

Electronic Prescribing and Administration (EPMA) Datixes

Feedback to TMC- Governance

1.0 Background

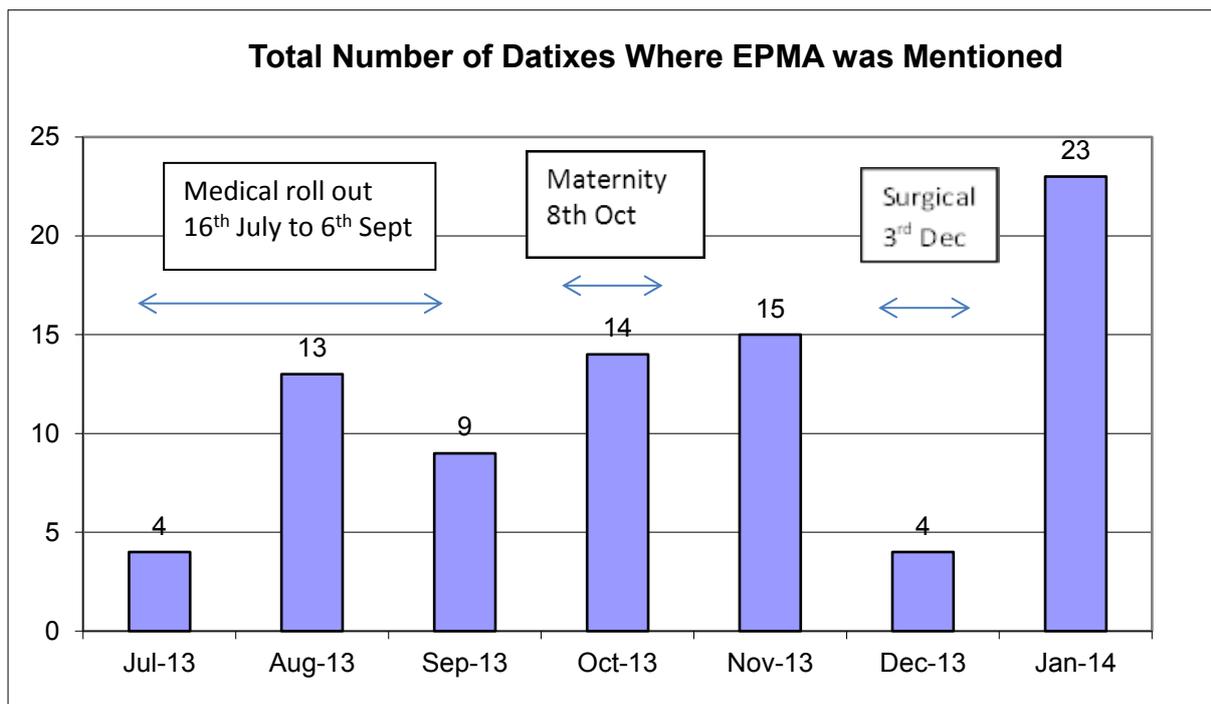
Following the presentation of the incident summary to TMC in Jan 2014 a query was raised whether peaks seen in medication incidents in Sept and Dec 13 were related to the implementation of EPMA.

This report details the type and number of datixes related to EPMA and whether EPMA is causing a significant increase in medication related datixes.

2.0 EPMA Datixes

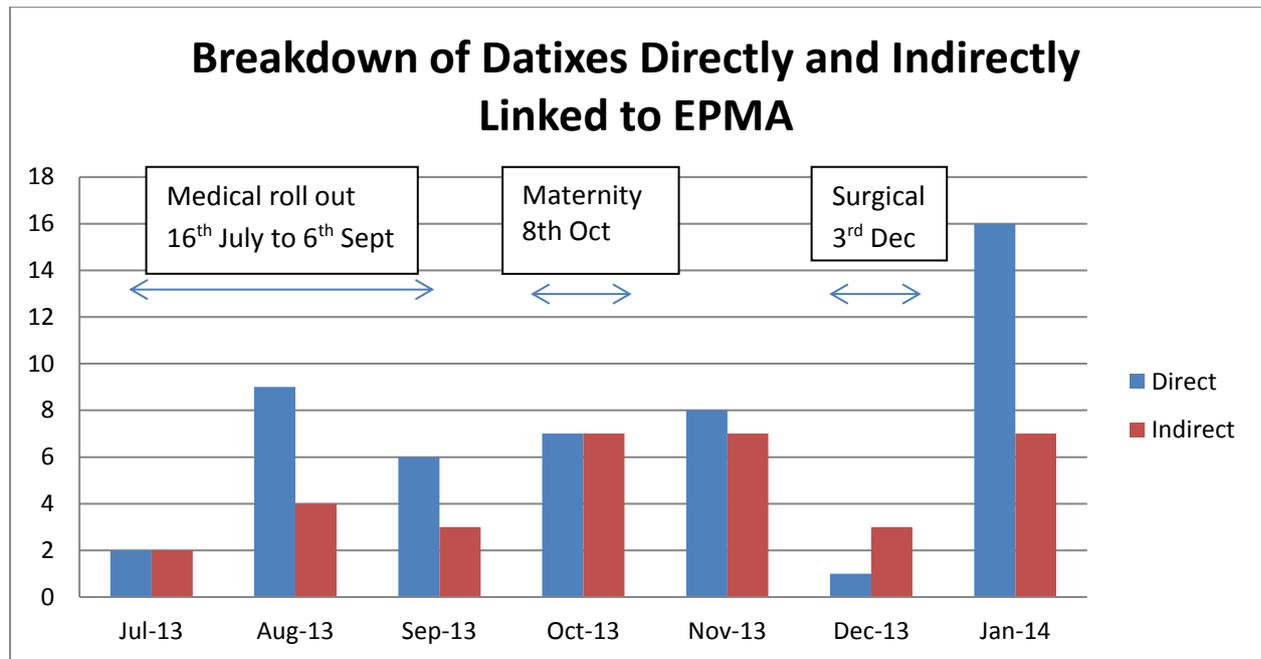
Figure 1 shows all datixes recorded where EPMA was mentioned in the last 7 months, whereas figure 2 breaks this down into whether these incidents were directly or indirectly linked to EPMA.

