Missed Doses

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Background

- **A systematic literature review reported dose omissions are a common administration error (Keers, 2013) and omitted and delayed doses are one of the most frequent causes of medication incidents reported to the National Patient Safety Agency (NPSA) (Cousins *et al.*, 2011). The NPSA proposes a staged approach to defining locally agreed critical medicines and developing systems to improve and audit the timeliness of administration (NPSA 2010).**

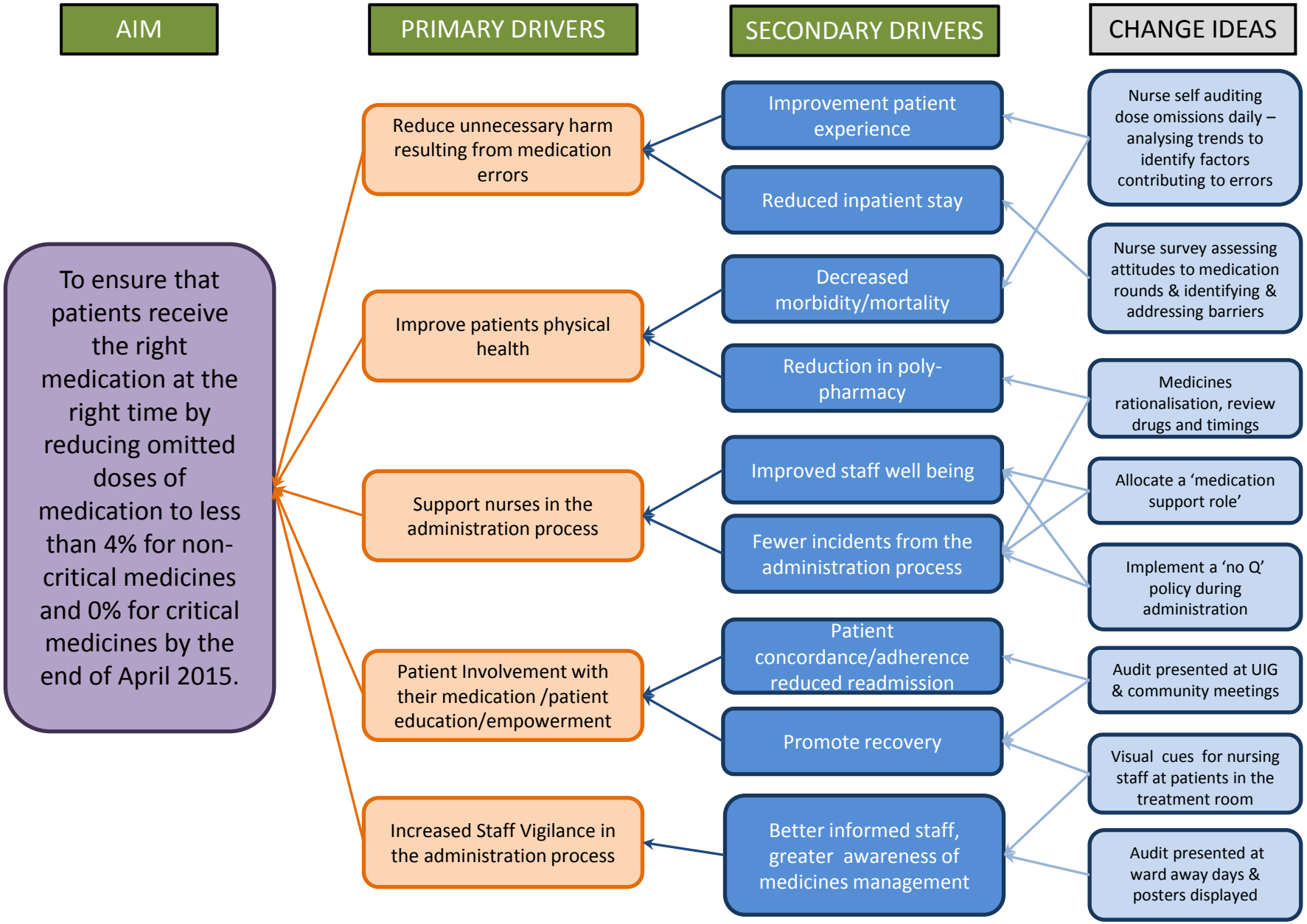
- **Many patients on Butterfield Ward have chronic physical health conditions as well as severe and enduring mental health problems. In order to improve the patients' opportunity for recovery and improve physical health we need to ensure that the treatment plan is followed and can be robustly evaluated.**

