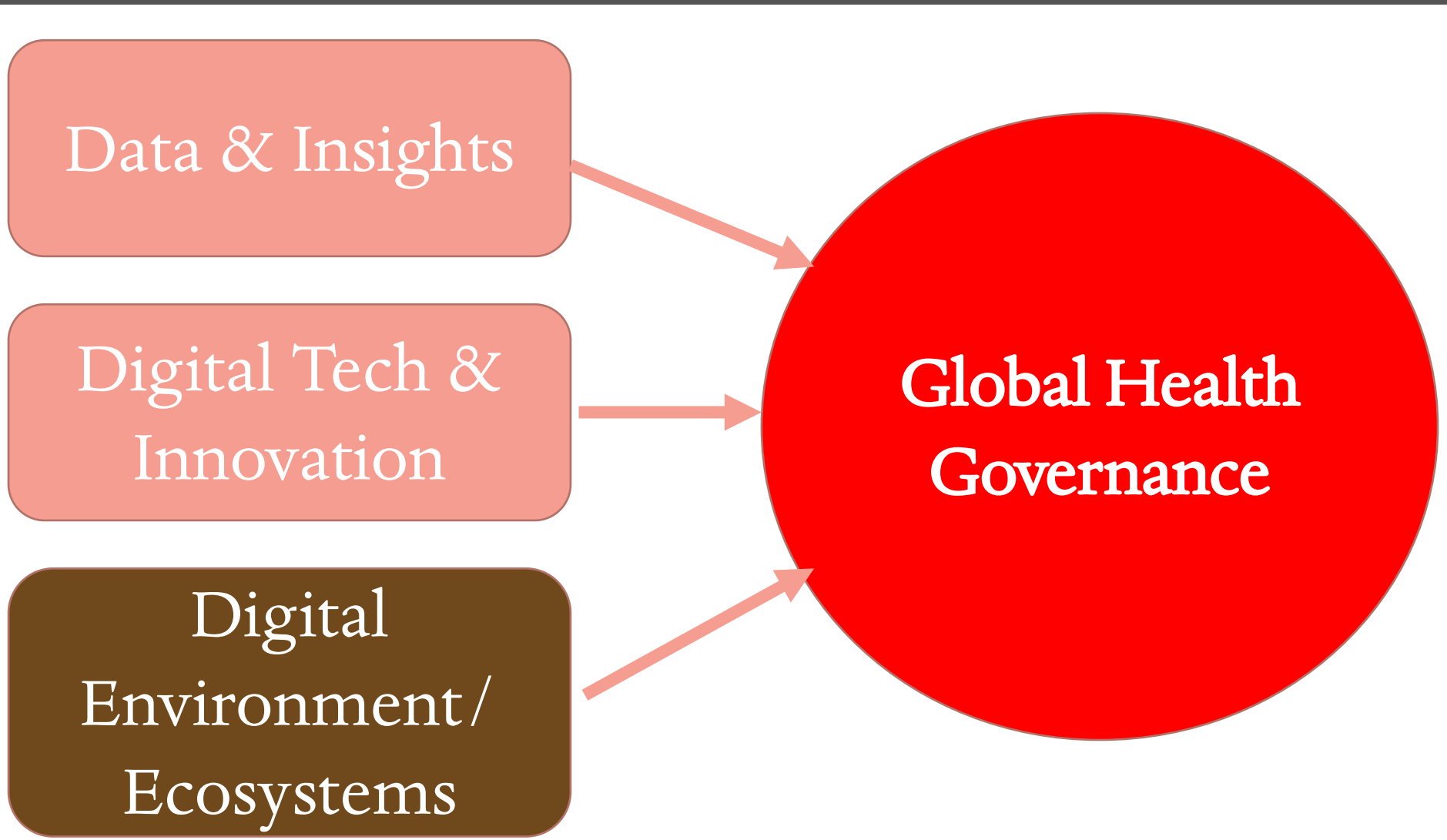

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Figure 1. Conceptualising the interface between digital technologies and the determinants of health

Governing Health Futures 2030 Commission (2021).

