



PUTTING DATA TO WORK FOR STRONGER HEALTH SYSTEMS

Bringing health into the 21st century

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What I will talk about today

In this presentation

1. How a digital transformation can help address emerging challenges in health
2. Health systems are 'data rich but information poor'
3. Digital transformation relies on policy transformation

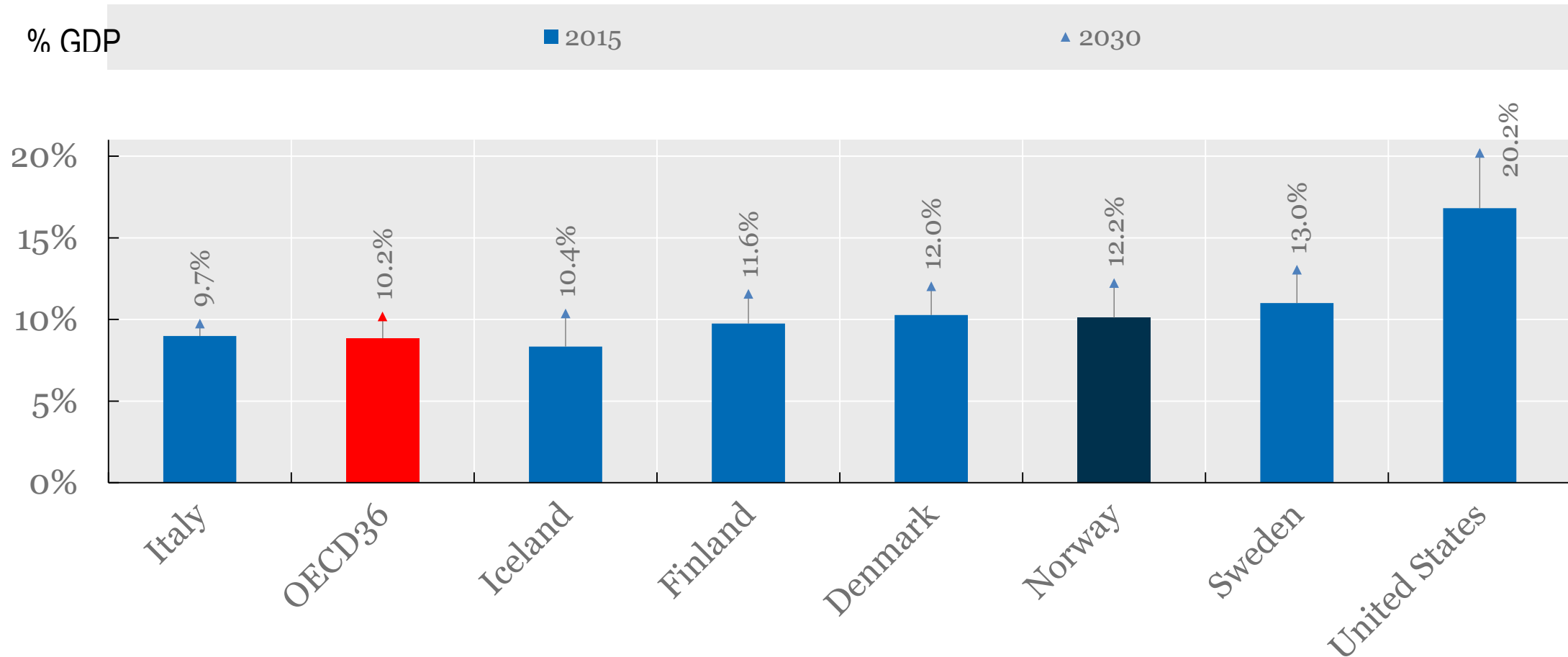


INTELLIGENT USE OF DIGITAL CAN HELP TACKLE HEALTH SYSTEM CHALLENGES



Health systems are under pressure

Raising health spending, share of GDP





Other sectors have transformed themselves using the opportunities of data and digital technology



Better products



Better services



More efficiency

Big consumer surplus





The opportunities are clear



Clinical practice improvement (quality)

Faster access to critical information
More analytical precision
Improved **clinical decision making** (A.I. & Machine learning)

System management

Monitor **performance**
Ensure better access to care
Reduce waste



Surveillance

Evaluate **public health** interventions
Inform good policy
Faster detection & response to public health emergency

Empowering people to self-care

Connected patients and doctors
Better patient **experience and satisfaction**
Greater patient voice, choice and coproduction of health



Predictive public health

More precise identification of at-risk populations
More **targeted strategies and interventions** to improve health promotion and disease prevention

Research & innovation

Statistical power
Vast and varied datasets
'Real world evidence' for improving **medical technologies**



