

Leading Organisational Spread in Improvement

Professor Lee Chien Earn

Chair of Singapore Healthcare Improvement Network (SHINe)

&

Dr Deepthika De Silva

Head, Healthcare Performance Office

St Andrew's Community Hospital

International Forum on Quality & Safety in Healthcare, 18 – 20 September 2019

“By healthcare institutions for healthcare institutions – Towards better patient outcomes”

Singapore Healthcare Improvement Network (SHINe)

Total number of member organisations in SHINe: 45



Large Scale Initiative 1

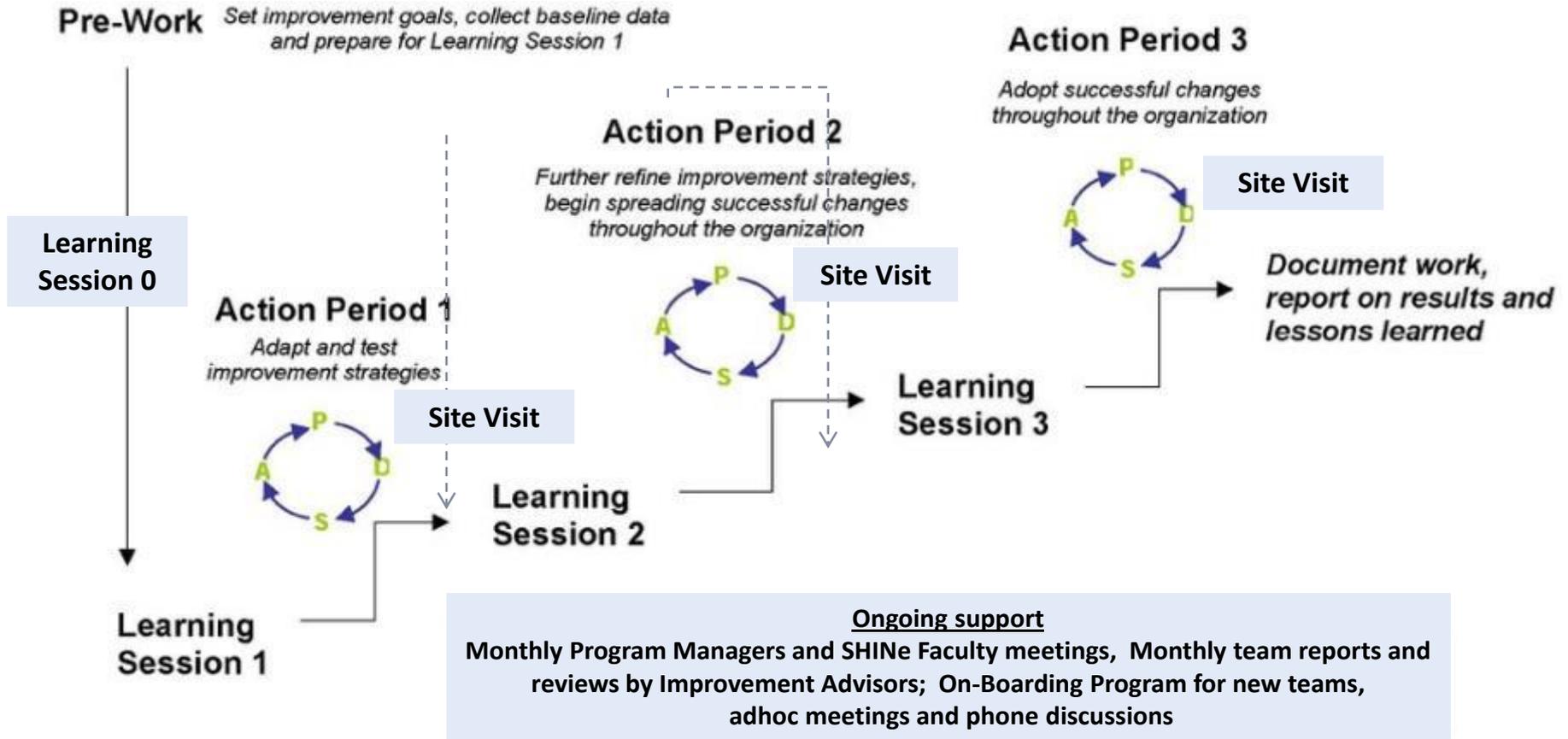
Take effective health care practices from one setting and make these practices ubiquitous across Singapore