Key digital determinants of health (DDoH)

A framework for digital health equity

Richardson et al. 2022

		Levels of Influence*			
		Individual	**Interpersonal**	**Community**	**Societal**
Domains of Influence *(Over the Lifecourse)*	**Biological**	Biological Vulnerability and Mechanisms	Caregiver–Child Interaction Family Microbiome	Community Illness Exposure Herd Immunity	Sanitation Immunization Pathogen Exposure
	Behavioral	Health Behaviors Coping Strategies	Family Functioning School/Work Functioning	Community Functioning	Policies and Laws
	Physical/Built Environment	Personal Environment	Household Environment School/Work Environment	Community Environment Community Resources	Societal Structure
	Digital Environment	Digital Literacy, Digital Self-Efficacy, Technology Access, Attitudes Towards Use	Implicit Tech Bias, Interdependence (e.g. shared devices), Patient-Tech-Clinician Relationship	Community Infrastructure, Healthcare Infrastructure, Community Tech Norms, Community Partners	Tech Policy, Data Standards, Design Standards, Social Norms & Ideologies, Algorithmic Bias
	Sociocultural Environment	Sociodemographics Limited English Cultural Identity Response to Discrimination	Social Networks Family/Peer Norms Interpersonal Discrimination	Community Norms Local Structural Discrimination	Social Norms Societal Structural Discrimination
	Health Care System	Insurance Coverage Health Literacy Treatment Preferences	Patient–Clinician Relationship Medical Decision-Making	Availability of Services Safety Net Services	Quality of Care Health Care Policies
Health Outcomes		**Individual Health**	**Family/ Organizational Health**	**Community Health**	**Population Health**

USO NET
บริการโทรคมนาคมพื้นฐานโดยทั่วถึง และบริการเพื่อสังคม
NBTC
USO
"This USO NET Center has been established under the cooperation between NBTC and ITU."
About USO NET
we are here
The provision of Universal Service Obligation, referred to in short as USO, is one of key missions of the National Telecommunication Commission. Universal Service Obligation is also considered a fundamental factor for economic and social development which will help bridge the gap of telecommunication accessibility and will create opportunity in accessing to
Background
The provision of a community internet center (USO NET) is one of key missions in providing universal Service Obligation (USO) for the year 2010 whereas licensees shall operate works in the target areas in accordance with terms and conditions determined by the National Telecommunication Commission (NTC) (Currently, it is under the responsibility of the National Broadcasting and Telecommunication Commission or NBTC).
Support from NBTC Office
The success of services provision and administration of the USO NET Center will be subject to continuous cooperation and support from all relevant sectors, which will enable effective and sustainable implementation of this project. After the establishment of USO NET Center is completed by licensees, NBTC Office has planned several beneficial projects to serve such establishment, such as organizing course to support the creative use of information technology creating learning network, and coordinating with other organizations to provide state-of-the-art and interesting contents and applications for people.
ศูนย์เรียน รู้ เล่น โดย กสทช.
Develop Education for Rural Students as an Important Basis for Country Development
by determining
520
target Schools
where the USO NET Center is established
Scatter the service of High-speed Internet to Schools to Bridge the Gap of Digital Divide of Rural Students
Aim
The provision of the community USO NET is to bridge the gap of digital divide of rural students, by introducing telecommunication system (high-speed internet) as a tool to benefit educational development which will become a key basis for country development further. In 2010, it is targeted to establish the USO NET Center at 520 schools.
Develop People's Quality of Life and Enhance Community's Fortitude
by determining
408
target Communities
where the USO NET Center is established
Scatter the service of High-speed Internet to Communities to Bridge the Gap of Digital Divide of People
Aim
Center in 408 communities.
Implementation
The licensees shall operate area renovation in the communities to prepare for the establishment of USO NET Center, and shall install devices, including computers for people and persons monitoring the center, which must be connected to internet system, as well as other usable equipment and infrastructures, such as
กสทช.
กสทช. จัดให้มีบริการอินเทอร์เน็ตความเร็วสูง ครอบคลุมทุกพื้นที่ทั่วประเทศ
พื้นที่ห่างไกล จำนวน 15,732 หมู่บ้าน ทั่วประเทศ
พื้นที่ชายขอบ จำนวน 3,920 หมู่บ้าน ทั่วประเทศ
รวม 19,652 หมู่บ้าน
198 รพ.สต.
ทั่วประเทศ ได้รับการเชื่อมต่อ
Authorities in Charge
There are 6 licensees who will provide services through USO NET Center for the year 2010, including
• TOT Public Company Limited
• CAT Telecom Public Company Limited
• TripleT Broadband Public Company Limited
• jasTel Network Company Limited
• AIN GlobalComm Company Limited
• Super Broadband Network Company Limited
รพ.สต.
คลินิคหมอครอบครัว
ระบบ Telehealth
ผ่านสัญญาณอินเทอร์เน็ตความเร็วสูง
รพ.จังหวัด
ศูนย์แพทย์เฉพาะทาง
รพ.ชุมชน

