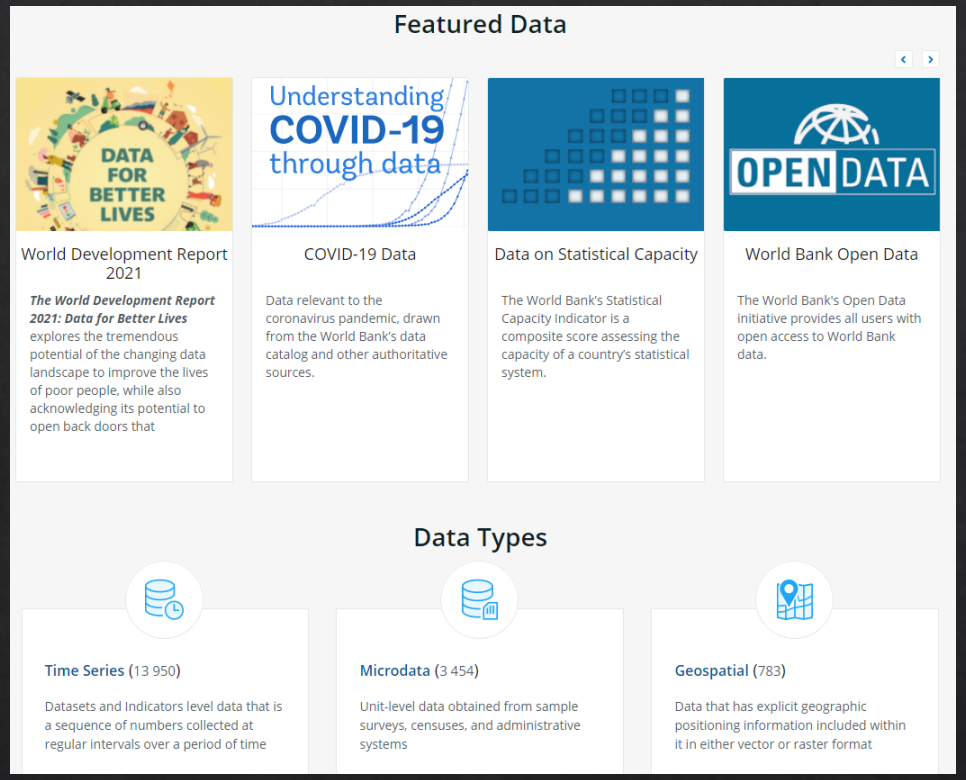
Can a Computer keep a secret ?

Tartu Biotechnology Park within the EIT Health program: **“eHealth - reshaping the future of healthcare / Experiences from Estonia and Scandinavia”. September 29 2021**

Med. Dr Lars Lindsköld



[Data Catalog | Data Catalog (worldbank.org)]

YouTube™

Barge Haulers on Volga 1973

Health Care today

Towards personalised services

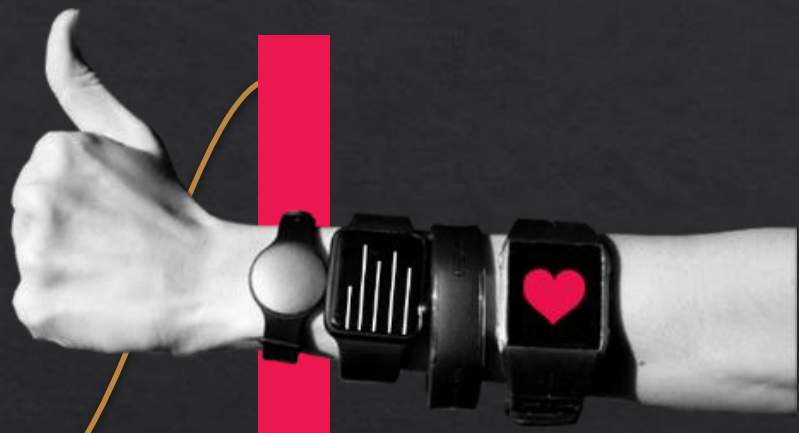
Emphasis on Professional Agents

Emphasis on Personal Agents

Source: van der Kamp & Plochg: ”The Health System Quartet” in: Sturmberg J (ed), Embracing Complexity in Healthcare, Springer 2019, pp. 113-123

