

Improving Unscheduled Care

Using Data to Drive Improvement

Autumn Collaborative Learning Event
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 @clahrc_nwl #clahrcevent

Session Outline

- Introduction
- A&E Tracker – Exercise
- The Day of Care Audit
- Diagnosing the system – understanding flow data
- Group Exercise
- Conclusions

Go to www.menti.com and use the code 67 90 96

Taking the pulse of an urgent care system

- <https://clahrcnwl.shinyapps.io/ae-app/>
(Search “A&E Tracker CLAHRC” and follow the links)
- Explore the data in small groups
- What did you learn? Was there anything that surprised you?

Using the Day of Care Survey (DoCS) for improvement

Day of Care Survey (DoCS) is a tool that provides a snapshot of hospital bed utilisation and helps assess in-patient delays

1. What is the Day of Care survey?

- DOCS is a tool to identify & understand system level delays and drive improvement in patient flow at system level
- Developed by an expert multi-disciplinary working group in NHS Scotland
- Validated & used widely across the NHS Scotland, England and Wales & Australia
- Over 30,000 patients surveyed using tool to date
- Methodology published
- Carried out by Health Board clinical & operational staff

2. How might the survey help?

- ✓ Provides a snapshot of inpatients in a single day;
- ✓ Gives detailed picture of bed occupancy & patterns of discharge delay across the system
- ✓ Identifies the most appropriate alternative place of care for patients deemed not suitable for hospital
- ✓ Identifies the number of outliers across the hospital



Day-of-Care Survey (DoCS): What is it?

Methodology published : *Identifying reasons for delays in acute hospitals using the day of care survey method.*

Clinical Medicine. 2015; 15(2) 117-120 Reid, E., King, A., Mathieson, A., Woodcock, T & Watkin, S ¹¹

<http://www.qihub.scot.nhs.uk/quality-and-efficiency/whole-system-patient-flow/day-of-care-survey.aspx>

Day of Care Survey – How it was done

- 45 hospitals across Scotland (Apr 2018) & London (Apr 2017)
- Approx. 19,000 patients
- All adult inpatient beds excluding ITU/HDU/Obstetrics/Mental Health
- Patients deemed inpatients if waiting more than 4 hours in ED
- Unfunded/surge capacity beds included in survey

London + Scotland DoCS: Overview

	45 sites across London & Scotland ¹	Medians & Ranges
Number of beds surveyed	19274	Range: 112 - 1523
Number of patients surveyed ²	18450	Range: 95-1430
Bed occupancy (%)	96%	Median: 96% Range: 75% - 131%
Boarders (%) ²	6% (1045 patients)	Median: 5% Range: 0% - 18%
Day of Care – criteria met (%) ³	78% (13097 patients)	Median: 77% Range: 55% - 90%
Day of Care – criteria not met (%) ⁴	22% (3718 patients)	Median: 23% Range: 10% - 45%
Of those not met – within hospital control (%)	34%	Median: 32% Range: 5% - 70%
Of those not met – whole system issue (%)	62%	Median: 64% Range: 27% - 90%
Of those not met – Home designated most appropriate alternative place (%)	48%	Median 50% Range: 8% - 72%

1. Three hospital sites were excluded as had less than 100 beds

2. Total number of patients surveyed on the day of DOCS at site

3 Boarders are patients who are in a ward bed not related to their main specialty needs. This is the % of boarders out of the number of patients surveyed

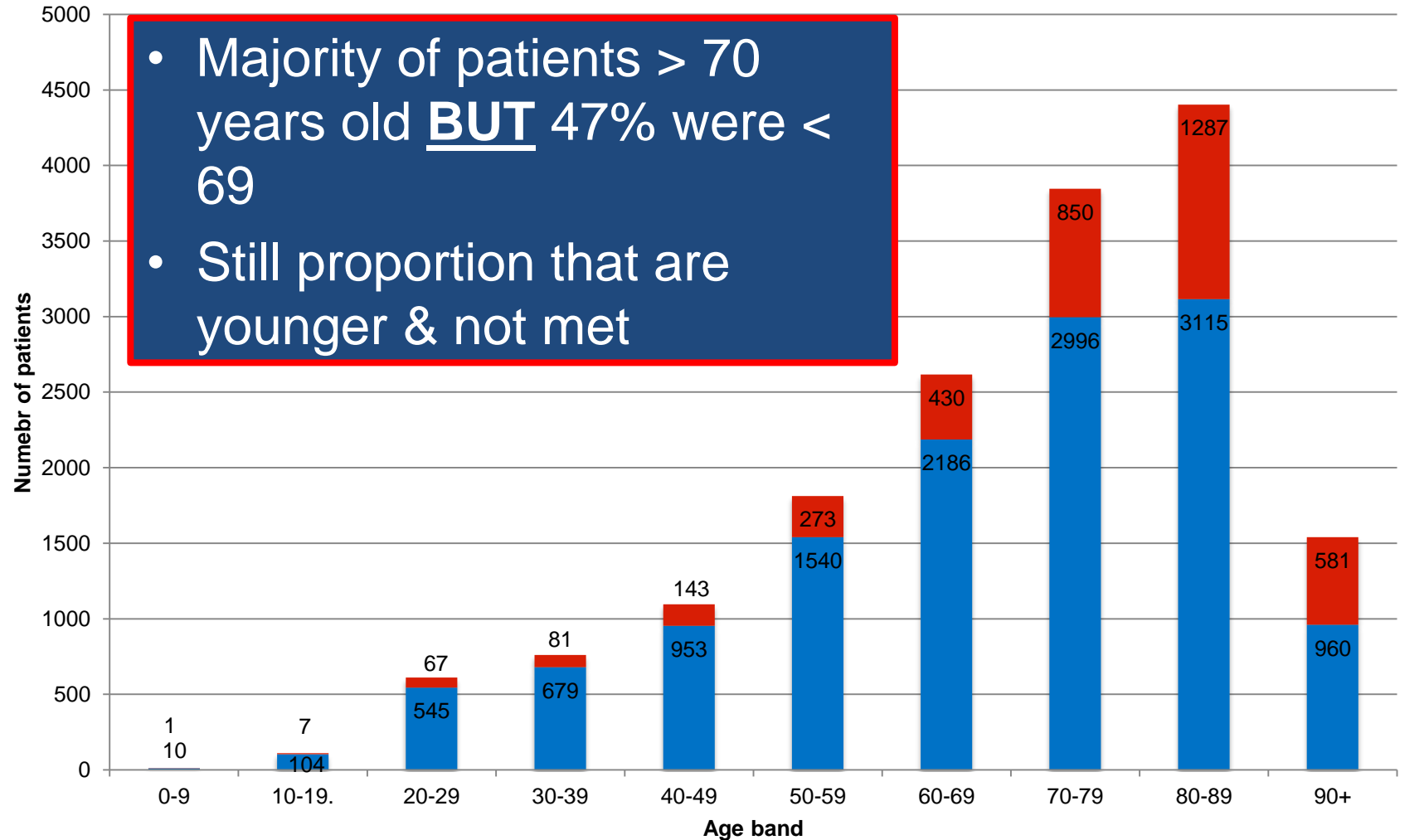
4 Excludes patients for discharge

London + Scotland DoCS: Age Profile

Excludes patients being discharged today

Age profile of patients in survey

■ Sum of DoCS criteria not met
■ Sum of DoCS criteria met Met



- Majority of patients > 70 years old BUT 47% were < 69
- Still proportion that are younger & not met

