

Reducing Emergency Admissions by 10%+

The Cambridge experience



Addenbrooke's Hospital

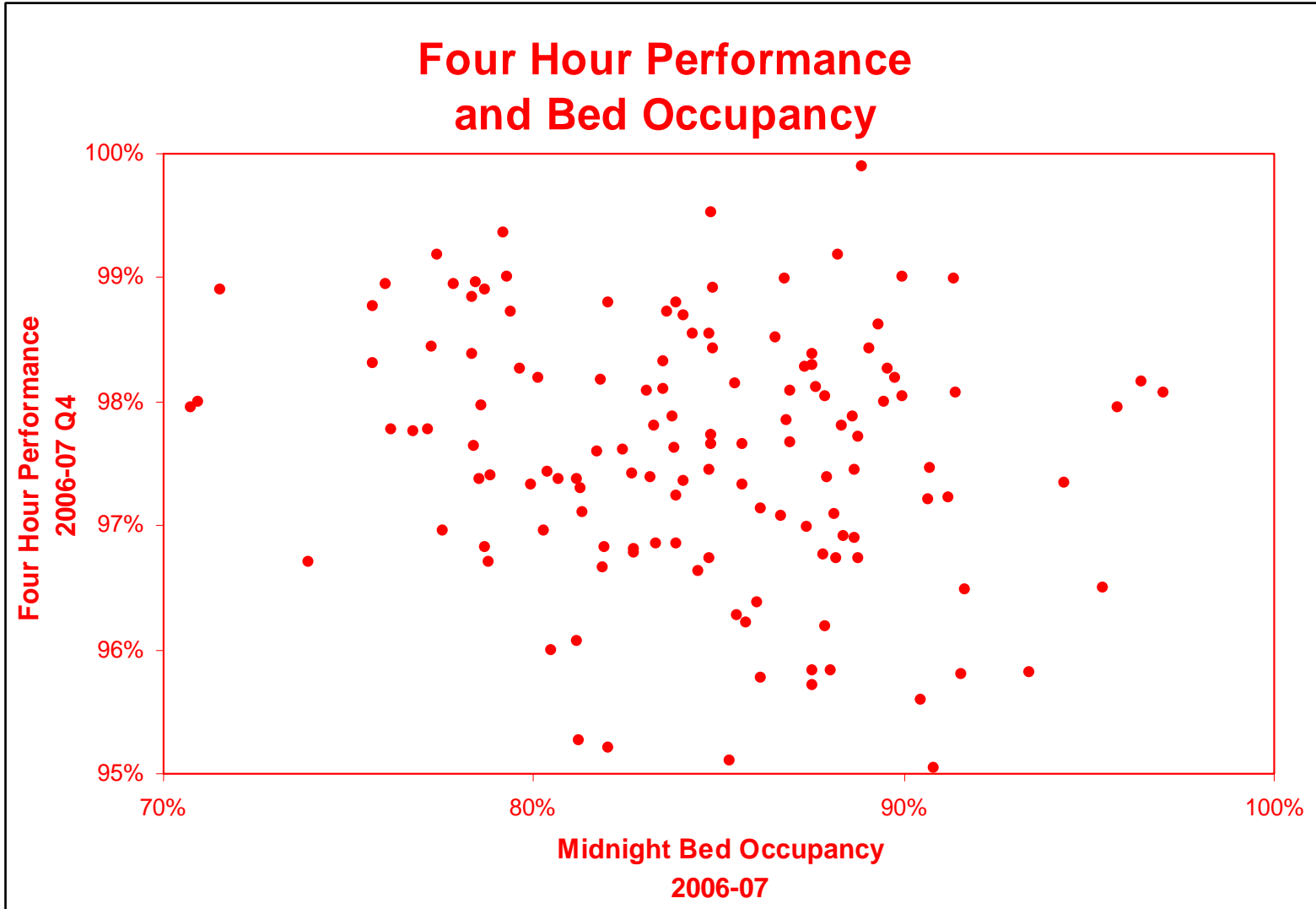


Re-stating the problem

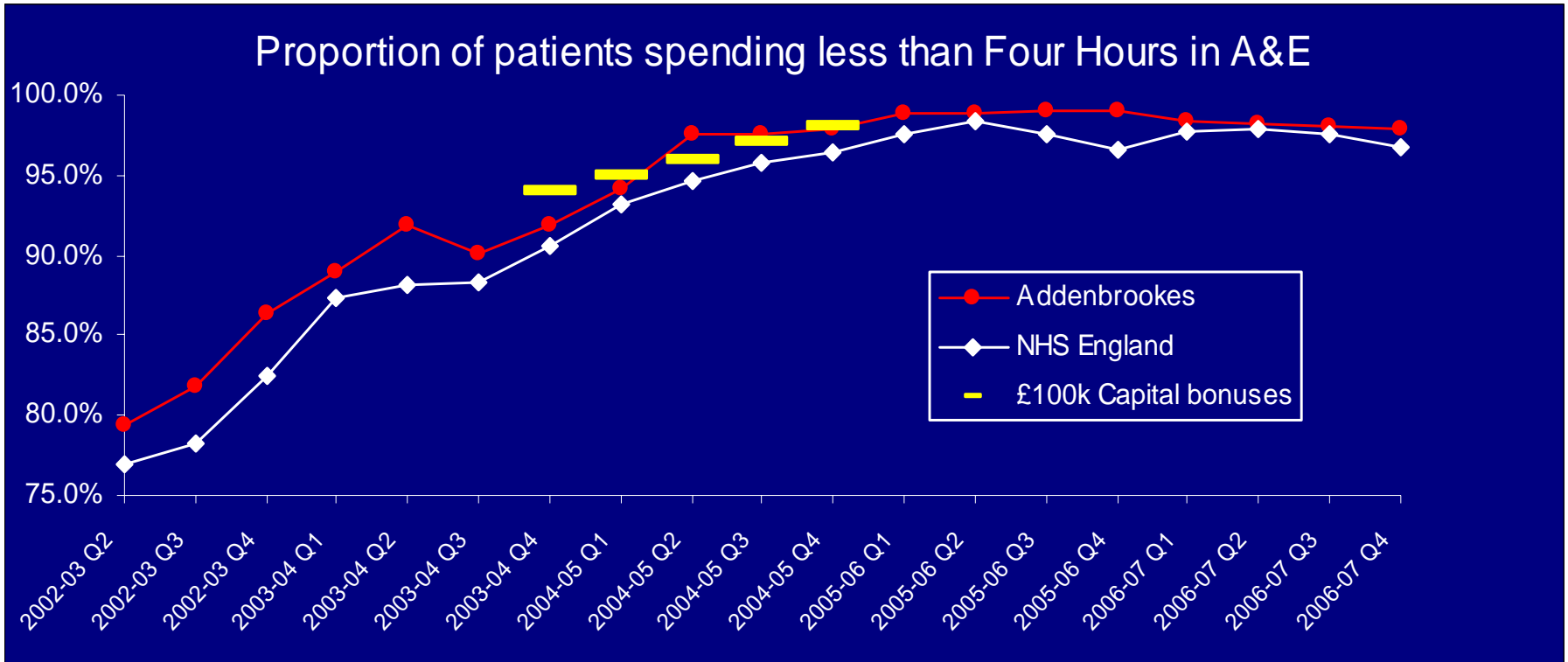


1. Ambulances waiting to off-load
2. ED overcrowding
3. Too much time in the ED
4. Bed occupancy is too high

Is it really beds?



The Four Target in England



What the doctors think now



- In Jan 2005 questionnaire were sent to consultants in all EDs



- 18% thought the target should be 98% or higher
- **52% thought the target should be 95%**
- 18% thought the target should be 90%
- 1% thought the target should be 85%

