PUBLIC SECTOR SUMMIT ONLINE

Building cloud-based solutions in Healthcare

Nicky Murphy
Head of Healthcare Public Policy, EMEA
Amazon Web Services

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Agenda

1. What are the opportunities for health systems to make use of cloud technology?

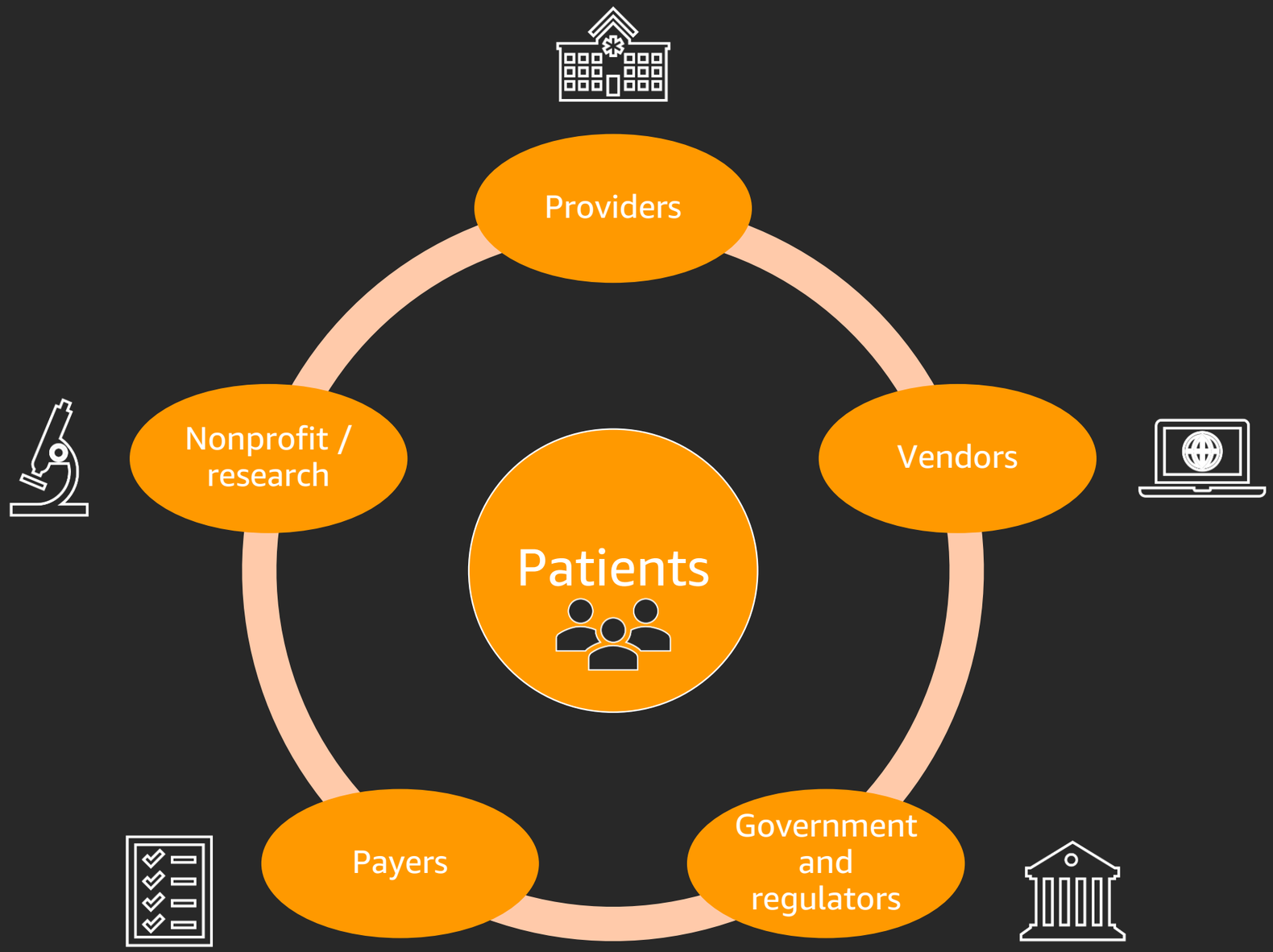
2. How can cloud technology support transformation?

    a. Unlocking the potential of healthcare data
    b. Enabling clinical and operational excellence
    c. Enabling personalized digital relationships with patients
    d. Activating the healthcare ecosystem
    e. Providing a trusted platform for delivering transformation

3. Policy enablers

1. What are the opportunities for health systems to make use of cloud technology?

Who is part of a health system?



