

Clinical Care Improvement Training Program (CCITP)

Transforming an improvement culture



QATAR: THE GROWING NATION

Dr. Noof Al Siddiqi

Consultant, Dermatology

Communications Lead, CCITP



Qatar National Vision

Human Development

- Development of all people to sustain a prosperous society

Social Development

- Just & caring society based on high moral values

Economic Development

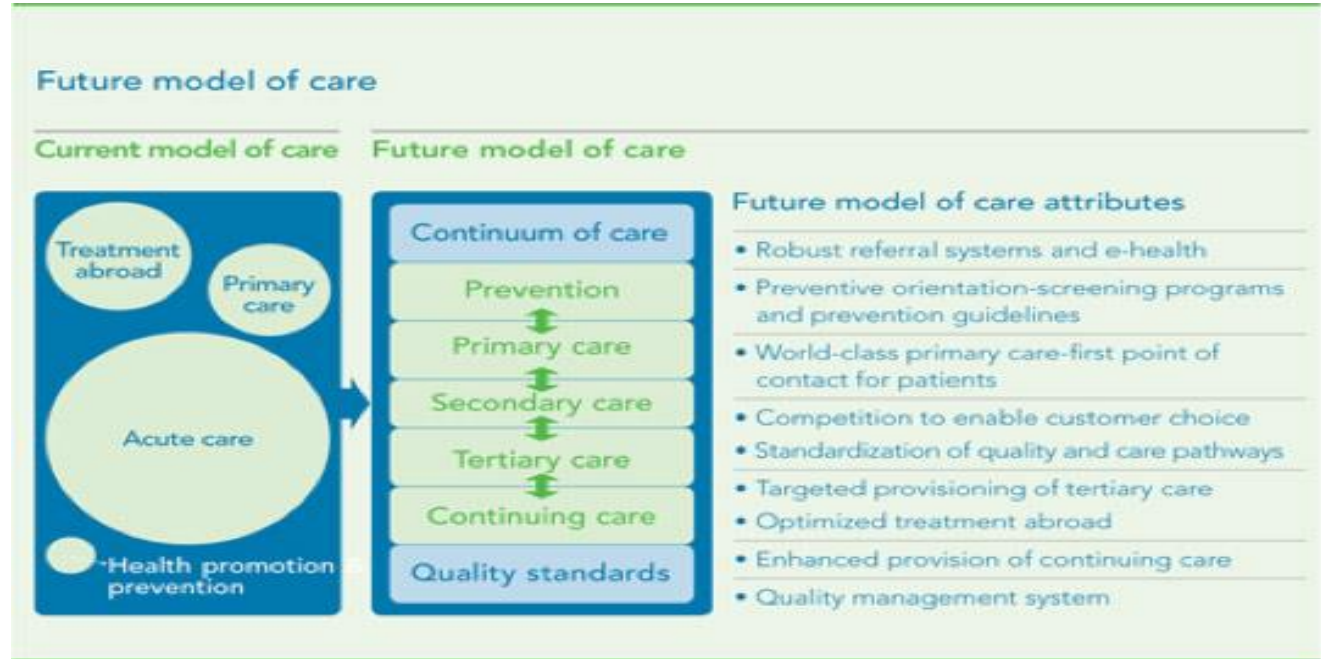
- Development of competitive & diversified economy

Environmental Development

- Harmony between economic growth, social development and environmental protection

The National Health Strategy 2011-2016

To ensure that people of Qatar have
an effective and integrated healthcare system



Quality focus in QNHS

There will also be an established *culture of excellence* with a strong focus on **quality** and continuous improvement.

This will be achieved by:

- ◆ Ensuring that *measurable performance* agreements are in place for all providers (i.e., **performance standards** founded on mandated reporting within a proportionate regulatory framework which rewards achievement).
- ◆ Developing systems so *that healthcare providers are given feedback* on current performance against **quality**.
- ◆ Standards to help *direct quality improvement initiatives* and sector wide best practice information gathering.

Who is HMC?

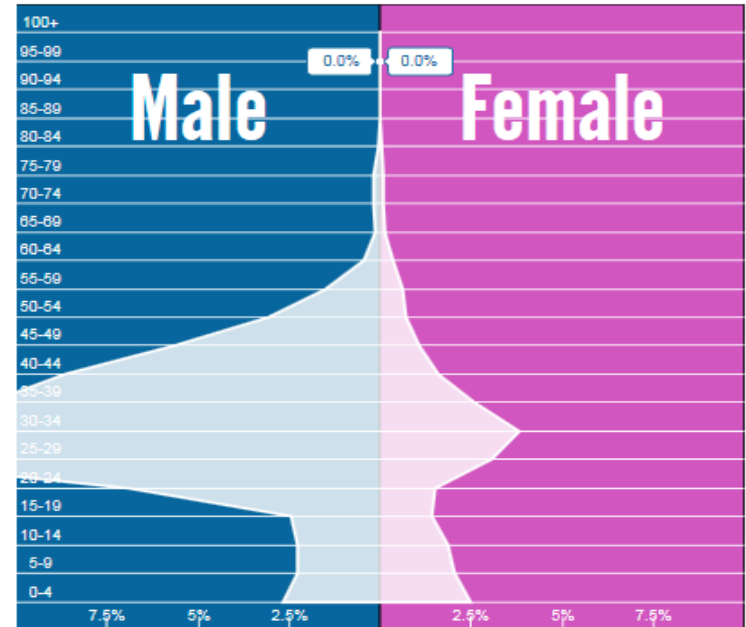
Hospitals
Clinical staff
Patients

Hamad Medical Corporation (HMC)

- Serving a community of 2,350,000
 - 8 hospitals
 - 2100 beds
- Established by Emiri decree in 1979 and reports to the Supreme Council of Health.
- Provides state-of-the-art diagnosis and treatment of diseases that previously could only be managed in overseas medical institutions.



Qatar Population
2016 **2,559,267**



HMC Facilities

Hamad General Hospital



Beds: 551
Location: Doha
Services: General

Rumailah Hospital



Beds: 509
Location: Doha
Services: Geriatric, PMR, Psychiatry
Communicable disease,
Specialized surgeries

Women's Hospital



Beds: 354
Location: Doha
Services: Gyn/ Obs and Neonate

HMC Facilities

Al Khor Hospital



Beds: 113
Location: Al-Khor
Services: General

Heart Hospital



Beds: 118
Location: Doha
Services: Cardiology

Al Wakra Hospital



Beds: 186
Location: Al-Wakra
Services: General

HMC Facilities

National Center for Cancer Care and Research



Beds: 92
Location: Doha
Services: Cancer, Blood diseases

The Cuban Hospital



Beds: 79
Location: Dukhan
Services: General

Specialized Care Center (Enaya)



Beds: 76
Location: Doha
Services: Long term

HMC Facilities

Total Clinical Staff (14,223) (2013)

Benefits

- Wide diversity of clinical providers
- Increased knowledge base
- Expanded experiences

Challenges

- Cultural differences
- Language barriers
- Entitlements

What is HMC?

Mission

Vision

Goals

HMC Vision



“We aim to deliver the safest, most effective and most compassionate care to each and every one of our patients”

HE Dr. Hanan Al-Kuwari, Minister of Public Health, HMC

Best Care, Always

Leadership commitment, HMC

Challenges in HMC? 2010

Dr. Reham Hassan Negm Eldin
Hamad Healthcare Improvement Program Manager, HHQI
CCITP Manager

Quality Improvement at HMC

2010

“Someone else’s” job

Centrally-driven, little involvement of clinicians

Issues are reported, nothing seems to change

Accreditation focused, often lacks “clinical relevance”

Leadership decisions

Empowerment

Time & compensation

Skills training

Project coaching

Start a movement

FUTURE

Everyone’s job

Driven by local clinicians, supported centrally

Reporting leads to meaningful change

Clinically relevant and patient-centered, supports accreditation

The need back in 2010

63% of physician believe that when something goes wrong, patients are most likely to register a complaint against them.

83% of physicians believe they should be involved in, and often lead, quality improvement efforts.

15% of physicians felt they had the proper training to lead a quality improvement effort.

Quality & Patient Safety

Capacity and Capability

IHI open school

Middle East Forum

Best care always collaborative

CCITP

Clinical microsystems coaching training

IHI HMC fellowship

QU MPH-HSI Masters



Clinical Care Improvement Training Program

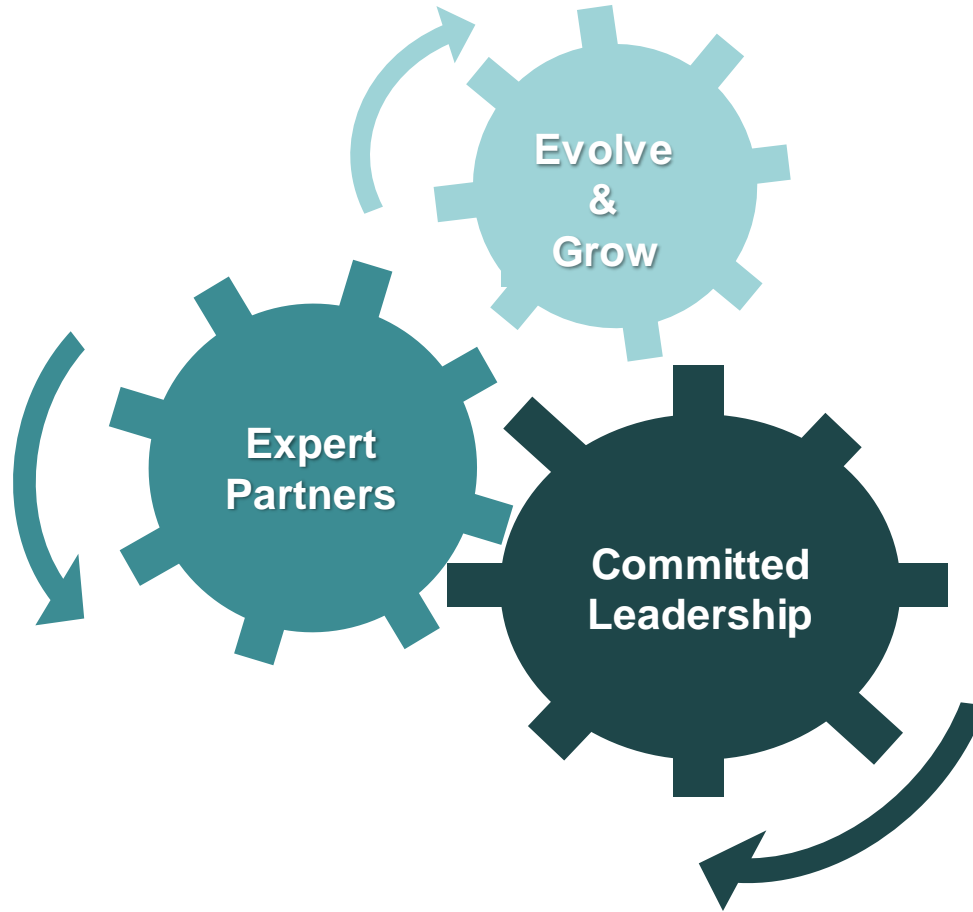
Vision

1. Start a Movement: train and mentor clinicians to lead improvement efforts that directly impact patient care.
2. Provide a Toolkit: teach basics of clinical quality and process improvement and apply to real life problem.

