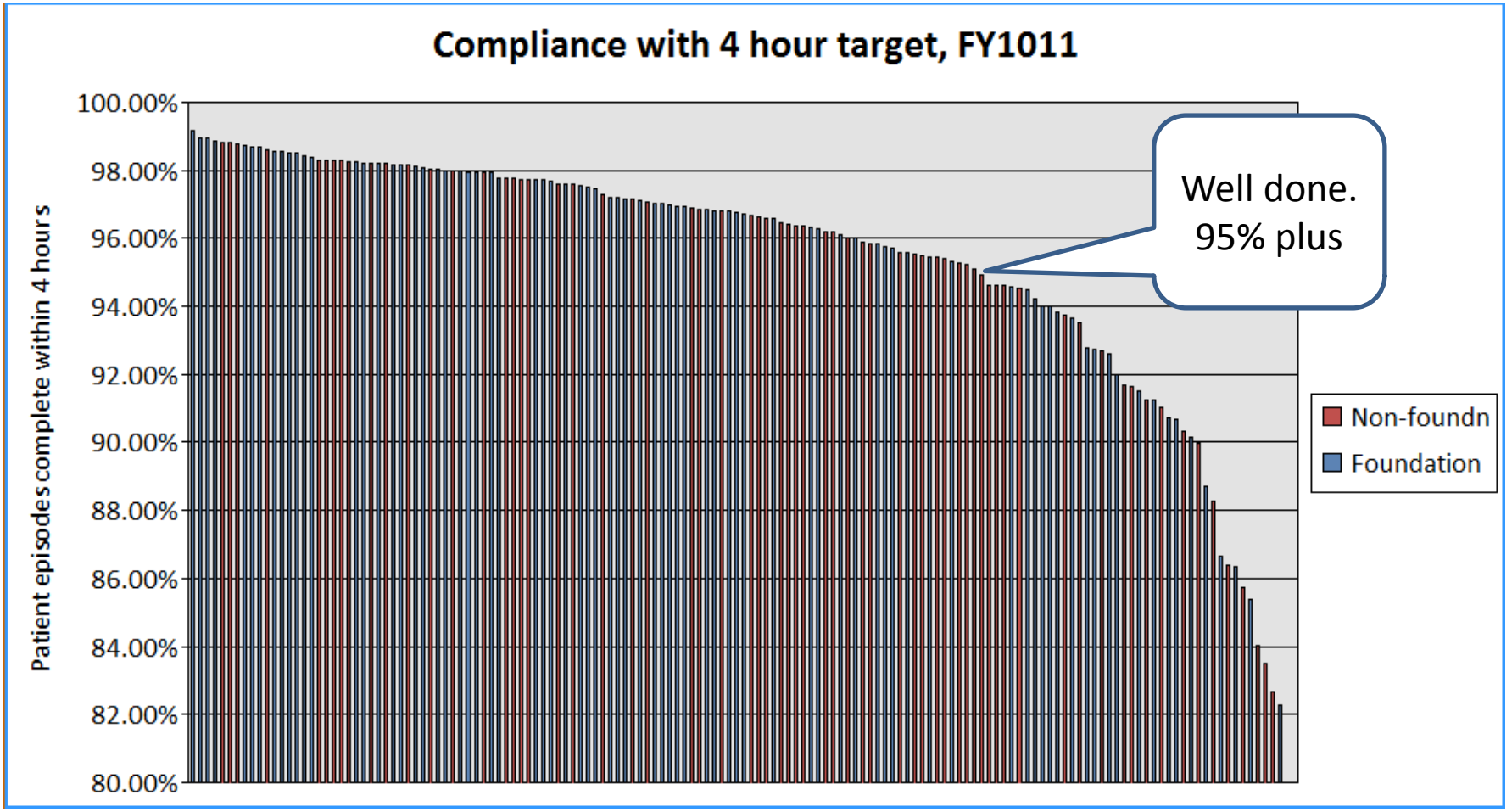
A&E: is there a better way?

Why many patients find their fate decided nearing 4 hours, why this costs us all, and one hospital whose different approach shows superior outcomes.

H Longman MA CEng FIMechE
Visiting Research Fellow, University of York
Chief Executive, Patient Access
Formerly LCR PCT
Dec 2011

