Emergency Medicine Ward

Experience of a Regional hospital in Kowloon Central Cluster Hong Kong

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Content

- What is EMW?
- What does it achieve?
- Why does it work?
- How does it work?
- Win-win situation but the priority .....

What

is Emergency Medicine Ward?

History

- USA
  - Early 1980s
  - Core content for EM (1997) & Model of EM Clinical Practice (2001)
- Hong Kong
  - Pioneered at QMH as early as mid-1980s
  - Short stay admission ward

Terminology

- Emergency Department Observation Unit
- Clinical Decision Unit
- Rapid Diagnostic & Treatment Unit
- Chest Pain Evaluation Unit
- Short Stay Unit
- Clinical Decision & Treatment Unit
- Extended Evaluation Unit
- Emergency Medicine Ward

Model of EM Clinical Practice (ACEP)

- Pre-hospital care
- Emergency Stabilization
- Focused Hx & P/E
- Modifying factors
- Professional Issues
- Diagnostics
- Diagnosis
- Therapeutic interventions
- Pharmacotherapy
- OBSERVATION & REASSESSMENT
- Consultation & Disposition
- Prevention & Education
- Documentation
- Multi-tasking & team management

Advantages of EMW

Clinical Initiatives

- Better patient care
- Better risk management
- “A valuable educational resources”
- Avenue for clinical pathways

Administrative Initiatives

- Decreased hospital admission
- Cost effective
- Marketing tool
- Improved public relations

Most Common Conditions in OU (USA survey)

Chest pain	80.6%
GI / Abdominal	57.1%
Asthma / Resp	56.1%
General ailments	32.7%
Dehydration	32.7%
Psychiatric / social	14.3%
Syncope	11.2%
CHF	11.2%
Head Injury	8.2%
TIA	6.1%
Orthopaedic injury	4.1%
Back Pain	3.1%

Emergency Medicine Ward

- Queen Elizabeth Hospital
  - Operational since February 2005 at separate floor from AED
- Environment
  - General ward setting with 30 beds at opening
  - Expanded to 40 beds in January 2006
  - (Psychiatric patients separately located at a Special Observation Ward off site with 24 beds; shared among all clinical disciplines)
- Facilities
  - Resuscitation backup
  - Access to laboratory investigations and Imaging (Plain X-ray & CT brain)
  - Meals provided (including special diets)

Emergency Medicine Ward

- Staff
  - Same team of nursing staff in A&E and E ward
  - Medical rounds (5 - 6 rounds from 0800 - 2400 ± ad-hoc)
  - Emergency Medicine Specialist provided care
- Other specialty consultations :
  - Internal physician regular round (2x/day for selected cases, 365 days)
  - General surgeon adhoc consultation system (365 days)
  - Community geriatric team round (2x/day Mon – Fri)
  - Others: physiotherapist (365 days); psycho-social team support (clinical psychologist, MSW, pastoral care and hospital chaplain); psychiatrist support (office hours)
- In general, stay not to exceed 24 hours except geriatric case whom 48 hours stay is allowed.

Case Mix

Year	2004	2005	2006	2007
Daily New Cases	47	43	45	45
Atypical Chest Pain	13%			
Drug Overdose	1.50%			
Psych / Drunk	10%			
COAD	3.40%			
DM	5%			
Cellulitis	1.50%			
Minor Head Injury	10%			
Low Back Pain	6%			
Gastroenteritis	4%			
Dizziness/Vertigo	8%			
Pain Management	14%			

