

ivion



Using Jvion to make PSHPs Profitable

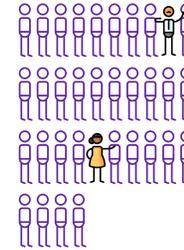


OVERVIEW

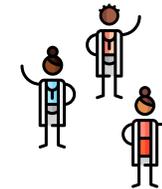
Client Profile: Baptist Health

Baptist Health is a three-hospital, non-profit system serving Montgomery and the surrounding central Alabama region. It is the largest non-governmental employer in the area with nearly 3,400 employees.

An affiliate of the University of Alabama-Birmingham Health System and a partner with Montgomery Surgical Center, [Baptist Health](#) is the first ambulatory surgery center constructed in Alabama. Baptist Health is committed to evaluating and updating its technologies and facilities to remain on the cutting edge of procedures and services. With more than 525 Baptist Health-affiliated physicians, a seasoned clinical staff and a comprehensive offering of medical services, Baptist Health strives to deliver the highest level of care possible.



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“ The best way to lower the cost of care is to drive prevention and effective interventions early and in a way that ensures patient engagement. By knowing who is at risk, whose trajectory we can change, and how to change it, the Jvion Machine provides us the critical pieces of information that will ensure the success of our health plan and the health of our population over the long-term. ”

— **Kelly Benson, Director of Community Care Management, Baptist Health Center for Well Being**

Challenges

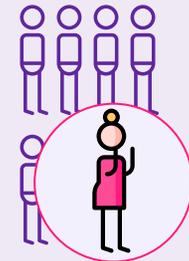
Avoidable admissions and readmissions plague hospitals nationwide, and Provider-Sponsored Health Plans (PSHP) — health plans that are owned by a health system, physician group, or hospital — such as Baptist Health, are particularly vulnerable.

According to a 2017 study released by the [Robert Wood Johnson Foundation](#), a little over 1% of the PSHPs established since 2010 have been profitable. And the report paints a grim future for the remaining plans. The current insurance market, regulatory uncertainty, and potential cuts to Medicare and Medicaid erode what little stable footing was left for the PSHP market.

With potentially avoidable admissions comprising 10 to 14 percent of all admissions for most hospitals, and avoidable admissions equating to \$9.5 million in annual “at risk” profit for an average 300-bed hospital ([Becker’s Hospital Review](#)), lowering rates of readmission and avoidable admissions is critical for effective cost and care management.

Key Challenges

Lowering rates of readmissions and avoidable admissions



Accurate identification of at-risk patients



Personalized interventions

Lower rates of readmissions and avoidable admissions

Lowering avoidable readmissions and admissions requires the accurate identification of at-risk patients and the application of personalized interventions that will address the clinical and socioeconomic factors driving a patient's risk. By avoiding an adverse event and the associated impact to a patient's health, Baptist Health would be able to both improve the quality of care and the cost of care. The challenge, however, was that the predictive capabilities of their existing Cerner EHR system were insufficient to provide the patient-level insights, flexibility, and scalability necessary to meet Baptist Health's needs.

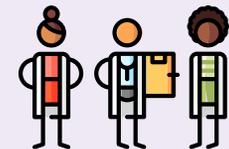
Gather actionable population insights for preventive care

In addition to potential new revenue streams, providers view PSHPs as an effective approach to driving more preventative care, lowering rates of high utilization and avoidable spend, and lowering costs. These savings can be captured as revenue within the health plan if the provider has a strong understanding of the market and covered patient population. Baptist Health knew to be a successful PSHP they would need actionable insights to help their providers better target and manage high-cost, high-risk patients with preventive care interventions.

Gather actionable population insights for preventive care



Better manage high-cost, high-risk patients



Lower rates of high utilization and avoidable spend



Solution

Baptist Health selected the Jvion Machine™ as the system's enterprise Artificial Intelligence (AI) enabled prescriptive analytics solution.

In addition to applying the capabilities of Jvion's Eigen-based engine to employees covered by the PSHP, Baptist Health is using the machine to lower rates of readmissions and patient complications across the care continuum.

Using a unique approach that leverages sophisticated mapping techniques, the Jvion Machine determines a patient's risk, the clinical and non-clinical factors driving that risk, if the patient's risk trajectory can be changed, and — if so — the actions that will most effectively drive to an avoided event.

The output is actionable, delivering highly personalized patient-specific

recommendations with the highest likelihood of improving health. This capability addresses the shortcomings of existing predictive or machine learning models by enabling a more granular and personalized view into each patient's risk of an avoidable event.

Based on data from 16 million patients and a unique use of Eigen-based models, the Jvion Machine was able to quickly apply AI technology to Baptist Health's readmission and avoidable admissions challenges. Currently, Baptist Health is applying the Jvion Machine to CHF, sepsis, COPD, pneumonia, and AMI readmissions as well as employees who are at risk of a major health event.

Results

Over the last two years, Baptist Health saved more than \$4M by targeting and intervening on those covered employees at risk of an avoidable ER or inpatient visit.

Using Jvion's AI-enabled prescriptive analytics, Baptist Health was able to better identify at-risk individuals and take the clinical actions that would keep them healthy and out of the hospital. By avoiding adverse events and their associated impact to a patient's health, Baptist Health has successfully improved the quality of its care while simultaneously lowering the cost of care. As a result, Baptist Health is one of the rare providers finding success with their PSHP.

Operationally, the Jvion Machine has helped better target resources and consolidate Baptist Health's technology landscape. Point solutions, like the one used by clinicians to identify high-risk diabetes patients, have been retired because they were redundant and/or insufficient. This outcome has reduced demands on IT support and ongoing financial and operational investment. And because the Jvion Machine works as the provider's AI asset, Baptist Health is empowered with a solution that can adapt to new demands and patient needs now and into the future.

As a result of its efforts, Baptist Health has:

\$4m

saved by targeting and intervening on those at risk



improved quality of care



reduced demands on IT support and operational investment



become a successful and profitable PSHP