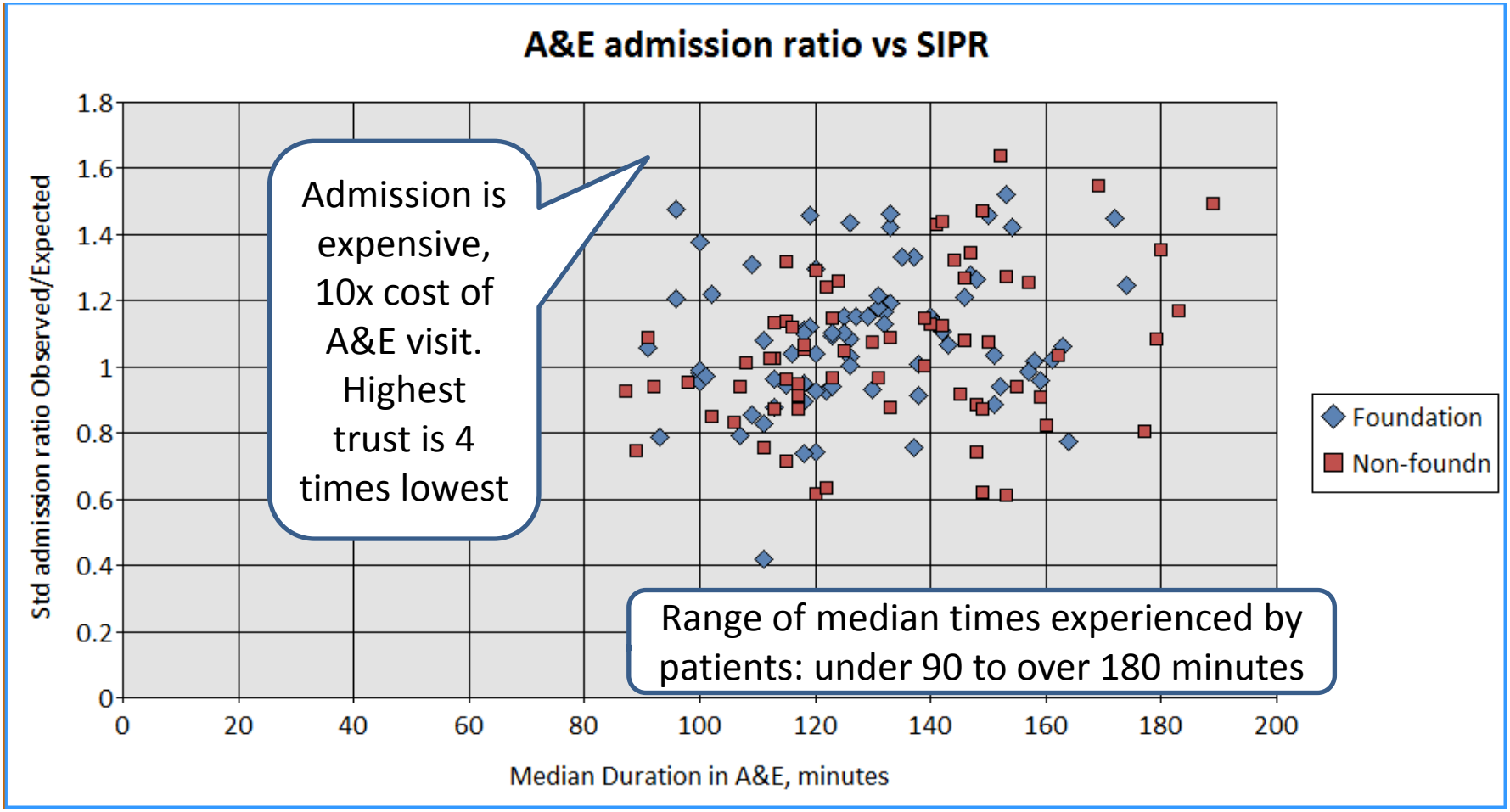
Patient Access
Simply transformed

Nationally, hospital A&E departments are measured on 95% compliance with the "4 hour target". Here, FY1011, 1st half



