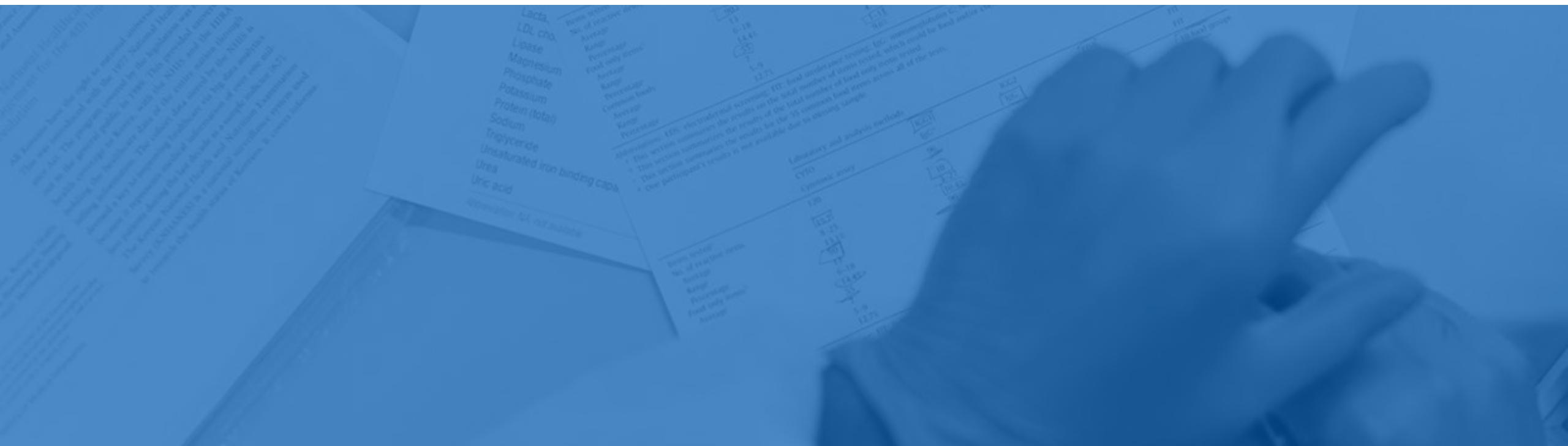


QI Power Hour with  
Ani Galstyan

# Embedding value in care: A roadmap for data-driven and clinically led transformations





# Land Acknowledgement



## Let's chat

Please share your questions, comments, and ideas in the chat during today's session.

# | Past sessions

## **Crisis meets connection: How Saskatchewan reinvented mental health supports**

Speaker: Michael Seiferling

## **Building a healthier future: How Saskatchewan is shaping the next generation of health research**

Speaker: Megan Vanstone & Emiliana Bomfim

[saskhealthquality.ca/training-webinars/qi-power-hour-webinars](http://saskhealthquality.ca/training-webinars/qi-power-hour-webinars)



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# Introducing



**Ani Galstyan**

Executive Associate to the  
Deputy President and CEO

CIUSSS West-Central Montreal



**Caroline Beck**

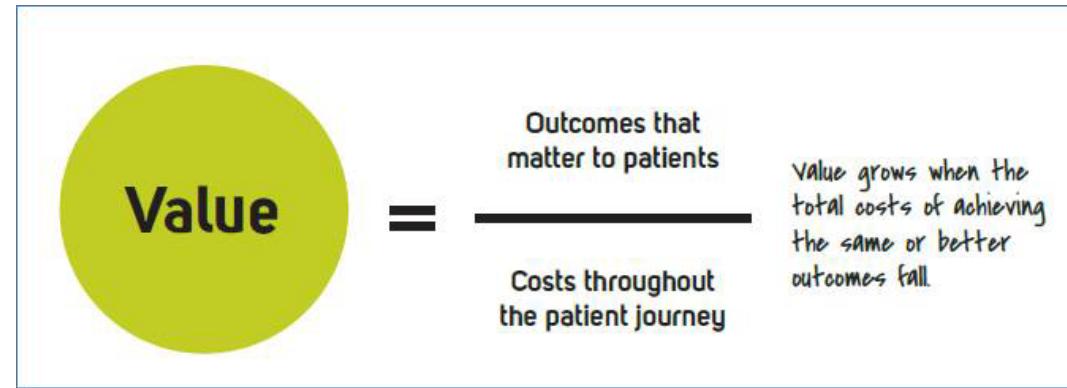
Project Director

Saskatchewan Ministry of  
Health

# Grounding Our “Why”: The Four Bettters



# What is Value in Health Care?



Understanding value requires the measurement of outcomes that are important to patients and the cost of the full cycle of care for those outcomes

Harm, adverse events, and other issues decrease value and reduce access to care

# A collaborative undertaking



## Key partners:

- Saskatchewan Health Authority (SHA)
- eHealth Saskatchewan
- Saskatchewan Cancer Agency (SCA)
- Health Quality Council (HQC)
- Saskatchewan Ministry of Health
- PowerHealth Solutions
- Canadian Institute of Health Information (CIHI)
- Countless subject matter experts across the system!

# Learning from our Peers: VBHC from Concept to Practice

- The IVHC Project will help provide the foundation and tools to understand and assess value in health care. However, real impact comes from how these tools will be used in practice.
- We have much to learn from peers who have translated data into meaningful improvement!





**vos soins partout**  
care everywhere

# Embedding Value in Care: A Roadmap for Data-Driven and Clinically-Led Transformation

**Ani Galstyan, PhD**

Executive Associate to Deputy President and CEO

CIUSSS West-Central Montreal

Centre intégré  
universitaire de santé  
et de services sociaux  
du Centre-Ouest-  
de-l'île-de-Montréal

Québec

 Hôpital général juif  
Jewish General Hospital



HÔPITAL D'ENSEIGNEMENT  
DE L'UNIVERSITÉ MCGILL | A MCGILL UNIVERSITY  
TEACHING HOSPITAL

# Introduction of organization

## Integrated Health and Social Services University Network (CIUSSS) for West-Central Montreal

**35** health care centers providing a variety of services across the continuum of care.

Staff over **13,000** people

**700** physicians

**1** University teaching hospital

**6** CHSLD sites

**6** CLSC

**3** Rehab hospitals

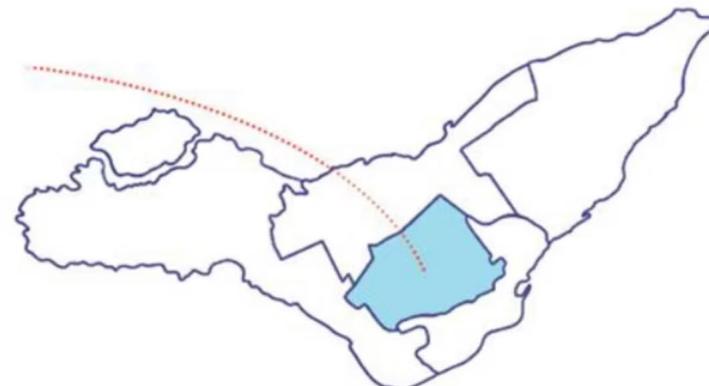
**567** Beds

**23 000** patients per year

**95 000** visits to the ER

**300 000+** external consultations

Population of **345 275**  
**18%** over the age of 65  
**52%** come from off our territory



### **Key Strategic Areas :**

- Patient-Centered Care
- Clinical Excellence
- Research and Innovation
- Education and Training

# Motivation: An Urgent Need to Rethink Our Healthcare System.



## Aging population

Growing pressure on available resources.



