Increases in patient attendances since the introduction of the "Four Hour Rule" in Western Australia

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Four Hour Rule

BACKGROUND

- Introduced in the UK in the 1990s amidst widespread public and staff dissatisfaction with Emergency Department performance
- Mandated that 98% of all patients presenting to an ED would be seen, sorted and discharged from the ED (either home or to the ward) within four hours of arrival
- Highly political
- Very well resourced

BACKGROUND

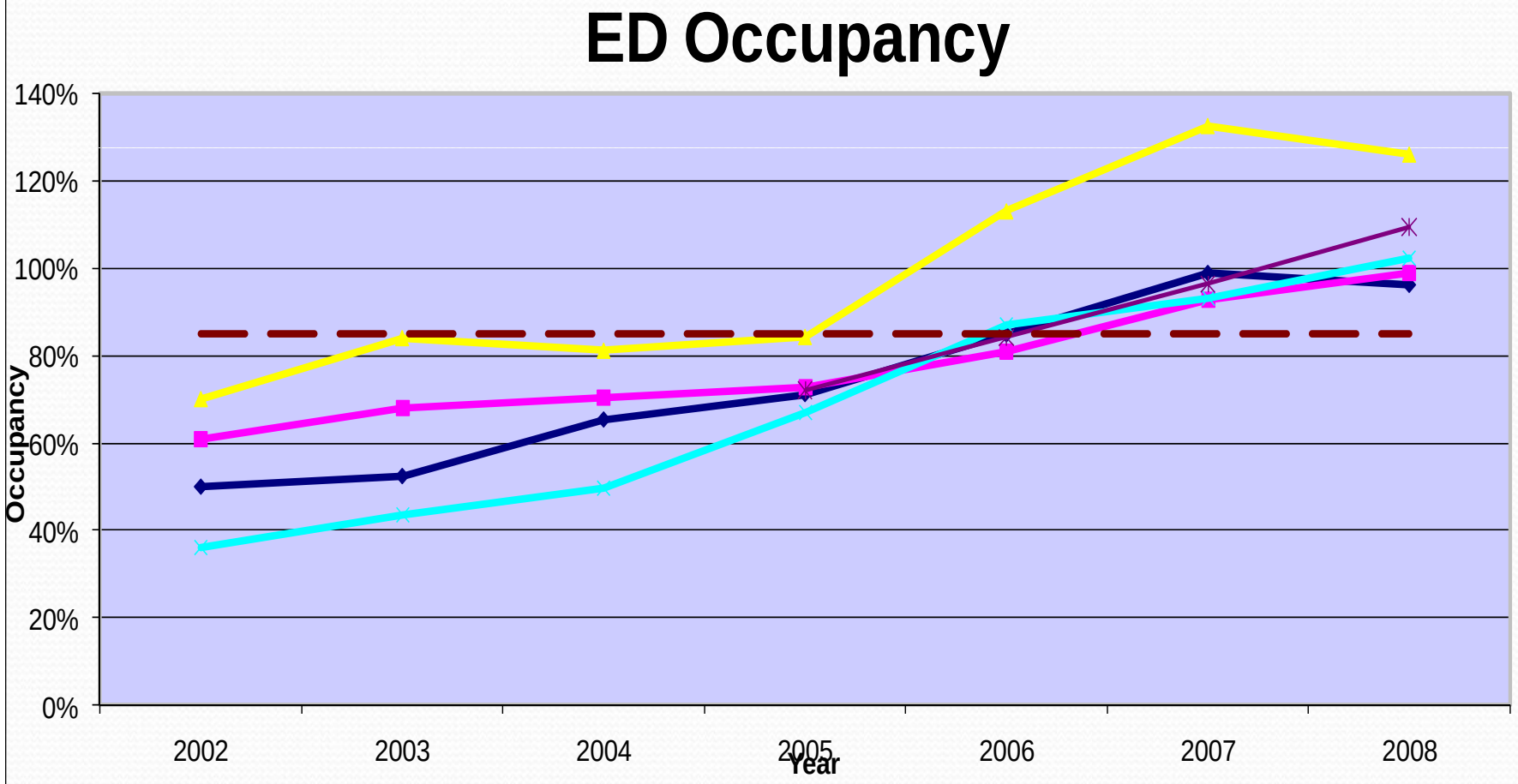
- Mainly “Stick approach” – Chief Executives lost jobs for failing to meet target

- However, after a few years, targets largely met
- Patients largely satisfied
- Interestingly, review by the BMA in 2005 revealed that ED staff were also largely satisfied

BACKGROUND

- Western Australia - 2007
  - Vast majority of state's population in Perth
  - Only three adult tertiary hospitals with a ring of general hospitals with fairly limited services
  - Ambitious building programme but years away
  - Record levels of access block – Fremantle Hospital worst in country
  - Ramping reaching record levels
  - Limited ability of the system to cope

Four Hour Rule



Record Number of Ambulances queue outside Perth Hospitals

MELTDOWN: Record number of ambulances queue outside Perth hospital emergency wards. *Source:* PerthNow

PERTH emergency departments went into meltdown today with record ambulance queues outside hospitals.

