

# National Quality Improvement Conference



## Reconciling Real Cost And Bill Size to Improve Value And Redesign Payment Models in ERAS® Colorectal Surgery kwang\_yeong\_how@ttsh.com.sg

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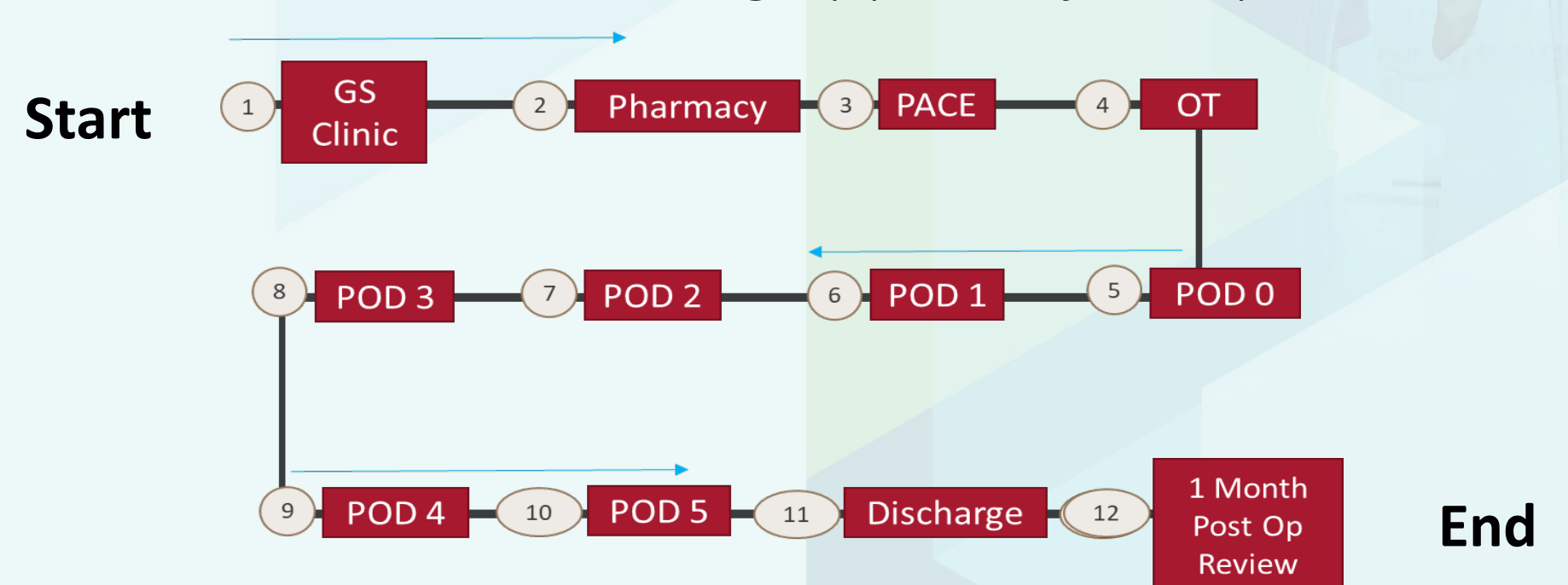
### Problem Statement

True cost of care in a surgical journey is difficult to estimate due to the complexity of the care process, healthcare system and payment model. There is no clarity if true cost of care rendered, and bill size corroborate.

In the new capitation model of healthcare financing, we need to better reconcile what the true cost of delivering quality healthcare for our patients, against what patients are paying for, in order to optimize value for our patients, the hospital and the healthcare system as a whole.

### Potential Solutions

Cost calculator created by the Value Management Unit (VMU) of Tan Tock Seng Hospital (TTSH) was used to map the simulated Time Driven Activity-Based Costing (TDABC) of TTSH ERAS® colorectal surgery patient journey.

