



OPTUM IQ™

# Annual Survey on AI in Health Care

2018 SPECIAL REPORT



## Measuring confidence in artificial intelligence

Health care faces a number of formidable challenges. Costs are high. Billing processes are complicated and unclear. Care can be uncoordinated with a poor patient experience.

Increasingly, one solution that holds promise is the use of artificial intelligence (AI) tools and technologies. They can streamline processes and improve both outcomes and the patient experience. Together, these capabilities can reduce the total cost of care across the health system.

To better understand attitudes and perspectives on implementing AI in health care and the barriers to adoption, Optum surveyed 500 senior health care leaders from health plans, hospitals, life sciences organizations and employers in its inaugural *OptumIQ™ Annual Survey on AI in Health Care*.

### Key Findings

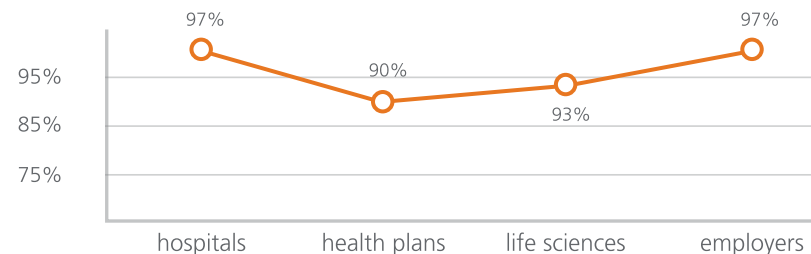
Health care leaders expressed confidence in the positive impact AI will have, but each sector focused on different benefits to health care:

- Hospitals and Life Sciences organizations told us AI will have the greatest impact on **improving health outcomes**
- Health plans believe AI will help **decrease per capita cost of care**
- Employers are looking forward to AI **improving the quality of care and the patient experience**

The health care industry is optimistic about AI


# 94%


of respondents agree that AI technology is the most reliable path toward equitable, accessible and affordable health care.




# The path to implementation

## Progress across the industry

 **22%**  
of health benefit leaders at **medium-to-large employers** reported being at the late stage (nearly full deployment of AI)

 **45%**  
of leaders at **life sciences organizations** reported being at a middle stage (partial adoption of AI)

 **47%**  
of **care providers** reported being at the early stage of adoption (preliminary phase of testing and limited deployment)

 **90%**  
of **health plan respondents** were in the early, middle or late stage of deployment

## Key Findings

Health care is at a tipping point in the adoption of artificial intelligence. Employers seem to be furthest along in their journey towards AI-enabled capabilities - 22% of them reported that their AI strategies were nearly fully deployed, the highest proportion in the industry.

While the rate of adoption may differ between and within these stakeholder groups, the prevalence of these projects shows that organizations aren't just talking about AI - they're acting on it. For example, 90% of health plan respondents are at least in the early stages of deployment.

AI is already in place or being implemented but progress varies

**75%** of respondents are currently in the process of or plan to implement an AI strategy.



## Investment plans and ROI expectations

### Administrative and operations use cases lead the way:



ranked **automating business processes, such as administrative tasks or customer service**, as their first choice for investment



ranked **detecting patterns in health care fraud, waste and abuse** as their first choice for investment