John Ambulance chief executive Tony Ahern said at 1pm today there were 26 out of the 48 ambulance vehicles in the metropolitan area stuck outside hospitals waiting to offload patients – a term known as "ramping".

BACKGROUND

- Highly engaged Minister for Health
- Looking for solutions
- Delegation sent to various countries including the UK
- Recommendation was that a time based target be introduced
- Delegation recommended that it NOT be called the "Four Hour Rule"
- WA Faculty recommended six hours, not four
- Cabinet over-rode both, and announced the "Four Hour Rule"

BACKGROUND

- Phased implementation
  - Initial tertiary hospitals to be 85% compliant by April 2009 followed by 95% and then ultimately 98% compliant by April 2011
  - General hospitals staggered by six months
  - Country hospitals staggered again
- No additional recurrent expenditure
- Minimal funds for one-off items
- At the same time, elective surgery pressure

Four Hour Rule

- Standard clinical redesign process
  - Central project office at Health Dept for support & resources
  - Local project management
  - Process mapping
  - Staff engagement for solutions
  - Aim for short rapid change cycles
- "Local solutions for local issues"

Four Hour Rule

- Some common themes:
  - Patient streaming
  - Team based care
  - “Navigators” / “Operations Manager” / “Flow nurse”

BACKGROUND

UK experience showed that this programme had the potential to increase patient attendances – a 37% increase in attendances between 2002-2006 was recorded by the NHS [though varied considerably from hospital to hospital]

Also anecdotal evidence that the number of "low acuity patients" had increased

AIM

To examine the rate of attendance prior to and after implementation of the Four Hour Rule in WA,

To examine whether the number of low acuity patients (so called “GP patients”) had increased since the Four Hour Rule

METHODS

Data extracted from the EDIS system (iSoft version 9.46) for the periods January-June in 2008, 2009, 2010 and 2011 for three adult tertiary hospitals in Perth

- total patient attendances
- number of "low acuity patients"

Low acuity patient = self referred, ATS3,4,5 and discharged within one hour of being seen by a doctor[1]

- 1 Nagree Y, Mountain D, Cameron P, Fatovich D, McCarthy S. Determining the true burden of general practice patients in the Emergency Department: the need for a robust methodology. *Emerg Med Aust* 2011:23(2)

RESULTS – all patients

Period	% Increase
2008 to 2009	2.7%
2009 to 2010	5.6%
2010 to 2011	10.4%

RESULTS – Low acuity patients

Period	% of attendances
2008 to 2009	8.8%
2009 to 2010	9.6%
2010 to 2011	10.8%

Despite being 10.8% of patient attendances, total LOS of low acuity patients was only 3.1%

RESULTS

- Total attendances growing at a rate higher than prior to the Four Hour Rule
- Slightly more low acuity ("GP type") patients, however, their overall contribution to ED workload is small (3.1%)

Limitations

- Only looked at January – June figures (due to abstract submission)
- Only looked at tertiary hospitals (due to staggered implementation)
- Not compared the growth rates with national growth rates (in progress)
- Can't definitely say that 4 hour caused the increase – may have occurred anyway

Discussion

Four Hour Target was useful in focussing energies on ED overcrowding

Allowed formal review of whole system with process mapping, robust data and dedicated project personnel

Some quick wins easily implemented

Discussion

Some strategies for ED function

- Streaming within Department
- Team Based Care
- Early Senior Review
- Dedicated radiology slot in morning
- Point of care testing
- Sensible inpatient registrar rostering
- Executive Support for 2 Hour Policy
- Executive Support for One Way Policy
- ED Navigator Role

Discussion

Ward Based

- Medical Assessment Unit with dedicated staff
- Surgical Assessment Unit with dedicated staff
- Pushing of discharge time
- Pager-free time from 1600-1700 for discharge planning
- Enhancement of discharge lounge

DISCUSSION

- Introduction of the Four Hour Rule in WA was controversial
- WA fellows split
- Arguments against:
  - "Glorified triagers"
  - "Australian system different to the UK"
  - Loss of quality of care as chase targets
  - UK have abandoned their targets just as we introduce

DISCUSSION

- Arguments for:
  - Finally engaged the whole hospital, access block no longer an "ED problem"
  - Archaic ward practices overhauled
  - Rest of the hospital has to operate 24 x 7
  - ED gets the same profile as elective surgery
- Experiences differed depending on hospitals
- Largely, WA didn't have a big stick (no CEO has lost their job!)
- Drove a lot of hospital reform that wouldn't have been possible otherwise

DISCUSSION

- However, became obvious that 98% was unachievable
- Minister revised target to 85% with no further escalation (country hospitals and tertiary paediatric to retain their 98% target)
- Hospitals still not consistently meeting 85% target but certainly much better than 2007
- Ambulance ramping still an issue

CONCLUSION

- WA's Four hour Rule appears to have increased the growth rate o patient attendances to WA's tertiary hospitals
- There has been an event faster growth rate of low acuity ("GP type") patients
- This is consistent with the experience in the UK