

Identification of Responsible Clinicians in a Digitalised Healthcare Environment

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I. INTRODUCTION

Digitalisation of healthcare services involves the integration of technology for the provision of mobile health, wearable devices, information technology and telehealth to name a few examples. Within information technology, electronic medical records (EMRs) are increasingly replacing paper charts. However, the greater reliance on technology can present with incorrect implementation or usage of it. One such example involves the accurate identification of the consultant responsible for newly admitted patients on EMRs, which if done inaccurately could be a disaster for the patients' care. We wanted to assess this identification and its impact.

Index Terms — Digitalisation, electronic patient records, general surgery, escalation

II. METHODS

Digitalisation of healthcare services involves the integration of technology for the provision of mobile health, wearable devices, information technology and telehealth to name a few examples. Within information technology, electronic medical records (EMRs) are increasingly replacing paper charts. However, the greater reliance on technology can present with incorrect implementation or usage of it. One such example involves the accurate identification of the consultant responsible for newly admitted patients on EMRs, which if done inaccurately could be a disaster for the patients' care. We wanted to assess this identification and its impact.

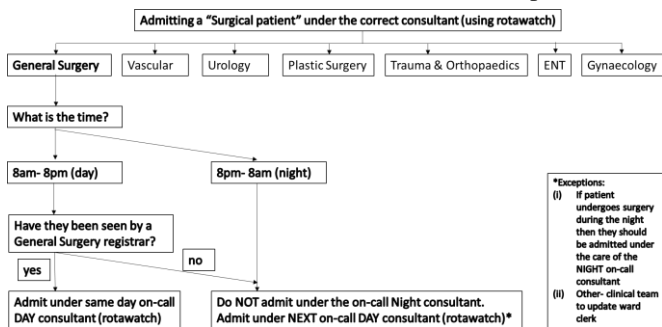


Figure 1: Flowchart directing administrative and clinical teams to identify the correct admitting consultant.

Please take a minute to highlight any changes to the allocated Specialty/ responsible Consultant during this patient's admission.

This will help our Administrative Teams to ensure that electronic systems are up to date.

This applies to all specialties (including: Gen medicine, Gen surgery, Vascular, ENT, Plastic surgery, Gynaecology, Trauma and Orthopaedics, Urology).

Form for patient information collection with fields for Name, Hospital/ NHS number, and DOB. Includes instruction 'Insert patient sticker'.

Table with 5 columns: Date, Consultant, Speciality, Other comments/ sub-specialty team, and Admission/Discharge rows.

Figure 2: Information collection sheet attached to front cover of all patient notes on admission.

III. RESULTS

Pre-intervention:

Sixty (60) patients were admitted between 00:01 12/07/21 and 23:59 18/07/21. Twenty (30%) had been assigned the correct consultant on admission.

Post-intervention:

Sixty-two (62) patients were admitted between 00:01 12/11/21 and 23:59 18/11/21. Thirty-four (54%) had been assigned the correct consultant on admission.

The difference between these results had a p-value of 0.029.

IV. DISCUSSION

Teams often work collaboratively, such as the general surgical on-call team often also clerking patients for urology, vascular or breast surgery, usually with different on-call consultants from these specialties. Even within general surgery, the on-call consultant changes throughout the day. As a result, the responsible consultant for an admitted patient may not be obvious to the surgical or administrative staff. Selecting the incorrect 'responsible consultant' for a patient on inpatient systems can have serious consequences such as wasted nursing time contacting incorrect teams, inaccuracy in follow-up queries, outstanding discharge summary requests, and complaints being directed at consultants who have never been involved in that patient's admission. This is a major source of complaints [3]. Importantly, these inaccuracies were also escalating unwell patients to the EMR devices of the incorrect teams, delaying patient care and possibly leading to increased patient morbidity.

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This study investigates how to identify the correct ‘responsible consultant’ and the impact of an information collection form on the patient notes from the surgical team to administrative staff. We found this, along with the other educational measures implemented, lead to significant improvement in EMR accuracy (30% - 54%), although further work is needed to achieve the 90% target.

This also helps in avoiding patients being escalated to the wrong team - delaying care, misdirected follow ups, and loss of continuity of care - all improving patient safety.

The limitation of this study was its sample size of one team’s admissions over 1-week period however this was reflective of the gross working pattern in the department.

The main recommendation of this study was to implement abovementioned measures before digitalisation takes place to prevent the scenarios of an incorrect responsible team being allocated.

V. CONCLUSIONS

With effective interventions, an improvement from 30% to 54% was made in a five-month duration in this study. The quality of care can be significantly improved by correctly identifying responsible clinicians in the electronic medical records system, which is becoming a common system of patient record keeping worldwide.

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