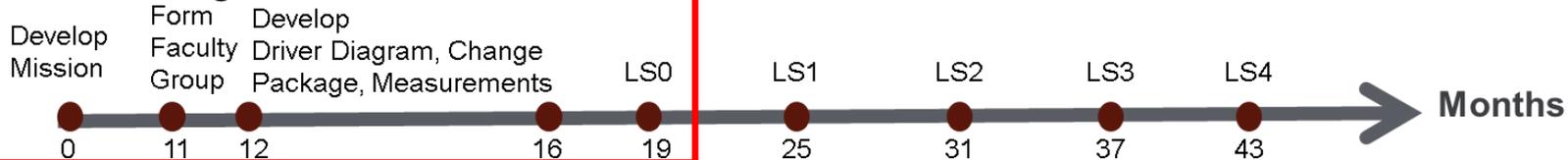
**Reduce Harm
by 30% in 3 years**

**15 April 2014 to
30 April 2017**

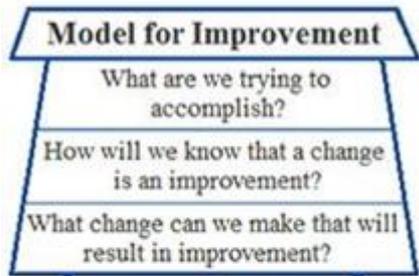
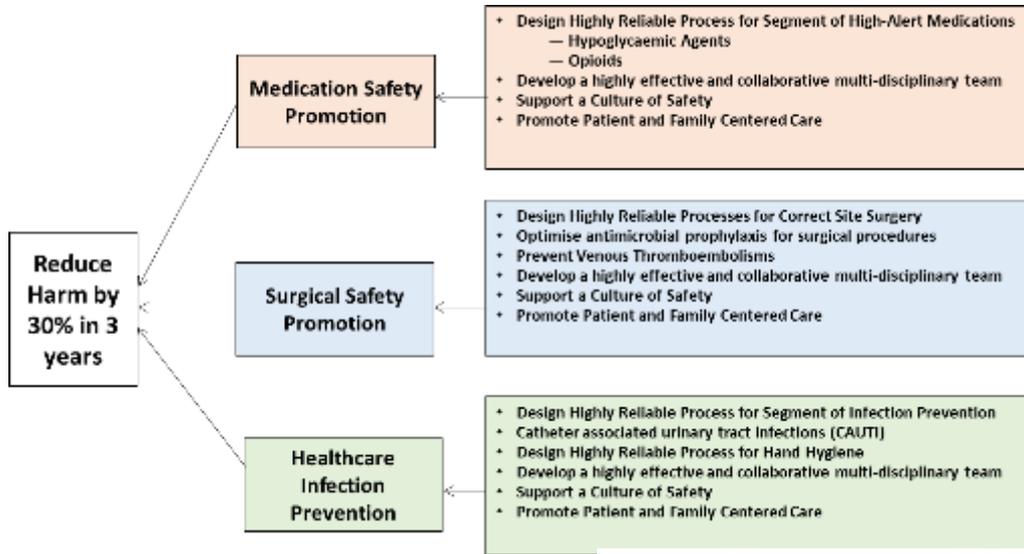
Large Scale Initiative Model