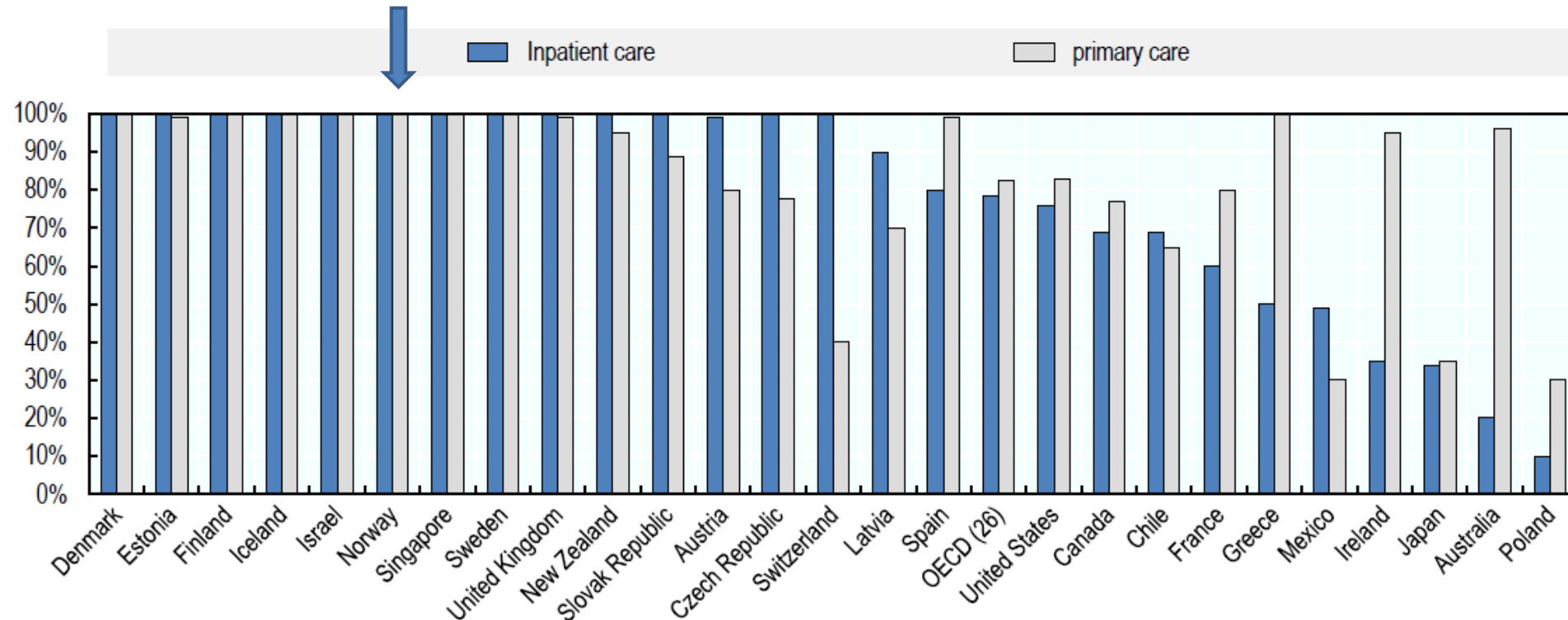


**BUT HEALTH SYSTEMS REMAIN “DATA
RICH AND INFORMATION POOR”**



Health care is rapidly 'digitising'...

