Institute for Healthcare Improvement

Safe Practice, Productive Teams - striking a balance to improve

Session B9: Thursday 11 April 13:15-14:30

Presenting Team

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Project Director, Europe Region
Institute for Healthcare Improvement

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Institute for Healthcare Improvement

Disclosures

This session's presenters are employees and faculty of The Institute for Healthcare Improvement (IHI) and have nothing to disclose.

After this session, participants will be able to:

- Recognise the importance of aligning improvement efforts to create a whole team approach to quality in care and service environments.
- Describe a method to support the practical steps of teams working to improve quality, safety, productivity and experience.
- Apply practical tools to build alignment across the system for improvement.
- Understand methods that empower teams to independently manage financial requirements as part of their approach to quality.

The current context

A desire to align efforts for safety, quality, productivity and efficiency

NHS IMPACT
Improving Patient Care Together

Figure 1: Key factors in delivering sustainable CIPs

Source: Audit Commission and Monitor

The NHS Patient Safety Strategy

Safer culture, safer systems, safer patients

How do you support teams to

Deliver priority improvements of the organisation
Continuously improve and maintain safety
Be productive
Drive efficiencies

….while also creating and maintaining their wellbeing and joy in work?

Key considerations for the creation and maintenance of quality, safety and effectiveness

Leadership Role and Responsibilities

Culture

Learning System

Source: Frankel A, Haraden C, Federico F, Lenoci-Edwards J. *A Framework for Safe, Reliable, and Effective Care.* White Paper. Cambridge, MA: Institute for Healthcare Improvement and Safe & Reliable Healthcare; 2017. (Available at ihi.org)

“Knowledge is Power”: A Bottom Up Approach to Quality Management

Data on safety performance

+

Data on cost & quality

+

Performance Improvement Methods

+

Management System

Reduce variation and harm, reduce waste and inefficiencies, increase productivity and joy

Continuous Improvement @ the point of care

The IHI Value Management methodology

- A high value health and care system is one that delivers the best possible outcome and experience for people at the lowest possible cost.
- The value management approach was developed by the IHI and successfully piloted at Raigmore Hospital, Scotland. It showed positive results in improving outcomes and reducing costs in Scotland and in Qatar [1, 2].
- The IHI Value Management approach provides 'just in time' data that front line staff can use to influence improvement activity at the point-of-care.
- This approach has **demonstrated positive impact in reducing costs, improving quality, efficiency and safety**.

1. Mate KS , Rakover J , Cordiner K , et al . Novel quality improvement method to reduce cost while improving the quality of patient care: retrospective observational study. BMJ Qual Saf 2020;29:586–94.doi:10.1136/bmjqs-2019-009825 pmid:http://www.ncbi.nlm.nih.gov/pubmed/31974264
2. Gupta P, Chacko G, Mavin P, et al Value improvement at the point of care: engaging and empowering front-line teams with a new quality improvement methodology BMJ Open Quality 2021;10:e001233. doi: 10.1136/bmjoq-2020-001233

Team formation

Hospital Steering Team

Project Sponsor

Nursing Lead

Finance Lead

Clinical Leaders

Technical Expertise

Day-to-day Leadership

Quality Expert Coaches

From Innovation to Scale

First small test – Summer 2015
R&D team travels to Connecticut Joint Replacement Institute to attempt a practical test with a surgical service

Second SP site – Fall 2017
IHI team partners with Hamad Heart Hospital in Doha, Qatar to introduce method in one cardiac step-down unit (model cell)

NHS Scotland national collaborative kicks off – Fall 2019
Six boards (of 14) each start with three teams; 3-year program aims for full board-wide scale in 3 years

Next steps
Potential for stand-alone programs, additional partners, and other offerings

2015 — Present

Initial IHI R&D on Value Improvement – Spring 2015
R&D 90-day cycle explores ways to improve value by engaging the front line; collaborative work with Brian Maskell and Kevin Little to identify applications of Lean Accounting in health care

Initiate work with model cell in NHS Highland, Scotland – Autumn 2016
IHI R&D team partners with inpatient respiratory ward at Raigmore Hospital to refine method

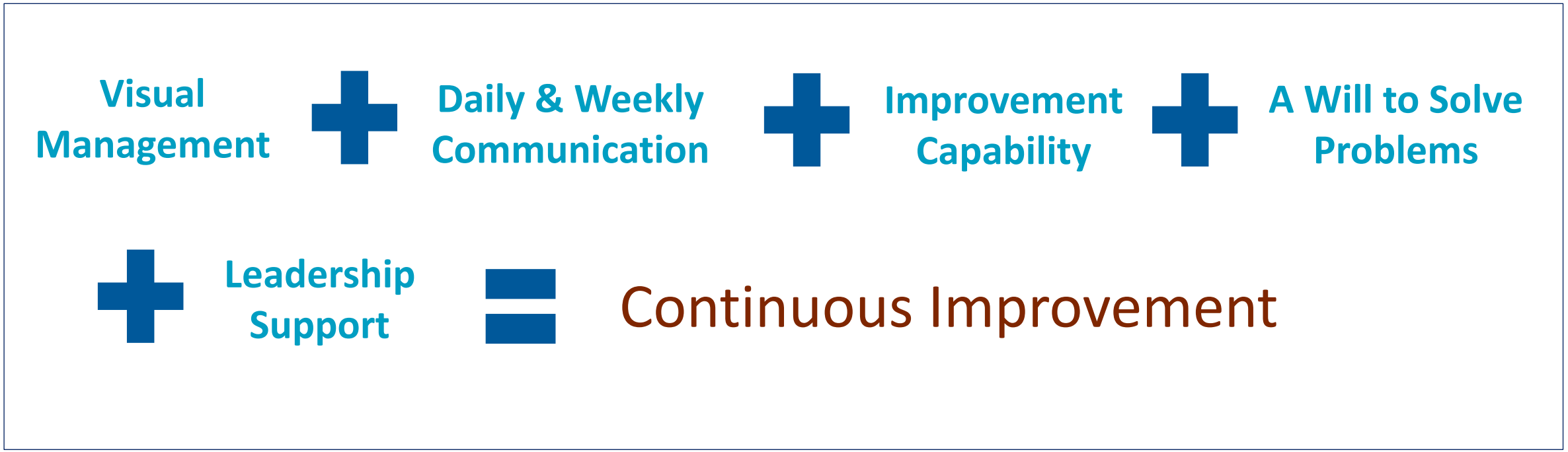
Third SP site – Summer 2019
IHI partners with Northwell Health, Lenox Hill Hospital, to establish model cell in neurosurgical ICU

Hamad launches system-level collaborative – Fall 2019
Collaborative will engage multiple facilities, at least 25-30 teams

NHS Highland and Hamad Health now leading the way with large scale results in clinical, non- clinical and community sites. Availability of toolkit to support local work in Scotland