Planning Phase → Launch



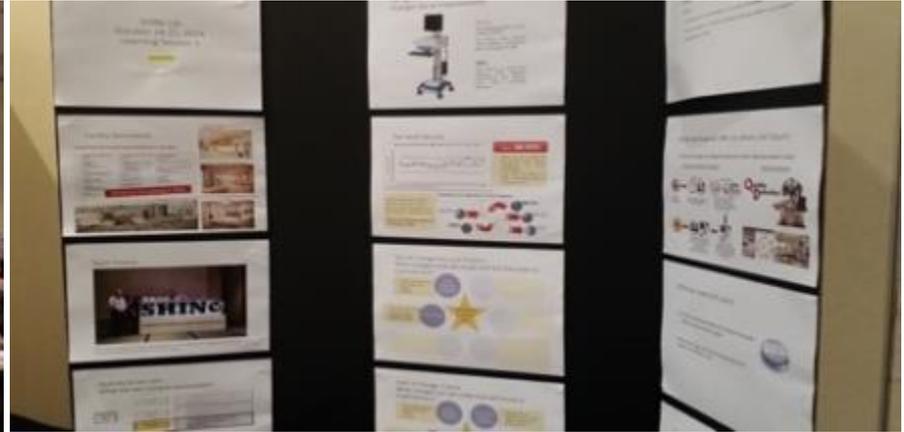
Will - Ideas - Execution



[My IHI](#) | [Log Out](#) | [Contact Us](#)



Learning Sessions



- 2 Day program held every 6 months bringing all teams together (200-400 persons)
- Format : Plenaries, breakout sessions, storyboards, world café;
- Engage, coach and teach teams about the improvement methodology, elements of the change package and help teams to plan next steps.
- Platform to share ideas, problem and solutions – All Teach, All Learn.

Site Visits

3 days site visits to all teams every 6 months

Aims :

- Understand institution context and culture
- Provide directed coaching to team and frontline staff
- Engaging the leadership team
- Sharing and Learning between institutions

Participants : Faculty, Leadership team, Program Managers, team members, other institutions.



A Team's Journey in the Large Scale Initiative



Learning Session	Number of Teams				Total number of participants
	Healthcare Infection Prevention	Medication Safety Promotion	Surgical Safety Promotion	Total	
LS 0	7	4	0	11	90
LS 1	9	7	2	18	120
LS 2	11	9	2	22	150
LS 3	14	10	5	29	220
LS 4	16	13	7	36	275
LS 5	20	15	7	42	253
LS 6	20	15	7	42	240
LS 7	21	17	7	45	244
LS 8	21	17	7	45	217
LS9	23	22	7	52	180
LS10	23	24	8	55	185

Data correct as of 30 August 2019

Phases of a Quality Improvement Project

Planning

- Set an Aim: What are we trying to accomplish?
- Develop an Improvement Strategy

Pilot

- Testing changes on a small scale using PDSA cycles which gradually build knowledge

