

The next healthcare revolution comes from data

Anders Quitzau
andersq@dk.ibm.com
+45 2880 4705

A breakthrough



There's a gap in the accuracy of treatment decisions.

As many as **44% of all initial cancer treatments** are modified on the second course of treatment. ¹

Less than 50% of medicine is evidence based.²

An epidemiologist would have to read **167 hours a week** to keep up with new professional insight. ³

Aging populations can't be served.

25% of Japan's population is over 65, growing to 40% by 2060. ⁴



IBM Watson Health // SOURCES:

1. Journal of Clinical Oncology, Talk about Health Blog, Sept 2011

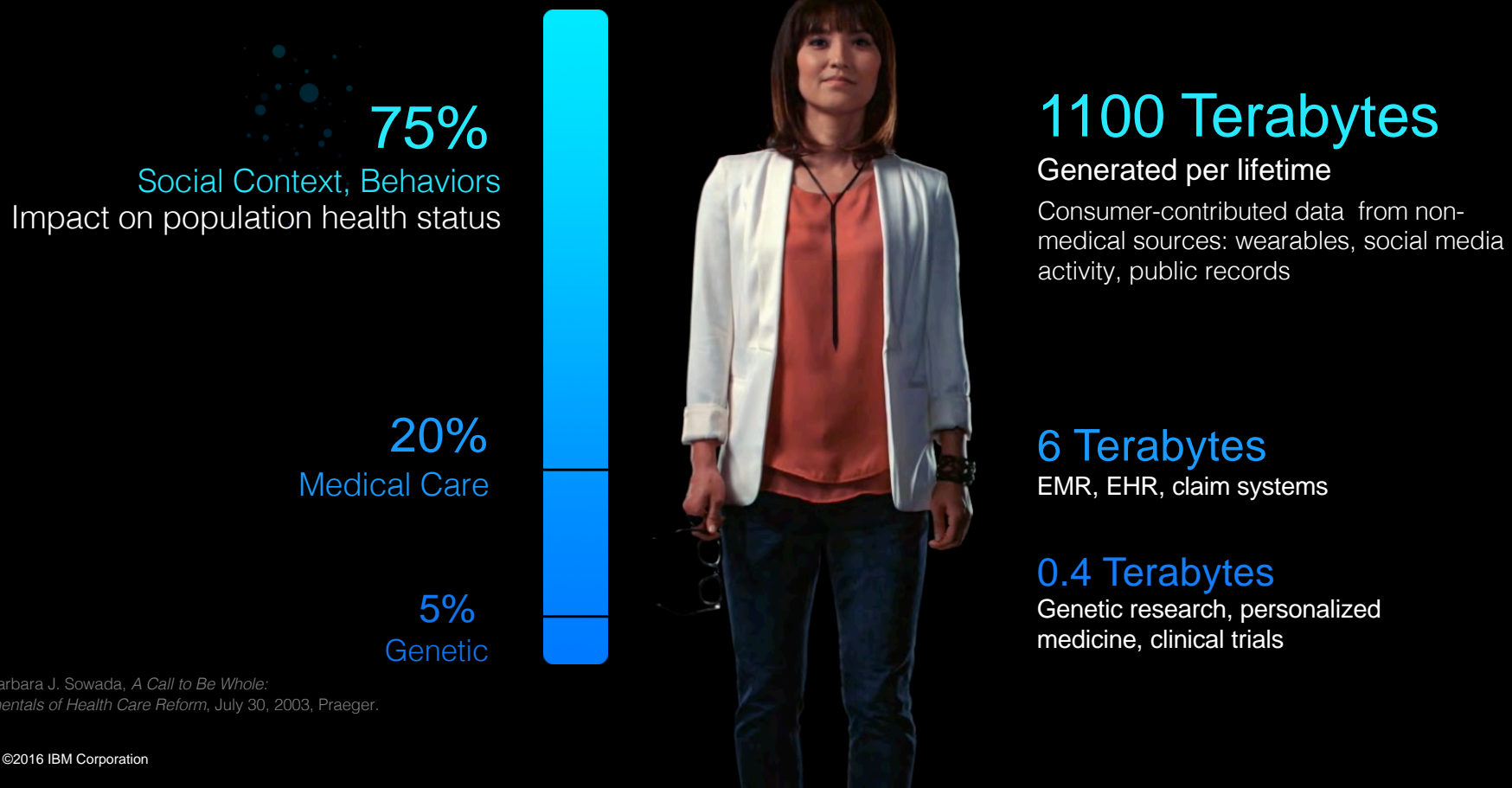
2. www.washingtonmonthly.com/features/2007/0710.brownlee.html