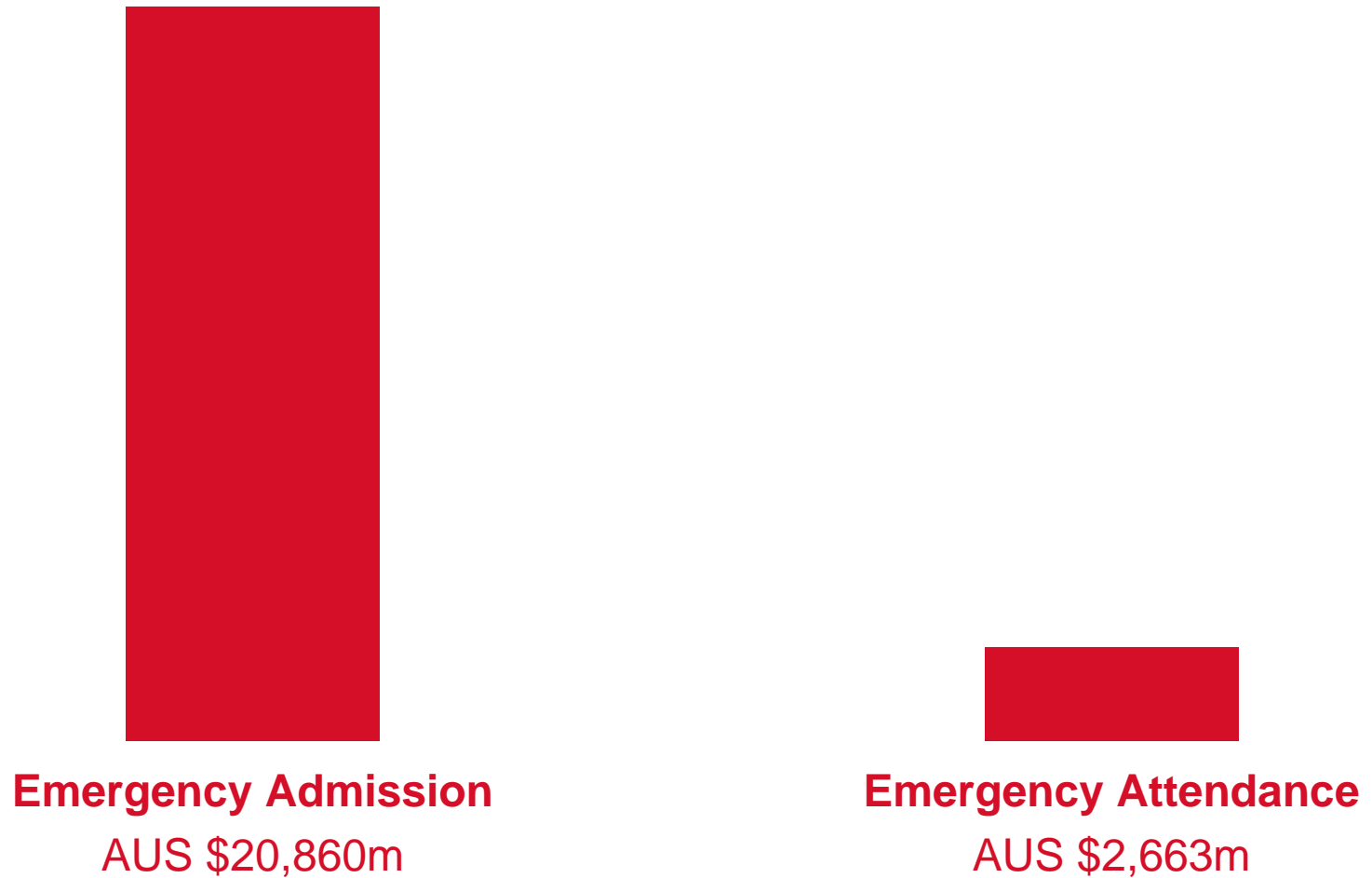
Addenbrooke's Hospital



Admission v. Attendance

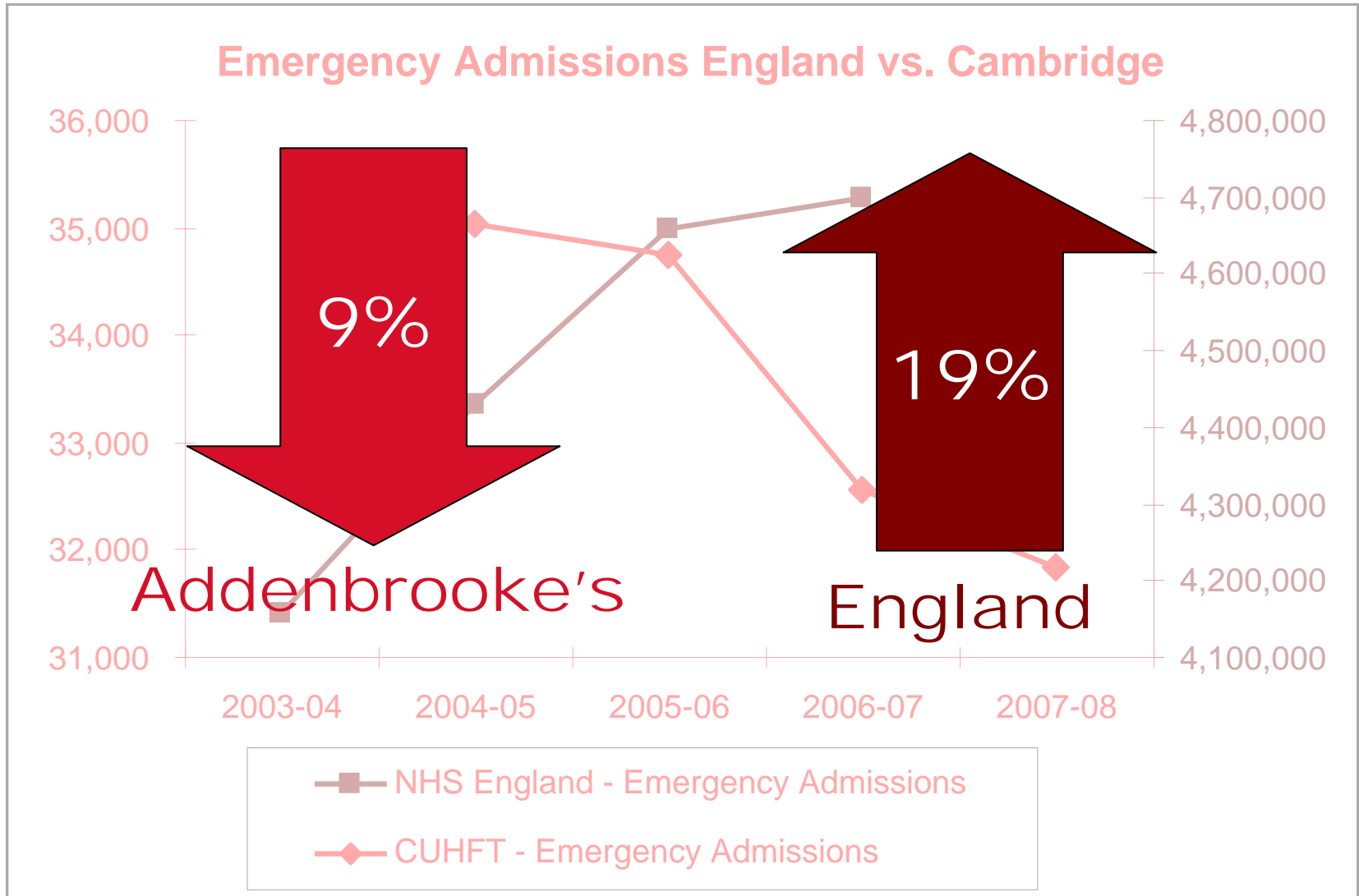


NHS England costs in 2006/07



Source: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_082571

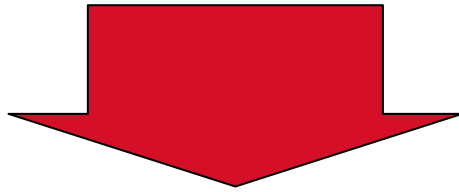
