



Using Value to Prioritize and Guide Analytics Investments

In an era of declining reimbursement and rising costs, hospitals and health systems are facing an unprecedented threat to revenue. It is all the more important, then, for these organizations to correctly prioritize investments in improving outcomes—including initiatives rooted in analytics—based on each initiative's ability to produce value. Mission Health, North Carolina's sixth-largest health system, offers an insightful blueprint for how to create an effective prioritization tool. Mission uses the tool to engage internal stakeholders, measure the value of its analytics projects, and reveal the right strategic priorities.

BALANCING DEMAND FOR ANALYTICS WITH VALUE

Soon after Mission implemented a Health Catalyst® Analytics Platform built using the Late-Binding™ Data Warehouse architecture (EDW), demand surged for analytics support of outcomes improvement projects. But while the EDW opened up new access to high quality, reliable data, Mission knew it also needed a systematic—and fair—way to prioritize such projects. Whatever method was devised would especially need to prioritize projects based on their ability to produce value and align with Mission's broader strategic priorities.

MISSION DEVELOPS A PRIORITIZATION TOOL

A clinical and business analytics team at Mission got to work to develop prioritization criteria, ultimately identifying six discrete measures, each based on a 4-point Likert scale:

- Breadth of applicability (1= one hospital or clinic, 2= more than 1 clinic; 3 = more than 1 hospital; 4= system-wide)
- Number of users (1= < 9 users; 2 = 9-24 users; 3 = 25-49 users; 4 = 50+ users)
- Frequency of application use (1= less frequently than a month; 2 = monthly; 3 = weekly; 4 = daily)
- Potential cost reduction or revenue enhancement (1= no impact; 2= incremental \$1 to less than \$100K; 3 = \$100K to \$250K; 4 = greater than \$250K)
- Safety (1= creates high risk to safety; 2 = creates low risk to safety; 3 = no impact on safety; 4= improves safety)
- Stakeholder buy-In (1= no buy-in; 2= 5-10 percent buy in of stakeholders; 3= 11-40 percent buy-in and stakeholder champion; 4= greater than 40 percent buy-in and stakeholder champion)

By placing a strong emphasis on data in the selection of improvement projects, we have been able to maximize the value of each one.

We provide the strongest possible support to end-users to maximize the likelihood of their success and the ultimate success of the project.

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These measures were then built into an Excel spreadsheet, with a drop-down menu for internal stakeholders to select the applicable response. Importantly, a weighting system is applied to the six measures and the Likert scale responses to assure the strongest possible alignment with organizational strategic goals.

KEYS TO SUCCESS

Use of the prioritization tool is required for improvement project approval and support; however, consults from the clinical and business analytics team are available if needed to assure benefits are accurately stated. Indeed, this early consultation approach helps to maximize the likelihood of ultimate approval. It also enables the clinical and business analytics team to deal with potential internal stakeholder frustration or pushback by offering them support and encouragement for future approval, if not initially approved.

Proposed projects are reviewed every six months by the clinical and business analytics team, and subsequently presented to a steering committee consisting of senior leadership (for example, the CEO, CIO, CMO, VPs, and physician leaders) for ultimate approval. Each proposed outcomes improvement project is required to establish both financial and non-financial targets for the project. As such, approved projects are subject to retrospective review and comparison of targeted and actual results.

RESULTS

Mission's goal to prioritize healthcare analytics investments to maximize value is delivering on all fronts. Mission's internal stakeholders are bringing informed ideas to the table. Of the 55 projects that have been approved, an estimated 80 percent have met or exceeded their initial targets. Here are some of the impressive values achieved:

- 32 percent reduction in sepsis mortality
- 20 percent improvement in sepsis bundle compliance rate
- 7 percent reduction in LOS for bowel surgery patients

Because of the prioritization tool and early consult process, Mission has realized these values all the more quickly. An improvement process previously could take upwards of 90 days to launch—a wait that has essentially been eliminated.

WHAT'S NEXT

Mission Health continues to refine and improve the prioritization criteria and weighting based on analytics and continuous improvement processes. It's also investigating migration of the tool from Excel into an analytics application. These and other efforts will be considered in support of internal stakeholders who are now more engaged than ever in driving outcomes improvement projects. *

ABOUT HEALTH CATALYST®

Health Catalyst® is a mission-driven data warehousing, analytics, and outcomes improvement company that helps healthcare organizations of all sizes perform the clinical, financial, and operational reporting and analysis needed for population health and accountable care. Our proven enterprise data warehouse (EDW) and analytics platform helps improve quality, add efficiency and lower costs in support of more than 50 million patients for organizations ranging from the largest US health system to forward-thinking physician practices.

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