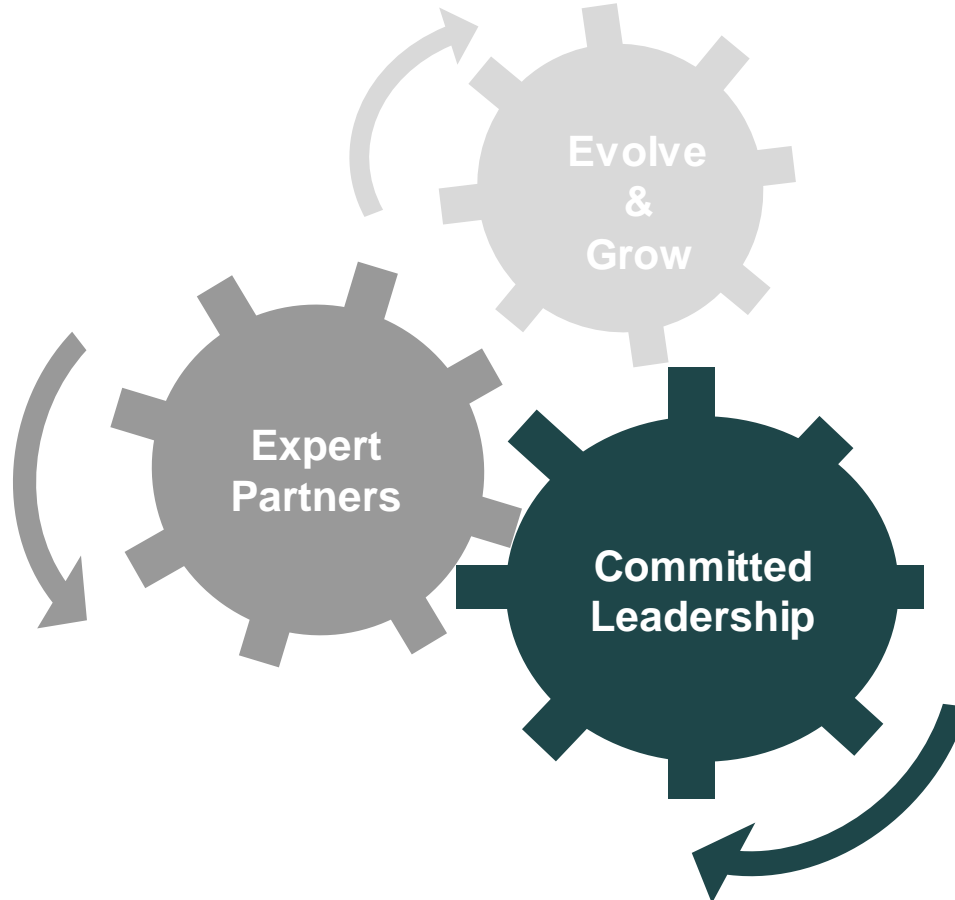
The Issues

1. Limited knowledge and experience in the area of quality improvement...
2. No lasting and sustained improvement projects in place...
3. HOWEVER, a strong desire for both...

Our Plan

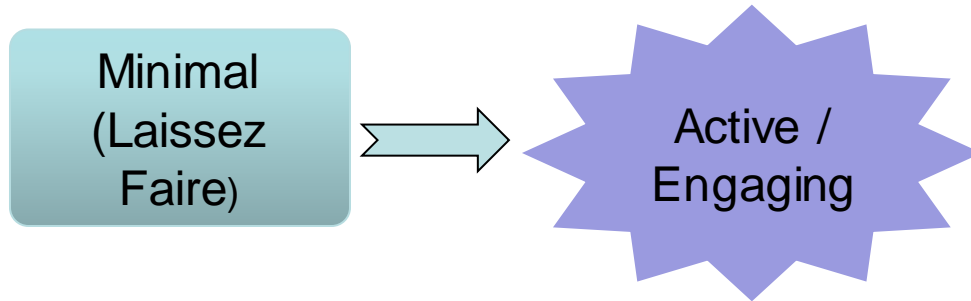


Committed Leadership



Frontline Leadership Engagement

Sponsor Engagement



Initially

Sponsored limited their involvement to:

- Nominating members
- Acknowledging the work
- General oversight

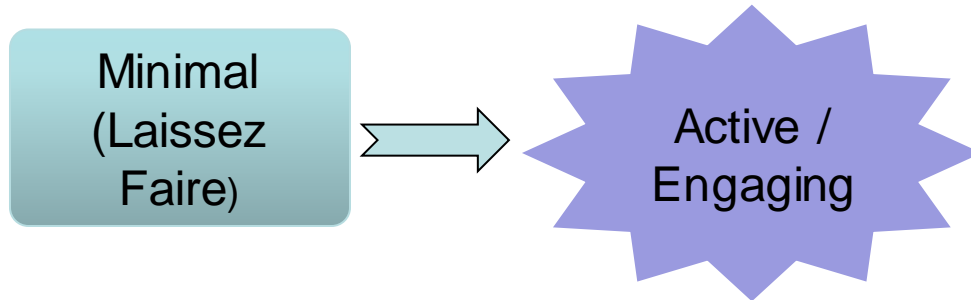
Evolution

Sponsors are actively involved in:

- Identifying improvement priorities
- Aligning nominations with initiatives
- Presenting sustainability plan
- Actively monitoring project work

Frontline Leadership Engagement

Sponsor Engagement



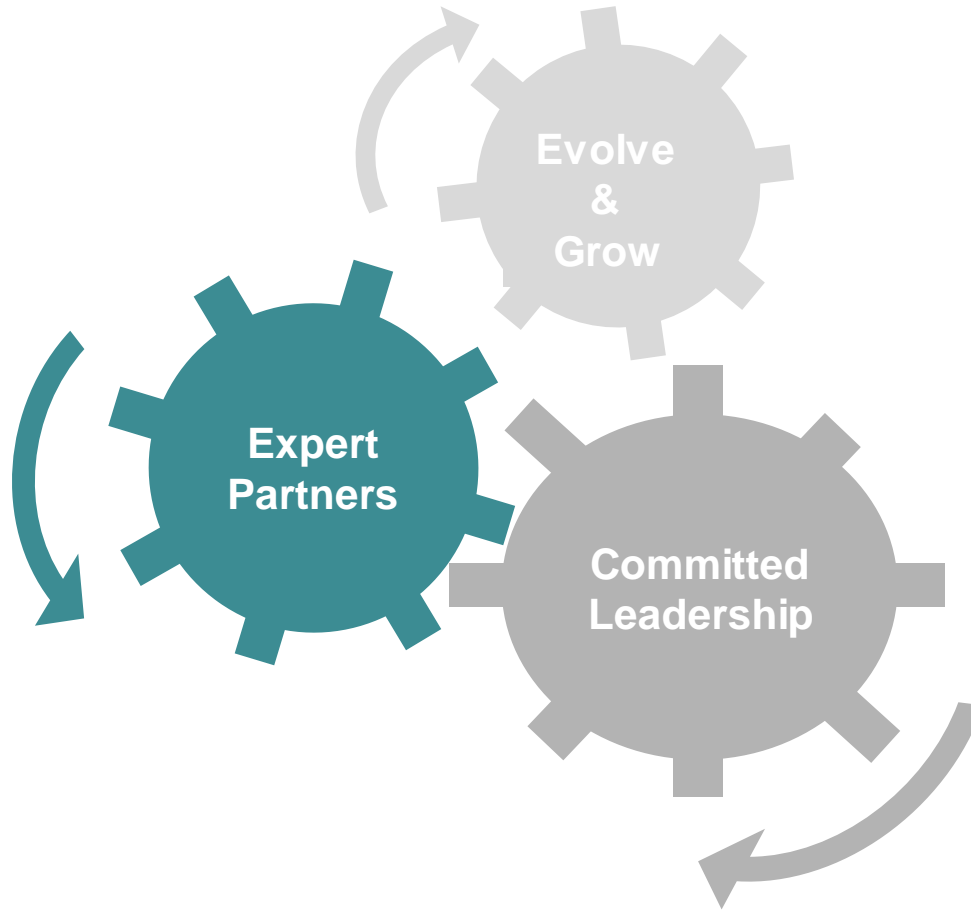
Challenges:

- Management not fully engaged
- Seen as an “add-on” to existing work
- Freeing staff to attend training & work on projects
- Overwhelmed by current demands

However:

Once sponsors start seeing the value, it becomes easy to get them more invested

Expert Partners



QUESTIONS?

Building an Effective Program

Dr. Sajith Pillai
Quality Analyst, Medicine
Coaches Lead, CCITP

Where are you in your PI Journey?

Continuous Improvement

- Under budget
- Setting the standard
- Talent magnet

Increasing Effectiveness

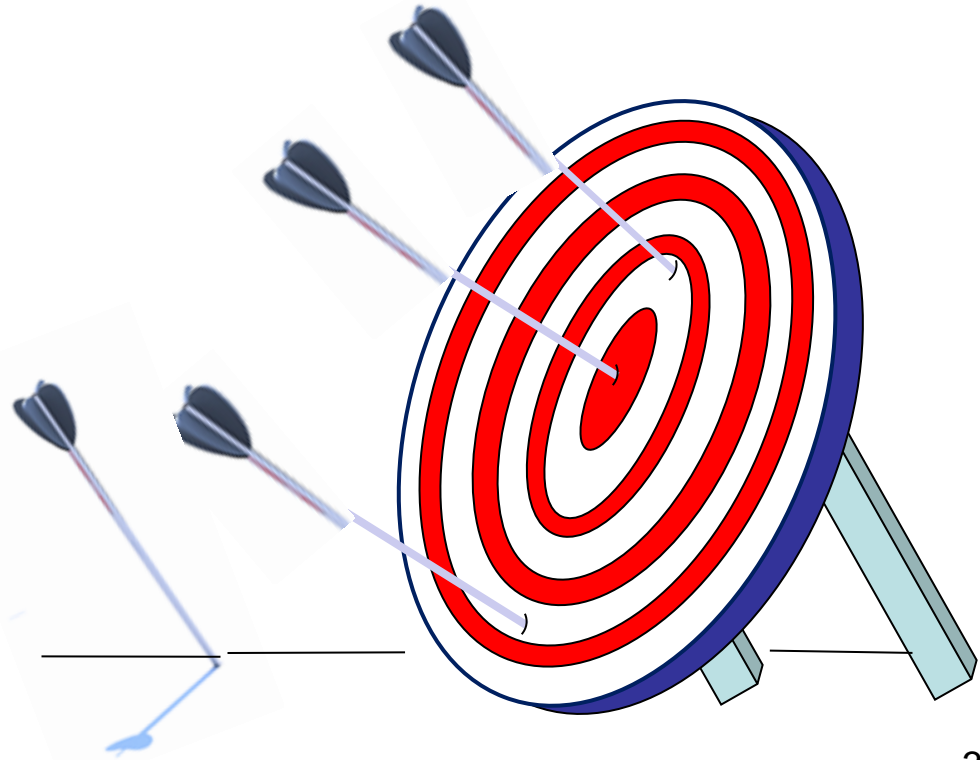
- Within budget
- Standard work in place
- Engaged staff

