RIVIR®

CASE STUDY

The Power of RIViR

Identifying and addressing waste to express value and increase market share

The Centers for Medicare & Medicaid Services (CMS) has undertaken a number of payment reforms focused on transforming health care delivery for Medicare beneficiaries. The ultimate goal is to create value by enhancing clinical quality at the lowest possible cost. These efforts have directly affected physician groups, hospitals and accountable care organizations (ACOs) and they face mounting pressure to demonstrate value to their peers while managing risk, saving money, and providing great clinical care.

> To continue on a high growth path, physician groups, hospitals and ACOs need the right tools to manage populations to value and show tangible evidence of their outcome performance using a value-based perspective.

RIViR can help entities express their value and maximize savings

RIViR is an advanced analytics and workflow platform that helps value based risk-bearing health care delivery organizations, Managed Care Organizations and state agencies identify and proactively act on the risks of waste at the population and the patient level. Used by hundreds of organizations in its first generation, RIViR can be used by any industry with a vested interest in managing risk, reducing the total cost of care and clearly conveying value.

RIViR distinguishes itself by using advanced analytics to remove patient factors, giving the user a clearer vision of healthcare waste. While other tools can point to broad categories of waste, they lack the precision of identifying what is modifiable based on patient acuity from normal variation. The knowledge generated by RIViR enables clinicians to effect process changes that can lead to great care at the lowest possible cost. In short, RIViR can provide precise information on how to improve patient care and clinical outcomes while lowering overall costs. An added benefit of the RIViR process is the support provided for key process selection through an evidence-based library and the flexibility to generate knowledge through evaluation of associations between process change and outcome impact using rigorous scientific methods.

Using more than 100 clinical risk models across key hospitalization reasons and clinical groups, RIViR can narrowly define exactly where waste is, what processes generate the waste, and how to make key process changes. **Modified waste through process changes brings savings and the ability to express value to payers, peers and other entities.**

Our approach focuses on three areas:

Opportunity gap analysis:
Use of risk stratification and predictive analytics in evaluating waste after adjusting for patient influences on outcomes. For example, evaluating waste on a risk-adjusted basis for total knee replacement surgeries across four areas: frequency (e.g., high rate of total knee replacements in a population), site of services (e.g., high utilization of inpatient vs. outpatient services), post-acute functional recovery (e.g., high utilization of skilled nursing and inpatient rehabilitation) and procedural complications.

Key process identification and measurement development:
Track progress on closing the identified gaps. Primarily, process measures should be tightly linked to the outcome the practice is trying to affect. For example, evaluating risk-adjusted care patterns for site of surgery and variation within six orthopedic groups which prompted conversations around patient preparation and selection for outpatient surgery and recovery at home.

Program evaluation:
Evaluate the effect of the program on outcomes compared to historical performance or a benchmark comparison group. For example, providing continuous feedback to orthopedic surgeons, administrators and primary care physicians on their outcomes on a monthly basis.

Our unique approach

Case study 1: Providing clear evidence of outcome performance

The challenge

A tertiary care hospital needed to improve their post-surgical outcomes of coronary artery bypass surgery and valve surgery patients, including lowering the utilization of skilled nursing and inpatient rehabilitation and minimizing the risk of rehospitalization.

Our approach

- **Opportunity gap analysis.** By using risk adjusted Medicare fee-for-service data, we identified opportunity gaps for coronary artery bypass surgery and valve surgery in two areas:

Post-acute functional recovery
e.g. high utilization of skilled nursing and inpatient rehabilitation

90-day rehospitalization
e.g. patients at high risk for readmittance into the hospital

- **Key process identification and recommendations.** A high rate of risk adjusted IPAC utilization and 90-day rehospitalization across the two clinical entities was identified. Using risk-adjusted rates, we compared the hospital to its identified peer, Cleveland Clinic, and facilitated leadership commitment to resource a solution.