## Workforce shortage

Difficulty maintaining essential services.



## Constantly rising costs

Need to rethink resource allocation.



## Limited accessibility

Waiting times for specialized care.



# VBHC System: A Computer-Like Architecture

## The Hardware

IT infrastructure and data systems that capture outcomes and costs.

Like a computer's physical components, this forms the foundation.



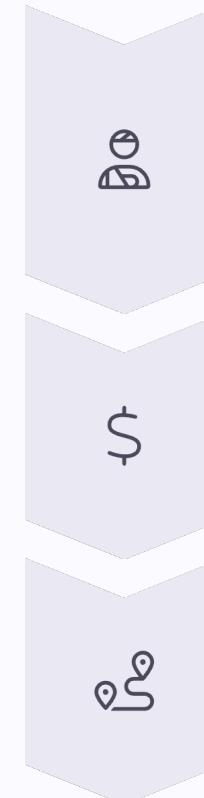
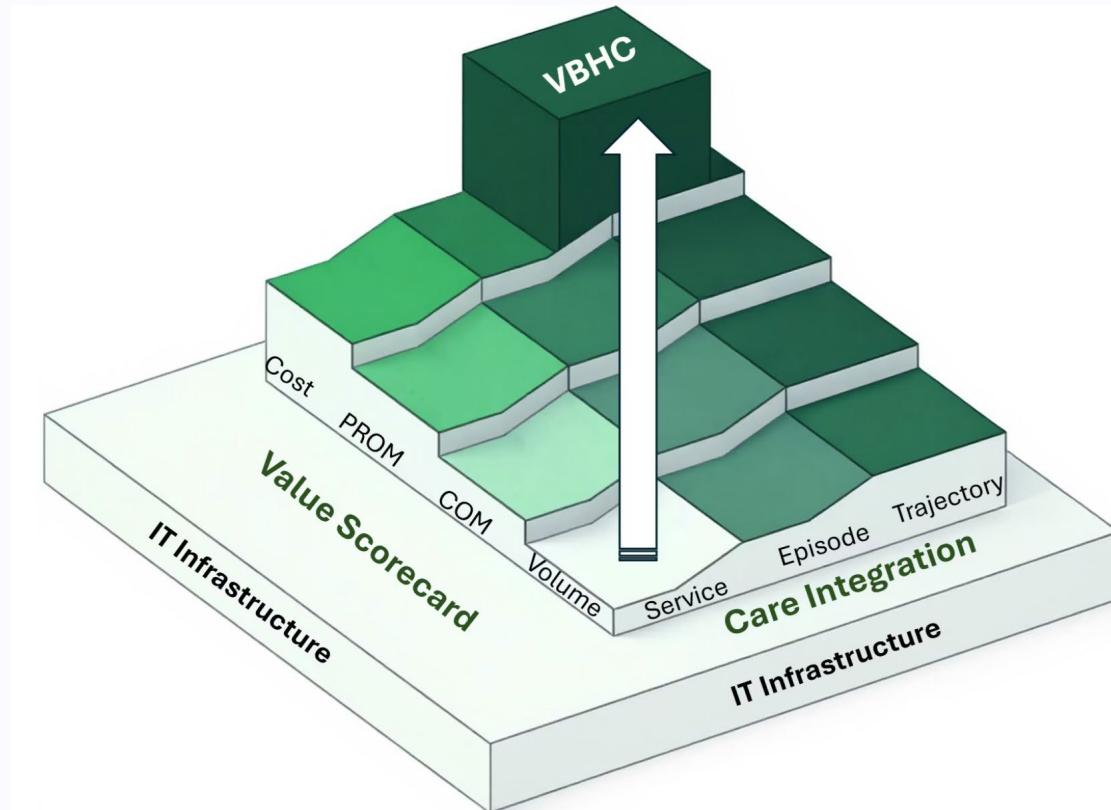
## The Software

The human element: clinical leadership, culture change, and education.

Like operating systems and programs, this drives function and purpose.



# Building the Hardware : From Concept to Practice



**Patient Outcomes**

Health results that matter to patients.

**Total Costs**

Complete financial picture of care.

**Care Pathways**

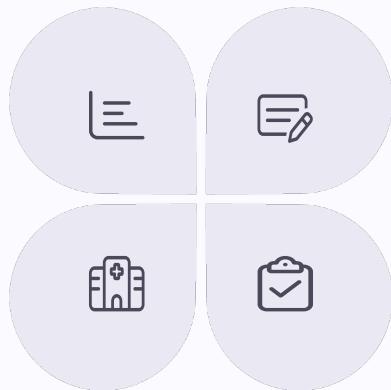
Clinical journeys with variations.

# Data Visibility

## Missing Critical Elements

### Operational Indicators

Focus on workflow efficiency metrics.



