UPMC Health Plan

UPMC High Value Care for Kids: Program Evaluation

EXECUTIVE SUMMARY

UPMC High Value Care for Kids is a one-time payment reform program for children with UPMC *for You* insurance and medically complex conditions. The program pays for care coordinators at participating practices and for physicians' time on care coordination, chart review, and other services not typically paid for by insurance. As of summer 2014, up to 100 families who work with their care coordinator are eligible to receive a $500 prepaid MasterCard toward medical or non-medical purchases to improve the health of their child.

What We Found

PROGRAM ATTRIBUTED SAVINGS: The payment reform achieved gross savings of $1.77 million after controlling for savings that occurred among the comparison group during the same two year period. Savings of $465PMPM were achieved in the first year, and savings of $230PMPM were achieved in the second year.

- **Key Drivers of Savings:** A closer look at the program attributed savings reveals large reductions in inpatient spending (decline of $192 PMPM) and medical services, supplies, and injectable drugs (decline of $96 PMPM).

- **Positive Return on Investment:** Program savings are highly driven by regression to the mean, but the program still yields a strong return on investment even after accounting for that effect. Factoring in the program cost of $423,000 and adjusting for changes in the total cost of the comparison group, the payment reform intervention generated a return on investment of 3.19.

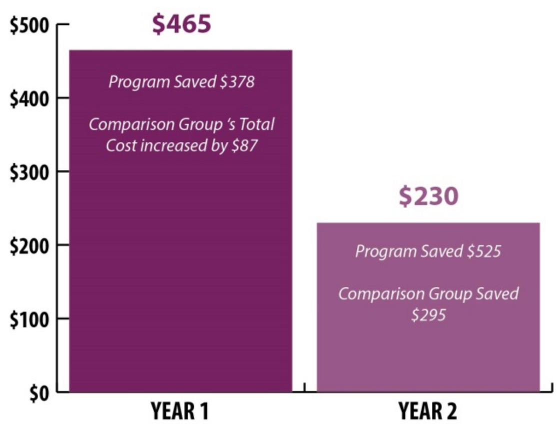
- **Program Savings Unstable :** While meaningful from an accounting perspective, the observed program savings may not be repeatable in the future *(The difference in intervention and comparison means was not statistically significant: p=0.486 in Year 1 and p=0.73 in Year 2. This is likely a result of small sample size: n=213. Detecting significance would require a sample size of 1,356)*. Though the mean savings are no different between the intervention and the comparison groups, median savings were significantly lower among the intervention group *(p=0.044)*.

Payment Reform Achieves Greater Savings than Comparison Group

Though the difference in savings is not statistically significant, the payment reform initiative achieved greater savings than the comparison group in both years. Relative to changes in total cost for the comparison group, the program saved more in the first year.

PMPM SAVINGS IN YEAR 1 Compared to Baseline (3/1/2013-2/28/2014) compared to (3/1/2012-2/28/2013)	PMPM SAVINGS IN YEAR 2 Compared to Baseline (3/1/2014-2/28/2015) compared to (3/1/2012-2/28/2013)

Reduction in Program's Total Cost Relative to Change in Total Cost for Comparison Group ($ PMPM)



NOTE: Difference between intervention and comparison is not Statistically Significant in either year

Year 1 Savings of **$464.93 PMPM*** 2,561 Member Months= YEAR 1 SAVINGS of **$1,190,686**

Year 2 Savings of **$229.90 PMPM*** 2.526 Member Months= YEAR 2 SAVINGS of **$578,454**

