Redesigning CGH Quality Improvement Competency Roadmap and Training Programme

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Introduction

In Changi General Hospital (CGH), there were various trainings available for staff to learn Quality Improvement (QI) such as Lean, Quality Circles, Plan Do Check Act (PDCA) and Enhancing Performance Improving Care (EPIC) (Figure 1). With each methodology having its own emphasis and nuances, this resulted in a haphazard approach to improvement and confusion among staff.

Fig 1. QI Methodologies

In early 2016, the Office of improvement Science (OIS) embarked on redesigning the CGH QI competency roadmap and training programme aiming to equip staff with appropriate QI competencies to carry out their improvements.

Methodology

Review and Redesign of QI Competency Roadmap

OIS mapped out the existing QI competency roadmap and trainings. A series of reviews between OIS and Human Resource (HR) was carried out to develop the competency roadmap (Figure 2).
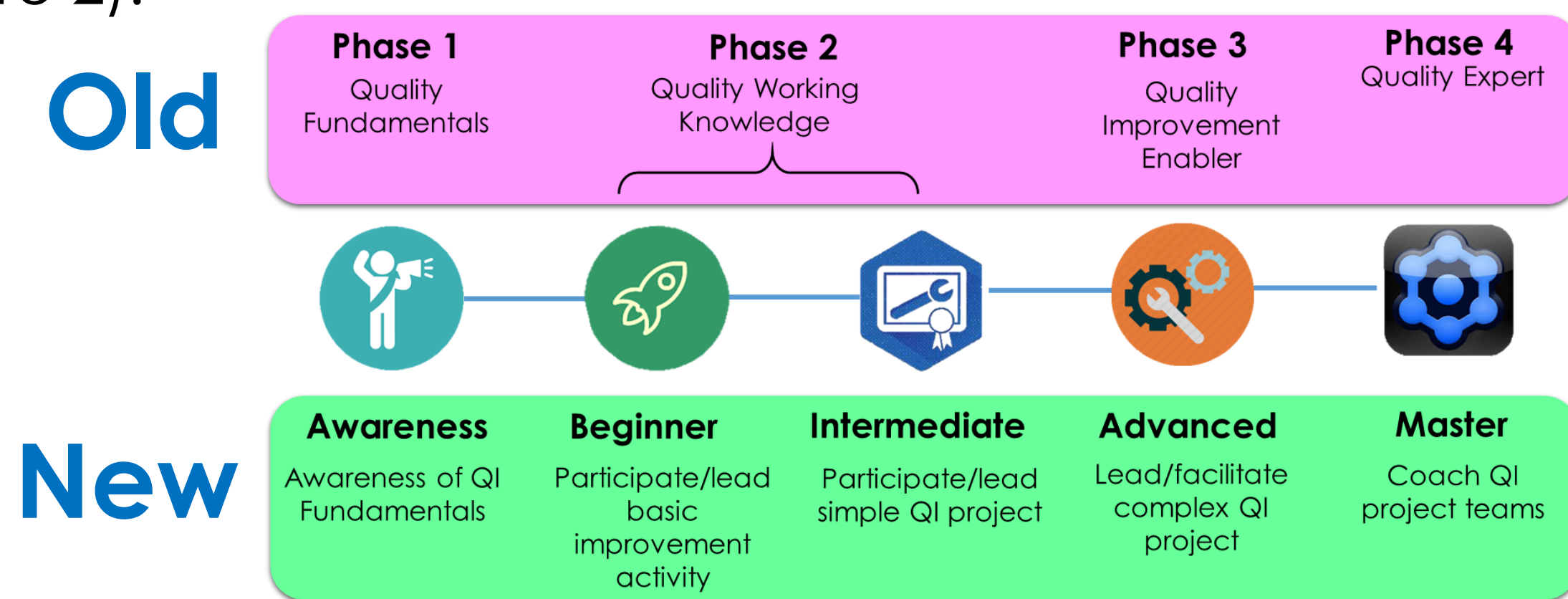