Emergency Admissions



So what?

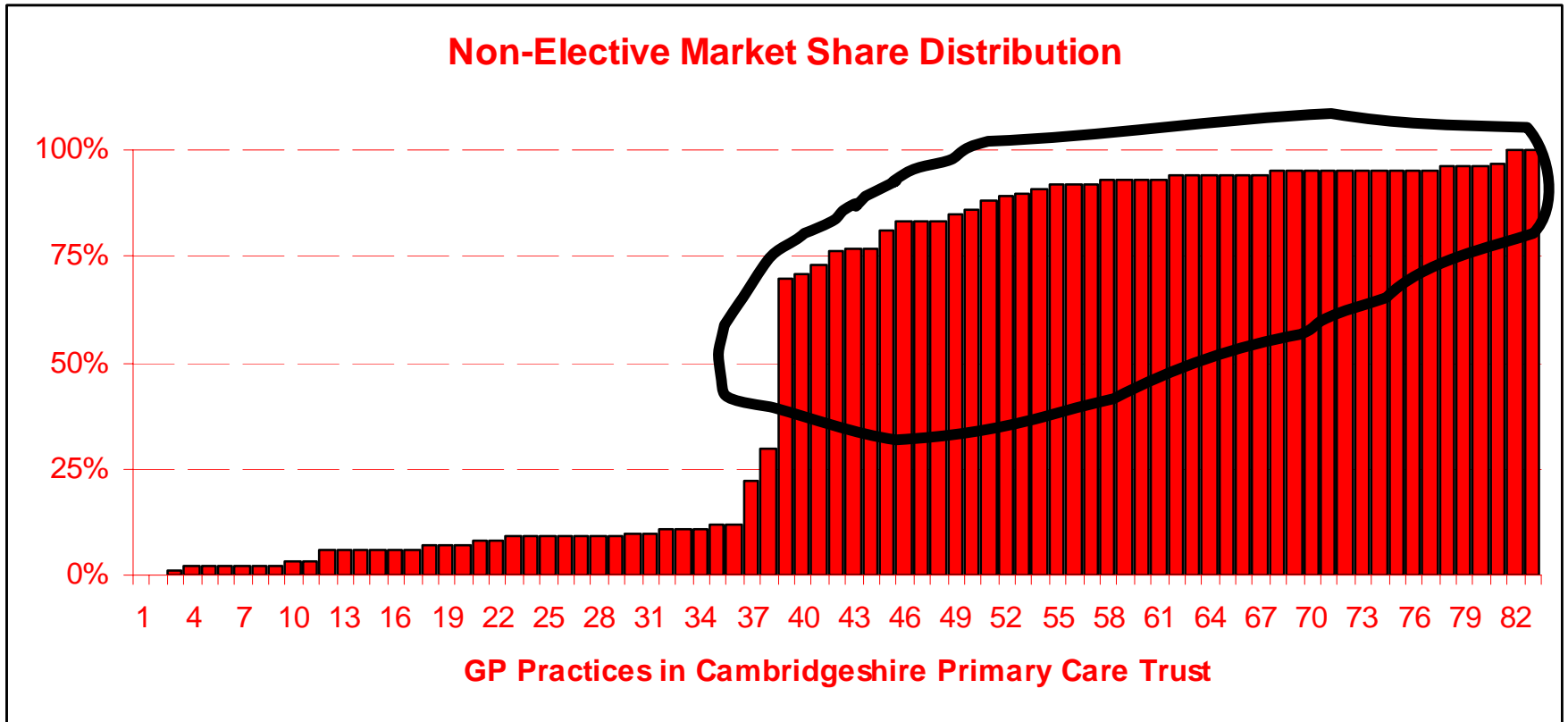


- Unnecessary admissions
- Changing market share
- Changes in complexity



**Population measure
required**

Basis of a population



...this may not hold true for Australia.....