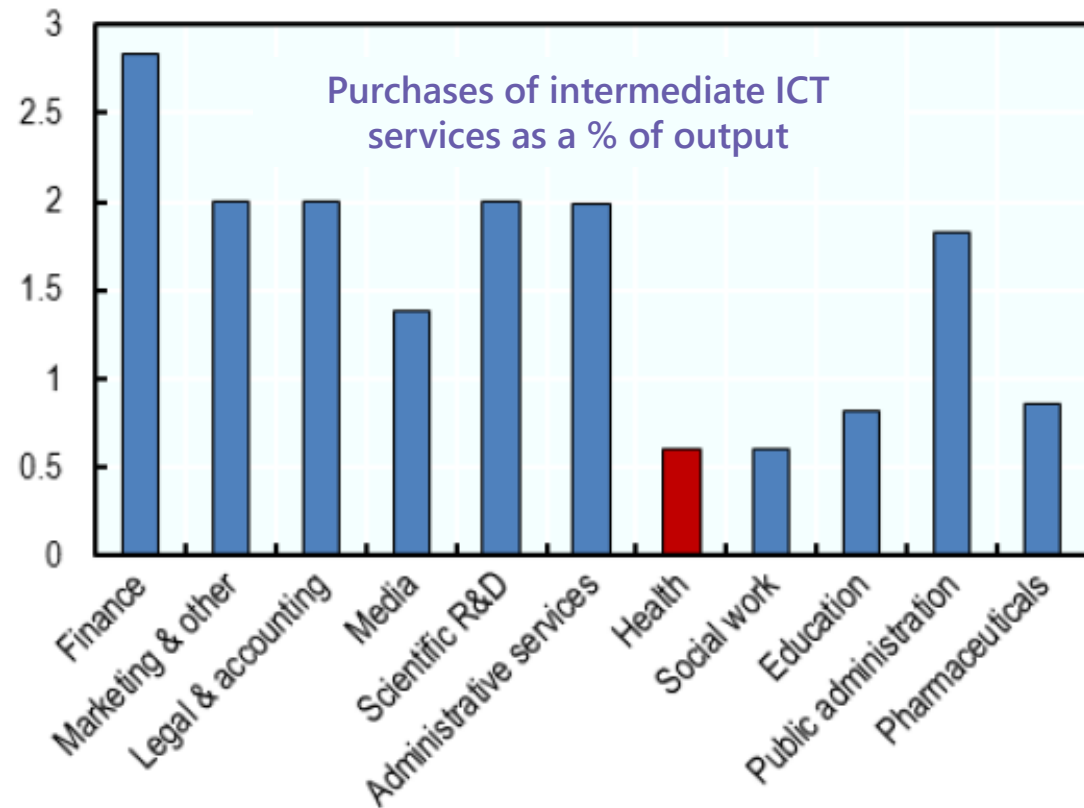
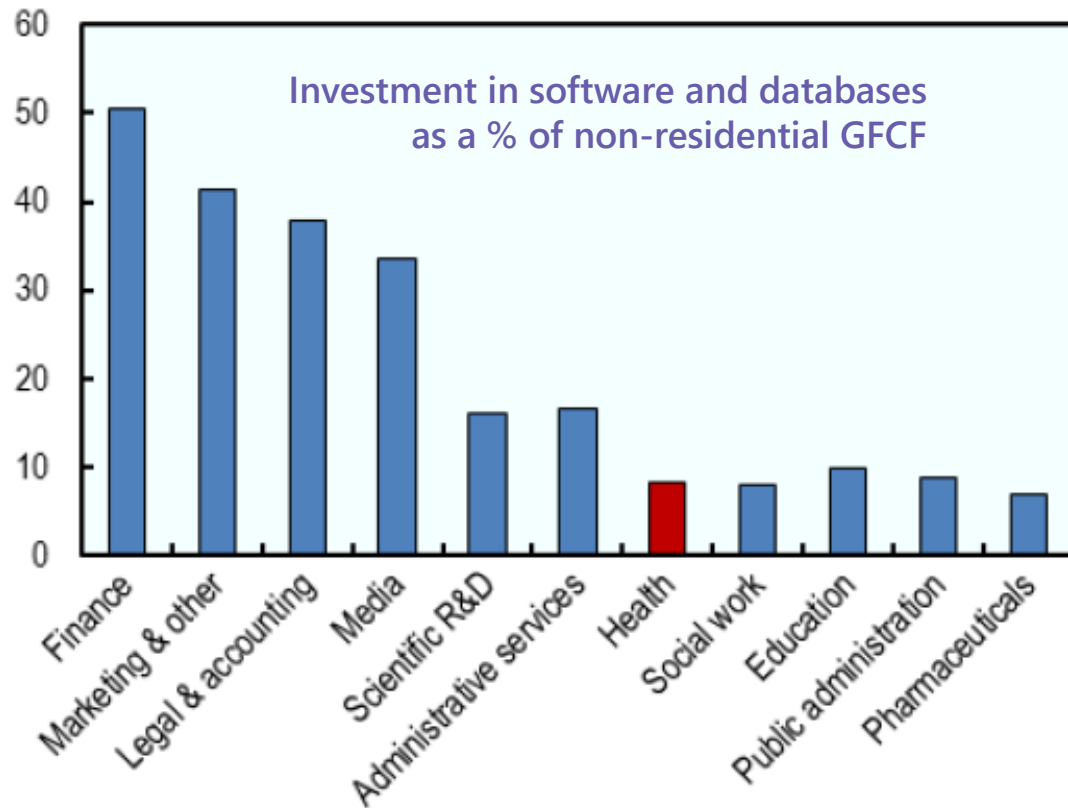
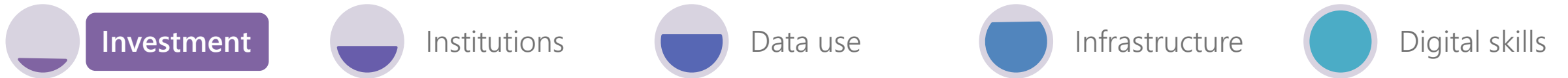
Percentage of primary care physician offices & acute care hospitals using electronic medical records, 2016



Note: United Kingdom: England, Scotland and Northern Ireland (excludes Wales).