- **Individuals with severe and enduring mental health problems have a reduced life span of about 20 years (Newman & Bland 1991, Brown *et al*. 2010) compared to the general population; ensuring they receive the right treatment could aid in bridging health inequalities.**

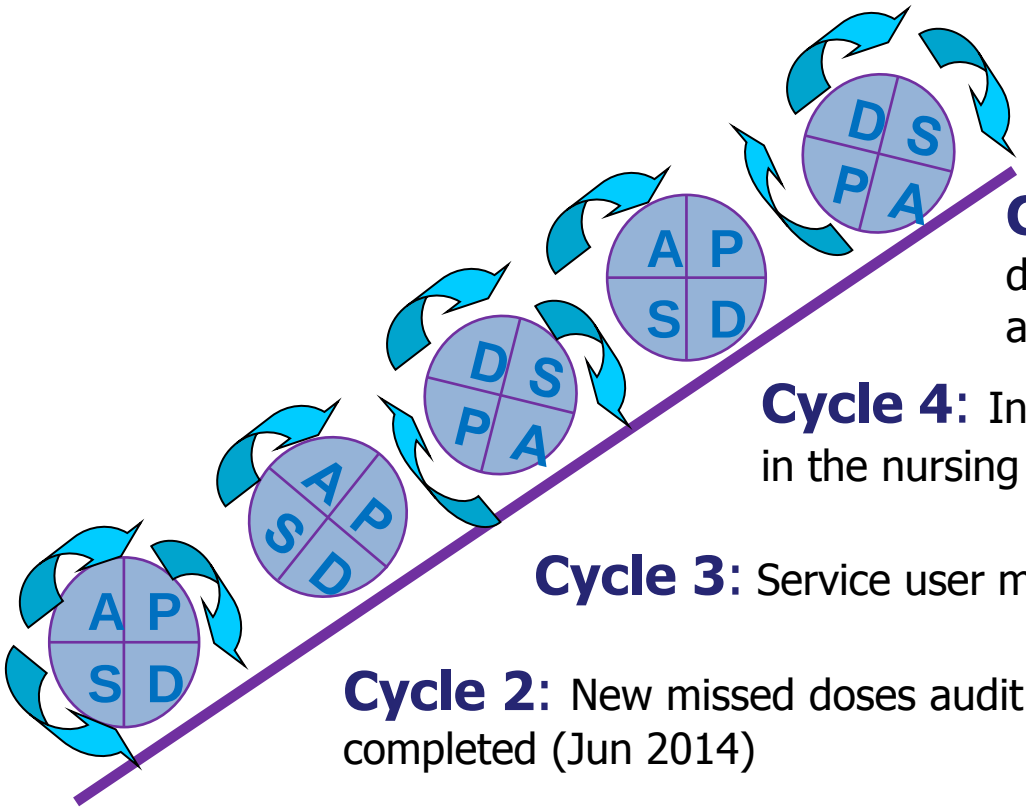
Project Aim

Reduce missed doses of medication to meet the Trust standard of less than 4% for non-critical medicines and 0% for critical medicines by April 2015.

