



# Healthcare Innovation: 2018 and Beyond

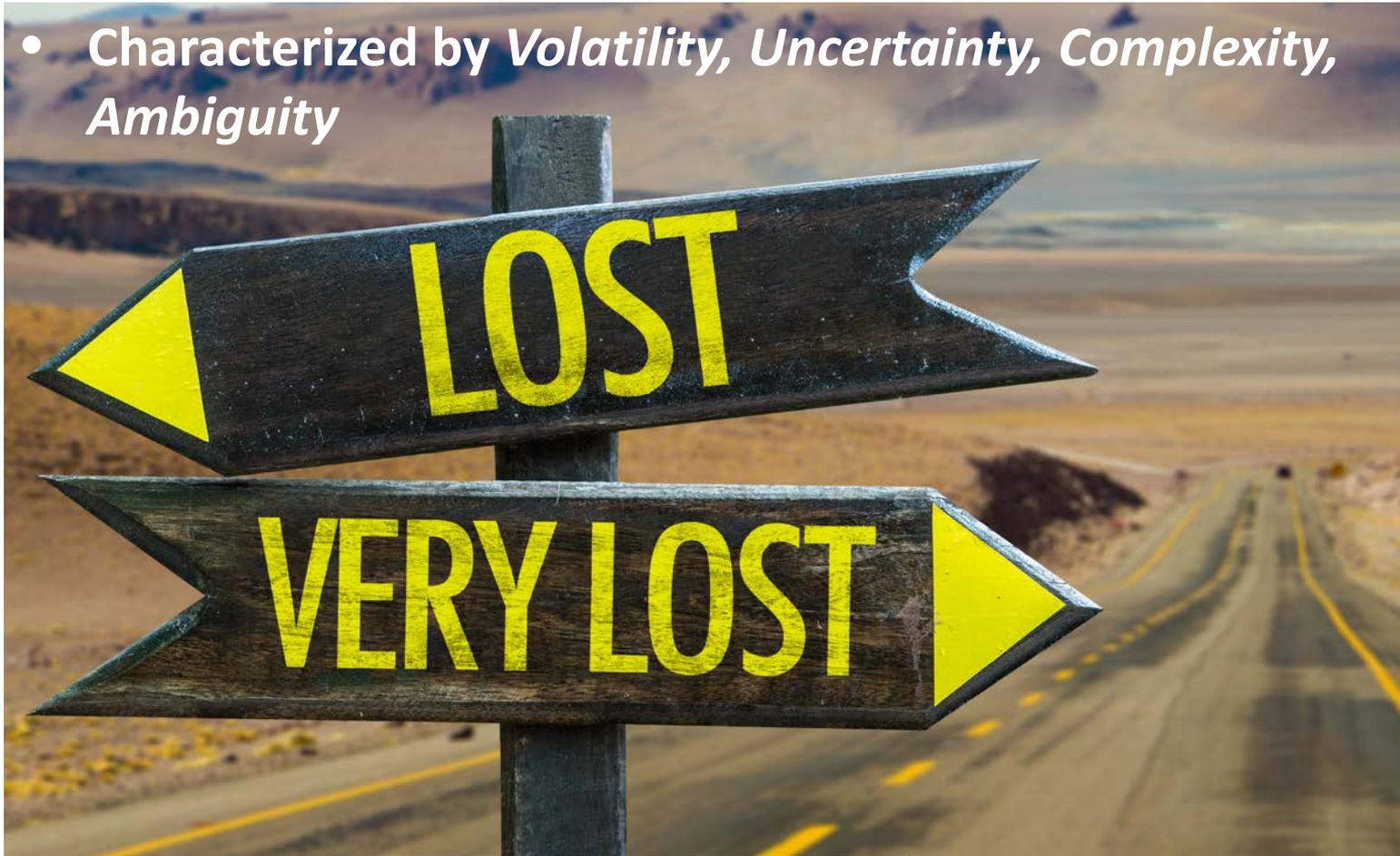
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Institute of Health Administration- Executive Leadership Course  
7-10-18