What

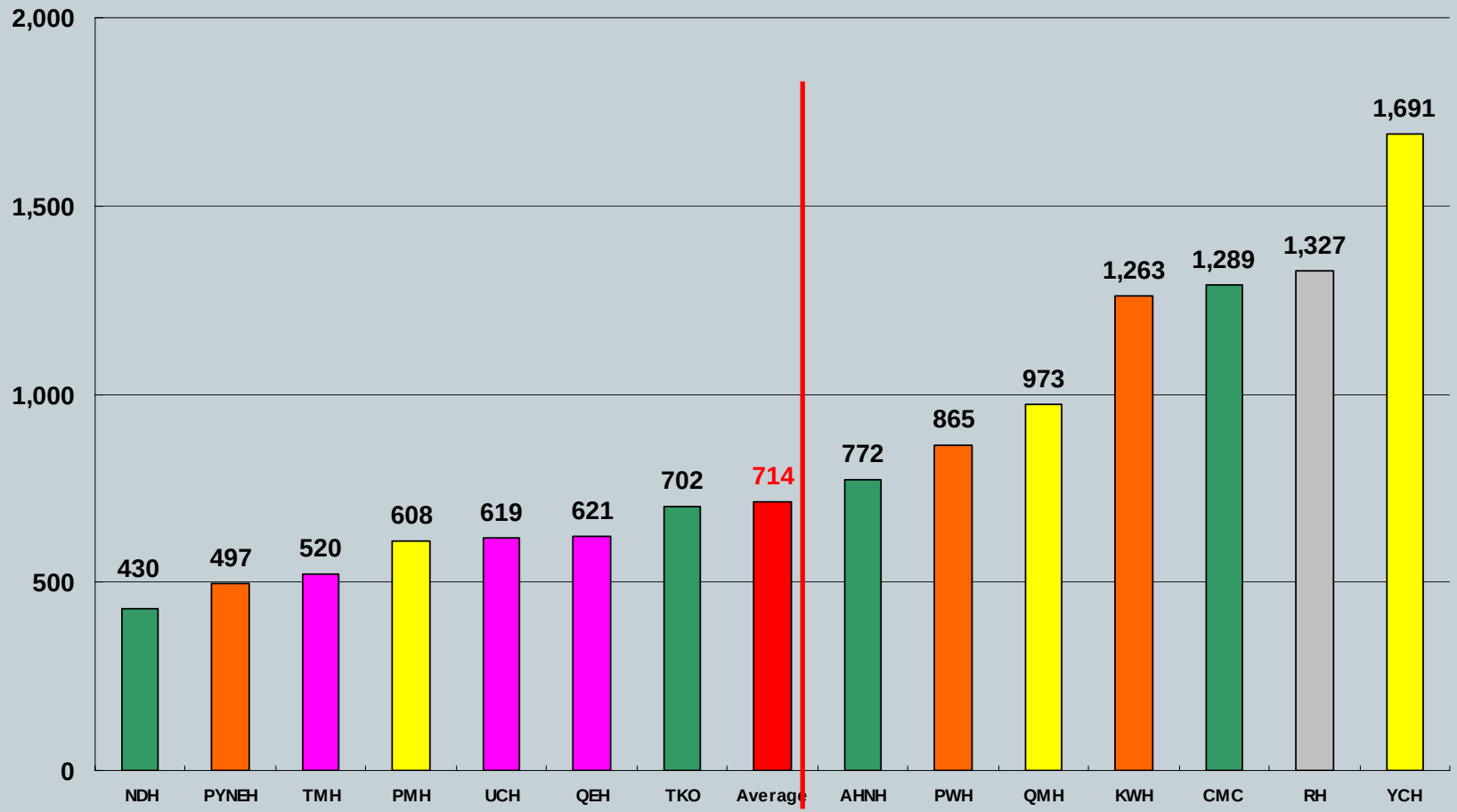
does it achieve?

