Scaling to Test for a Million New Patient Cases Every 36 Hours

Eggplant has been working with Tavistock and Portman NHS since Spring 2019. The Tavistock and Portman NHS Foundation Trust is a specialist mental health trust based in Camden, London, offering high quality mental health care and training. It provides multi-disciplinary services for adults, adolescents and children and their families.

Like most NHS Trusts, it was facing digitalisation challenges moving from legacy systems to new technology fit for purpose for today’s healthcare. And, when you consider that the NHS has a million new patient cases every 36 hours, a dynamic digital platform is required to cope with demand.

The Digitalisation Challenge

The NHS has progressed a long way down its digitisation journey over the last five years. Many Trusts have implemented a variety of either single vendor or multi-vendor electronic patient records – as is the case with Tavistock and Portman as David Wyndham Lewis, Director of Transformation and Technology explains:

“As we’ve gone through that journey we found that those big multi-vendor platforms have actually created complications within the system. And while it has helped to improve patient journeys and has helped us deal with the vast increasing numbers of patients the NHS deals with, it has also created challenges in terms of burden on clinicians, on our nursing staff, and administrators within the NHS.”
Because the systems tend to be configured it is creating a burden in terms of iterative change and testing. The systems don’t perfectly match the clinical process of each Trust because they vary quite considerably. This means systems need to be improved over time and there is a need to tailor the system and evolving processes together.

“The systems we’ve dealt with in the past in the NHS have been more challenging and slower to change. Over the last five years we’ve moved to a model where systems are more frequently changed but there is a need for rigorous testing as part of that. We need to assure ourselves that we are able to move quickly and improve our systems while maintaining that low level of patient risk.”

**The Testing and RPA Solution**

This is when Tavistock and Portman engaged Eggplant from both a testing and a Robotic Process Automation perspective. The Trust uses a system called Advanced Care Notes – a well developed system for mental health settings. The system is highly configured and Tavistock and Portman has an in-house development team making those iterative changes alongside the needs of its clinicians. However, it means there is a much tighter testing schedule than has been required previously where updates could be as infrequent as quarterly.

“Each iterative change needs testing and we’ve been able to use Eggplant to significantly reduce the burden on our development staff in terms of testing, and also to an extent – to increase the amount of clinician-driven testing that we’re undertaking, rather than testing systems purely from a technologist’s perspective.”

The first use case with Eggplant was to deal with a student information management system, which involved a complex process of scheduling patient activity alongside student activity. The Eggplant platform allowed Tavistock and Portman NHS Trust to work across multiple systems; a student information management system, a timetabling system, and its electronic patient records, mapping different activity types to plan the best time for activities to happen.

**Impact**

The big differentiator has been the re-usability of the platform for different use cases. Tavistock and Portman NHS Trust can now architect the platform to interact with the central patient record and entrap law student information once those interactions are usable for both the robotic processing and for the testing. It also means Tavistock and Portman has been able to build platforms that are reusable across multiple use cases within the Trust and it no longer has to rebuild different interactions for every different use case.
“The way that the Eggplant interfaces are built to graphically interface has meant that we are no longer necessarily reliant on highly specialized development skills for all aspects of the process. We’re able to use business analysts to build the majority of our flows through a plant with some support from our higher end development team within the Trust as and when needed, rather than that being required for all aspects of every build.”

Where Next?

Most Trusts are fairly well progressed with their digitisation journeys, and have moved to traditional platforms but what they haven’t yet achieved is a move from digitisation onto digital transformation.

“We need to look at ways to better interact digitally with our patients and, critically, we need to make sure that all that data can flow in a consolidated way. Because of the breadth of the systems that exist, it is incredibly challenging to build integrations through traditional APIs. We are working on that as a whole NHS (in terms of open standards) but while that work is ongoing robotics can bridge the gap.”

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