Uplifting Surgical Patient Safety

from silo thinking to safety circle

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Votes of thanks

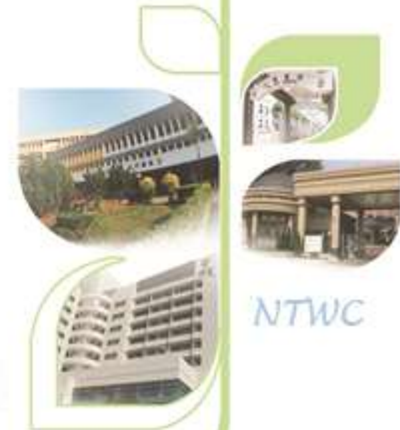
- Dr. Albert CY Lo

- Dr. CW Man
- Dr. SK Leung
- Dr. CC Cheung

- Dr. KK Lam
- Dr. WS Chan
- Dr. KC Lam

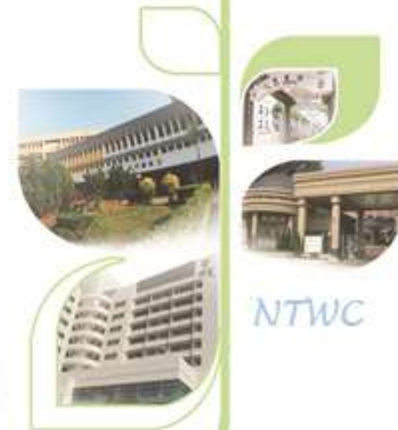
- Dr. CK Koo
- Dr. WM Kwan
- Dr. HK Tsang

- Dr. Jasperine Ho
- Ms. PF Tang
- Ms. Quinnie Lee
- Ms. MN Li

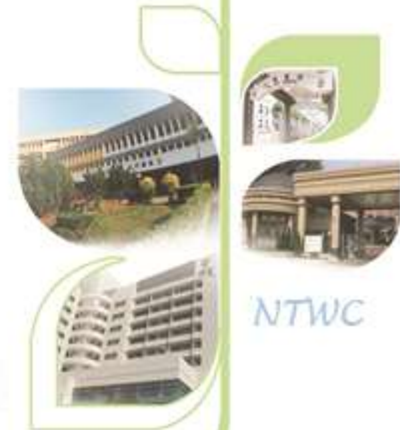


What I am going to share

- Patient journey of a typical complicated surgical patient
- Need to change to patient journey approach
- Our initial journey along the path in NTWC
  - Surgical Quality and Safety Circle
- Initial problems and small success
- Conclusion



Why bother about surgical patient journey?



A surgical patient's journey

AED

AED MO

CXR, AXR

Surgery

SUR MO

SUR AC

MED MO

ICU

ICU MO

ICU AC

M&G

MED MO

ANA MO

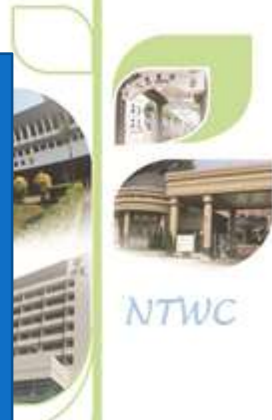
ANA AC

Anesthesia

DR MO

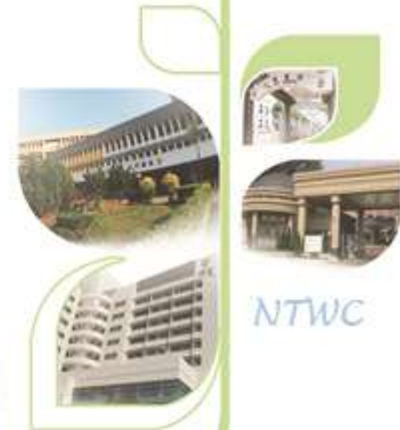
DR SMO

Radiology



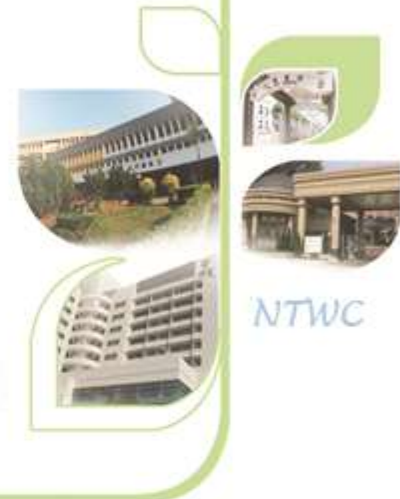
Finally…..