By each GP Practice



- Number of people with a GP Practice
 - Age
 - Sex
 - Unemployment
 - Overcrowding
 - Car ownership
 - Social class

intelligence dr foster®



**Expected Admissions
adjusted for deprivation**

Standardised Admission Ratio

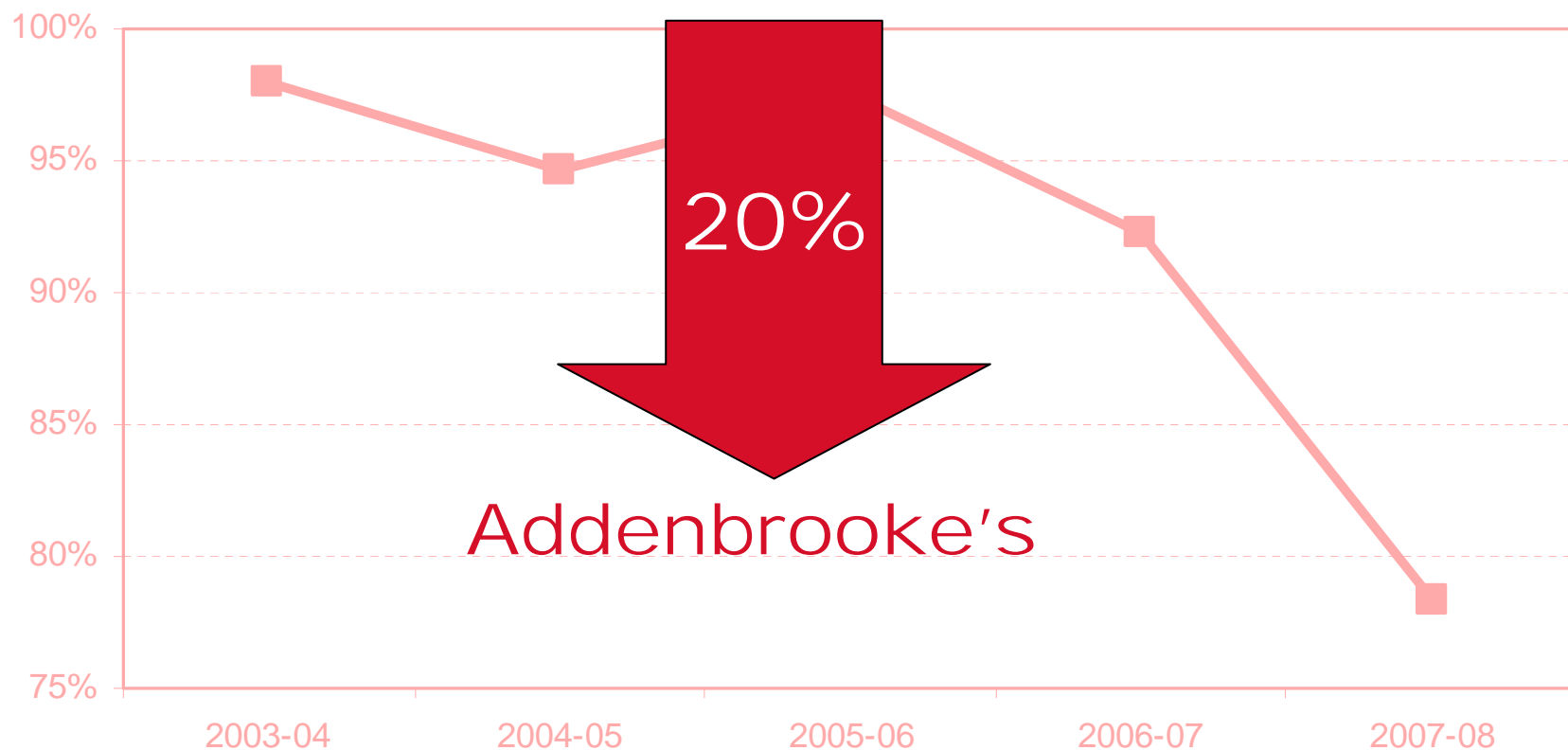


$$\frac{\text{Actual Admissions}}{\text{Expected Admissions}} = \text{Standardised Admission Ratio}$$

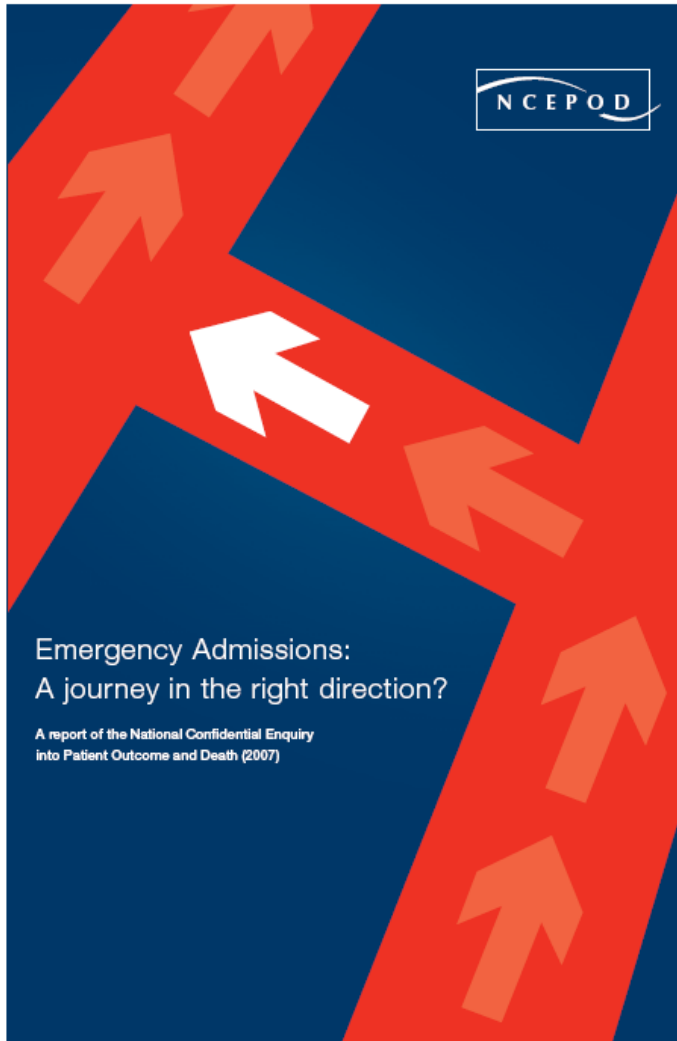
A SAR for Addenbrooke's



Non-elective Standardised Admission Ratio for GP Practices where Addenbrookes has majority market share



Waiting for doctor in England



- 40% were not seen by a senior doctor within 12 hours, 8% at 24
- 7% had a poor or unacceptable initial assessment
- 35% had shortcomings in standards of care
- 7% did not receive adequate observations

....the sample was our sickest patients – dead or in intensive care within a week, or dead at home a week later....

