The introduction of a quality improvement programme in the Emergency Medicine ward of a tertiary teaching hospital

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Historical background

- Evolved from the observation ward.
- Established in 1985. The first of its kind in HK.
- Restructured in end of 2006 and renamed Emergency Medicine (EM) ward.
- Reflects the specialization of EM and an expansion of the roles played by the A&E department.
The EM ward

- 12 beds: 5M 7F
- Average monthly admission: 500
- Admission rate:
  - 5.3% (A&E to EM ward)
  - 20% (EM ward to inpatient specialty)
- No restriction on patient’s age or types.
- Preferably discharge within 24 – 48 hrs.
Objective

• To describe the process of introducing a quality improvement (QI) programme to the EM ward.
Methodology

• To discuss the design and ways of implementing the QI programme in the EM ward.
• To identify the obstacles encountered and discuss their solutions.
The QI programme: the team

• A QI team was formed in November 2006.
• Representatives from medical and nursing staff.
• Full support by Cons.
The QI programme: approach

- PDSA approach:
  - Plan (a change)
  - Do (it in a small test)
  - Study (its effects)
  - Act (in full scale)
What change? (1)

• To plan a change, we need to know:
  • 1. what we are doing
  • 2. how we do it
  • 3. whether we do it right
What change? (2)

- Utilization review of EM ward
- Study on management of patients with abdominal pain in the EM ward
- Study on management of dizzy patients in the EM ward
- Patient satisfaction survey
Important findings: targets for change

• 1. high variability in clinical practice
• 2. a gap between ‘best’ and ‘actual’ practice in managing dizzy patients
• 3. no mechanism overseeing performance
• 4. inadequate discharge information to patients
Setting the standard (1)

- An **EM ward manual** has been written.
- It covers 38 clinical conditions commonly seen in the EM ward.
- Evidence-based guidelines on patient selection for EM ward admission and management.
Setting the standard (2)

- Educational case studies and clinical updates.
- Distributed by e-mail and as poster in a designated corner in the department.
Filling the gap: dizziness project

- A **dizziness assessment form**, which contains the essentials on evaluating a dizzy patient, has been put in use.
- **Flow charts** on management were posted.
- **Videos** on how to perform positioning tests were prepared.
- **Educational talks** during departmental training session were arranged.
Monitoring the performance

• 1. Monthly statistics
• 2. Annual utilization review
• 3. Regular M&M audits
Patient information

• **Education pamphlets** specifically designed for EM ward patients have been written.
• EM ward nurses are encouraged to provide more **health education** and **discharge information** to patients.
Evaluation of results

• 1. Has improvement occurred?
• 2. Was the QI programme the cause?
• 3. Is the QI programme generalizable?
Evaluation: an ongoing process
Example: dizziness

- Improved documentation of essential history and physical examination findings from 40% of cases to nearly 100%.
- Transfer to inpatient specialty was reduced from 20% to 10%.
- A specific diagnosis was made in over 60% of cases compared to 52% before intervention.
Example: gross hematuria

• An evidence based guideline (EM ward manual) on management of patients with gross hematuria has been produced.
• Patient selection for EM ward admission and management.
• *Between 12.2007 and 1.2008*
• 88 patients
• *Direct admission: 34 (38.5%)*
• *In the past, admitted almost all*
## Generalizable?

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Our missions

- To develop a model of EM ward service that can
  - 1. ensure *safe* and *quality* clinical service to patients
  - 2. allow *effective* and *efficient* utilization of hospital and departmental *resources*
  - 3. act as a platform for staff *education* and *research*
United, we strive.