Data from HES Online, Apr-Sep 2010

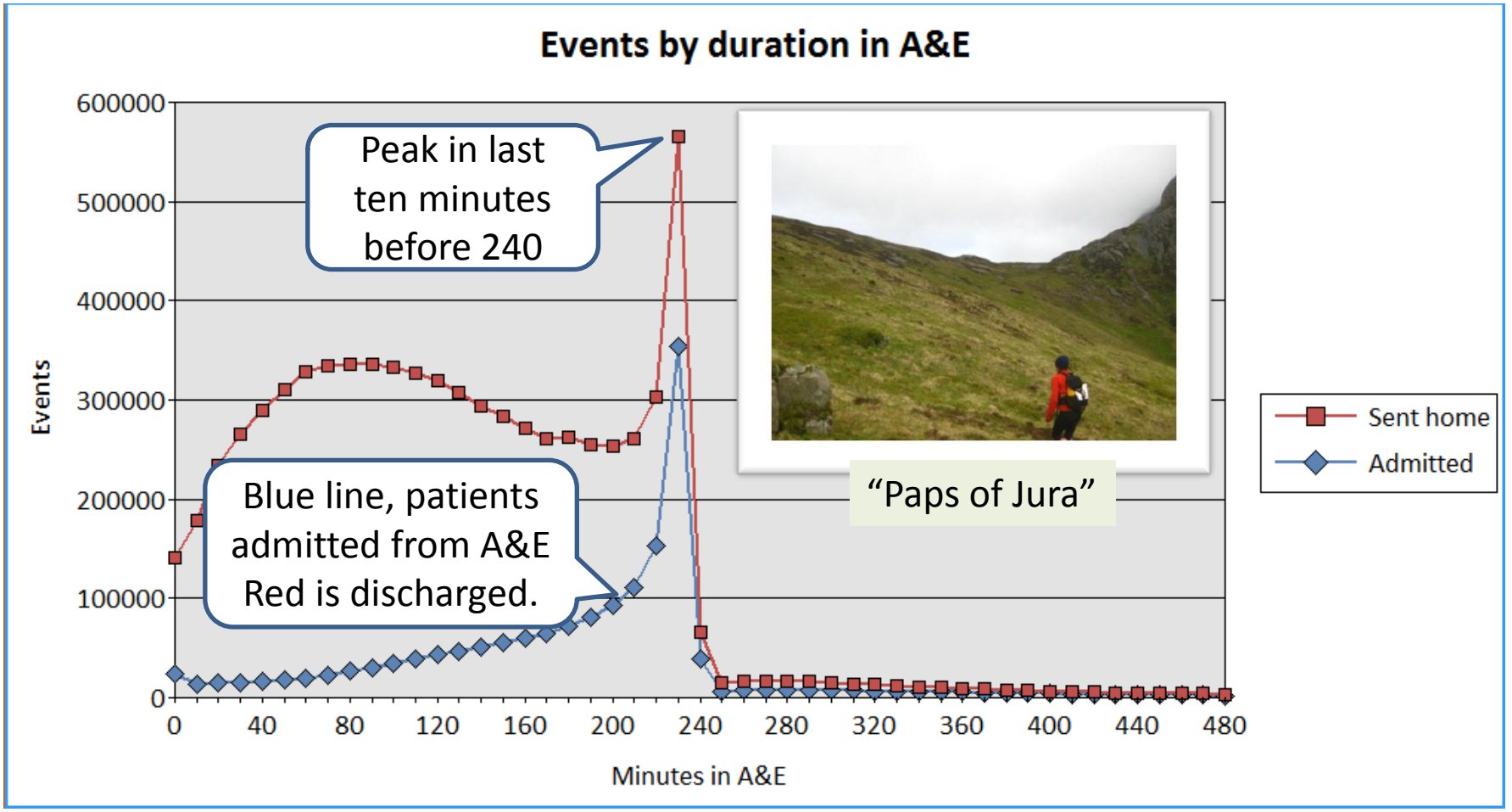
But other measures may be more important both economically and to patients. Admission rate (age-sex standardised) is the key cost driver, and median time to discharge reflects patient experience.



Data from HES Online, Apr-Sep 2010

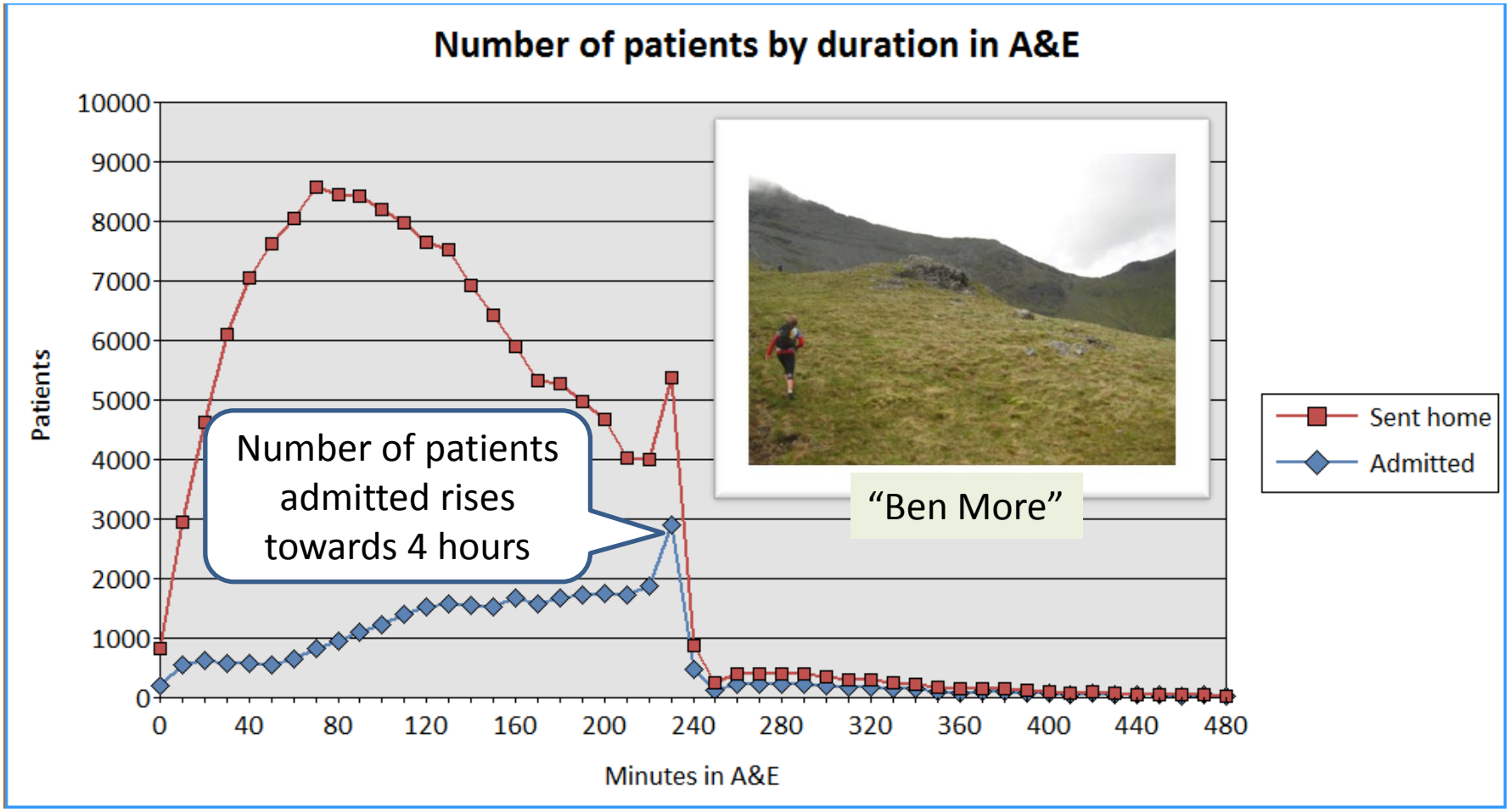
What does the target mean for patients?