...but investment is lower in the health sector



Note: Note: Gross fixed capital formation (GFCF) is a measure of spending on fixed assets. Source: OECD 2019, *Health in the 21st Century*



...but numerous & significant institutional barriers



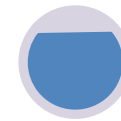
Investment



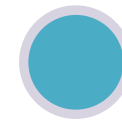
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Data use

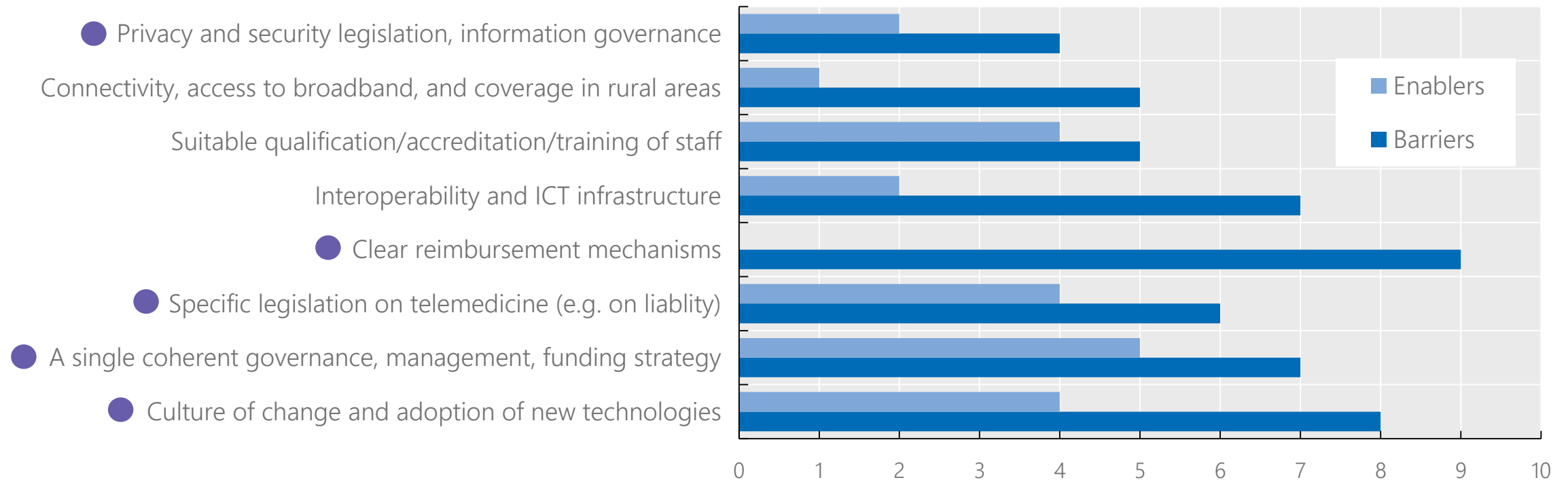


Infrastructure



Digital skills

Barriers and enablers of telemedicine use highlighted by experts, by number of reporting countries