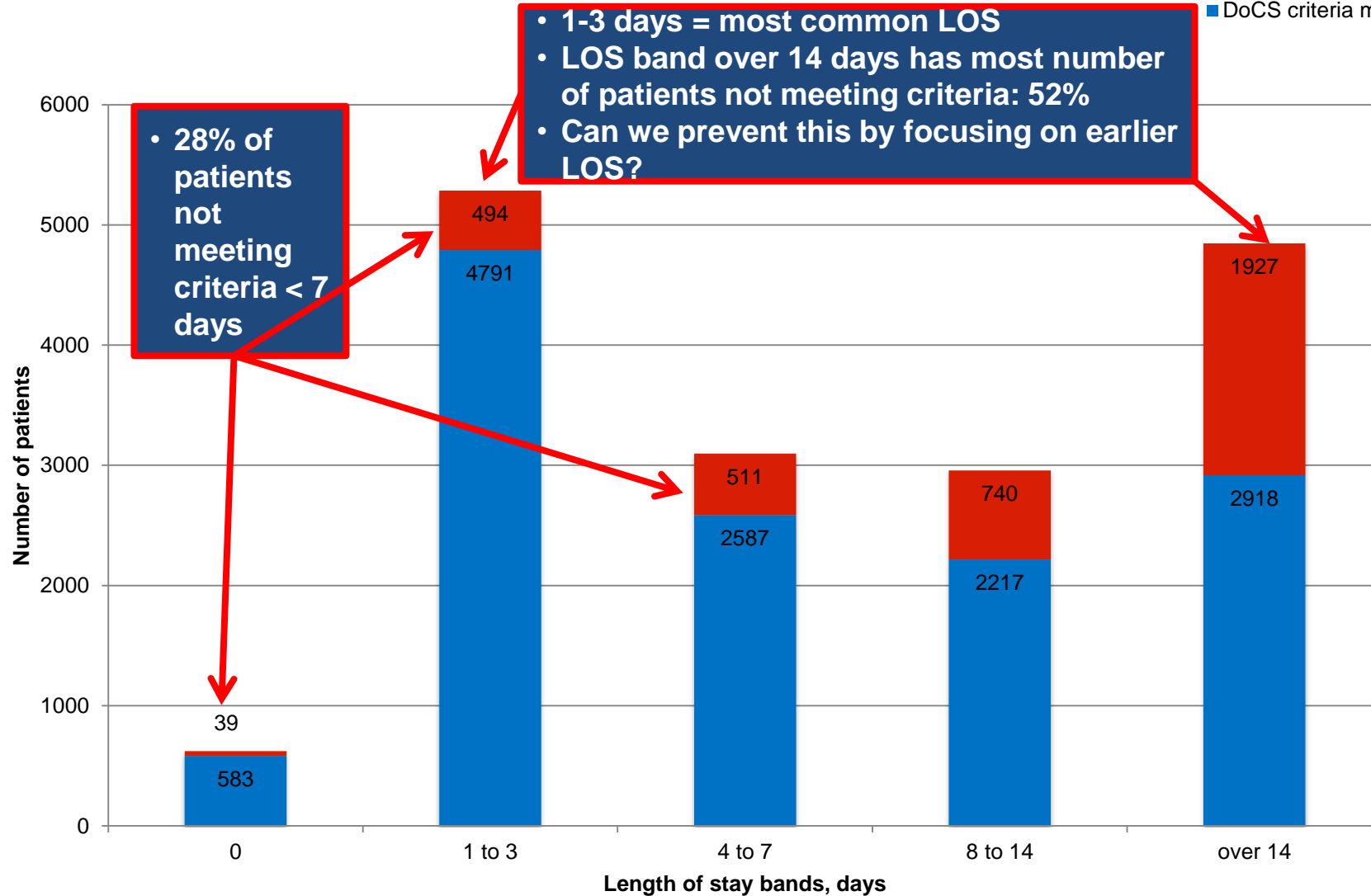
London + Scotland DoCS: Length of stay

Excludes patients being discharged today

Length of stay for all patients who met and did not meet DoCS criteria

■ DoCS criteria not met

■ DoCS criteria met



DoCS – reasons for delayed discharge

1

Acute specific

- Awaiting final multi-disciplinary team decision
- Awaiting procedure/investigation/results and not meeting criteria for acute care
- Awaiting consultant decision/review
- Waiting for AHP assessment/treatment

2

Wider system issues

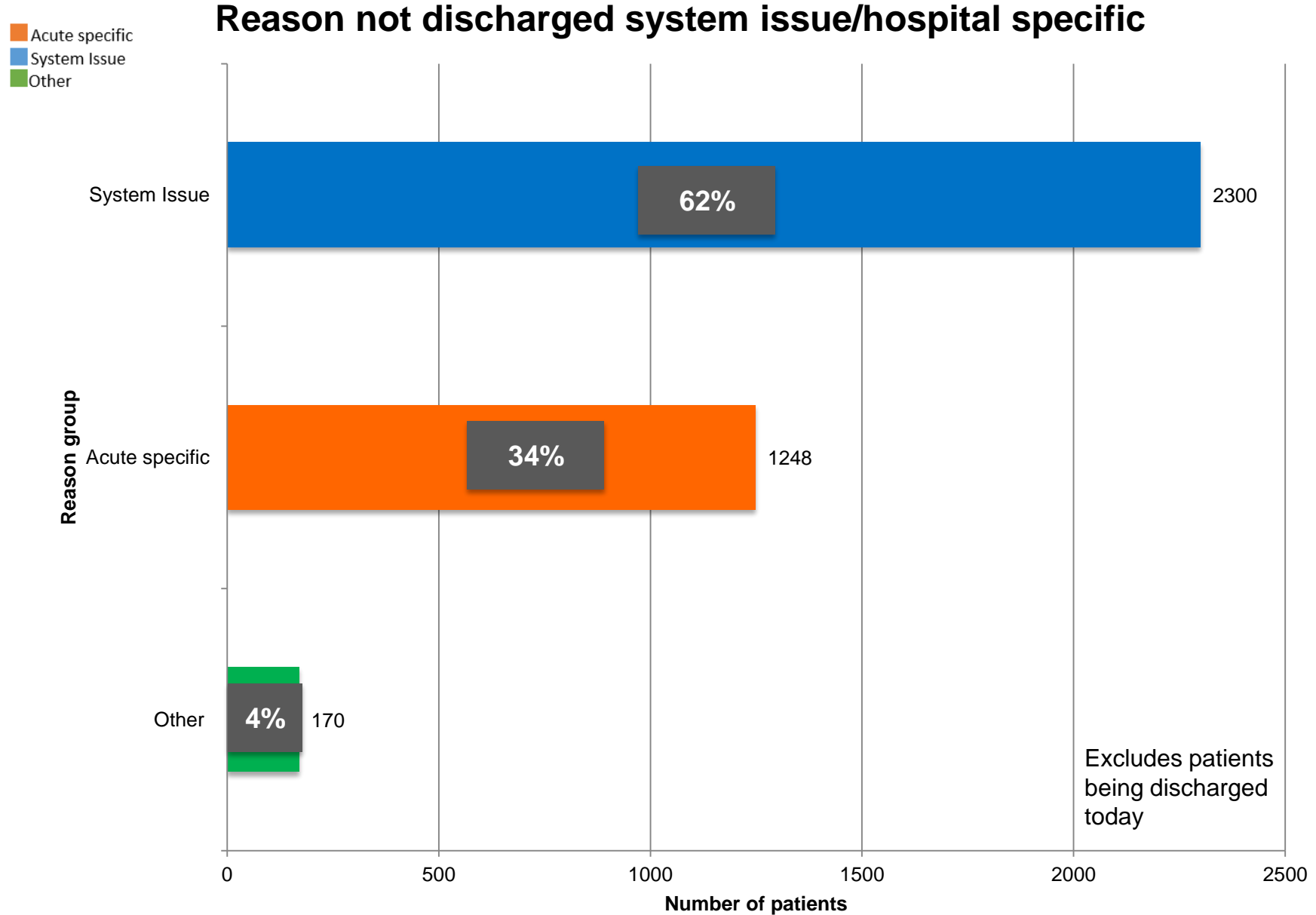
- Awaiting social work allocation/assessment/completion of assessment
- Alteration to/equipment for home/re-housing
- Home care support availability/funding
- Making choices/awaiting place in care home
- Awaiting community hospital bed
- Awaiting/planned repatriation to other board
- Awaiting tertiary care
- Vacancy in home of choice/funding available/discharge planning in progress
- Waiting funding for placement, vacancy in care home
- Delay due to relatives
- Delay due to transport
- Health care assessment arrangements
- Legal/financial
- Disagreement between family/patient/NHS/local authority
- Ward/care home/facility closed – patient well but cannot be discharged