Driver diagram



Sequence of PDSA's



Cycle 5: Introduced new policy of not disturbing administering nurse's during administration (Jul 2014)

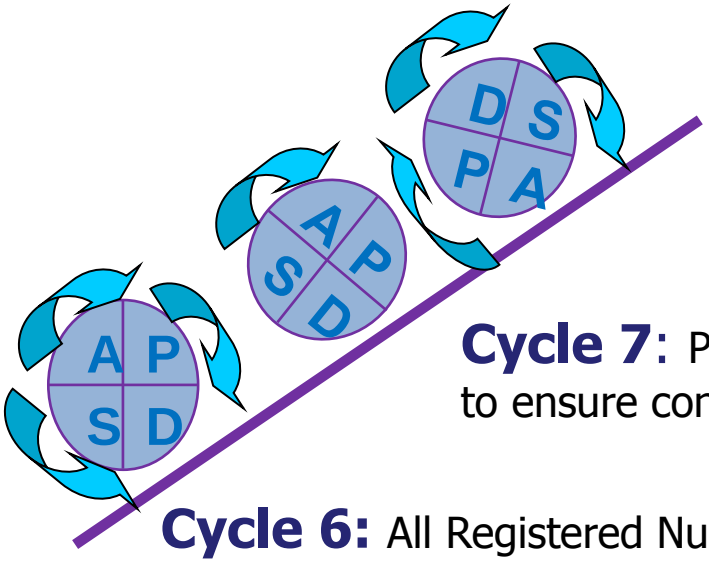
Cycle 4: Introduced role of medication support in the nursing team (Jul 2014)

Cycle 3: Service user meeting to discuss no "Q" system

Cycle 2: New missed doses audit tool developed and audit completed (Jun 2014)

Cycle 1: Pharmacy Audit for missed doses at Wolfson House (Apr 2014)

Sequence of PDSA's



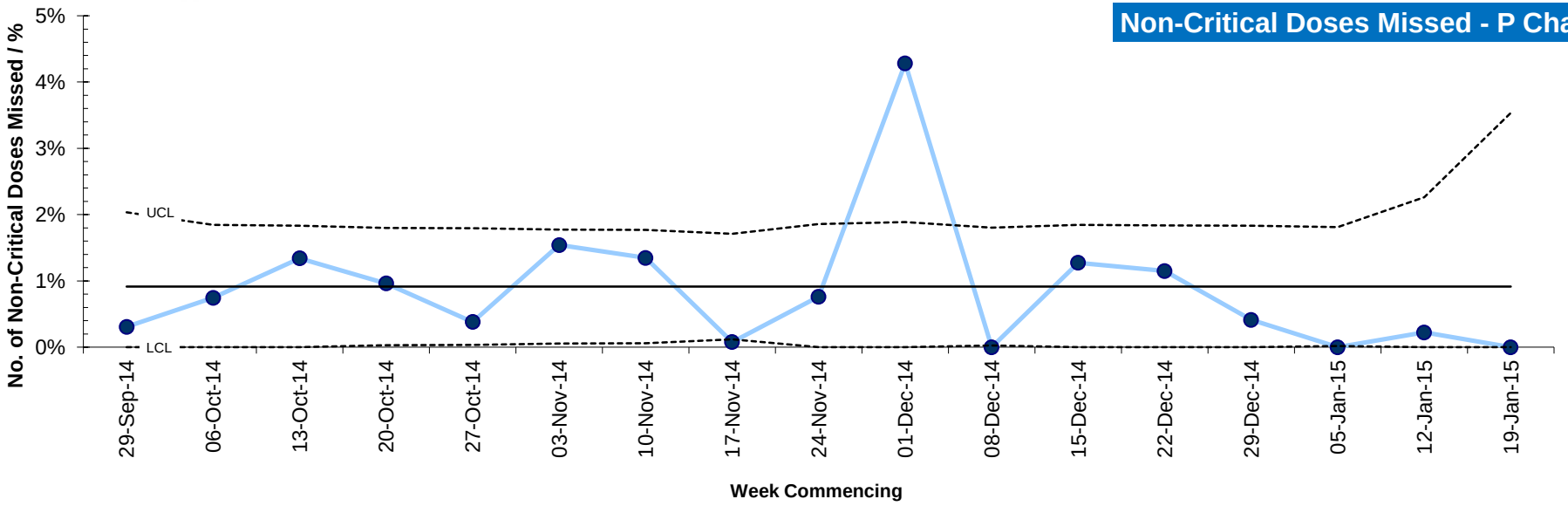
Cycle 8: Use of questionnaire to ascertain the cause of missed dose running in parallel with the night Registered Nurses completing Datix for missed doses