### Structural Data

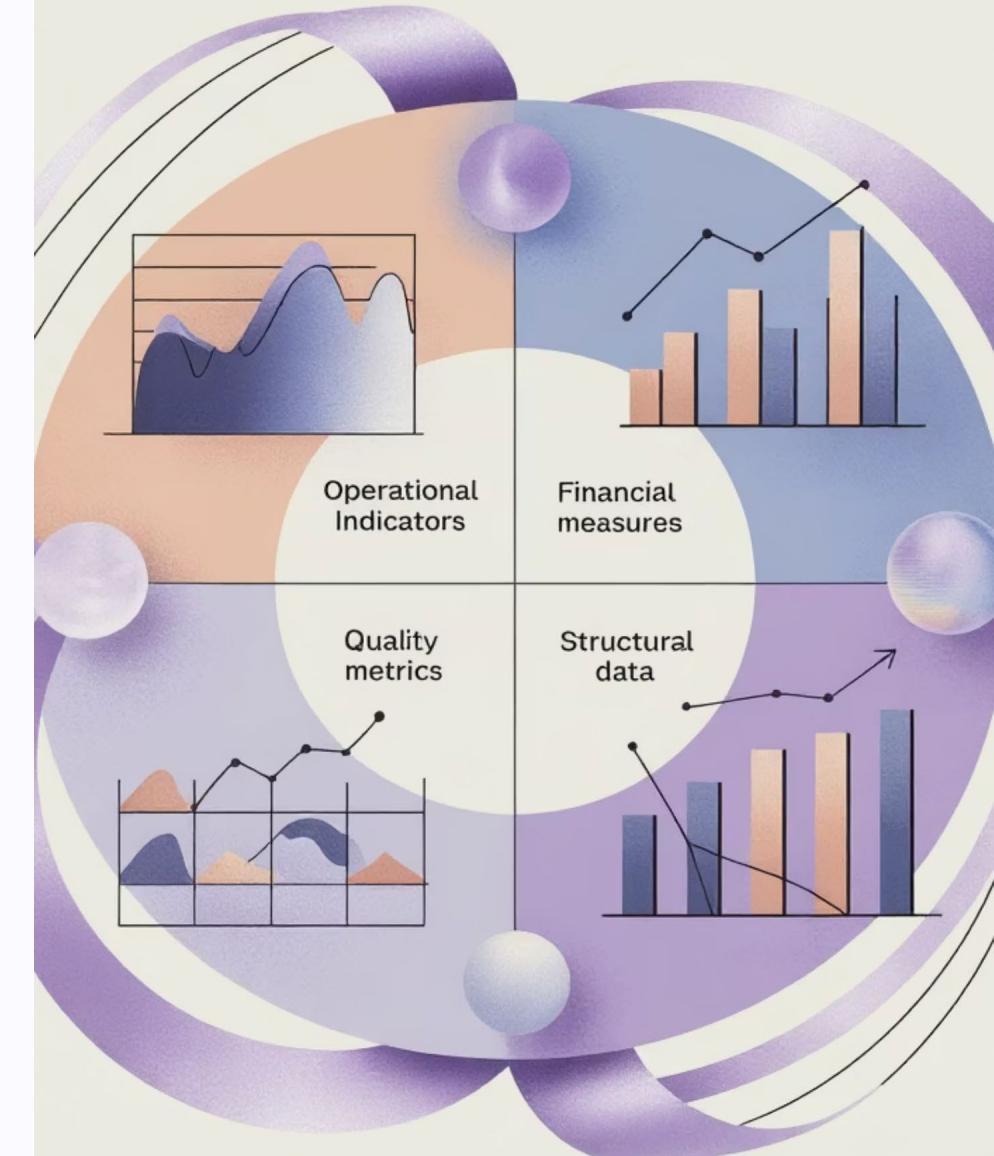
Assess system capacity not effectiveness.

### Financial Measures

Track expenses without linking to outcomes.

### Quality Metrics

Measure processes rather than patient results.



# IT Infrastructure: Power BI Portal



## Multi-Platform Integration

Combines data from disparate healthcare systems into a unified view.

## Quality Indicators

Tracks measurable quality metrics alongside clinical outcomes.

## Outcome-Cost Connection

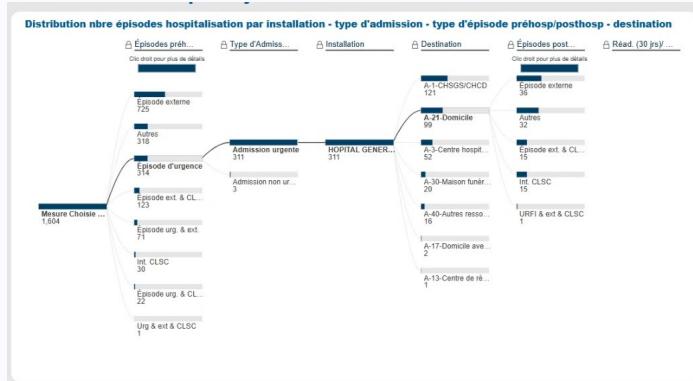
Links patient outcomes with actual care expenditures.

## Actionable Insights

Translates complex data into clear improvement opportunities.

# Trajectory Analysis

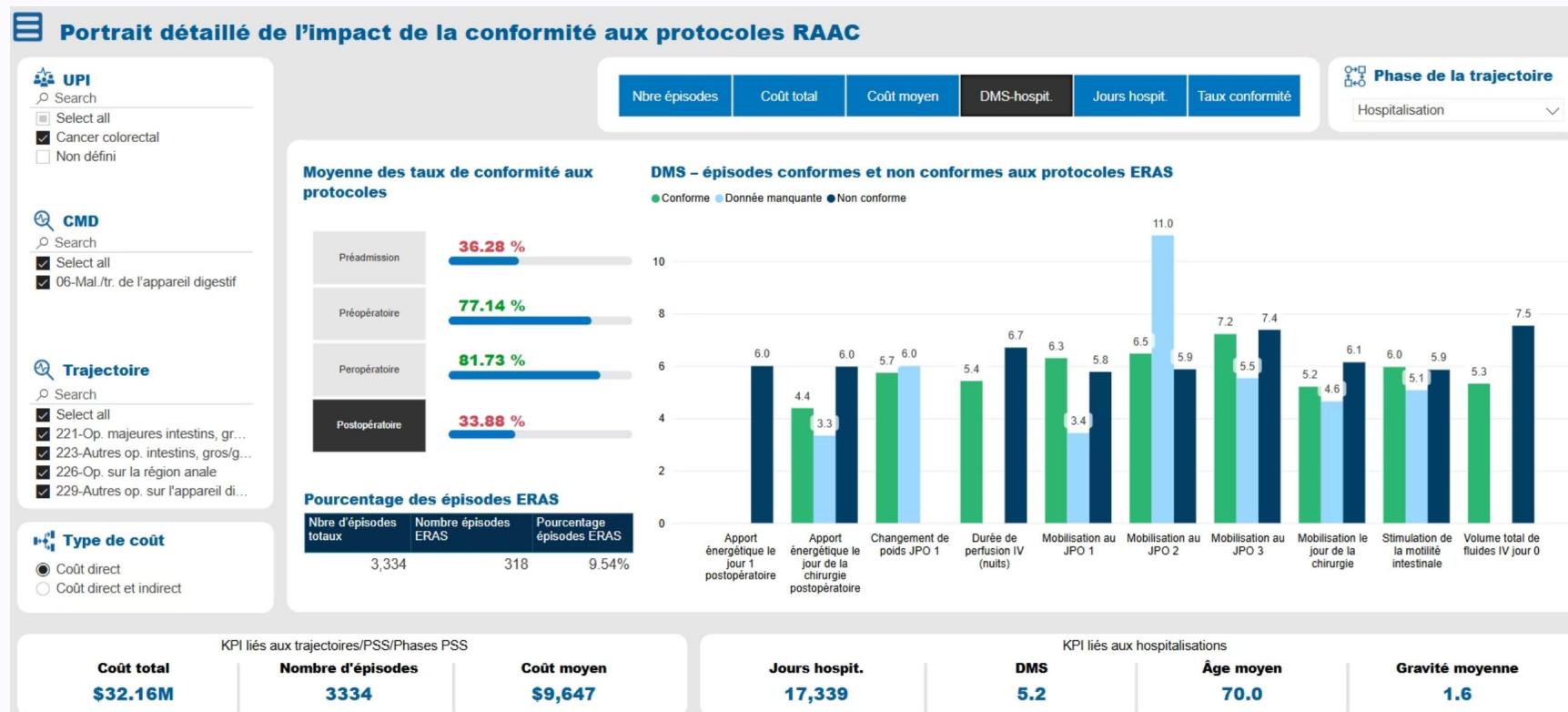
## A tool to transform collaborative practices into integrated practices