- SUR:
  - I will go in if percutaneous drainage could not be done tonight
  - Waiting for ICU/ Radiology reply
- ICU:
  - I will ask radiology to do it as 1st case if surgeons not going in tonight
  - Waiting for surgical reply
- Anesthetists:
  - We will go ahead if radiologist is not doing it tonight
  - Waiting for surgeons
- Radiology:
  - Will do it as 1st case if surgeons not going in tonight
  - Waiting for ICU reply



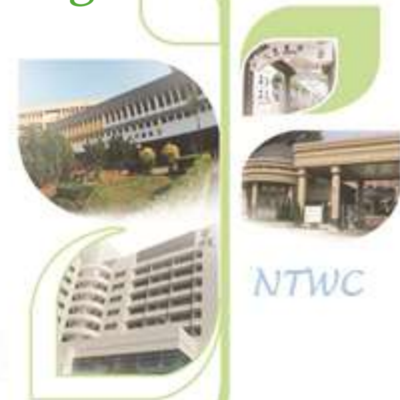
If you are the patient's son, sitting outside ICU waiting

- How would you feel?
- What would you do?



But wait a minute

- Hospitals has been divided into departments and divisions since they exist
- We have been saving countless patients' life by this structure/approach
- Why we need to change to patient journey approach in caring for our patients?
- Is it just another Q&S buzz word??



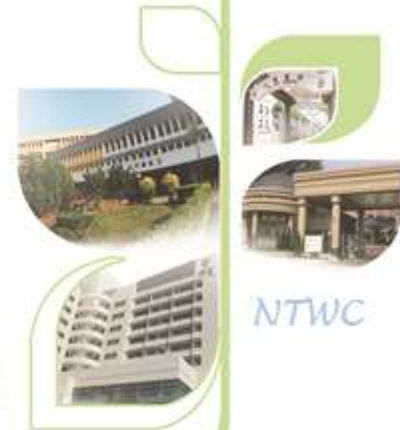
Hospital organization vs. patient journey

- In early 20th century (1937)
  - Medicine was largely ineffective
  - A few diseases that you can actually treat
    - Pneumococcal pneumonia → antiserum
    - Congestive heart failure → bleeding + crude digitalis + oxygen tent
    - Syphilis → arsenic and mercury

The Youngest Science: Notes of a Medicine Watcher (Lewis Thomas)

- Doctor/ Nurse know it all and do it all by himself/ herself

- Culture of working in silos and small circles
  - Autonomy became highest value
  - Minimal need to collaborate
  - Patient journey typically very short

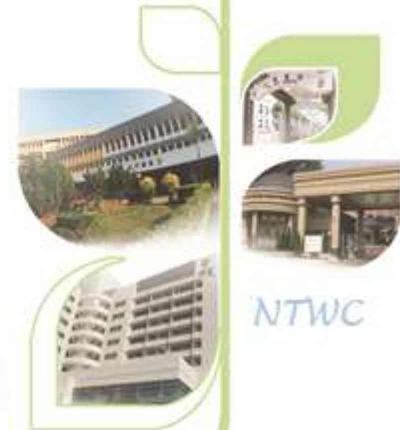


Hospital organization vs. patient journey

- Take a look at where are we now….
  - >4000 medical and surgical procedures
  - >6000 drugs

- Exploding complexity requiring multiple specialists/ therapists
  - A typical hospital stay
    - 1970s → 2 full time equivalent of clinicians
    - 1990s → 15 full time equivalent of clinicians

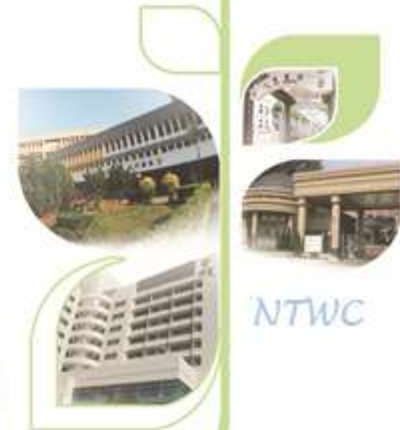
- Very well trained specialists working in silos
  - Minimal cross talk and sharing
  - Patients travelling across all these silos



Silos of specialists/ departments

- We hope that…
  - With multiple very expensive/ sophisticated components taking care of parts
  - Our patient will get great care
  - But will they get it?

