Automating Emergency Department 12 Hour Breech Reporting
Creating a 'Datix Robot' to Improve Data Quality and Save Clinical Time

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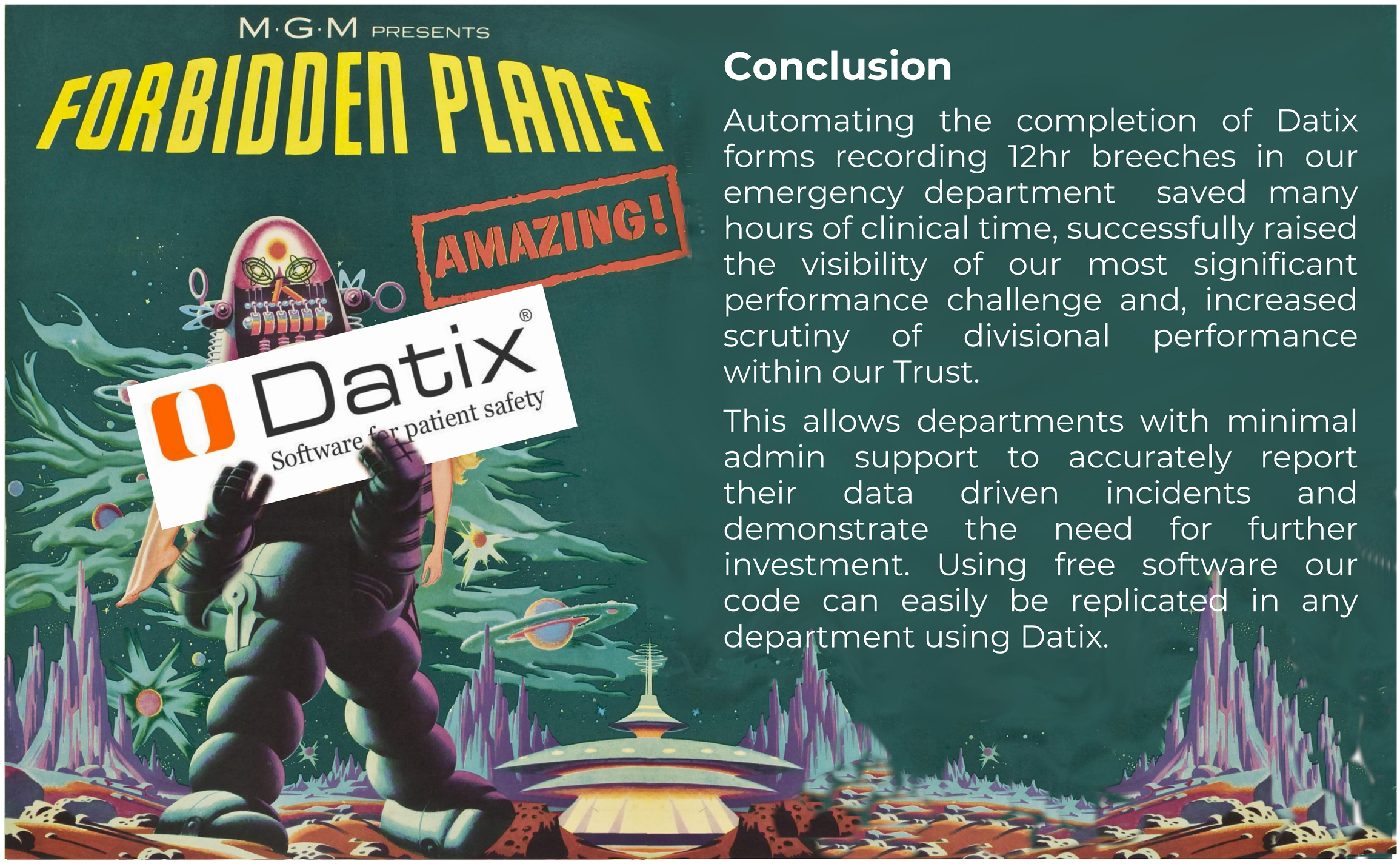

Conclusion

Automating the completion of Datix forms recording 12hr breeches in our emergency department saved many hours of clinical time, successfully raised the visibility of our most significant performance challenge and, increased scrutiny of divisional performance within our Trust.

This allows departments with minimal admin support to accurately report their data driven incidents and demonstrate the need for further investment. Using free software our code can easily be replicated in any department using Datix.

Background

In our tertiary paediatric emergency department children waiting over 12 hours after a decision to admit ('12 hour trolley breech') was previously a near 'never event', with only 2 between 2015 and 2020. In the post-pandemic period NHS performance has increasingly struggled. For many departments – including our own – 12hr breeches have become a daily occurrence. Logging and reporting these episodes is a core part of our governance, safety and quality processes. With limited administrative and non-clinical support. Datix reporting became a large burden for our clinical team to complete, often staying post shift to complete forms, or with some episodes going unreported. We attempted to develop a more efficient process.

Method

Using the free opensource R software we developed code to check our EPR (CareFlow) to identify if, when and how many 12hr breeches had occurred then without user-intervention – complete and submit the appropriate Datix form, link to the risk-register, and close it.
We estimated how much time the Datix 'robot' saved and if there were other safety/performance issues it could process

Results

Between Oct 22-Jan 23 there were 284 12hr breeches in our children's emergency department. When done manually, identification and entry was a simple but monotonous task taking >10 minutes per form. Reporting and closing them using 'the robot' saved a minimum of 47 hours of clinical time.

Further iterations of 'the robot' were developed to submit daily performance Datix reports highlighting when we had not achieved our internal standards: of time to triage; time to assessment; crowding; and exit block – again linked as evidence against our risk-register.
Further adaptations to the robot will report nurse : patient ratios and the new 12hrs since arrival breech

Code

https://github.com/robinmarlow/Automated_Incident_Reporting

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