- Map the trajectory of patients in the healthcare system.
- Evaluate the impact of changes on the total cost of the trajectory.
- Enforce the cohesion and efficiency of the different stakeholders involved.
- Understand complex interactions and optimize overall outcomes.

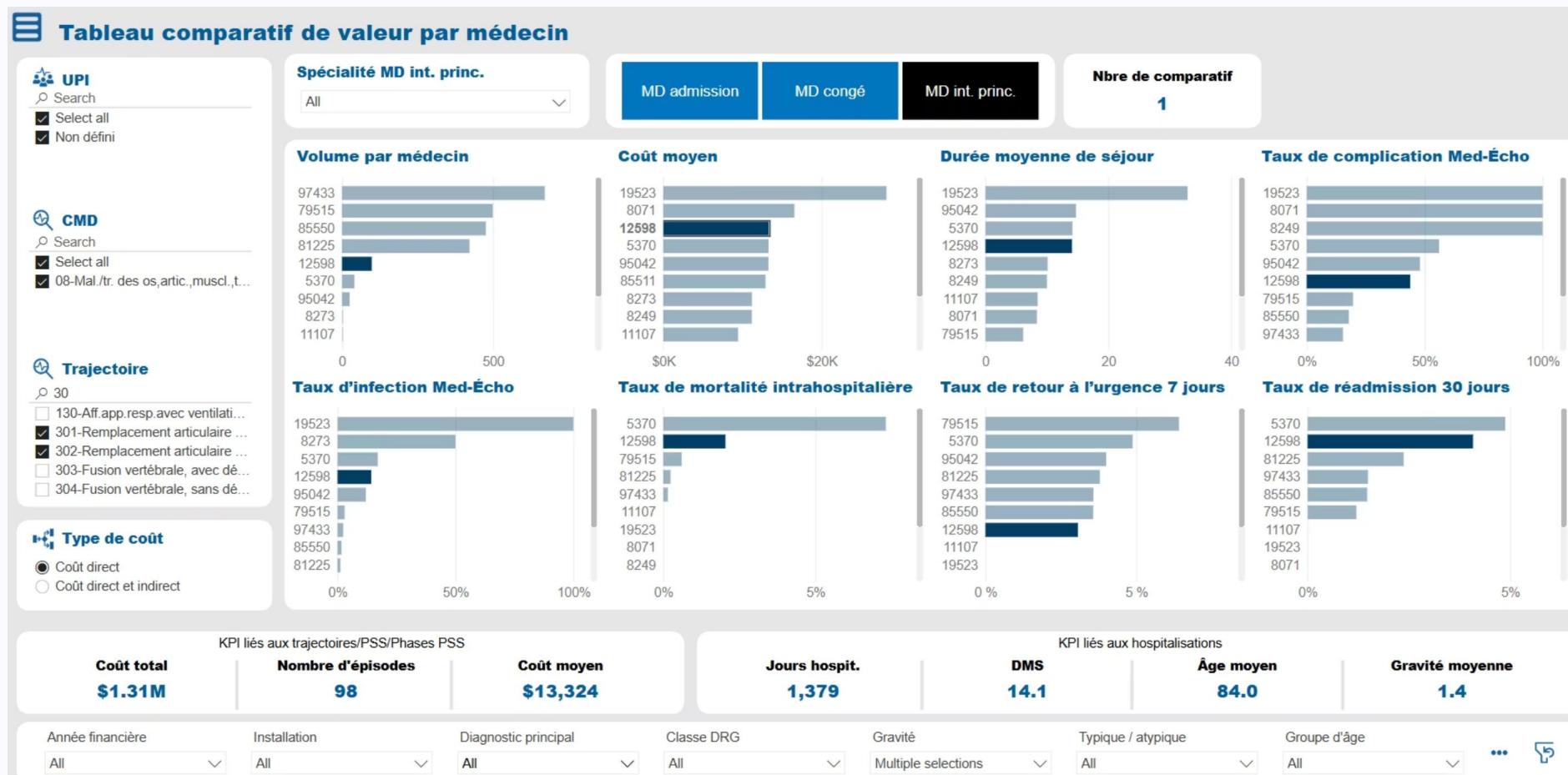
# Quality and Variability Analysis

The impact of compliance rate to ERAS (Enhanced Recovery After Surgery) best practices on the LOS.



# Value Scorecard

Culture of transparency and improvement through benchmarking



# Value in Numbers: Tracing the Link Between PROM Scores and Total Cost

**Portrait détaillé de la variabilité et de l'impact des résultats cliniques**

**UPI**

Search

Select all

Maladie coronarienne

Maladie des valves cardiaques

**CMD**

Search

Select all

(Blank)

01-Maladies et troubles du syst...

02-Maladies et troubles de l'œil

03-Mal./tr., oreille,nez,bouche,...

**Trajectoire**

Search

Select all

(Blank)

003-Transplantation de moelle ...

004-ECMO/trachéo +vent.artif...

005-Trachéo +vent.artif.>96H, ...

**Type de coût**

Coût direct

Coût direct et indirect

**Capital social**

Phase	Mauvais (%)	Modéré (%)	Bon (%)
Initial	23.53%	52.94%	23.53%
3 mois	20.00%	44.67%	33.33%
6 mois	38.46%	53.85%	7.69%
Final	23.08%	46.15%	30.77%

**Santé mentale**

Phase	Mauvais (%)	Modéré (%)	Bon (%)
Initial	51.61%	32.26%	16.13%
3 mois	52.00%	36.00%	12.00%
6 mois	59.09%	22.73%	18.18%
Final	52.38%	23.81%	23.81%

**Santé physique**

Phase	Mauvais (%)	Modéré (%)	Bon (%)
Initial	64.71%	35.29%	0%
3 mois	73.33%	26.67%	0%
6 mois	69.23%	30.77%	0%
Final	84.62%	7.69%	7.69%

