Optimizing Technology to Improve Care in the Delivery of CRRT

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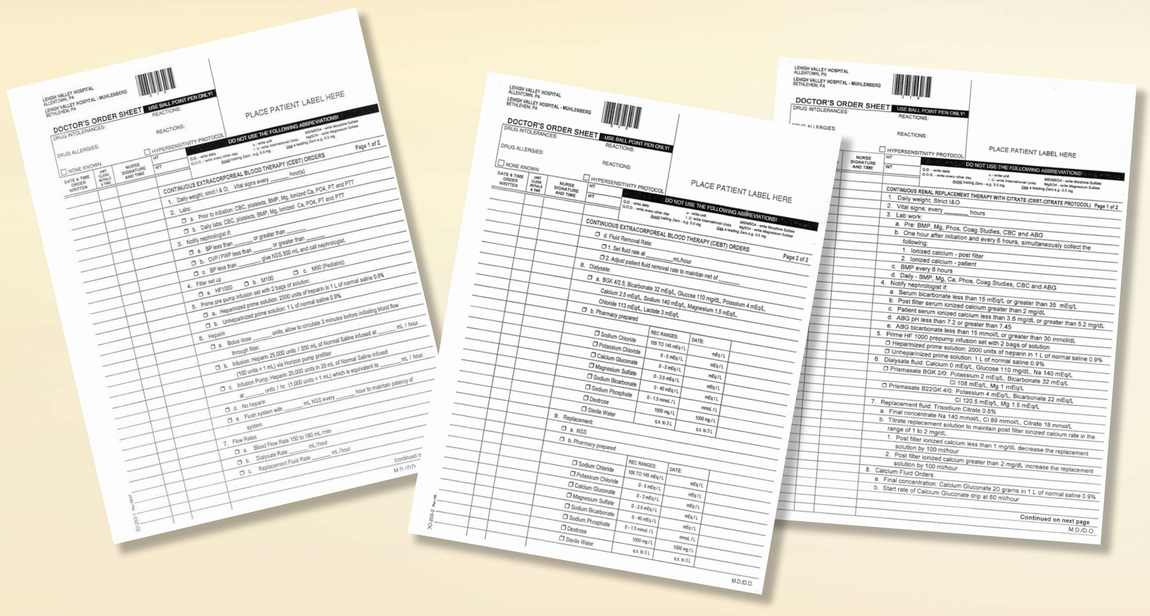
The application of information technology improves accuracy and decreases errors in the delivery of CRRT, standardizes practice and documentation, improves communication, improves monitoring and promotes patient safety.

Lack of Standardization

- Printed and handwritten physician orders
- Transcription of orders by pharmacists into EMAR
- Unit specific paper flow sheets
- Nurse specific calculations
- Inconsistency from unit to unit, shift to shift
- CRRT treatments performed in 7 critical care units in 2 hospitals

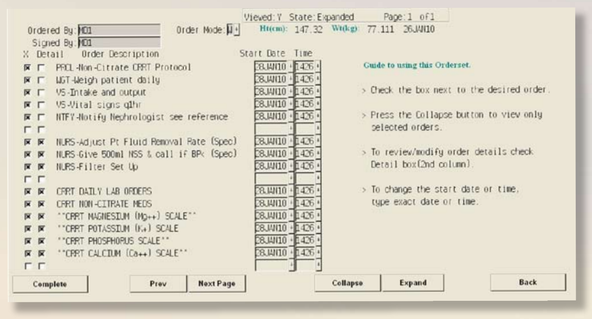
Additional Challenges

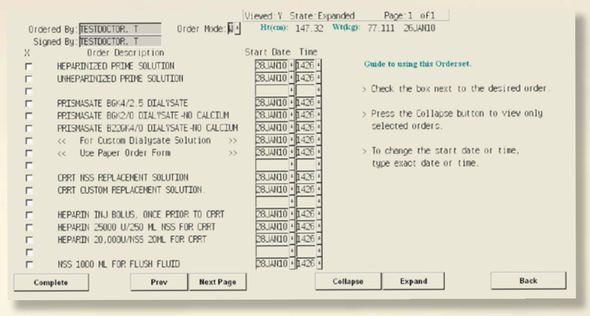
- Consensus amongst 21 nephrologists
- Physician specific sometimes conflicting instructions
- Paper flow sheets only available on units
- Delayed treatments based on processing paper orders
- Delayed documentation due to patient's care