Addenbrookes Response



Project from March '04 to June '06

- Single Front Door
- Front-loaded Investigations
- Front-loaded Specialists

All within Four Hours.....

Single Front Door

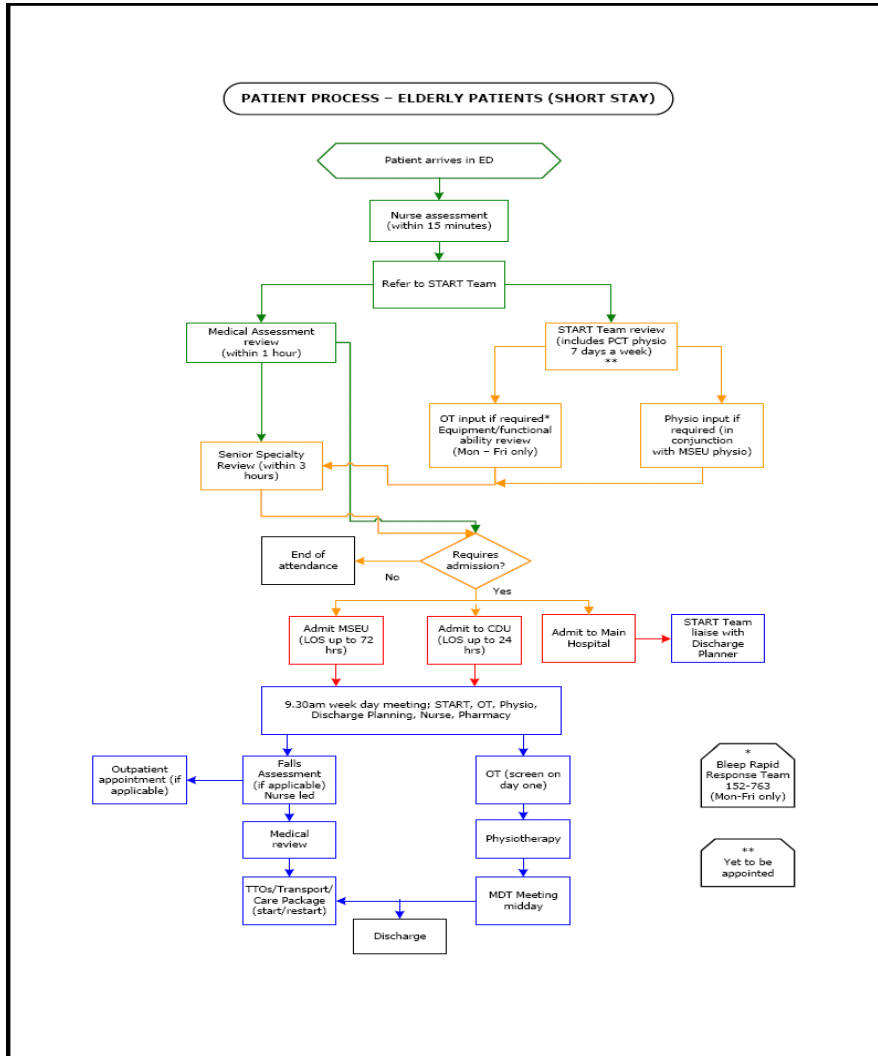


- Nationally 1.7million (38%) emergency patients bypassed Emergency Departments in 2005-06 ¹
- Typical hospitals have multiple front doors, depending initially on referral not condition



- Existing resources and activity were focused at one front door
- 63 cross-specialty agreements (patient journeys)

Specialty Agreements



Front-loaded Investigations



- Pathology testing increased by 38%¹ per patient
- Faster bloods with dedicated staff testing on arrival with Point of Care Testing
 - Standard blood gases – Ph, $p\text{CO}_2$, $p\text{O}_2$.
Cooximetry, ISE, Sodium, Potassium, Ionised Calcium, Glucose, Lactate, Urea.
- Co-operation with Radiology and Pathology to reduce turnaround times
 - 70.8% Troponin Results available in 60 mins – July '08

Front-loaded Specialists



- 16 Admitting specialities – two based in the ED 24/7 at senior level (ST3+) with juniors
- Allocation to speciality from initial nurse assessment
- Every patient admitted from the ED should have a senior review

- *Signed agreements*
- *Constant monitoring*
- *Constant management*

Working in our ED - Forms



Addenbrooke's Hospital Emergency Assessment Unit Emergency Assessment (Adult)	Patient Name: Hospital No:
Senior / Specialty Clinical Assessment (Summary)	
Review and Further Management Plan	

This patient may now leave the Emergency Department
(patient stable & relevant investigations reviewed and documented, CODING completed)

Yes No

Destination : Home / CDU / MSEU / SSEU / ICU / HDU / NCCU / CCU
Ward: General Medical /General Surgical /Specialty
Transfer (please specify).....

Name: Signature: Bleep no:

Designation: Date: DD / MM / YYYY Time: __ : ___hrs

This patient may now leave the Emergency Department
(patient stable & relevant investigations reviewed and documented, CODING completed)

Yes No Destination : Home / CDU / MSEU / SSEU / ICU / HDU / NCCU / CCU
Ward: General Medical /General Surgical /Specialty
Transfer (please specify).....