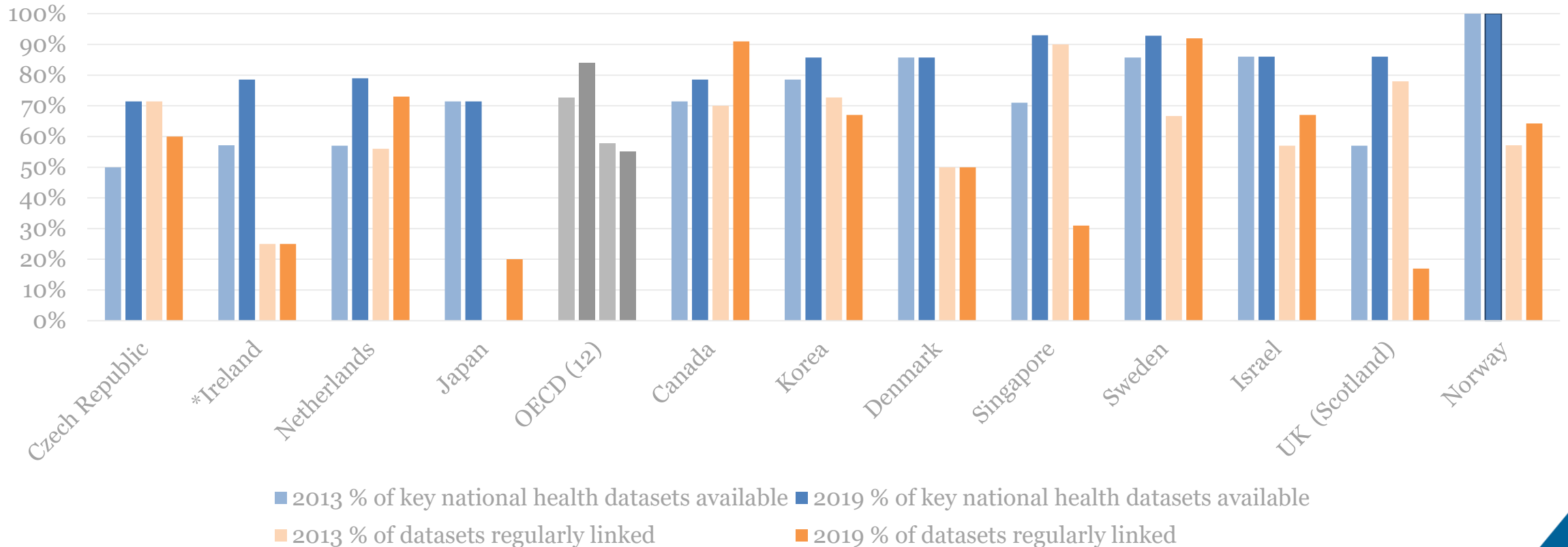
Note: x-axis is number of countries; Source: OECD 2020, *Bringing health care to the patient: an overview of the use of telemedicine in OECD countries*



...but missed opportunities in linking data



Percentage of key data sets available and regularly linked, 2013 and 2019



Source: OECD 2019, *Health in the 21st Century*, based on 2013 and 2019 OECD Surveys of Health Dataset Availability



...but missed opportunities in using data



Investment



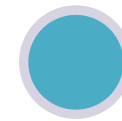
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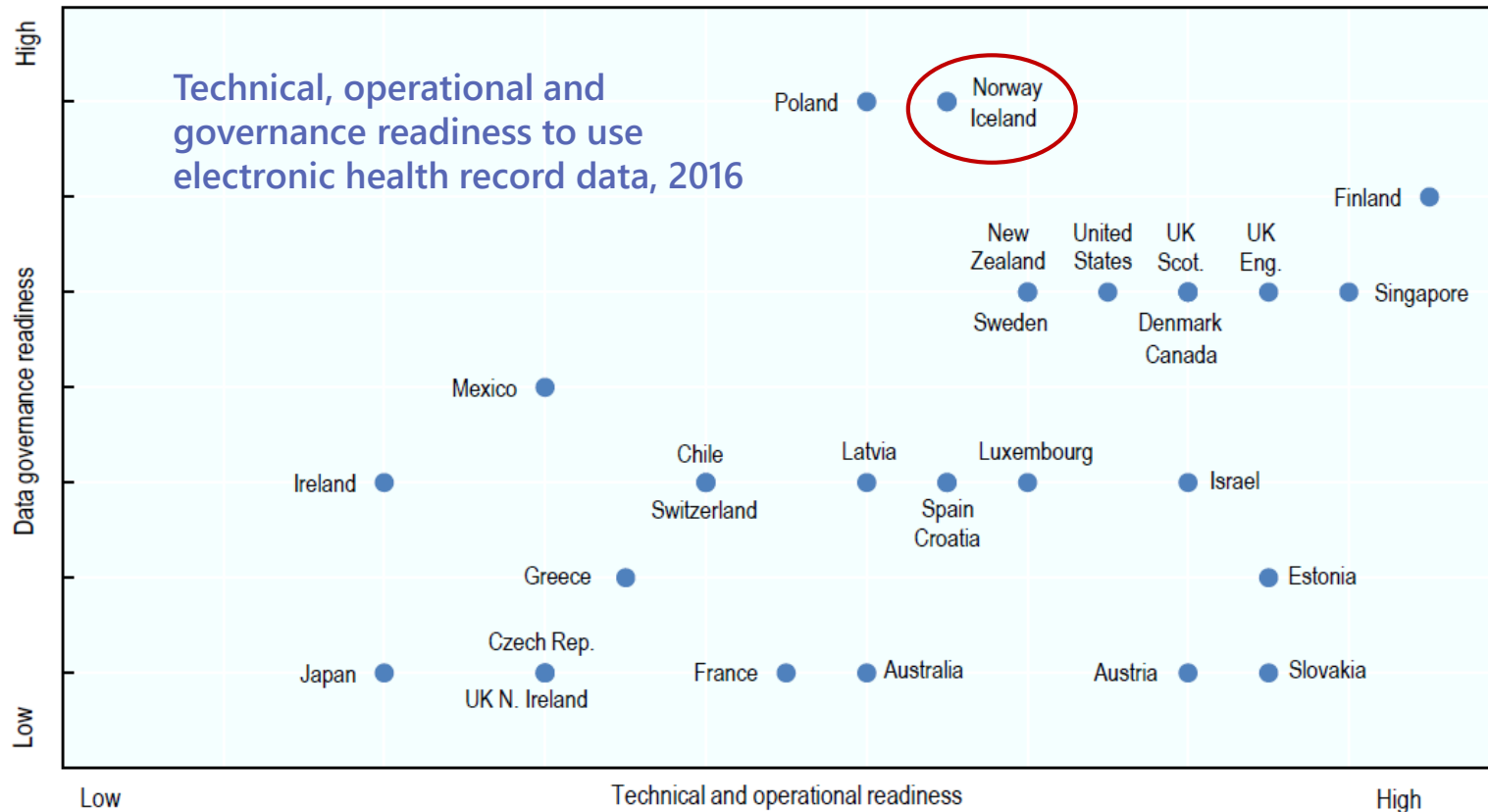
Data use



