

Webinar: Get Employees Back to Work & Patients In for Care — and Return to Revenue Faster

As healthcare organizations re-open, how can you get employees back to work and patients in for care - and return to revenue faster? The answer: Clinical AI

Every single industry across the globe feels the impact of COVID-19. Very obviously, few more feel that than those in healthcare delivery.

Today's webinar is all about the power of data when it comes to back to work considerations. We share how organizations can:

- Operationalize AI and their back to work strategies using clinical artificial intelligence (AI) to rebuild patient trust and accelerate return to revenue
- Deploy AI to identify patients on a severe course of illness, as well as interventions that can be leveraged to change their risk trajectory

Why AI and Why Now

This era is different because of three forces*:

 Frustration with legacy medical systems	 Ubiquity of networked smart devices	 Acclimation to convenience and at-home services like those provided through Amazon
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62% of healthcare leaders report having implemented an AI strategy**

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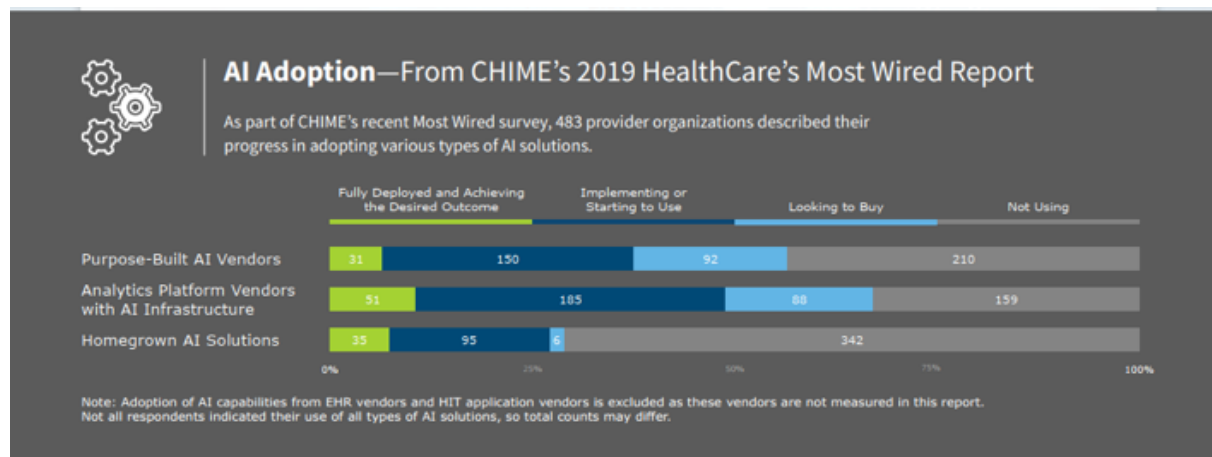
**Artificial Intelligence for Health and Health Care™; JASON The MITRE Corporation. JSR-17-Task-002
** OptumIQ Annual Survey on AI in Health Care

Projected Market Growth

- Current revenue contribution as a percent of total AI market revenue:
 - **50%** clinical applications
 - **30%** operational applications
 - **20%** financial applications
- Estimated that the healthcare AI market will increase at a compound annual growth rate (CAGR) of between **47% and 50%**
- Projected to reach **\$36.1 billion by 2025**

Frost and Sullivan report

Jvion's data shows that healthcare organizations are investing in AI, with 62% of healthcare leaders implementing an AI strategy. To bolster that, according to [CHIME's 2019 Most Wired Report](#), 483 organizations described their AI maturity and the market were at different phases of adoption.



Who is Jvion?

[Jvion](#) is one of the few organizations looking at things differently and retooling solutions that will have a meaningful impact. Jvion focuses on their core ability to understand individuals' vulnerabilities and risk. They researched past pandemics and leaned into the lessons learned and not learned from H1N1, one of which was social vulnerability and community vulnerability. They assessed their technology asking, “Do we have the ability to accurately identify and predict which areas are going to have the greatest impact from a mortality perspective at the community level”.

To that end, they partnered with Microsoft and brought forward their [COVID Vulnerability Map](#), an interactive map that allows users to dig into what's going on at a block group level. The tool is built on Microsoft’s Azure map software development kit and allowed Jvion to visualize vulnerability data. **Within the first seven days of making the vulnerability map available, it had over 2 million hits and within the first two weeks it had approximately 5 million.** It was used by FEMA, the White House task force, all divisions of the military, many state and local municipalities, as well as a number of research groups. Jvion was able to pull together and tackle a need identified during the H1N1 pandemic that nobody had tackled in the last decade in just a few weeks.

How Jvion is Using Their Data

Though Jvion built their map at community level, customers began to ask for it at the individual level. For example, an organization used social determinates of care to analyze the claims and the health record data available from clients and scored over 10 million patients and provided the vulnerability results back to their clients.