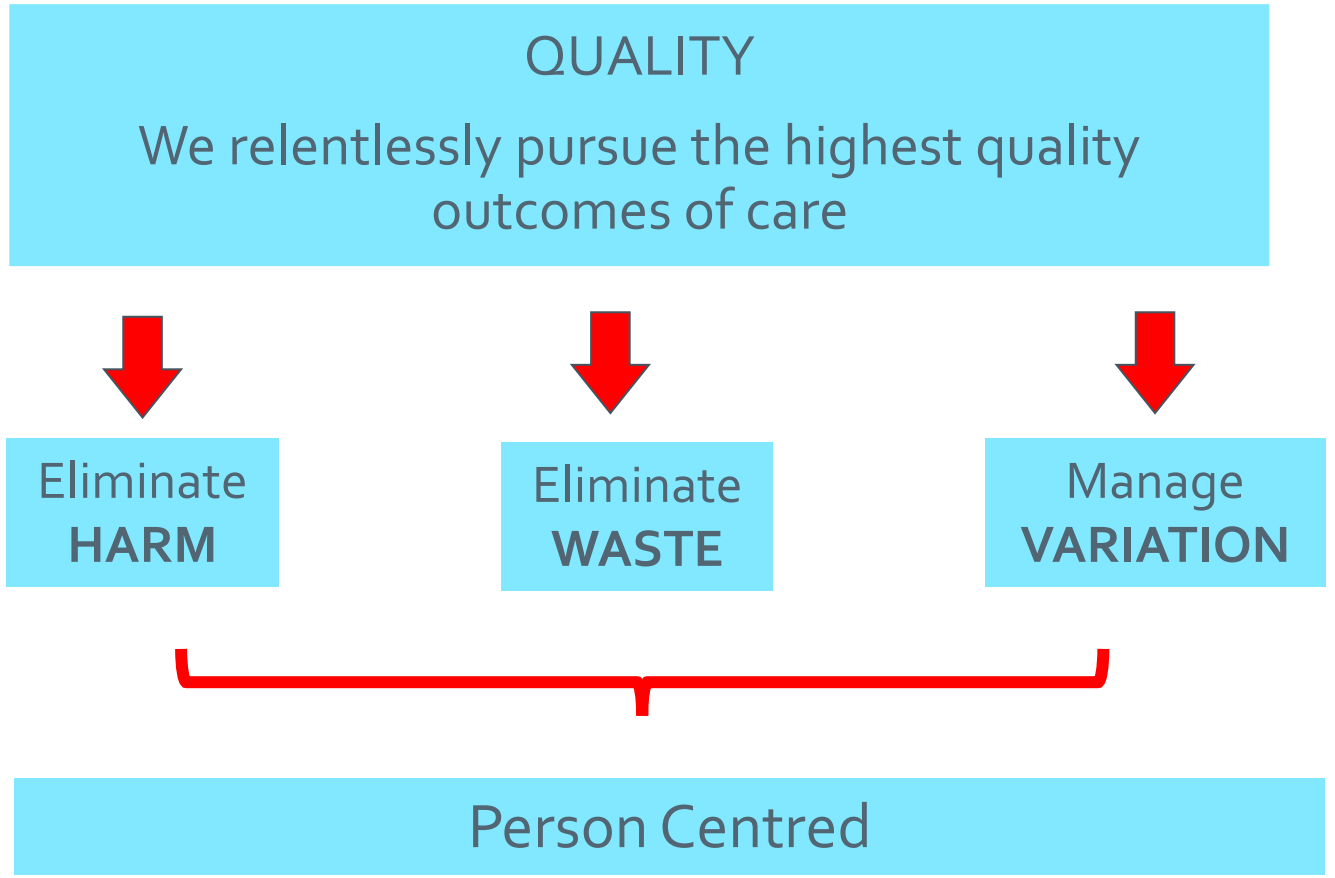
Why is this method effective in aligning improvement efforts with efficiency, productivity and staff joy?

Continuous Improvement Equation



Mate K, Rakover J, Cordiner K, Maskell B. A Simple Way to Involve Frontline Clinicians in Managing Costs. *HBR*. October 11, 2017.

Why this method?



Focus on daily work for staff and managers

Weekly huddles

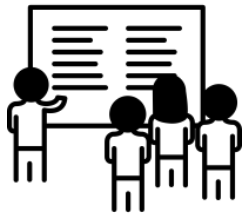
Integration of **aims** and **priorities**

Use of **visual boards** at the point of care

Problem solving and escalation protocols

The solution – Improvement Science and 3 key elements

1. **Box Score**



2. **Visual Management**

3. **Communication Method - Huddles**

Box Score

Performance Metrics

Capacity Metrics

Financial Metrics

HH.HDU-B Value Stream Box Score		Jan-18	Feb-18	Mar-18	Apr-18	April-May-18	Jun-18	Jul-18	Aug-18	Sep-18	Sep-18
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	Total number of Blood samples	163	190	213	158	118	154	149	194	159	187
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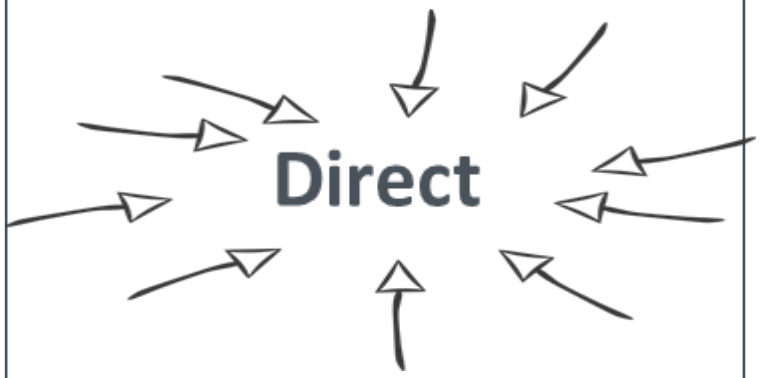
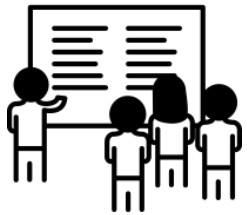
Capacity

		**Available**
Definition: Time spent face-to-face with the patient	**Definition:** Time spent on other activities that support patient care, such as paperwork, phone calls and equipment preparations	**Definition:** Any time staff receive payment for left over, after accounting for direct and indirect capacity, not including agreed breaks