Gaining Control

- Moving to a budget
- Establishing standards
- Identifying staff champions

Out of Control

- Over Budget
- Inconsistent outcomes
- Frustrated staff / high turnover rates



Developing the Foundation

Project Selection

Initial projects: Scoped to facilitate successful completion

- Limited timeline (90 days)
- Attainable goals
- Define a small / contained area in which the work will occur
- Keep your team small
- Provide formal training and support

Focus on the immediate problems:

- Process flow improvements
- Turnaround time improvements
- Standardizing internal communication



Developing the Foundation

Hard Skills

1. Defining the Project

- Identifying the problem
- Establishing a proper AIM
- Set the goal

2. Data Collection

- Types of data (quantitative / qualitative)
- Measurement systems
- Observation techniques

3. Data Analysis

- Charts / graphs
- Flow maps / Value stream maps
- Statistical analysis



Developing the Foundation

Soft Skills

1. Project Management
2. Conflict Resolution
3. Communication
4. Presentation
5. Stakeholders Management
6. Change Management



CCITP Curriculum

Session 1

- Introduction to Process Improvement
- Project Charter Development
- Principles of Process Flow (the DOT Game)
- Voice of the Customer
- Principles of Data Gathering & Measurement Systems
- Understanding Waste in Healthcare
- Principles of Process Flow Mapping



CCITP Curriculum

Session 2

- Understanding Cause and Effect
- Chart selection
- Process Analysis I – Resident's Discharge Case Study
- Advanced process Flow Mapping
- Process Analysis II – Urology Case Study



CCITP Curriculum

Session 3

- Managing Variation
- Change Methodology
- Sustaining Change
- Communication Workshop



Prep Sessions

- ☐ Conducted before each classroom module
- ☐ All presenters rehearse & get feedback
- ☐ Opportunity to simplify & modify (content & delivery)
- ☐ Train coaches for table facilitation

Training Modules

The classroom

Content Design

- Presentations + worksheets
- Home-grown case study as a constant thread

Content Flow

- Based on flow of the work

Assignments

- Building blocks of actual project work
- Feed into final deliverables

Adult learning

- Concepts: "Explain & apply"
- Practical activities
- Engage multiple senses (thru use of videos etc)

Key essentials

- Notice, manage & leverage group energy
- Use feedback forms to evaluate
- Use effective table facilitation

Internal Growth

- ❑ Participant → Coach → Co-teach → Teach → Mentor/ Faculty
- ❑ Continually “on-board” new trainers, support & then let them flourish
- ❑ Coaches’ Training sessions:
 - Develop core coaching skills
 - Train on quality tools & techniques from a coaching perspective
 - “Soft skills training & professional development

Developing the Foundation

Coaches

- Provide technical experience to the Sponsor & Project Leader
- Help with scoping & setting goals
- Assist with overcoming barriers
- Be available for regular meetings with the Project Leader

The Coach does not:

- Lead the project
- Work //N the project



Developing the Foundation

Preparing the Coaches

Characteristics of a good coach:

- Strong analytical skills
- Strong communication skills
- Flexible/ Adaptable
- Time Management
- Excellent interpersonal skills

A coach's greatest challenges will be with:

- Time management
- Interpersonal skills



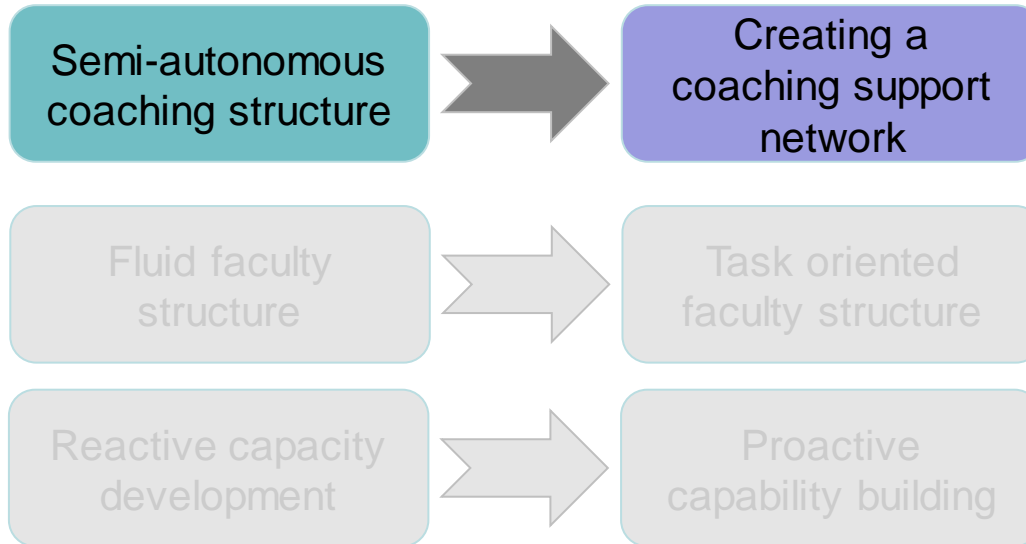
Developing the Foundation

Preparing the Coaches

1. Initially rely on **external** experts; they have:
 - The expertise & knowledge
 - The resources & materials
 - A clear view of the outcome
2. Identify **internal** experts from within your organization; they:
 - Have knowledge (and possibly expertise)
 - Understand the organization
 - Reshape the outcome to align with the organization
3. Transition to **Internally developed**
 - Move from instruction to coaching
 - Take ownership
 - Establish your own identity

Coaches Experience

Internal Structure



Initially

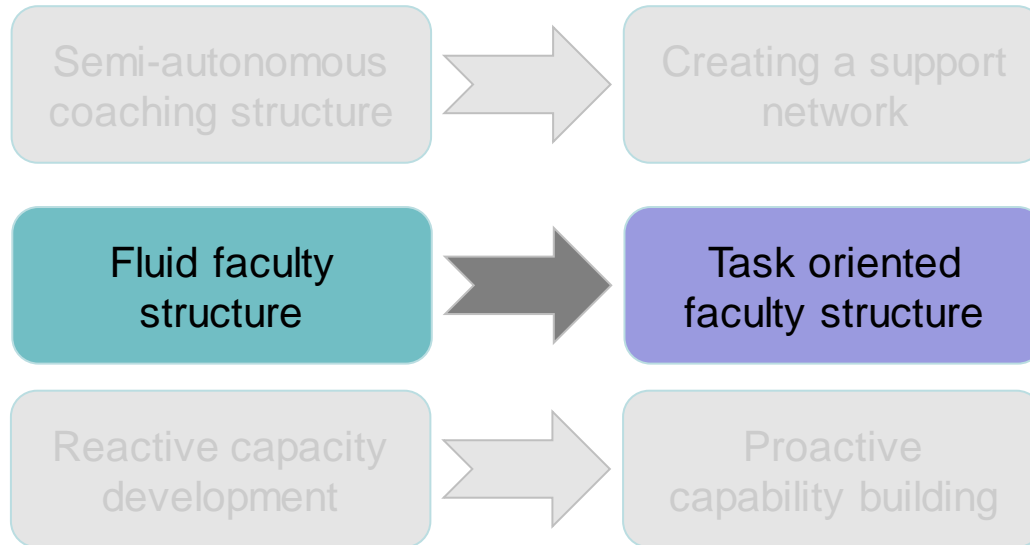
- Self reliant
- Self motivated
- Unstructured

Evolution

- 3-tiered coaching model
- Weekly coaches meetings
- Structured coaches' evaluation
- Coaches training & development
- Leveraging technology (WhatsApp)

The CCITP Evolution

Internal Structure



Initially

Faculty members were:

- An informal group
- Had other full-time responsibilities
- No clear roles

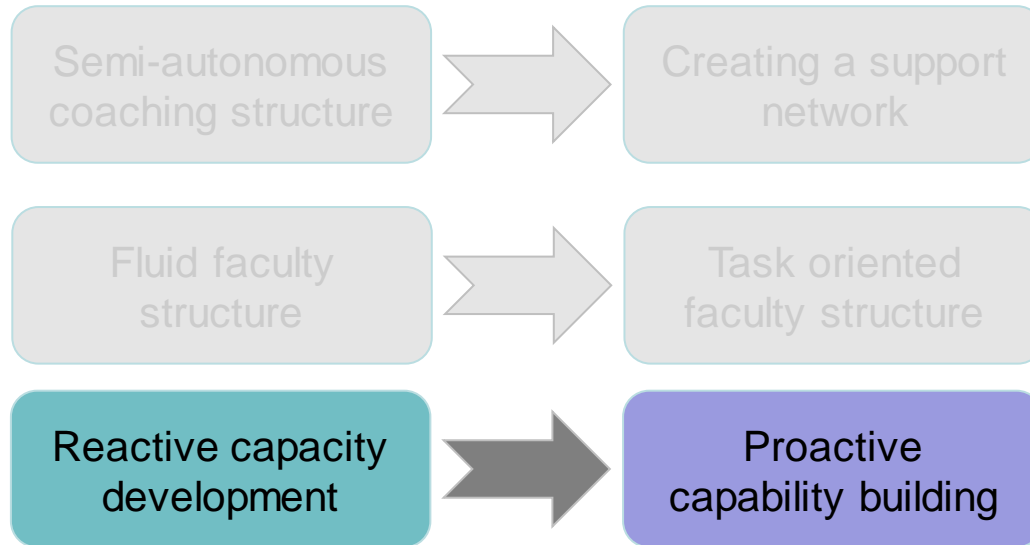
Evolution

Faculty members have clear delegation of functions:

- Overall program management
- Coaching, Content development
- Communication, Evaluation

The CCITP Evolution

Internal Structure



Initially

Adhoc training for coaches & faculty as required

Faculty merely content presenters

Evolution

A structured development plan for engaged coaches & Faculty

- Certifications & courses
- Schedule
- Book club

'Rules of the Game'

