

# The value of clinical AI in community oncology



## The challenges:

### Growing population of new diagnoses and survivors



#### By 2023

2.3 million people will be newly diagnosed with cancer in the U.S.<sup>1</sup>



#### By 2030

The number of cancer survivors in the U.S. is projected to increase by 31.4%, to 22.2 million.<sup>2</sup>

**With a growing population of cancer patients and survivors,** community oncology providers need a solution to identify those who are most at risk of adverse health events.

## Value-based care requirements

Value-based care models, such as CMS' Oncology Care Model, and the 35 payment reform models found in a 2020 Community Oncology Alliance study, aim to provide higher-quality, more highly coordinated oncology care, at the same or reduced costs.

**35**  
payment reform models

**138**

participating practices as of 1/2/20

Practices participating in OCM have committed to providing enhanced:

- Care coordination
- Navigation
- National treatment guidelines for care

## Social determinants of health

Over the past decade, mounting clinical evidence has shown that social determinants of health (SDOH) — defined by the World Health Organization as “the conditions in which people are born, grow, live, work and age” — are equally, if not more, important to driving health outcomes than a patient’s genes.

### Social determinants of health (SDOH)

- Financial insecurity
- Housing insecurity
- Food insecurity
- Social isolation
- Addiction
- Access to transportation
- Patient health literacy

**90%**

of oncologists said they believe SDOH factors such as financial security, access to food and social isolation are significantly impacting outcomes for cancer patients<sup>3</sup>

**68%**

of oncologists said that more than half of their patients are negatively impacted by SDOH<sup>3</sup>

**81%**

of oncologists said they don't have enough time with patients to adequately understand or address their SDOH needs<sup>3</sup>



Oncologists are faced with significant challenges to ensure quality, patient-centered and proactive care for this growing population.

## How clinical AI can address these challenges:

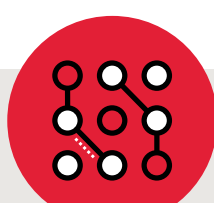
### With the use of clinical AI, providers can:<sup>4</sup>

- Look beyond a patient's clinical state
- Bring external SDOH factors to the surface
- Build holistic care plans

### Jvion CORE™ — an AI platform that helps oncology care teams:

- Assess individual patient risk
- Prescribe most effective interventions

## The Jvion CORE™ leverages a unique, robust dataset for risk assessment:



**4,500**

data points considered for each patient



**Quadrillion**

dimensions through which risk can be assessed



**30 million**

lives in repository of clinical, socioeconomic and referential insights

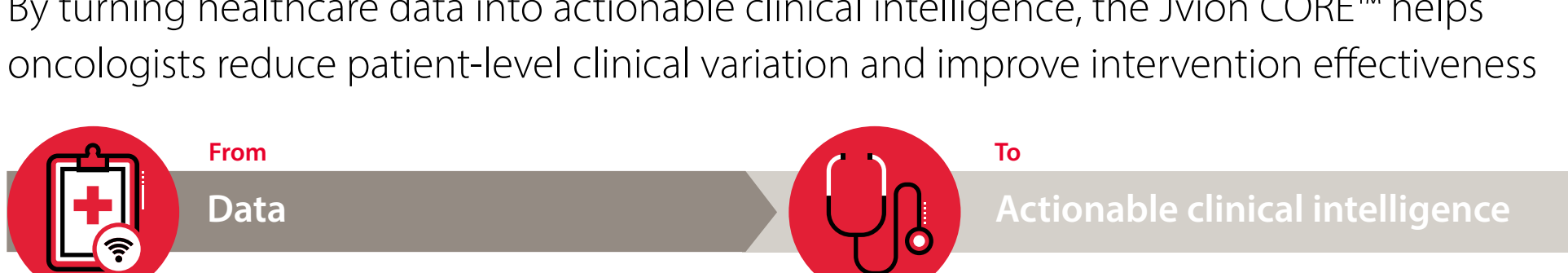
## Patient risk for seven key health events

The Jvion CORE™ uses clinical and nonclinical factors, such as patient socioeconomic status and environment, to analyze a patient's risk for seven key health events:<sup>5</sup>



