Assessment of Implementation of Value Based Healthcare via an Implementation Toolkit: A Dual Institution Collaboration

Singapore General Hospital — SingHealth

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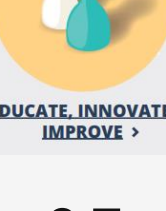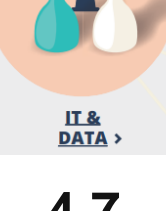
Introduction

Singapore General Hospital (SGH) is a tertiary academic medical centre and the largest hospital in Singapore. Following Singapore's recent healthcare reform to focus on preventive health and early intervention, and a shift from a workload-based to a capitation-based model[1], robust implementation of Value Based Healthcare (VBHC) has been identified by SGH as a key focus area.

Linnean Initiatief is a Dutch national network of leaders driving VBHC. It organizes network meetings to discuss the implementation of VBHC and has created knowledge products[2] to guide robust implementation. This includes a toolkit consisting of a VBHC Implementation Thermometer and an Implementation Guide. The toolkit has been mostly applied in the evaluation of a multidisciplinary team, and this poster explores a broader application as a systematic evaluation tool to assess SGH's current status from the perspective of an institution to identify areas of strengths and improvement.

Analysis

Domain	Quick Scan Questions	Areas of Strength		Areas for Growth
MULTIDISCIPLINARY TEAM › 3.7	1. Are all healthcare professionals and support staff involved sufficiently represented in our team? **4** 2. Are patients represented in the evaluation and improvement of care? **2** 3. Do multidisciplinary progress and improvement meetings take place on a regular basis? **5**	**SGH VBC Council**	✓ Monthly meeting with senior leadership to present updates	• Increased representation of patients
		SGH VBHC Implementation Toolkit	✓ In-house template as a step-by-step guide to aid creation of clear definitions & indicator	
		Quality Improvement	✓ Improvement plans in mind, multidisciplinary team involved	

CARE PATHWAYS AND OUTCOMES 3.7	1. Is the care pathway well described and are health outcomes (Clinical and PROs) and casemix variables structurally measured for the medical condition? **4**
	 2. Are individual health outcomes discussed with the patient (as part of shared decision making)? **2**
	 3. To what extent are outcome data used to continuously improve care in our team? **5**
		SGH VBHC Implementation Toolkit	✓ Care pathways described
			 ✓ Measurable clinical outcomes data that cross domains & long-term outcomes
				• Systematic implementation of PROMs
				  • Variation in level of understanding
				  • No integration to EMR

		Quarterly Reporting	✓ Quarterly reporting of outcomes via Tableau dashboards	
		International benchmarking	✓ Pilot to adopt ischaemic stroke ICHOM Standard Set (2024)	
COSTS AND REIMBURSEMENT › 2.3	1. Do we know the costs and reimbursements related to the medical condition? **3** 2. To what extent is our team financially responsible? **3** 3. Are there agreements with healthcare insurers on value-based contracts or payments? **1**	**Understanding components of cost bucket**	✓ Cost data available, represented in cost buckets	• Deeper understanding of payments processes • Identifying our cost drivers • Explore value-based payment
		Developing Health Economics framework	✓ Working on how to structure existing financial data into a framework for VBHC analysis	
COLLABORATIVE NETWORKS › 3.7	1. To what extent are all healthcare providers in the entire (internal and external) care chain part of our team? **4** 2. Is the entire care chain jointly responsible for both outcomes and costs? **3** 3. To what extent are good practices shared outside our care chain to learn from? **4**	**Cluster benchmarking**	✓ Quarterly benchmarking for select conditions with other providers within cluster ✓ Cross sharing of best practices	• More collaboration with external partners
		Cross-setting VBHC analysis	✓ Analysing single condition across primary to tertiary care continuum ▪ Facilitated by data sharing agreement ✓ Active collaboration with community partners for improvement projects	
EDUCATE, INNOVATE, IMPROVE › 2.7	1. To what extent is the philosophy of value-based healthcare known to all healthcare professionals and support staff involved? **4** 2. Is there an integrated quality policy, which also includes outcomes & costs? **2** 3. Are health outcomes and costs shared and/or compared with regional or (inter)national parties? **2**	**Quality Improvement**	✓ Good knowledge on QI methods & PDSA cycles ✓ In-depth analysis of root causes via case review and multidisciplinary discussion	• Further rigour in statistical methods for academic publication
		Implementation Science	✓ Adopting rigour in Implementation Science frameworks for initiatives ✓ Multipronged approaches in improvement plans	
IT & DATA › 4.7	1. Are outcome data unambiguously recorded at the source? **5** 2. Are outcome data available in real time? **4** 3. Is outcome data displayed in useful overviews for the team? **5**	**Analytics & Dashboards**	✓ Enterprise analytics platform to extract data from EMR ✓ Quarterly reporting of data via Tableau ✓ Robotic process automation to generate individual clinician reports via Tableau	• Dashboards for patients • ePROMs platform
LEADERSHIP AND CULTURE › 4.0	1. Is/are the leader(s) inspiring and have good communication skills? **4** 2. Do all members of the multidisciplinary team know their roles and take responsibility? **4** 3. Is there a culture of enthusiasm and trust within the team, of learning and improving safely together? **4**	**Clinician Champions**	✓ Clinician leads have formal appointments, endorsed by leadership ✓ Leads report progress of conditions at VBHC council meetings	• Further empowerment of non-clinicians (nurses, allied health staff, patients)
		Improvement-focused Mindset	✓ Quarterly reports not punitive in nature, individual reports anonymised ✓ Frequent sharing of good practices	

Conclusions

Linnean's Implementation Toolkit allows for a systematic and comprehensive assessment of an institution's progress in VBHC, highlighting both strengths and opportunities for improvement. This allows for subsequent conversation in the institution to develop strategic areas to focus on in the immediate, mid and long term. This framework also facilitates discussion between different institutions to compare different areas of strengths to promote sharing of best practices. This has shown broader applicability of Linnean's toolkit as a versatile framework that can be applied to various levels ranging from a multidisciplinary team to an organisation.

Acknowledgements

SingHealth DukeNUS ACADEMIC MEDICAL CENTRE · NEJM Catalyst

1 "Promoting Overall Healthier Living While Targeting Specific Sub-populations" Ministry of Health, 2023, https://www.moh.gov.sg/news-highlights/details/promoting-overall-healthier-living-while-targeting-specific-sub-populations. Accessed 19 March 2024.
2 "Linnean products" Linnean Initiatief, 2023, https://linnean.nl/inspiratie/kennisbank/1917451.aspx?t=Linnean-producten. Assessed 19 March 2024

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