SITRA

It's Going to Get a Lot More Personal



DATA FROM THE PROFESSIONALS AND SYSTEMS

DATA FROM THE INDIVIDUALS

1990 2000 2010 2020 2030

http://www.healthdata.org/

Combining data from professionals and systems with data collected by individuals leads to next phase for value creation

Source: Dr. Holger Schmidt, TU Darmstadt, 1H2018

60 platform companies worth

7 TRILLION USD

USA

66%

CHINA

30%

EU

3%

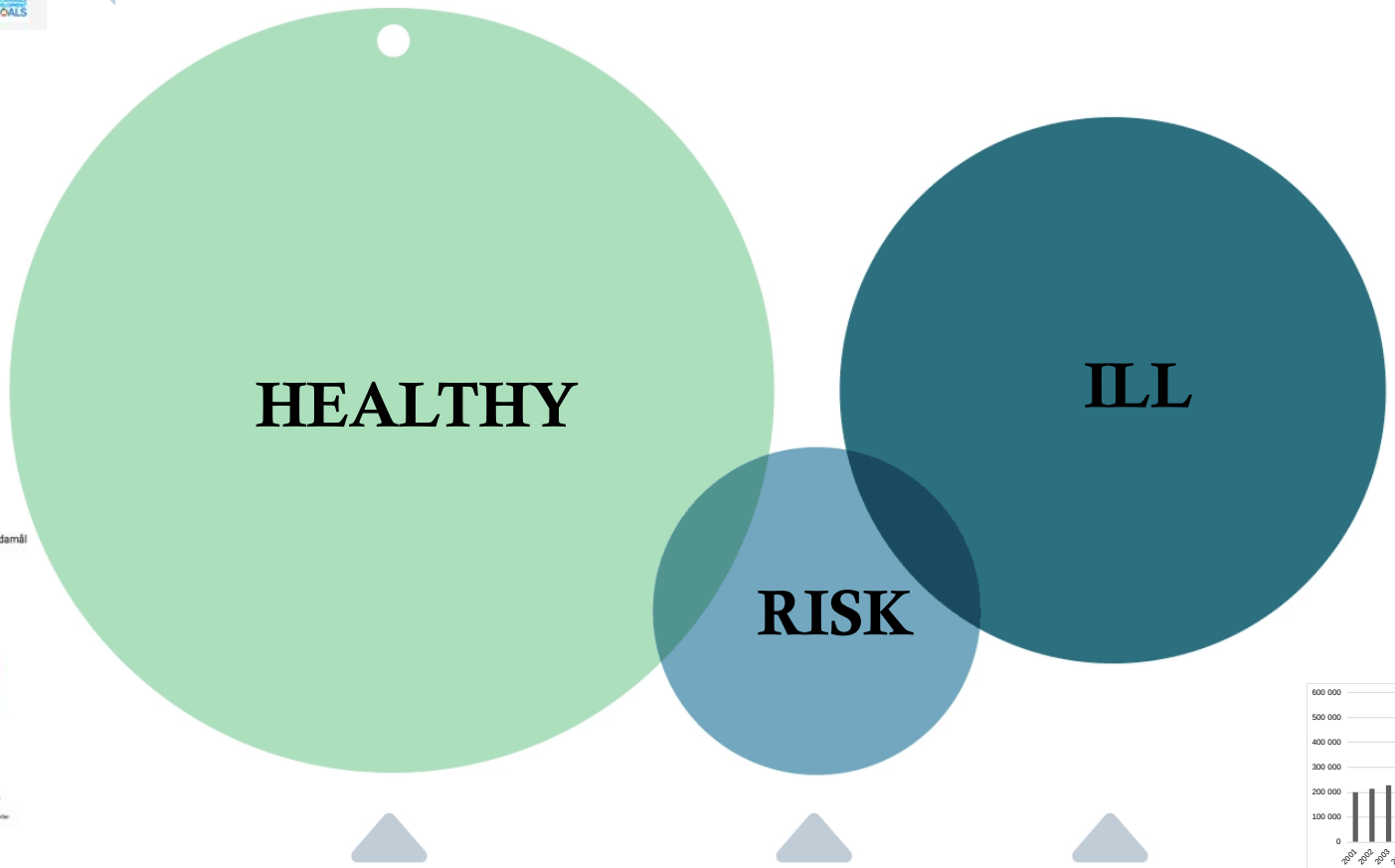
SITRA

Trust and security – Europe’s biggest opportunity?

