

Context

- Hamad Medical Corporation (HMC), the only provider of acute healthcare services in the State of Qatar. HMC manages 8 tertiary hospitals and employs over 23,000 clinical and non-clinical staff. This improvement activity was performed in a general hospital, a cancer hospital, a rehabilitation hospital and a women's hospital as representative of the corporation services.

Problem

- Despite the provision of numerous quality improvement training programs by external and internal teams, doctors and nurses still voiced their dissatisfaction with the training and cited difficulty in applying the tools they were taught to their work setting. Furthermore, quality champions were having difficulty properly facilitating quality improvement efforts citing improper training as the cause.
- A closer look at QI training processes revealed that training needs and expectations of clinical and non-clinical staff have not been identified. Training is not designed to meet staff needs with respect to content, delivery methods and expected outcomes.

Assessment

- In order to understand the expectations and needs of healthcare staff with respect to QI training needs, focus groups and one-on-one interviews were held with 63 nurses, 37 physicians and 28 Quality Management staff (a total of 128 staff). Staff were asked to list their preference with respect to any aspect of QI training.
- Seven themes were identified and staff responses were as shown below:

Theme	Nursing Staff	Physician Staff	Quality Management
Environment	Conducive location Accessible Parking spaces available Shuttle Bus Close to work Food & snacks offered	Conducive location Computer availability Comfortable Large On-site Fixed, does not change Snacks and lunch	Conducive location Accessible
Incentives	Certificates of completion/attendance	Certificates of completion/attendance Continuing education credits	Certificates of completion/attendance Continuing education credits Facilitates promotions Interaction with international experts
Trainees	Includes all staff Staff selection should be fair and transparent By direct assignment of the supervisor	Includes all staff Staff selection should be fair and transparent Senior staff participation in training Resident physicians should be included	Includes all staff Based on needs Fair and transparent Based on clear criteria
Schedule	Training held at appropriate time Training held at convenient time Scheduled in advance Follows a fixed schedule Short lectures Time allotted for questions and answers During working hours After working hours	Training held at appropriate time Training held at convenient time Scheduled in advance Follows a fixed schedule Short lectures Time allotted for questions and answers During working hours	Adapts to staff work load and schedule Scheduled in advance Sufficient duration for in depth training During working hours with a relevant annual schedule
Trainer	Expert Professional Well prepared Able to answer questions Bilingual	Expert Professional Physician	Expert Professional Competent Able to answer questions Clearly presents material Well prepared
Style/Approach	Based on a training needs analysis Work related Interesting Interactive Fun Workshop Creative Incorporates group discussions Pass or fail examination at the conclusion Develops confidence	Based on a training needs analysis Informative Interesting Interactive Hands on Workshop Creative	Based on a knowledge assessment Informative Interesting Interactive Hands on Workshop Training materials provided Training brochure provided Training evaluation Skills transferable to work setting
Content	Easy to understand Includes practical examples Conveys best practice Poses questions Easy to implement Covers both theory and practice Enhances problem solving Addresses patient safety Covers quality indicator (KPI) development	Easy to understand Includes practical examples Conveys best practice Includes test questions	Easy to understand Practical examples Latest industry trends Theory and practice Data Analysis Survey and audit methods IT skills Project management Teaches teamwork and communication Accreditation standards Policy development

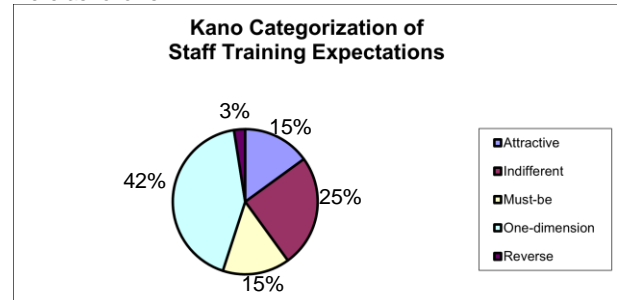
Analysis

- The Kano model of customer satisfaction was used to categorize staff training expectations and assess the impact of meeting them on staff satisfaction.
- The Kano model categorizes needs and expectations into one of five categories:

Category	Symbol	Description
Attractive	A	are not explicitly stated but have the greatest influence on satisfaction as they are unexpected by staff
Must-be	M	typically stated and degree of staff satisfaction is proportional to the level of fulfillment
One-dimensional	O	stated only when absent, staff dissatisfaction occurs if they are not fulfilled, but fulfillment does lead to increased satisfaction
Indifferent	I	the presence/absence of these features do not have an impact on staff satisfaction
Reverse	R	staff satisfaction improves if the feature is not present

Results

The questionnaire was completed by 93 nurses, 73 physicians, and 39 quality management professionals (total of 205 staff) and the overall results were as follows:



Details of training features that each group were attracted to, indifferent about or felt must be included are listed below:

QI Training Feature	Nurses	Physicians	QM
Individual training needs	I	O	O
Rules for staff selection	I	O	M
All staff allowed	O	O	O
Offered on a regular basis	I	M	M
Structured in modules	M	M	O
Brochure & pamphlet	M	M	A
Manual & CD provided	A	A	A
Applied & no theory	R	R	I
Interactive	O	O	O
Simulations	I	A	A
Training games	I	A	A
Role play	I	A	A
Application to solve a problem	I	M	O
Provide a coach and mentor	I	A	A
External company to deliver	I	I	I
Competent & skilled trainer	M	M	M
Trainer has healthcare experience	O	M	M
Evaluation of trainer & training	M	O	O
Online delivery	I	I	I
Held in a hotel	I	I	I
Lunch & snacks provided	A	A	I
During working hours	O	O	I
HMC certificate provided	M	M	O
External Certificate provided	O	O	O
Continuing Education credits	M	M	M
Prepares trainee for certification	O	A	A
Used as a basis for promotions	I	I	I
Multi-disciplinary trainee groups	I	I	I
Senior management congratulation	I	I	A
Basic Quality tools	I	I	M
New quality tools module	O	O	M
Advanced quality tools module	O	A	M
Soft skills module	O	O	A
Quality standards module	O	O	M
Customer Service module	O	I	A
IT skills module	O	M	O
Statistics and data analysis module	O	O	M
Project management module	I	I	A
Lean & six sigma module	O	I	O
Requirement to teach peers	I	I	I

Lessons Learnt

- Healthcare staff have clear and explicit training needs that differ between professional groups and can be identified through appropriate instruments.
- Training expectations have varying degrees of impact on staff satisfaction. Attempting to satisfy all staff needs will result in wasted resources and sub-optimum return on investment.
- The Kano model is an effective tool to understand and categorize healthcare staff QI training preferences.
- In order for QI training to be effective, staff training needs and expectations must be factored in the training development.