Physician-specific and risk-adjusted data were provided to define physician performance and engage surgeons to use resources to reduce IPAC and rehospitalizations. Based on the findings and recommendations, the hospital implemented process changes, such as:

Evaluating risk dimensions for readmission and identifying subsequent heart failure readmissions as a key contributor.

Implementing a multidisciplinary team led by physical and occupational therapy to functionally recover patients after surgery and engaging the patient and family at home as the preferred place of recovery.

Empowering physical and occupational therapy as a discharge decision maker once the patient is clinically stable.

Connecting patients at-risk for rehospitalization with a newly developed heart failure clinic.

Creating a nurse practitioner navigator position with cardiac surgery experience to manage post-discharge patients at home and if they go to the emergency room.

- **Program evaluation.** We provided continuous feedback to cardiac surgeons, administrators and physical and occupational therapy on their outcomes on a regular basis.

By moving beyond utilization to risk adjusted outcomes, we provided accountability and key process changes to the hospital, enabling it to **reduce waste, manage risk and provide clear evidence of their outcome performance.**

The Results: The organization was able to provide clear financial and clinical evidence of its outcome performance

Reduced total spending by

$3,700

per surgical episode

Received more than

$4 million in payments

from CMS during BPCI three-year contract

Reduced waste annually on 350 cases by

$1.3 million

Achieved the desired goal of

0.8%

for IPAC utilization

Lowered rehospitalizations from

1.15 to 0.9%

Case Study 2: Demonstrating value to peers and patients

The challenge

A large primary care group with more than 70,000 Medicare beneficiaries in at-risk contracts needed to identify the Orthopedic groups providing value to their patients.

Our approach

By using risk adjusted Medicare fee-for-service data, we identified opportunity gaps for total knee replacements across three of four areas:

1

Frequency

e.g. high rate of TKRs in their population

2

Site of services

e.g. high utilization of inpatient vs. outpatient services

3

Post-acute functional recovery

e.g. high utilization of skilled nursing and inpatient rehabilitation

4

Procedural complications

e.g. this group's quality is above national average

Key process identification and recommendations

Found a high rate of TKR in their population and recommended an evaluation of the orthopedic groups' patient selection criteria. We helped the primary care group develop an evidence-based conservative management option for patients with knee osteoarthritis which was not previously available to the patients.

Evaluated risk adjusted care patterns for site of surgery and variation within six orthopedic groups which prompted conversations around patient preparation and selection for outpatient surgery and recovery at home.

Evaluated risk adjusted SNF and Inpatient Rehabilitation use after surgery. The group focused on prehabilitation and created expectations and resources for recovery at home for patients.

Program evaluation

We provided continuous feedback to orthopedic surgeons, administrators and primary care physicians on their outcomes on a monthly basis.

By moving beyond utilization to risk adjusted outcomes, we provided accountability and key process changes to the primary care group to manage the six orthopedic groups caring for their patients. **The primary care group was able to reduce waste, manage risk and provide clear evidence of their outcome performance.**

The result: $2.6 million in annual savings

Reduced total spending by
$3 per member
per month for primary care group patients

Total waste **reduction** amounted to
$2.6 million annually

Total knee replacement rates **dropped** from 14 / 1000 to the desired goal of
12 / 1000

Outpatient site of surgery **increased** from
30% to 80%

Use of post-acute care **dropped** from
22% to 6%

Financial results of the primary care at-risk population demonstrated a reduction in frequency of knee replacements in the primary care group population as well as a large shift in site of service and use of IPAC for patient functional recovery. There was no increase in complications during the time frame and the net effect of these process changes was **a net reduction in spending of over $2.6 million without loss of clinical quality.**

Let's partner.

We invite you to partner with us to more clearly demonstrate value and reduce waste. RIViR encodes, streamlines and automates clinical risk models, evidence-based care redesign metrics and program outcome evaluations. Such approach has shown proven results of savings in the millions of dollars. Following the same approach outlined above, we can create a tailored and easily customizable solution within RIViR to evaluate value across clinical areas to create efficiencies and maximize savings.

Visit **qlarant.com** for more information.