- Let's imagine we are building a jet fighter that would out-perform any existing ones
  - Chinese 殲二十 engines + Russian PAK FA navigation system + US F 22 body
  - A multi million pile of junk that cannot fly



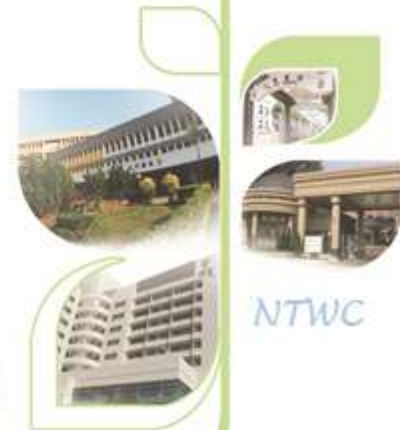
Where to start

- The change in culture from specialists silos to a "circle" of healthcare workers caring for the patient is never going to be easy
- Such a change has to be taken in phases and it is going to take years
  - "evolution rather than revolution"
  - Setback would occur
- Do we have a practical concept framework?
  - We need a roadmap or checklist to bring about such changes

Steps to significant change

1. Establishing a sense of urgency
2. Creating the guiding coalition
3. Developing a vision and strategy
4. Communicating the change vision
5. Empowering employees/ colleagues for board based actions
6. Generating short term wins
7. Consolidating gains and producing more changes
8. Anchoring new approaches in the culture

Probably where we are right now



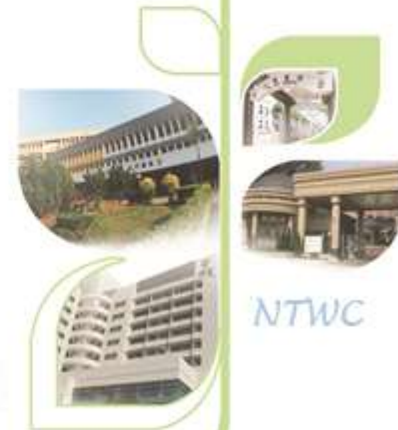
Leading Change (John P. Kotter)

Establish sense of urgency

- Surgical Outcome Monitoring and Improvement Program (SOMIP)
  - Suboptimal outcomes of elective and emergency surgical patients in TMH
  - Persistent similar findings over consecutive years

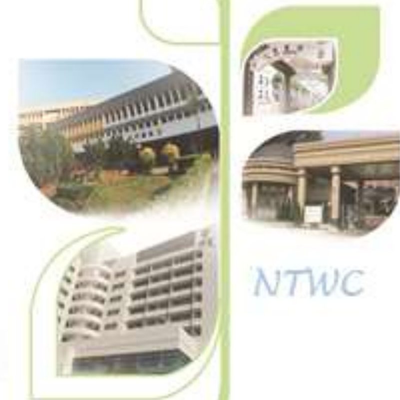
- Phases of accepting bad news → acceptance

- We need to do something about this
  - Short term fixes
  - Long term improvements



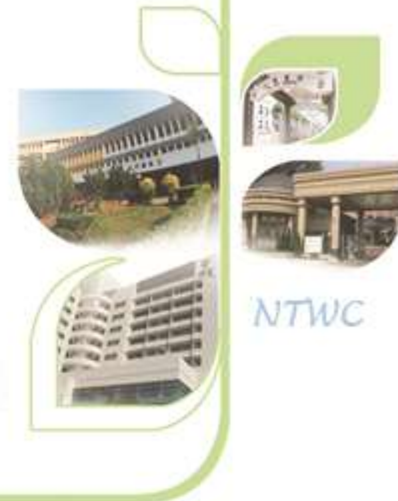
Creating the guiding coalition

- A lot of differences in views and response in the 3 departments (SUR, ANA, ICU)
  - "just the way it is"
  - "not my problem, it is their problem"
  - "not possible to fix"
  - "need to improve but how"
- A core of surgeons/ anesthetists/ intensivists group came together to form a circle
- Formal endorsement by CCE
  - Letter sent to all senior surgeons
  - to invite and thank them for joining
- Quality and Safety Division provide executive support



Developing vision and strategy

- What is our aim?
- Where to start?
- How to make changes?
  - Education?
  - Guidelines?
- How could we obtain resources for this?