The solution – Improvement Science and 3 key elements

1. Box Score



2. **Visual Management**

3. Communication Method - Huddles

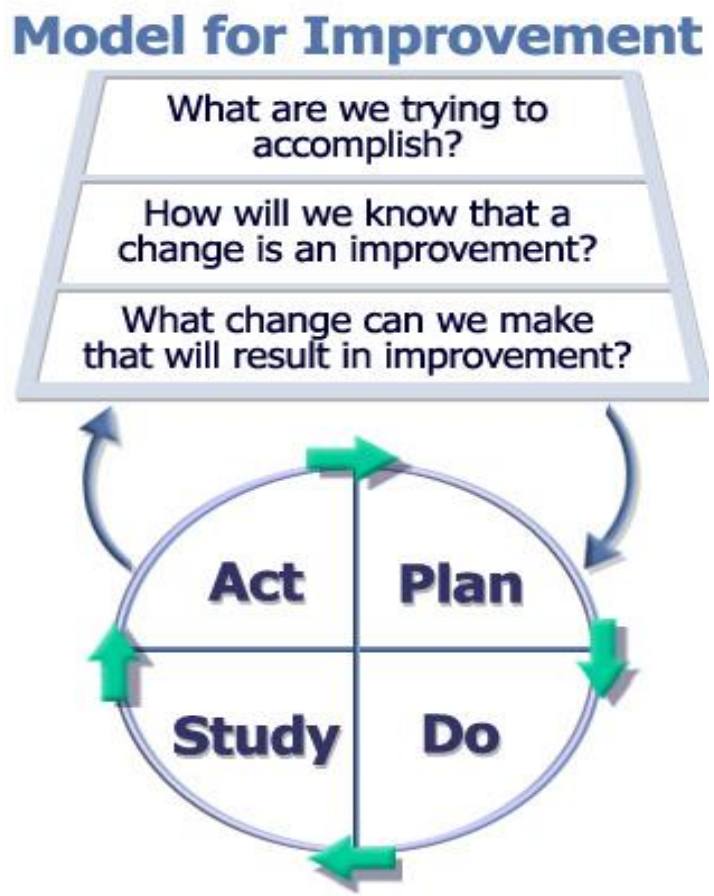
Visual Management Board

Box score - updated on a weekly basis

Select ~5 strategic improvement areas based on measures from the box score for “deeper dives”

Use improvement science to get results

Apply improvement science to get results

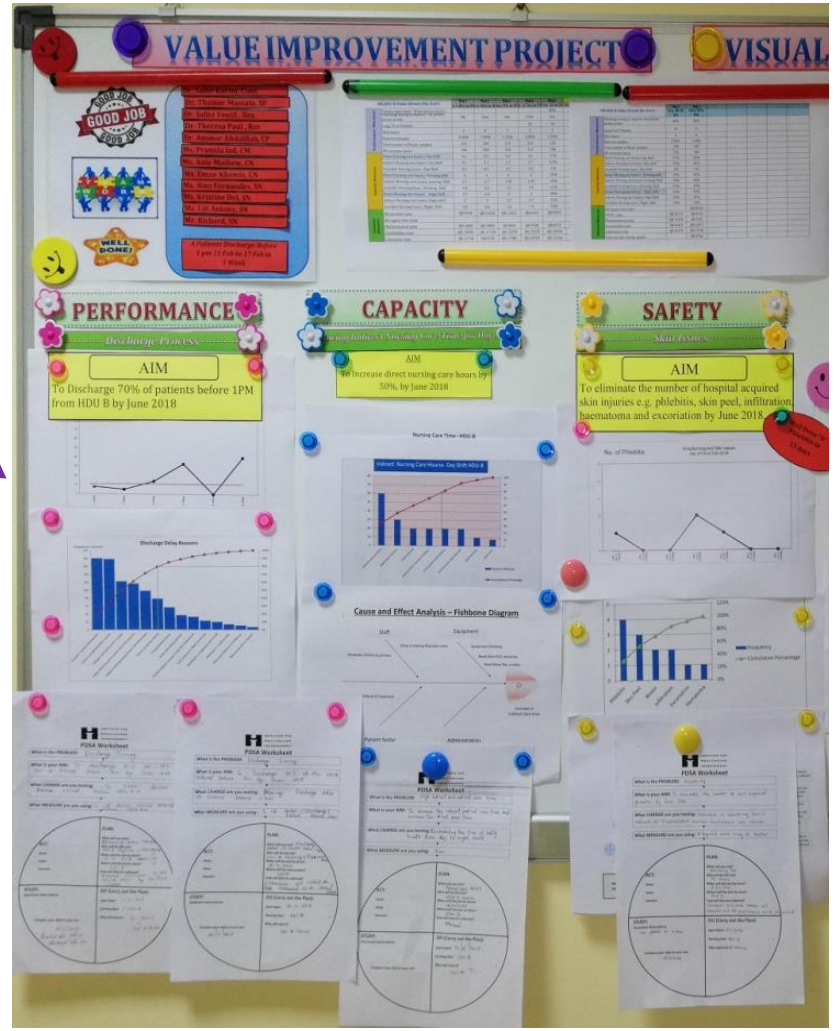


Aim

Measures

Changes

PDSA Tests



The solution – Improvement Science and 3 key elements

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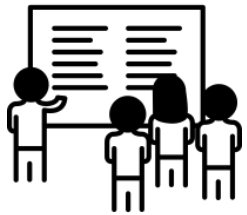


2. Visual Management

3. Communication Method - Huddles

Communication Method - Huddles

- Conducted weekly around the Visual Management Board
- Should involve an interdisciplinary team
- Huddle should last <15 minutes

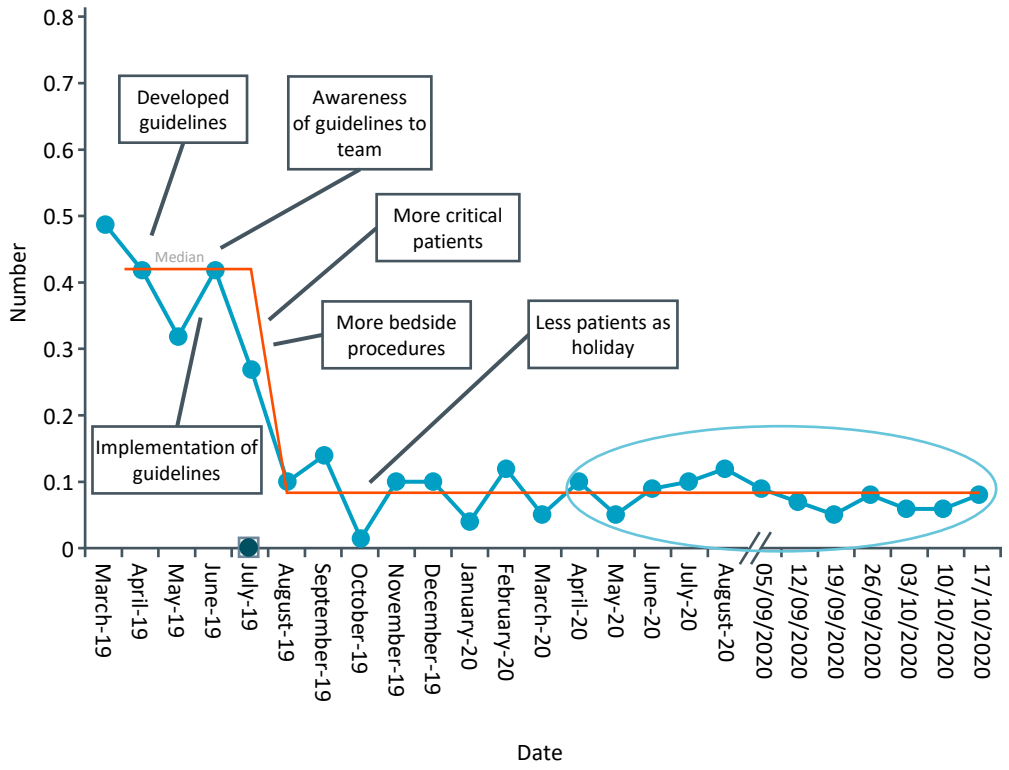
Benefits

- **Reducing harm** to the patients and improving safety
- Focus on **waste reduction and capacity** in addition to performance
- An **integrative management philosophy** that aims for continuous improvement in the quality of services
- **Sustainability** in existing and new QI work
- **A rhythm for learning and improvement with pace**
- Whole team involvement with **physician engagement** in QI work
- **Capacity building** of all staff
- Frontline **ownership**
- Development of **peer support** and shared learning
- **Increased joy at work** through accountability and recognition
- Easier **diffusion and adoption across** the system

