

# National Quality Improvement Conference

## Adopting a Value Based Healthcare Implementation Matrix for use at Singapore General Hospital

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### Problem Statement

In 2023, the SGH Office of Value Based Healthcare (OVBH) was formed to take on an expanded scope of value-based healthcare (VBHC) strategies and assist clinical teams in adopting and implementing best-in-class practices.

To achieve this, SGH OVBH adopted a VBHC implementation matrix from the European Institute of Innovation and Technology (EIT) Health, a knowledge and innovation community.

### Potential Solutions



VBHC implementation matrix from EIT Health<sup>1</sup>

Two VDC conditions at SGH were mapped to the matrix to identify compatibility as well as potential gaps in implementation thus far:

- Elective total knee replacement (TKR)
- Ischemic stroke

### Project Aim

To identify compatibility of existing VDC conditions with the VBHC implementation matrix as well as potential gaps in VDC implementation at SGH thus far.

### Lessons Learnt

1. Most aspects of VBHC are in place
2. Gaps have been identified:
  - For elective TKR, to study impact of implant choice on outcomes and costs
  - For ischemic stroke, to consider incorporating PROMs and monitoring of longer-term outcomes
  - Adoption of standard sets (e.g. ICHOM) to facilitate international benchmarking
3. Consider local systems and practices when using matrix prospectively

### Outcomes & Impacts

#### Ischemic Stroke VBHC

Condition	Patients admitted for Ischemic Stroke			
Internal Forces	Doctors Nurses Allied Health	Community Hospitals Patients	Investments	Bladder scan machines (for UTI) Clinical pathway Allied health manpower (for rehab)
Scorecard	Length of stay Pneumonia UTI PROMS?	DVT Inpt mortality ASU rate Hyperacute mgt	Incentives	Patient satisfaction Recognition of work
Data Platform	eHIntS Department audit data	EMR	Learning Community	ICHOM Cross-institution sharing
Benchmark	Public Hospitals in Singapore International studies		External Collaboration	Nil at the moment – Consider community resources

#### Total Knee Replacement VBHC

Condition	Elective Total Knee Replacement			
Internal Forces	Surgeons Allied Health	Community Hospitals Patients	Investments	Short Stay Ward PROMs Platform Green lane to Rehab
Scorecard	Length of stay Blood Transfusion Complication Readmission	Return to OT Inpatient Mortality SF36 Oxford Knee	Incentives	Patient satisfaction Recognition of work
Data Platform	eHIntS EMR	Zedoc Tableau	Learning Community	ICHOM ERAS publication sharing
Benchmark	Public Hospitals in Singapore International studies		External Collaboration	Insurers Value based contracting for implants

<sup>1</sup>EIT Health, Implementing Value-Based Health Care in Europe: Handbook for Pioneers (Director: Gregory Katz), 2020.