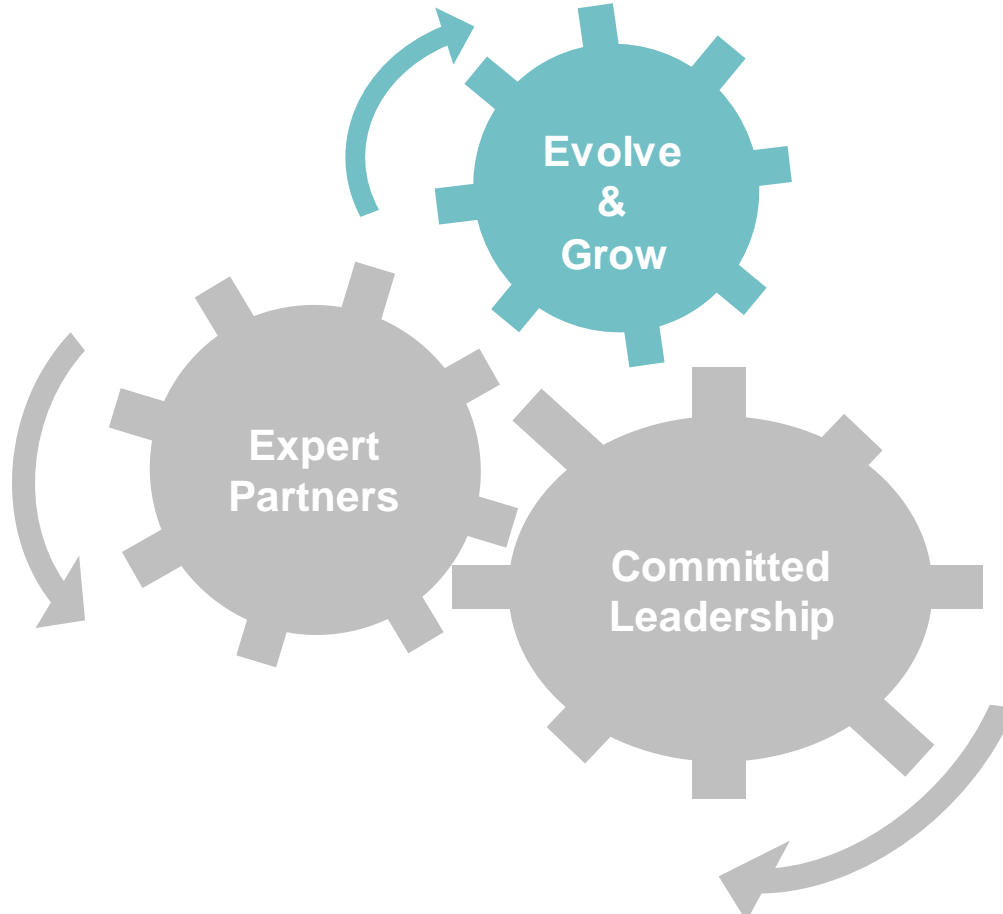
- ❑ Create a functional program team structure. (program manager, coordinator, admin team)
- ❑ Set clear expectations from participants, coaches & sponsors.
- ❑ Actively manage important stakeholders.
- ❑ Address team issues when they arise; escalate appropriately when required
- ❑ Create a clear program plan:
 - Agenda, checklist, course layout & materials
 - Have a dedicated program coordinator
 - Plan for effective in-class facilitation
- ❑ Focus on crafting a consistent, authentic brand/ culture

Shaping our evolution

The key questions that guided our evolution:

1. How can we align CCITP with HMC's quality vision/ strategy?
2. What can we do on a continuing basis to stay agile, learn and evolve?
3. What are our customers really telling us?

Evolve & Grow

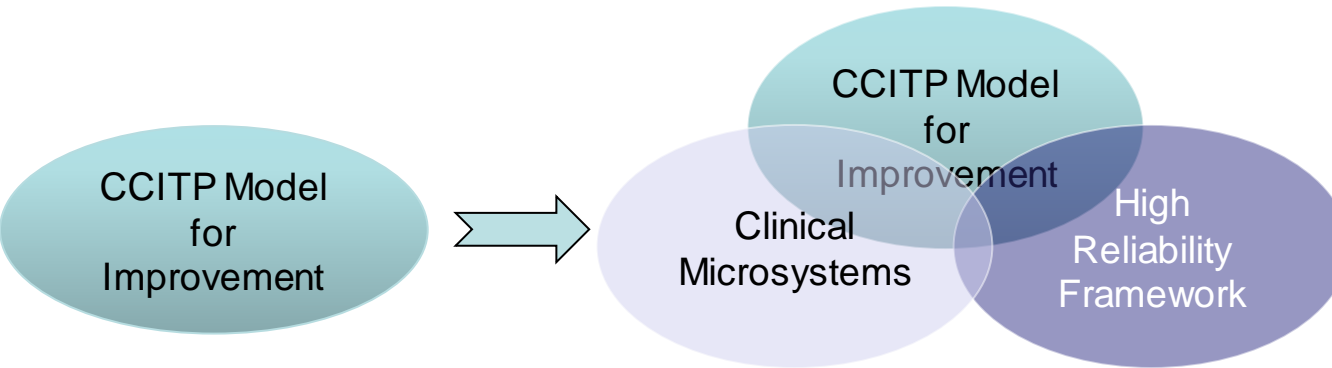


Moving from Capacity Building to System Redesign

Dr. Khalid Awad
Sr. Consultant, Pediatric Neurology
Academic Lead, CCITP

The CCITP Evolution

Strategic Alignment



Initially

CCITP Model:

- PDSA
- DMAIC
- Rapid Cycle improvement

Evolution

Blend of:

- CCITP Model for improvement
- Clinical microsystems
- High reliability functions

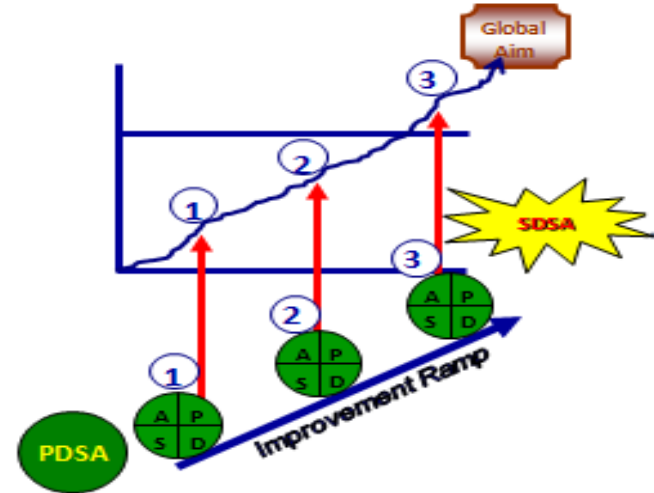
Best Care Always: The Framework

10 Essential Functions of High-Reliability Patient Care Teams



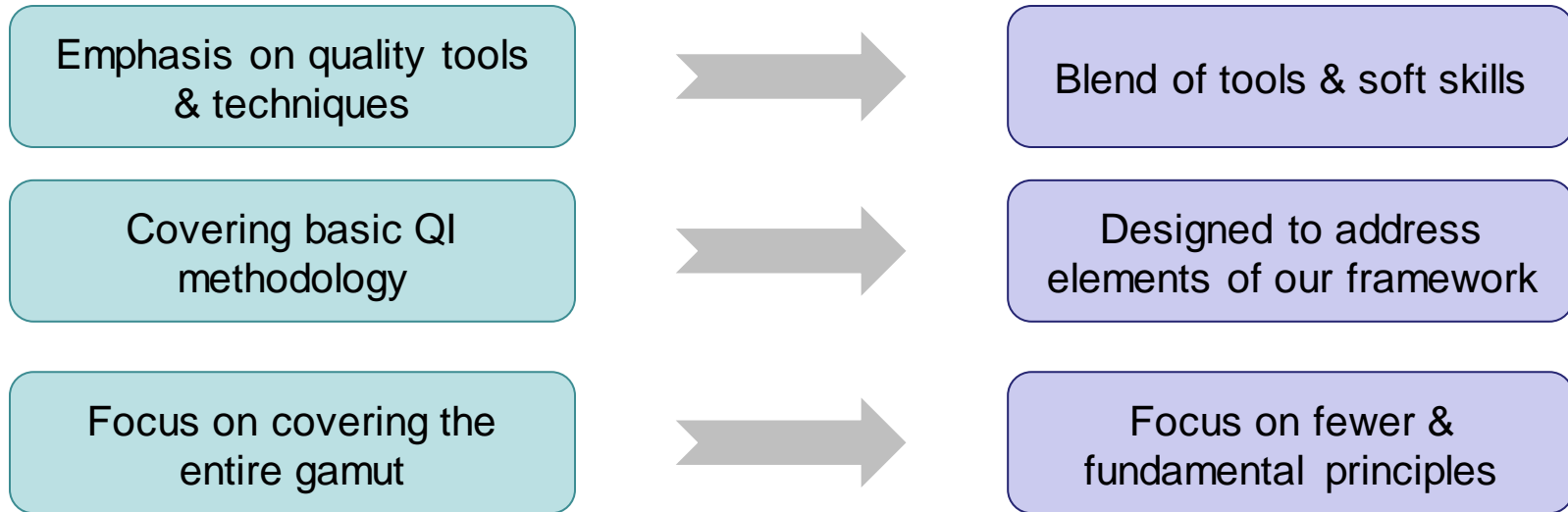
The CCITP Evolution

Dartmouth Microsystem Improvement Ramp



The CCITP Evolution

Curriculum Development



Highlights of the Evolving Curriculum

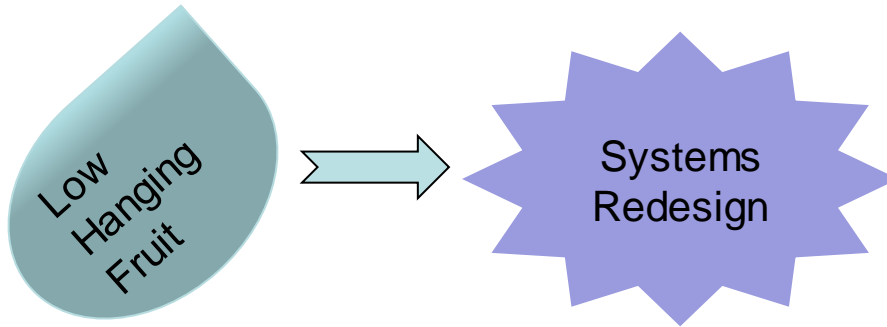


Facilitation



The CCITP Evolution

Projects Selection



Challenges:

- Identifying improvement priorities
- Choosing the immediate sub-piece to work on
- Continuity and hand-off of projects
- Sustainability of current efforts

Alignment

CCITP moved from individually selected projects to general themes aligned with the strategic direction of the Corporation.

Still allowing individual project selection as agreed by the sponsors.

Participants are pre-empted for the role of Quality Improvement advisors.

Addressing Systems Needs



Reliable patient care systems systems/QEWS

Sepsis

High reliability patient care systems launched QEWS and brought the focus on the importance early identification and management of sepsis .

CCITP adapted and dedicated cycles 9 and 10 with a sepsis theme.



