Interprofessional Care for the 21st Century: Redefining Education and Practice

Poster 10: Practice
Pharmacist-driven Interdisciplinary Computerized Prescriber Order Entry for Parenteral Nutrition

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To enhance safety and efficiency for ordering Parenteral Nutrition (PN) while promoting prescriber education and satisfaction.

The complexity of PN orders and the need for frequent pharmacist intervention impaired our efforts to use Computerized Prescriber Order Entry (CPOE) for processing PN orders. Audits revealed that 60% of PN orders required clarification or adjustment, accounting for 24% of all pharmacist interventions. A Failure Mode Effects Analysis uncovered many problems with paper/pencil orders and underscored the need to revamp our system for ordering PN.

Our interdisciplinary nutritional support team (NST) developed an innovative CPOE system that offers decision support and education to clinicians prescribing PN. The system features an interactive communication tool, viewable by all clinicians, that allows the NST pharmacist to post PN recommendations and rationale for changes that reflect input from all interdisciplinary NST members. After the prescribing clinician accepts/modifies the PN recommendations, the pharmacist submits an electronic PN order for signature. The NST used an inter-professional Likert-scale questionnaire to gather feedback about the system.

The dialogue established by the interactive feature of the system promotes an exchange of information between the prescriber and the NST while educating clinicians about the intricacies of PN management. CPOE also circumvents the potential for transcription errors and abolishes verbal orders. On a 5-point scale, users find the system convenient (4.20) and easy to use (4.20). Overall, respondents felt that the system has improved patient care (3.68), a finding reinforced by numerous free-text comments.

We implemented CPOE for PN ordering by developing a process that enhances interdisciplinary collaboration, promotes optimal nutrition therapy, and reduces the potential for PN prescribing errors. Pharmacists, nurses, dietitians, and physicians have expressed high levels of satisfaction with the CPOE process for PN.