Those clients then prioritized mail order pharmacy requests – focusing on outreach and calls to individuals and increasing attention in triage if people called into a center. If an individual was identified as high risk when they called in to ask a question, a screen popped up that identified that individual as high risk and they got a higher intensity protocol than those who were at lower risk.

Next, Jvion took all the knowledge generated from doing a national analysis and the 10 million patients and created an AI home survey. The survey helps people understand their individual vulnerability, connect with the healthcare provider about their COVID-19 concerns and come up with a plan to get back to work and get back to life safely. They used the most important questions from the survey to generate an understanding of the individual's vulnerability.

Why AI is Valuable

Only 30% of organizations are using some form of AI as part of their back to work strategy.

As we look at what's happening in the market, the utilization of static questionnaires and thermal screening may provide a less than complete view to address vulnerability issues.

AI provides a framework to look at the way a threat or an infection admission to the hospital interacts with the individual and the individual's vulnerability or more modifiable risk factors. It provides a way to examine how age and genetics interact with disease progression and how social determinants of health interact with the overall threat, in this case, COVID-19. A lot of work that has been focused on threat management. Temperature screening, mass social distancing and other efforts are all trying to reduce the threat aspect of the pandemic, but we know there are asymptomatic carriers, so **threat management alone is just not going to control the outbreak.**

The CDC symptom questionnaires are by far the most common tool in use. While Jvion is supportive of using this tool and any tool to reduce the spread or the threat of a symptomatic individual who may not realize they are symptomatic, we need to consider the modifiable pieces of vulnerability and calculating that vulnerability is extremely difficult. **According to Jvion, highly vulnerable identified individuals have a 1 in 6 chance of being admitted to a hospital.** When looking at the county level instances, the high-risk counties have higher mortality rates up to 3x depending on the state and the disparity within that state. If we understand which individuals are more vulnerable and overlaying an understanding of individual's vulnerability with the threat reduction work that's already happening, we can have a much greater impact on the overall patient base or employee base.

A significant misconception in the initial reporting about COVID is that just the elderly are affected. Early in the vulnerability data for [Parkland in North Texas](#), Jvion saw that age dispersion on ventilators was broad. There is also a misunderstanding of the cardiovascular effects. There is increasing evidence of strokes in 20 and 30 year old patients including due to increased clotting. Jvion's analysis quickly showed people with clotting disorders on blood thinners or cardiovascular heart related issues, and those under 65 were high risk. Those that have some immune suppression or immune therapy also have had increased risk. All these examples increase risk regardless of age, and it has been reported by [Dr. Jha at Harvard](#) that regardless of age, the mortality rate of those who are hospitalized is at least 5%. So those who are at risk of getting hospitalized are at a high risk of mortality.

Clearly the elderly have higher mortality rates, but the mortality rates in the younger group are still too high to be ignored, and the hospitalization rates are definitely too high to say that this doesn't affect people just because they are 30 years old.

Common Pitfalls in Technology to Fight COVID

AI plays a fundamental role in shaping strategies and executing against strategies to bring employees and patients back safely with transparency on their own risk factors. [In the Physician's Weekly study](#), Northwell Health reported that two thirds of hospitalized patients presented without a fever when they came in but were sick enough to be hospitalized.

We can't walk away from symptom reduction as most technologies are focused on screening and social distancing.

- **Screening:** Includes temperature checks surveys and individual attestations, as well as some AI technologies that use facial recognition and thermal scanning. Unfortunately, thermal scanning and individual attestations are going to miss a significant chunk of infected, potentially asymptomatic, people. It is a reality that people are not going to get caught by thermal screening, facial recognition and questionnaires.
- **Social distancing:** Includes wristbands that ding if you are within six feet of another wristband. However, studies that look at ideal conditions show that it could go up to 20 feet. A [new argument](#) from 230 scientists just appealed to the World Health Organization to identify COVID-19 as airborne, because the studies now indicate that it is spread via micro droplets, not droplets, which will continue to make the social distancing at six feet, again, likely insufficient.

However, static questionnaires and other classical linear approaches are insufficient. Jvion uses a mathematical approach. For example, based on community data, Jvion found that the

number of people in a household really matters, which validates the impact of dosing where more exposure leads to higher likelihood of severe infection. For those living in close proximity, in tiny homes with lots of people, if one person becomes infected, it is much more likely the whole group can be infected.

Jvion's data indicates that higher incident rates in African American and Latino populations is due to social determinants of health. If, in March, these individuals were able to get to directionally correct answers with clinical AI, the outcome would be different.

A New Approach

AI brings dynamic value as the situation changes and as the approach to reopening changes, we will need more dynamic technology that, at least, reasonably matches the evolution of our understanding of COVID-19.

It's critically important for individuals to understand of their own vulnerability, make informed choices and work with their employer for the right accommodations – so that employees that are at the highest risk of being hospitalized or unfortunately the highest risk of death, can make a good choice about coming back to work and how to come back to work, so they can work with their employers and stay as safe as possible.

