Strategic Workforce Capability Building in Achieving a Safe and High Reliability Organisation – Target Zero Harm

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Background

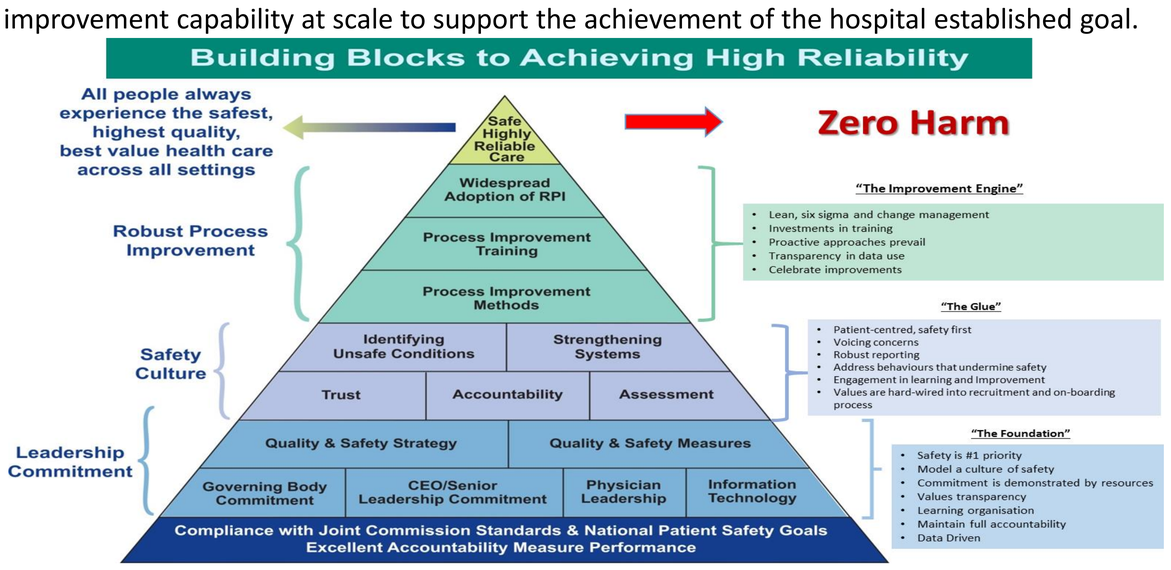
KK Women's and Children's Hospital (KKH) has placed safety as our highest priority since 2010 after a near fatal chemotherapy drug overdose event. Many activities were initiated to improve safety and quality outcomes, however still lack the working definition that encompass the entire system perspective to effect a sustainable change. In beginning 2016, KKH decided to make Zero Harm a goal to move beyond and the timeframe given for the achievement of this tall order is by 2022. Many questions arose within various levels of our staff and even in the mind of some senior leaders i.e. Is that possible? Can it be done? How? The knowledge, skills, and attitudes needed for quality safe practice are not normally acquired in medical or nursing school. Patient safety, risk and quality improvement cut across all professional, clinical, and organisational boundaries, as such the development of knowledge, skills and insights in quality and safety should be at all disciplines if the hospital is going for Zero Harm by 2022. Learning and development requires rigour and attention as any other management task and system build up. Well managed training, learning and development can deliver the right people with the right skills at the right time to enable the hospital to use it as a mean to achieving high reliable and safe care.

Aim

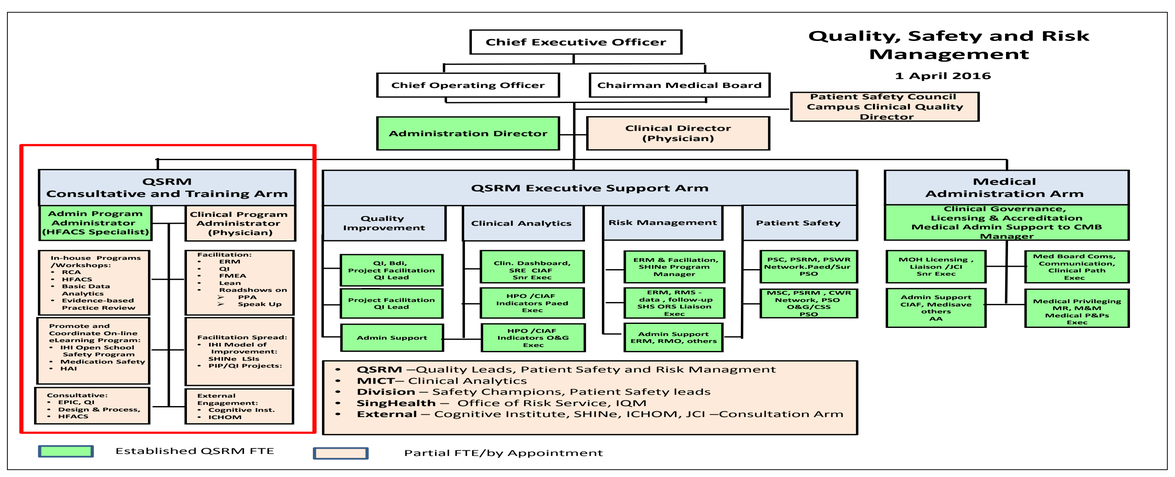
To develop an integrated and holistic quality and safety improvement training programme that aligned with the hospital strategic goal for workforce capability building.