3

Other

- Unspecified

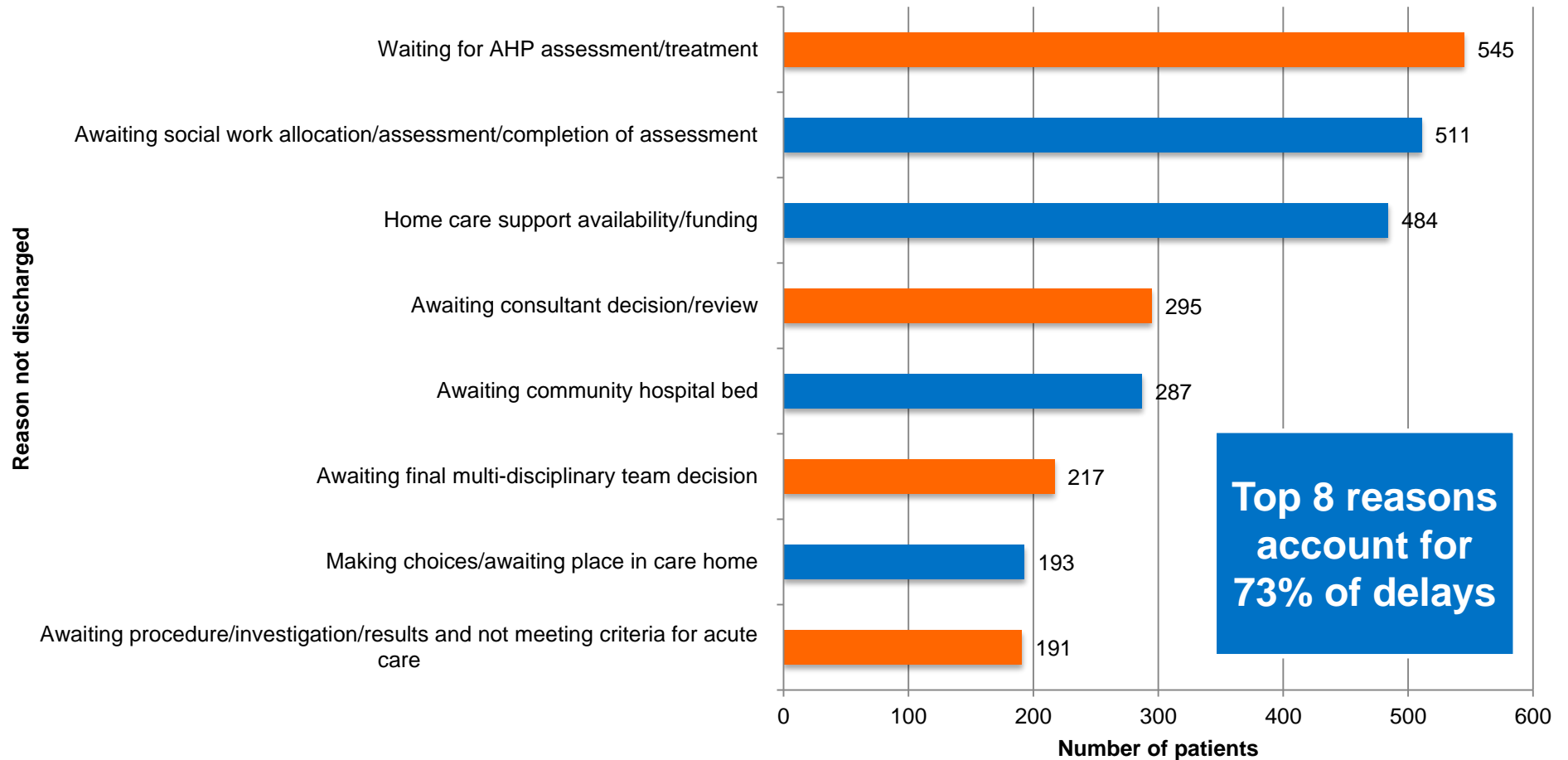
London + Scotland DoCS: reasons



London + Scotland DoCS: Key reasons

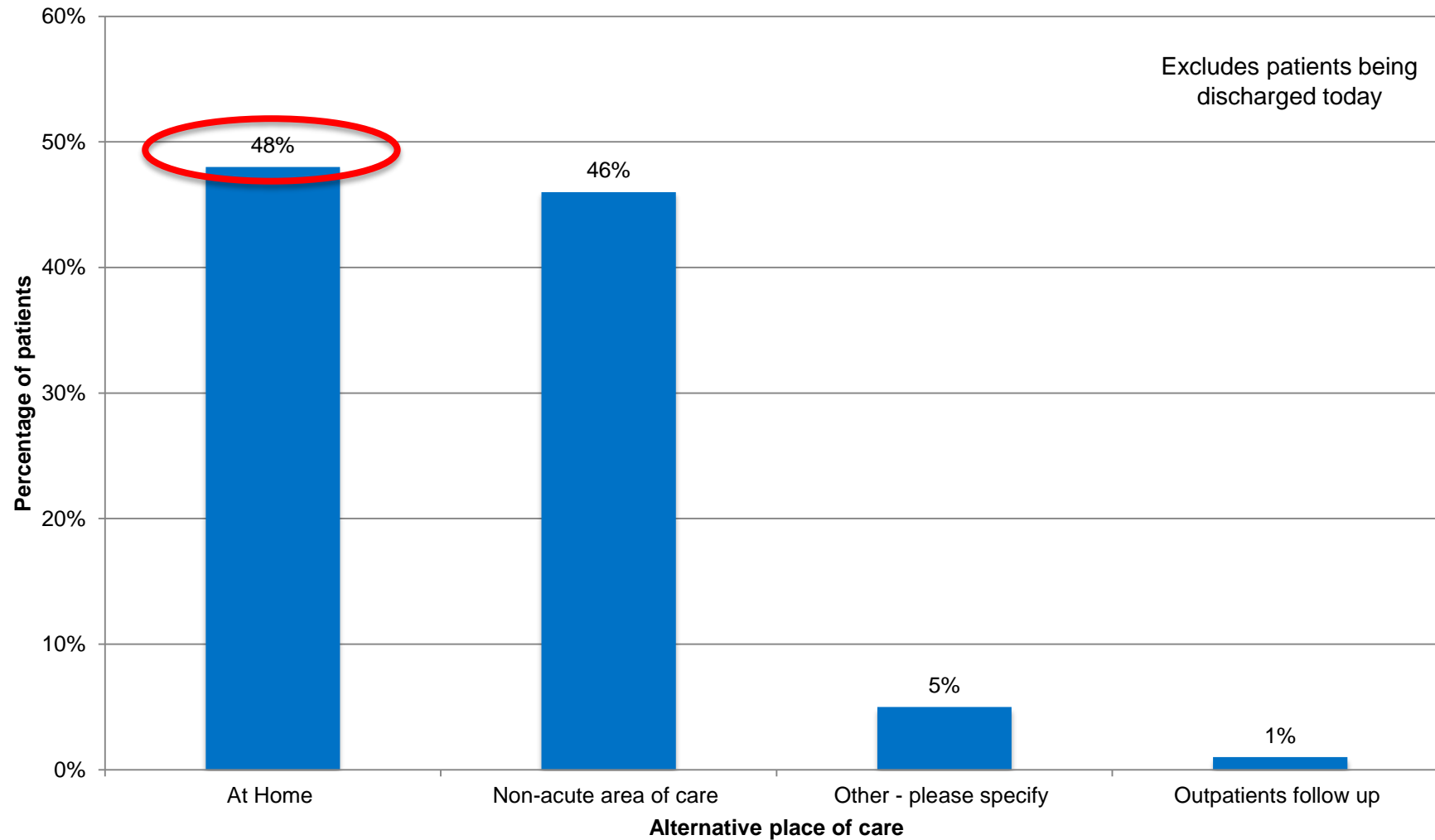
- Acute specific
- System Issue
- Other

Top 8 reasons not discharged



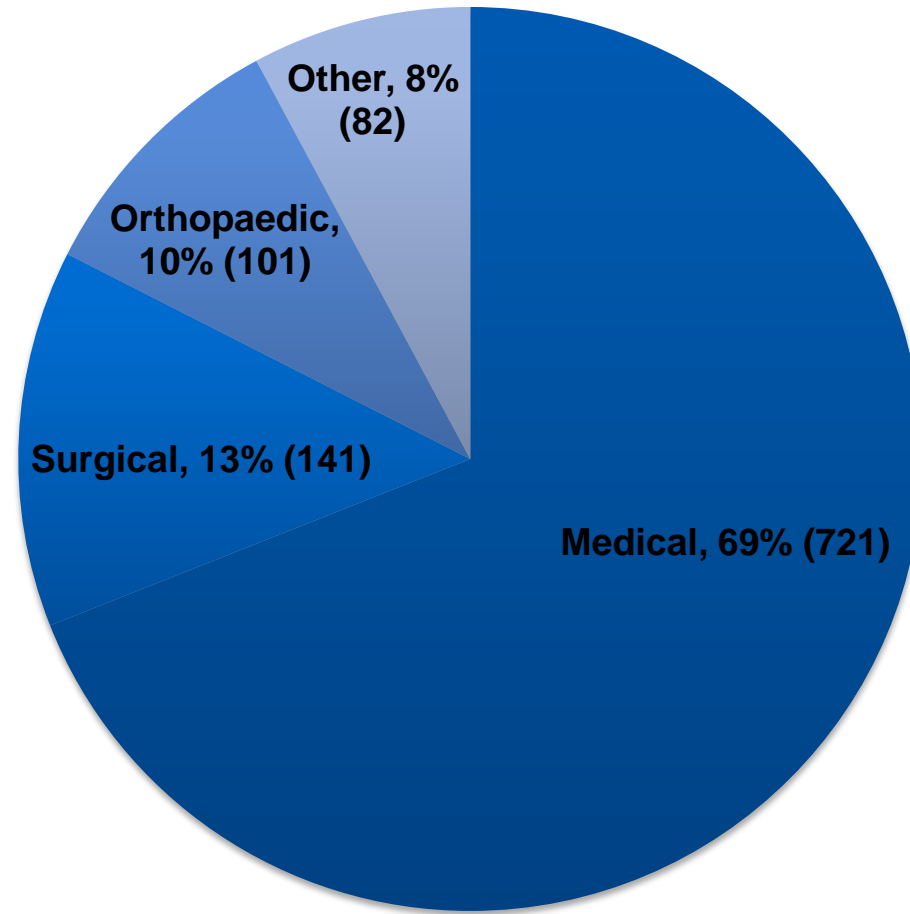
Reasons split equally: 4 x acute specific & 4 x system issues

Alternative Place of Care for patients not meeting DoCS criteria