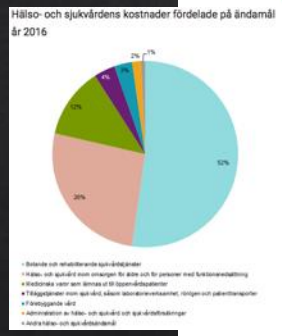
Looking Ahead

Personalised/ Precisison medicine and health
In combination with AI

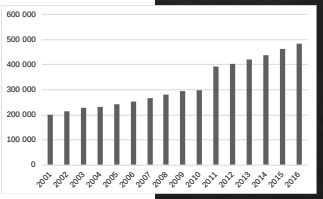
PREVENTION PRECISION HEALTH PRECISION MEDICINE



Preventive care



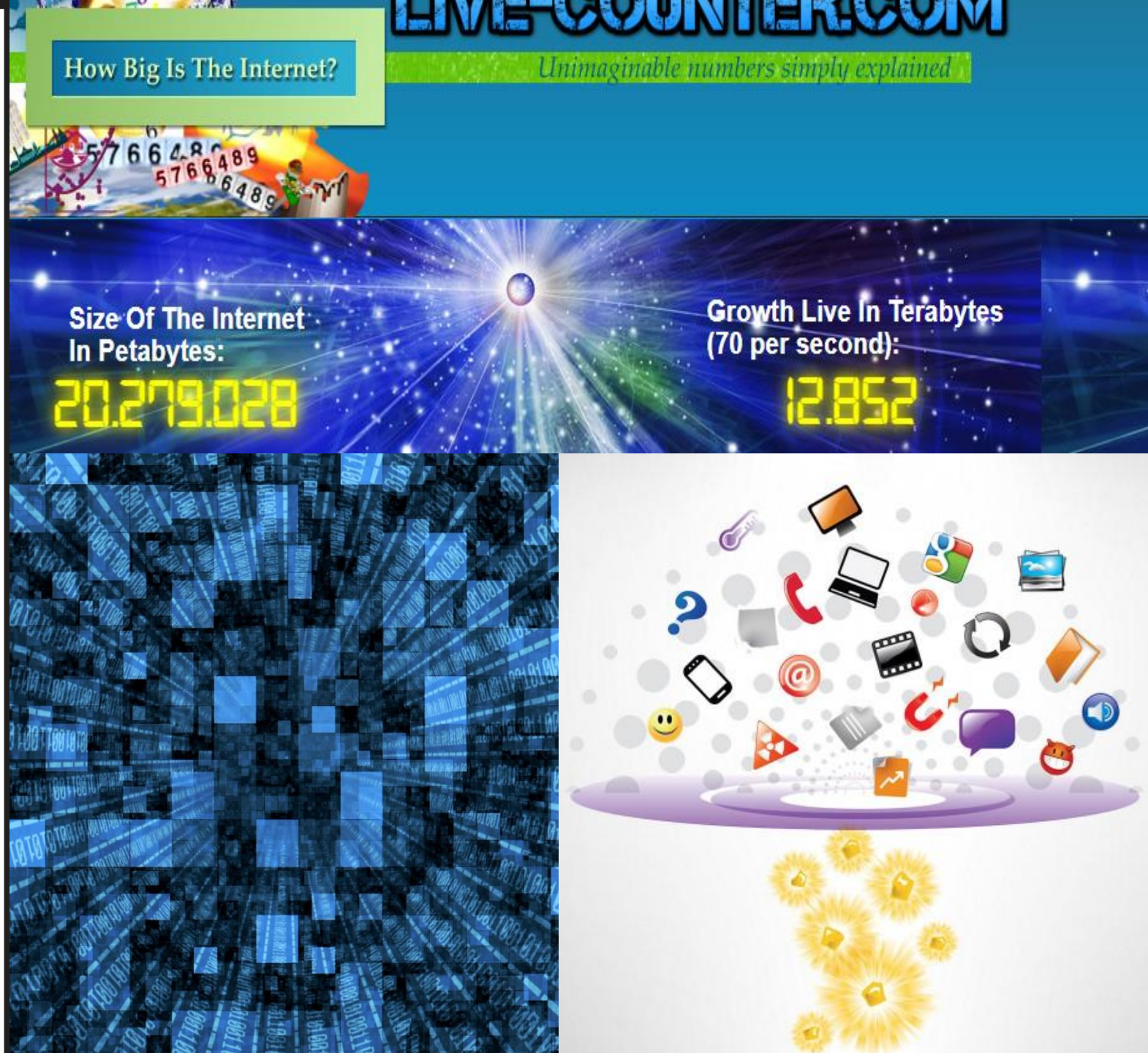
Cost Health Care



Källa: SCB

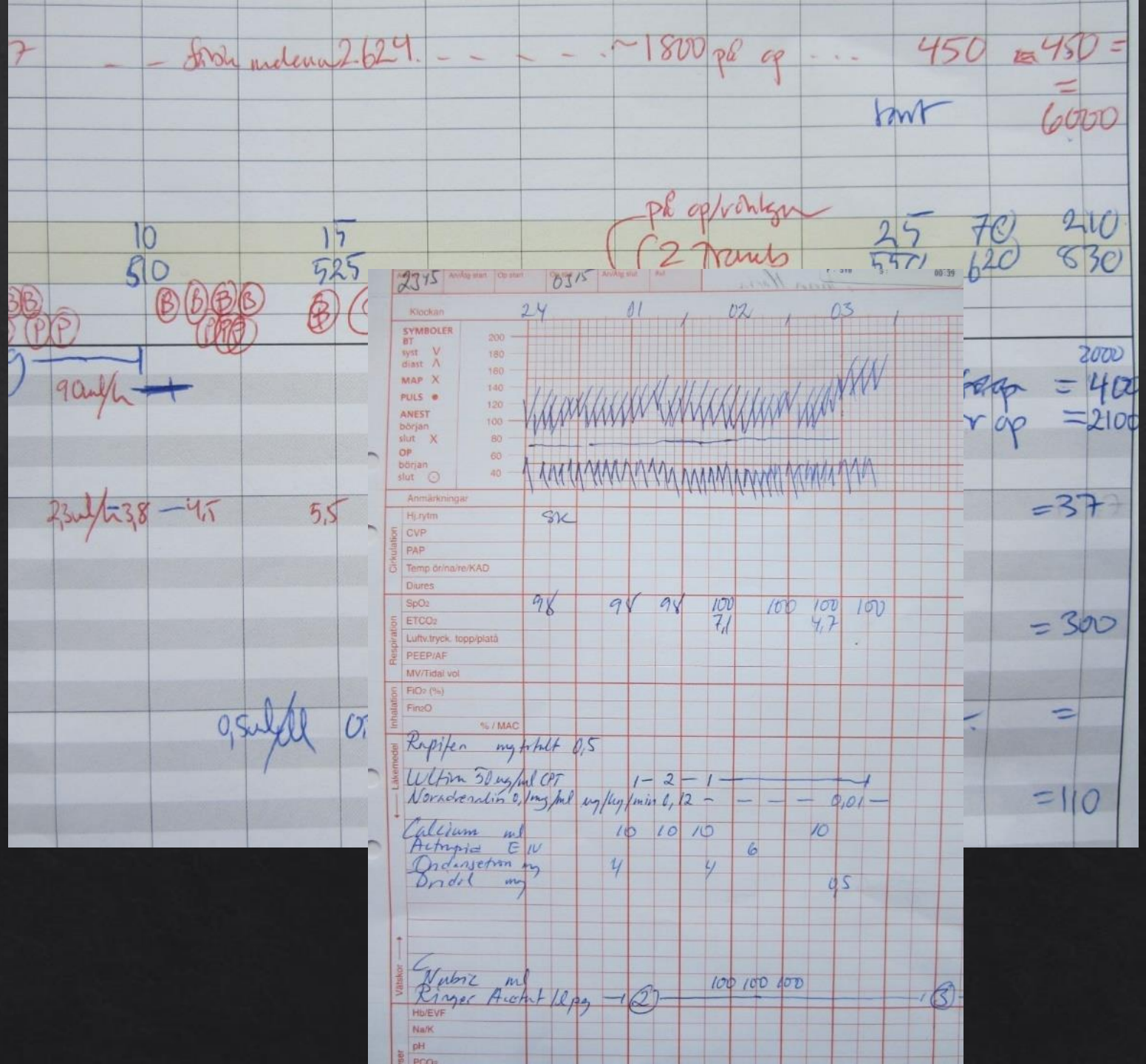
SYSTEMATIC HEALTH DATA

SWElife

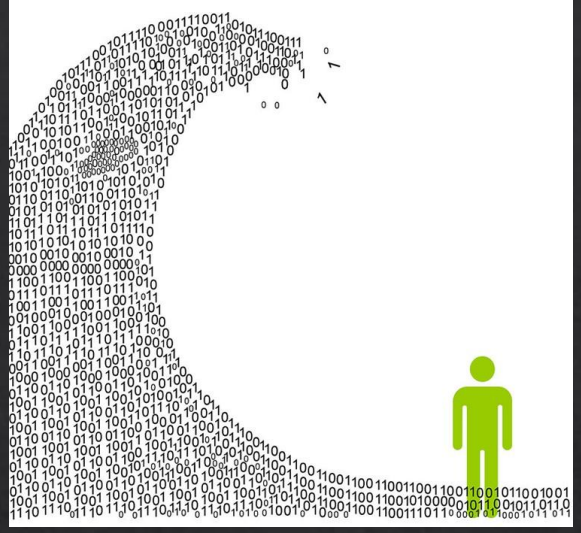

How Big Is The Internet?
LIVE-COUNTER.COM
Unimaginable numbers simply explained
Size Of The Internet
In Petabytes:
20.279.028
Growth Live In Terabytes
(70 per second):
12.852

We also have 4 V In Swedish helthcare

- ✓ Vanligt