Methodology

The hospital leadership set priorities based on strategic objectives and initiatives. The values and vision of hospital aspiring to achieve highly reliability and safety through commitment to culture change and continuous improvement are clearly articulated and made visible at every level. JCI framework on Building Blocks to Achieving Safety and Reliability (shown below) is adapted to guide the development and the establishment of needed programmes to build improvement capability at scale to support the achievement of the hospital established goal.



Office of Quality, Safety and Risk Management (QSRM) support the hospital in planning, initiation and execution of programmes. A Training and Consultative Arm is established within the QSRM structure to map and establish capability building programmes at a scale that could equip staff with needed knowledge and skills to effect change.



The first step in developing a training programme is to identify and assess needs. Safety Culture and High Reliability: Stages of Organisational Maturity ™ scoring matrix as shown below was used to assess the level of maturity in Leadership Commitment, Safety Culture and Robust Process Improvement under the four stages of maturity, namely Beginning, Developing, Advancing and Approaching. After the key elements were assessed, work plans were mapped where key drivers were identified with training programmes and activities drawn to bridge the gap between current and desired performance.

KKH High Reliability Maturity Matrix in 2016

	Beginning	Developing	Advancing	Approaching
Performance Improvement				
Methods	No formal approach to quality management adopted by organisation	Exploration of modern process improvement tools beginning	Organisational commitment to adopt full suite of Robust Process Improvement (RPI) tools	Adoption of RPI tools accepted fully throughout organisation
Training	Limited to compliance personnel or to quality department	Recognition that training in PI tools outside quality department is criticalto success	Training of selected staff in RPI underway; plan in place to broaden training	Training in RPI is mandatory for all staff, as appropriate for their jobs
Spread	No commitment to widespread adoption of improvement methods	Pilot projects using some new tools conducted in a few areas	RPI used in many areasto improve business processes as well as clinical quality and safety; positive ROI achieved	RPI tools used throughout organisation for all improvement work; patients engaged in redesigning care processes; RPI proficiency required for career advancement
Safety Culture				
Trust	No assessment of trust or intimidating behaviour	First codes of behaviour adopted in some clinical departments	CEO and clinical leaders establish a trusting environment among all staff by modelling appropriate behaviours and championing efforts to eradicate intimidating behaviours	High levels of (measured) trust exist in all clinical areas; self-policing of codes of behaviour in place
Accountability	Emphasis on blame; discipline not applied equitably or with transparent standards; no process for distinguishing "blameless" from "blameworthy" acts	Beginning recognition of importance of equitable disciplinary procedures; some clinical departments adopt these procedures	Managers at all levels accord high priority to establishing all elements of safety culture; adoption of uniform equitable and transparent disciplinary procedures begins organization-wide	All staff recognise and act on their personal accountability for maintaining a culture of safety; full adoption of equitable and transparent disciplinary procedures
Identify unsafe conditions	Root cause analysis limited to adverse events, close calls (early warnings) not recognised or evaluated	Pilot "close call" reporting programs begin in few areas, some examples of early intervention to prevent harm	Staff in many areas begin to recognise and report unsafe conditions and practices before they harm patients	Close calls and unsafe conditions routinely reported, leading to early problem resolution, before patients are harmed; results routinely communicated
Strengthening systems	Limited or no effort to assessssystem defences against quality failures and remedy weaknesses	RCAs begin to identify same weaknesses in system defences in many clinical areas; systematic efforts to strengthen them are lacking	System weaknesses catalogued and prioritised for improvement	System defences proactively assessed; weaknesses proactively repaired
Assessment	No measures of safety culture	Some measures of safety culture under-taken but are not widespread; little if any attempt to strengthen safety culture	Measures of safety culture adopted and deployed organisation-wide; beginning efforts to improve	Safety culture measures part of strategic metrics reported to Board; systematic improvement initiatives underway to achieve fully functioning safety culture
Leadership				
Board	Board quality focus is nearly exclusively on regulatory compliance	Full Board's involvement in quality limited to hearing reports from its quality committee	Full Board engaged in development of quality goals and approval of quality plan; regularly reviews adverse events and progress on quality goals	Board commits to goal of high reliability for all clinical services
CEO/ Management	CEO/management quality focus is nearly exclusively on regulatory compliance	CEO acknowledges need for plan to improve quality; delegates development and implementation of plan to subordinate	CEO leads development and implementation of proactive quality agenda	Management aims for zero failure rates for all vital clinical processes; some demonstrate zero or near-zero failure rates
Physicians	Physicians rarely lead quality improvement activities, overall physician participation in these activities is low	Physicians champion some quality improvement activities; physician participation in these activitiesoccurs in some areas but is not widespread	Physician often lead quality improvement activities; physician participation in these activities occurs in more areas, but we still have some important gaps	Physicians routinely lead clinical quality improvement activities and accept leadership of other appropriate clinicians; physician participation in these activities is uniform throughout the organisation
Quality strategy	Quality is not identified as central stragic imperative	Quality is one of many competing strategic priorities	Quality is one of our organisation's top 3 or 4 strategic priorities	Quality is the highest priority strategic goal of the organisation
Quality measures	Quality measures not prominently displayed or reported internal publicly; only measures used are those required by outside entities; not part of reward systems	Few quality measures reported internally; few or none reported publicly; not part of the reward systems	Routine internal reporting of quality measures begins; first measures reported publicly; first quality metrics introduced into staff reward systems	Key quality measures are routinely displayed internally and reported publicly; reward systems for staff prominently reflect accomplishment of quality goals
Information technology	Provides littleor no support for quality improvement	Supports some improvement activities, but principles of safe adoption not often adhered to	IT solutions support many quality initiatives; organization commits to principles and practice of safe adoption	Safety adopted IT solutions are integral to sustaining improved quality