Infrastructure



Digital skills





...but missed opportunities in using data



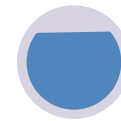
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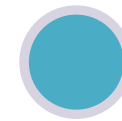
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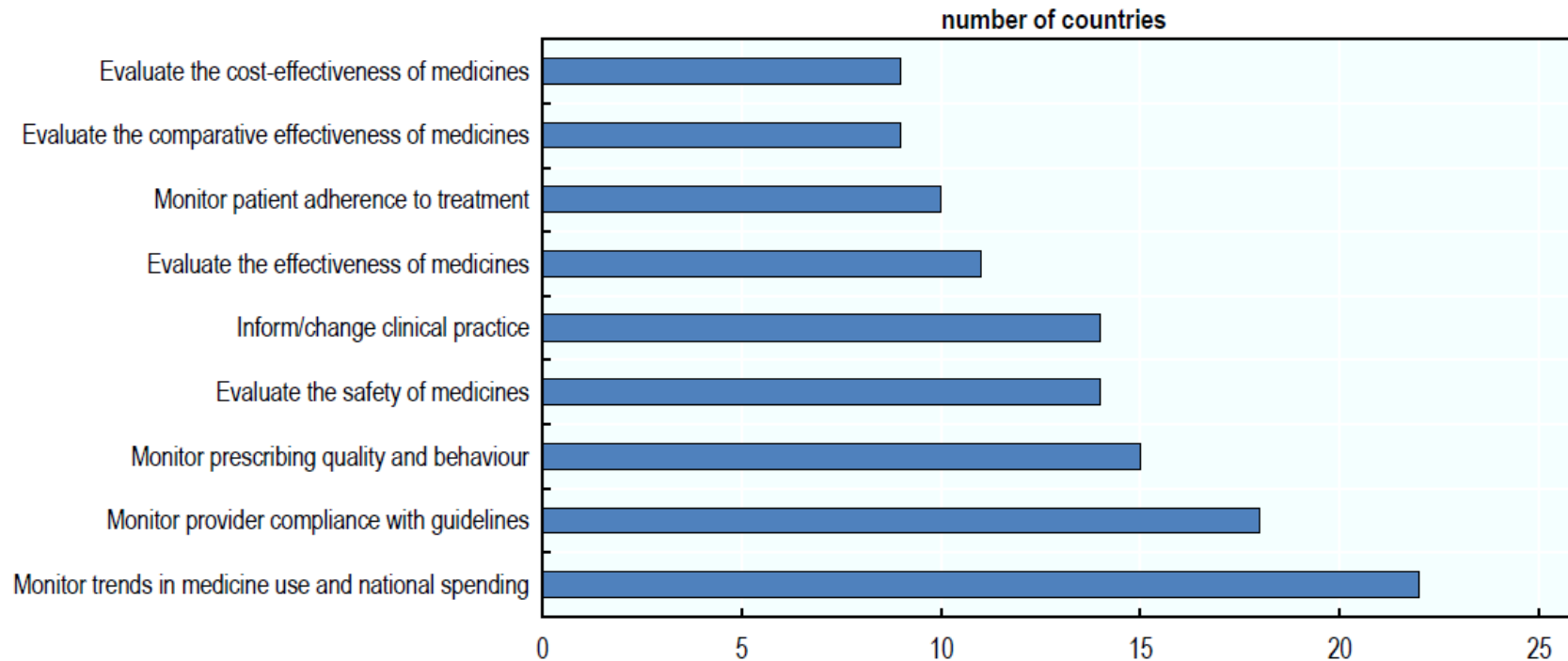
Data use



Infrastructure



Digital skills



Note: In most cases, the routine data described only cover medicines dispensed in the community setting and not medicines dispensed in hospitals.