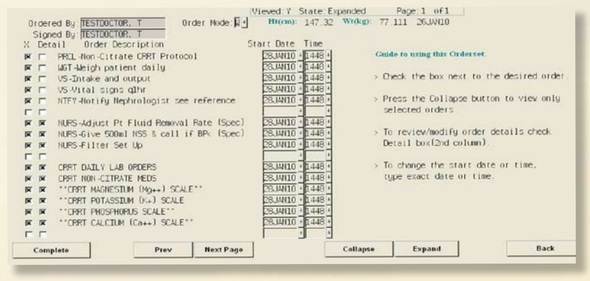


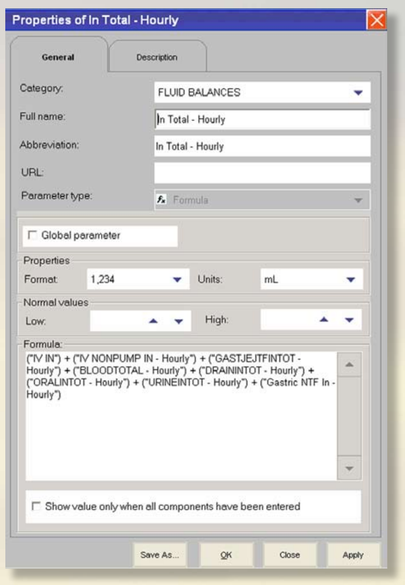
Standardization of Documentation

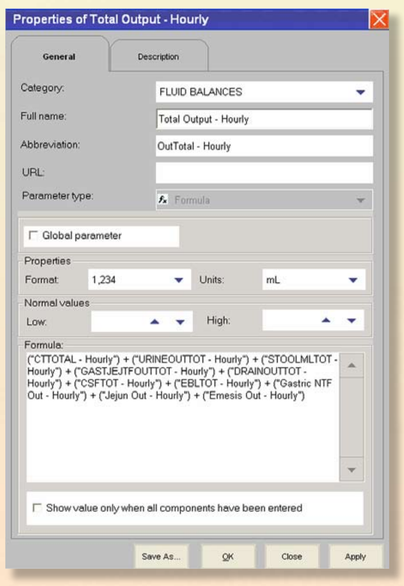
- Electronic flow sheet designed with assistance of end users and available to all 7 critical care units in 2 hospitals
- Automatic hourly I&O calculations increased accuracy and provided nurse with more time for patient care
- Electronic record provided real time access to all caregivers and promoted efficient evaluation and treatment

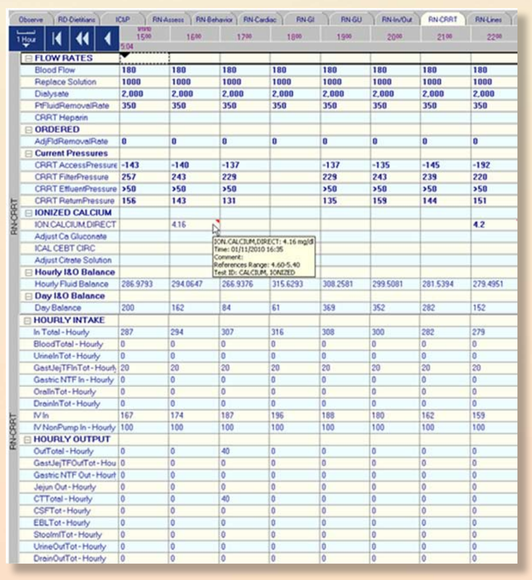












Standardization of Orders

- Physician enters all CRRT orders including custom orders via CAPOE
- Transcription of the orders to EMAR is automatic
- Medication orders are programmed to be included or excluded from I&O calculations