Frequency distribution of recorded arrival to discharge or admission shows powerful effect at 230 minutes. Even more marked for admissions, ie decisions to admit are largely made only minutes before 4 hours is up.



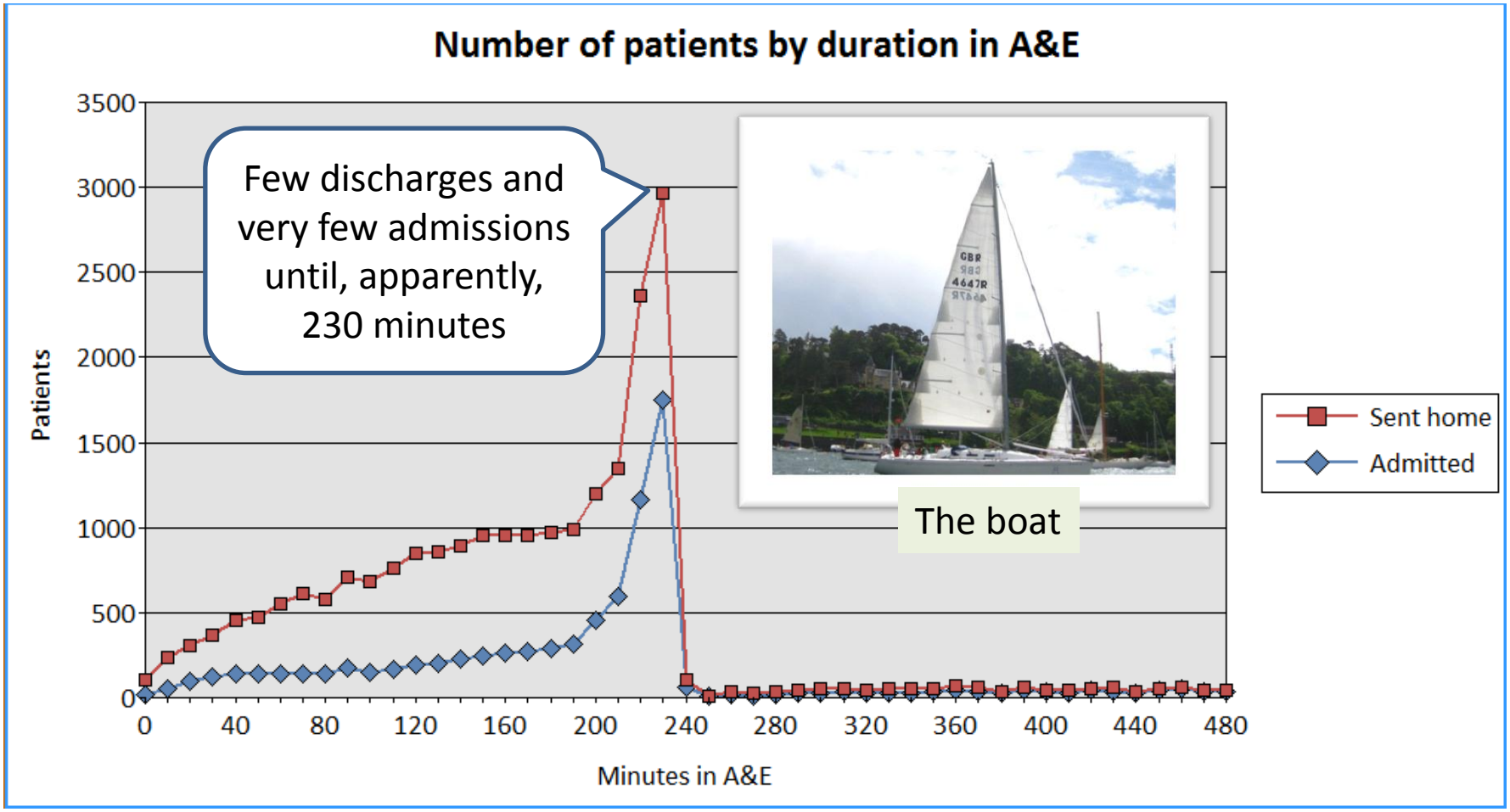
Data from HES Online, Apr-Sep 2010, all England acute trusts

