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Microsoft

Molly K. McCarthy MBA, BSN, RN-BC National Director, US Provider Industry & Chief Nursing Officer

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### 5 Trends

DRIVING INTELLIGENT HEALTH



**1 GB** 

By 2020, on average of

**1GB of health-related** 

data will be created

daily per person.<sup>1</sup>

#### Aging populations

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#### 2 billion

people in 2050 will be over 60 years old, representing an increase of 10% over today's **aging population.**<sup>3</sup>

#### Shortage of healthcare workers



healthcare worker positions will go unfilled in 2030 as the world experiences a global shortage of healthcare workers.<sup>5</sup>

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#### \$6.2 billion

is lost due to data breaches to the health industry every year, leading to increased pressure in security and compliance.<sup>2</sup>

#### Growing cybersecurity threats

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#### **97%**

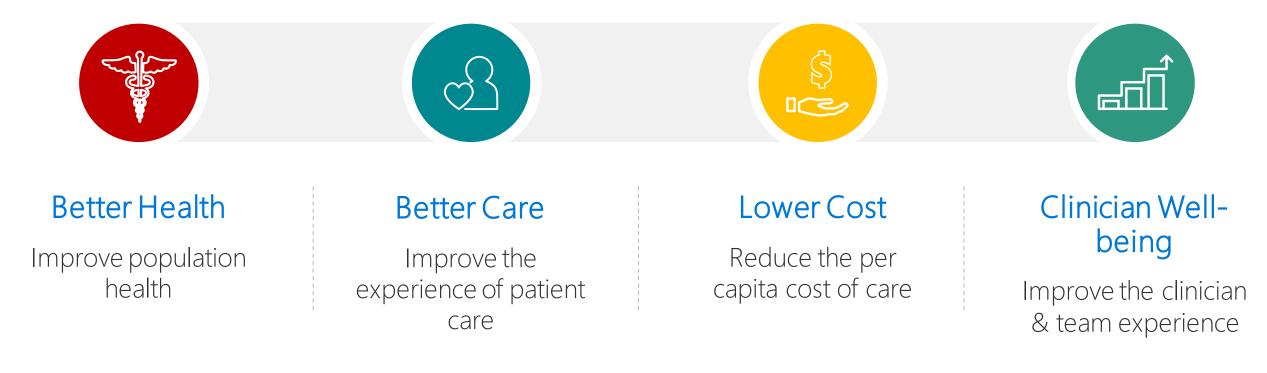
of patients have **raised expectations** around their healthcare, expecting every health institution to have access to their full medical history.<sup>4</sup>

Increasing patient expectations



# **Digital transformation in health**

Technology enabled care, health promotion and disease prevention that advances the quadruple aim.





## Al in healthcare: maturity model

| Leader       | Innovation:<br>Using SDoH to improve the health of individuals and populations   |  |
|--------------|--|--|
| Advanced     | <b>Creation:</b><br>New AI solutions, e.g. patient and consumer experience and empowerment   |  |
| Intermediate | <b>Optimization:</b><br>Adding AI to existing systems, e.g. diagnostics, using AI for computer vision,<br>including chronic and rare diseases. |  |
| Basic        | <b>Conversion:</b><br>BI to AI, e.g. LOS, forecasting, reduce readmissions, operations, financial, etc.  |  |
| Foundational | <b>Implementation:</b><br>Put AI Datalake, Data Estate, or AI data<br>platform in place  | Narrow: Seeking specific use cases,<br>solutions, models<br>Broad: Seeking general use cases, solutions,<br>models |



## Digital Transformation = technology Cultural Shift

...and AI/ML will be an integral part of most Digital Transformation going forward



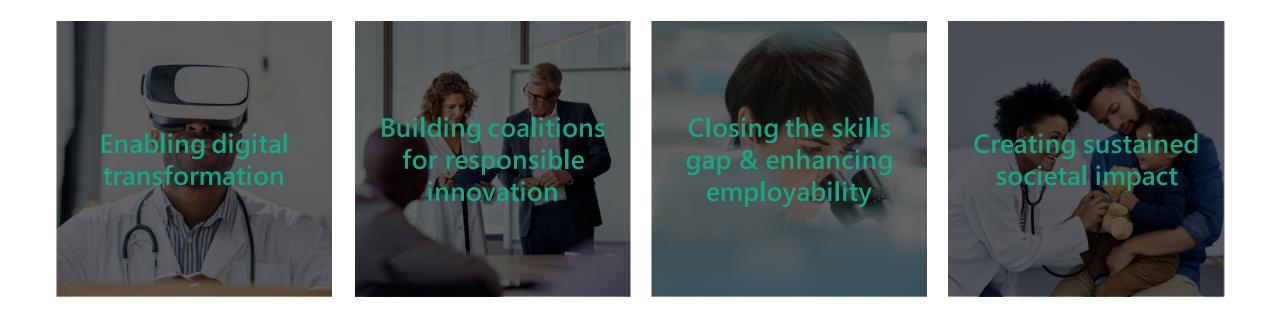
I have come to understand that my primary job is to curate our culture so that one hundred thousand inspired minds—Microsoft's employees—can better shape our future.

Satya Nadella





## How do we tackle the challenge?



Improving health of populations through Aldriven consumer care. Partnering with key groups to form and foster lasting and responsible oversight. Retraining nurses, physicians and scientists to broaden valuable skill sets. Improving access to and quality of healthcare, health literacy, and life expectancy.



I can see every piece of data within two minutes as it goes from the table to the cloud. We can catch things before parents do, because we're the ones who are medically trained, and that's the way it should be, to reduce the burden on the parents.

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— Lori Erickson Nurse practitioner, Children's Mercy Hospital, Kansas city, Missouri

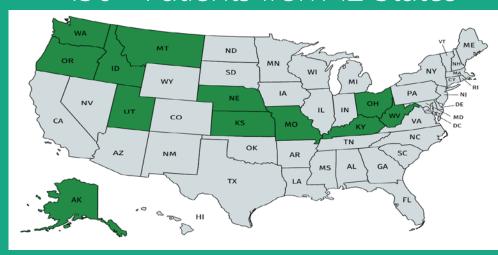
# Improve access and outcomes to care







## 130+ Patients from 12 States





HaNk

CHAMP



#### Children's Mercy Kansas City Wins 2016 Magnet<sup>®</sup> Prize

SILVER SPRING, MD — The American Nurses Credentialing Center (ANCC) today announced Children's Mercy Kansas City, in Kansas City, Missouri, as the winner of the ANCC 2016 Magnet Prize<sup>®</sup> sponsored by Cerner, a global leader in health care technology.

AMERICAN NURSES CREDENTIALING CENTER

**NEWS RELEASE** 

The prize recognizes innovative nursing programs and practices in ANCC

#### www.childrensmercy.org/champ

Bingler, M., Erickson L.A., Reid, K.J., Lee, B., Apperson, J., O'Brien, J., Goggin, K., & Shirali, G.S (2018). Interstage Outcomes in Infants with Single Ventricle Heart Disease Comparing Home Monitoring Technology to Three-Ring Binder Documentation: A Randomized Crossover Study, *World Journal for Pediatric and Congenital Heart Surgery*, 9(3), 305-314. DOI: 10.1177/2150135118762401

<u>champapp@cmh.edu</u>



Healthcare is at the core of Microsoft's mission