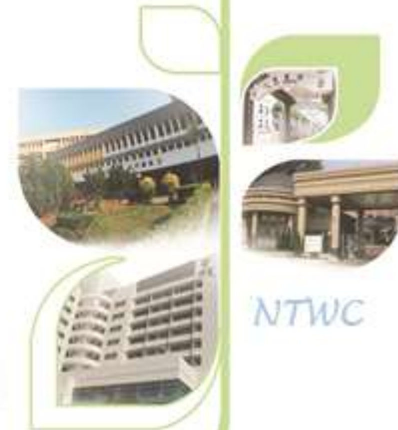


Surgical Quality and Safety Circle (SQSC)

- Vision:
  - Improve care of complicated surgical patients to decrease mortality and morbidity.
  - Cultural shift: Allow dissents, just culture, speak up culture, safety culture

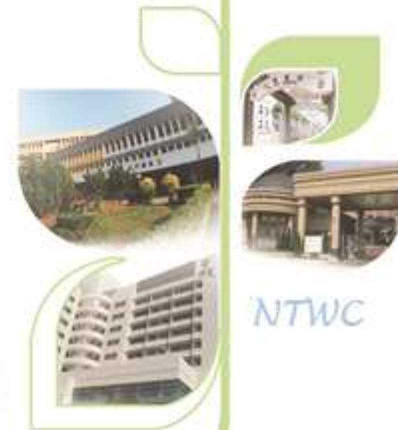
- Strategy:
  - SUR, ANA, ICU
  - Start with patient journey approach and look into ways to do things better
  - Concentrate on evidence based practices
  - "cracks that patients tend to fall through our care"

- Tools
  - Communication improvement/ standardization
  - Protocols for evidence based practices
  - Education



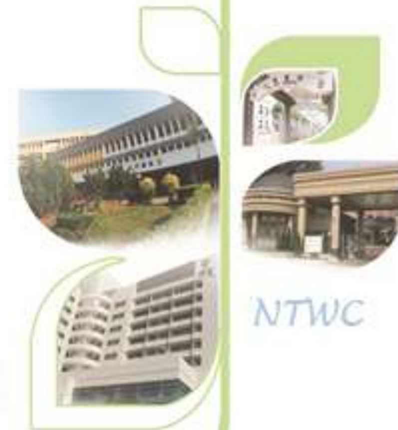
Surgical Quality and Safety Circle (SQSC)

- Members of the circle
  - Surgery: COS + Team heads of surgical teams
  - Anesthesia: 3 senior anesthetists
  - ICU: 2 senior intensivists
  - Q&S: SD(Q&S) + audit team
- A discussion and collaboration platform
  - Convener
  - EP(Q&S) as coordinator and case reviewer
- Meeting every 1-2 months after 5pm



Surgical Quality and Safety Circle (SQSC)

- Selected patients
  - Elective and emergency patients according to pre-defined selection criteria
  - Entered into SQSC database of Q&S every month
  - Whole patient journey (from admission to discharge) reviewed by Q&S audit team
  - Summary prepared by EP(Q&S)



Communicate change vision

- Establishment of SQSC briefed in the following meetings in NTWC
  - Cluster Management meeting
  - Division Head meeting
  - Chief of Services meeting
  - Cluster Clinical Governance committee meeting
  - Surgical department meeting
  - Anesthesia and ICU department meeting

- Terms of reference and logistics of SQSC sent to all senior surgeons/ anesthetists/ intensivists

- In retrospect
  - More informal communication probably needed
  - Communication to "middle level" probably needed to be strengthened

Empowering colleagues for actions

- Obstacles for actions
  - Departmental barriers
  - Inertia associated with common practices
  - Differences in perspectives of different specialties
  - Value and principles
- What we have done
  - Some culture change
  - Joint taskforce for specific clinical problem e.g. massive GI hemorrhage
  - Joint educational seminar
  - Focus on good level evidence as driving force for change
- In retrospect
  - Some actions could be coordinated better
  - Some actions would need more resources support

Generating short term wins

RESEARCH

A continuous quality improvement project

Jasperine Ho Ka-yee, Quinnie Lee, Ka-chi Lam, Kwok-key Lam, Siu-kee Leung, Chi-wai Man, Kam-shing Tang, Chi-yeun Lo