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# The Current Environment

- Characterized by *Volatility, Uncertainty, Complexity, Ambiguity*



# Overview: What Is Driving Disruptive Change?

## Healthcare in the USA is:

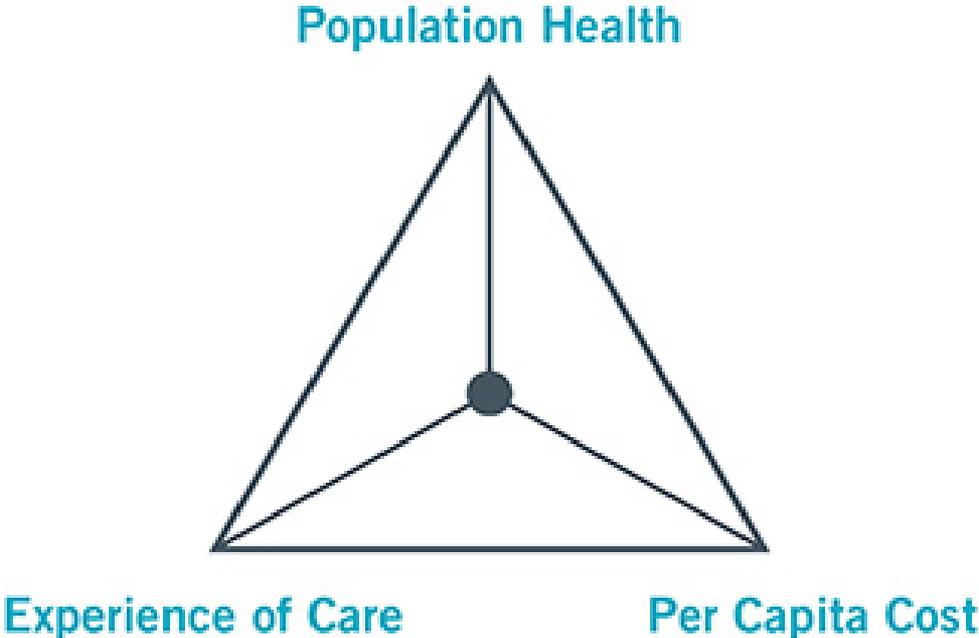
### Expensive

- Healthcare Spend per Person
  - US = approximately \$10,000 per person- more than any other country in the World
  - UK = approximately \$4,000 per person
- Represents 18-20% GDP
- Estimated 30% of total U.S. healthcare spend can be attributed to overuse, underuse, and misuse of healthcare resources
- (Source: CMS.gov/research-statistics/ National Health Expenditure Data 2015; accessed May 2017)

### Inconsistent Quality and Outcomes

- Life Expectancy- U.S. ranks 12<sup>th</sup> among 12 wealthiest industrialized nations, according to the Kaiser Family Foundation
- Medical errors and adverse events
  - Medical errors represent 3<sup>rd</sup> leading cause of death per 2016 study by Johns Hopkins
  - Cause 250K deaths/year

## The IHI Triple Aim



# 2018 Milliman Medical Index: Key Findings



- In 2018, the cost of health care for a typical American family of 4 covered by an average employer-sponsored PPO Plan is **\$28,166**
  - The Milliman Medical Index (MMI) increased by \$1222 from 2017 to 2018, climbing nearly \$5000 over the past 4 years
- **Employee cost sharing has continued to rise**, increasing by 5.9% in 2018 compared to a 3.5% increase in employer expenses
- The MMI annual rate of increase was 4.5%, second lowest over the past 18 years only to last year's rate of 4.3%
  - Annual rate of increase has averaged 7.4% over the 18 year period