...but missed opportunities in using data for enabling people to interact with own records



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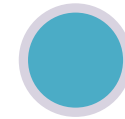
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Data use



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Digital skills



70% of countries planning to allow people to **access** their electronic medical record

43% of countries say that people will be able to **interact** with their record



...but geographical digital divides remain



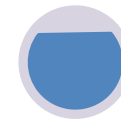
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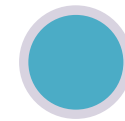
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Data use

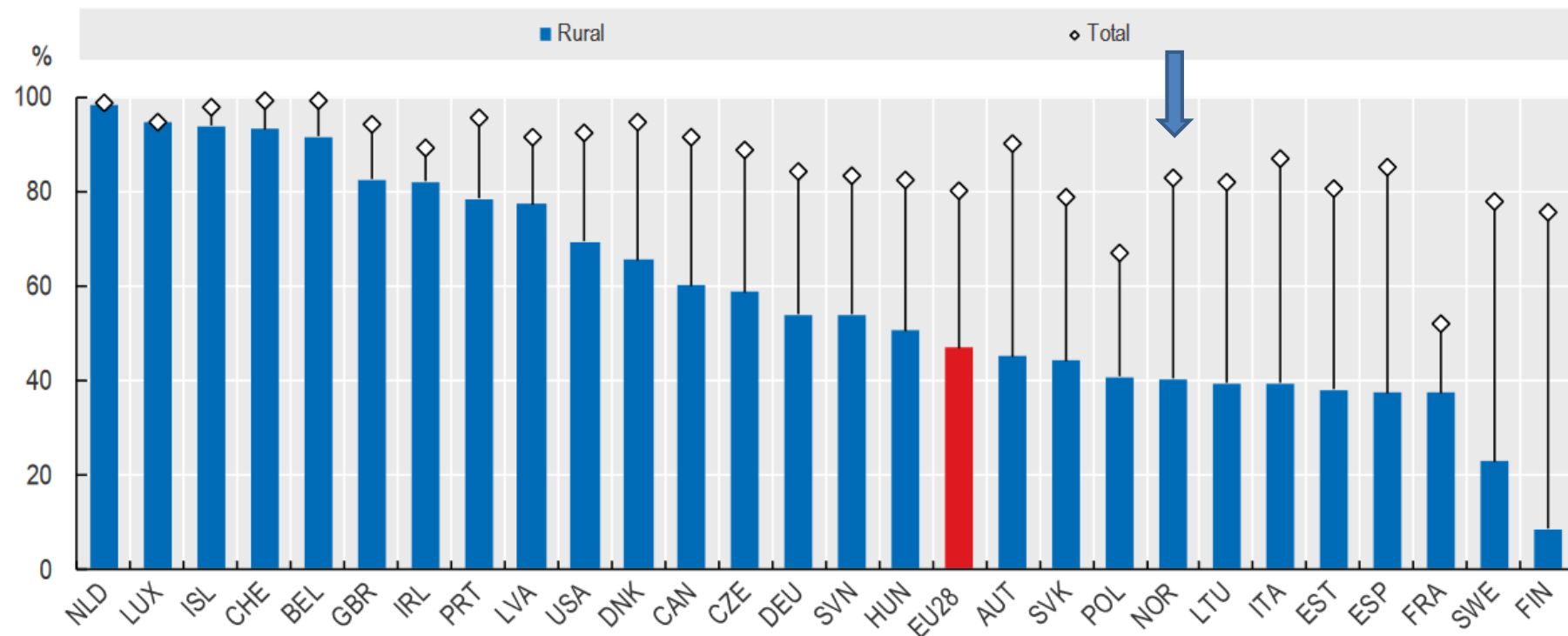


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Digital skills

Households in areas where fixed broadband with a contracted speed of 30 Mbps or more is available, 2017





...but professionals are unprepared



Investment



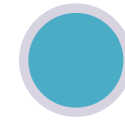
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Data use