3. <http://www.economist.com/blogs/babbage/2013/02/computer-aided-medicine>

4. "Population Statistics of Japan 2012". National Institute of Population and Social Security Research. January 2012.

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Accessing a vast amount of untapped data could have a great impact on our health - yet it exists outside medical systems.



SOURCE: Barbara J. Sowada, *A Call to Be Whole: The Fundamentals of Health Care Reform*, July 30, 2003, Praeger.

We need a new computing paradigm to harvest and disseminate all this data and the exploding HC knowledge

– cognitive computing may be the answer

UNDERSTAND



Cognitive systems understand imagery, language and other unstructured data like humans do.

REASON



They can reason, grasp underlying concepts, form hypotheses, and infer and extract ideas.

LEARN



With each data point, interaction and outcome, they develop and sharpen expertise, so they never stop learning.

INTERACT



With abilities to see, talk and hear, cognitive systems interact with humans in a natural way.



Data

Standards based.
Massively scalable.
Open repository of data on all
dimensions of health for
research.

Insights as a Service

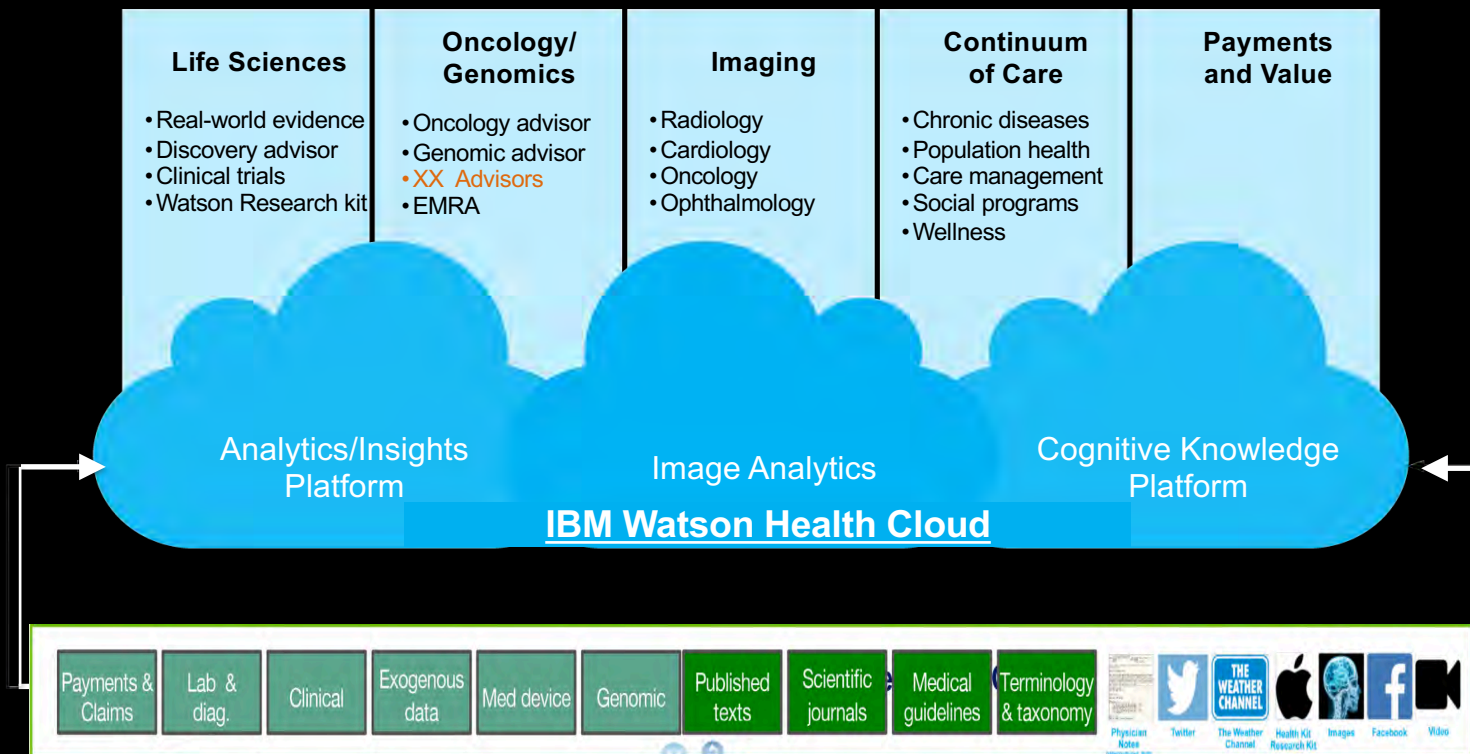
Knowledge and
actionable information,
through advanced analytics
and cognitive capabilities