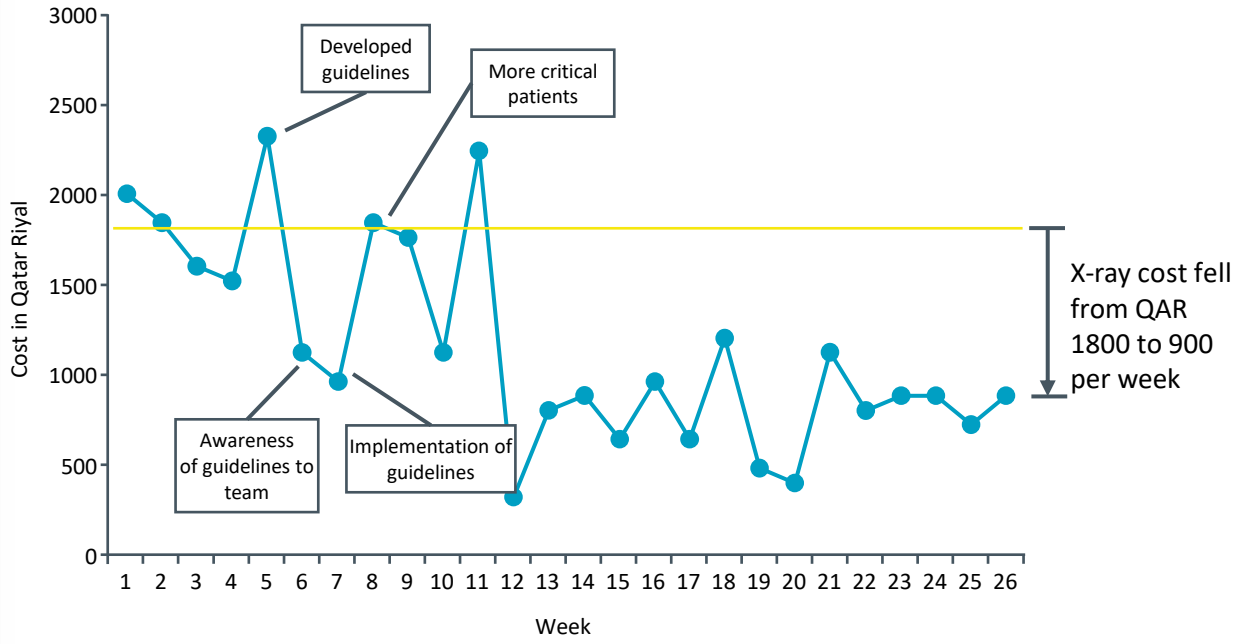
Reduction in Unnecessary X-rays

Improved safety | Improved efficiency | Reduced staff time | Reduced cost

Daily X-rays per patient



Weekly cost of X-rays



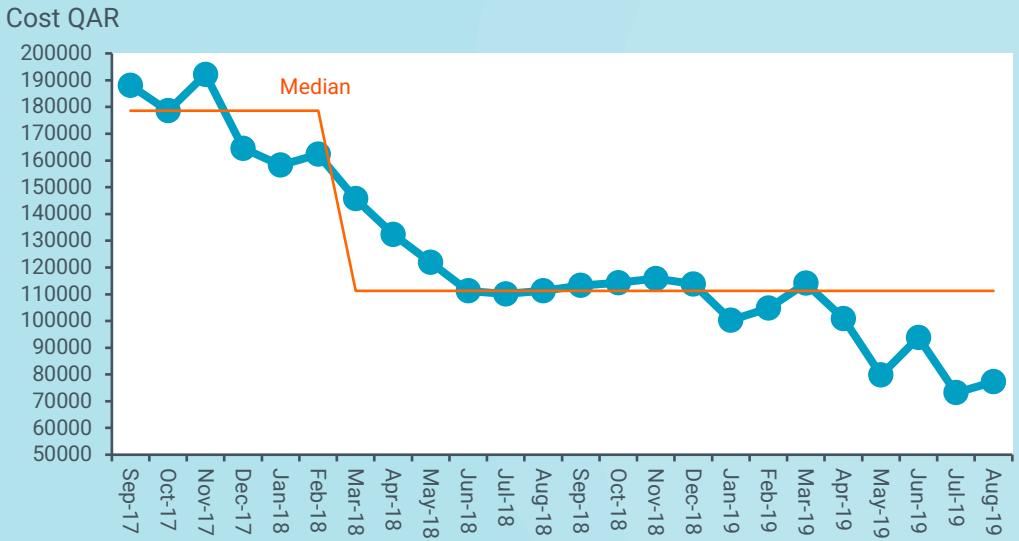
Estimated cost savings **for one unit:**
13,500 QAR over 15 weeks
(approx. GBP 3000)

Reduction in consumables

Improvements in stock control

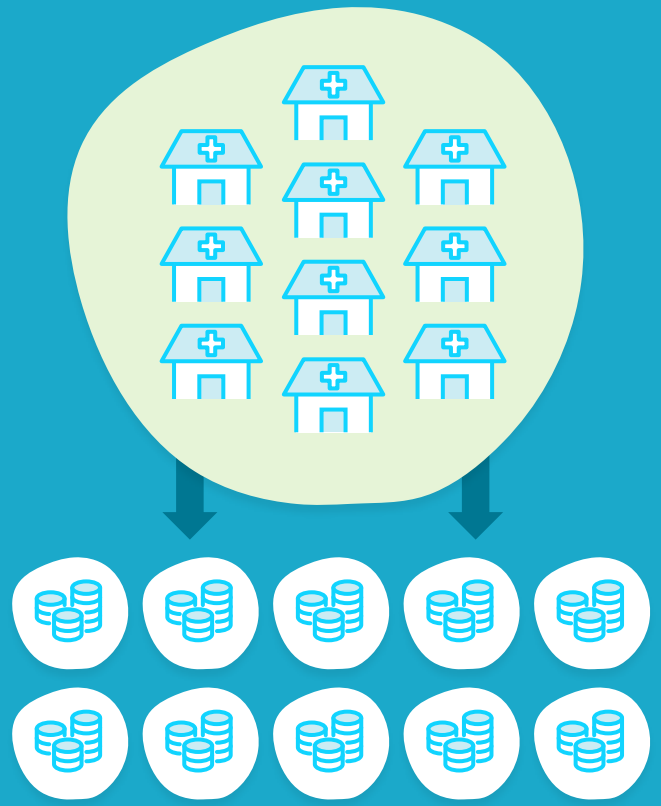
Better quality products at reduced cost

Reduced monthly consumable cost at CICU, Heart Hospital



QAR 1,200,000 saved in a year (approx. GBP 262,000)