The same plot is drawn for individual trusts, revealing a range of patterns. One of the best here, mode of duration 70 minutes, but still tainted with fear at 230 mins



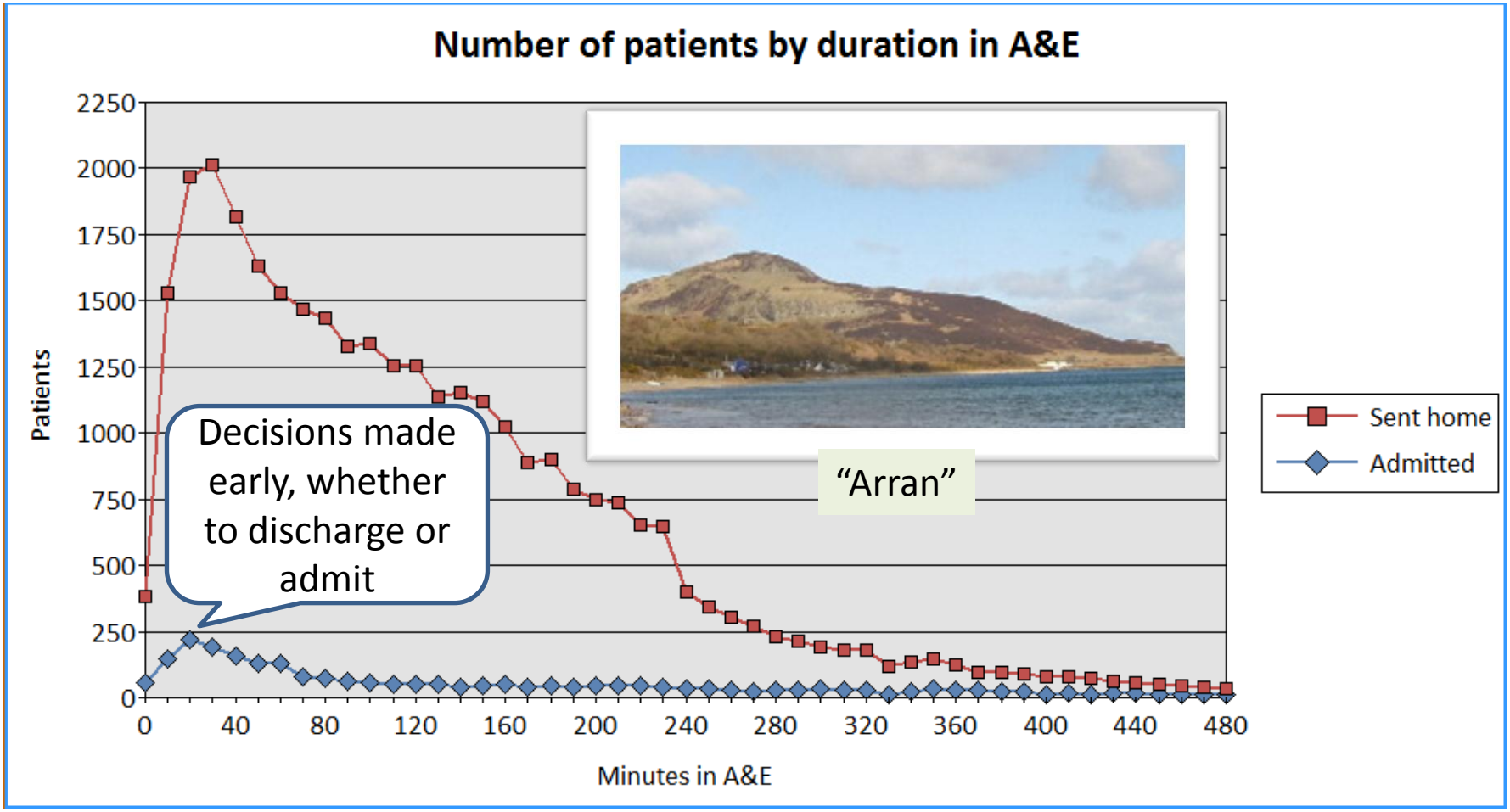
Data from HES Online, Apr-Sep 2010

Patients at some hospitals suffer an exacting experience.
Not an uncommon pattern, many patients here wait the full 4 hours, and many are then admitted.