Timely Delivery of First Dose of Antibiotics to Febrile /Suspected Neutropenic Children on Chemotherapy in Children's Cancer Ward Hamad General Hospital
 HGH PICU Battle Against Infection Beyond Expectation



Improvement of Early Recognition Of Sepsis in Coronary Intensive Care Unit(CICU)

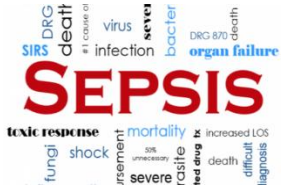
Optimizing Timely IV line removal in premature babies admitted to Women's Hospital NICU

Improving septic miscarriage patients care and raise sepsis awareness in Women's Hospital

Standardization of Aseptic Technique in Regional

Anesthesia blocks

Improve the Hand Hygiene Practices in the Acute Medical Assessment Unit



CYCLE 9

Stop Sepsis

- It is SEPSIS ! Let us save them
- Sepsis; let's bundle the care!
- Improvement of Sepsis Awareness In Patients Attending West Bay H.C



RECOGNISE • RESUSCITATE • REFER



- Golden hours of sepsis for long term patients in ENAYA Specialized Care Center (ESCC)
- Improving Sepsis Management in ED HGH Project 2015
- Increasing Sepsis Awareness amongst healthcare providers in the West Bay Health Center, PHCC.

CYCLE 10



CCITP Story

Sustaining Change, From Projects to Culture Change

CCITP by the Numbers

Project Sustainability:

Defined as maintaining the plan & performance of the initiative for **6 months or more** after the conclusion of the CCITP cycle (*outcomes & measures might change or lag*)

Cycle 1-5

Project Sustainability Rate

Cycle 1 = 38%

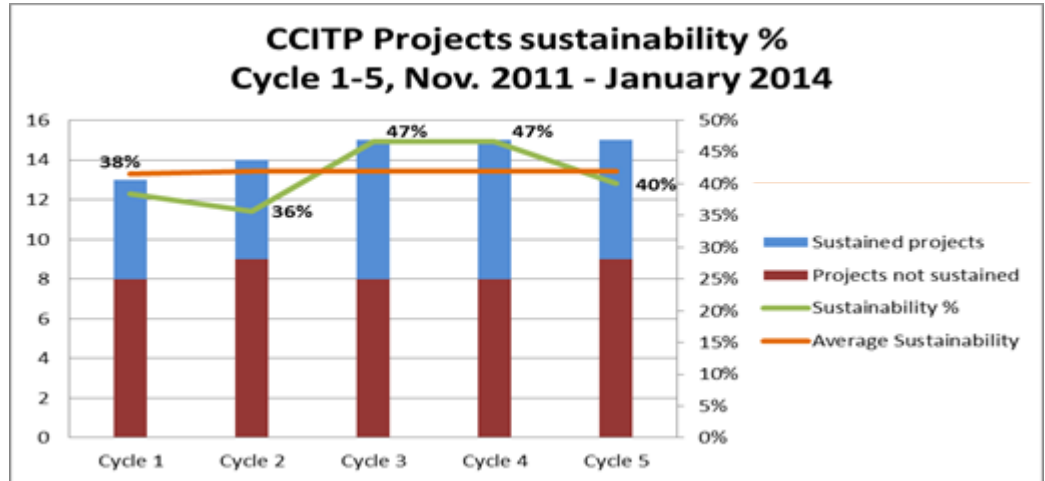
Cycle 2 = 36%

Cycle 3 = 47%

Cycle 4 = 47%

Cycle 5 = 40%

Average = 42%



CCITP by the Numbers

Project Sustainability:

By involving sponsors and targeting system redesigns rather than focusing just on projects we saw an overall sustainability increase from 47% to 82%

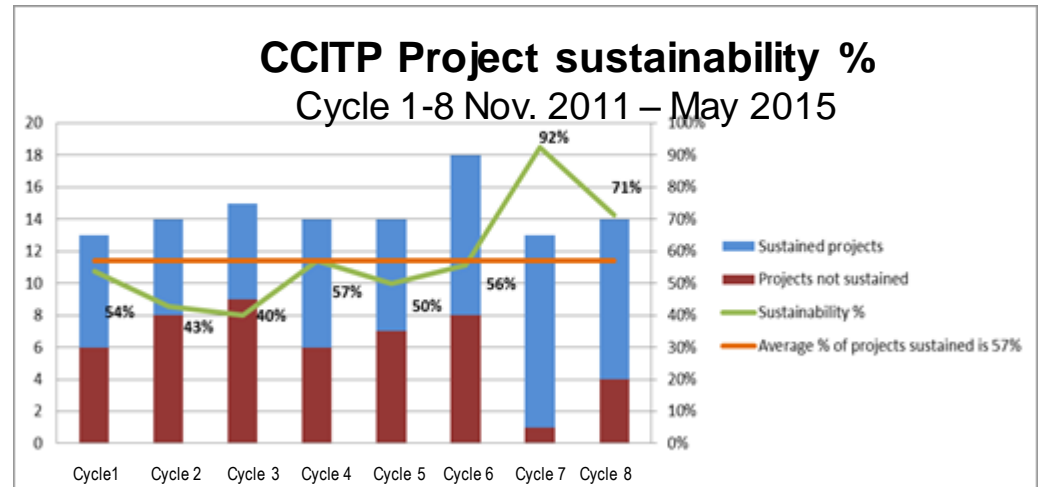
Cycle 6-8

Project Sustainability Rate

Cycle 7 = 92%

Cycle 8 = 71%

Average = 82%



Improving, Sustaining & Spreading Exit Flow of Discharged Patients on the Medical Floor

PROBLEM:

As of October 2014, only 49% of all patients on the medical floor exit the wards within 2 hours after decision to discharge is made by the care team (Exit Time). This adversely impacts inpatient bed capacity causing a reduction in the number of beds available for inpatient admissions and transfer, and increases overall inpatient length of stay.

AIM:

Increase the percentage of patients with Exit Interval of 2 hours or less (as per hospital standards) from 49% to 70% in 3S2 by June 2015. Subsequently, expand this initiative to other medical floors, starting with Acute Medical Assessment Unit (AMAU)

TEAM:

- Medicine Quality Improvement Committee (Med-QIC)
- Physicians in Medicine Department

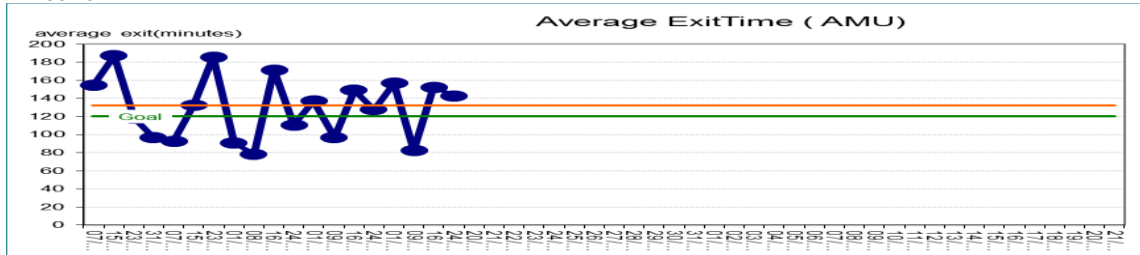
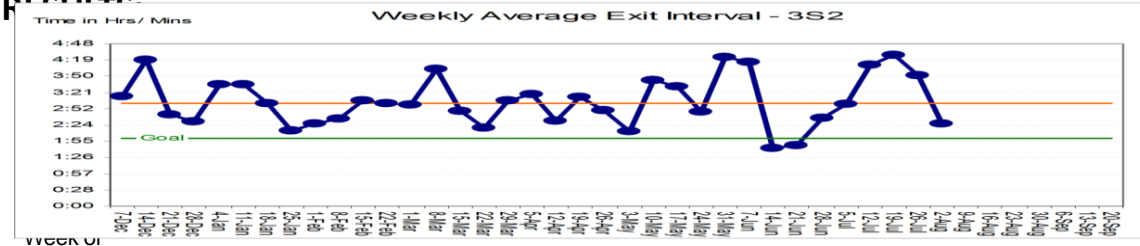
PROJECT SPONSOR:

- Dr. Muna Al-Maslamani, Vice-Chairperson, Department of Medicine

INTERVENTION: Multiple PDSAs have been carried out since December 2014. Successful changes were sustained in Stroke Unit, and the initiative was spread to AMAU:

- Medical teams to begin daily rounds with patients who are planned to be discharged
- Begin discharge paperwork at least 24 hours prior to discharge
- Complete discharge paperwork before 10am
- Single-piece flow of discharge process

RESULTS:



CONCLUSIONS & LESSONS LEARNT:

- Rounding with "for-discharge" patients first can shorten their exit times.
- There is a lot of individual variation amongst medical teams with regards to clinical rounds (discharge vs teaching rounds).
- Daily discharge planning & multi-disciplinary communication may significantly help speed up discharge process.
- Spreading successful initiatives requires customizing change ideas to be appropriate for each unit.

CHALLENGES & NEXT STEPS:

- Constant changes to medical team structures due to rotation schedule hampers testing & stabilizing change ideas.
- Lack of a common system for discharge process.
- Admitting patients that are not appropriate for a particular ward (e.g., surgical cases in AMAU) may hinder timely discharge process.
- Upcoming Cerner implementation may pose a challenge that would require new ideas and PDSAs.

Reducing the No-Show Rate in Pediatric neurology

Pediatric department HGH

PROBLEM: 45% of patients referred to pediatric neurology do not show for their appointments leading to long waiting time for new Pts; international bench-marks are 5-7%,
AIM: To reduce the percentage of no show rate of new patients to one pediatric neurology clinic from 45% to 25% by 31st December 2013

INTERVENTION:

- Direct and weekly communication was made between the project team, clinic staff and patient referral management and the call center to ensure sharing of information.
- When call center contacts patients an offer of an alternative appointment is explicitly made.
- All patients removed from the list are notified to referral management to replace them; are no

TEAM:

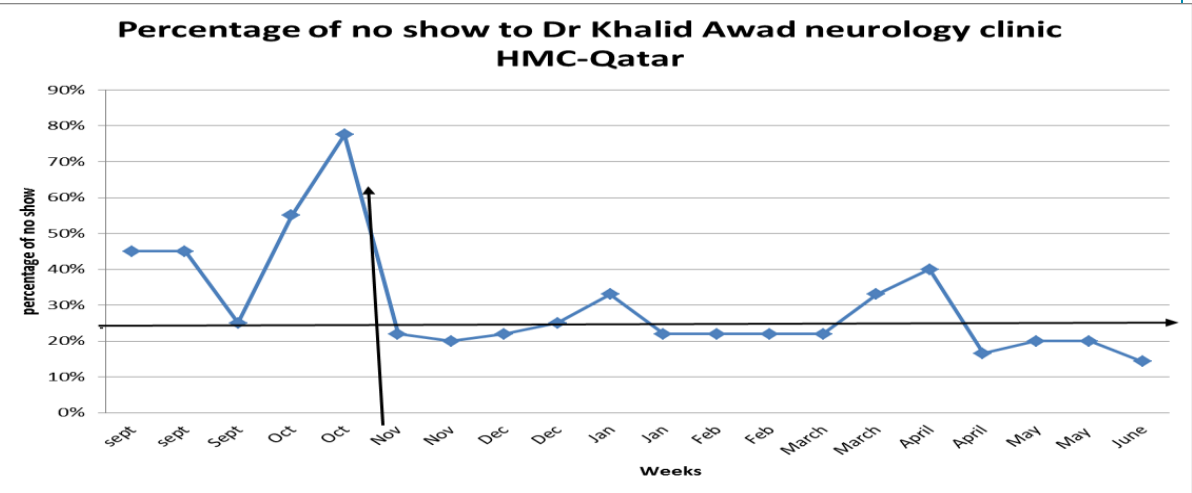
Dr Sona Tahtamouni
Dr Khalid Awad Mohamed
Dr Eshraga Taha
Dr Eman Almusalamani
Amal Yousef
Rajaa Saeed
Sally Haridi,
Zeenia Kersi Mirza,