Trends for health systems

Ageing populations

1/3

Proportion of population in Europe estimated to be over the age of 60 by 2050

Value-based care

48%

Percentage of Hospital CEOs who say the transition from volume to value is their biggest financial challenge

Increasing volume of digital data

163ZB

Amount of data that will be generated globally in 2025; 10 times the 16.1 ZB of data generated in 2016

Continuous technology advances

18 months

Rate at which computer processing power doubles, according to Moore's Law

Drive to improve efficiency

20%

Proportion of health spending which could be seen as non-value adding according to the OECD

Sophisticated security breaches

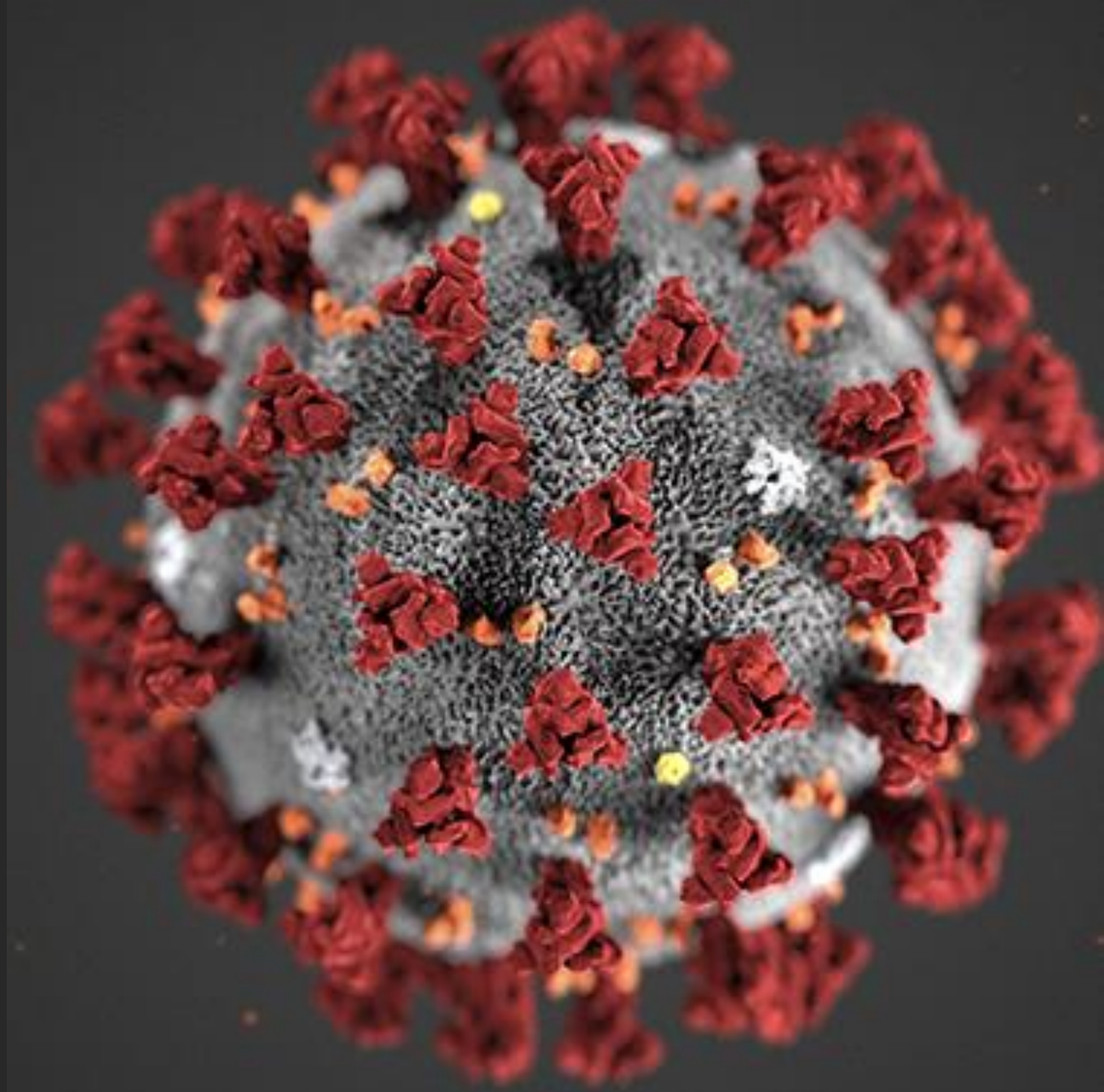
93%+

Proportion of healthcare organizations that have experienced a data breach of some kind over the past five years

Sources: United Nations (2017): World Population Ageing; American College of Healthcare Executives (2019): Top Issues Confronting Hospitals in 2018; IDC Forecast (April 2017); Moore's Law; OECD (2017): Tackling Wasteful Spending on Health; Back Book Market Research (2019): Health Data Security & Privacy

Challenges facing health systems: COVID-19

- Significant increase in acutely ill patients
- Constrained equipment and resources
- Keeping the workforce well
- Populations seeking health advice on an unprecedented scale



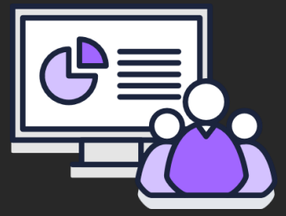
Source: LSV/bw: https://www.lsvbw.de/coronavirus/

2. How can cloud technology support transformation?

How can cloud technology support transformation?

Unlock the potential of healthcare data

Enable clinical and operational excellence



Enable personalized digital relationship with patients

Activate the healthcare ecosystem

Provide a trusted platform for delivering transformation

How can cloud technology support transformation?

Unlock the potential of healthcare data

2,000 exabytes of healthcare data, every year

Using cloud technology to track the spread of coronavirus and help decide where to allocate resources

Applying machine learning to predict readmission rates

How can cloud technology support transformation?

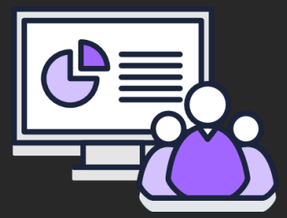