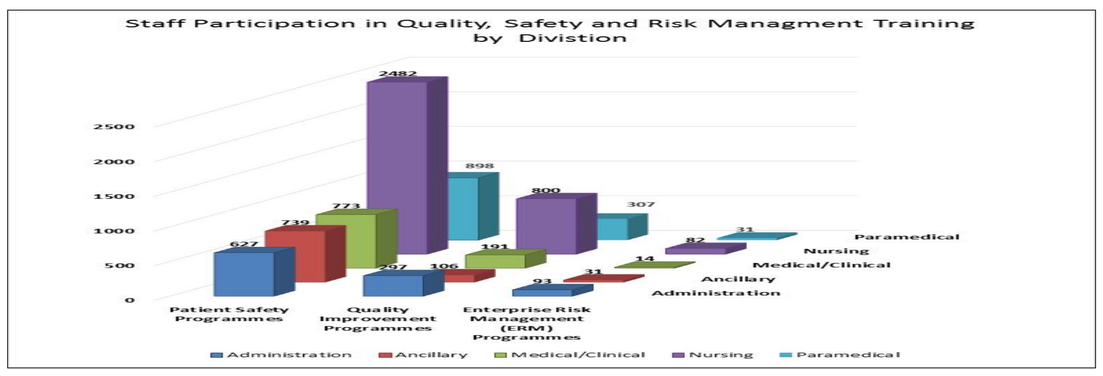
To effect a sustainable new skills learnt that reap the intended benefit, training programmes were wisely planned and implemented, and aligned with individual employees' goals to those of hospital. Each of the programme places a strong emphasis on connecting people together to improve the quality of care each offer. Facilitation in the application of skills and tools is emphasized to help individuals to reap the true value and the meaning towards what they can leverage and contribute to the knowledge and skills they have acquired.