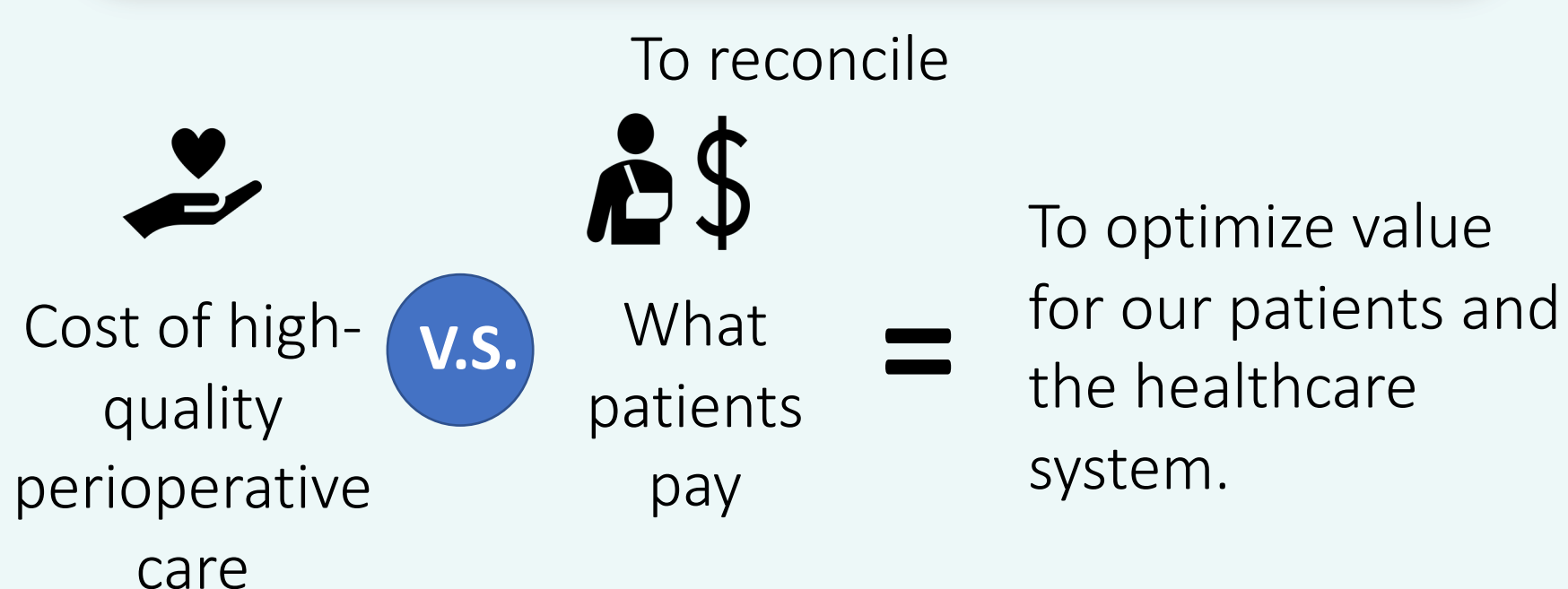


### Actual Patient Bills

TDABC for TTSH ERAS® colorectal surgery patient journey was compared against the actual patient bill size for 2 standard colorectal surgical procedures:

1. Hemicolectomy
2. Low/Ultra Low Anterior Resection

### Project Aim



### Lessons Learnt

Hospitalization cost and bill size are not the same and needs to be reconciled to ensure that the hospital is adequately compensated, and patients are appropriately billed.

A cost calculator created based on the hospital's payment codes can facilitate an efficient way to perform cost mapping for a complex care program like ERAS®.

A cost mapping exercise can help to bring better value to the patients and the healthcare system by evaluating redundancies in workflows and identify cost drivers within complex care processes.

### Outcomes & Impacts

Type of Surgery	Simulated TDABC exercise for Estimated ERAS® Colorectal Surgery Cost	Average Bill size of ERAS® Colorectal Patient	Percentage Difference
Hemicolectomy	\$10,953.63	\$13,837.21	23.3%
Low/Ultra Low Anterior Resection	\$16,907.16	\$23,903.65	34.3%

This preliminary evaluation suggests that the ERAS® journey for the average patient who has an uneventful recovery is well structured with minimal redundancies. This exploratory evaluation allows the colorectal ERAS® team to examine the cost effectiveness of the ERAS® program, reduce redundancies and improve value of the ERAS® Program.

#### Future Work

- Review of cost and bill sizes of patients with complications of different severity, identify cost drivers.
- Consideration of possible bundled payment models and cost mapping.
- Comparison in other surgical subspecialties using the same framework.