TOTAL PROGRAM SAVINGS: $1,769,140
TOTAL PROGRAM COST: $423,000
ROI: 3.19

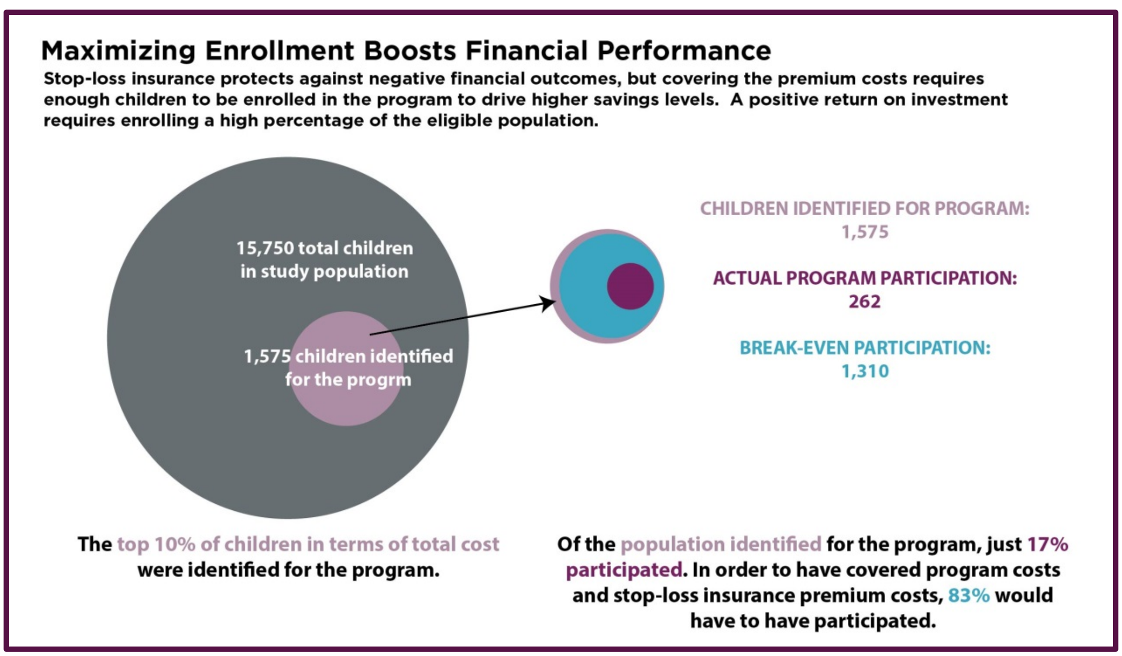
FINANCIAL RESULTS BOOSTED BY FAVORABLE TIMING OF SHOCK CLAIMS: Such a small population means the impact of shock claims can be huge: the program's returns essentially hinge upon their timing and magnitude. While the observed shock claims occurred in such a way as to generate program attributed savings of $1.77 million, under less favorable timing, the program could have operated at a loss of nearly $3 million.

- **High Financial Risk:** With such a small sample of medically complex children, shock claims are more likely and highly disruptive to financial performance. A closer look at observed shock claims and alternative timing scenarios reveals the magnitude of the risk associated with the program.
  - **Actual Program Attributed Savings:** **$1.77 Million**
  - **Program Attributed Savings under Best Case Timing:** **$3.58 Million**
  - **Program Attributed Savings under Worst Case Timing:** **($2.91) Million Loss**

ADEQUATE SCALING COUPLED WITH STOP-LOSS INSURANCE PRESENTS A PATH FORWARD: The program's wide range of potential financial outcomes may deter provider participation, but two program modifications can help manage the risk. A larger population of medically-complex children and stop-loss insurance can serve as safeguards against a negative financial outcome and help incentivize providers to participate in the program.

- **Stop-Loss Insurance Protects Against Worst Case Scenario:** Since the program attributed savings are driven by shock claims, applying stop-loss insurance has a negative impact on the program's return on investment, but it mitigates losses under less favorable shock claim scenarios.
  - Had providers been faced with the worst case scenario, they would have incurred losses of $2.91 million without any stop-loss insurance.
  - With stop-loss insurance, those losses would have been contained to between $1.19 million and $1.24 million depending upon the level of coverage purchased.

- **Larger Population Needed to Drive ROI:** Just 17 percent of the children identified as meeting the program's eligibility criteria actually participated in the program (262 out of 1,575 kids). Had ***at least 83 percent*** of the identified population (1,310 or more kids) participated, the savings would have covered the cost of stop-loss insurance (for claims over $125,000) and program costs.



THE BOTTOM LINE: This analysis provides evidence of cost savings associated with the payment reform intervention. While the small sample size makes it difficult to attribute savings to the program with certainty, the intervention generated large returns relative to the comparison group. These savings were due, in part, to an advantageous timing of shock claims.

Given that shock claims can make or break the program's bottom line, incorporating measures to manage risk can encourage provider participation. This analysis demonstrates that if the program is adequately scaled, participants can generate a level of savings that accommodates the purchase of stop-loss insurance as a protection against an unfavorable shock claim scenario.