If applied across **10 units:**

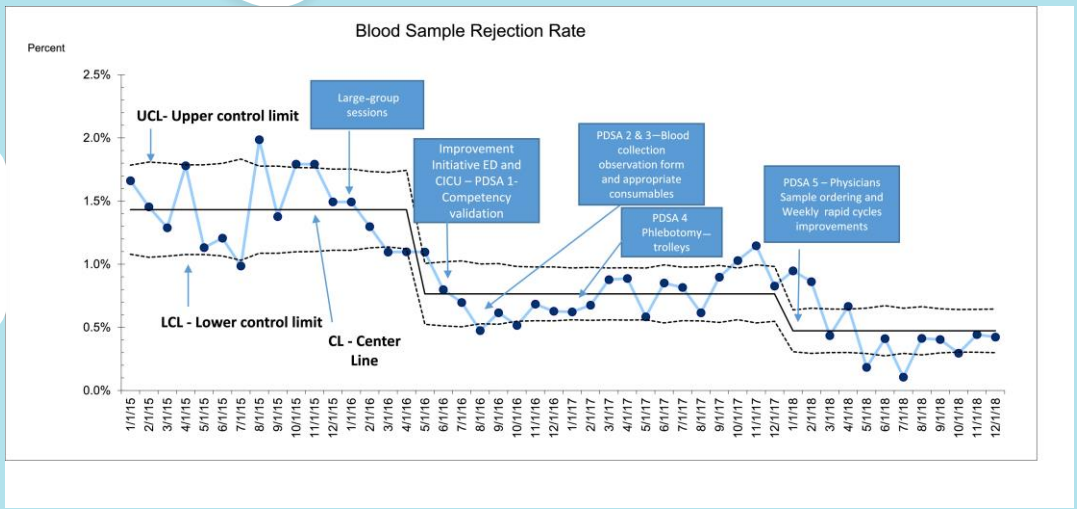


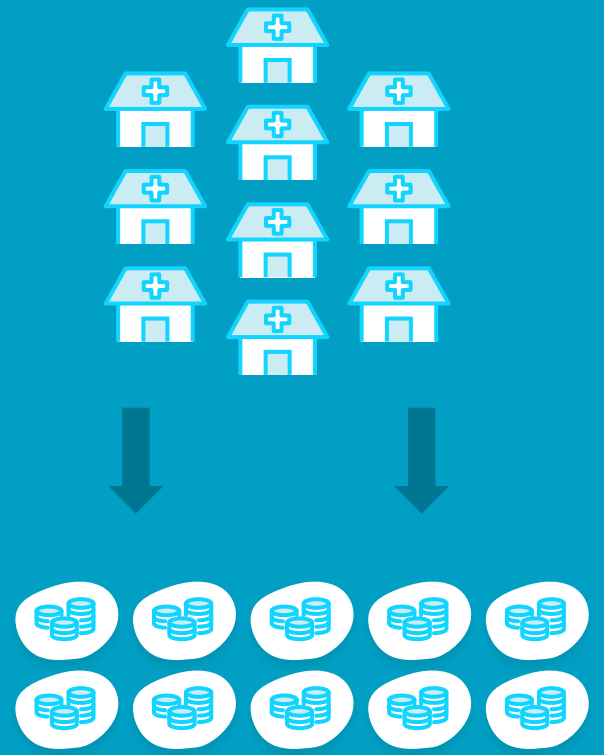
Could save **QAR 12,000,000** in a year

Reduction in lab Cost

Using 5 s
Reduction in rejected specimen
Reducing unnecessary lab orders

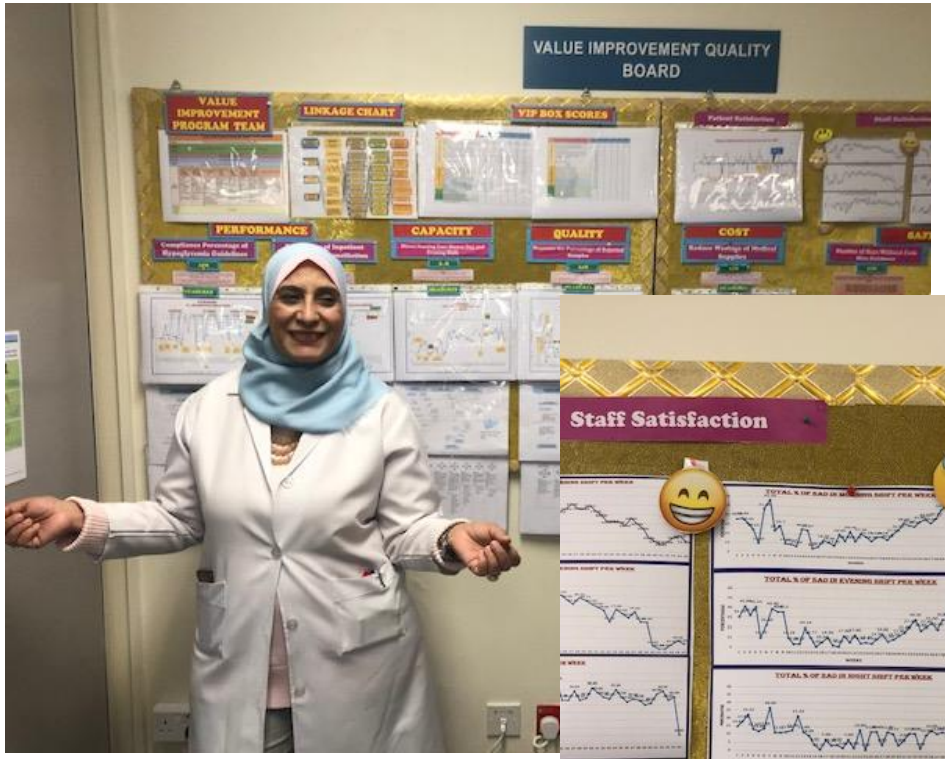
Reduced monthly lab cost at CICU and HDU B, Heart Hospital





QAR 890,000
(Approx GBP 194,000 saved in a year)

Pay attention to staff experience and creating joy in work



Take a few minutes to discuss with your neighbour:

How do teams in your context currently align and manage safety, productivity, and efficiency?