- ✓ Varierande
- ✓ Vackert
- ✓ Vansinnigt



Value/ Benefits when Data become Information



Health and healthcare will reach its full potential with new incentives and the **democratization** of health data

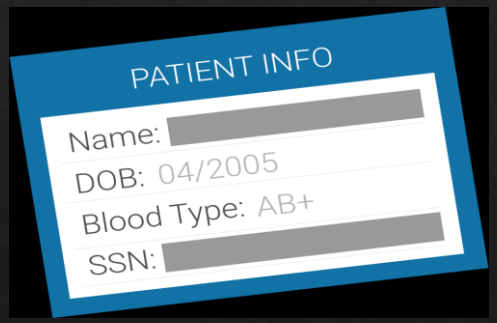
Cross-disciplinary collaboration and sharing of research data will be a requirement to accelerate new discoveries. (GDPR + or -)

To improve care and reduce costs with this new science, we must focus on what drives **80% of of outcomes**, the non-clinical factors which include **social, economic and psychological determinants** of health.

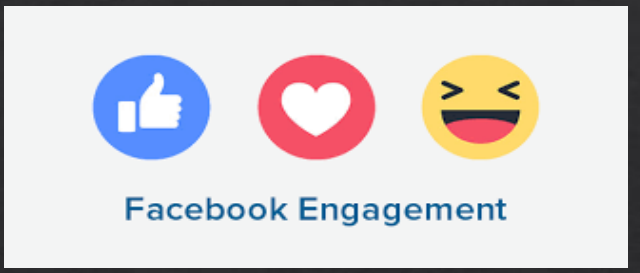
This new science will arrive at an evidence-based understanding of **what works** through a great wealth of shared longitudinal health data captured through mobile devices, sensors and health records. It must be mindful of the concept of transforming **Data to Information, Knowledge and Wisdom.**

Individuals have a right to **health data privacy**. Rights to sharing must be established with the individual it originates from, or their legal agent, in advance of sharing. **GDPR**

Verifiable but **de-identified**, health data will become part of a unified view of healthcare for research and risk assessment). Individuals will have the **choice** to contribute / donate.