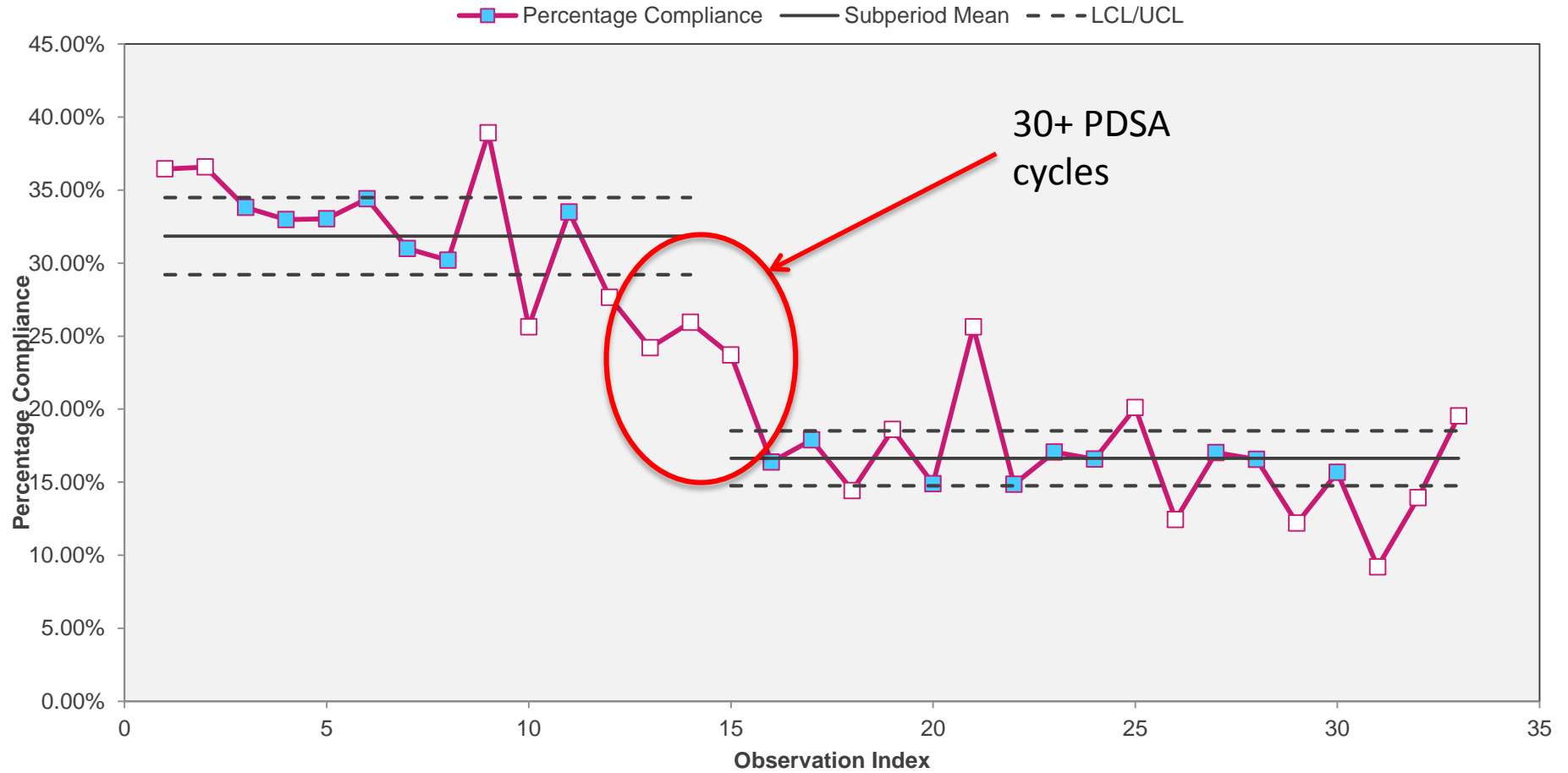


London + Scotland DoCS: Outliers

Percentage of outliers by type



Serial DoCS can be used for improvement



Day of Care Survey Oct 2017: Example Recommendations Hospital X

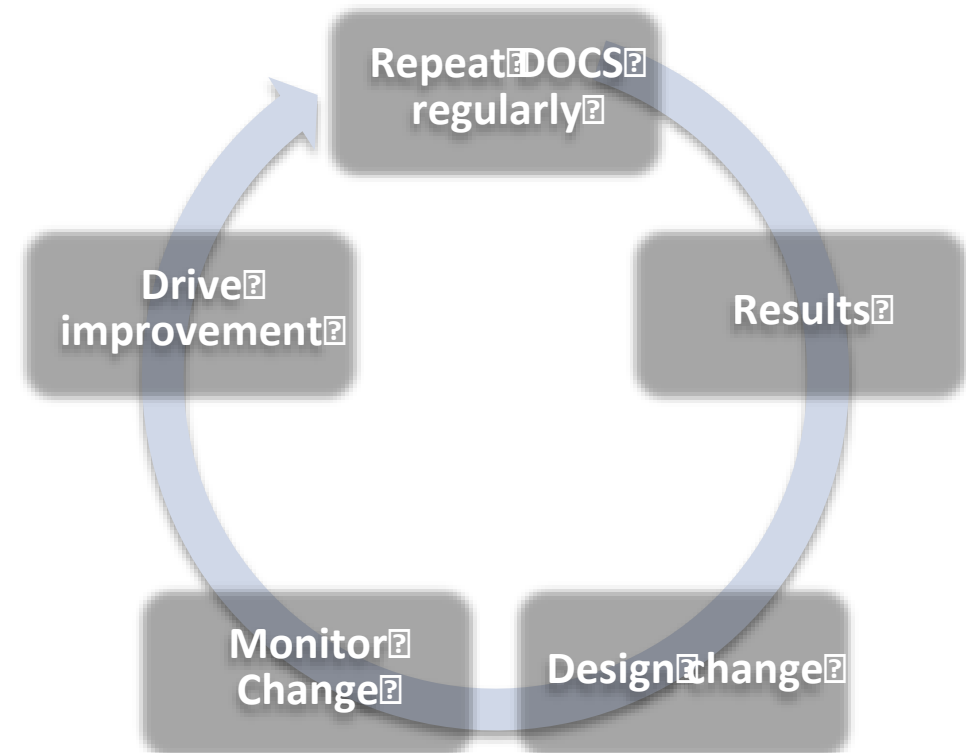
- Focus on those patients not meeting criteria, with a view to review their needs and the processes for learning. It may be beneficial to carry out this examination as a priority for wards: **A & B**