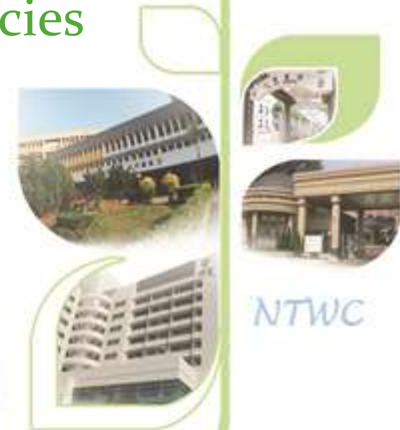
British Journal of Healthcare Management 2014 Vol 20 No 3

NTWC

Common lapses identified

- Communication between Surgeons/ ICU/ Anesthetists
  - Difference in opinion and plan of care for marginal cases
  - Who is responsible for co-ordination for complicated cases with multiple options
  - Difference in knowledge/ attitude of certain conditions

- Lack of guidelines/ protocols in management of emergencies crossing specialties
  - Acute severe GI bleeding
  - Severe sepsis/ septic shock

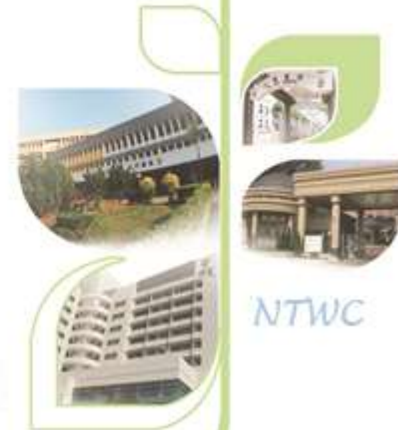


Pre-operative liaison

- Mostly marginal cases with acute surgical problems
  - "to go in or not to go in?"
  - "to support or not to support?"

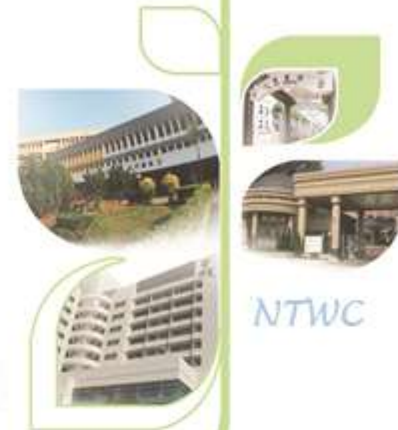
- Differences in opinion and expectation between different specialties
  - Conflicts between specialties
  - Suboptimal care
  - Incomplete information to relatives
  - Unrealistic expectations

- Pre-operative liaison:
  - Formal pre-operative liaison established
  - Aim to promote communication among seniors from Surgery, Anesthesia and ICU.



Protocols and guidelines

- New inter-departmental protocols and guideline
  - Workflow on emergency interventional radiology procedure
  - Gastrointestinal bleeding protocol
  - Logistics for Pok Oi Hospital patients with acute surgical problem who may benefit from Intensive Care
- New protocols under recent development
  - Sepsis bundle



Inter-departmental education

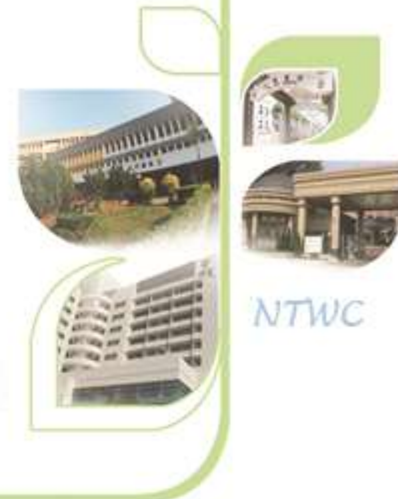
- Inter-departmental education program
  - Advances in management of abdominal trauma and recent evidence on upper GI bleeding
  - Bleed or clot? Current evidence on thromboembolism prophylaxis in the critically ill
  - Traumatic lung injury: Myth and facts of chest drain, extended FAST, pain control
  - Medical and surgical management of abdominal compartment syndrome
  - Rational use of antibiotics, fluid and inotropes in managing uro-sepsis
  - Perioperative cardiovascular assessment and management

- Changing to case based interactive sessions for better staff engagement

- SQSC bulletin to be published in Q&S website

Bridge between frontline and management

- Clinical problems/ message pass to top management
- One page summary to CCGC members



Conclusion

'The SQSC circle is a real example demonstrating the potential success of improving clinical outcomes and services by changing the hospital culture. We echo the Francis report in that real change needs a refocusing and recommitment of all healthcare staff'

We are nowhere near success yet

'Culture eats strategy for breakfast'
- Peter Drucker

THANK YOU