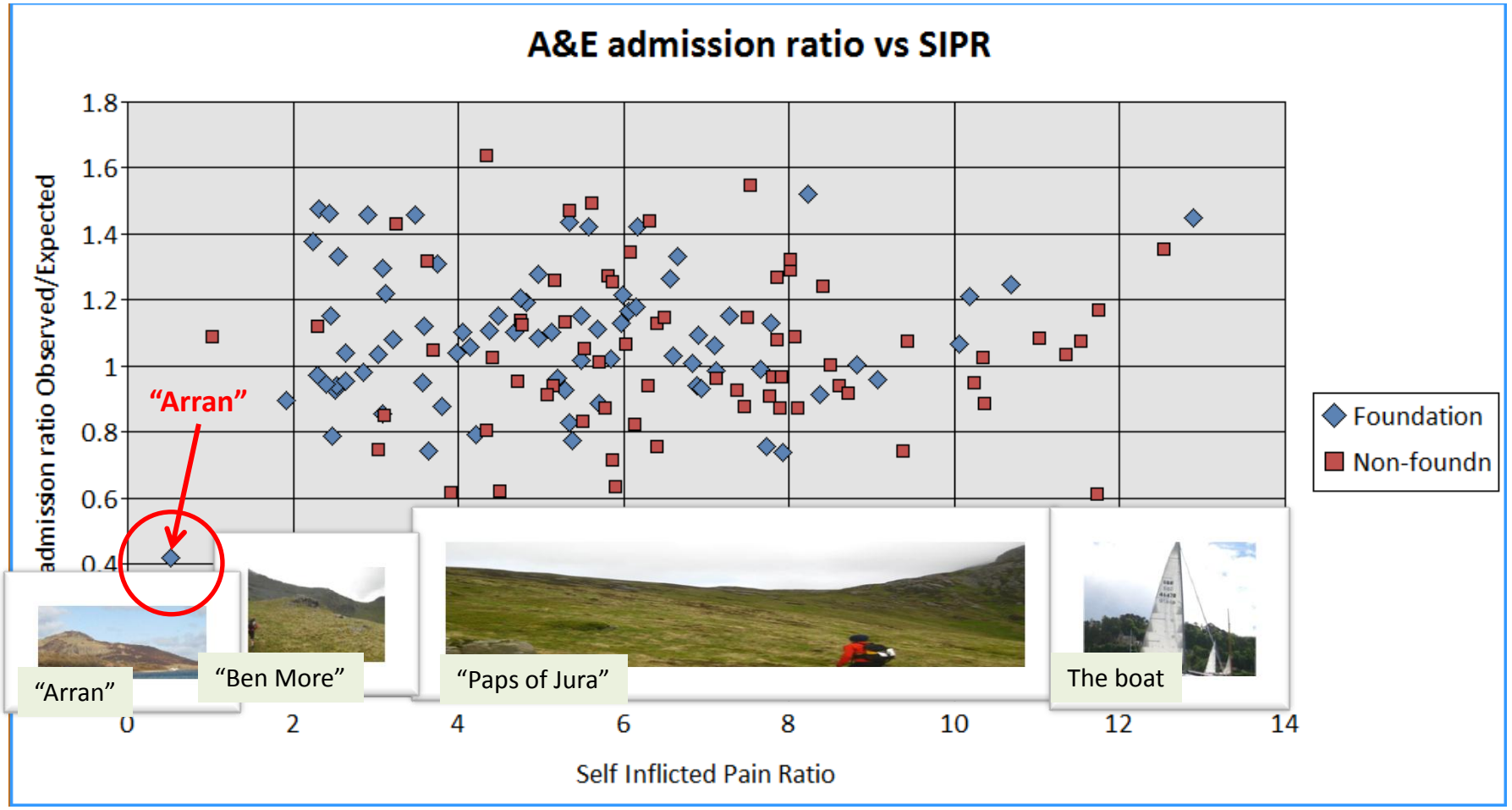
Data from HES Online, Apr-Sep 2010

Just one trust shows this pattern, the elusive “Arran”. Peak at 30 mins, peak for admitted 20 mins: rapid clinical decision making. And no rise at 230 mins.