Some example actions for A:
 - Clarify the outcome metrics expected for ward A
 - Analyse number of patient moves prior to discharge
 - Do they meet AHP criteria at front door?
 - Analyse total hospital LOS vs. LOS in ward A
- Review processes & protocols for **short stay units: most urgently for C and then for D.**
- Review patients with **short LOS < 3 days in first instance and then < 7 days** to better understand how to improve the patient journey.
- Consider adopting a **senior bi-weekly needs review** of patients with **LOS of between 8-14 days** not meeting criteria, to achieve improved patient pathway and reduce numbers > 14 day, thereby shifting the discharge time curve to the left.
- Review the major reasons for delayed discharge (**awaiting AHP assessment & awaiting consultant review & MDT decision**) and examine local processes, as these are within the hospital control.
- Undertake a **joint review of the major reasons for not meeting criteria on a system level** (awaiting social services involvement & home care support & awaiting community bed), to include processes in order to identify where flow could be better managed.

- Individual hospital reports
- Targeted recommendations
- Include areas for immediate focus
- Allow for concentrated improvement strategy rather than a case-by-case discharge solution

Day of Care Survey: Next steps

- Recognise DOCS as an improvement approach
- Encourage hospitals to examine individual thematic recommendations
- Iterative DoCS have been shown to lead to improvement
- Use DoCS for **focused** improvement not performance
- Repeat acute DoCS across Scotland in October



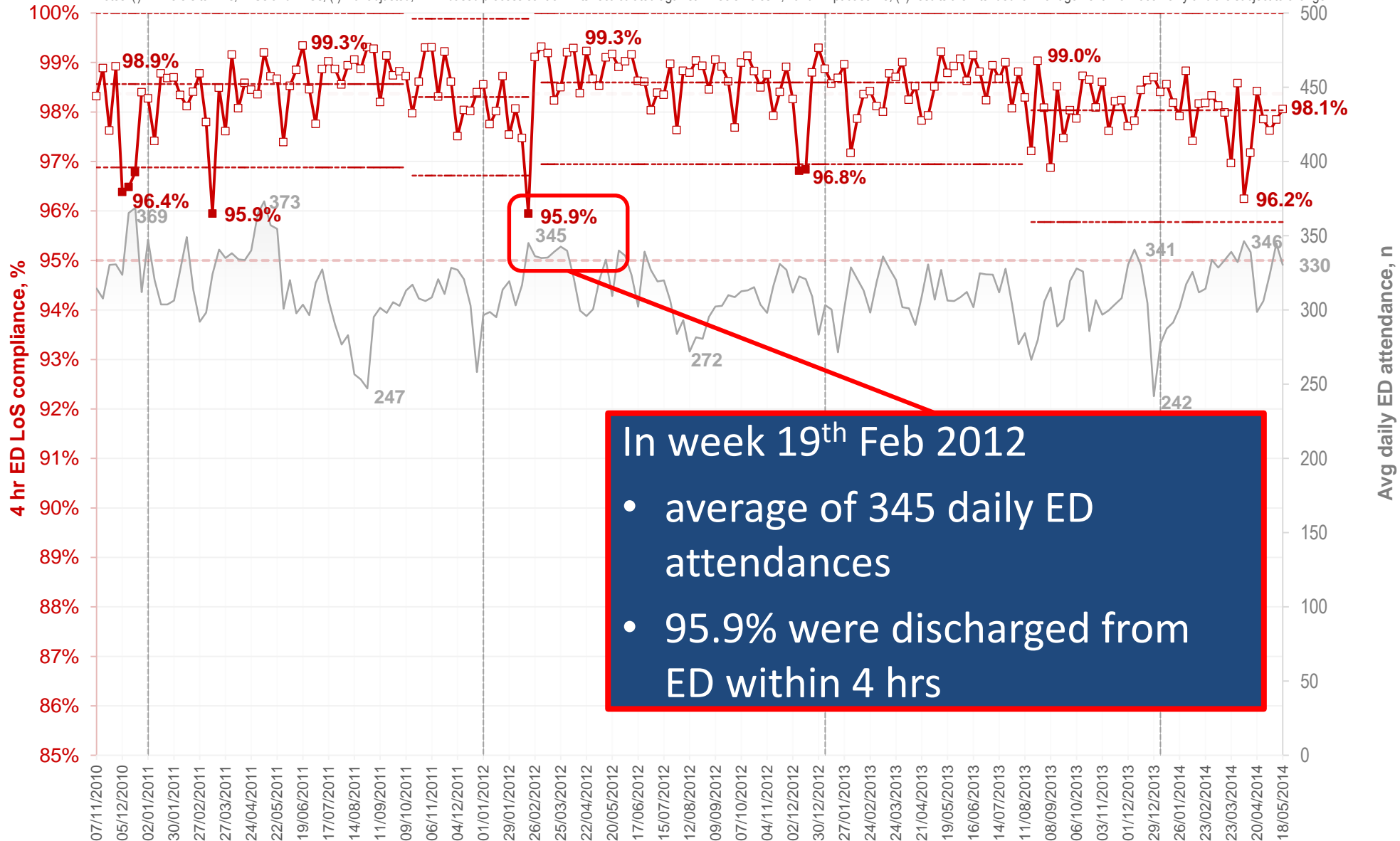
Diagnosing the system

Hospital 1: type-1 ED attendances only

Average daily type-1 ED attendance, n; weekly 4 hr ED LoS compliance (type-1), %

Sources: WSiTAE Unify2-derived publications covering unscheduled activity for ED sites w/e 7 Nov 2010 to w/e 18 May 2014

Notes: (i) ED refers to EDs, MIUs and WICs; (ii) **unadjusted, XmR-based process control limits recalculated against Wheeler rules 1,4 and 24-pt baseline; (iii) results are intended for management information only and are subject to change