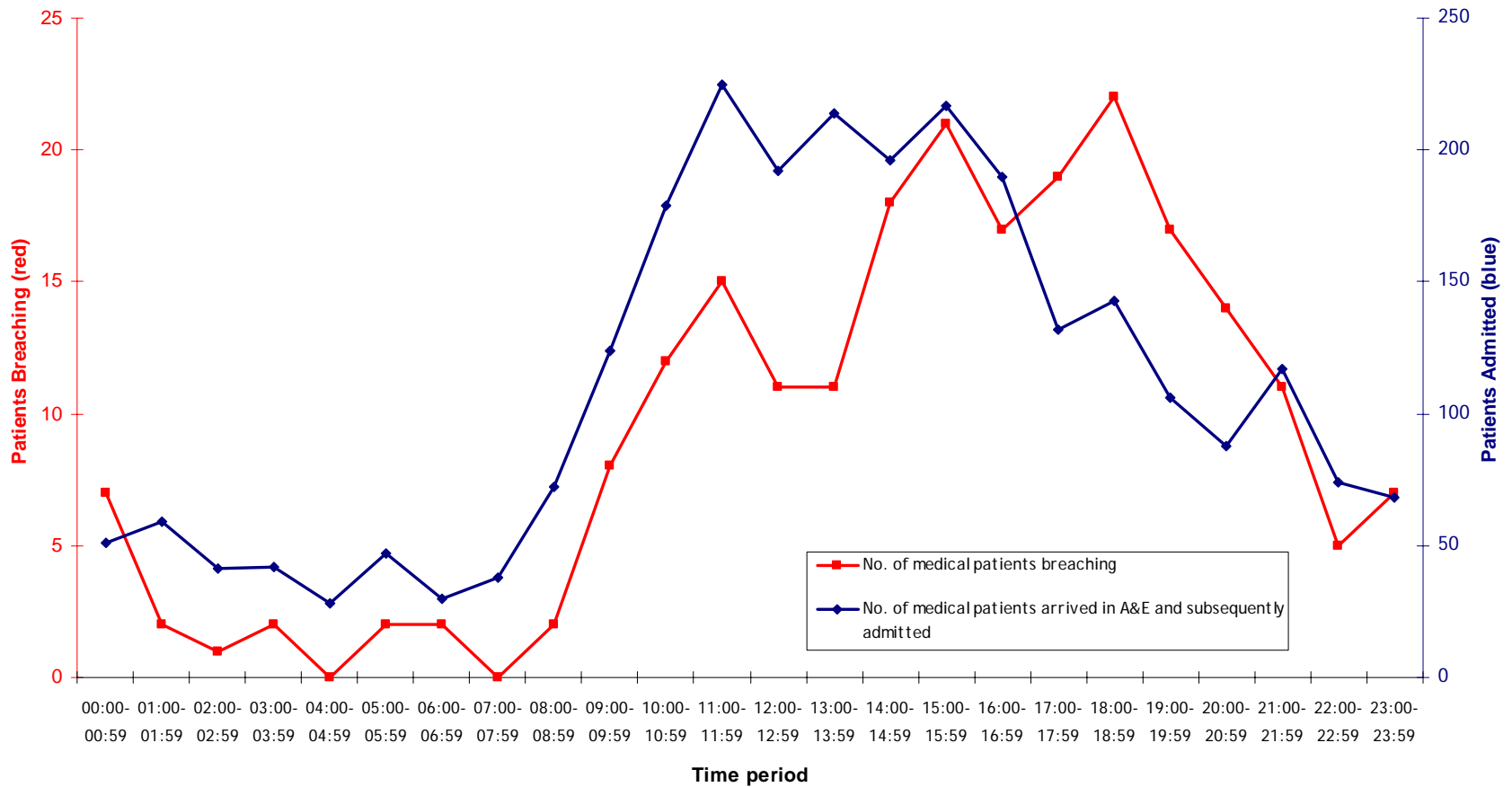
Name: Signature: Bleep no:

Designation: Date: DD / MM / YYYY Time: __ : ___hrs

Specialists in the ED



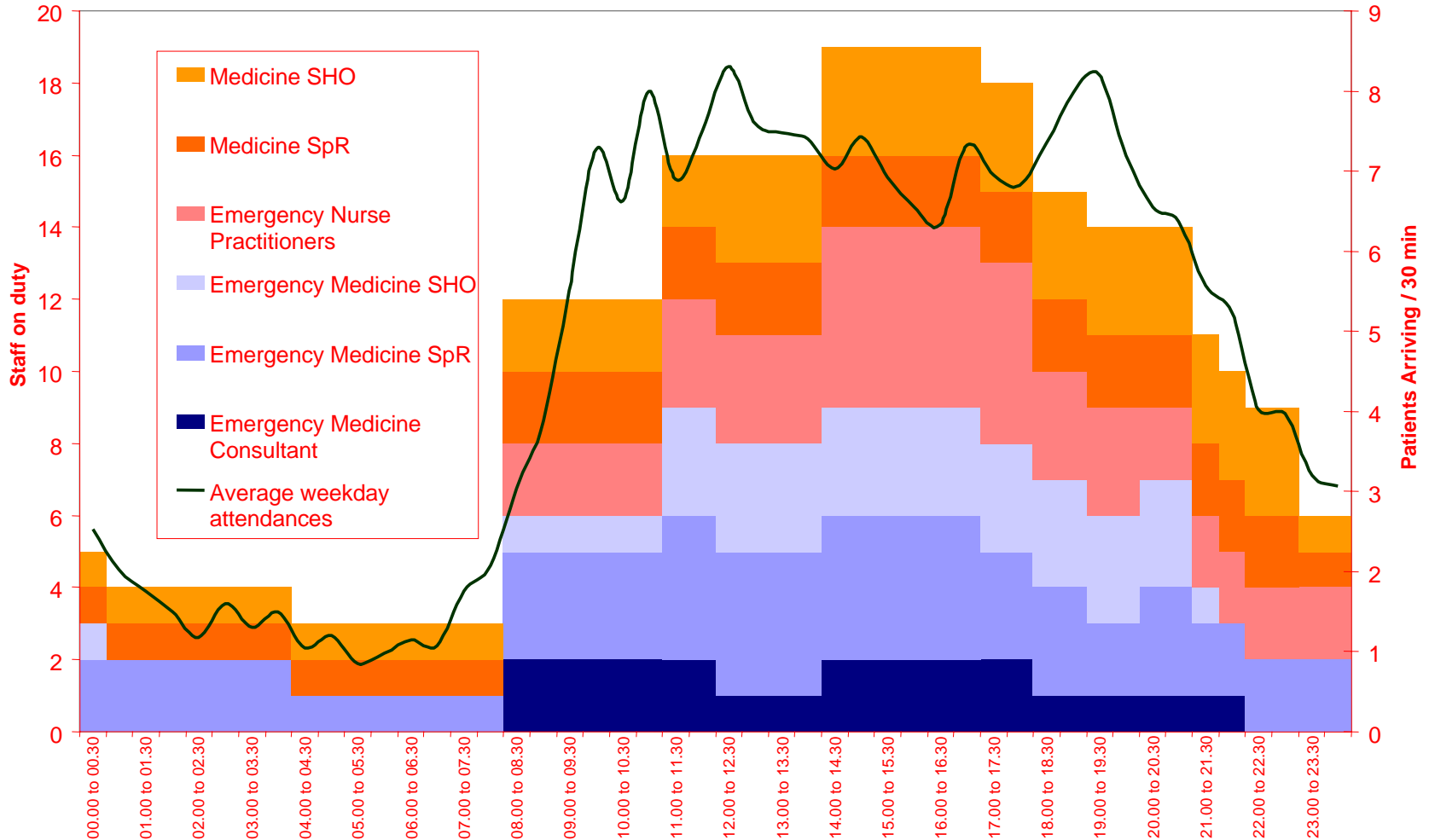
No. of medical patients arrived in A&E and subsequently admitted vs. no. of medical patients breaching
19th June - 16th October 2006