PROJECT SPONSOR:

▪Dr Mohamed Janahi

Project Coach

Dr Amira Mustafa



CONCLUSIONS:

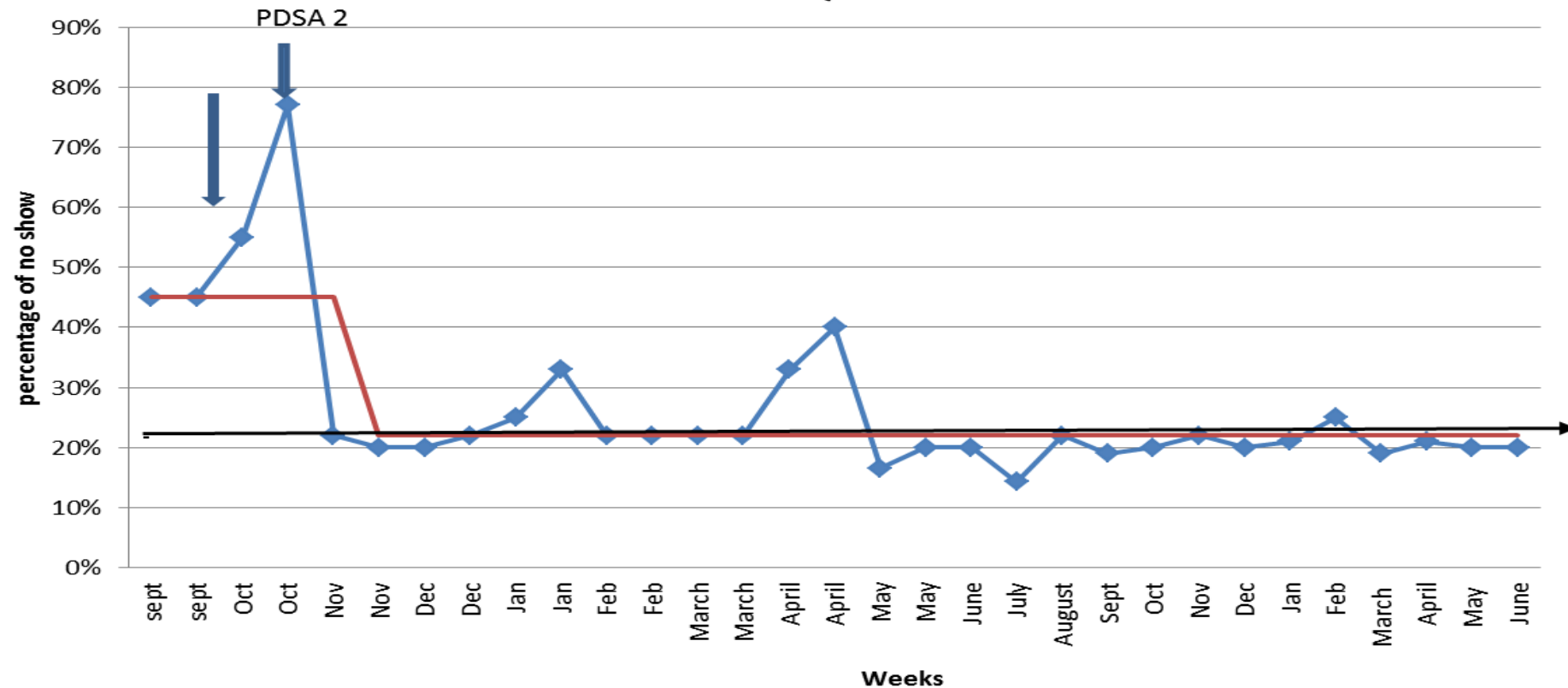
- . Communication with stakeholders (call centre and referral management service) is key to any improvement program in the area of clinic no show.
- Customer contact strategy is the best way of ensuring attendance and reducing no show
- Replacing cancelled patients improves clinic usage and indirectly reduce no show and reduce waiting time.

NEXT STEPS:

- Call center to continue to use the same message to all patients called
- Regular review of the no shows by monthly communication between clinic and call center



Percentage of no show to Pediatric Neurology clinics HMC-Qatar



Blended Learning

Putting



at the heart

of QI

The way to Future Learning!

E classrooms with discussion boards.

Posted questions and resources uploaded.

Dedicated faculty members to run the discussion.

Studying the impact of blended learning.

Research & Scholarship

What have we learned?

A Culture of Enquiring Minds

CCITP adopted humble enquiry as a way of interaction, coaching, evaluation and research.

Reflecting on our knowledge.

Encouraging faculty to build up on knowledge by obtaining formal research degrees.

Research activity

Publishing:

- CCITP experience: in press
- Several projects: BMJ quality reports
- Blended learning
- Qualitative/action research.

Presenting:

- IHI forum
- ISQUA

CCITP ACHIEVEMENTS

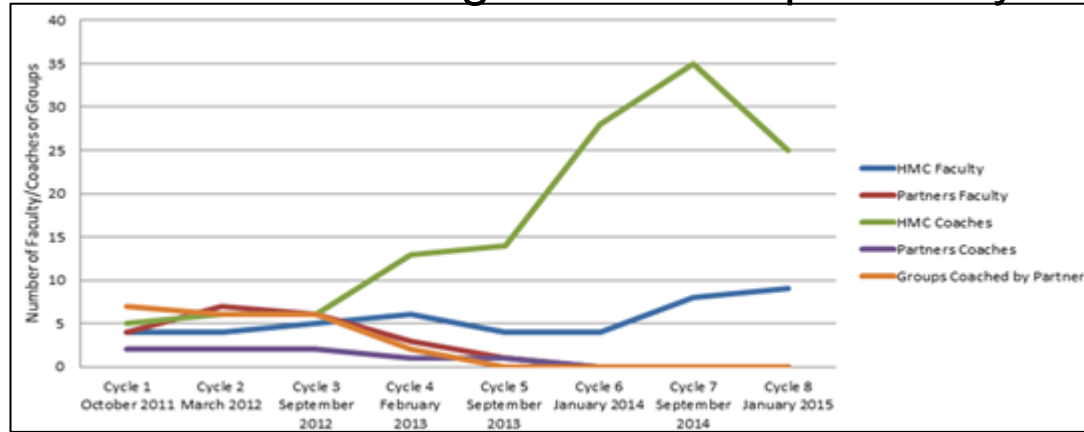
(2014 – PRESENT)

Dr. Reham Hassan Negm Eldin

Hamad Healthcare Improvement Program Manager, HHQI
CCITP Manager

Delivering Independently

HMC Delivering CCITP Independently



Average per/ Cycle

| | Cycle (1-4) | Cycle (5-8) | % Δ |
|------------------|-------------|-------------|---------|
| HMC Faculty | 5 | 7 | 40% ↑ |
| HMC Coaches | 8 | 25 | 212 % ↑ |
| Partners Faculty | 5 | 1 | 70% ↓ |
| Partners Coaches | 2 | 1 | 50% ↓ |

Stars Of Excellence

Managing Director Award

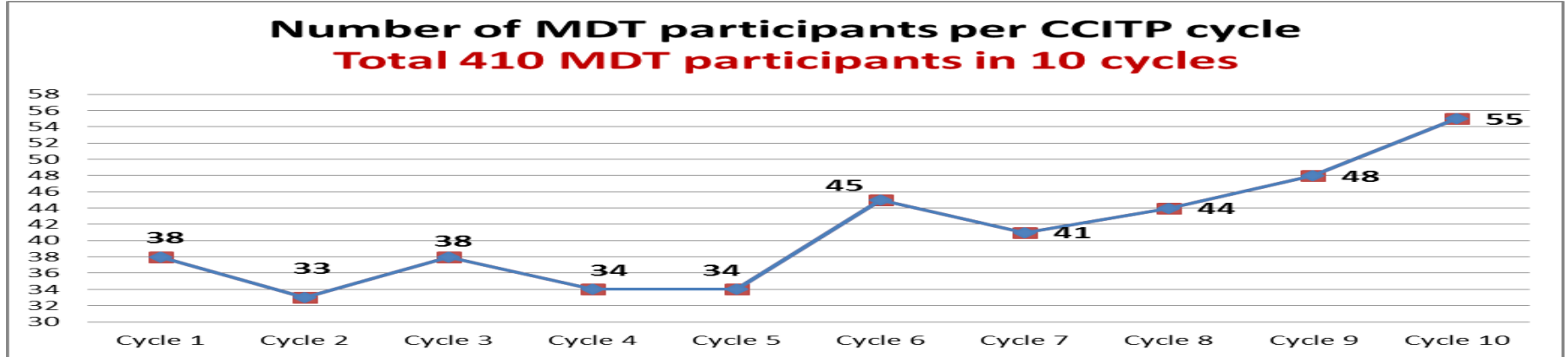
In 2012, CCITP was
awarded the HMC “Stars
of Excellence
Managing Director
Award”

This in special
recognition by the HMC
Managing Director for
overall **Excellence**



CCITP by the Numbers

Number of participants per CCITP cycle



Summary:

Cycle 1 – Cycle 5 average class size = 35 students

Cycle 6 – Cycle 10 average class size = 47 students

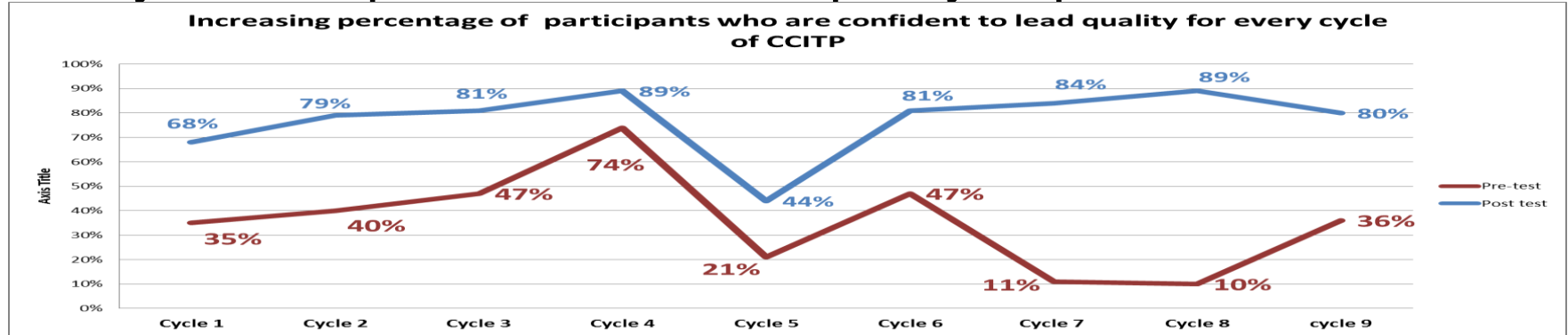
Reason:

- Expanded program to include non physicians
- Increase demand

34 % ↑

CCITP by the Numbers

“Do you feel qualified to lead a quality improvement event?”