### Why prioritize these areas?

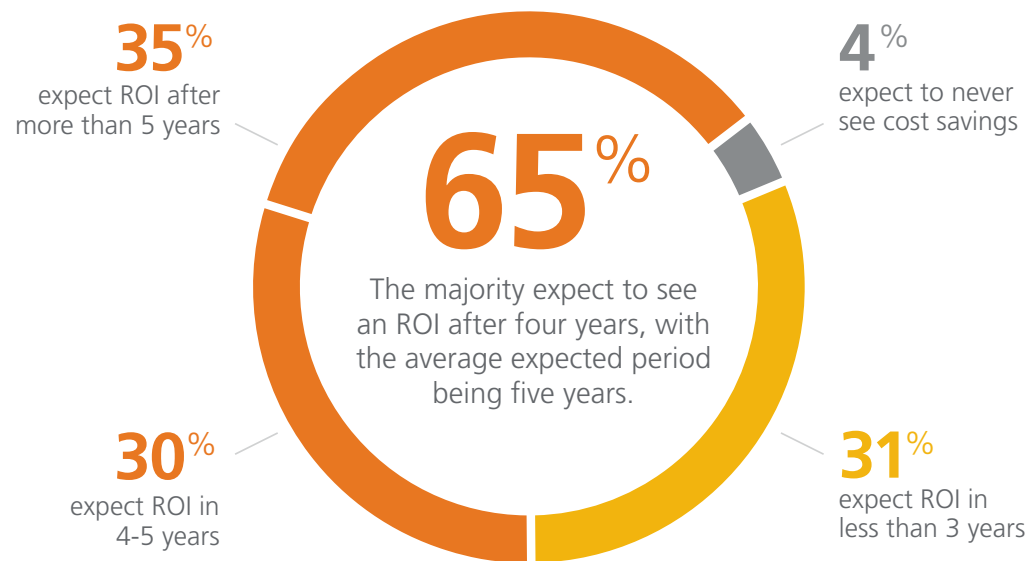
The forms of artificial intelligence that are most mature in health care - natural language understanding and machine learning - both lend themselves to administrative applications. Organizations across health care can use AI-enabled systems to help route inquiries appropriately at call centers, automate document review and flag suspicious financial transactions.

### Key Findings

Respondents told us they expect the average AI investment to be **\$32.4 million over five years**. They're confident they'll see a full return on that investment, but expectations vary for how long that will take.

That confidence might stem from the conclusion that organizations are investing in applications of AI that have already proven to be successful in other industries like retail and finance. Almost 80% of our respondents plan to invest first in technology that helps automate business processes or detect potential fraud, waste and abuse - two areas where it is easier to measure the impact of greater efficiency and accuracy.

Almost all respondents expect a full ROI, but many anticipate waiting for it



## Building organizational capacity

### Key Findings

Health care executives recognize that the advantages of AI won't be realized overnight, so they know organizational capacity is critical to their success. While the pace of change is accelerating, having the right people and skillsets will help their organizations adapt more quickly - especially when combatting the risk of data breaches and protecting personal privacy.

#### Hiring and training talent for AI is a top priority

**91%** agree that hiring candidates with AI experience is a priority for their organization.

**45%** estimate that more than 30% of new hires will need to work with AI in the next year.

#### Privacy and security are paramount



**95%** of respondents agree that ensuring data security policies protect an individual's personal health information is vital before AI deployment.

# About the OptumIQ Annual Survey on AI in Health Care

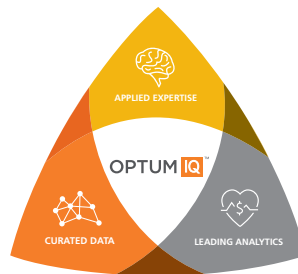
**Distributed:** September 2018

**Method:** Custom online survey

**Reach:** 500 senior health care industry executives

**Respondents:** C-Level executives across care provider, health plan, life sciences, employer health benefits and government organizations

AI as defined for the survey: “Artificial Intelligence (AI)” refers to technology that emulates human performance by coming to its own conclusions and understanding of complex content to enhance human abilities. Organizations represented: hospitals, ACOs, clinics, health plans, medical device manufacturers, pharmaceutical companies, health care IT and other organizations working in the health care sector.



## What is OptumIQ?

OptumIQ is the unique combination of curated data, leading analytics and applied expertise in Optum products and services. We use OptumIQ to build a common language, innovate with purpose and guide action for success. Learn more at [optum.com/iq](http://optum.com/iq).



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