Chest Pain OU

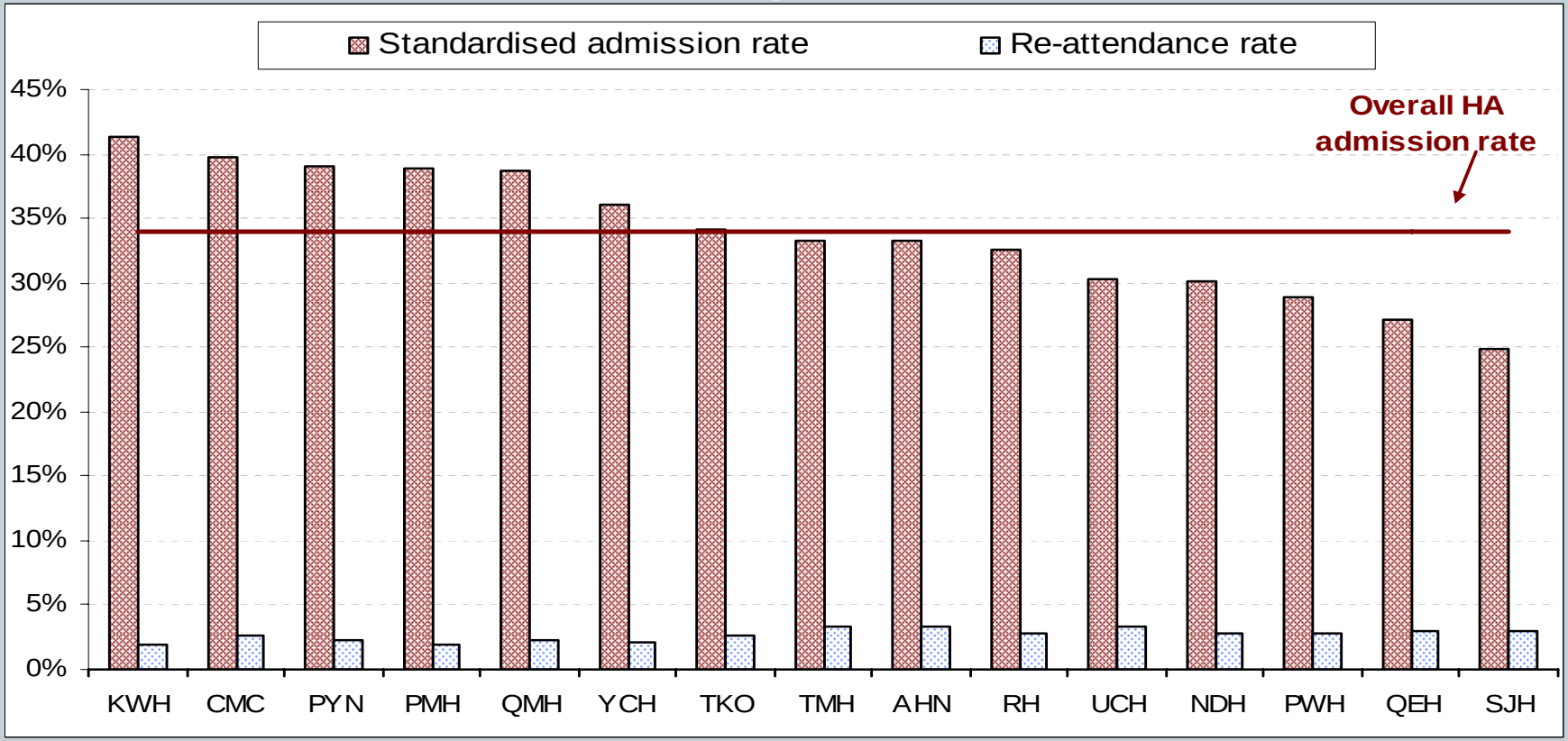
- RCT & Economic Evaluation of chest pain OU Vs Routine Care
  - Steve Goodacre et al, BMJ 2004

- 972 acute undifferentiated chest pain
- 493 Routine A&E Care Vs 479 CPOU
- Result:
  - Admission rate reduced from 54% to 37% (S)
  - Proportion D/C with ACS from 14% to 6% (NS)
  - Rates of cardiac event from 3.4% to 3.8% (NS)
  - Improved QALY (S)
  - Saving of 78 pounds/patient (NS)

A&E Attendance per Observation Bed (March 2005)



Adjusted admission rate – *MED/FM attendances*



Re-attendance rate = $\frac{\text{No. of A\&E re-attendances (not scheduled MED/FM attendance within 48hrs in same AED, regardless of previous attending specialty)}}{\text{No. of A\&E MED/FM attendances}}$

Observation beds Vs Admission Rate

- Of the 7 hospitals with better than average A&E attendance per observation beds, 5 have adjusted admission rate (Med/FM) below HA average

- Of the 7 hospitals with less observation beds, 4 have adjusted admission rate (Med/FM) above HA average

Why

does it work?