- In all cases, significant increase in the level of improvement from 42% to 77%

HOWEVER,

- Cycle 5 included senior level participants
- Cycles 7 & 8 included Multi Disciplinary Staff

CCITP by the Numbers

Project Sustainability:

By involving sponsors and targeting system redesigns rather than focusing just on projects we saw an overall sustainability increase from 47% to 52%

Cycle 6-8

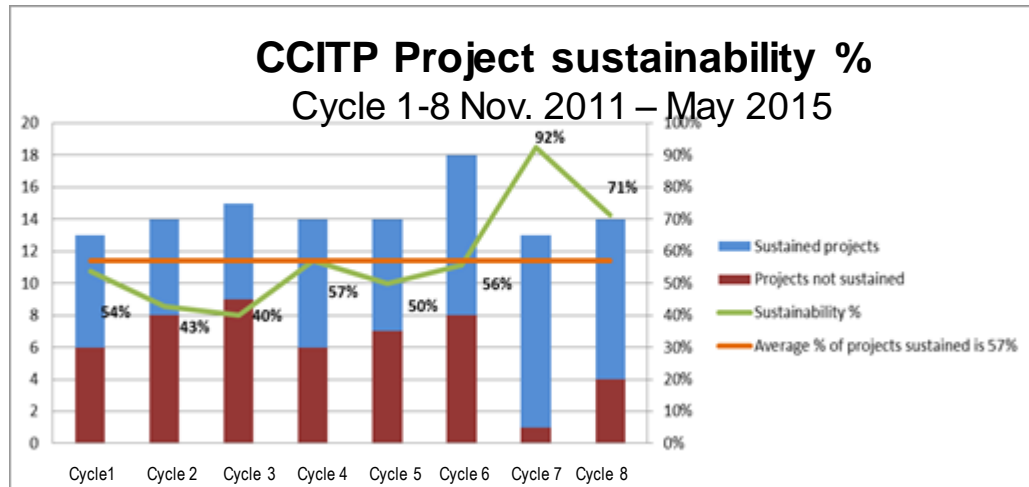
Project Sustainability Rate

Cycle 6 = 56%

Cycle 7 = 92%

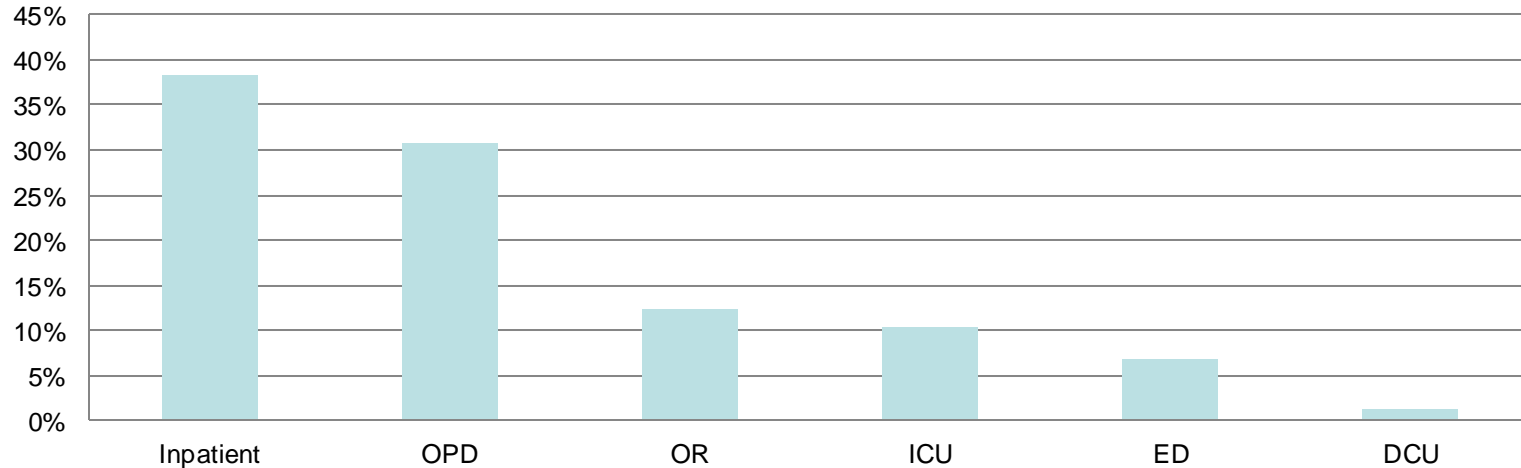
Cycle 8 = 71%

Average = 82%



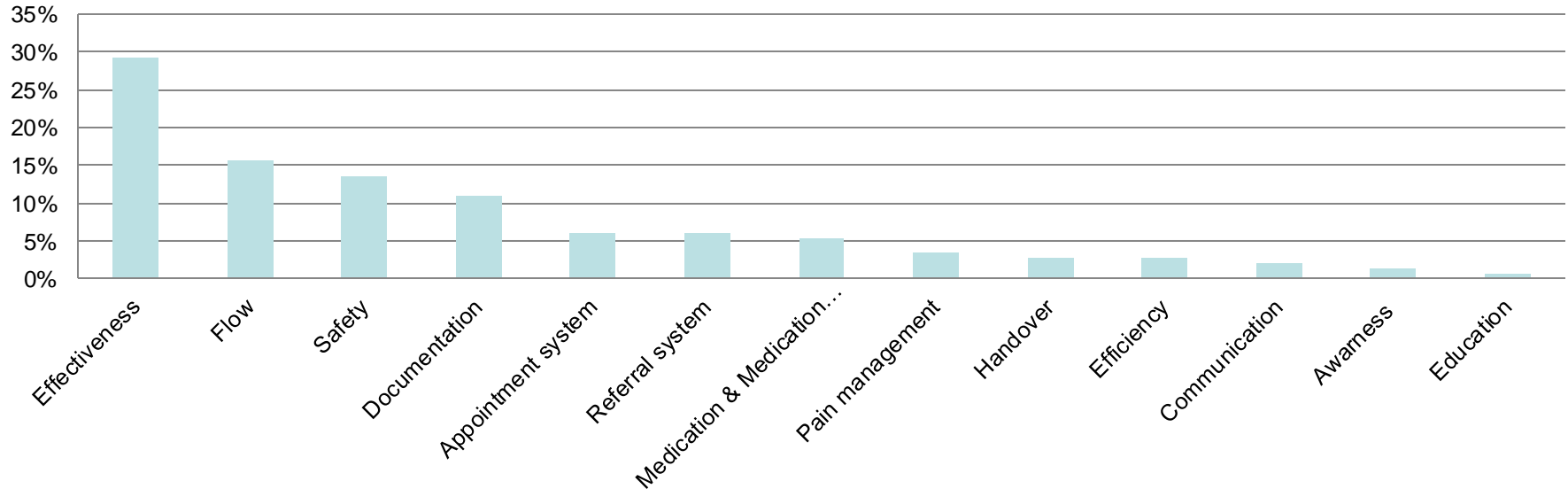
Clinical Setting of Projects

**Focus Clinical setting of projects
cycle 1 - cycle 10 November 2011 - May 2016**



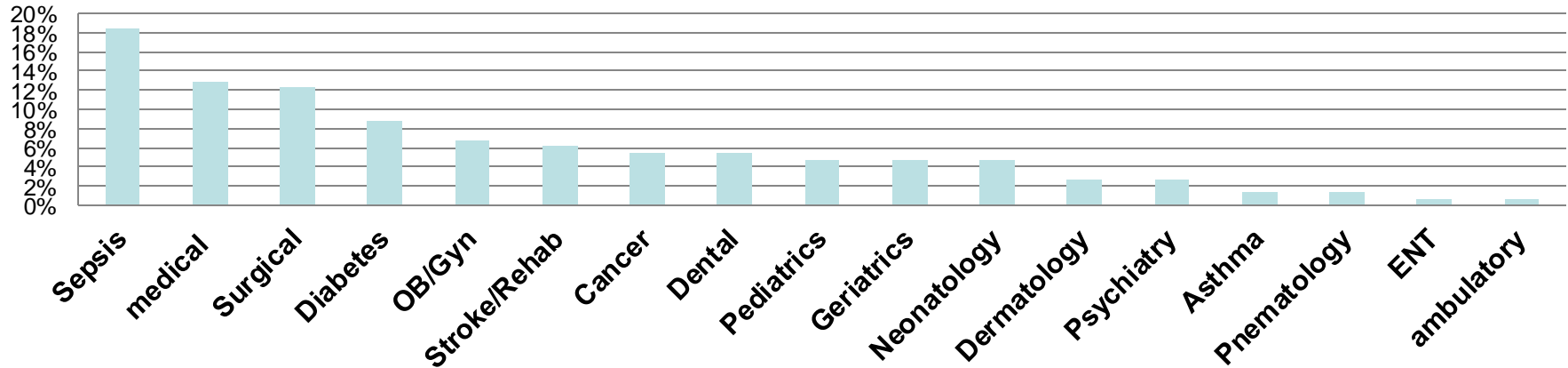
QI Themes of Projects

Percentage of projects covering each improvement theme
cycle 1 - cycle 10 November 2011 - May 2016



Target Disease Groups

Percentage of projects covering every disease group
cycle 1 - cycle 10 November 2011 - May 2016

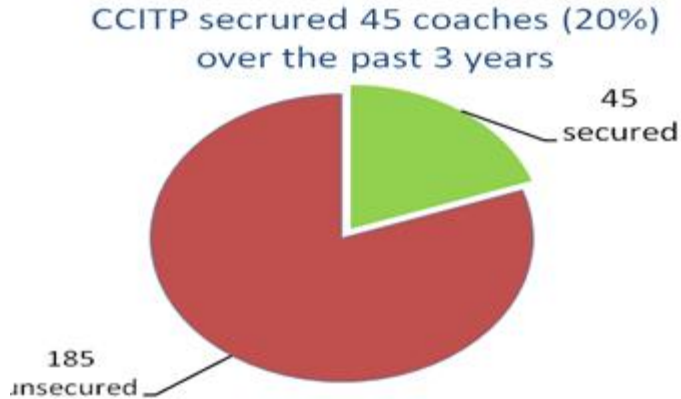


Project Highlights

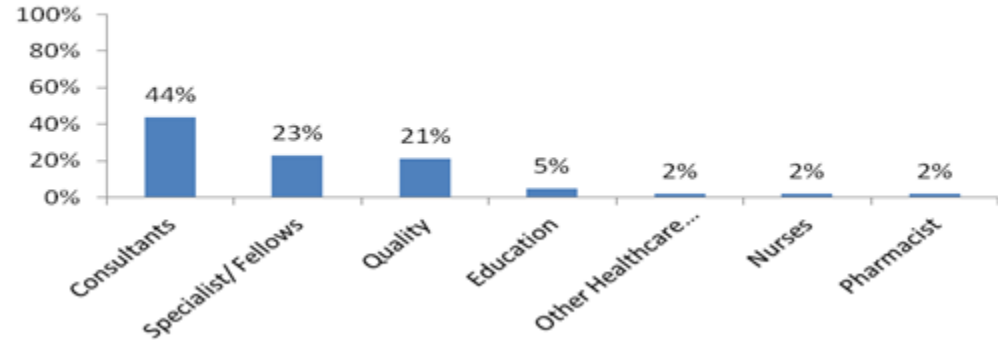
- ✓ Eliminating Allergy documentation discrepancy in NCCCR
- ✓ Improving pneumococcal vaccination for patients above 65 to 75%
- ✓ Timely referral of cancer patients from acute to palliative care
- ✓ Establishing the demand for Palliative Care accredited program & unit and sustained.
- ✓ Dropping the waiting time of patients for CT Scan by 50%
- ✓ Increasing the percentage of neonates receiving first dose of antibiotics within one hour from 30% to 70%
- ✓ Improving postoperative pain assessment by CT ICU staff from 30% to 60%
- ✓ Reducing the No Show in pediatric neurology clinic from 45% to 25%
- ✓ Improve appointment utilization in DC pediatric surgery from 75% to 92%
- ✓ Optimizing the through put time in intervention radiology & reducing the waste peri-procedure by 50%

