MEDITECH's complete, closed loop medication management solution goes beyond stand-alone CPOE, medication reconciliation, and medication administration solutions and provides the tight integration required to efficiently circumvent medication errors during all phases of the medication management process. Whether reconciling, ordering, filling, or administering medications, clinicians are able to ensure the safety of their patients, while improving the overall quality of care they deliver. As the demands placed on medication management systems continue to grow, it is becoming increasingly clear that only a tightly integrated, complete medication management solution can provide all of the checks and balances needed to guarantee safe medication delivery.
Medication Reconciliation

MEDITECH supports the reconciliation of medications across care settings. For example, when a patient presents at the hospital, clinicians can review a list of medications the patient is currently taking. They can also check the patient's medication claims history, and select additional medications to add to the list of reported home medications, ensuring a complete list. Once the patient is admitted, providers can again review ambulatory medications, including those dispensed in the Emergency Department and select which ones to convert to inpatient medications.

Likewise, when the patient is discharged, the consultant can select which inpatient medications and original ambulatory prescriptions to convert into a new set of ambulatory prescriptions.

Consultant Ordering of Medications/CPOE

MEDITECH’s Computerized Provider Order Management (CPOE) capabilities are designed to maximize patient safety and minimize the possibility of error during medication order entry. The integration of our Pharmacy and CPOE solutions means that when consultants place medication orders, the orders are electronically sent to the pharmacy and appear on the pharmacist worklist within our Pharmacy application.

The system automatically performs interaction checks, scanning for potential drug and allergy interactions, as well as potential conflicts involving the patient’s lab results, diet, or disease. Additional checks include warnings for IV incompatibilities, contraindications, and duplicate therapies. With this critical information at their fingertips, providers are able to make decisions in a timely and efficient manner.

A drug dosage calculator helps care providers select the appropriate dosage based on the patient's age, gender, height, weight, and body surface area and flags for potentially harmful doses. Each warning is accompanied by additional detail regarding the potential conflict, such as the severity and type of interaction. When flagged about an interaction or other conflict, providers can choose to cancel the order, proceed forward, or select from a list of alternative medications. This is based on the provider’s privileges as well as the type and severity of the interaction. Comments can also be required when overriding specific warnings, while audit trails track all warnings which are overridden.

Reviewing and Processing Medications in the Pharmacy

An integrated Pharmacy system is critical to safely managing patient medications across a healthcare organization. The tight integration between MEDITECH’s Pharmacy, order management, and medication administration functionality gives providers a system of checks and balances, greatly reducing the potential for drug interactions or other adverse reactions. As all applications share a single drug formulary, allergy record, and medication administration record, there is no redundant data entry, and all care providers are given access to the most up-to-the-minute information.
All interaction checking performed during the ordering process can be repeated in Pharmacy, including checks for drug and allergy interactions, drug dosage calculations, incompatibilities, duplicate medication orders, and checks against the patient’s most recent lab results. Rule-based logic can also be invoked to provide additional warnings when ordering, dosing, filling, and refilling medications. Whenever a warning is issued, pharmacists have the option to either override the warning or notify the consultant with a list of alternative medications.

**Medication Administration and Bedside Verification**

The integration between MEDITECH’s Patient Care System and Pharmacy applications ensures medication orders automatically flow to the electronic Medication Administration Record (eMAR). As a result, care providers throughout the organization have immediate access to the right information at the right time. The integration also allows nurses to view discontinued medications, dose changes, and interaction warnings generated by the Pharmacy prior to administering medications.

Nurses administering medications may access the eMAR to review patient dose instructions, recent medication administration history, and any associated data pertaining to a specific medication. Clinicians can generate reports listing the errors and warnings the system generated during medication administration. Nursing management can also assess the utilization and effectiveness of the eMAR and verification system through reporting functions provided in the software.

To further automate the medication administration process, while offering an added level of patient safety, MEDITECH’s solution includes bedside medication and transfusion verification capabilities. Utilizing bar code scanning technology, nurses are able to confirm a patient’s identity and medication or transfusion information against data readily available in the eMAR.

**Patient Education at Discharge**

To close the loop and provide departing or discharged patients with proper instructions regarding their medications, the MEDITECH system gives organizations the ability to assemble a packet of information for patients to take home with them. The discharge packet includes editable drug monographs supplied in conjunction with formulary service vendors, which provide patients with valuable knowledge about their medications.

To ensure patients continue to receive proper treatment following discharge, the discharge packet can also include Patient Discharge Instructions, which provide relevant consultant-approved recovery care instructions. MEDITECH’s Patient Discharge Instructions (PDI) Integration incorporates evidence-based clinical content from industry-leading vendors EBSCO Publishing, Krames StayWell, ExitCare, and Truven Health Analytics directly into the workflow of our clinical products.

Through MEDITECH’s system integration, patient medication information, clinical, and demographic data are automatically pulled from throughout the EHR and incorporated into the discharge packet.
An Integrated, Closed Loop Solution

Safe medication delivery goes beyond medication reconciliation alone and requires a fully integrated single-vendor solution which supports medication reconciliation, computerized consultant order entry, bedside verification, and e-prescribing. MEDITECH’s medication management solution includes all of these components, which are fully integrated and specifically designed to work together to provide a closed loop solution which promotes safety and provides consistency across all stages of medication delivery. Wherever a patient is in the care continuum, MEDITECH's solution ensures the right medications follow.