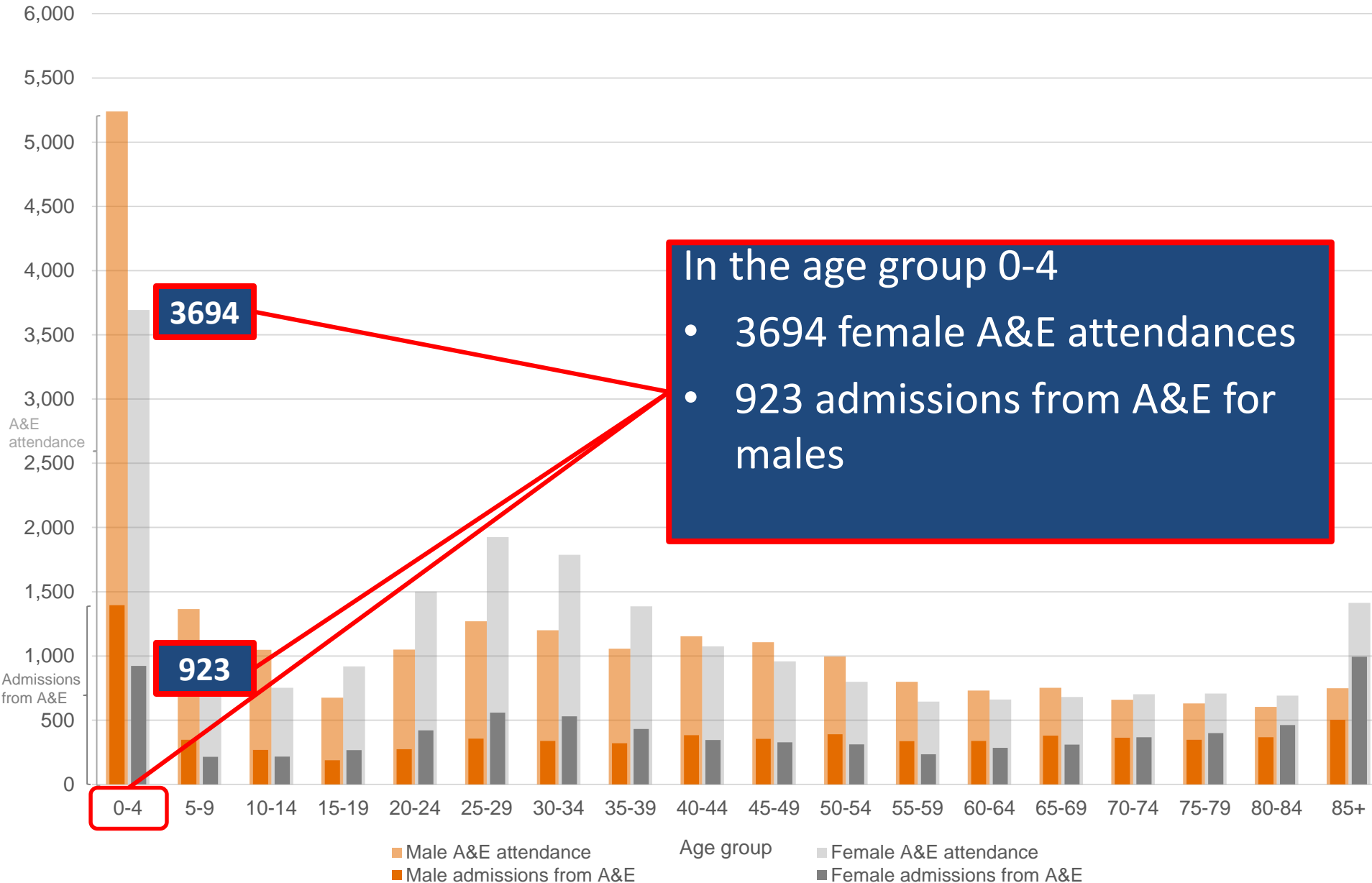
In week 19th Feb 2012

- average of 345 daily ED attendances
- 95.9% were discharged from ED within 4 hrs

Hospital 1: A&E attendance and admissions from A&E age-sex profile, 2013

A&E attendance and hospital admissions from A&E, by recorded patient age-group, 2013, n

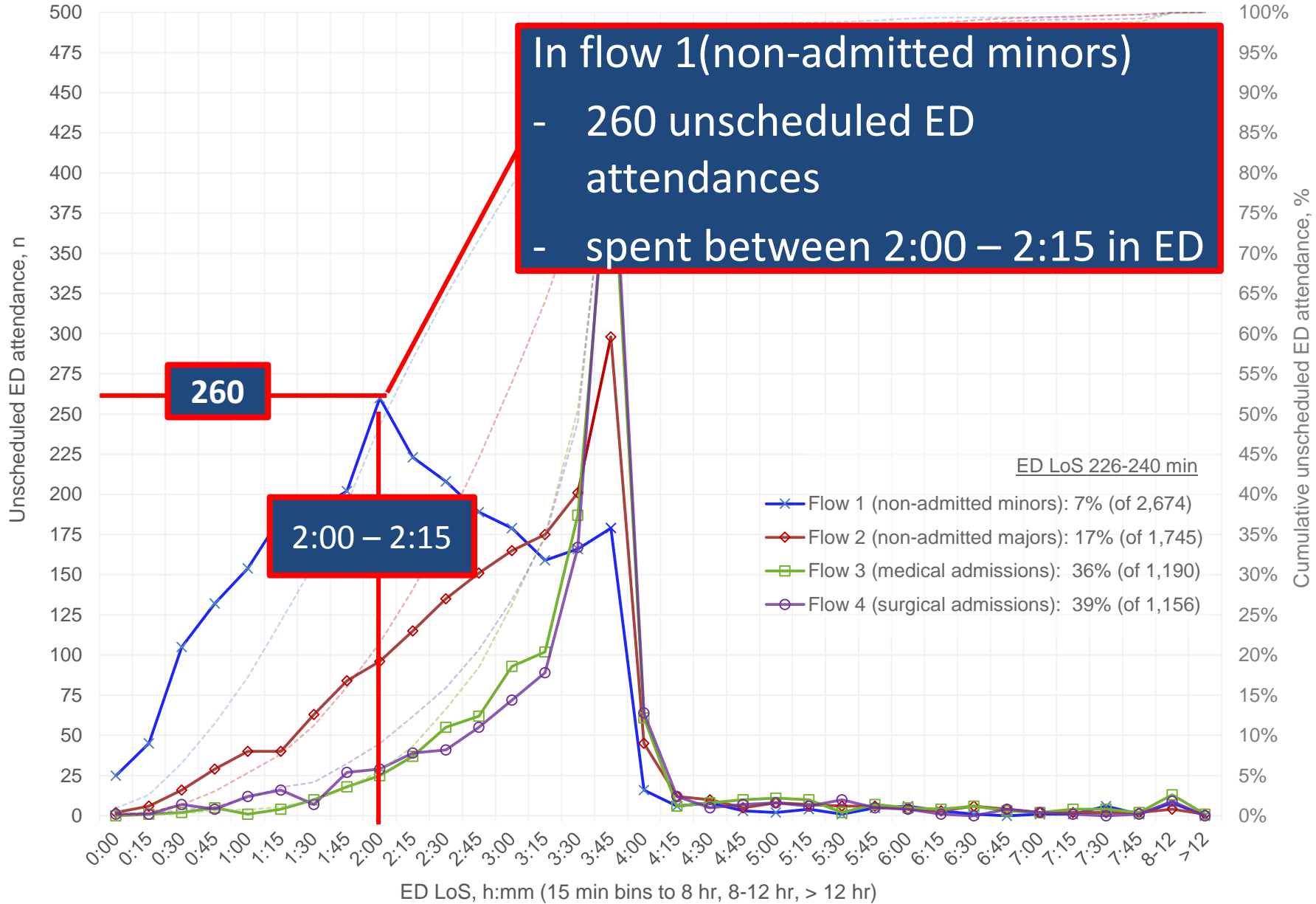
Notes: (i) excludes UCC area; (ii) results are intended for management information only and are subject to change



Hospital 1: A&E LoS distribution for unscheduled ED attendances, 4 Nov to 29 Dec 2013

Unscheduled ED attendance, by patient flow group, n; ED LoS in 15 min bins to 8 hr, 8-12 hr, > 12 hr