Administration Priorities The Record

OCTOBER 30, 2023

FACT SHEET: President Biden Issue Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence

BRIEFING ROOM ▸ STATEMENTS AND

Today, President Biden is issuing a land
America leads the way in seizing the pr
artificial intelligence (AI). The Executi
AI safety and security, protects Americ
rights, stands up for consumers and wo
competition, advances American leade

As part of the Biden-Harris Administra

November 8, 2023

THE JAPAN NEWS
BY THE YOMIURI SHIMBUN

Fake Video of Japan Prime Minister Kishida Triggers Fears of AI Being Used to Spread Misinformation

Reddit Share Tweet

A still image of a fake video of what appears to be Prime Minister Fumio Kishida as posted on the Niconico Douga video-sharing site. (Image has been partially modified.)

2023 Global Health and Welfare Forum in Taiwan

The Economist

Menu Weekly edition The world in brief Search

By Invitation | Artificial intelligence

The world needs an international agency for artificial intelligence, say two AI experts

Gary Marcus and Anka Reuel argue that global governance must be prioritised to address the risks of bias, misinformation or worse

IMAGE: DAN WILLIAMS

Apr 18th 2023

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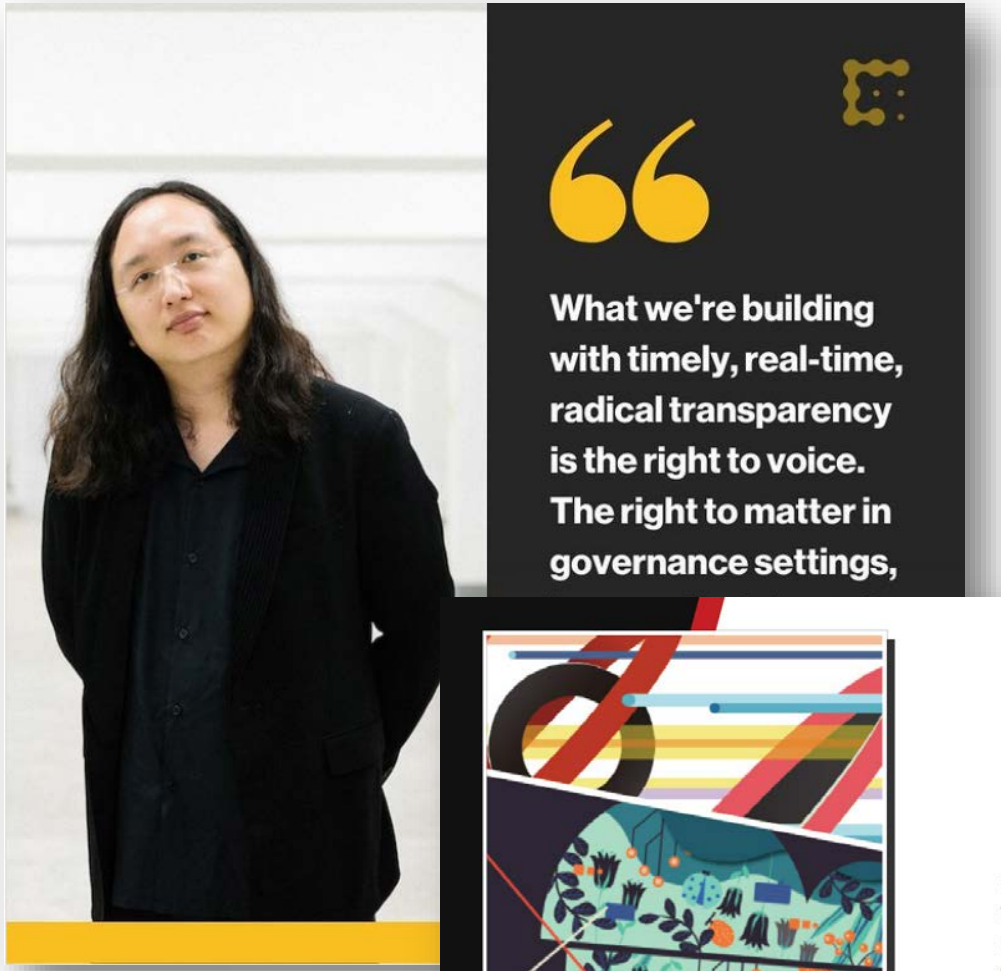