Fig 2. CGH QI Competency Roadmap

Enhancement of QI Training Programme

OIS reviewed all the available trainings to ensure alignment to intended QI competency. Gaps on existing QI trainings which include learning outcome, contents, delivery and target audience were identified. The **Model for Improvement** was adopted by CGH as the basic approach to Improvement (Figure 3).
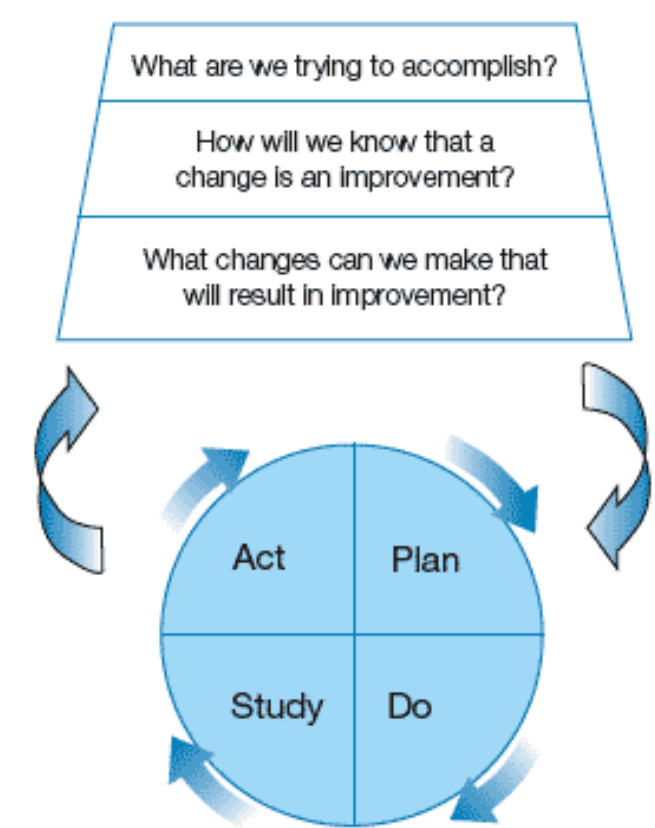

Fig 3. Model for Improvement

The Risk Improvement and Patient Experience (RIPE) Awareness Training has been revamped. Everyday Improver and Effective Improver Training have been developed. Subsequently, a RIPE[X] training module was also developed to replace an existing QI module in PM101 intended for new managers (Table 1).

	Awareness	Beginner	Intermediate	Advanced
QI Training Programme	Risk, Improvement Patient Experience (RIPE) Awareness Training (Revamped)	Everyday Improver Training (New)	Effective Improver Training (New)	Expert Improver Training (New*)
Training Duration	0.5 day	1 day	2.5 days	3 + 3 days
Frequency	Monthly	Monthly	Bi-Monthly	Annually
Prerequisite Course and/or Certification	nil	RIPE	Everyday Improver Course/IHI-HarvardX online course (PH556X)	Effective Improver Course + IHI Open School Level 2 (Program Managers)
Certification Duration	N/A (Training to complete within 6 months)	Within 12 months	Within 24 months	Within 48 months
Certification Requirement	nil	Yes / 1 Simple Improvement Activity	Yes / 2 Projects (at least team member)	Yes / 4 Projects (2 lead/fac, 1 co-lead/ co-fac, 1 member)
Project Scope	N/A	Tier 4 (Kaizen)	Tier 3 Projects	Tier 2-3 Projects

*To be outsourced. Planned launch in FY17.

Table 1. CGH QI Training Programme

Improvement Lab, a bi-monthly initiative designed to generate awareness and interest in QI through highly-accessible mini-presentations on specific areas of Improvement Science was also introduced.

In mid 2016, the revised **QI Competency Roadmap and Training Programme** were reviewed and endorsed at Hospital Management Meeting (HMM) chaired by CEO.

Training Pilots

The Office of Improvement Science (OIS) conducted 2 pilot sessions each for Everyday Improver and Effective Improver trainings (Figure 4).

Fig 4. Everyday and Effective Improver Trainings in action

Training evaluation and feedback forms were distributed after each session to capture insights and areas for improvement. These were later reviewed and changes were carried out on subsequent runs.

To facilitate regular participation, HODs submit nominations for trainings.

Results

To date, a total of 5 and 3 sessions of Everyday Improver and Effective Improver trainings have been held respectively.

