

# Improving health outcomes with precision insights

We're in a new age of healthcare, and it's both exciting and challenging, as all stakeholders must learn to evolve and adapt to an ever-expanding body of data. But not all innovations create meaningful benefits, and the impact associated with care that's not clinically appropriate creates a burden on our entire health system. **With so many different sources of medical information, we need a way to harness it and ultimately provide better care and better experiences.**

## The speed of medical knowledge



### 73 days

73 days is the estimated amount of time it takes for available medical knowledge to double.<sup>1</sup>

### 4x

is how often that medical knowledge doubled while 2020 medical student graduates were in school.<sup>1</sup>

### For 2020 graduates

what's learned in the first 3 years of medical school will be just 6% of what is known at the end of the decade.<sup>2</sup>

### More than 600,000

articles are published in biomedical literature every year.<sup>2</sup>

## Industry innovation



### 90%

of acute kidney injuries can be predicted by machine learning 48 hours earlier than traditional methods.<sup>3</sup>



### 161.7%

is the growth rate of artificial intelligence (AI) in healthcare from 2019 to 2021.<sup>4</sup>



### 84.1%

of cardiac arrests can be identified by AI based on descriptions provided by 911 callers.<sup>5</sup>



### 60%

more new drugs were approved for sale in the last 10 years than in the previous decade.<sup>6</sup>

## Administrative overload



### 16 min, 4 sec

is the average time a doctor spends using electronic medical records per patient, which is longer than the average appointment time of 15 minutes.<sup>7</sup>



### 27%

Only 27% of physicians time is spent interacting with patients.<sup>8</sup>



### 1 in 20

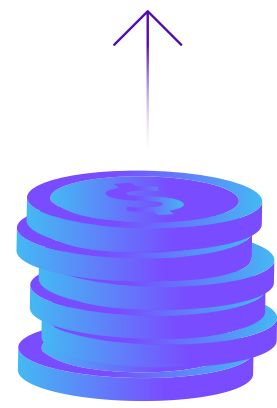
people are misdiagnosed because of data errors.<sup>9</sup>



### 47%

of physicians feel burned out.<sup>1</sup>

## The cost of less-than-optimal care



### 18.3%

of the U.S. gross domestic product is spent on healthcare.<sup>4</sup>

### 10%

of all U.S. deaths are caused by communication-related medical errors.<sup>12</sup>

### More than

### 100,000

people report medication errors to the U.S. Food and Drug Administration every year.<sup>13</sup>

### 20–25%

of U.S. healthcare spending is wasteful.<sup>14</sup>

## Our perspective:

### Research and data hold the keys to health outcomes

It takes a deep understanding of medical science and real-world clinical practices to provide effective care. Health plans need to make that knowledge easily accessible for health professionals through next-generation data and technology — all while ensuring that patients are receiving affordable, quality care.

Carelon can help health plans navigate this ever-changing landscape by developing and automating clinical pathways. This helps inform care, create new insights to improve care, and leverage data and technology to pinpoint care and improve workflows.



<sup>1</sup> National Library of Medicine: *Challenges and Opportunities Facing Medical Education* (accessed September 2023): <https://bit.ly/46Fkyn2>

<sup>2</sup> National Library of Medicine: *Challenges and Opportunities Facing Medical Education* (accessed September 2023): <https://bit.ly/46Fkyn2>

<sup>3</sup> Annals of Internal Medicine: *Allocation of Physician Time in Ambulatory Practice: A Time and Motion Study in 4 Specialties*: (accessed September 2023): <https://bit.ly/3RVmh3Q>

<sup>4</sup> Centers for Medicare & Medicaid Services: *National Health Expenditure Data Fact Sheet, 2021*: (accessed September 2023): <https://bit.ly/3ZPsf6>

<sup>5</sup> Accenture: *The Hidden Cost of Healthcare System Complexity*: (accessed September 2023): <https://bit.ly/46FVYbb>

<sup>6</sup> National Center for Health Statistics: *Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, 2021*: (accessed September 2023): <https://bit.ly/3RVwME6>

<sup>7</sup> Gallup: *Record High in U.S. Put Off Medical Care Due to Cost in 2022*: (accessed September 2023): <https://bit.ly/3PVh9d8>

<sup>8</sup> Gallup: *Record High in U.S. Put Off Medical Care Due to Cost in 2022*: (accessed September 2023): <https://bit.ly/3PVh9d8>

<sup>9</sup> The Commonwealth Fund: *Mirror, Mirror 2021: Reflection Poorly. Health Care in the U.S. Compared to Other High-Income Countries*: (accessed September 2023): <https://bit.ly/3QeoV3o>

<sup>10</sup> American Medical Association: *Policy Research Perspectives*: (accessed September 2023): <https://bit.ly/3PK47PG>

<sup>11</sup> JAMA Network: *Waste in the US Health Care System, Estimated Costs and Potential for Savings*: (accessed September 2023): <https://bit.ly/45sSzWW>

<sup>12</sup> JAMA Network: *Waste in the US Health Care System, Estimated Costs and Potential for Savings*: (accessed September 2023): <https://bit.ly/45sSzWW>

<sup>13</sup> American Medical Association: *Practice Transformation: Research*: (accessed September 2023): <https://bit.ly/3PizOw>

<sup>14</sup> Guidehouse: *Healthcare Consumer Digital Experience Analysis*: (accessed September 2023): <https://bit.ly/4077ipz>