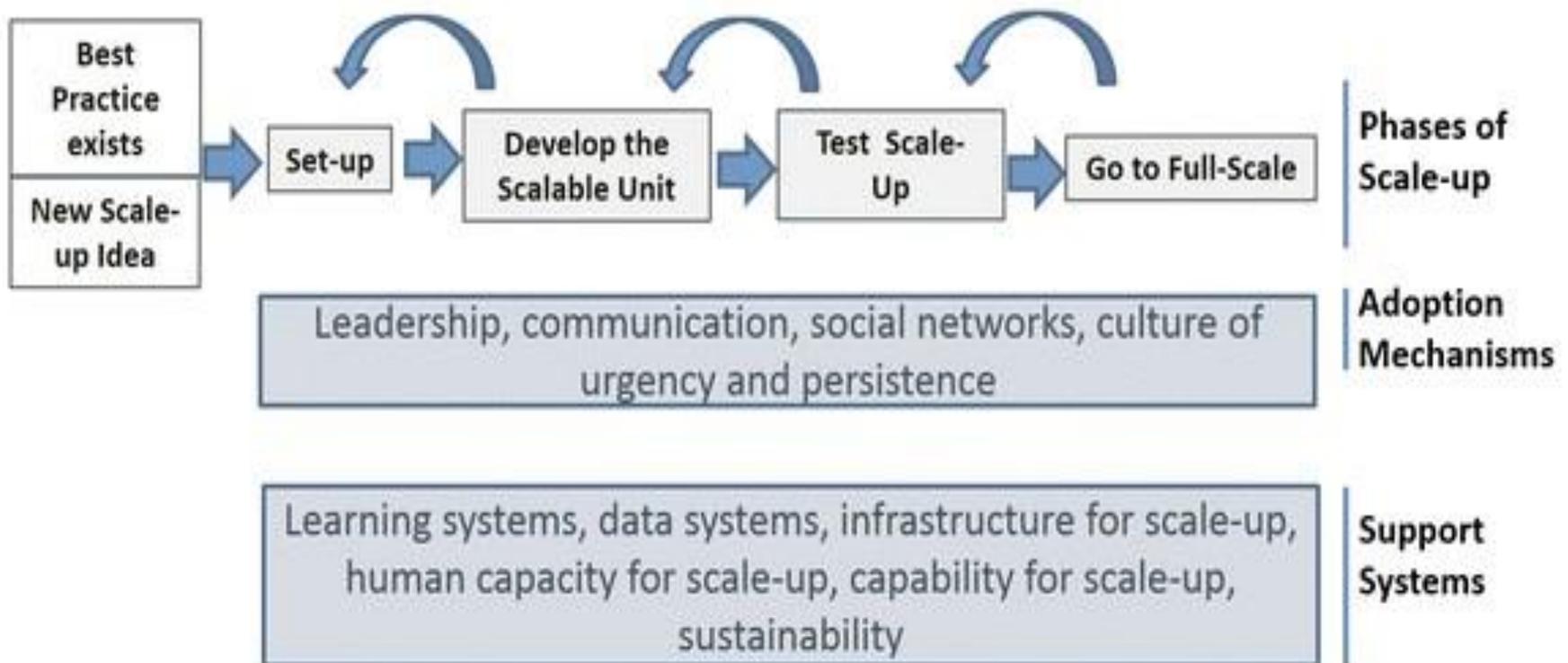
Implementation

- Making the change the new standard process in one defined setting

Spread

- Implementing the change in several settings

IHI Framework for Going Full Scale



Going to Full Scale

Set-up

Prepares the ground for entry of planned intervention that will be taken to full scale
Identify initial test sites, early adopters and potential 'champions' of the intervention



Develop the Scalable Unit

Most intensive period of innovation, usually resulting in a large array of change ideas that are being tested and require vetting



Test of Scale-up

Tests the intervention in a variety of settings that are likely to represent different contexts that will be encountered at full scale



Go to Full Scale

Rapid deployment phase in which a well-tested set of interventions, supported by a reliable data feedback system, is adopted by frontline staff on a larger scale.

Adoption Mechanisms



Ref: *The Spread and Sustainability of Quality Improvement in Healthcare*, Quality Improvement Hub 2014

Support Systems

Human capability for scale-up

- Staff training
- Communicate quantitative results and underlying stories of success to staff

Infrastructure for scale-up

- Identify resource constraints
- Ideally, scale-up can be achieved primarily through redesign rather than addition of new resources

Data collection and reporting systems

- Reliable systems to track and provide feedback on the performance of key processes and outcomes
- Data are accurate, complete and timely and shared frequently to inform of ongoing improvement.

Learning systems

- Mechanism for collecting, vetting and rapidly sharing change ideas or interventions
- Mechanism to assemble change ideas which result in improved performance into a change package

Design for sustainability

- Learnings associated with sustainability are shared and activities are well described, so that system cannot revert to its prior state of performance.
- Leadership commitment is pivotal

Leadership



Goals



Vision



Communicate (positive and balanced)



Resources (incl leadership time/attention)