# 2018 Milliman Medical Index: Key Findings



- Overall Prescription Drug trends are down for the third consecutive year, rising 6% in 2018
  - Can anticipate continued volatility in prescription drug costs
- Multiple factors have likely contributed to the sustained reduction in healthcare expenditure growth rates, including recent fundamental shift of risk from employers to individual employees and from payers to providers:
  - increased provider involvement in cost containment via value-based reimbursement and risk-sharing arrangements and better alignment of financial incentives
  - health plan benefit design changes, including steerage to lower cost settings of care and increased employee cost sharing, ex. HDHPs
  - growth of commercial ACOs
  - impact of pharmacy initiatives, such as the shift to generic medications

# Ongoing Federal Reimbursement Cuts to Hospitals



- By 2028, federal payment cuts to hospitals since 2010 will total \$218.2 billion, according to a report from Dobson Davanzo & Associates commissioned by the Federation of American Hospitals and the American Hospital Association.
- "Continued cuts of this magnitude represent a troubling trend for hospitals and health systems as many struggle with declining reimbursements for services provided in and out of the hospital," said Rick Pollack, president and CEO of the AHA. "Additional reductions will create challenging and potentially unsustainable financial circumstances that could adversely impact patients' access to care and the ability of hospitals to provide services."

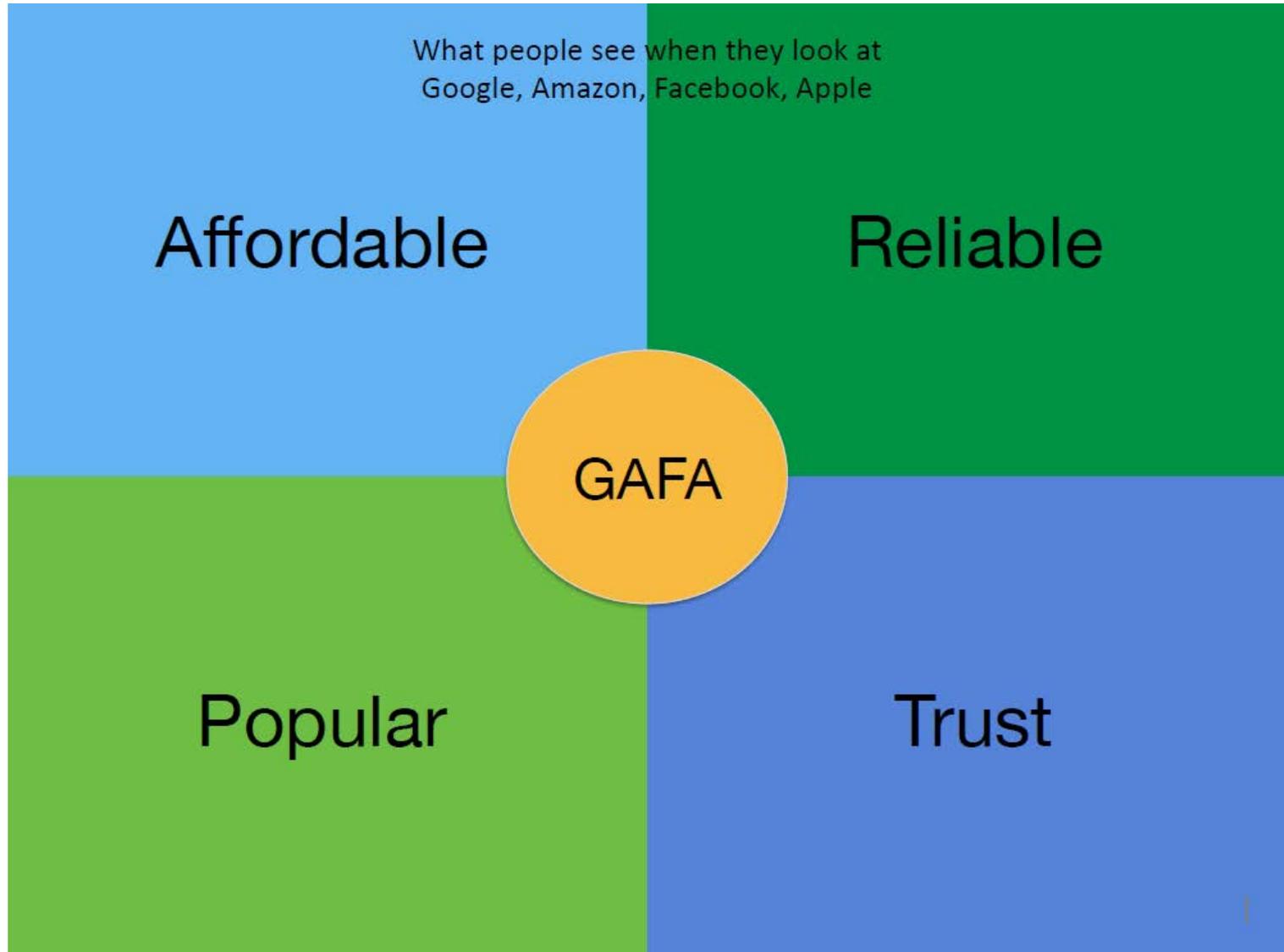
- Continuing shift from inpatient hospital to outpatient settings for care and services.
- Significantly increased attention to cost and quality of Post-Acute Care and the impact on total medical expense.
  - A widely quoted report by the Institute of Medicine in 2013 identified PAC as the source of **73% of the variation in healthcare spending**
    - (Institute of Medicine. 2013. Variations in Health Care Spending: Target Decision Making, Not Geography. Washington, DC: The National Academies Press. <https://doi.org/10.17226/18393>.)
  - Between 2007 and 2015, Medicare payments to PAC providers rose to a total of **more than \$54 billion**
    - (CMS Geographic Variation Public Use File, accessed 2017.)
  - Pending implementation of CMS Value-Based Purchasing Program for Skilled Nursing Facilities, effective October 2018.
- Home-based care, care coordination, and drug pricing present the greatest opportunities for tech disruptors to improve care of seniors, according to Providers in a recent study.
  - “From Hospital to Home: Elder Care Investments by 2020”, S. Shill, P. Pilch; HealthLeaders: July 2, 2018.)

