

## Patient CV: Increasing Productivity of On-Call Junior Doctors and Site Managers in a High Secure Forensic Hospital through the process of Task Automation

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**Background:** While any NHS electronic patient records software stores massive amount of patient data, it often makes extracting the relevant data in times of emergencies extremely difficult. We found the same issue at Broadmoor, a national level high secure forensic hospital. We found that the software is excellent in storing tonnes of information of long staying patients (over two to three decades). However, due to the complexity of software in terms of loading time, multiple tabs, and numerous formats, it was a common struggle for the on-call doctors and site managers to quickly and easily know about the clinically relevant details of a patient who needs an out of hours review. We explored the concept of a simple solution for this complex problem in the form of a 'one-page long CV' for all patients. There was a gap and need for use of the concept of task automation for multiplying the time of professionals for this productivity problem.

**Aims:** The main aim of the quality improvement project was to decrease the time spend searching for clinically relevant information in patient notes at least by 40% and making it subjectively easier to access at least by 40% for junior doctors and site-managers during out of hours shifts. Thus, the two main domains of healthcare quality delivered to our forensic patients that we were focussing on were timeliness and efficiency.

**Methods:** We used the Model for Improvement, by Associates in Process Movement, to make an improvement in the Quality of care delivered. In the first part of the model, we set our aims, established measures (pre-and post-project surveys) and explored ideas from those who have worked in system for long. We then tested out the changes using PDSA cycles. We finally implemented the changes on two wards and are now in the process of spreading these changes to the whole of the hospital in next phase and to the rest of the West London NHS trust in another phase. We ended up having a one-page summary ready on the system about main relevant bits of information of a patient that one wants to know before a review or sending patient out on an emergency leave of absence – like index offence, past medical history, allergies, risk, drug seeking behaviour, important anniversaries which make a patient anxious, usual self-harm method, etc. We used pre- and post-project questionnaire to understand and chart the change in the two main areas – Quickness of accessing information and Ease of accessing information after having Patient CV on the system. This project ran from May 2020 – July 2020 and is now being extended further with full support from the Hospital Information Governance Team.

**Results:** To our surprise, we found that on an average, time to access the relevant information decreased by 87.43% and a subjective feeling of ease of accessing information increased by 50.04% after implementing the change. We also found that it was quite easy to make it sustainable as it only required once a month updating for any significant changes in the ward round for any patient. The initial project was aimed at two wards (one acute and one rehabilitation ward) and is now being extended to the whole hospital. The plan is to extend the usefulness of this model to whole of the forensic services of the West London NHS Trust to further increase impact and maintain continuity of care of these patients. Updating this CV on a monthly basis in the team meetings takes less than 5 minutes, and this is how we are making this project sustainable and lifelong.

**Conclusions:** We used the principle of automation in multiplying the time of junior doctors and site managers. The concept is simple - creating a process today which leaves enough time for tomorrow, in our case, it was creating a Patient CV – so that we don't have to spend time and difficulty creating it every time in our head or on paper during out-of-hours reviews. This concept can be extended beyond the long staying patients in forensic settings to community patients with long standing mental illnesses like Schizophrenia and Bipolar disorders. The whole idea is to let the computers store the data, but also to maintain the simplicity by which the quality of care is timely and efficient making our work easy than difficult in this era of information overload which is affecting our NHS software systems as well.