POSTER ABSTRACT

Patient Value Measurement and Improvement using the Steps of Systematic Improvement SOSI in Yishun Health
18th International Conference on Integrated Care, Utrecht, 23-25 May 2018

Naiying Liu, Matthew Yee Song Lee, Jagadish Ullal Mallya, Terence Eng Yeow Tang, Yeuk Fan Ng
Khoo Teck Puat Hospital, Singapore

Patient value measurement remains a challenge in healthcare, with varying standards of measurement in different care settings. Yishun Health, which is a regional health system RHS comprising Khoo Teck Puat Hospital, Yishun Community Hospital, Admiralty Medical Centre, and a Population Health arm, set up a Care Integration Group to create a methodology for patient value measurement that can be aggregated across all care units i.e. “clinical microsystems” to enable value measurement and improvement across the whole RHS. This methodology was implemented in the Yishun Health Hip Fracture Unit HFU to evaluate ground feasibility and assess scalability to the full RHS.

First, the HFU articulated a concept of patient service using a Clinical Logic Model CLM and Patient Value Compass PVC, adapted from the Dartmouth Clinical Policy Institute’s Clinical Value Compass. Anchoring the service using the PVC ensures that the HFU was centered on measuring patient value as its outcome. The CLM then becomes a hypothesis of the unit i.e. how the unit’s clinical strategies, inputs, processes, and outputs were expected to lead to improved patient value creation.

Second, all available baseline data relevant to the unit were mapped against the CLM and PVC to create a HFU dashboard. The dashboard enabled the unit to identify gaps in data availability and prioritize activities within the unit to gather additional patient value outcomes data and key process data from different work units beyond the team.

Third, the HFU dashboard was presented during monthly unit meetings. Through facilitated discussions and reviewing of data, team members sought to understand how their unit inputs, processes and outputs led to patient value creation. Specific areas were identified for “kaizen”; unit members were assigned kaizens to be accountable to each other for progress at subsequent unit meetings.

This systematic approach when put together is termed the Yishun Health Steps of Systematic Improvement SOSI Methodology and was adopted by the HFU since December 2016. Adoption of SOSI required the clinician service lead to develop a clear CLM and PVC value measures. Implementation required the availability of data for identified PVC and CLM measures. A
clinician and administrative dyad leadership model was crucial in ensuring sustainability of the value-based improvement methodology.

The SOSI methodology for patient value measurement and creation is highly transferable to all other clinical units seeking to improve patient outcomes, and has been spread to the Acute Medical Unit and Acute Stroke Unit within Yishun Health. The adoption of PVC enable value measurements to be aggregated across different clinical units using a single value-framework. Deployment of CLM and PVC value measurements across the whole of Yishun Health is currently underway to enable management to visualize value measurement and full system performance across all care units.

**Keywords:** patient value compass; clinical logic model; value measurement