# The Economy of the Future May Be Different From That of the Past

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- ✓ More wealth bifurcation
- ✓ Wealth concentrated in a small number of companies/individuals
- ✓ Automation replacing traditional jobs
- ✓ Gig economy
- ✓ Increased workforce mobility

# Healthcare Disruptors



- Navicent Health in Macon, GA has opted to assess both "disruption" and "innovation" as distinct but interrelated concepts, according to Christopher Cornue, Chief Strategy and Innovation Officer for Navicent Health. Disruption is defined as any force—from outside or inside the organization—that can fundamentally change a business or clinical model
- "With that definition, what we're able to do is make sure that we are aligning our organization with what possibly may end up being a disruption, and we can end up disrupting ourselves as opposed to being disrupted," says Cornue.

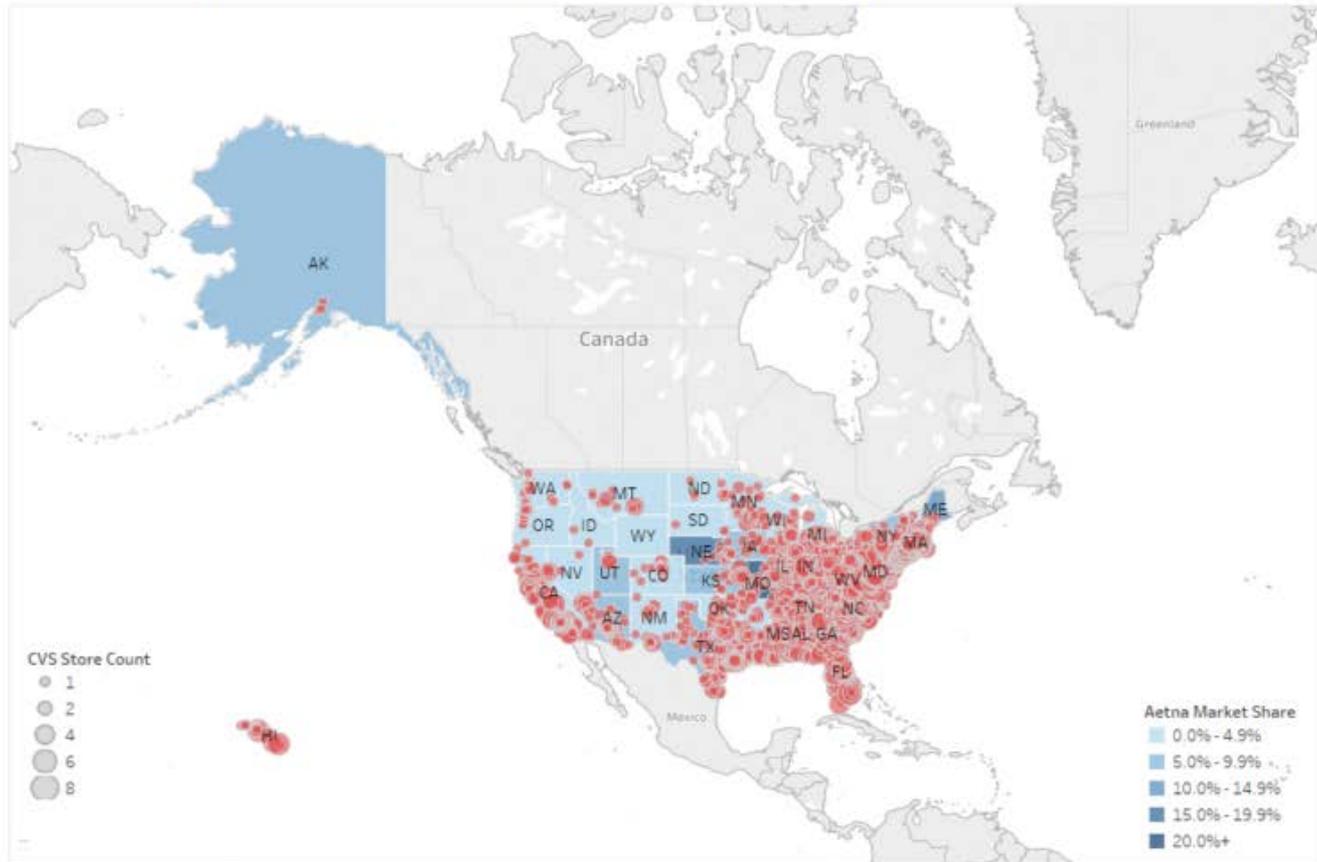
- To accomplish that goal, Navicent Health launched its [Center for Disruption & Innovation](#) two-and-a-half years ago, as part of their effort to systematically identify and respond to incoming threats like those posed by Walmart and Amazon
- Navicent identified three primary objectives:
  - to optimize and equalize healthcare delivery
  - to apply research that leads to disruptive innovation
  - to develop and commercialize new products.
- "There's a focus on horizon-scanning, making sure that we know what's coming at us," Cornue says. "And when we know something is coming at us, we discern whether or not we partner with it or we come up with something that competes with it."

- CVS Health announced plans in December 2017 to buy Aetna.
- Mark Bertolini, CEO of Aetna, said the insurer's \$69 billion merger with CVS Health will succeed by keeping Americans healthier where they live, according to [CBS This Morning](#).
- "In today's environment, 60 percent of our life expectancy, which has gone down two years in a row, is associated with where we live. Thirty percent is our genetic code and 10 percent is the clinical care you receive. So now our zip code matters more than our genetic code and how long we live," Mr. Bertolini said on the program Feb. 26.
- Addressing **Social Determinants of Health**, Mr. Bertolini continued, "Unless we get into the community and we begin to provide services in the community that deal with issues like social isolation, food, water, accessibility, access - if we can do more of that in the community and near people's homes, then we're going to win because we're going to keep people healthy around the issue that prevents them from living the life they want to lead."