**Nombre de questionnaires envoyés**  
**17**

**Nombre de questionnaires avec réponse au jalon initial et final**  
**13**

**Analyse des résultats par année financière selon l'indicateur - Capital social**

Classe des scores (Au Jalon initial)	Nombre de questionnaires avec réponse au jalon initial et final	Coût moyen	Score Moyen Jalon initial	Score Moyen Jalon Final	Tendance
Bon	2	\$24,448	5.00	4.50	⬇️
Modéré	8	\$14,250	3.38	4.00	⬆️
Mauvais	3	\$42,400	1.00	1.67	⬆️
<b>Total</b>	<b>13</b>	<b>\$22,315</b>	<b>3.08</b>	<b>3.54</b>	<b>⬆️</b>

**KPI liés aux trajectoires/PSS/Phases PSS**

Coût total	Nombre d'épisodes	Coût moyen	Jours hospit.	DMS	Âge moyen	Gravité moyenne
<b>\$382.84K</b>	<b>17</b>	<b>\$22,520</b>	<b>234</b>	<b>13.8</b>	<b>70.7</b>	<b>2.8</b>

**KPI liés aux hospitalisations**

Année financière

All

Installation

All

Diagnostic principal

All

Classe DRG

All

Gravité

All

Typique / atypique

All

Groupe d'âge

All

...



# Beyond the Numbers

**Data Alone Is Insufficient**

Technology provides insights but can't drive change by itself. People must interpret and act on information.

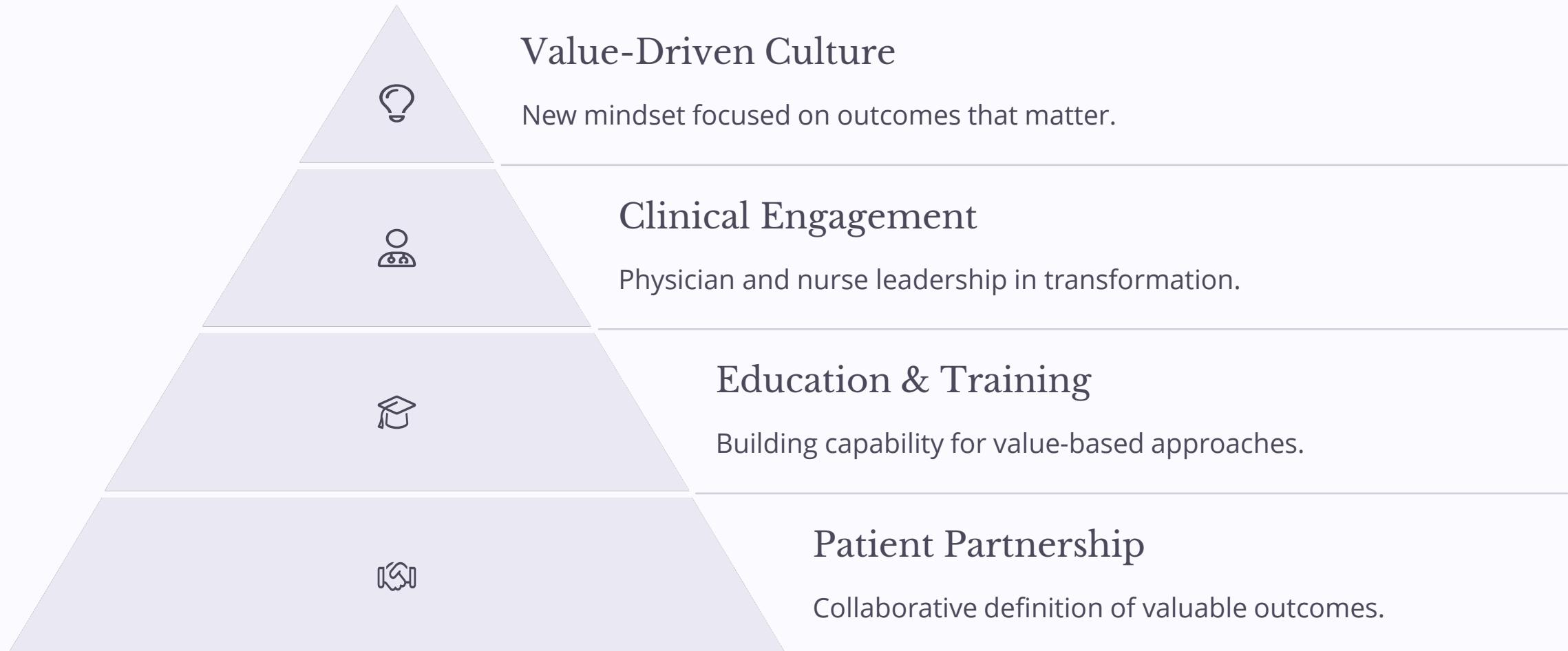
## Clinical Leadership Required

Physicians and nurses must champion value-based approaches. Their expertise translates data into practice.

## Cultural Transformation Needed

Shifting from volume to value requires new mindsets. Organizations must embrace outcome-focused thinking.

# Installing the Software: The Human Element





# Value Transformation Office (VTO)



## Strategic Direction

Sets clear vision and roadmap for VBHC implementation.



## Change Management

Coordinates efforts to transform clinical practice.



## Technical Oversight

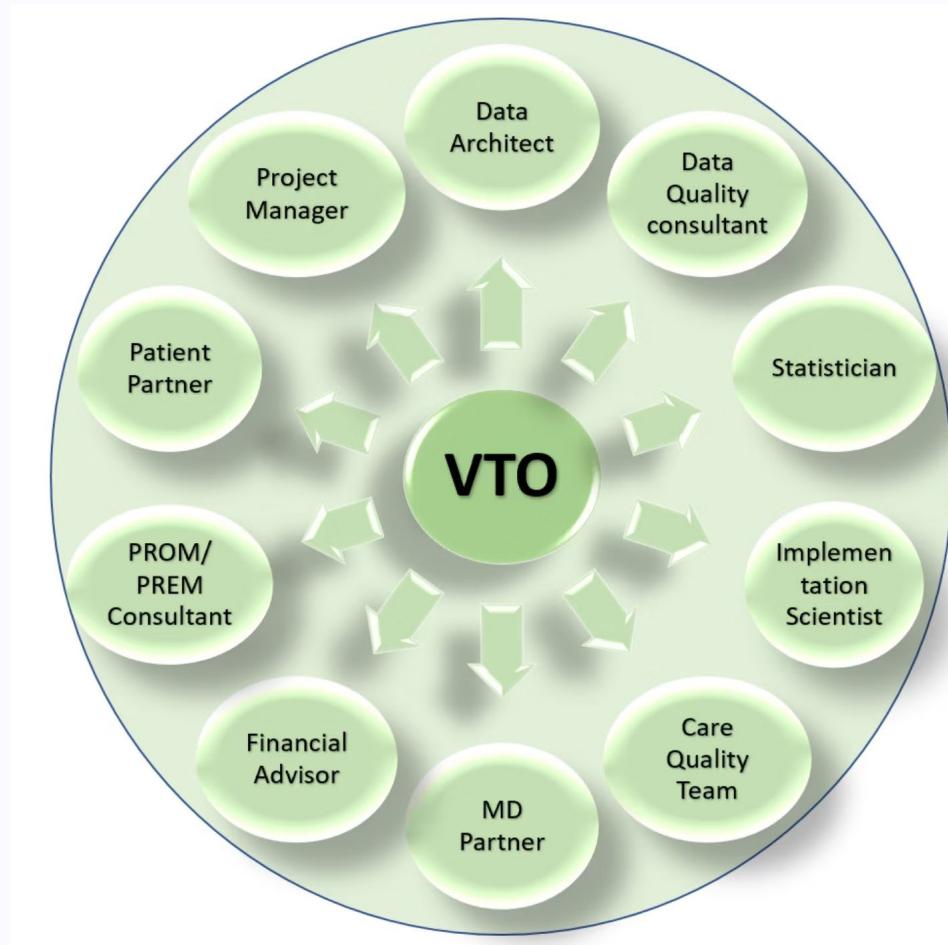
Oversees creation of necessary technical capabilities.