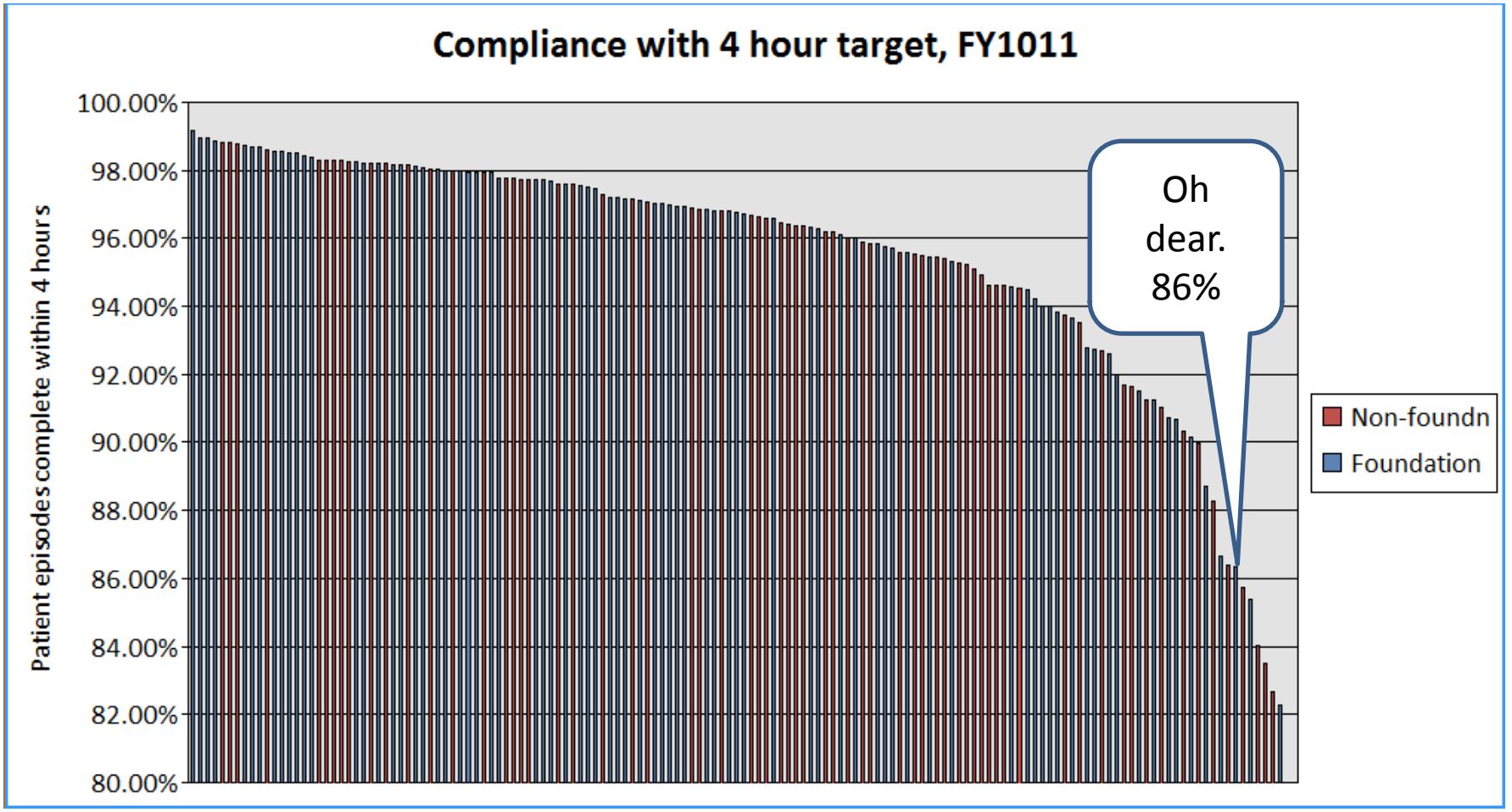
Data from HES Online, Apr-Sep 2010

SIPR, the Self Inflicted Pain Ratio:
count of decisions in last 10 minutes / average 0-240
plotted v admission ratio (age-sex standardised)



