Transcription of supportive medication for inpatient chemotherapy by designated oncology pharmacists

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Introduction

• Systemic Anticancer Treatments (SACT), previously referred to as chemotherapy, are prescribed alongside supportive medication, designed to alleviate SACT side-effects. These are prescribed on a specialist electronic prescribing system, ARIA.

• Following several incidents where patients supportive medication were omitted, the oncology pharmacy department at UHS implemented a safety measure in the verification process for inpatient SACT (IPSACT).

• Oncology ward pharmacists (OWPs) must ensure all supportive medications are prescribed on the inpatient prescribing system (IAC) before the SACT treatment is released to the ward. Current practice is for doctors to prescribe the supportive medication.

• Delays in prescribing supportive medication may delay SACT administration, which impacts on workflow, extends admissions and leads to a poor patient experience.

Aim

To evaluate whether the transcribing pharmacist role reduces the IPSACT delivery time and occurrence of transcribing errors.

Methods

• Stage 1 (February-March 2019) involved assessing the efficiency of the current IPSACT process. The clinician-led process of prescribing supportive medication was mapped, and the time-taken for each step and transcribing errors were recorded by OWP for four weeks using a piloted data collection form. Average timescales for each step were calculated and compared against the UHS guideline targets.

• Stage 2 (June-July 2019) involved trained OWPs transcribing the supportive medication. Transcription and delivery-to-patient times and transcribing errors were again recorded using the same data collection form. Stage 1 (control period) and stage 2 (active period) mean delivery-to-patient and transcription process times were compared using a Student’s t-test and Welch t-test respectively. Transcribing error rates for each stage were compared using a Chi-square test.

• Ethical approval was not required for this service evaluation.

Results

• Data from 22 patients in the control period and 27 patients in the active period were analysed. The assessment of current IPSACT processes showed there were aspects of the service that were inconsistent with the UHS guideline.

• The mean IPSACT delivery time during the active period was 50.2 hours (range 24.7 to 75.7), a decrease of 23.7 hours (95% CI, -15.4 to 62.8) compared to the control period; however, this was not statistically significant p = 0.228.

• There was a notable decrease in screening process time, from 7.8 hours (range 4 to 11.6) in the control group to 3.5 hours (range 1.8 to 5.2) in the active period, a statistically significant difference of 4.3 hours (95% CI, 0.2 to 8.5), p = 0.039.

• The transcribing error rate during the active period was 4%, significantly lower than the 27% in the control period χ² (1) = 36.46, p < 0.001 (see figure 2).

Discussion and conclusion

We have demonstrated that involving OWPs in transcribing supportive medication significantly reduces the occurrence of transcribing errors, and there was a trend towards a reduction in IPSACT delivery time. Nonetheless, inconsistencies between current practice and UHS guideline raised important issues that may imply a further evaluation of the whole IPSACT process is required. The delay in the transcription of supportive treatment is certainly not the only contributor to delays in SACT administration. This study is limited by the small number of IPSACT reviewed and potential bias in the reported transcription times by OWPs. Consequently, further research is required to establish if additional interventions are required to improve oncology patients waiting time.

References