

## A temporal awareness of prescription changes in an electronic prescribing environment

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**Introduction:** The delivery of safe and effective healthcare is fairly dependent on the coordinated and collaborative way in which practitioners work. An awareness of the work that colleagues are undertaking or have completed facilitates this. Context-based workplace awareness has been defined as “*the mechanism of establishing awareness about the activities in a workplace based on access to information on work context*” (1). A dimension of this is ‘temporal’ awareness— knowing the progress of activities over time: past, present and future.

**Method:** Focus groups were conducted with physicians and pharmacists of varying grades at the University Hospitals Birmingham NHS Foundation Trust to discuss communication in the context of electronic prescribing (eP). The data were transcribed and analysed thematically using deductive and inductive approaches, facilitated by NVivo 10.

**Results:** Physicians and pharmacists expressed difficulty in determining the reasons behind the status of a prescription. They stated they were often uncertain whether prescriptions were intentional: “*By the time people come up to the ward, you don’t know if things have been changed deliberately or not. It’s not always written in the notes. And there’s no way of knowing and it’s really hard trying to figure that out or you just change it on the assumption...*” [D6]. Pharmacists reported a need to communicate with physicians to clarify and confirm the status of a prescription: “*I think that’s why we end up putting a lot more review notes on as well*”. Poor documentation of medication changes was noted as a major contributing factor. Both physicians and pharmacists expressed a wish for a timeline of changes to be visible within the eP system, and both adopted work-arounds in an attempt to achieve this. For example, with the use of an endorsement message function [P-note]: “*I will quite often, when I sign off a drug and I think there might be some question as to why I have changed or signed off, I will put a P note saying ‘as per pharmacist review notes’*” [D3].

**Conclusion:** Physicians and pharmacists expressed a need to be aware of prescription changes that have occurred within the eP system over time. Access to this information could facilitate coordinated care relating to medicines, which in turn has the potential to improve efficiency of associated tasks and improve communication at the interface of care.

### References:

(1) Bardram, J. and Hansen, T. (2010) Context-Based Workplace Awareness. Computer Supported Cooperative Work (CSCW), 19 (2): 105-138.