Everyday Improver Training

Across all participants, **91%** agreed/strongly agreed that the improvement tools covered in training are useful (Figure 5). About **85%** of them are likely/extremely likely to recommend the course to other staff (Figure 6). The training also received good participation from key departments (Figure 7).
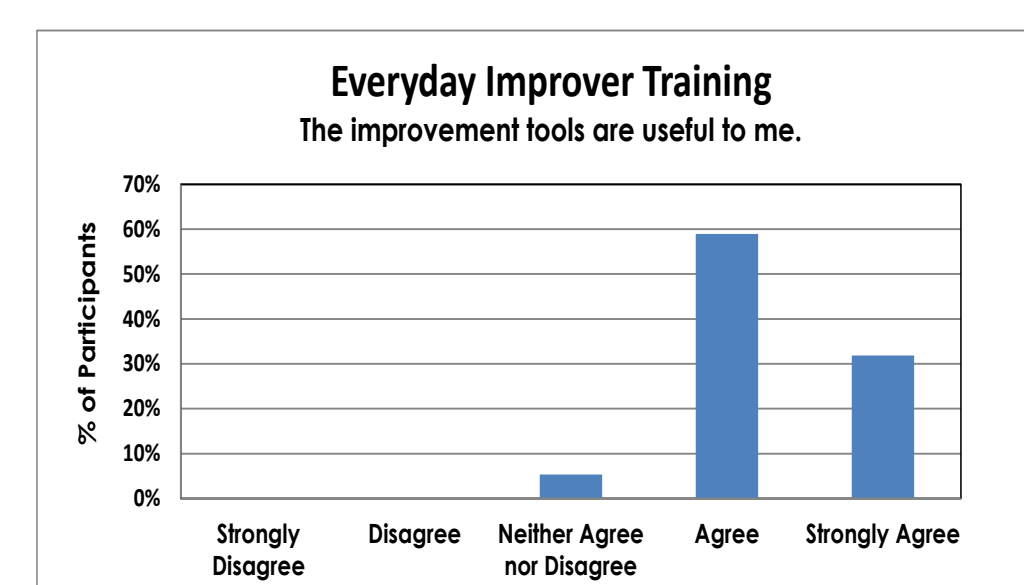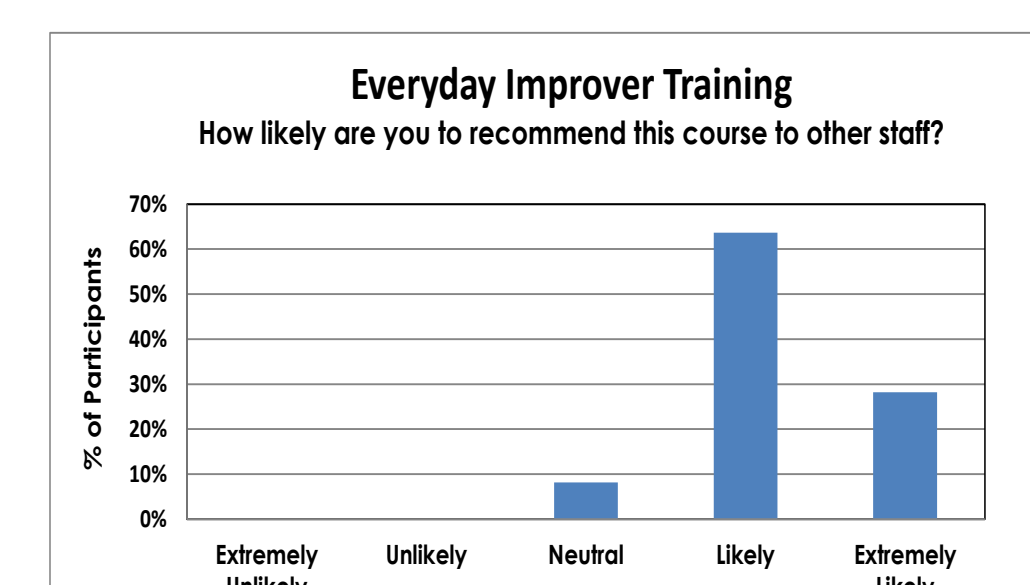

Fig 5. Ratings on usefulness of improvement tools

Fig 6. Likeliness of recommending the training to other staff
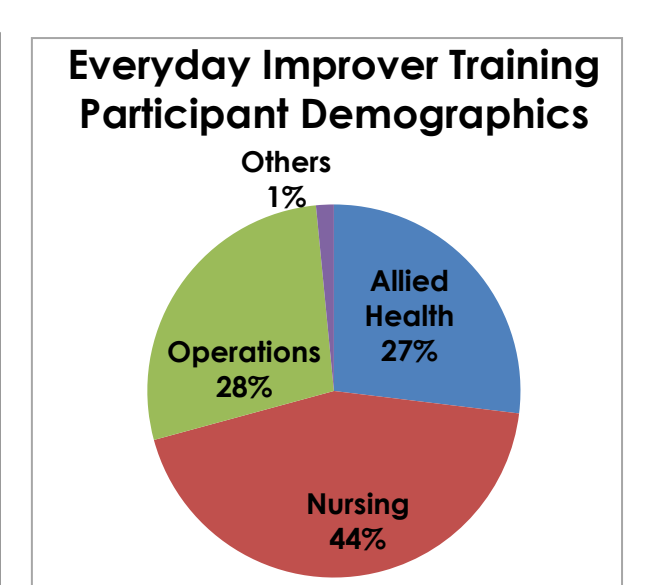