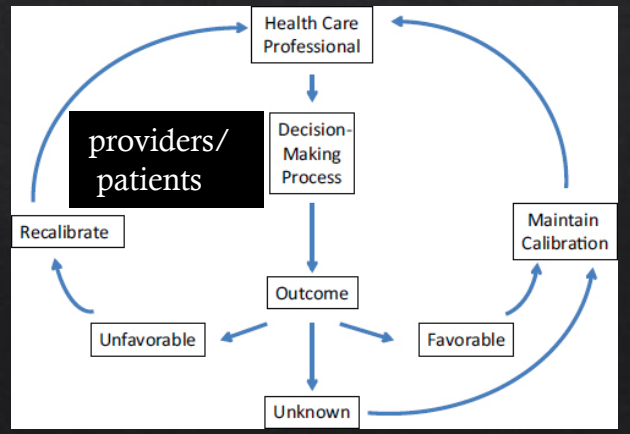


"Patient engagement" is valuable, but backwards. Individuals need the health system to be **engaged** with them regularly, and not just during visits. (Prevention)



Healthcare organizations that aggressively promote **health literacy** will build community capacity in addressing health issues. This may mean enabling and curating others in the community to reach all facets of the community.

The most relevant providers/ patients will learn and will be conversant in data analytics and tools. They will be **experts in care delivery/usage**, not just diagnostics and traditional medical science.



Summary : The Future of Health

PREVENTION AND EARLY DETECTION

Getting care as early as possible or avoiding the need for care altogether

DATA SHARING AND GOVERNANCE

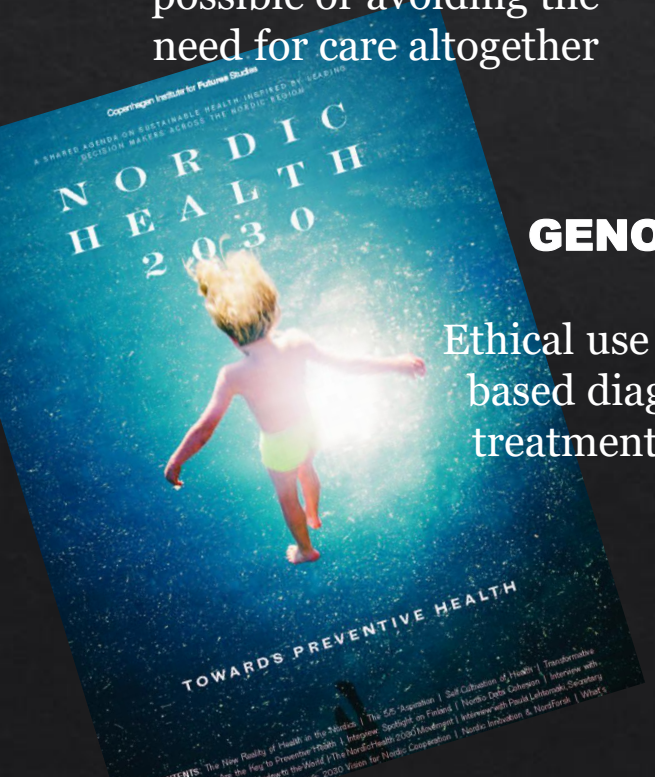
Understanding as much as possible about each person's circumstances and needs

PERSON AND PATIENT EMPOWERMENT

Allowing each person to take full control of their own wellness and care

CONNECTING HEALTH DATA ACROSS EUROPE (World)

Advancing Europe as a leader in health data and data-driven solutions.