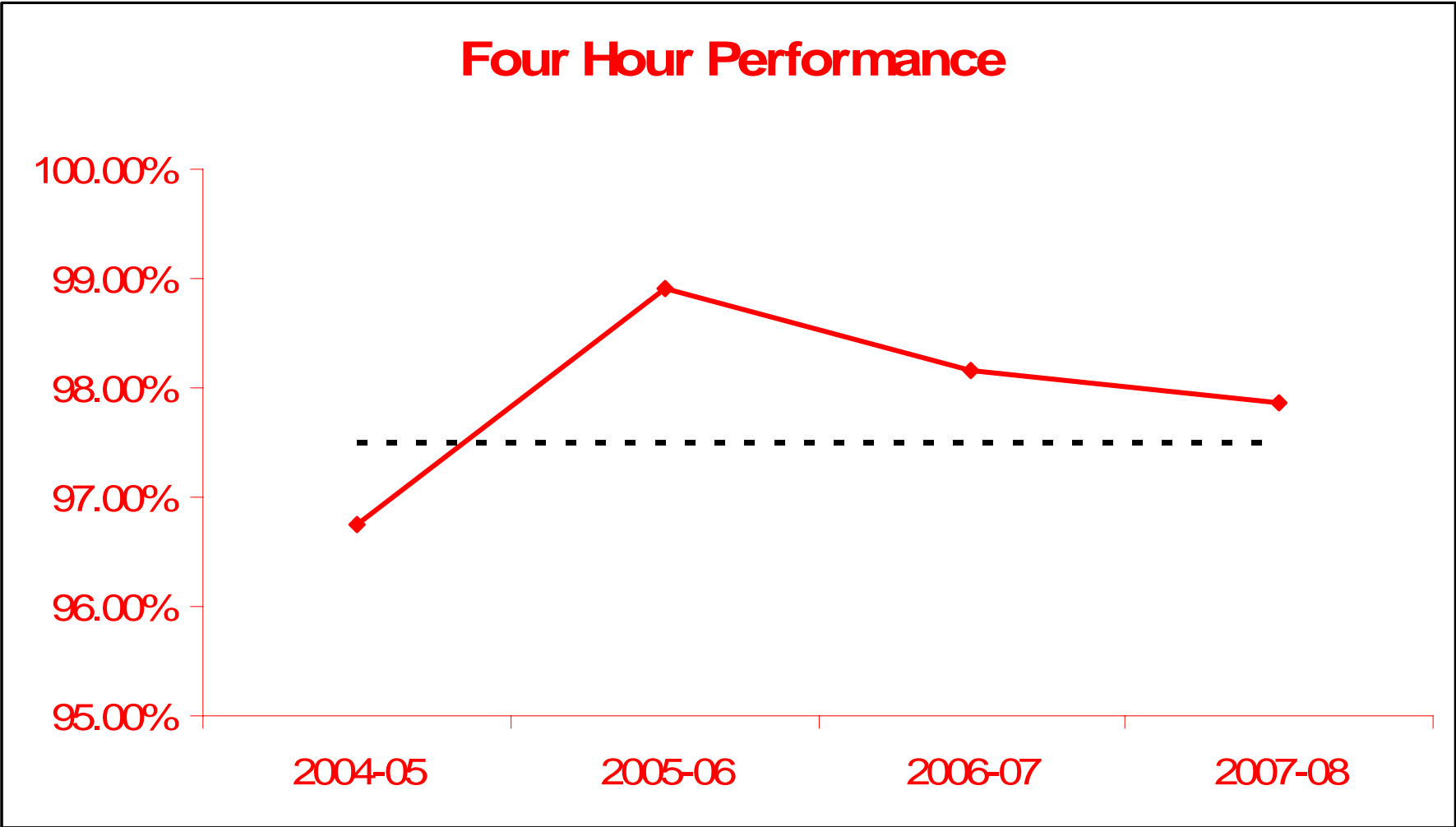
Working in our ED - Staffing



Current Weekday Activity & Staffing



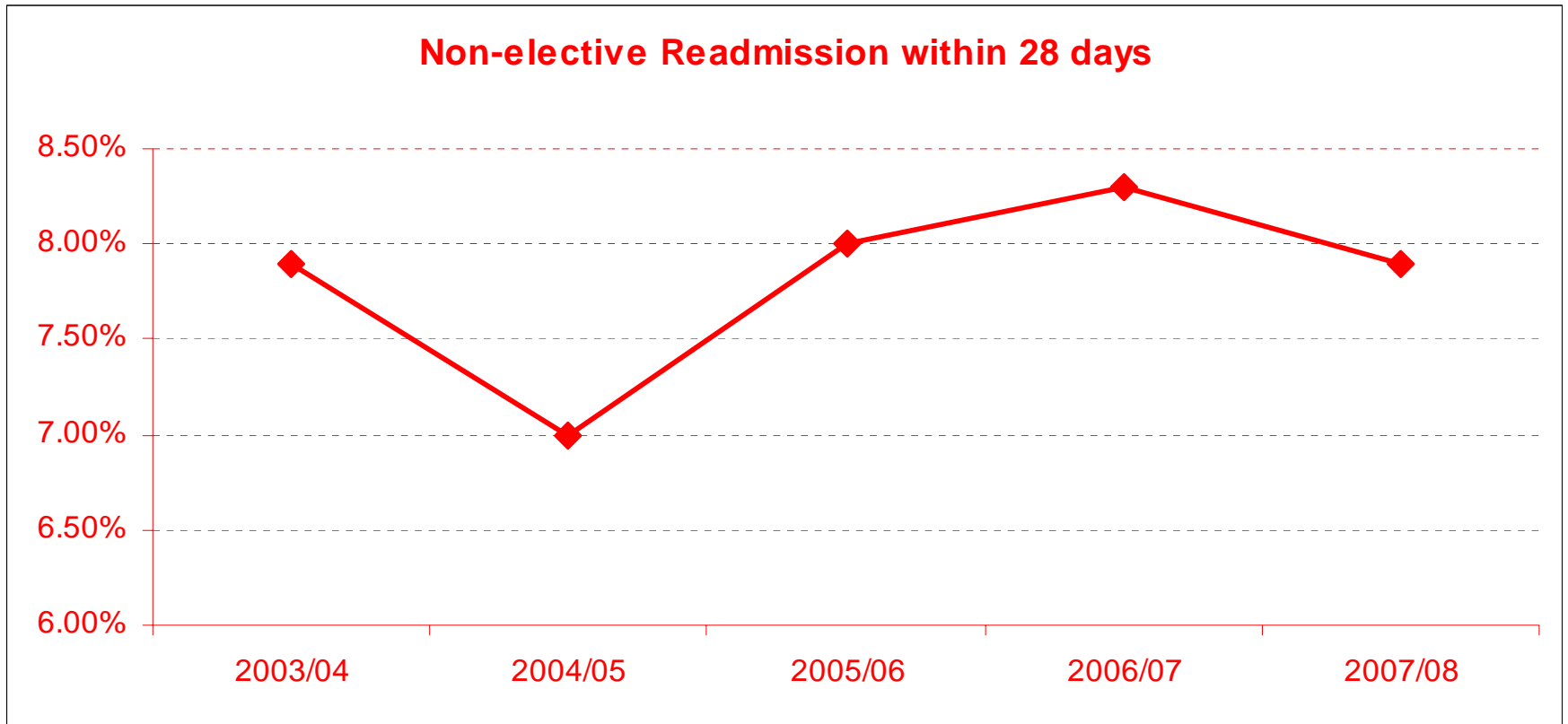
Four Hour Performance



Re-admission performance



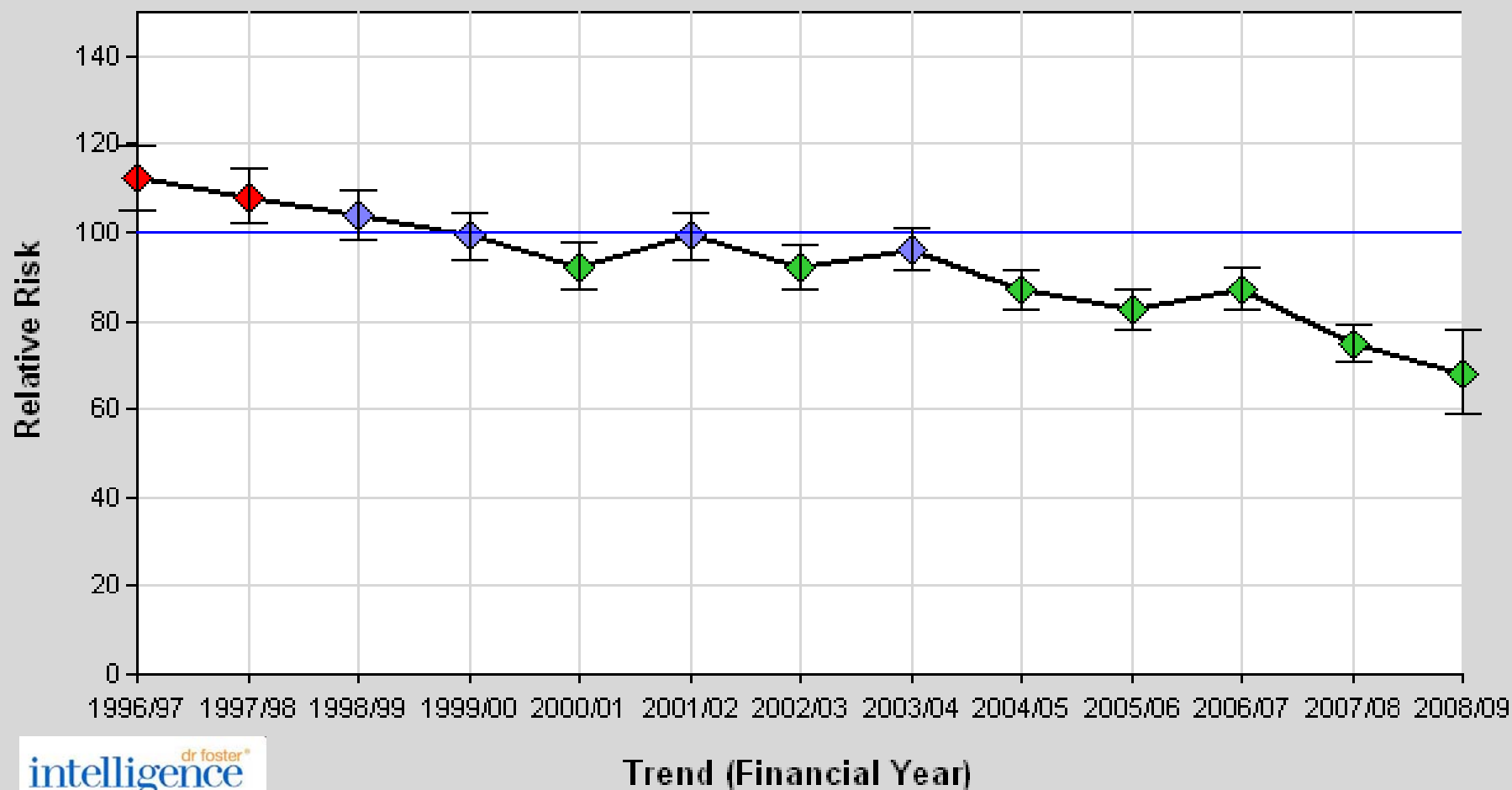
Non-elective Readmission within 28 days



Mortality



Mortality (in-hospital) | Diagnoses - RTM | Non-elective



Conclusions



- It is feasible to have a single front door assessing to discharge or admit all emergency patients within four hours.
- Concurrent with this change in Addenbrookes emergency admissions and mortality have reduced.