CCITP by the Numbers

Coaching demand at HMC, based on clinical departments magnitudes and requirements are estimated to = 230 coaches



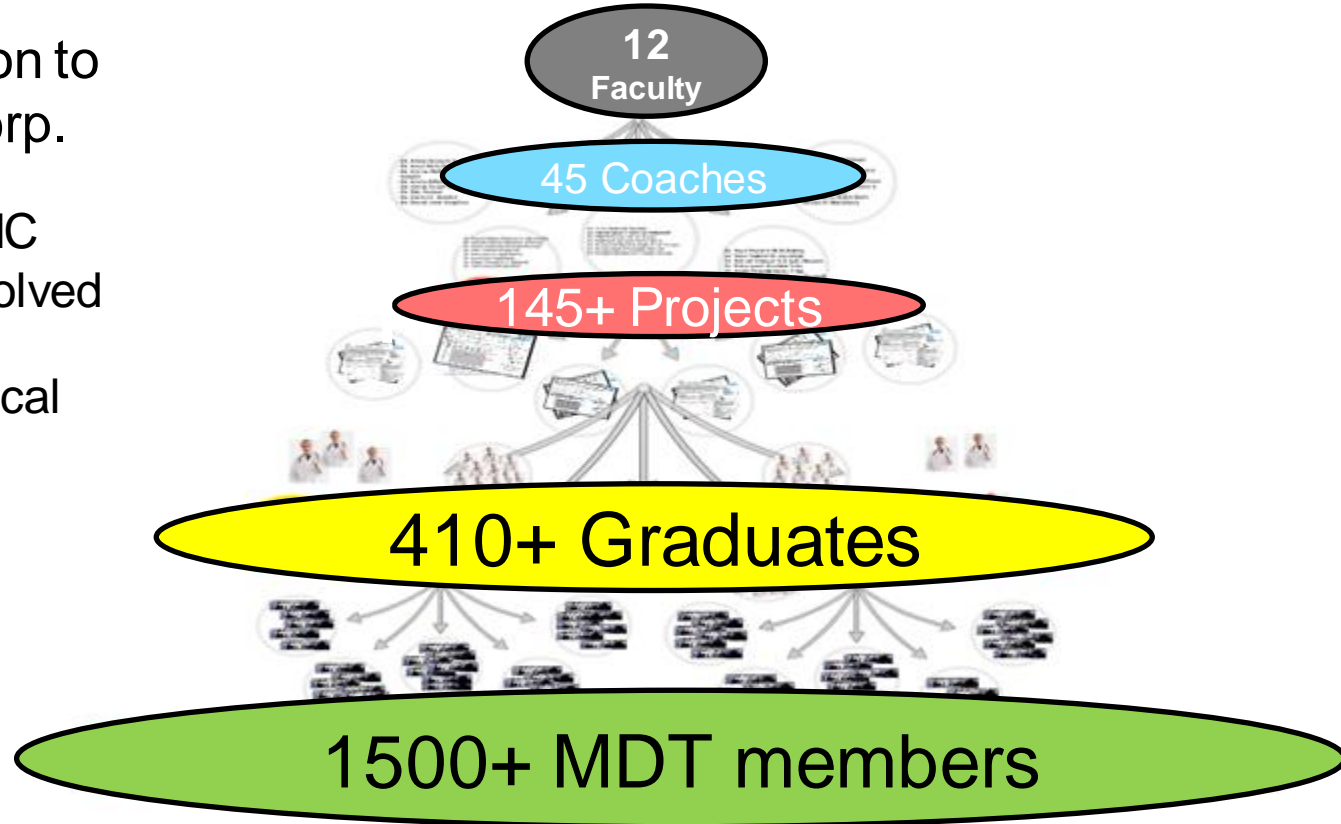
CCITP Coaches - clinical breakdown
n = 45



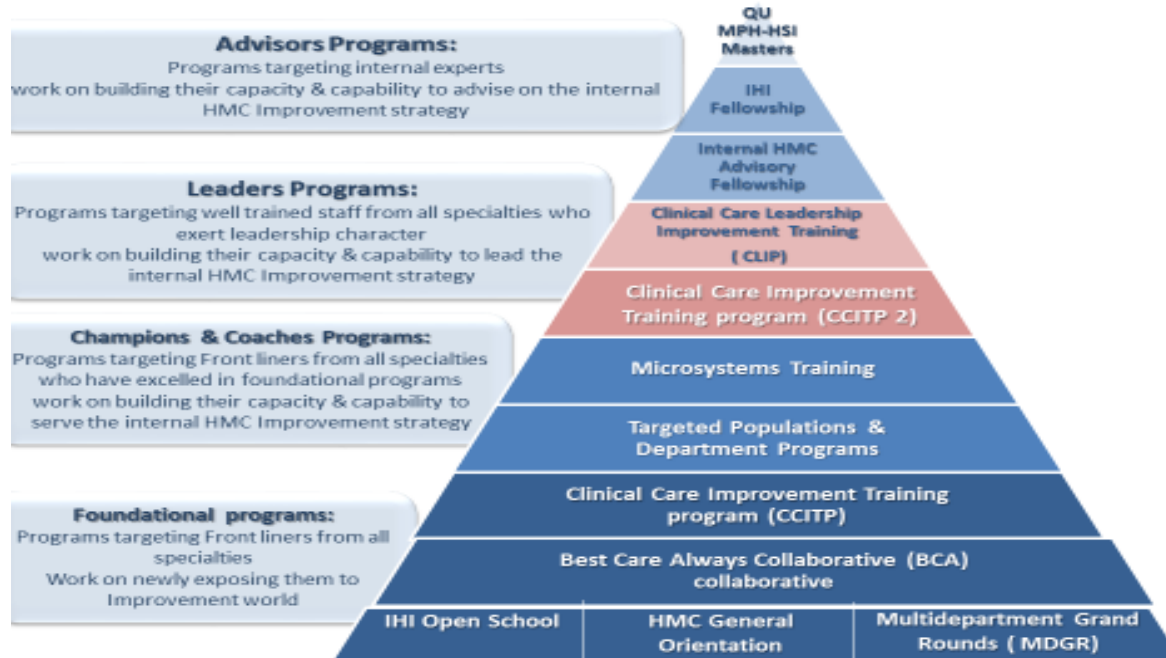
CCITP by the Numbers

CCITP's contribution to Hamad Medical Corp.

- 100% of ALL HMC hospitals are involved
- 95% of ALL Clinical Departments



Next Steps

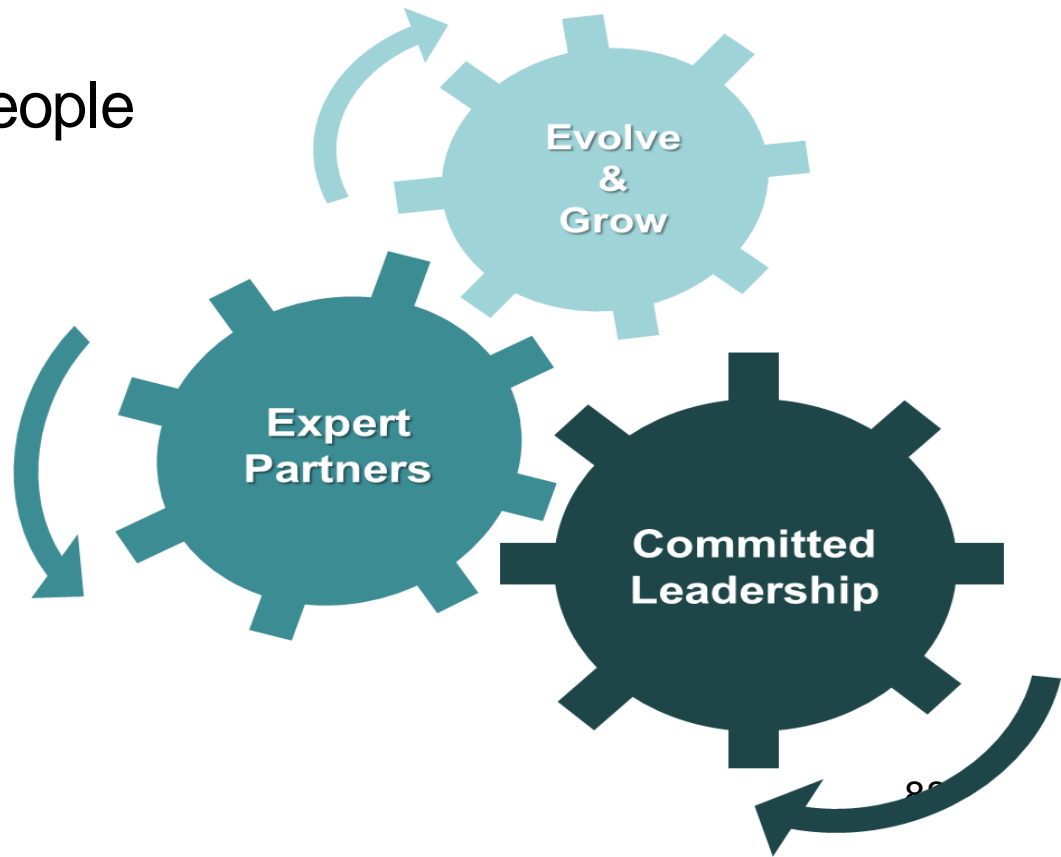


The development of CCITP 2

- Designed to deepen QI skills
- Bridge between CCITP and the HMC Fellowships and Masters program

Success recipe

- ❑ Focus on developing people
- ❑ Commit to learning
- ❑ Build a culture
- ❑ Think global, act local
- ❑ Take risks
- ❑ Have fun!





Thank you



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