Cycle 7: Project audit tool aligned with pharmacy audit tool to ensure consistent measurement of missed doses

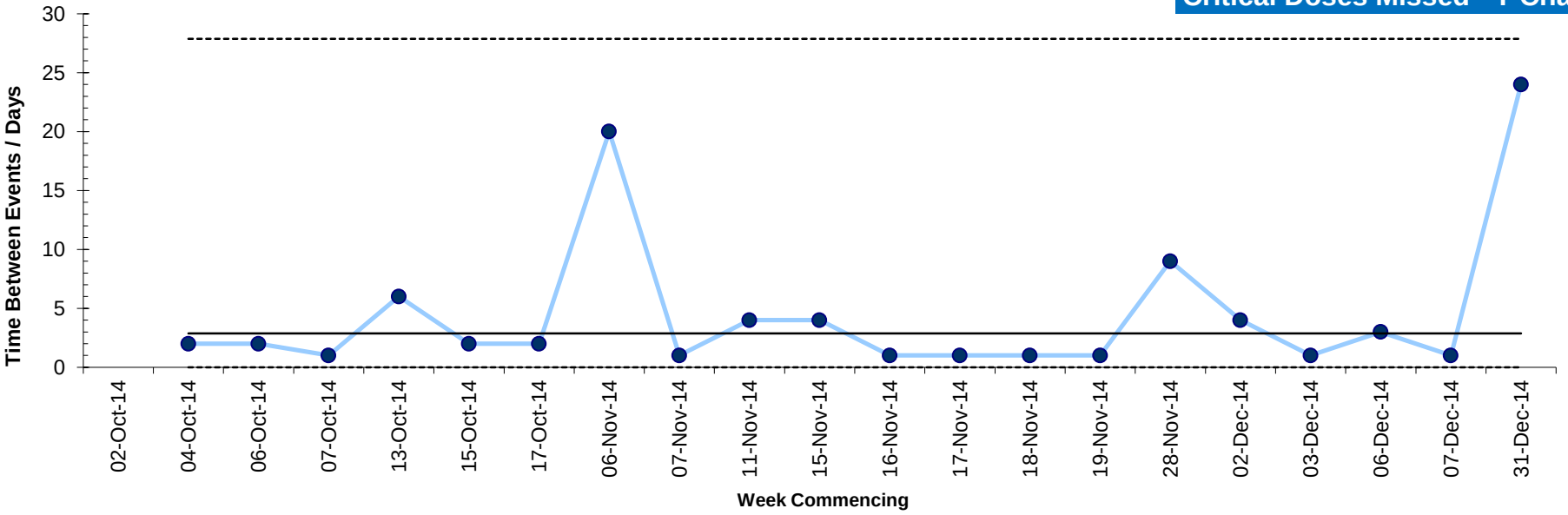
Cycle 6: All Registered Nurses will now contribute to data collection for project (Oct 2014)

