How Diagnostic Robotics unlocks the full potential value of care management

Company Overview

The healthcare industry must move beyond only prioritizing patients already in the hospital for a serious illness and make its strategy for care management more proactive. The traditional, reactionary approach to care management causes health plans to focus on members who are costly and likely require unavoidable acute care or lengthy hospital stays in the short term but fail to consider the long-term risk of members who may have avoidable health incidents in the future.

Providers, payers, and patients are all facing these growing cost pressures, which have been exacerbated by the COVID-19 pandemic. More than half of all hospitals are projected to finish 2022 with negative margins, Kaufman Hall reports. The Business Group on Health, which represents many large employers, says its members are focused on policy efforts that lower healthcare costs.

Diagnostic Robotics' artificial intelligence (AI) models focus on identifying members who could benefit from earlier inter-

vention and are most likely to engage with their health plans to proactively improve their health. In return, care managers gain a more streamlined strategy to prioritize members and health plans can reduce the cost of care.

Diagnostic Robotics differs from other solutions because its models run continuously and adapt to address members' unique health pathways, lifestyles, and external factors like seasonal changes, all with the ability to seamlessly integrate into payers' existing systems. Also, on average, the risk lists provided by Diagnostic Robotics consist of individuals that are younger and healthier than those included in current outreach efforts, which means they are more likely to be impacted by outreach.

Diagnostic Robotics is focused on matching the right member to the right clinical intervention at the right time, while considering a holistic view of the member in terms of medical and other data points.

"Historical approaches to risk prediction focused on the currently most expensive members, often assuming that if a patient is expensive today, then there must exist a clinical inter-

vention that will reduce the member's cost to the plan," says Dr. Kira Radinsky, CEO and Founder of Diagnostic Robotics. "A member who has been dealing with chronic obstructive pulmonary disease for 15 years may only benefit so much by adding dietary consulting to their care plan. But a member who was just recently diagnosed with congestive heart failure and had an avoidable emergency department visit might benefit from guidance on their diet as a proactive approach to their care."

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Health plans that work with Diagnostic Robotics state that they're able to achieve better health outcomes and build better relationships with their members and networks. Providers are using less resources to treat patients and members are paying less.

Saving Money, Working Smarter

With its health plan and provider clients, Diagnostic Robotics analyzes 28 million patients each month, and has produced savings of up to $17,000 per member per year on impacted members.

By adding proprietary, nuanced, and enhanced definitions of risk, based on over 60 billion points of external and claims data, Diagnostic Robotics delivers outsized financial value for health plans. Clients have seen a double-digit percentage decrease in the number of members required for outreach and an increase in cost-saving opportunities.

One health plan experienced a substantial reduction in avoidable emergency department costs, dropping from over $500 to just over $100 per member on successful outreach.

In ongoing work with a leading health plan, Diagnostic Robotics' integrated AI systems detected a 71% early warning rate of end-stage renal disease. This detection enabled physicians to prescribe early interventions, translating to a $37 million cost savings opportunity.

While working with another national health plan, Diagnostic Robotics' AI systems improved the company's existing internal algorithm and found 34% greater savings potential, along with

$29 million in additional savings opportunities.

By leveraging an overlay of diagnosis and procedural data in each model, Diagnostic Robotics is able to expand the scope of addressable members beyond those with known ailments, shifting the focus to members at higher risk of health complications in the future and providing actionable pathways for intervention.

Diagnostic Robotics offers clients more than 30 unique models for different health conditions, including congestive heart failure, spinal care, gastroesophageal reflux disease and behavioral health. Models can also be layered based on causalities, making the output even more effective. Algorithms are built for proactive identification and intervention to reduce costs for members, even if they aren't unduly expensive to the plan today.

Each model can be configured to the needs of clients. These models are designed to be integrated into a health plan's initiatives, such as program enrollment, keeping up with visits to primary care physicians, and annual checkups.

Care management processes are hindered by the need for sufficient and timely preparation prior to any outreach, even if that outreach does not result in successful engagement, and subsequent documentation of these efforts.

The Diagnostic Robotics dashboard provides a streamlined view of the risk list, organized by score and options to filter the list to assist with prioritization and engagement.

Instead of replacing a payer's infrastructure, Diagnostic Robotics seamlessly pairs member and plan information with its large medical datasets, which can include EMRs, ER visits, lab data, pharmaceutical data, eligibility, prior authorizations, and patient questionnaires. With health plans seeing an unprecedented number of claims in recent years, clients appreciate the integration into existing workflows.

By improving care management efficiency, and matching members with relevant clinical programs, Diagnostic Robotics' solution lifts a burden on the provider network, which subsequently benefits the payers supporting those providers as well. Moreover, payers benefit from reduced claim processing time as a result of the models' ongoing analysis and recommendations.

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Fewer members are being identified for outreach, because the Diagnostic Robotics algorithms are focusing on groups of members who will benefit from earlier intervention. As an example, one health plan found a 22% reduction in members requiring outreach. By zeroing in on a smaller group of members, the care management team can focus more time on individuals where outreach and intervention can have improved impact.

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Diagnostic Robotics offers predictions that are actionable and understandable by physicians, while controlling bias through systematic QA. With more healthcare leaders focused on closing disparities in health outcomes in underrepresented groups, this perspective and data can help organizations improve care for all.

A Health Plan's Story - Blue Cross Blue Shield of Rhode Island (BCBS RI)

One health plan shared its experience on working with Diagnostic Robotics and how doing so is helping to reduce costs and provide better outcomes for members.

BCBS RI is working with Diagnostic Robotics' models for congestive heart failure (CHF) and spinal care (MSK) to identify avoidable surgeries and hospitalizations.

In the past, the health plan typically focused on reaching out to members who had recently been in the emergency department or were admitted to the hospital. Utilizing the risk lists developed by Diagnostic Robotics, the company is now surfacing members that haven't historically been prioritized for outreach.

With the MSK model, BCBS RI is leveraging a physical therapy cluster that seeks to identify people that can avoid more serious procedures by doing physical therapy. Ideally, this avoids intensive levels of care, where members typically start engaging the health plan.

"Diagnostic Robotics is highlighting individuals that have a higher risk of being admitted or may need more intensive care in the future," BCBS RI says. "Though these members are more difficult to engage, there is a high probability of changing the trajectory for the member when we have successfully engaged them."

"Access to Diagnostic Robotics' dashboard streamlines care management efficiency," they added. "The team is able to view detailed summaries of what is driving a member's risk, including prioritizing and visualizing their most critical health issues. The dashboard is specifically assisting with reducing preparation time prior to outreach and the visualization tools further aid in projecting the return from these efforts."

They have also been able to transfer insights from the analysis and outreach efforts to accountable care organizations (ACOs) to assist with their management of high-cost conditions.

Diagnostic Robotics is providing opportunities beyond reducing costs and avoidable health incidents, BCBS RI says. "They have developed digital outreach tools to impact member trajectory in the future, such as questionnaires, along with AI-powered insights to determine when outreach will be most effective, such as during prior authorization of a medical need."

The health plan concludes, "We're excited with where our partnership is heading and the processes that can be streamlined through the solutions proposed by Diagnostic Robotics."