Linking strategic goals with unit aims and improvement efforts

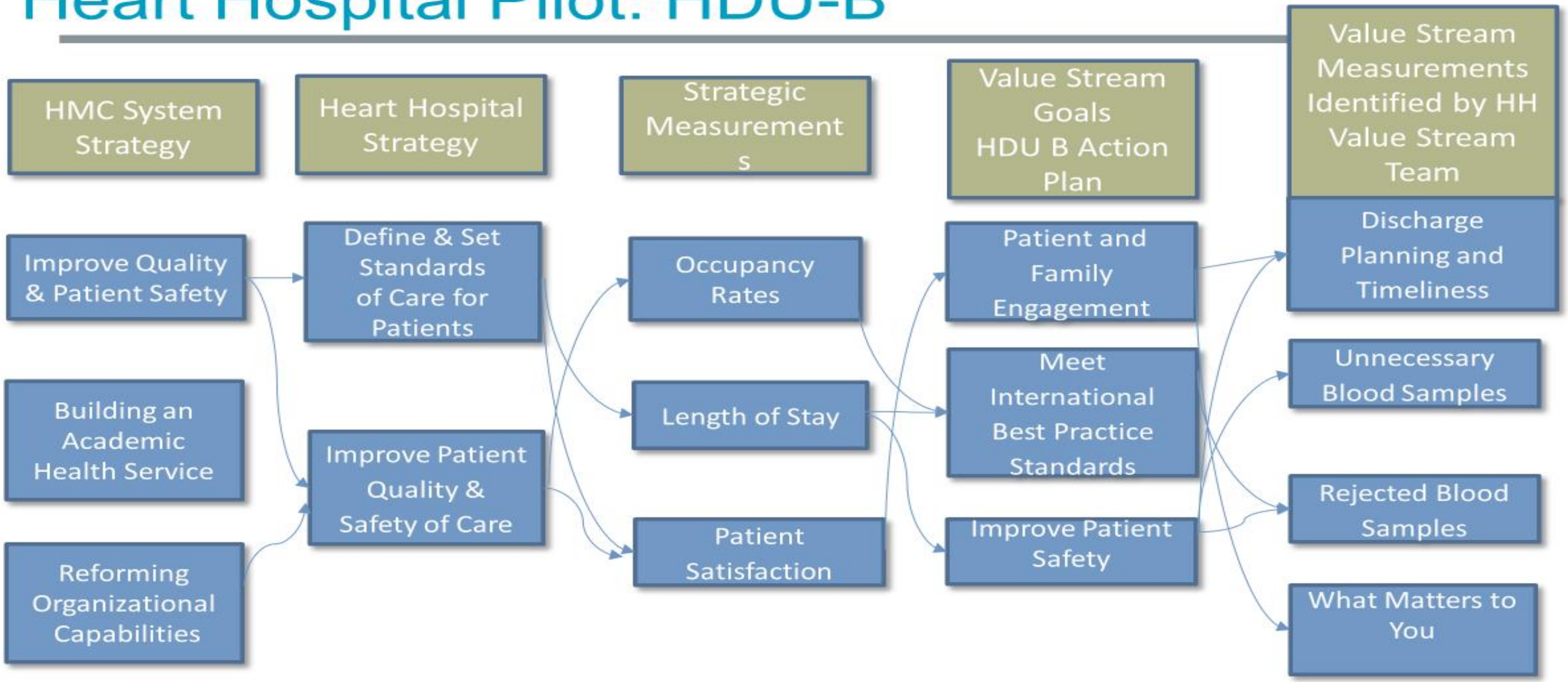
Linkage Chart Template

System Level Strategic Priorities	Hospital Level Strategic Priorities	Existing Measures and Data	Unit/Ward level Priorities and Aims	Unit/Ward Level Measures and Data

Linkage Chart Example

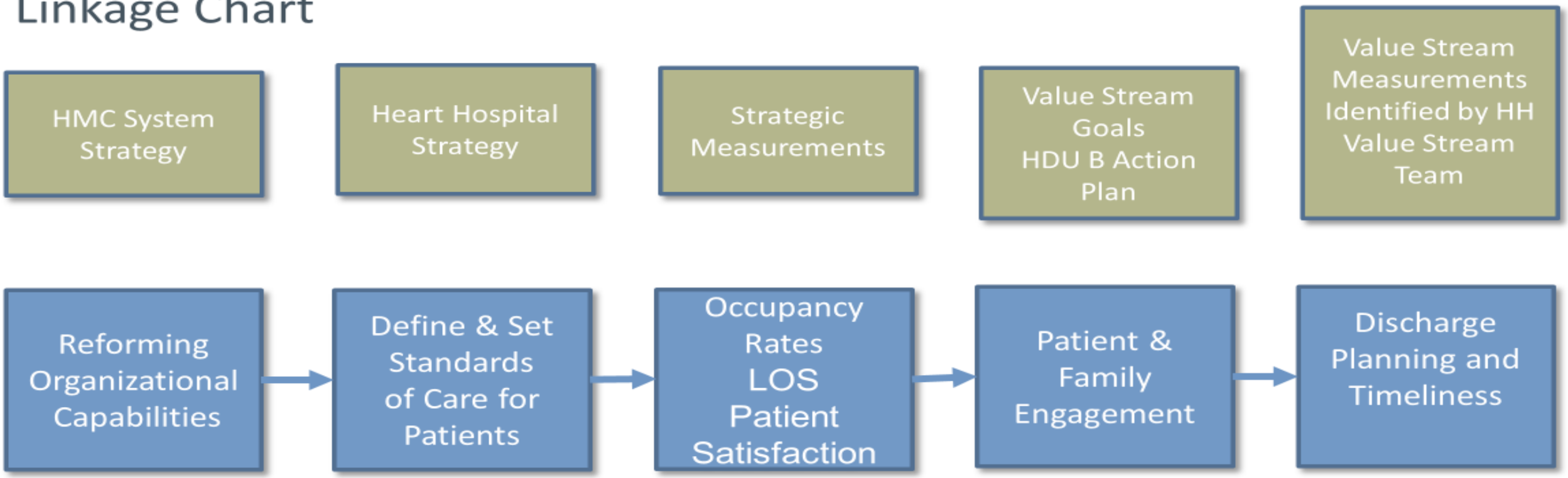
System Level Strategic Priorities	Hospital Level Strategic Priorities	Existing Measures and Data	Unit/Ward level Priorities and Aims	Unit/Ward Level Measures and Data
Safe Care	Improve Patient safety and Quality	Number of harm events e.g., Falls rate, Rate of hospital acquired pressure ulcers. Number/rate of Hospital Acquired Infections (HAI) e.g., Central Line, C-diff, Catheter associated UTI.	A unit recognises gaps and need for focus on: Reducing in-patient Falls Reducing in hospital acquired Pressure Ulcers	Rate of incidence per bed days Number of falls per week Number of pressure ulcers per week Compliance with patient assessment and expected preventative actions

Heart Hospital Pilot: HDU-B



Heart Hospital Pilot: HDU-B

Linkage Chart



Take a few minutes to explore:

How do you currently align organisational priorities to the every day improvement work of teams?

Are the linkages known and understood?