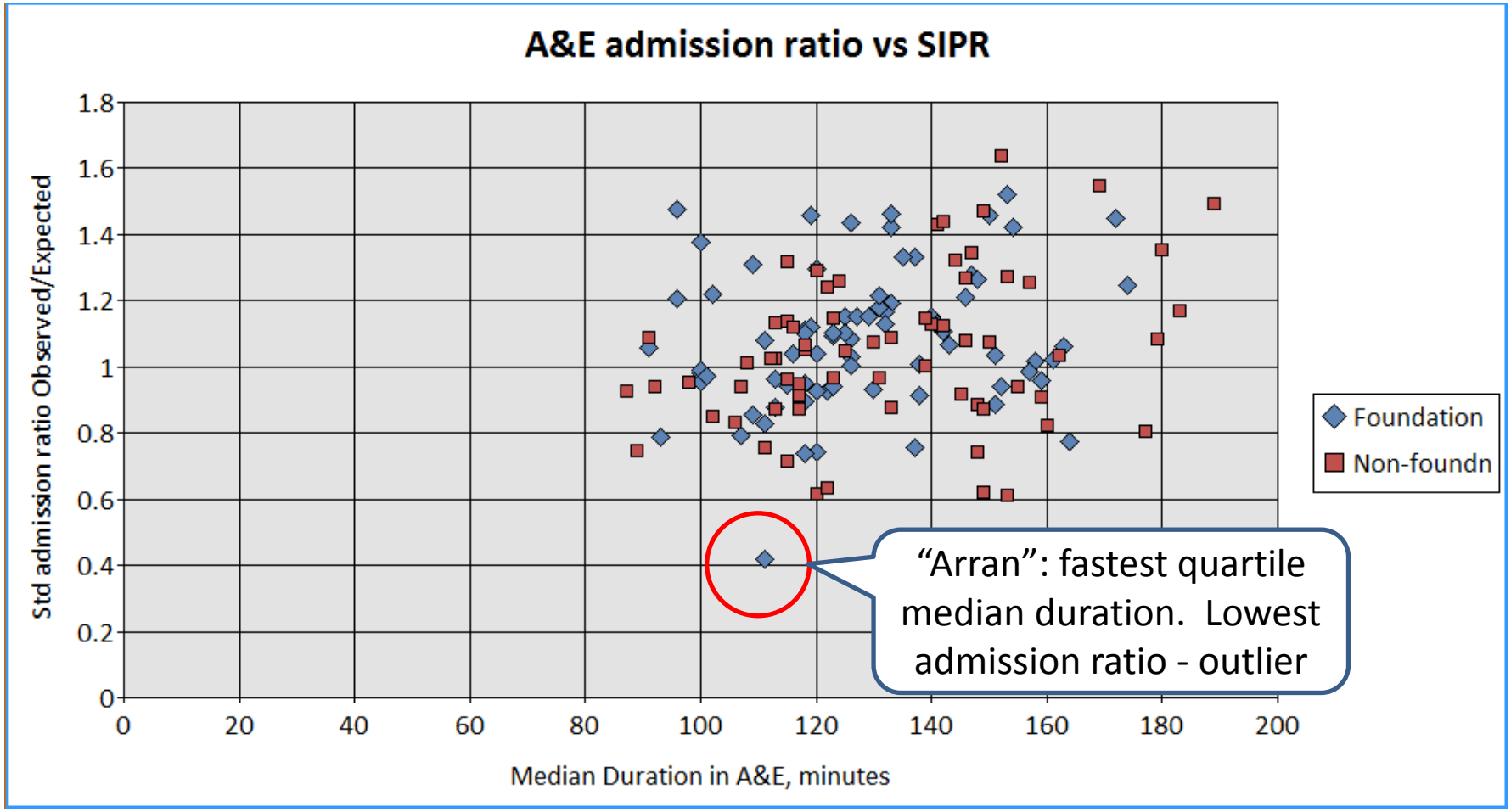
Data from HES Online, Apr-Sep 2010

Where does “Arran” come on the chart that gets attention?



Data from HES Online, Apr-Sep 2010

But where on the chart that matters to patients and taxpayers?



Data from HES Online, Apr-Sep 2010

Conclusions and questions

- 4 hour target
  - Evidence shows many decisions are made close to 4 hours.
  - Only one hospital in England shows no evidence of distortion or fear in A&E figures near 4 hour target. Performance is lowest decile on % inside 4 hour target at 86%, vs pass rate of 95%.
- Speed of treatment
  - The same hospital has fastest quartile performance on median duration in A&E, a clear benefit for patients
- Outcome in admissions
  - The same hospital is an outlier below all others in proportion of patients converted from A&E attendance to admission. This is the major cost driver for commissioners, around 10x cost of attendance.
- Note: the hospital “Arran” has excellent financial performance and a glowing report from the regulator.
- For further study: exactly how does “Arran” achieve these results, and are they transferable to other trusts?

What evidence underlies the current plan?

- *White paper July 2010:*
  - *"The NHS will be freed from inefficient micromanagement of meeting targets like the 98% requirement for A&E waits, and associated performance management bureaucracy." (page 45)*
- *PCT plan April 2011:*
  - *"Our focus will be on maintaining a range of existing targets during 2011-12, particularly ensuring the delivery of the A&E four-hour maximum wait." (p 6)*

Acknowledgements

Dougall Matheson for his decisive project leadership and steady hand in times of crisis.

James Bullrush for maintaining the energy of the team, and a practical response to any loss of components.

Colin McKenzie for keeping the wind in the sails at all times.

Zoe Procter for her boundless energy in tackling uncharted terrain and uphill situations without getting bogged down.

EMQO for data extraction. NB admission ratios are directly age-sex standardised to enable comparison between hospital trusts.

Harry Longman

May 2011, revised Dec 2011

harry.longman@patient-access.org.uk

01509 816293 07939 148618