## Stakeholder Alignment

Brings clinicians, administrators, and patients together.

# VTO's Role in Cultural Shift



## Education & Training

Building VBHC literacy across clinical and operational teams.



## Opportunity Identification

Analyzing data to find high-impact improvement areas.



## Implementation Support

Providing hands-on guidance to teams adopting VBHC practices.



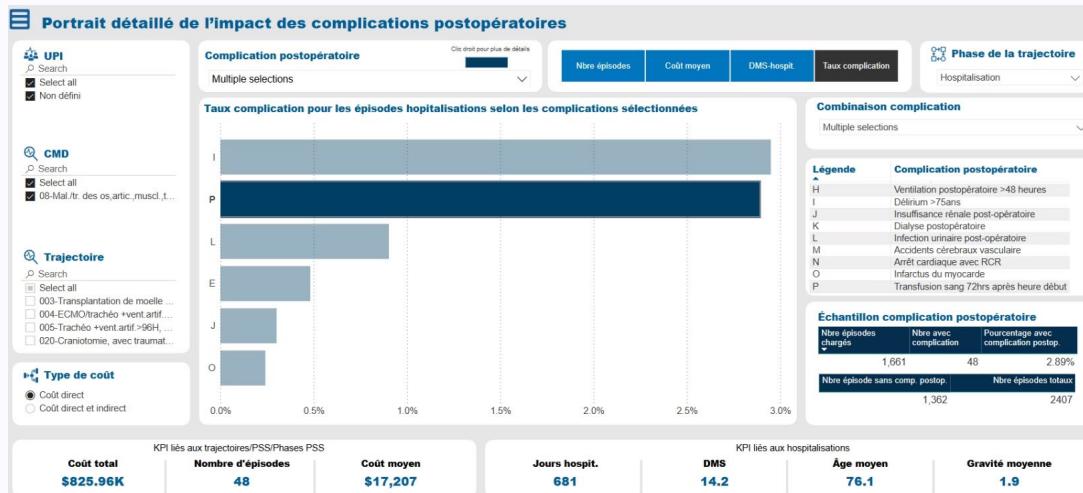
## Cross-Department Alignment

Ensuring consistent value approaches throughout the organization.

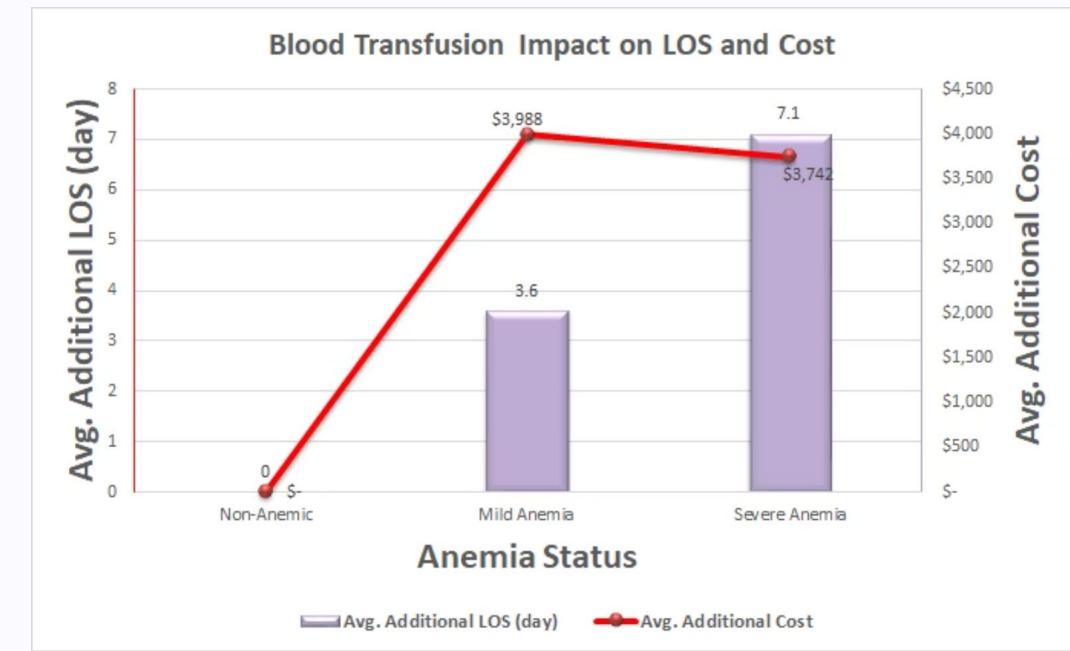
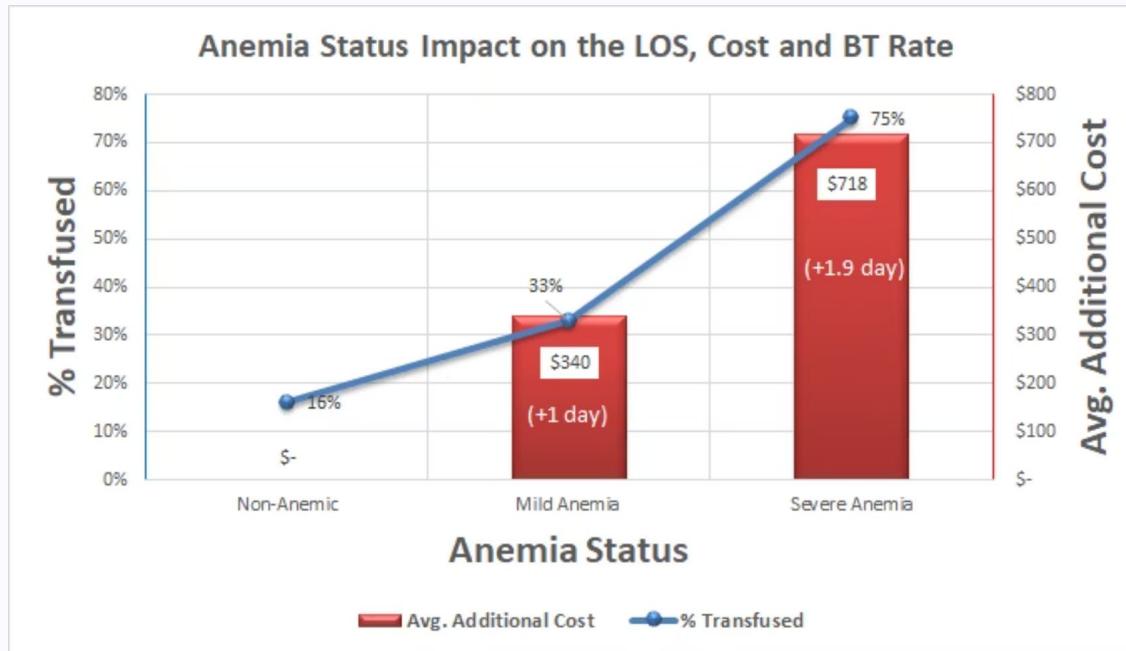
# Case Study #1 : Quality Analysis