Solutions

From IBM &
an ecosystem of partners.
Improves the overall experience
and increases the quality of
outcomes.



Five pillars enabled through a platform that has data, knowledge, analytics and industry specific solutions supported on a secure cloud.



IBM Watson Health

Health Knowledge

Internal and external
Qualified knowledge

23+M P

Health Data

Health Records

300+M

Health Longitudinal
Data Points

315B

Images

30B

Physicians

350,000+

Growth

Talent

3000+

Partners + Ecosystem

120+

Clients

250+

16 Cancer Institutes

Programs served
in 18 Countries

80



- Population Health Management
- Condition Specific Care
- Health and Wellness
- Social Programs
- Discovery Solutions
- Real World Evidence



Sep 14, 2016, 07:00 ET - News provided by

HELSINKI and CAMBRIDGE, Mass., Sept. 14, 2016 /PRNewswire/ -- TEKES – the Finnish Funding Agency for Innovation (TEKES) and IBM (NYSE: IBM) today announced a partnerships.

- Central Health cloud for all data (Biobank, Genomics, Hospital)
- Collecting data from wearable devices for citizens
- Spark innovation around their data using Watson Health AI and predictive analytics capabilities on top of health cloud
- With Finnish citizens at the center as the ultimate beneficiaries. This partnership with IBM Watson Health will position Finland to be a forerunner in digitalizing healthcare in the Nordics, Europe and the rest of the world.



Tekes - the Finnish Funding Agency for Innovation and IBM sign a landmark collaboration that will enable Finland to utilize Watson cognitive computing across its health ecosystem. From left to right: Maarit Palo (IBM), Tuomo Haukkovaara (IBM), Pekka Soini (Tekes) Mika Lautanala (Tekes)



IBM Watson Health

Bumrungrad International Hospital taps into world class oncology expertise from MSK with Watson Oncology Advisor