Fig 7. Participant Demographics

Effective Improver Training

About **90%** of the participants agreed/strongly agreed that the improvement tools covered in Effective Improver training are useful (Figure 8). **95%** of them are likely/extremely likely to recommend the course to other staff (Figure 9). There were also good participation from key departments including doctors. (Figure 10)
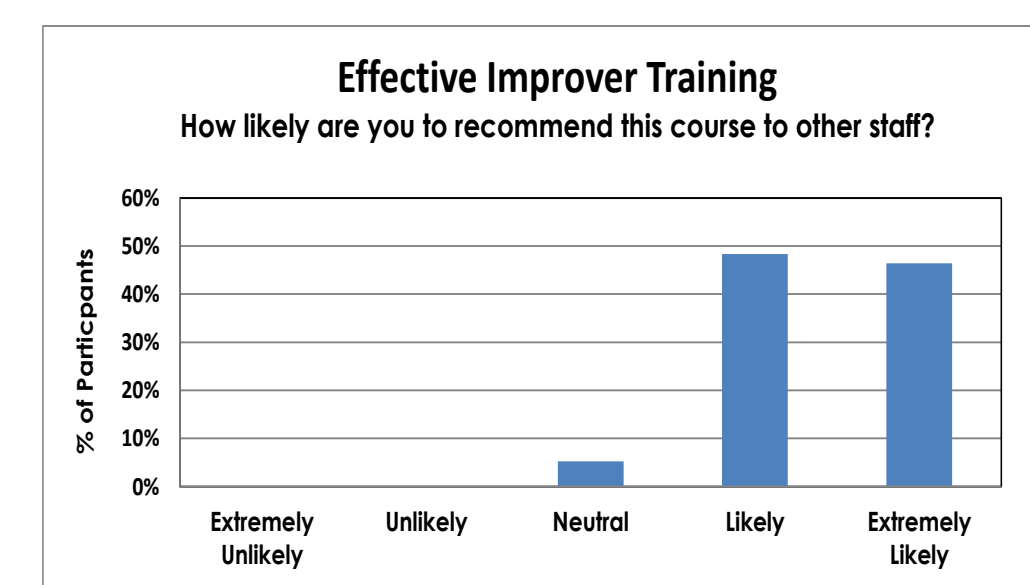

Fig 8. Ratings on usefulness of improvement tools

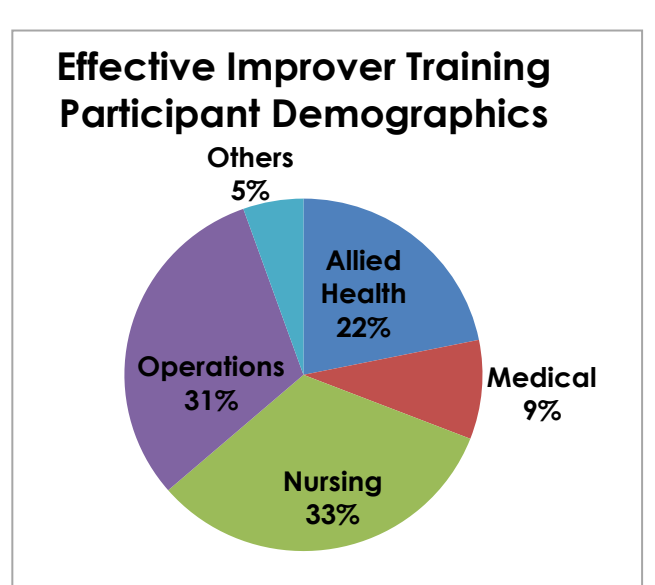Fig 9. Likeliness of recommending the training to other staff

Fig 10. Participant Demographics

Conclusion

With the redesigned QI competency roadmap and training programme, staff will be better equipped with the appropriate QI competencies they need as they go through their improvement journey. The Model for Improvement is now being used as the standard framework for improvement in CGH. Staff who want to pursue QI expertise can be certified after attending the required training and completion of projects.