Data

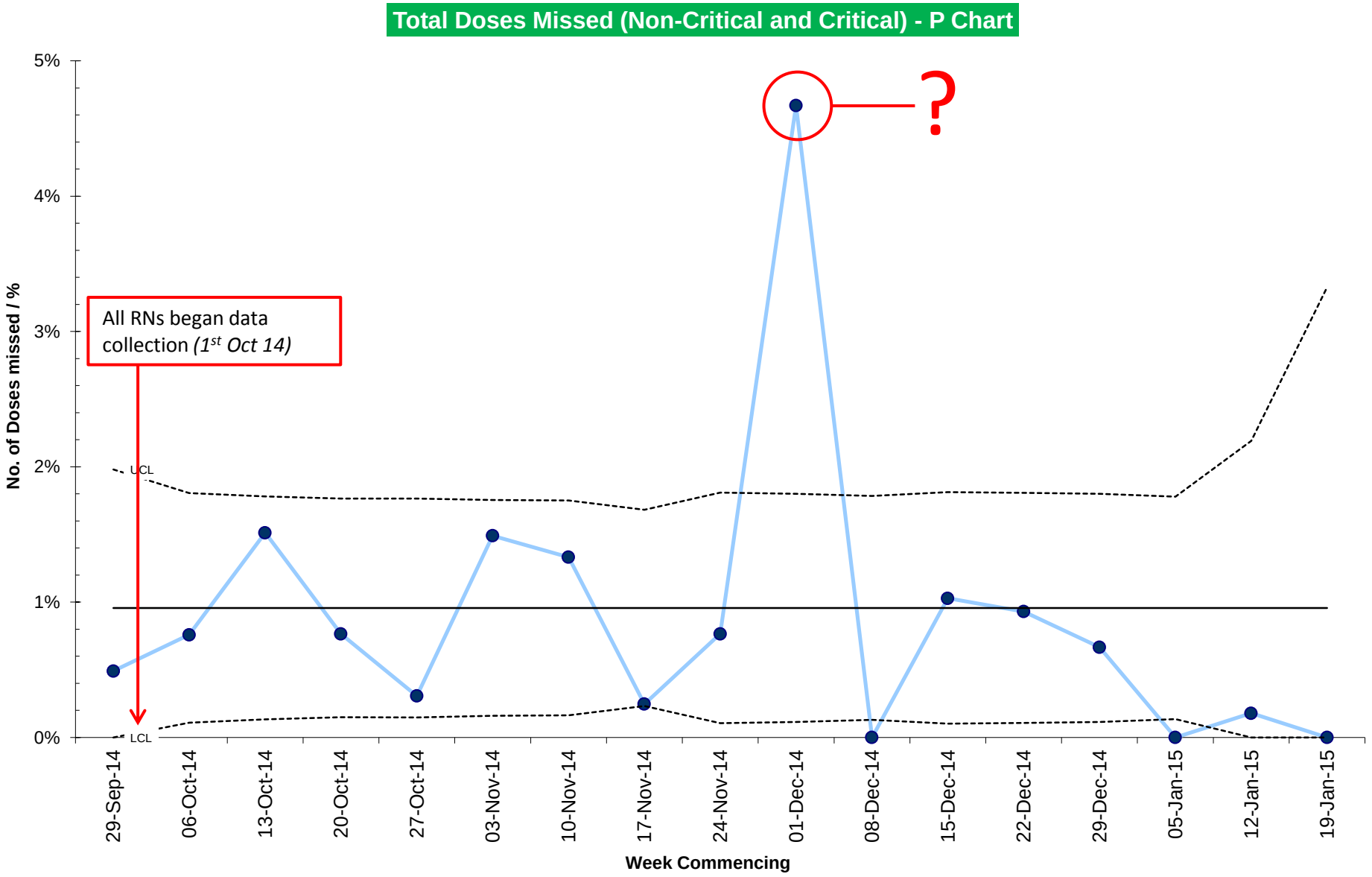
Non-Critical Doses Missed - P Chart



Critical Doses Missed - T Chart



Data


Total Doses Missed (Non-Critical and Critical) - P Chart
5%
4%
3%
2%
1%
0%
No. of Doses missed / %
All RNs began data collection (1st Oct 14)
UCL
LCL
?
29-Sep-14
06-Oct-14
13-Oct-14
20-Oct-14
27-Oct-14
03-Nov-14
10-Nov-14
17-Nov-14
24-Nov-14
01-Dec-14
08-Dec-14
15-Dec-14
22-Dec-14
29-Dec-14
05-Jan-15
12-Jan-15
19-Jan-15
Week Commencing

Spot the data outlier?