- CVS Health comprises 10,000-plus clinics and pharmacies across the U.S. These spaces could become local options for preventive care, filling prescriptions and treatment, which may sway Americans from entering the healthcare system only when they're in need of extensive care, Bertolini added.

# CVS-Aetna Merger

## How Will Proposed CVS-Aetna Merger Affect Your Primary and Urgent Care Strategies?



State All

State Abv	Aetna Market Share	CVS Store Count	% of Total CVS Stores
AK	7.5%	3	0.0%
AL	1.1%	182	1.9%
AR	4.5%	23	0.2%
AZ	6.8%	198	2.0%
CA	2.0%	1,145	11.8%
CO	3.2%	42	0.4%
CT	13.2%	175	1.8%
DC	14.6%	60	0.6%
DE	15.2%	20	0.2%
FL	7.0%	874	9.0%
GA	8.3%	357	3.7%
HI	0.2%	71	0.7%
IA	7.9%	38	0.4%
ID	1.6%	2	0.0%
IL	9.2%	373	3.8%
IN	10.3%	339	3.5%
KS	7.8%	53	0.5%
KY	6.4%	79	0.8%
LA	4.3%	135	1.4%
MA	1.2%	404	4.1%
MD	4.4%	225	2.3%
ME	10.7%	27	0.3%
MI	2.4%	296	3.0%
MN	0.6%	136	1.4%
MO	21.2%	130	1.3%
MS	1.8%	57	0.6%
MT	1.7%	16	0.2%
NC	9.1%	365	3.7%
ND	0.6%	6	0.1%
NE	17.4%	30	0.3%
NH	1.7%	49	0.5%
NJ	10.4%	339	3.5%
NM	0.7%	25	0.3%
NV	4.0%	101	1.0%
NY	5.8%	563	5.8%
OH	9.6%	405	4.2%
OK	4.7%	77	0.8%
OR	0.9%	18	0.2%
PA	11.6%	479	4.9%
RI	0.5%	66	0.7%
SC	1.5%	210	2.2%
SD	1.7%	3	0.0%
TN	1.8%	164	1.7%
TX	6.9%	833	8.6%
UT	7.2%	25	0.3%
VA	8.0%	344	3.5%
VT	1.5%	10	0.1%
WA	3.1%	42	0.4%
WI	1.5%	84	0.9%
WV	16.2%	57	0.6%
WY	3.0%	0	0.0%
<b>Grand Total</b>	<b>6.1%</b>	<b>9,735</b>	<b>100.0%</b>

9,735 CVS Store Locations and Aetna State Market Share

Sources: National Association of Insurance Commissioners. Reprinted with permission (MSR-HB-17 Aug 2017) & AggData CVS Store Locations



# Amazon, Berkshire Hathaway, JP Morgan Chase & Co. Announce New Healthcare Company

Amazon, Berkshire Hathaway, and JP Morgan Chase & Co. are launching a new company aimed at cutting healthcare costs for their U.S. employees

- Aiming to improve employee satisfaction through the new venture
- Hoping the sheer size of each company and their complementary areas of expertise will help them tackle these issues

"Our people want transparency, knowledge and control when it comes to managing their healthcare," said Jamie Dimon, chairman and CEO of JP Morgan. "The three of our companies have extraordinary resources, and our goal is to create solutions that benefit our U.S. employees, their families and, potentially, all Americans"

# Amazon, Berkshire Hathaway, JP Morgan Chase & Co. Announce New Healthcare Company

- “The ballooning costs of healthcare act as a hungry tapeworm on the American economy,” said Berkshire Hathaway Chairman and CEO Warren Buffett. “Our group does not come to this problem with answers. But we also do not accept it as inevitable. Rather, we share the belief that putting our collective resources behind the country's best talent can, in time, check the rise in health costs while concurrently enhancing patient satisfaction and outcomes.”
  - (“Amazon, JP Morgan, and Berkshire Hathaway Launch New Healthcare Company: 6 Things to Know”, Ayla Ellison; Becker’s Hospital CFO Report: January 30, 2018)
- Dr. Atul Gawande has been named Chief Executive Officer of the companies' joint healthcare initiative, effective July 9.
  - Gawande is a prominent surgeon at Brigham and Women's Hospital and a Harvard professor. He is also a journalist who has written four books on the *New York Times* bestseller list and whose work has appeared in *The New Yorker*.