## Prioritization of projects based on added value

Analysis of the clinical and financial impact of postoperative blood transfusions.

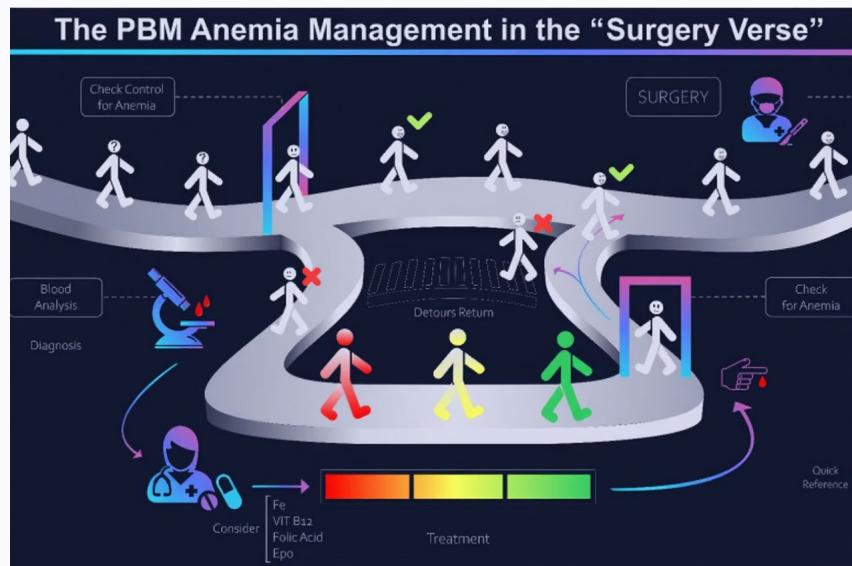


# Root Cause Analysis : Anemia and Blood Transfusion



Annual Impact	
Extra hospital days	3288
Additional expenses	\$2,078,222

# Prevention : Patient Blood Management Program

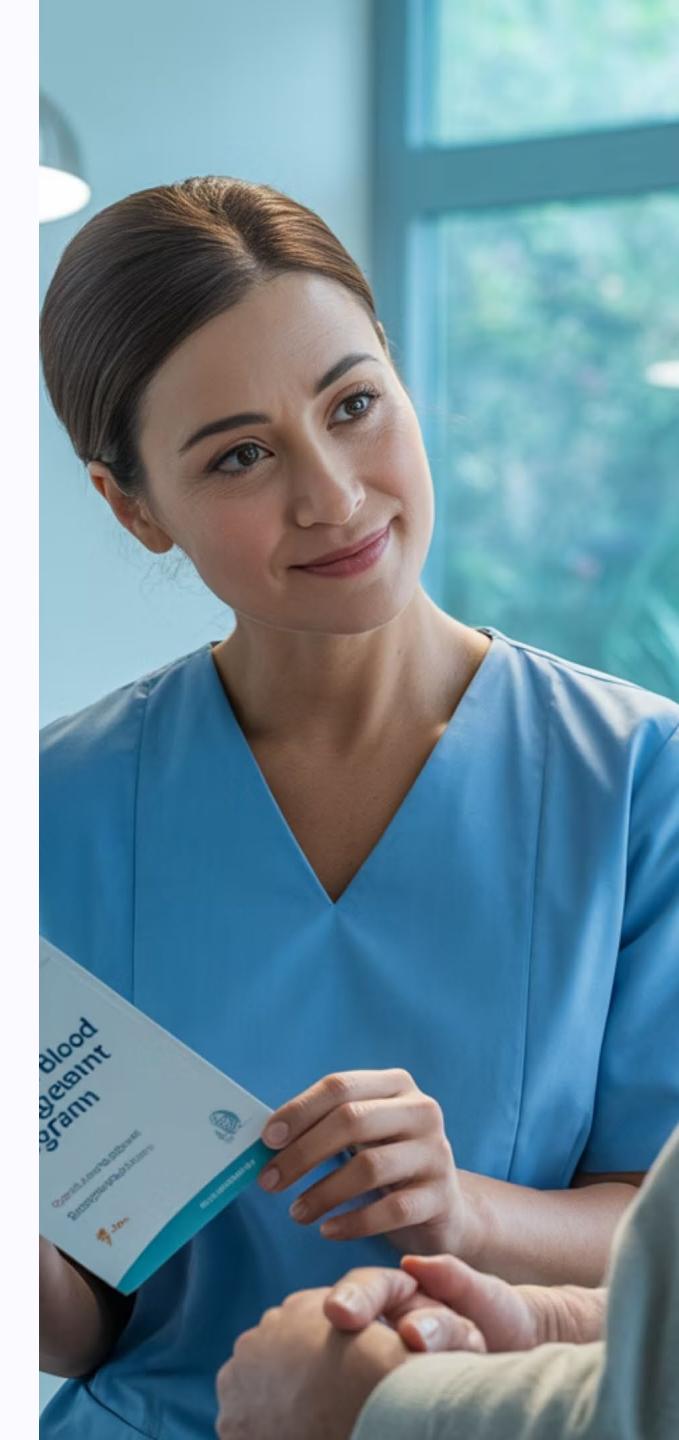


Investment in anemia clinic - \$ 128K

Only from iron deficiency treatment before surgery (18%)

Total Annual Benefits - \$364K

- ROI (Year 1): 184%
- ROI (Year 5): 193%



# Case Study #2 : Trajectory Analysis

Impact of integrating post-discharge rehabilitation into the cardiac trajectory on the patient's health outcome and the cost of the care.