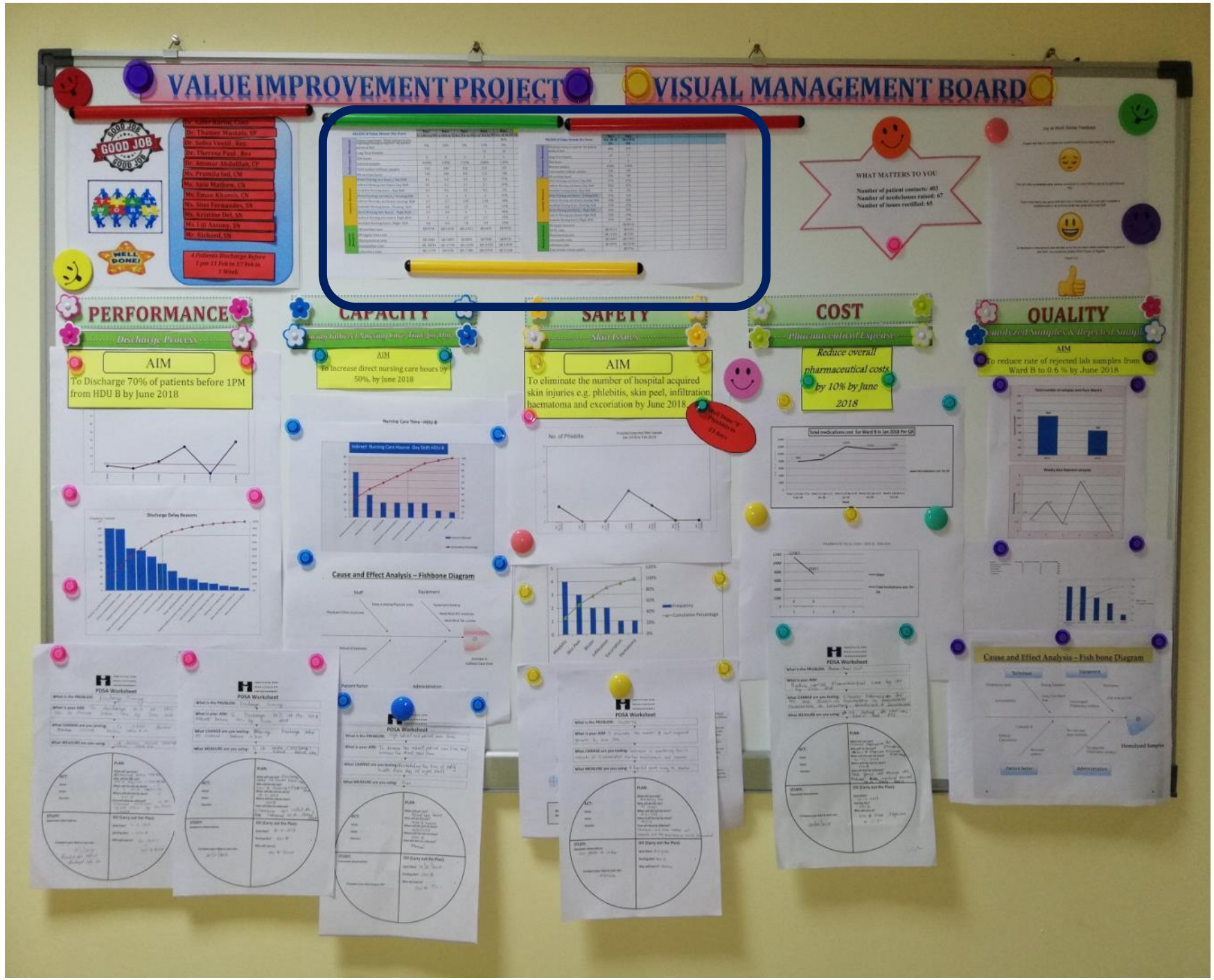
Huddles as a habit

Who leads

Time keeping

Covering all aspects of Visual Management Board

Agreement on next steps


VALUE IMPROVEMENT PROJECT
VISUAL MANAGEMENT BOARD
GOOD JOB
WELL DONE!
WHAT MATTERS TO YOU
Number of patient contacts: 403
Number of needs/issues raised: 67
Number of issues rectified: 65
PERFORMANCE
Discharge Process
AIM
To Discharge 70% of patients before 1PM from HDU B by June 2018
CAPACITY
AIM
To increase direct nursing care hours by 50%, by June 2018
SAFETY
Skin Issues
AIM
To eliminate the number of hospital acquired skin injuries e.g. phlebitis, skin peel, infiltration haematoma and excoriation by June 2018
COST
Pharmaceutical Expense
Reduce overall pharmaceutical costs by 10% by June 2018
QUALITY
AIM
To reduce rate of rejected lab samples from Ward B to 0.6 % by June 2018
Cause and Effect Analysis – Fishbone Diagram
Cause and Effect Analysis – Fish bone Diagram
PDSA Worksheet

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Let's Huddle

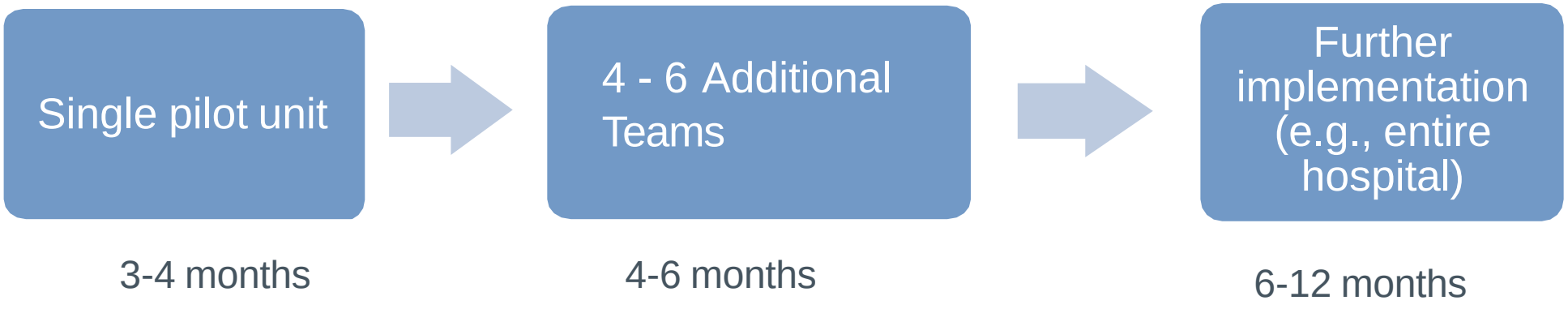
Who leads

Time keeping

Covering all aspects of Visual Management Board

Agreement on next steps

Testing and spreading the method



Pace of spread depends on:

Existing improvement capability

Leadership and multidisciplinary support

Availability of data and ability to automate data processes

The commitment of at least 1 local clinical champion

Peer Reviewed QI Report Publications

ELSEVIER

The Joint Commission Journal on Quality and Patient Safety

Quality Improvement Initiative to Reduce Rejected Laboratory Samples and Enhance Specimen Acceptability


A Quality Improvement Initiative to Reduce Rejected Laboratory Samples and Enhance Specimen Acceptability

Poonam Gupta, Mincy Thomas, Nidal Sbetan, Gracy Chacko, Indirani Savarimuthu, Pulikana Cherian, Asma Abas, Shiny Shiju, Sabir Karim, Ammar Kanaan, Gilrose Bautista, Nevine Elsalasiny, Sara Al Balushi, Amani El Haga, Mawahib El Hassan,

PubMed

https://doi.org/10.1016/j.jcjq.2021.04.005

BMJ Journals

BMJ Open Quality

Value improvement at the point of care: engaging and empowering front-line teams with a new quality improvement methodology