# Dr. Atul Gawande Named CEO

- "I'm thrilled to be named CEO of this healthcare initiative," Gawande said. "I have devoted my public health career to building scalable solutions for better healthcare delivery that are saving lives, reducing suffering, and eliminating wasteful spending both in the US and across the world. Now I have the backing of these remarkable organizations to pursue this mission with even greater impact for more than a million people, and in doing so incubate better models of care for all." "This work will take time but must be done. The system is broken, and better is possible," Gawande added.
  - ("Atul Gawande Named CEO of Amazon, Berkshire Hathaway, JP Morgan Initiative", Steven Porter; HealthLeaders: June 20, 2018.)
- In a recent article, Philip Betbeze, Sr. Leadership Editor at *HealthLeaders* said, "We should all be heartened that someone willing to try bold ideas is getting the chance to hack away at healthcare's problems and push forward the Institute for Healthcare Improvement's so-called [triple aim](#): improving the patient experience, the health of populations, and the per-capita cost of care."
  - ("Can Atul Gawande Fix Health care? Maybe.", Philip Betbeze; HealthLeaders: June 20, 2018.)

- Walmart Inc. is reported to be in preliminary talks to buy insurer Humana Inc., according to people familiar with the matter, a deal that would mark a dramatic shift for the retail behemoth and the latest in a recent flurry of big deals in health-care services
- “It isn’t clear what terms the companies may be discussing, and there is no guarantee they will strike a deal. If they do, the deal would be big: Humana currently has a market value of about \$37 billion.”
  - (“Walmart in Early- Stage Acquisition Talks with Humana”, D. Mattioli, S. Nassauer, A. Mathews; Wall Street Journal : March 29, 2018.)
- A potential deal between Walmart and Humana would strengthen Walmart's position as a competitive threat to hospitals, industry consultants and executives told [The Wall Street Journal](#)
  - (“A Walmart-Humana giant scares hospitals: 5 reasons why”; Morgan Haefner; Becker’s Hospital CFO Report: April 2, 2018)