GENOMICS

Ethical use of genome-based diagnosis and treatment solutions

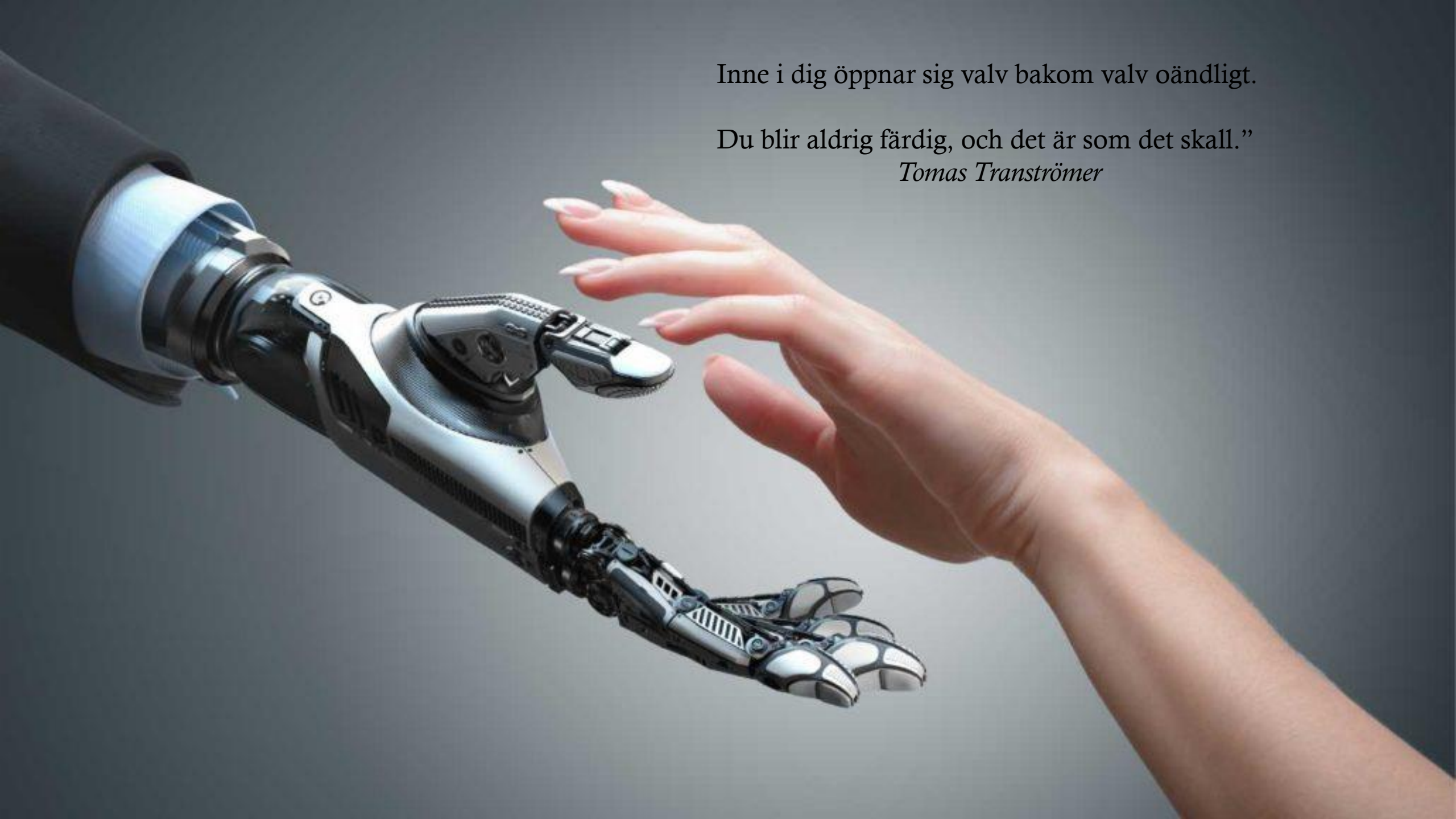
TECH AND AI

Enabling technologies and health interventions to work together

PERSONALISED CARE

Ensuring individuals and the system as a whole can get the most out of new technologies.

Source: Nordic Health 2030 Nordic Health 2030 – To everyone who wants a healthier life, community, and world



Inne i dig öppnar sig valv bakom valv oändligt.

Du blir aldrig färdig, och det är som det skall.”

Tomas Tranströmer

So, what about the secret ?

It can but does not

Thank You !

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