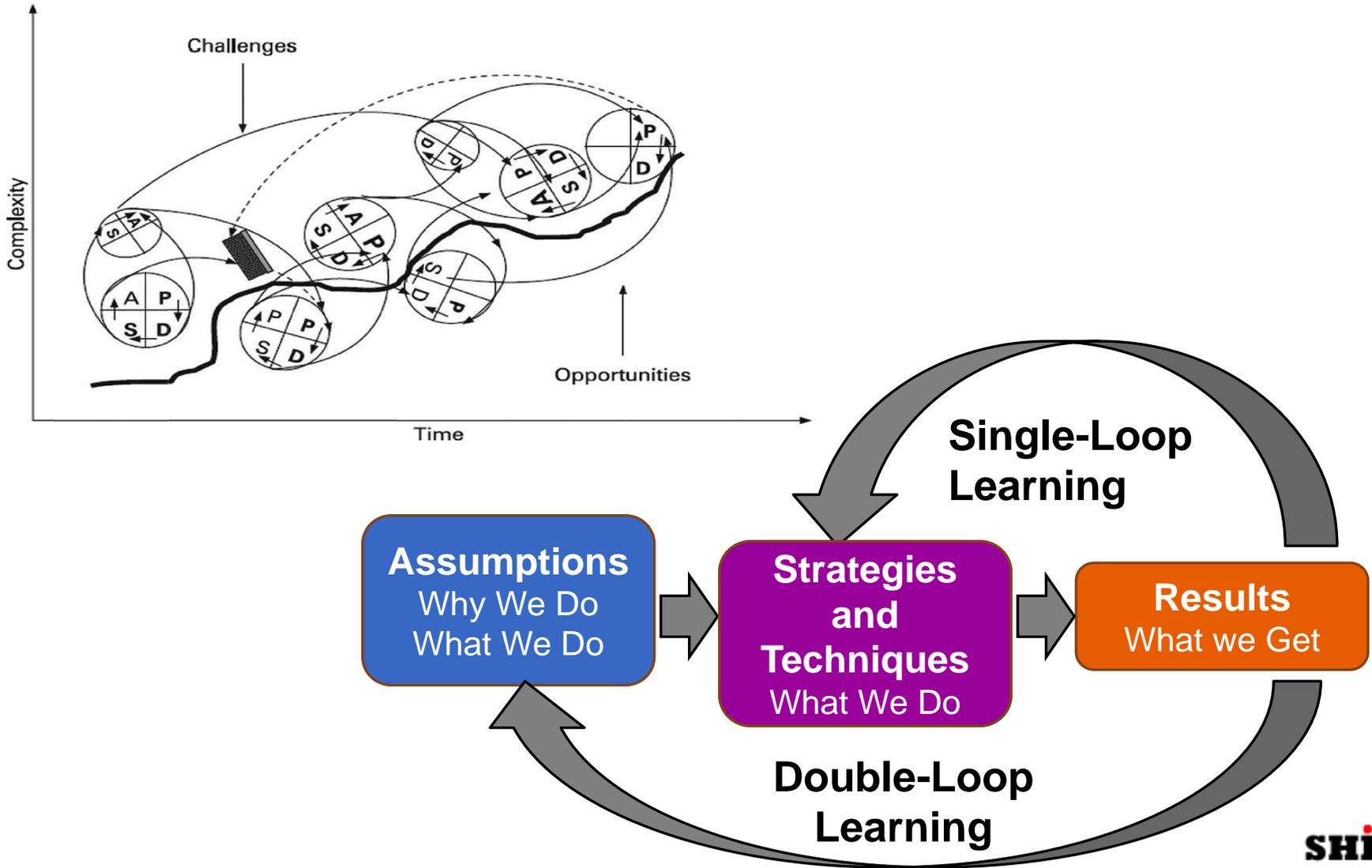


Tempo & Pace (with regular reviews)



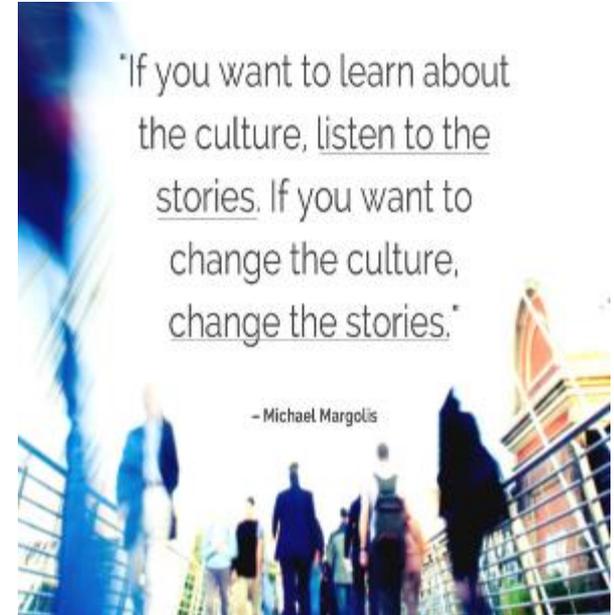
Permission to Change and Learn

Focus on Learning, NOT Perfection



Culture

- Importance of Context
 - Implementation plans that are not adaptive to local conditions or context are likely to result in unintended consequences
- Need to listen, engage and empower
 - Move authority downward so local decision-makers can adapt to their own social and organizational environments to prevent poor choices at the local level:



Comprehensible, Manageable and Meaningful

Our achievements (1)

CAUTI Prevention Outcomes

10

Institutions participated in CAUTI prevention

9

Teams have reached or completed spread

1

Team is in pilot phase

6 Acute Hospitals

4 Community Hospital

804

CAUTIs Prevented



3345

Bed Days Saved



\$3.6

Million Saved



From start of LSI till September 2018

Hypoglycaemia Prevention Outcomes

13

Institutions participated in HYPO prevention

6

Teams have reached or completed spread

7

Teams are in pilot phase

6 Acute Hospitals

3 Community Hospitals

1 Specialty Centre

2 Group Polyclinics

1 Home Care Agency

108

Admissions for DM (hypoglycaemia) prevented



2523

Episodes Prevented



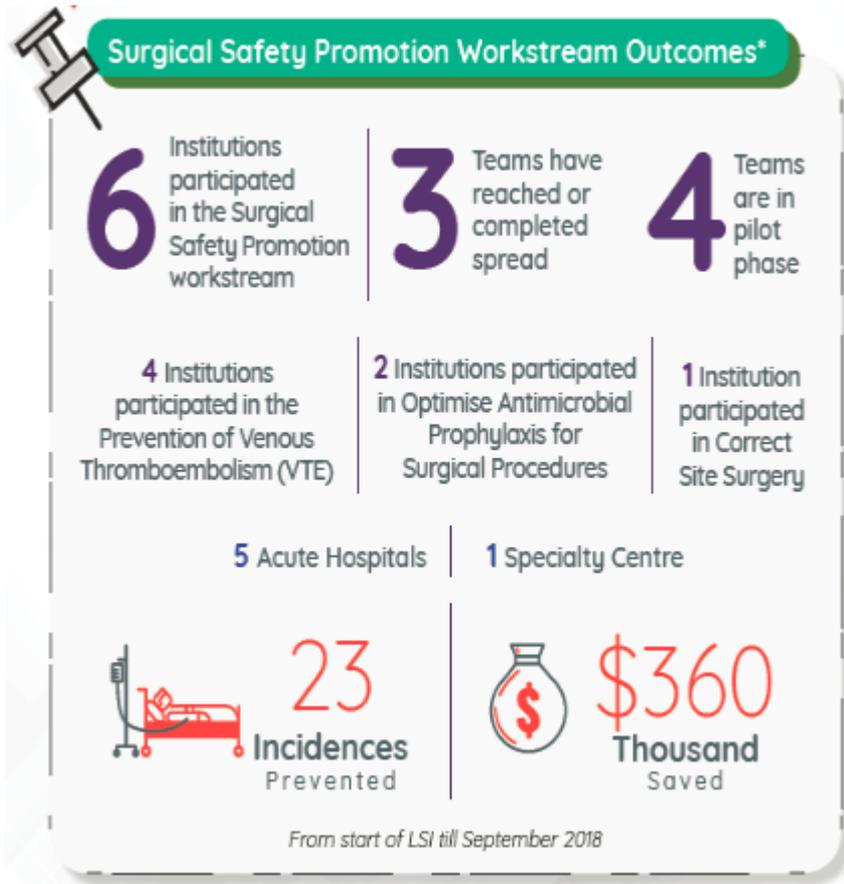
\$1.99

Million Saved



From start of LSI till September 2018

Our achievements (2)



More than **90 program managers trained in 24 institutions** to support and facilitate improvement work within their institutions

Trained 55 improvement teams in improvement methodology in 24 institutions

Trained 16 Faculty members to plan, coach and support multi-institution collaborative improvement work

Improvement as a social movement



Thank you