Missed Doses

Week	Date	Date of 1st day of week	Non critical doses prescribed	Non critical doses missed	Percentage of non critical doses missed	Critical doses prescribed	Critical doses missed	Percentage of critical doses missed	Total doses prescribed	Total doses missed	Percentages of missed doses
Wk 1	29 Sept - 05 Oct 14	29-Sep-14	650	2	0.31%	165	2	1.21%	815	4	0.49%
Wk 2	06 - 12 Oct 14	6-Oct-14	940	7	0.74%	247	2	0.81%	1187	9	0.76%
Wk 3	13 - 19 Oct 14	13-Oct-14	969	13	1.34%	287	6	2.09%	1256	19	1.51%
Wk 4	20 - 26 Oct 14	20-Oct-14	1040	10	0.96%	268	0	0.00%	1308	10	0.76%
Wk 5	27 Oct - 02 Nov 14	27-Oct-14	1050	4	0.38%	254	0	0.00%	1304	4	0.31%
Wk 6	03 - 09 Nov 14	3-Nov-14	1104	17	1.54%	238	3	1.26%	1342	20	1.49%
Wk 7	10 - 16 Nov 14	10-Nov-14	1113	15	1.35%	238	3	1.26%	1351	18	1.33%
Wk 8	17 - 23 Nov 14	17-Nov-14	1293	1	0.08%	329	3	0.91%	1622	4	0.25%
Wk 9	24 - 30 Nov 14	24-Nov-14	919	7	0.76%	257	2	0.78%	1176	9	0.77%
Wk 10	01 - 07 Dec 14	1-Dec-14	864	37	4.28%	335	19	5.67%	1199	56	4.67%
Wk 11	08 - 14 Dec 14	8-Dec-14	1030	0	0.00%	217	0	0.00%	1247	0	0.00%
Wk 12	15 - 21 Dec 14	15-Dec-14	943	12	1.27%	224	0	0.00%	1167	12	1.03%
Wk 13	22 - 28 Dec 14	22-Dec-14	957	11	1.15%	225	0	0.00%	1182	11	0.93%
Wk 14	29 Dec 14 - 04 Jan 15	29-Dec-14	969	4	0.41%	231	4	1.73%	1200	8	0.67%
Wk 15	05 - 11 Jan 15	5-Jan-15	1010	0	0.00%	251	0	0.00%	1261	0	0.00%
Wk 16	12 - 18 Jan 15	12-Jan-15	449	1	0.22%	111	0	0.00%	560	1	0.18%
Wk 17	19 - 25 Jan 15	19-Jan-15	119	0	0.00%	33	0	0.00%	152	0	0.00%

Learning

The project has raised the profile of medication errors (missed doses) among staff and service users on the ward. This has resulted in improved quality of care, through reduced error rates as evidenced by the data we have collected over the past few months.

QI Tips from Butterfield Ward

- **Planning** – clinicians are keen to 'get doing' but careful planning of *how* is crucial to a successful project, as well as *what to measure* and **actually measuring it**.

- **Change ideas** – these are exciting but must be aligned with measures to establish if they result in real change

- **Communication** – the project team require regular meetings to ensure work is being co-ordinated, and data can be scrutinised so the team respond in real time

- **Engagement** – project work needs to become business as usual, so staff need to believe it is meaningful if it is going to be a priority in practice: QI ideas that come from frontline staff are the ones that will be embraced most easily

- **Improvement** – has been demonstrated easily, with very little financial investment from the service. Improving the quality of care provided and reducing harm has proved an extremely rewarding experience for ward staff – and patients!

THANK YOU FOR LISTENING!

Any questions?