If your employer can help you understand your risk, hopefully you are going to make better choices about going to social activities. Jvion believes that **employers, especially because they have access to their employer-sponsored health plan data, can play a very big role in educating their employees and helping them stay safe both at home and at work.** And who better has a charter to raise awareness and instill that kind of behavioral change than healthcare systems?

The vulnerable communities have a higher spread, higher hospitalizations and higher mortality rates. If you are the health system, it is important to understand what is going to happen to your resources and what is going to happen from a surge perspective. The county level and the census tract level is not going to help. Understanding what is happening at a granular level, at a block group type level, are elements that can lead to alterations in plans so you can have responses in place, like mobile testing and mobile clinics and get to those communities the help that they need.

When we understand vulnerability, we can do a better job with those communities. On the flip side, employers have the ability to step up, especially health systems, and begin to

consider vulnerability not only for their employees, but also in their patients, and have discipline around helping those that are most vulnerable.

There's still a lot of skepticism around what clinical AI can do. However, there have been some really good examples of healthcare organizations getting into the decision making about who gets mail or pharmacy, getting outreach calls done, getting mobile units sent to the right communities.

Jvion has also seen the impact that targeted outreach can have on chronic care management, as well as COVID-19. They've done match controlled studies that show significant cost savings when you add a clinical AI to transitions of care to chronic care management and are doing more randomized control trials now.

How to Use AI to Get Back to Work

COVID-19 has and will continue to impact essential workers. But we can lessen that impact. We need to do everything we can to have them trust that we're doing everything as an industry to help and to protect them. This boils down to understanding individual risk, which to date has been informed by data that doesn't really hold up. Yes, certain groups generally have a higher risk, but they're not the only groups who are at risk, and we're seeing the holes in that understanding that lead to tragic outcomes.

There are technologies to help you to track and screen, social distance, but not as many to truly understand an individual's risk and vulnerability.

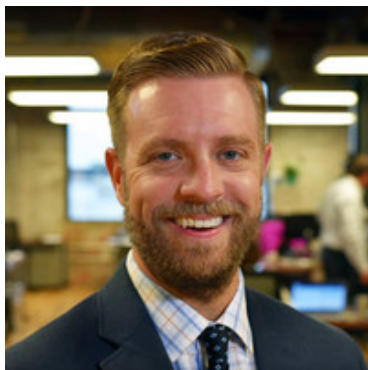
- Apps that employers can get for their employees and for patients where they can interact with chatbot features and get better education
- SMS-based technologies that track those who have been exposed and get daily symptom reports from them over an app or via phone
- Social distancing technologies that track whom you've been in contact with, as well as flag if you're getting too close to another person and help let people know if there are too many people in common areas

The individual's understanding and education coupled with risk role matching piece is a best practice. We believe that we can reduce the negative impacts to employees if vulnerability is matched with the right roles and right equipment. It's not widely accepted best practice yet, but we advocate **matching the vulnerability of the individual with the risk of their role and making any adjustments** if able. Patients need their providers to find the right technology, and that it's going to be important to identify the right solution for your problem.

Key Takeaways

- There are technologies out there that provide insight into vulnerability to understand what the risk of an individual person is that considers both their health and social circumstance.
- There is a lot of noise out there, but there's also signal in that noise. There are good technologies and good partners out there to help you with back to work strategies that are truly mission driven.

Today's Speakers:



Matt Curtin

Sr. Director, Strategic Growth, Pivot Point Consulting

Matt Curtin is a Health Strategy & Solution specialist responsible for executive relationship management, complex engagement architecture, strategic partnership leadership and delivery alignment. He also focuses on macro industry trend alignment, best practice identification and organizational capabilities. Matt leads Pivot Point Consulting's industry relationships with KLAS and HIMSS.

Pivot Point Consulting's Strategic Growth division includes Advisory Services, Solution Architecture, Strategic Partnerships and Enterprise Services and is charged with crafting new solutions, creating unique client partnerships and fostering emerging best practices.



John Showalter, MD, MSIS

Chief Product Officer, Jvion

John Showalter, MD, MSIS, is Chief Product Officer for Jvion and former Chief Health Information Officer at University of Mississippi Medical Center.

Dr. Showalter brings visionary thought leadership on the application of advanced information technology to improving outcomes for patients. His unique education in biomedical engineering, physiology, clinical informatics and internal medicine has allowed him to work at the intersection of those fields to positively impact patient care and health system efficiency.

His work has been recognized with cross-industry awards including ComputerWorld's Premiere 100 IT Leaders and health IT awards such as the CHIME Collaboration Award. Dr.



Showalter is dedicated to using his passion and knowledge to ensure that Jvion's machine has the maximum positive impact for patients.

Make AI apart of your back to work strategy. Contact us at 1-800-381-9681 or letschat@pivotpointconsulting.com