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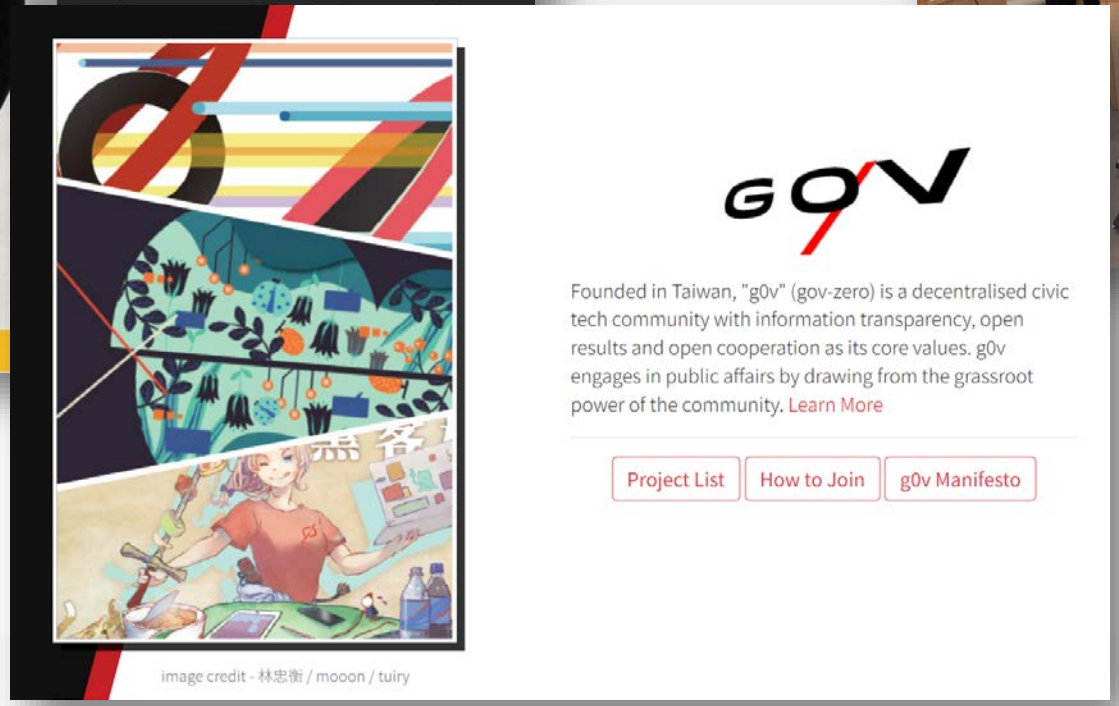
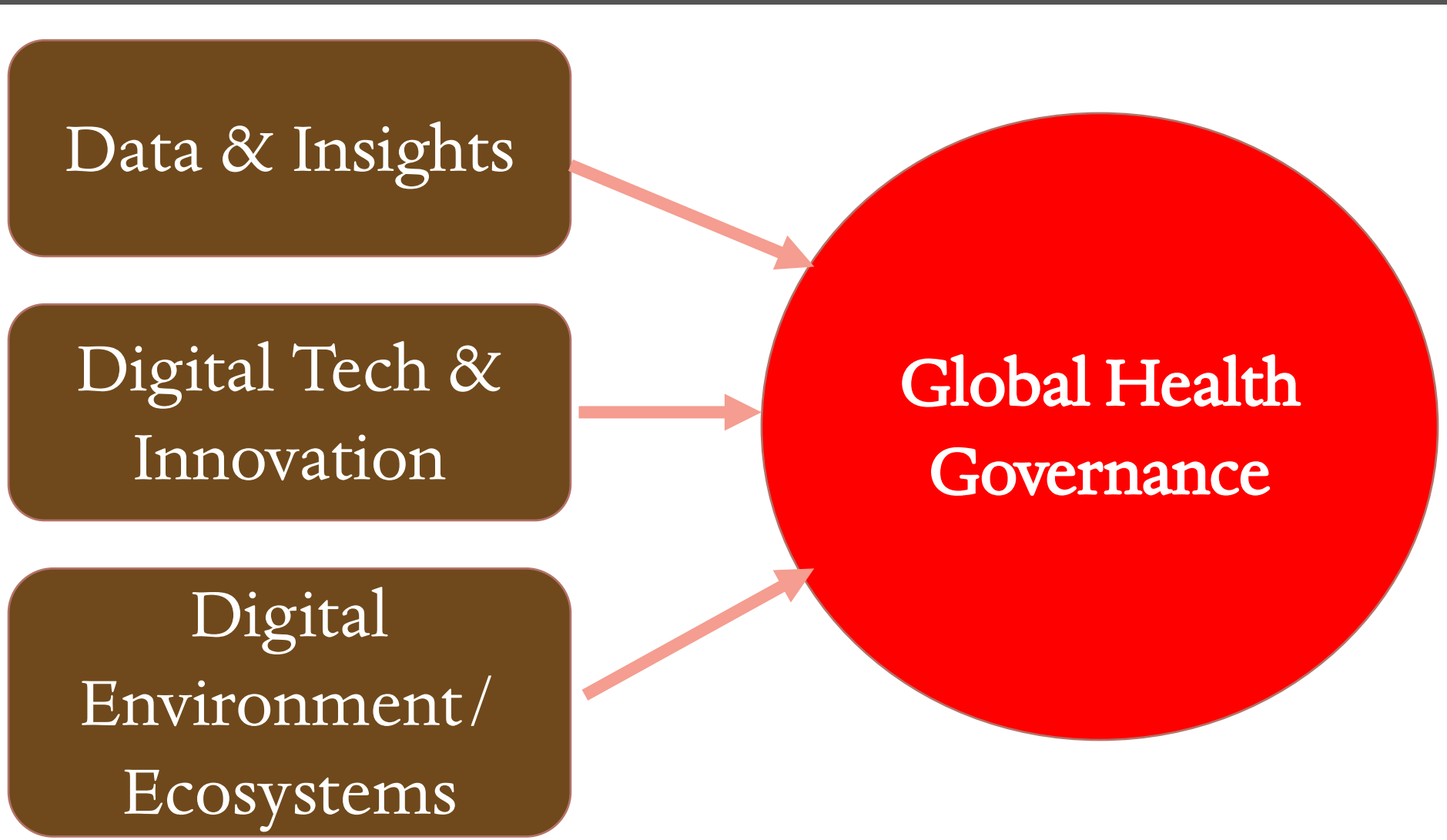


It is important to address digital determinants of health in the governance for global health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Summary

- Better health data governance: frameworks for data sharing and interoperability that promote cooperation, while protecting privacy and security
- Supportive and collaborative health governance to enable effective and equitable digital health transformation
- Additional consideration for global health governance: digital environment as a key social determinant for health

THANK YOU!

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http://www.thainhf.org