Enable clinical and operational excellence

Telehealth for remote consultations, at scale

Virtual call centers, to manage routine enquiries to large volumes of citizens

Transforming clinical care by using machine learning and tools such as Amazon Comprehend Medical

How can cloud technology support transformation?



Enable personalized digital relationship with patients

Enabling care co-ordination and ways for patients to interact with multiple providers

Providing online therapeutic interventions to reach more patients and connect with them in multiple ways

How can cloud technology support transformation?

Activate the healthcare ecosystem

Enabling real-time learning and collaboration across multiple industries and sectors

How can cloud technology support transformation?

Provide a trusted platform for delivering transformation

AWS Cloud technology can be used to support even the most sensitive workloads

At AWS, security is job zero

It is a shared responsibility between AWS and customers

AWS provides tools to support compliance with local legislative and regulatory requirements

Healthcare transformation is happening on AWS

3. Policy enablers

Policy enablers

Technology-enabled health strategy

Setting out the priorities for the health system, underpinned by technology

Cloud-first policy

Guides health systems through the steps needed to use the cloud safely, with a recommended procurement vehicle

Access to electronic health data

Requiring data to be stored in a way that is interoperable to allow the integration of records from multiple sources

Secondary processing of data for research

Enables collaboration to achieve insights in providing better care, whilst respecting patient privacy rights

4. Conclusion

It is clear that health systems are at a pivot point globally, the likes of which some have never seen. Cloud technology presents a unique opportunity for health systems to transform as they develop the services which meet the emerging needs of their populations: driven by data, value, and creating the best possible outcomes for patients.

Thank you!

Nicky Murphy

www.linkedin.com/in/nicky-murphy

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