

**Error Reduction and Patient Safety Project
Luther Midelfort-Mayo Health System
2000 Acclaim Award Honoree**

Luther Midelfort-Mayo Health System designated Error Reduction and Patient Safety as a strategic objective and participated in a collaborative project, sponsored by the Institute for Healthcare Improvement. Initial chart reviews indicated that about 230 medication errors occurred for each 100 admissions to one of the medical units. By using the PDCA cycle they were able to quickly pilot protocols and are now implementing the innovations in all units.

Goal

To improve patient safety through the reduction of medication errors.

Intervention

Improved reconciliation and verification of medications at the interfaces of care: admissions, transfers and discharges used protocols that standardized and simplified use of high risk drugs; implemented best practices for drug administration; and implemented a non-punitive error reporting policy.

Highlights

- Project leader met weekly with the CEO and Medical Director to provide progress reports and discuss potential barriers.
- High-risk drug innovations include: a single weight-based heparin protocol, nurse-run protocols for outpatient coumadin management, pharmacy-run coumadin protocols for initiating and ordering for inpatients, sliding-scale insulin protocol, and a post-op pain protocol.
- Standardized IV pump, color coded IV tubing and labels for each route of administration, made epidural tubing non-compatible with IV tubing, used oral syringes for oral medications.
- Discharge orders and post-hospital prescription all in one sheet, nurse and pharmacy admission protocols, nurse and physician transfer protocols, and discharge reconciliation forms all helped reduce potential for errors at interface of care.
- 48-hour Amnesty Program, with no disciplinary action taken against the employee and nothing placed in the employee's file, provided a safe environment for reporting errors.

Results

- Non-punitive error reporting system resulted in a twelve-fold increase in the gathering of error data, and associated learning increased exponentially.
- Potential adverse drug-reactions were reduced by 83 percent during the pilot period on one unit.

Luther Midelfort, a member of the Mayo Health System, is a 180-physician group in Northwestern Wisconsin, with three hospitals and 19 clinics in various locations in Northwest Wisconsin. The payer mix is 25 percent managed care (mostly their own health plan), 60 percent Medicare and Medicaid. The remainder is commercial insurance.