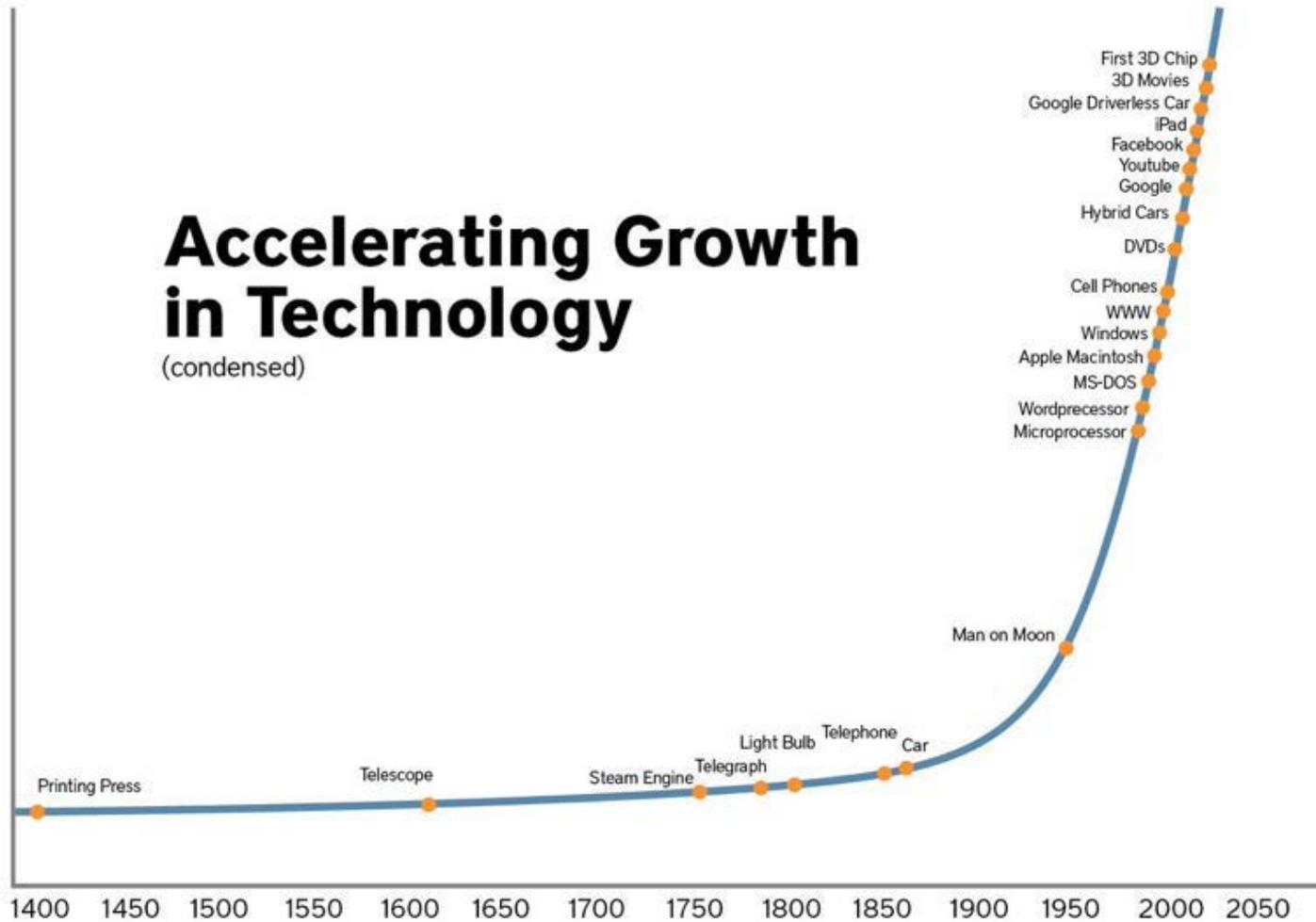
# A Walmart-Humana Merger: Potential Impact on Hospitals

The potential merger follows two other healthcare mega-deals: CVS Health's \$69 billion bid for Aetna and Cigna's \$54 billion offer for Express Scripts.

These insurer pairings could mean a shift toward less expensive care provided at clinics and pharmacies, cutting into spending on hospital services.

Industry consultants and executives also look to Walmart's negotiating power for employee health benefits as a reason for hospitals to be nervous.

- Combining Walmart's employee benefit negotiating clout with Humana's data and infrastructure could position a combined entity to offer competitive health plans.
- Walmart has 1.5 million employees and over 4700 stores in the U.S. in 2018.
- For the fiscal year ended January 31, 2018, Walmart's total revenue was \$500.3 billion.
- (<https://corporate.walmart.com/newsroom/company-facts>)
- Hospitals excluded from those networks would see increased operating pressure, the WSJ reports.



# What Could This Mean for Healthcare in the Years Ahead?



- Virtual medicine
- Mobile medicine
- Artificial intelligence
- Interoperability
  - Wearables
- Environmental sensors
- Personalized medicine
  - Big data
  - Virtual reality
  - Robotics
  - Genomics
- Personalized health record

# What Could This Mean for Healthcare in the Years Ahead?

- Home diagnostics
- Gamification
- Augmented reality
- Crowd sourcing
- Blockchain
- Privacy and security
- **Unknown**

## Top Healthcare IT Investments

Healthcare leaders who responded to the 2018 HealthLeaders Media Annual Industry Outlook Survey identified the top areas of healthcare IT in which their organizations plan to begin or increase investment over the next three years.

**65%** Clinical analytics

**49%** EHR interoperability

**44%** Mobile health, mobile technology

