

Analyzing Effectiveness of the HIGHMARK **True Performance Program**



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OBJECTIVES

- * Evaluate the effectiveness of the True Performance (TP) Program
- Analyze which quality metrics in the TP program lead to lower cost
- Investigate other value based reimbursement programs

BACKGROUND

In June 2017, Highmark Inc. launched a value-based reimbursement program called the True Performance (TP) Program for Primary Care Physicians (PCP). The TP program is a pay-for-performance program in which providers get reimbursed based on certain performance measures. The program intends to reduce operational complexity and offer the potential for a significant financial value-based incentive. The aim of the program is based on IHI's (Institute for Healthcare Improvement) "Triple Aim for Healthcare Improvement shown below:

> Improve Experience of Care Improving Health of Reducing Per Capita Cost of Population Healthcare

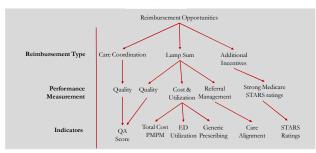


Figure 1 High-level structure of the TP program

This project focuses specifically on the quality component of the program. The QA score in turn is computed using around 30 quality metrics specific to each age-based population (senior, adult, pediatric).

METHODS

Based on a framework created by RAND1 we conducted the evaluation using three approaches:

Environmental Scan: Reviewed other Value Based Reimbursement (VBR) programs to evaluate the state of VBR in the United States

Stakeholder Perspectives: Conducted 2 physician

interviews and spoke to subject matter experts in the area of quality metrics and payment reform

Program Features: Performed regressions to estimate which quality metrics have a statistically significant association with per member per month cost (PMPM score), **Emergency Department** Utilization (ED score) and readmission (RDM score).

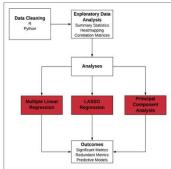


Figure 2 Steps in the quantitative analysis.

RESULTS

* There are mixed results regarding the success of pay for performance programs with most programs not showing an association with lower cost outcomes and better health outcomes2

Stakeholder Perspectives:

- · Feedback given to the physicians does not help them to make any process/ organizational changes
- Physicians spend more time gathering generalized metrics than treating the patients

Program Features:

Exploratory analysis

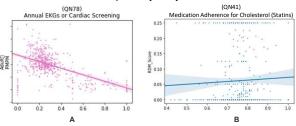


Figure 3: A. Annual cardiac screenings are correlated with lower PMPM costs in Adults B. Most quality metrics are not significantly associated with any of the outcome

Multiple Linear Regression

PMPM Cost	ED Score	RDM Score
Avoidance of Antibiotic treatment in Adults With Acute Bronchitis	Medication Management for People With Asthma	Medication Adherence for Cholesterol (Statins)
Use of Imaging Studies for Low Back Pain (LBP)	Annual EKGs or Cardiac Screening	All-Cause Readmissions
Annual EKGs or Cardiac Screening	Colorectal Cancer Screening	
Adult BMI Assessment	Comprehensive Diabetes Care: Eye Exam (retinal) performed	
Medication Adherence for Cholesterol (Statins)	Use of Opioids from Multiple Providers	

Table 1 Quality metrics found to be statistically significant in Multiple Linear Regression

Lasso Regression

PMPM Cost	ED Score	RDM Score
Breast Cancer Screening	Annual EKGs or Cardiac Screening	Medication Adherence for Cholesterol (Statins)
Colorectal Cancer Screening		All-Cause Readmissions
Medication Adherence for Hypertension: renin angiotensin system antagonists		
Medication Adherence for Cholesterol (Statins)		
Annual EKGs or Cardiac Screening		

Table 2 Quality metrics found to be statistically significant in Lasso Regression

RECOMMENDATIONS

Expected/ Explainable Results

Quality Metrics

- ❖ Collect more data over time to enable better time-series analysis
- Eliminate metrics that are highly correlated since they do not add value and would also help reduce physician fatigue with data entry

Program-Specific

- Give more comprehensive and comprehensible feedback to the physicians on a regular basis, in order to inform physicians where they have improved and where they need to make improvements
- Structure incentives based on behavioral economics³

Evaluation of the Program

- Measure outcomes related to health and patient experience
- * Assess the causal effect of the program using a control group
- ❖ Gather patient-level data in order to understand how the program is affecting patients, not just providers and payor

- Damberg, Cheryl L, et al. "Measuring Success in Health Care Value-Based Purchasing Programs: Findings from an Environmental Scan, Literature Review, and Expert Panel Discussions." Rand Health Quarterly, RAND Corporation, 30 Dec. 2014

 Eijkenaar, Frank, Martin Emmert, Manfred Scheppach, and Oliver Schöffski. "Effects of pay for performance in health care: a systematic review of systematic reviews." Health policy 110, no. 2-3 (2013): 115-130.

 Chee, Tingyin T, et al "Current State of Value-Based Purchasing Programs." Circulation. U.S. National Library of Medicine, May 31, 2016.