Figure 1:



Examples of those directly linked to EMPA would be downtime, unable to access the system and picking the wrong drug from the drop-down list. Examples of where EPMA was indirectly linked to the incident are a drug not being signed for and a patient receiving a second dose, a drug being prescribed once a day instead of three times a day etc.

Figure 2:



The number of incidents directly related to EPMA has been relatively steady since the beginning of the medical deployment. This reduced markedly in December 2013, likely as a result of the intensive support given to users by the pharmacy team during the surgical and theatre deployment and has markedly increased during Jan 2014, likely as a result of some of that support being withdrawn.

The types of datix can broadly be broken down as shown in Table 1.

Table 1: Datixes directly linked to EPMA for the period July13-Jan14.

Category of Datixes Directly caused by EPMA	Number of Datix	Examples
Training/ Familiarity	19	<ol style="list-style-type: none"> GP wanted clarification of meds. Unable to get info from EPMA. Inappropriate Rx of oxycodone - blamed on unfamiliarity of EPMA.
Speed/ Speed of Access	3	<ol style="list-style-type: none"> Very long time to Rx pre-med PPIs for 2 pts. Ran out of time to Rx for other 6 pts. Dr couldn't get into EPMA
Dual Prescribing Systems/ Interface	10	<ol style="list-style-type: none"> MAU to Phoenix over w/end. Missed 2/7 of warfarin. (before MAU was live) No insulin Rx on EPMA on admission in ED. Type 2 DM, PD, confused but wife present.
Inherent System Risks	11	<ol style="list-style-type: none"> Dr selected penicillamine instead of penicillin V 50mg iv cyclizine given too soon after prev dose
Down-time/ technical issues	6	<ol style="list-style-type: none"> EPMA system failed, had to use paper charts EPMA not responding so meds missed (incl insulin)

3.0 General Medication Incidents Trends

As with all variable processes such as datix reporting, some statistical analysis needs to be applied to identify whether the observed variation is significant. This can be achieved using the 'Statistical Process Control' (SPC) method which can distinguish between 'natural cause' variation and 'special

cause' variation- see figure 3. Where the pattern meets one of the following rules would indicate special cause variation:

Rule 1	Any point outside one of the control limits (3 standard deviations)
Rule 2	A run of seven points all above or below the 'mean' line, or all increasing/ decreasing
Rule 3	Any unusual patterns or trends within the control limits
Rule 4	Less than 66% of all points fall within the middle 1/3 of the region between the control limits

Figure 3:

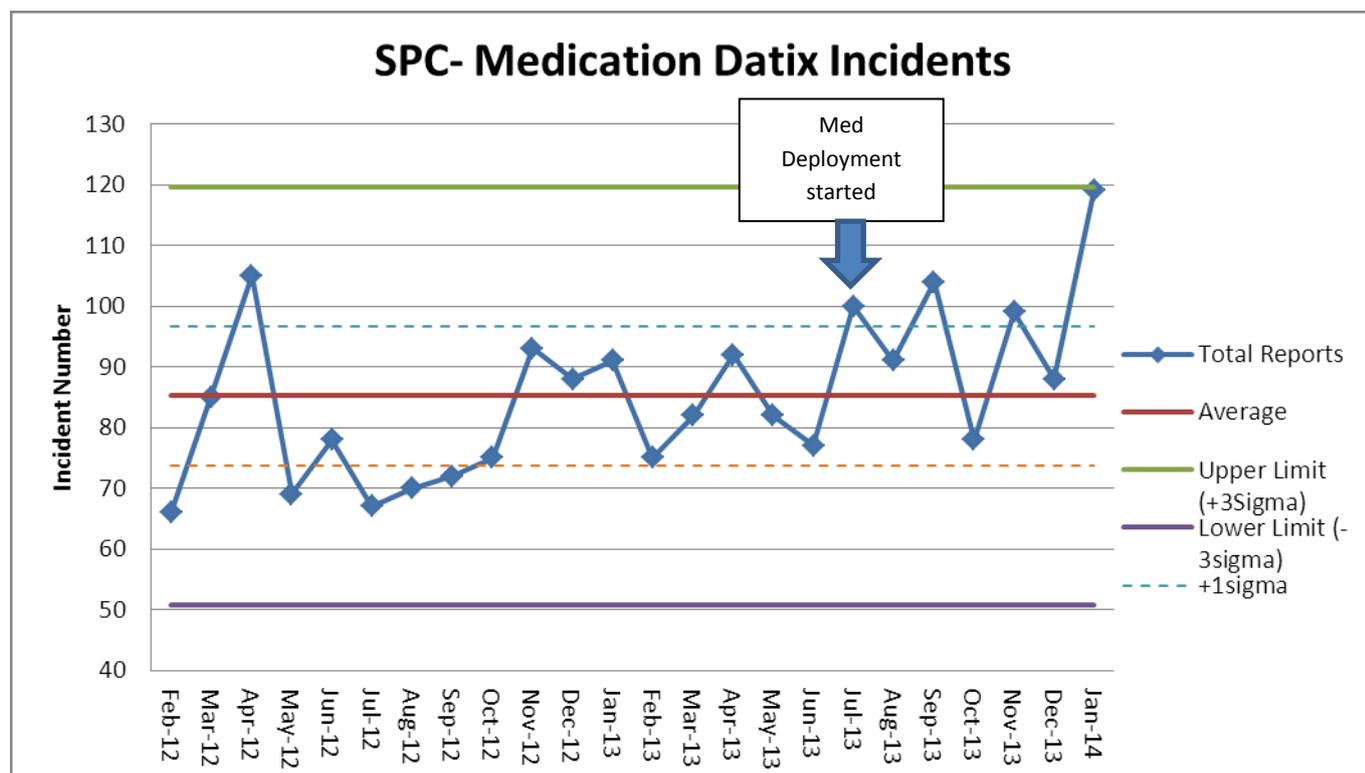


Figure 3 illustrates that rule 4 and rule 1 have been met and therefore some of the variation is due to special causes rather than natural variation. It would seem likely that this 'special cause' is EPMA.

4.0 Summary

The JAC EPMA system is deployed and well established in over 15 acute Trusts in the UK, such as Southampton, Great Ormond Street, Heartlands and The Royal Liverpool. The committee can take assurance from this and whilst the system is not perfect, it is delivering safe patient care across the UK.

The degree of change that EPMA entails should not be underestimated and our post-deployment survey results have broadly shown it to be better accepted by the nursing staff than prescribers. The recent trend in datixes is likely to be multifactorial which include;

1. Inherent risks with the system.
2. The new system bedding in.
3. Increased propensity to report during the implementation.
4. Training/ Familiarity
5. Speed/ Speed of Access

6. Dual Prescribing Systems/ Interface
7. Down-time/ technical issues

A number of actions are underway to address these issues and close monitoring of the datix trend data will be continued.

5.0 Action Plan

	Factor	Plan	Who	When
1.	Inherent risks with the system	<ol style="list-style-type: none"> 1. Where possible- design out those risks locally. 2. Request enhancements from the supplier to reduce those risks. 3. Increase awareness of those risks locally with users 4. Attendance at divisional governance meetings for direct user feedback 5. Listening into action event to be held on 3rd April 	<p>EPMA</p> <p>Pharmacy</p> <p>Pharmacy & Users</p>	<p>Ongoing</p> <p>From March 14</p> <p>April 14</p>
2.	Training/ Familiarity	<ol style="list-style-type: none"> 1. EPMA staff to go back out to wards in a planned manner to support ward rounds, nursing rounds in areas that request such assistance 2. Provide youtube 'how to' videos for quick guides on how to do specific things. 	EPMA	<p>April 14 (post ED deployment)</p> <p>March 14</p>
3.	Speed/ Speed of Access	<ol style="list-style-type: none"> 1. Citrix clinical desktop build for faster access to PCs. 2. Direct access to EPMA rather than via Maxims 3. Reconfigure launch from Maxims to EPMA 4. Investment in VDI and 'follow-me' technology 5. Build launch from Oceano to EPMA for ED deployment 	<p>CITS</p> <p>Users</p> <p>CITS/ IMS</p> <p>CITS/ CIDP</p> <p>CITS/ Oceano</p>	<p>April 14</p> <p>Available now</p> <p>?July 14</p> <p>As per CIDP investment plan</p> <p>?March 14</p>
4.	Dual Prescribing Systems/ Interface	<ol style="list-style-type: none"> 1. Move ED to EPMA 2. Look for portal solution to reduce risk around CareVue, Aria etc interface 	<p>EPMA & users</p> <p>CITS/ CIDP</p>	<p>March/ April 14</p> <p>As per CIDP investment plan</p>
5.	Down-time/ technical issues	<ol style="list-style-type: none"> 1. Investment in Trust infrastructure (LAN. Wifi etc) 	CITS/ CIDP	As per CIDP investment plan