Value improvement at the point of care: engaging and empowering front-line teams with a new quality improvement methodology

Poonam Gupta, Gracy Chacko, Paul Mavin, Ian McDonald, Mawahib El Hassan, Emad Omari, Azhar Ali, Raana Siddiqui, Needa Khan, Lisa McKenzie, Tricia Bolender, William Andrews

PubMed

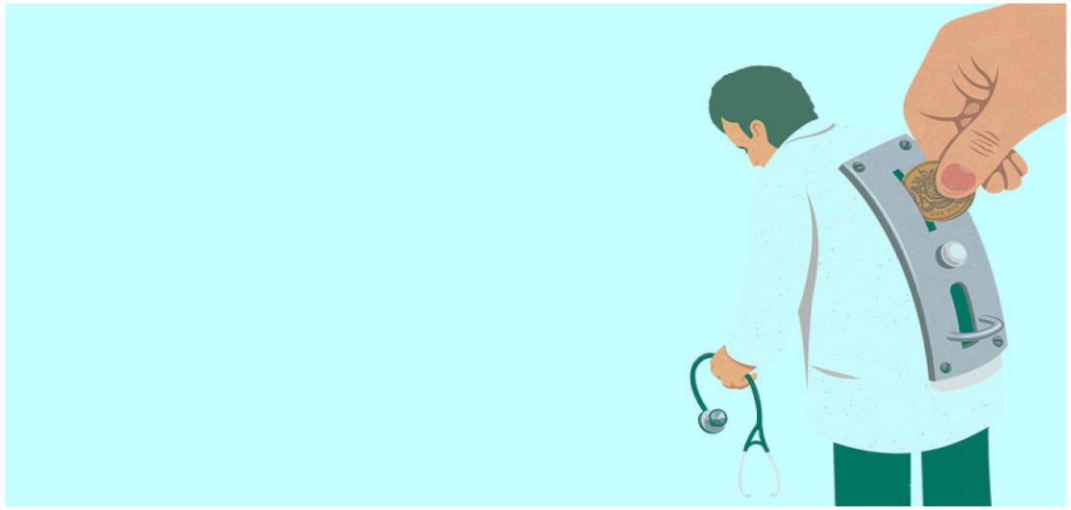
doi: 10.1136/bmjoq-2019-000905

OPERATIONS

A Simple Way to Involve Frontline Clinicians in Managing Costs

by Kedar S. Mate, Jeffrey Rakover, Kay Cordiner, and Brian Maskell

OCTOBER 11, 2017



John Holcroft/Getty Images

While there have been significant strides in providing frontline clinicians with quality information, these clinicians still lack the tools they need to play an active role in controlling the costs of the care they provide. To date, only small steps have been taken at most health care systems (for example, clarifying the costs of specific tests during the test-ordering process), and new clinical analytics systems that offer better insights into costs and efficiency often aren't integrated into day-to-day

Impact

Explore the top 3 Altmetric articles, 2021

- Unintended consequences: quantifying the benefits, iatrogenic harms and downstream cascade costs of musculoskeletal MRI in UK primary care
- Value improvement at the point of care: engaging and empowering front-line teams with a new quality improvement methodology
- Empowering patients: simplifying discharge instructions

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Citations	116	116
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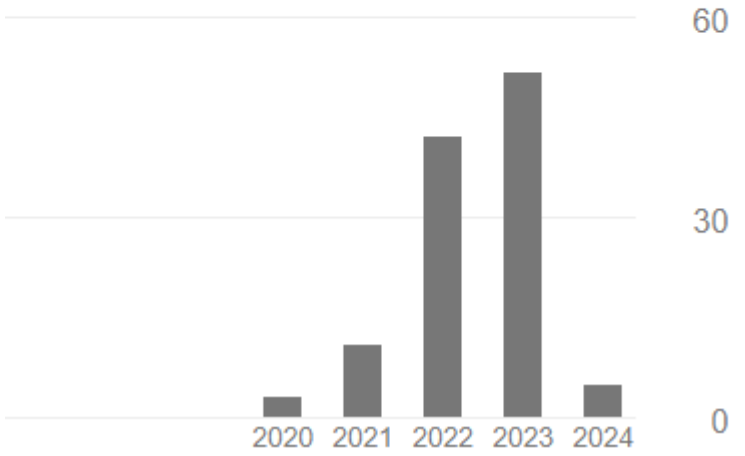

Award for Hamad Medical Corporation Centre in Qatar as Second Hospital in the World to Implement Value Improvement Project

Heart Hospital bags prestigious award

Heart Hospital second in world to implement Value Improvement Project

TRIBUNE NEWS NETWORK
DOHA

A team from HMC's Heart Hospital won this year's Managing Director's Special Award and received the Stars of Excellence Award for their project titled 'Embedded Sustainability in Value Improvement Work'.

HAMAD Medical Corporation's (HMC) Center for Patient Experience and Staff Engagement (CPESE) recently held its 10th annual Stars of Excellence Awards ceremony to honour the top 29 winning projects.

A team from HMC's Heart Hospital won this year's Managing Director's Special Award and received the Stars of Excellence Award for their project titled 'Embedded Sustainability in Value Improvement Work', which was submitted in the Health category, Quality and Patient Safety subcategory.

Commenting on the achievement, Professor William McKenna, chief executive officer and medical director of Heart Hospital said: "This success is the outcome of a long journey full of challenges and opportunities. I take this opportunity to thank everyone who contributed to this achievement. We are proud of the high-quality healthcare services provided at Heart Hospital for patients with heart conditions in Qatar. We are also committed to continuously expanding and improving our services to ensure the care we provide is among the very best in the world."

"Led by the Office for Performance Improvement team at Heart Hospital, the value improvement project aims to enhance quality while maintaining or even reducing costs. The team has been working on this initiative for almost two years and the process has passed through many phases during that time, including testing and implementation. The Heart Hospital is the second hospital in the world to implement value improvement project successfully," said Professor McKenna.

Dr Nidal Ahmad Asaad, chairman of Cardiology at Heart Hospital, said: "Heart Hospital's Office for Performance Improvement worked with the US-based Institute for Healthcare Improvement to introduce 'value improvement', a new approach to quality improvement. This approach uses improvement science and three new concepts: a 'box score' of measures, a 'visual management board', and weekly staff huddles to drive rapid improvement."

"This approach has a great impact on patient care and patient satisfaction as it allows the provision of timely and effective care and a well-coordinated, patient-centred approach to care. It has also resulted in a sustainable reduction in the total number of blood samples sent from inpatient units, improved time management for staff and ultimately cost reduction," added Dr Nidal.

The value improvement approach is now operational on nine units at Heart Hospital – High Dependency Unit A, High Dependency Unit B, High Dependency Unit C, High Dependency Unit D, the Cardiac Intensive Care Unit, the Cardiothoracic Intensive Care Unit, the Non-Invasive Cardiology Unit, Cardiac Rehabilitation, and the Facilities Maintenance and Safety Department. The initiative will be expanded to three more units in January, 2020.

Please provide feedback and sign up to learn more!

Photo by Kevin Butz on Unsplash

Ending with Gratitude

What is one thing you're grateful for today?