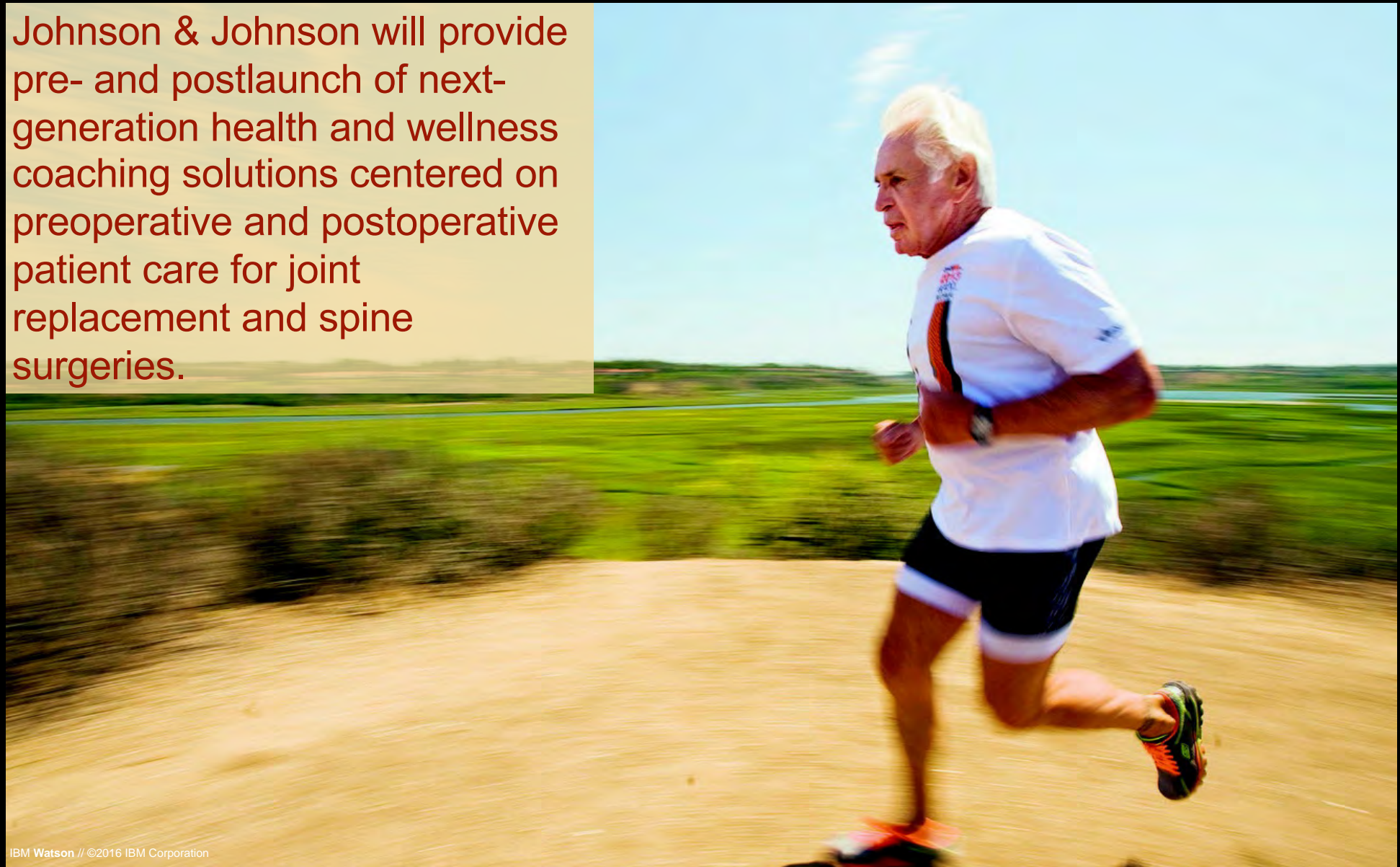
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Medtronic

Medtronic build glucose monitoring devices with Watson that can predict hypoglycemia up to 3 hours in advance of onset.

Johnson & Johnson will provide pre- and postlaunch of next-generation health and wellness coaching solutions centered on preoperative and postoperative patient care for joint replacement and spine surgeries.



Café Well , Welltok – powered by IBM Watson





IBM Watson Health