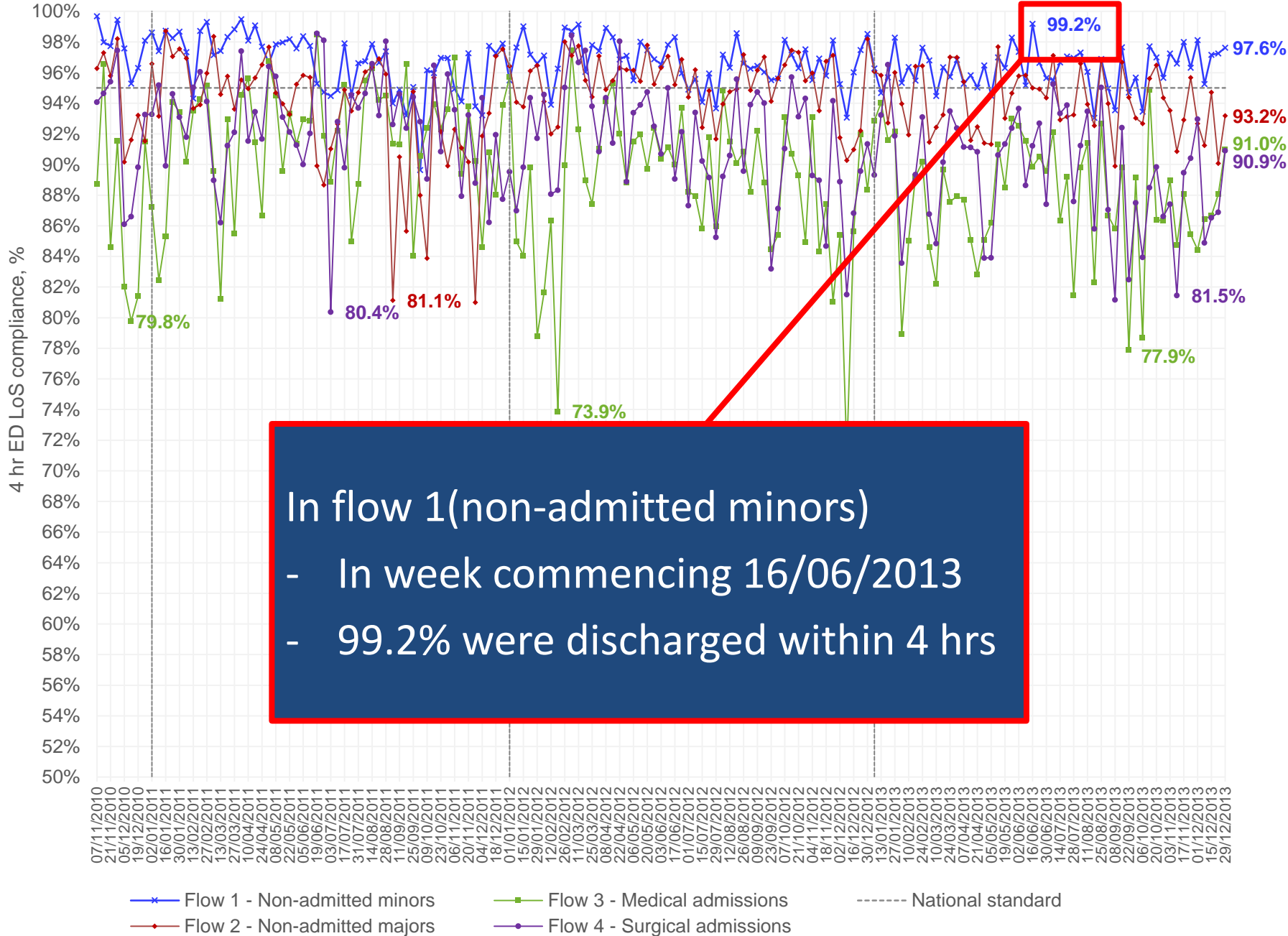
Notes: (i) excludes planned reviews, UCC attendances and ED ward stays; (ii) results are intended for management information only and are subject to change



Hospital 1 A&E: weekly 4 hr emergency access performance, 1 Nov 2010 to 29 Dec 2013

Weekly **overall** 4 hr ED LoS compliance, by patient flow group, %

Notes: (i) excludes planned reviews, UCC attendances and ED ward stays; (ii) results are intended for management information only and are subject to change

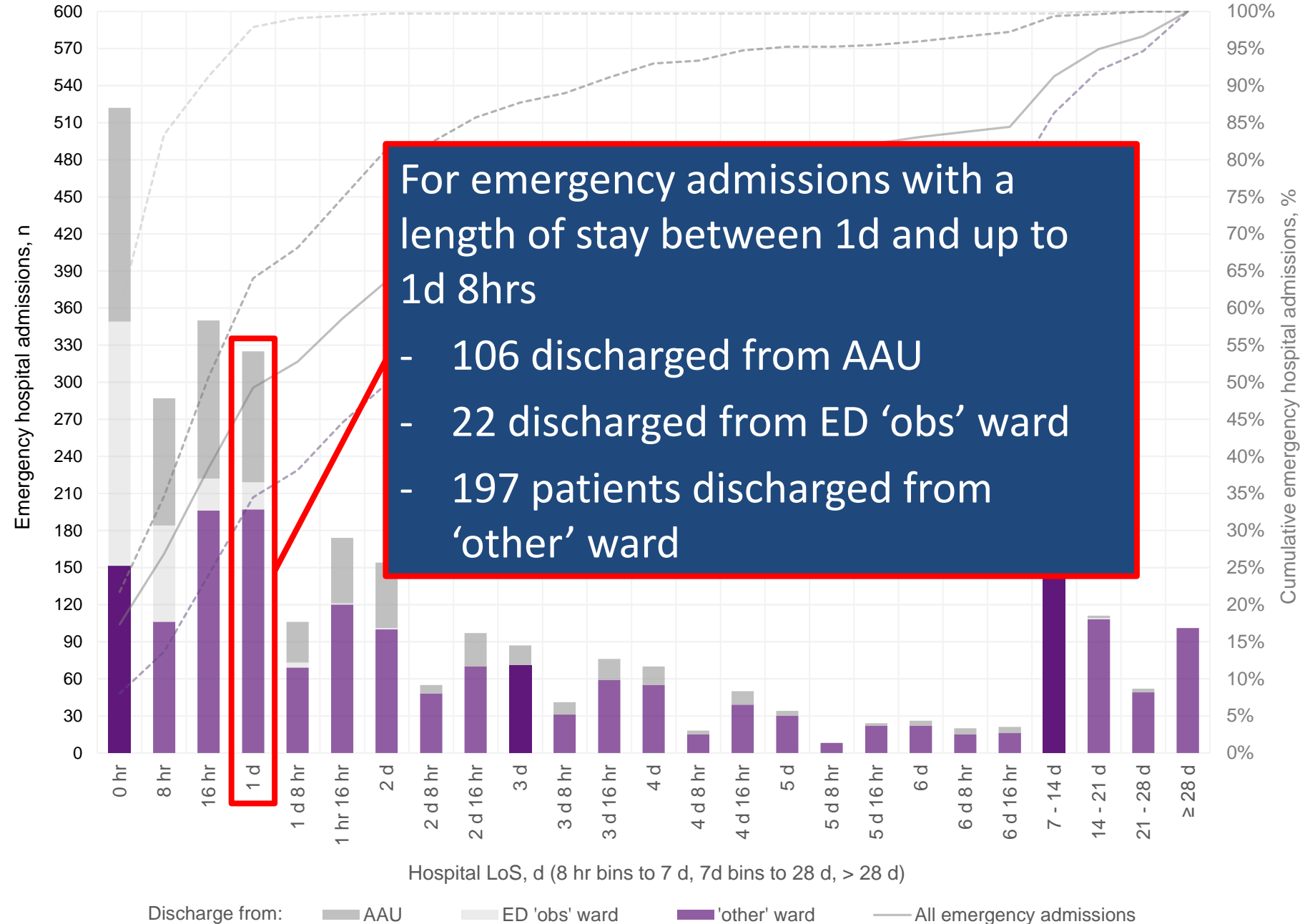


In flow 1 (non-admitted minors)
- In week commencing 16/06/2013
- 99.2% were discharged within 4 hrs

Hospital 1: Hospital LoS distribution for emergency admissions 4 Nov to 29 Dec 2013*

*Hospital discharges 4 Nov to 29 Dec 2013 for patients admitted as an emergency, n; hospital LoS in 8 hr bins to 7 d, 7 d bins to 28 d, ≥ 28 d)