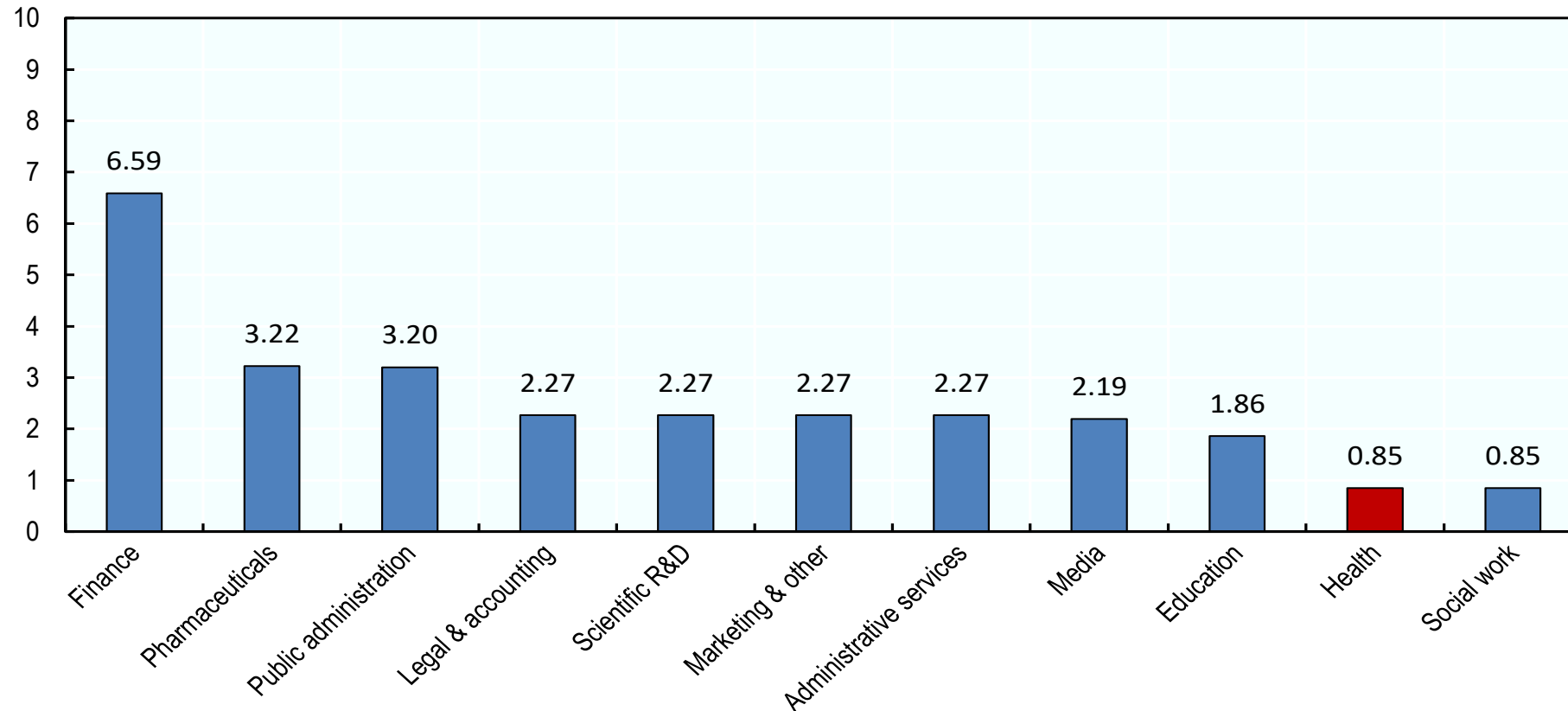


Infrastructure



Digital skills

ICT specialists as percentage of total employment, by sector (2013-15).



Source: Calvino et al. (2018), "A taxonomy of digital intensive sectors", <https://dx.doi.org/10.1787/f404736a-en>.



A DIGITAL TRANSFORMATION IN HEALTH RELIES ON A POLICY TRANSFORMATION



A true digital transformation in health requires political leadership, will and bold policy reform

Strategy

- Overarching, **cross-sector digital (health) strategy** with a consolidated vision, plan and policy-framework

Governance

- A **governance framework** that enables data use and sharing for agreed purposes but ensures privacy and data security

Capacity

- **Human** (workforce and the public to make the most from digital technology) and **institutional** (data can be put to work to generate knowledge and action) capacity



Key takeaways



A digital transformation can help address emerging health & policy challenges but...

a digital transformation relies on policy reform, not just digitising existing processes

Strategy, governance and capacity can set the reform process in motion &

Smart investment will lead to a healthy economic return



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It is time to bring health into the 21st century

“The key barriers to building a 21st century health system are not technological.

They are in the institutions, processes and workflows forged long before the digital era.”

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