- 30-day mortality risk**  
Identifies patients who would benefit most from early hospice/palliative care at end of life
- 30-day readmission risk**  
Selects individuals at risk for multiple inpatient readmissions within the next 30 days
- Six-month deterioration risk**  
Predicts the likelihood of functional decline
- No-show risk**  
Pre-emptively deters patients who are likely to miss an appointment
- Avoid admission**  
Highlights patients with a high chance of hospitalization over the next 30 days while the patient is still in the ambulatory setting
- Patient experience and pain management**  
Underscores patients at risk for poorly controlled pain
- Depression risk**  
Projects patients' propensities for depression over the next 6 months

By turning healthcare data into actionable clinical intelligence, the Jvion CORE™ helps oncologists reduce patient-level clinical variation and improve intervention effectiveness



From Data



To Actionable clinical intelligence

#### Data types:

- Health
- Socioeconomic
- Behavioral
- Environmental
- Claims

#### Identify patients on the cusp of an adverse event or outcome

- Examine influencing risk factors that can be changed
- Deploy personalized and prioritized recommendations that improve the outcome



#### Help improve patient care:

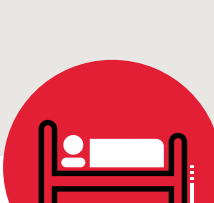
- Reduces 30-day readmission
- Reduces 30-day avoidable admissions
- Improves end-of-life planning and communication
- Improves pain management
- Reduces the risk of patient depression
- Improves the patient's experience of care

## The Jvion CORE™ is a key to improving the value equation

Community-based oncology practices have seen tremendous benefits from implementing the Jvion CORE™ solution, including a reduction in costs through improved intervention effectiveness. Below are highlights from two practices:

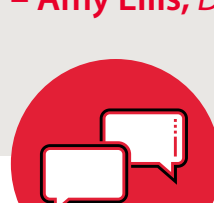
**“Jvion’s ability to help NWMS providers answer questions such as, ‘Should we proceed with treatment, should we go to hospice, what might be the best thing to do with the patient?’ has been critical to NWMS’ delivery of the comprehensive care solutions that patients need when they need them, such as hospice.”**

— Amy Ellis, Director of Value Based Care, Northwest Medical Specialties



**2x**

Increase in palliative and hospice care referrals



**5x**

Increase in depression screenings



**3x**

Increase in case management evaluation

**“Generally, it’s a 20/80 rule where 20% of your patients are generating 80% of your costs. Jvion helps you identify that 20% and understand that you’ve got to spend more time on those patients, because they’re going to have the biggest impact on the overall value equation.”**

— Barry Russo, Chief Executive Officer of The Center for Cancer and Blood Disorders



**\$3 million**

During the performance period, two practices in the CCBD umbrella were able to **save about \$3 million in Medicare costs.** And the ROI didn't end there, as improving its benchmarks allowed the organization to receive bonuses for its pay periods.<sup>6</sup>

## To request a demo of the Jvion CORE™ Clinical AI technology, go to [cardinalhealth.com/jvion](https://cardinalhealth.com/jvion).

Cardinal Health is the exclusive reseller of Jvion oncology products to community oncology practices.

<sup>1</sup> IOM (Institute of Medicine). 2013. Delivering high-quality cancer care: Charting a new course for a system in crisis. Washington, DC: The National Academies Press.

<sup>2</sup> <https://cancercontrol.cancer.gov/ocs/statistics/---text=Ar%20of%20January%202019%2C%20I%20approximately%205.0%25%20of%20the%20population.&text=The%20number%20of%20cancer%20survivors,to%2022.2%20million%2C%20by%202030>

<sup>3</sup> Cardinal Health Oncology Insights Report – June 2020

<sup>4</sup> <https://www.hcinovationgroup.com/analitics-ai/artificial-intelligence-machine-learning/article/21161169/for-oncologists-artificial-intelligence-helps-accomplish-value-based-care-goals>

<sup>5</sup> Precision Medicine in Oncology, May 2020. AI System Helps Guide Care for High-Risk Patients

<sup>6</sup> <https://www.healthcarefinancenews.com/news/artificial-intelligence-oncology-care-saved-3-million-one-texas-provider>