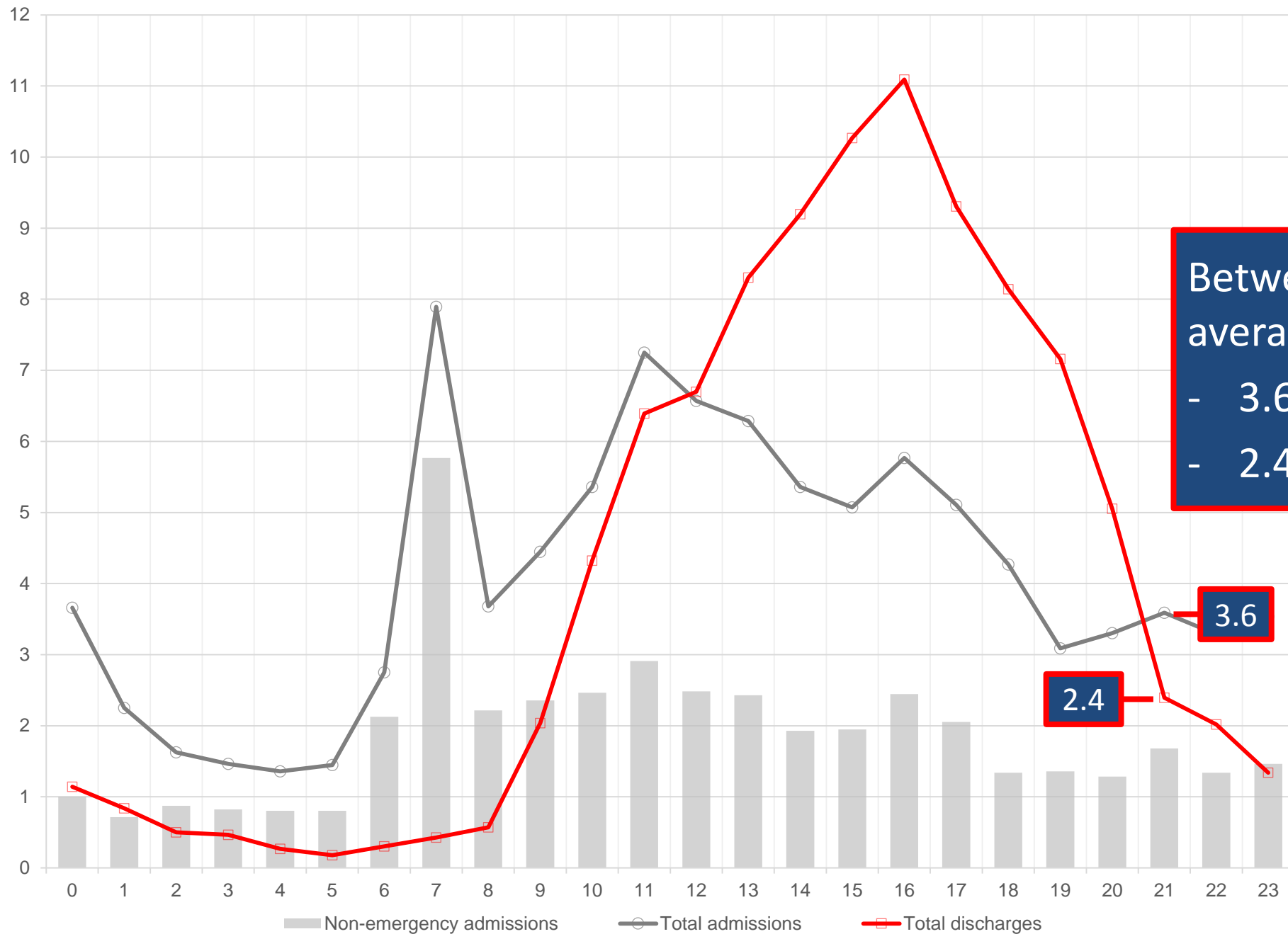
Notes: (i) hospital LoS calculated in minutes, incl. trolleyed ED LoS and excl. transit areas; (ii) results are intended for management information only and are subject to change



Hospital 1: hourly hospital inpatient arrival and discharge profile, 4 Nov to 29 Dec 2013

Average hourly hospital arrivals and discharges (excl. same-day non-emergency admissions and non-admitted ED attendances), by hour of day, n

Note: results are intended for management information only; transit areas considered out of hospital wrt discharge



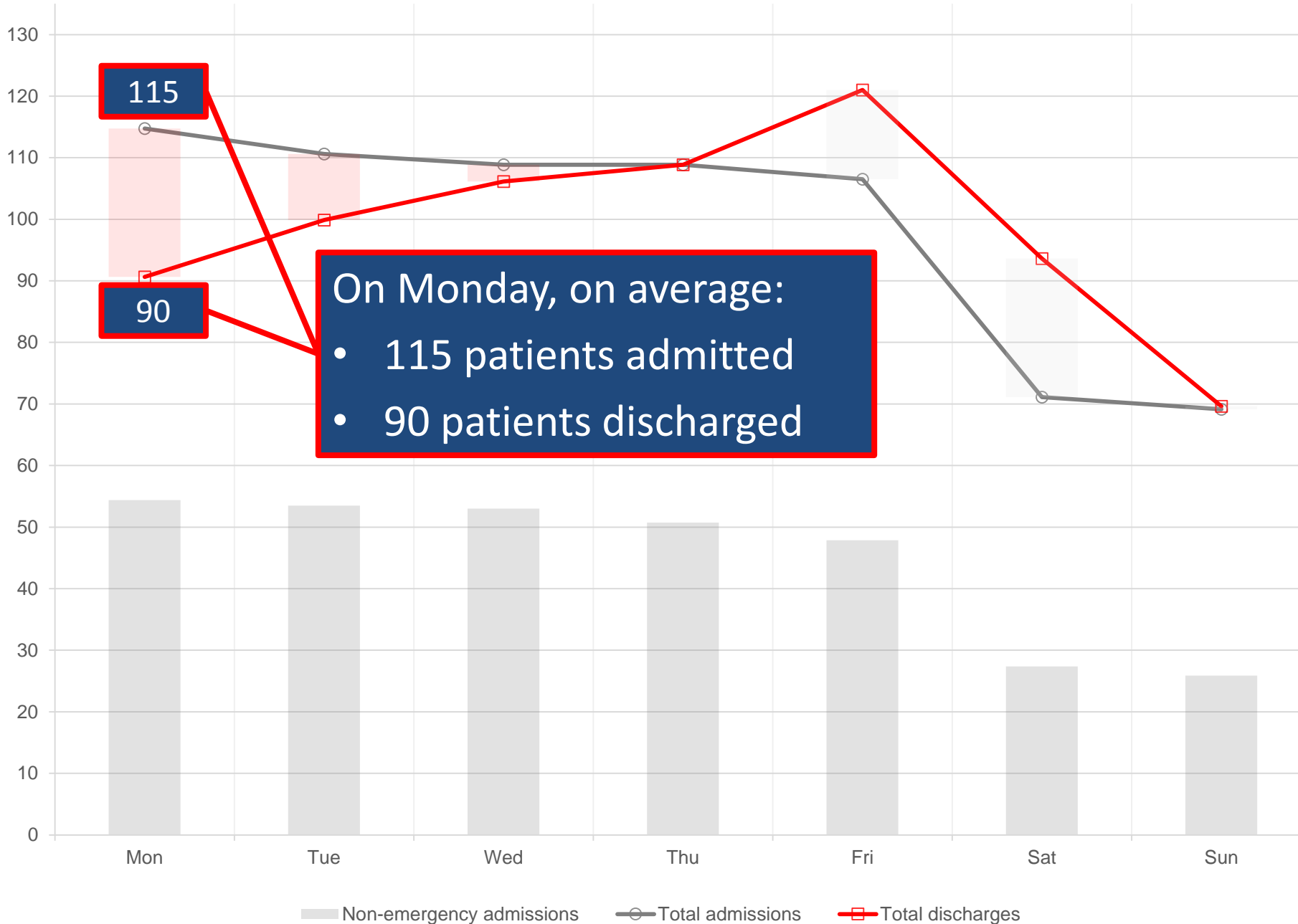
Between 9 pm and 10 pm on average:

- 3.6 patients admitted
- 2.4 patients discharged

Hospital 1: daily hospital inpatient arrival and discharge profile, 7 Jan to 3 Mar 2013

Average daily hospital arrivals and discharges (excl. same-day non-emergency admissions and non-admitted ED attendances), by day of week, n

Note: results are intended for management information only; transit areas considered out of hospital wrt discharge



Group Exercise

Imagine you are an improvement team in charge of ensuring patients do not experience unnecessary delays in emergency care for Hospital X

1. Look at the example data packs you have on your tables
2. Check you understand what each chart is showing
3. Interpret each chart - what is the data telling you?
4. What is the overall picture based on the data you have?
5. What questions remain? What other data do you need?
6. What actions will you take as a team?

Summary

- Unscheduled and emergency care is a whole system issue
- Accident and Emergency departments form a bottleneck – useful to measure there, but not sufficient
- To improve care, use data to diagnose the system – what are the problems locally?
- Focus improvement effort, using data to understand progress over time