

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

Any NHS Electronic Patient Record software system has an enormous capacity of recording huge amounts of data. However, when it comes to extracting the relevant bits and pieces of information in emergency situations, the complexity of these systems bogs down our productivity. This is evident by their multiple tabs, time taken to load information and other numerous unavoidable issues that come with storing big data.

Same was the case at Broadmoor Hospital, one of the three high secure Forensic Hospitals of the United Kingdom, where it was a common daily struggle for on-call doctors and site managers to extract the relevant data from the system, particularly, during out-of-hours shifts. There was a gap and need for use of the concept of task automation for multiplying the time of professionals for this productivity problem. So, we explored solving this complex problem through application of a modern but simple concept – ‘task automation’ by creating ‘one-page long CV’ for all patients.

AIMS

The aims of this Quality Improvement Project were:

- To decrease the time spend in searching for clinically relevant information in patient notes at least by 40%
- To make it subjectively easier to access information at least by 40%

Thus, the two main domains of healthcare quality delivered to our forensic patients that we were focusing 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, which began in May 2020, 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 before sending patient out on an emergency leave of absence – like index offence, past medical history, allergies, risk, drug seeking behavior, important anniversaries which make a patient anxious, usual self-harm method, and so on.

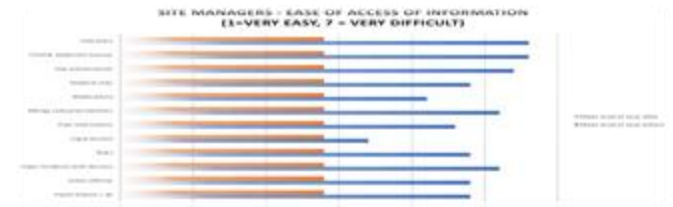
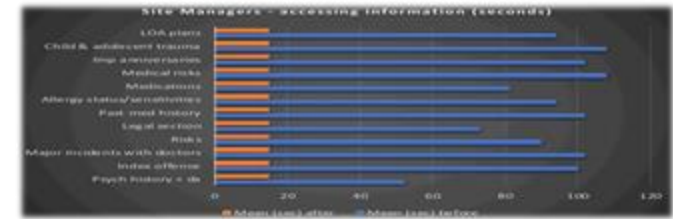
We used pre- and post-project questionnaires to understand and report the change in the two main areas

- Quickness of accessing information
- Ease of accessing information

RESULTS

To our surprise, we found that on an average, **time taken** 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. 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.

| Patient CV | | |
|-----------------------|---|---|
| NHS number: | DOB: | Ward: |
| Date of Admission: | Legal Section: | Allergies/Sensitivities: |
| Past Medical History: | Past Psychiatric History (Including current diagnoses): | Major incidents towards doctors since index offence: |
| Medications: | Childhood and Adolescence Trauma: | Risk (Low, Mod, High): To self - To others - To doctors - Subverting security - Self Neglect - Demanding meds - Non-Compliance - |
| T2/T3 medications: | Index offence: | Leave of absence plan: |
| Medically at risk of: | Important anniversaries (dates when he is/can be quite anxious +/- manifesting as physical symptoms): | Suitable methods of de-escalation: |



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 have any difficulty in creating it every time in our head or on paper during out-of-hours reviews.

This concept can be extended for use 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 rendered timely and efficient making our work easy than difficult in this era of information overload which is affecting our NHS software systems as well.



Source: <http://roryvaden.com/blog/the-focus-funnel/>

REFERENCES

1. Vaden, R., 2015. *Procrastinate on Purpose: 5 Permissions to Multiply Your Time*. TarcherPerigee.
2. Willis, M., Duckworth, P., Coulter, A., Meyer, E.T. and Osborne, M., 2019. *The future of health care: protocol for measuring the potential of task automation*. Grounded in the National health service primary care system. *JMIR research protocols*, 8(4), p.e11232.