Results

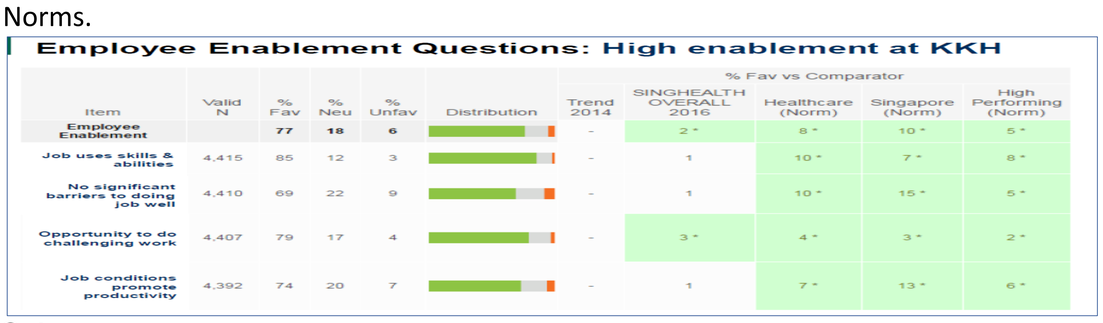
With the initiation of target Zero Harm, the training programmes were taken to broader scale to courses directed more specifically to meet the strategic objectives of the hospital with more in-house courses developed. Each training programme was mapped to target at specific group of staff e.g. Institute of Healthcare Improvement (IHI) Open school for all staff with diploma and above, Leading Reliability Improvement for Safer was directed at all clinician leaders, Speaking Up for Safety Seminar was for all hospital employees. The following tables were type of programmes mapped and completed by staff.

Type of Training Programmes	2017	2016	2015	Start till 2014	Total
Patient Safety Programmes					
IHI Open School	344	561	66	2	973
Speaking Up for Safety Seminar	4054	140	0	0	4194
Leading Reliability Improvement for Safer Healthcare	0	0	63	63	126
Mastering Safer and Reliable Practice in Healthcare	54	24	0	0	78
Promoting Professional Accountability	0	0	41	0	41
Safety and Reliability Improvement Programme Leader's Orientation Workshop	0	89	0	0	89
Patient Safety Champion Training	0	18	0	0	18
Quality Improvement Programmes					
CPIP	0	0	0	102	102
PIP	20	83	115	578	796
EPIC-QI	10	12	16	159	197
RCA	39	174	0	0	213
HFACS	134	176	0	0	310
Basic Analytics	0	83	0	0	83
Enterprise Risk Management (ERM) Programmes					
CERM/CPRM/(Risk Manager) Diploma	0	2	2	5	9
ERM Workshop	6	12	72	98	188
SingHealth TTT	0	0	0	54	54
Total	4661	1374	375	1061	

The chart below illustrates the type of training programmes and the participation rate by Clinical and Non-clinical Divisions.



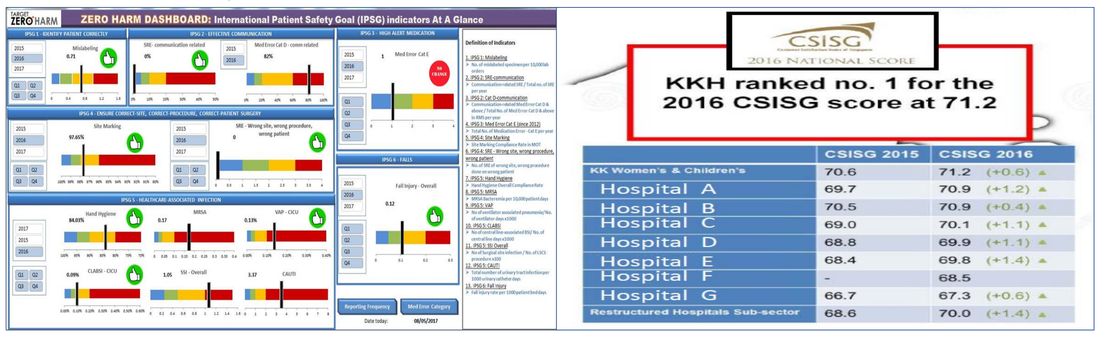
The Employee Satisfaction Survey conducted in 2016 with 94% response rate: High level of enablement - all elements rated above Healthcare, Singapore and High Performing Norms.



Outcome:

Hospital uses 13 Patient Harm Indicators that focus on 6 Joint Commission International (JCI) International Patient Safety Goal (IPSG) to track progress year on year: 62% has better outcome compared to previous year.

Consumer Satisfaction Index of Singapore 2015 & 2016: KKH ranked No. 1 among the Restructured Hospitals.



Conclusion

Strong leadership and a clear sense of corporate direction are vital to successful improvement. At its heart of capability building, the essential aspect of promoting strong engagement of the workforce is to incorporate the Connecting of People as part of the key component in training, coaching and facilitation. Learning events will always be beneficial, but the desired results will not be realised unless the learning is sustained. Behaviour change that drives organisational change requires more than a training solution. The Building Blocks to Achieve High Reliability is a great working frame that KKH uses to assess the level of maturity in meeting up our aspired goal, the targeted solutions or plans require specific designed system in which each piece contributes to the whole of what is to achieve.