MEDICAID PAYERS AND PROVIDERS are monitoring case management and care coordination (CCM) programs as a promising value-based payment strategy, given their potential to help providers succeed under shared savings contracts and achieve Triple Aim goals. Although emerging evidence supports the long-term effectiveness of CCM programs, they are challenging to implement and sustain.

In 2012, Partnership HealthPlan of California (PHC), a health plan serving over 550,000 Medicaid members in Northern California, collaborated with community health centers (CHCs) to pilot a CCM program—the “Intensive Outpatient Case Management Program” (IOPCM)—in four Northern California counties. PHC hired JSI, a public health research and consulting organization, to conduct an evaluation. Methods included: trend analysis of claims data (2011–2015) comparing health care utilization outcomes among IOPCM members (n=262) and a propensity-score matched control group (n=257); a difference-in-difference analysis examining program effectiveness on emergency department (ED) visits and inpatient (IP) admissions after controlling for potential confounders; document review; and interviews with PHC leadership. At 18 months, the program showed greater and sustained reductions in high-cost service utilization among program recipients compared to controls receiving standard care, leading PHC to expand the program.

This blog illustrates five key insights related to program design and evaluation from the productive partnership between PHC and CHCs. Through leading the Delta Center for a Thriving Safety Net, a Robert Wood Johnson Foundation-funded initiative to advance value-based payment and care in the safety net, JSI recognizes that primary care associations, their members, and Medicaid health plans are increasingly seeking ways to implement value-based care and payment models. Primary care associations may want to communicate insights from this blog to their health center members and engage health plans to support the design and testing of new models in value-based care and payment.

1. Embed testing, continuous learning, and evaluative thinking into program design.

PHC was intentional about sharing program design ideas with CHCs early on, conducting internal analysis to measure progress and incorporating partner input for program refinement. For example, IOPCM initially had four delivery models: (1) a CHC-based case manager distributing time across care teams; (2) CHC-based nurses distributing time between intensive case management and routine nursing duties; (3) a case management team hired by the health plan to manage high-cost members across multiple practices; and (4) a case manager hired by the health plan and embedded within a health center, working with multiple care teams. Based on analysis results, PHC dropped the plan-administered models (models 3 and 4) due to their high administrative burden, and recognized that the provider-led models (models 1 and 2) were most effective.

2. Conduct analyses to tailor programs to members’ needs.

By engaging CHCs in the IOPCM program design, PHC recognized that members become high utilizers of the health system for a variety of medical, social, and environmental reasons. To help PHC understand how IOPCM functioned for various members, JSI conducted analyses of ED visits and IP admissions that revealed IOPCM had a different effect by member subpopulation. IOPCM worked for members with chronic heart failure but less so for members diagnosed with a psychotic illness. This finding is important for Medicaid CCM programs to consider because individuals with serious mental illness are among the most vulnerable and costly Medicaid beneficiaries.

These findings showed that few PHC providers were skilled in treating behavioral health conditions. Given these results, PHC and its partners are now training primary care providers in psychiatry and the provision of medication-assisted treatment. Further, they are integrating primary care, mental health, and substance use systems of care at both the provider and payer levels.
Providers tend to focus on optimizing evidence-based outcomes, while payers focus on reducing the total cost of care (TCOC). With IOPCM, PHC recognized its unique role in bridging payer and provider perspectives, and the importance of selecting outcome measures that were comprehensible, calculable, and yielded evidence sufficient for decision-making. TCOC analyses require significant time and resources given the delay to obtain claims data and the expertise needed to analyze claims. Further, desired TCOC reductions can be delayed because programs often initially lead to cost increases associated with outpatient visits and pharmaceutical use.

Building on these lessons, PHC and JSI developed a two-step analytical approach. Step One focused on IP admissions as the key outcome instead of TCOC for several reasons: staff could see the connection between their efforts and IP admissions; IP admissions provided a fair assessment of program effectiveness because they are not dependent on contracted rates, which vary by hospital; IP admissions data are available within a few days (compared to the three-12 month delay for TCOC data); and IP admissions are an acceptable proxy for shifts in TCOC because they drive a significant portion of TCOC. Step Two involved translating evidence-based outcomes into financial terms to support investment decisions. Using assumptions for average costs and actual utilization rates, JSI modeled IOPCM’s financial influence. This approach enabled stakeholders to make fair and expedient business and clinical decisions while also supporting evidence-based outcome measurements.

Evidence shows it takes two to three years for CCM programs to demonstrate favorable trends. In the IOPCM program, results showed ED utilization rates declined for IOPCM and control patients 12 months post-IOPCM. However, at the 18-month mark, IOPCM patients’ ED utilization rates continued to decline while control patients’ rates increased in subsequent time periods.

A longer timeframe for observing outcomes raises challenges for providers and payers pressed to quickly demonstrate program effectiveness. For example, Health Homes for Patients with Complex Needs is an initiative where state Medicaid programs receive two years of an enhanced federal match to finance CCM services for high-need Medicaid beneficiaries. As states implement Health Homes, many Medicaid programs are asking plans and providers to demonstrate cost neutrality in order to sustain the program after two years.

Payers and providers of Health Homes and similar programs may benefit from tying investment to incremental progress and/or advocating for longer timeframes to demonstrate cost neutrality or positive return on investment (ROI). When this is not possible, providers and plans may want to pursue alternate funding strategies to ensure they can continue pilot programs long enough to assess outcomes.

Both PHC and participating health centers revisited their ROI and cost-saving assumptions. Health centers realized the avoidable costs for a small group of CCM patients created a limit to the achievable savings. In order to have a positive ROI, the CCM program cost had to be less than this limit. While PHC recognized that ‘soft’ ROI, or benefits such as improved patient outcomes and higher provider satisfaction, will not pay for a program, they acknowledged the importance of weighing costs against both financial and non-financial returns.

PHC also realized that including a control group in program evaluations is invaluable and feasible even in low-resource settings. Part of doing a cost impact assessment involves recognizing the likelihood of “regression to the mean,” a realistic concern for CCM programs that target high-cost patients. Payers investing in CCM programs will want to assess how much of the utilization changes can be attributed to the program versus regression to the mean.

PHC subsequently expanded its desired ROI to include patient outcomes, higher provider satisfaction, and cost savings over time, and then engaged JSI to conduct an evaluation that included a control group. Using JSI’s evaluation findings along with five internal evaluations, PHC showed that the IOPCM pilot, on average, had a small positive ROI (average ROI 1.2, range 0.4-2.4). Following this assessment, PHC decided to scale IOPCM to the nine most populous counties in its service area and used evaluation findings to refine enrollment criteria and the reimbursement model.

Looking Ahead

This blog highlights how a partnership between a Medicaid health plan and health centers on CCM program design and evaluation was key to effective implementation of a new value-based care and payment model. Given the potential of CCM programs to address payer, provider and patient goals, it is critical to incorporate evaluation into CCM program design and implementation with an eye towards sustaining effective program strategies.