Unique Characteristics of the new Emergency Medicine Ward Service

- Managed by Emergency Physicians with frequent ward rounds
- Treatment of specific targeted disease groups
- Access to necessary investigations
- A hub for integrating multi-disciplinary care & community care

Unique Characteristics of the new Emergency Medicine Ward Service (2)

- A place for execution of care plans expediting investigation & treatment of patients
- Length of stay no longer in terms of a few hours
- Highly efficient as compared with traditional in-patient wards

Care Plans / Guidelines developed

- Airway / Breathing
  - COAD; Pneumothorax (needle aspiration); Asthma
- Circulation
  - Atypical chest pain; Asymptomatic HT; Fast AF (known); PSVT (known / new); CHF
- Disability
  - TIA; Epilepsy (known / new); Dizziness; Minor head injury; LBP / degenerative joint problems, Syncope

Care Plans / Guidelines developed

- Endocrine
  - Hypoglycemia; hyperglycemia
- GI
  - GE, Suspected mild UGIB (OGD)
- Psycho-social
  - Drunk; Drug Overdose; psychiatric / psychological
- Others
  - Cellulitis; CGAT patients with non-specific complaint, AROU

Admission Rate & LOS

	EMW (Jul – Dec 2005)				IP (Jul – Dec 2000)	
	Av. No. /day	Median LOS (Hours)	Adm Rate (%)	Re-attd 48 hours (%)	Av. No. /day	Median LOS (Hours)
Atypical Chest Pain	5	10.2	19	5	4	48
LBP	2.5	20	15.5	7.3	2.5	72

Admission Rate & LOS

	EMW (Jan – Jun 2006)				IP (Jan - Jun 2000)	
	Av. No. /day	Median LOS (Hours)	Adm Rate (%)	Re-attd 48 hours (%)	Av. No. /day	Median LOS (Days)
Hypoglycemia	2	27.7	26.6	0	1	3
T.I.A.*	0.5	7.2	~40	0	1	3
Psychiatric^	1.5	16.5	42.4	1.4	2	4.4

* Very restricted case selection to EMW with CT brain and Joint Medical Consult

^ Borderline cases requiring psychiatrist consult

How

does it work?

Good Reason to Convince.....

- Medical & Health – People's business
- Provider – professional
- Ego, Super-ego
- Quality issues ≠ Administrative issues
- Appropriate admission reflects appropriate EM care

Cultural Change

- Medical staff should take the lead
- Senior staff should act as role model
- Historical Vs Opportunities
- Specialty development should go hand in hand with service improvement
- KPI are necessary desirable 'side-effect' of gate-keeping policies but NOT the aim

Human Resources Issue

- Culture created/maintained by people
- Opportunities Vs Threats of contemporary HR policy
- Avoid ambiguity
- Align with conceptual change in new culture
- Medical + Nursing
- Professional development Vs Service need
- Fairness Vs Competency

Monitor

- Local Vs whole picture
- Trends
- Regular parameters
  - Adm. Rate to EMW, Transfer rate to specialty ward
- Adhoc
  - Individual performance

Monitor (Cont'd)

- Reporting to all grades
- All meetings (management, medical, nursing, departmental)
- Fixed agenda
- Close monitor after implementation of new policies

Strategy

- ATTITUDE (culture)
- Peer group influence (academic meetings)
- CLINICAL GUIDELINES
- Interdepartmental collaboration

Conclusion

- Devotion (both professional & admin.)
- Perseverance
- Good intent
- Staff morale and involvement
- Disciplines
- Peer group pressure
- A GOOD MANAGEMENT TEAM

Win-win situation but the priority is .....

Vs

Thank

You