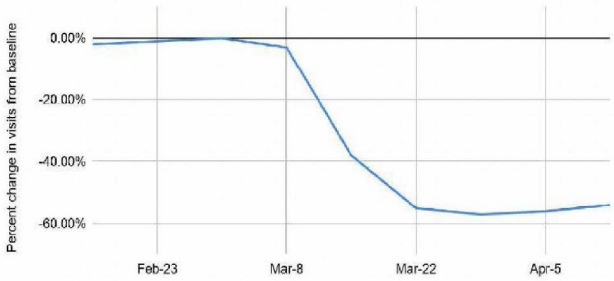
DIAGNOSTIC ROBOTICS

AI/ML Predictive Analytics for Population Health Management

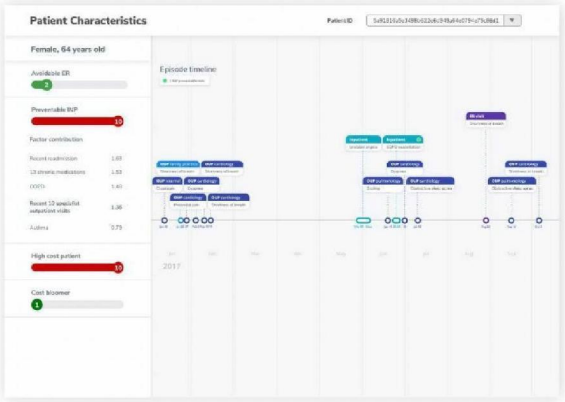
Diagnostic Robotics offers a suite of AI/ML algorithms for predicting deterioration in medical conditions and chronic condition management. The system systematically processes claims and EMR data to identify patients at high risk of deterioration and flags them for intensified care management and preventative treatments to improve clinical outcomes and reduce costs of health maintenance over time.

During the COVID-19 outbreak, medical practices have reported sharp declines in patient visits. With patients not coming in for routine appointments, it has become increasingly important to identify at-risk patients for active outreach for health maintenance.

Sharp decline in number of visits to ambulatory practices during the COVID-19 outbreak



Source: Harvard University / Phreesia



The Diagnostic Robotics system crunches claims and EMR data to stratify patients according to their risk of medical deterioration. High risk patients can be flagged for proactive health management, including assigning care managers and a variety of other interventions.

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Preventable deterioration and **causal** treatment analysis

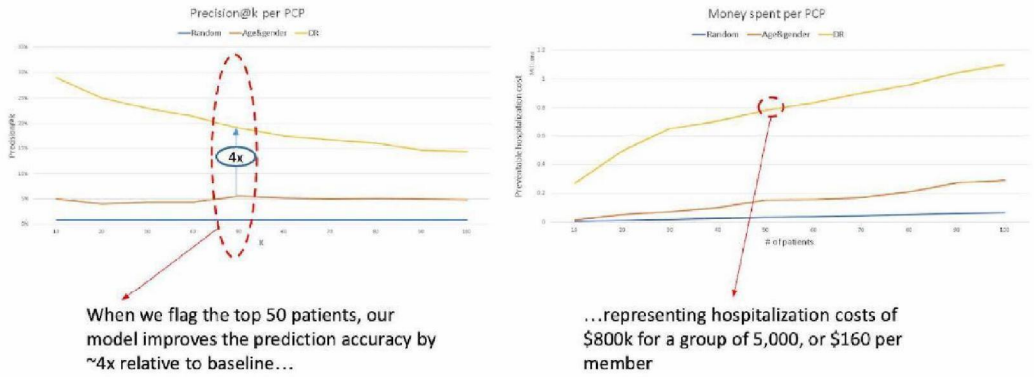
Identifying high risk patients is often insufficient in practice, since the patients most at-risk for high medical expenditures are often patients that require significant medical care that cannot be prevented.

Our system is focused on predicting which patients are most likely to utilize medical care that is preventable if properly treated. We aim to generate savings by accurately identifying the patients most likely to benefit from care management.

We further offer models for predicting the effect of applying an array of treatments and interventions on specific individuals, to identify which patients are most amenable to each treatment.

Improve care management ROI

Care management and preventative interventions are methods that are proven to improve clinical outcomes and reduce total healthcare outlays, but they are ultimately costly investments. Care management requires an upfront investment in preventative services that is realized over time through reduced healthcare outlays down the line. The Diagnostic Robotics solution identifies patients most likely to respond to care management, thereby improving the care management return profile by focusing on the highest ROI patients.



Case study: Diagnostic Robotics models allowed PCP's working with one of the largest US payers to focus on patients with higher potential savings

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The Diagnostic Robotics system can process up-to-date medical records from the COVID-19 pandemic to flag patients that are at risk for medical condition deterioration due to missing their routine treatments.

Implementing such a program can help address the shortfall of medical services accrued during the COVID-19 period, and alleviate the both the clinical and cost burden created by this deficit.

Available prediction modules

General risk / cost predictions
Acute hospitalizations risk
ED visits likelihood
High cost patients
Cost bloomers
Persistent high-cost patients

Patients seeking inappropriate care
Avoidable ED visits

Early detection of health deterioration
ESRD
Opioids disorder
Joint replacements
Spine care
Endometriosis

Chronic conditions management
Preventable hospitalizations
Behavioral health
Medication adherence
Asthma
COPD
Diabetes
CHF
Hypertension

Episode management
Readmissions risk

Our platform can support additional prediction targets for a variety of health system workflows

FOR FURTHER INFORMATION, PLEASE CONTACT:

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