## Summary of Improvements

Outcome Measure	Pre	Post	Change Type	% Change
Total Physical Activity	285 min/week	427 min/week	Increase	+49.8%
6-Minute Walk Test (6MWT)	432 m	479 m	Increase	+10.9%
Duke Activity Status Index (DASI)	7.1	8.9	Increase	+25.4%
Sitting Time	9.5 hrs/day	8.5 hrs/day	Decrease	-10.5%
Sit-to-Stand (30 sec)	14.4 reps	17.4 reps	Increase	+20.8%

## Psychosocial Outcomes Summary

Measure	Pre	Post	Change Type	% Change
PHQ-9 (Depression)	7.46	2.04	Decrease	-72.7%
GAD-7 (Anxiety)	5.58	2.01	Decrease	-64.0%

Costing Sector	Total Cost (Direct+Indirect)		Difference
	Rahab. Completed	Rehab. Non Completed	
<b>Average Cost per Cardiac Rehab Episode</b>	<b>\$ 2,203.30</b>	<b>\$ -</b>	<b>\$ (2,203.30)</b>
Inpatient	Pharmacy	\$ 23,355.92	\$ 33,604.54
	Care Unit	\$ 487,179.08	\$ 635,685.54
	Professional Services	\$ 35,381.81	\$ 34,571.04
	OR	\$ 199,110.96	\$ 289,609.75
	Cath Lab	\$ 218,543.79	\$ 169,405.95
	Imaging	\$ 44,534.15	\$ 48,277.84
Outpatient	Outpatient	\$ 69,965.00	\$ 135,264.82
	Emergency	\$ 106,735.37	\$ 115,045.84
	<b>Total Cost</b>	<b>\$ 1,184,806.08</b>	<b>\$ 1,461,465.32</b>
Nb of admitted patients		42	46
<b>Average Hospital Cost per Patient</b>		<b>\$ 28,209.67</b>	<b>\$ 31,770.99</b>
<b>Average Cost per Trajectory</b>		<b>\$ 30,412.97</b>	<b>\$ 31,770.99</b>
Readmission Rate (30 days)		7%	9%
Readmission Rate (60 days)		10%	24%

# Key Success Factors



## Co-creation with clinicians

User-centric development facilitating ownership.



## Agile Approach

Rapid field testing and continuous improvement.



## Strategic Alignment

Consistency with the organization's "care everywhere" vision.



## Data Transparency

Reliability and accessibility promoting team engagement.



# Three Skill Domains of VBHC Expertise

Successful value-based healthcare delivery requires a balanced integration of digital proficiency, human-centered capabilities, and deep clinical knowledge. Each domain plays a distinct yet interconnected role.

## Digital and Analytical skills

Data analytics, digital tools, KPI measurement, AI-LLM and implementation methodologies

## Clinical Skills

Ensure that improvement efforts remain anchored in the realities of patient care and evidence-based practice.

## Human Skills

Bridge the gap between theoretical frameworks and real-world healthcare transformation.

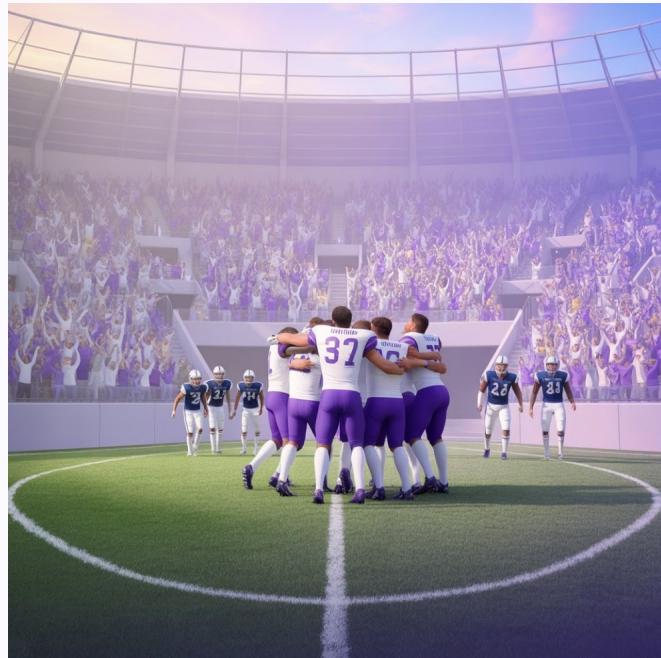
- ⓘ **Critical Reality:** These powerful methodologies are tools, not solutions. Without anchoring them to VBHC principles—improving **outcomes that matter to patients** while managing costs—they risk optimizing the wrong things.

# Positive-Sum Competition in Healthcare

A positive-sum scenario occurs when all participants can benefit simultaneously.

## Not a zero-sum game

Not a win-lose dynamic where one party's gain is another's loss



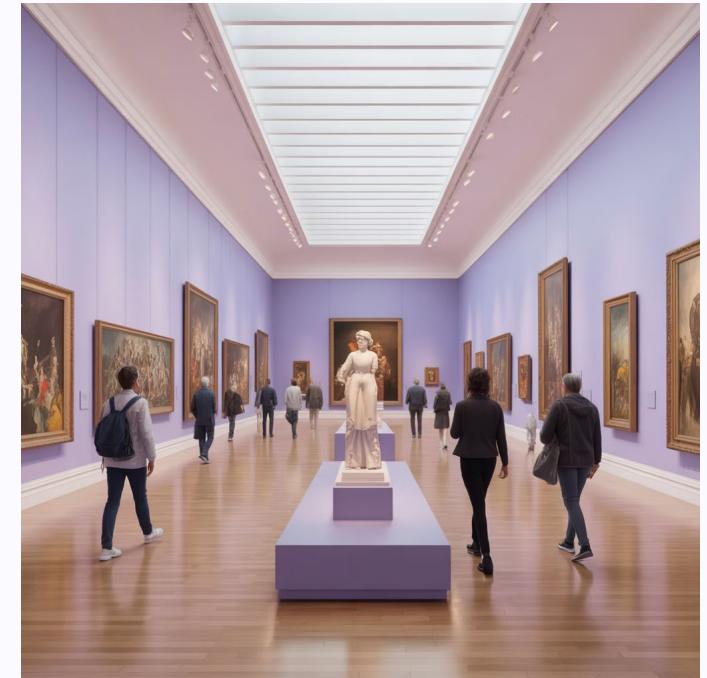
## Not simple copy-paste

Not merely replicating standardized solutions without adaptation



## Like an art gallery

Each unique work enriches the whole collection, creating value for everyone



Thanks !



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