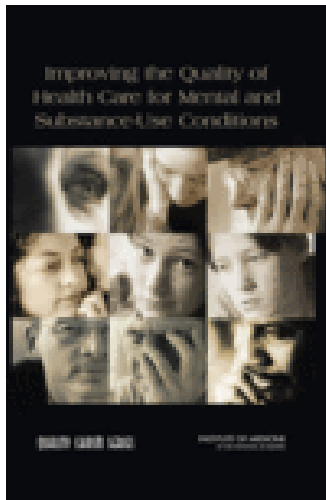


Sequest develops with Improving Patient Safety as a Goal



There are some serious flaws in our patient care delivery systems. Typically addiction treatment providers need to assume applicability to patient safety from acute care settings; refer to Institute of Medicines (IOM) publications "To Err is Human" and "Crossing The Quality Chasm." However, in 2006, IOM released a study focused on the mental health and addiction treatment settings in the United States; "Improving the Quality of Health Care for Mental and Substance Use (MH/SU) Conditions." This finally brought national attention to improving conditions in our treatment settings. **Our purpose here is to summarize key aspects of those studies and demonstrate Sequest's ability to address your needs with our products and services.**

"At least 44,000 people and perhaps as many as 98,000 die in hospitals each year as a result of medical errors that could have been prevented" (To Err is Human: Building a Safer Health System). IOM strongly urges providers to create patient safety programs, make safety a number one priority for all staff and dedicate resources and funds to error analysis and the redesign of flawed processes. One of the main suggestions derived from research across all areas of healthcare is the use of an electronic health record (EHR). Sequest took the following strategies outlined in the literature into their product development:



- Adopt a system oriented approach to medication error reduction.
- Implement standard processes for medication doses and dose timing.
- Standardize prescription writing and prescribing rules.
- Implement a physician order entry.
- Implement unit dosing.
- Use special procedures and protocols for use of high risk medications.
- Make relevant patient information available at point of patient care.

Sequest Technologies, Inc. is unique, as both its founder, Len Brink ACSW and its President/CEO Bill Connors, LCSW, are from the provider community and continue to design research and build technology tools to meet the needs of their provider partners. The TIER® Workflow System for Addiction Treatment is a patient care continuum that was developed to improve patient safety from many aspects inclusive of the IOM recommendations.

We utilized the studies of IOM, American Society of Health Systems Pharmacists, the National Coordinating Council for Medication Error Reporting and Prevention, National Patient Safety Partnership and the Massachusetts Coalition for the Prevention of Medical Errors-**all of which strongly suggest the implementation of a computerized Physician Order Entry (CPOE) and a electronic Medication Administration Record (MAR)**. These studies provided Sequest with substantial research to justify its development of the TIER[®] Workflow System's CPOE and MAR.

Our development of a medication administration record (MAR) and computerized order entry system began long before the IOM focus on the reduction of medication errors through the use of these tools.

Sequest was asked to develop a Computerized Order Entry (CPOE) and an electronic Medication Administration Record (MAR) for the physicians at La Hacienda Treatment Facility in Hunt, Texas. The vision of La Hacienda's former CEO, Frank Sadlack, was to eliminate paper records throughout his alcohol/substance abuse treatment hospital. Sequest and La Hacienda combined their technologies and business expertise and created the first version of TIER[®]'s CPOE and MAR. This system has been fully operational since its delivery and remains held in high regard by the physicians at La Hacienda. This revolutionary development was one of the first between a behavioral software vendor and a treatment provider to create this progressive functionality.

"I have been using TIER for two and a half years. There are major advantages in patient management. When I type an order in for labs, medications or even a general order, it immediately is processed by the appropriate department. I can enter an order for a medication, sign it, and the patient can walk the twenty yards to the pharmacist and the pharmacy has the order on his computer, ready to give the medications. It has stopped mistaken meds, illegible hand writing, and delays waiting for someone to take an order off. This has been my first experience with an EMR and it has been a very pleasant one."

Daniel Boone, MD
Medical Director
LaHacienda Treatment Center

The TIER[®] CPOE provides the physician with all the necessary data at the time of ordering to assist in delivering correct medication. Sequest took the physician ordering process further by designing automated protocol ability. If the organization has admissions orders and detox protocols we generate the many collective orders to the pharmacy or nursing staff with a click of a button. We allow the partnering of non-medication orders as well within our protocols-dietary, lab or special needs-all generated at the time of physician entry. In many of our installations these orders are automatically sent to pharmacy software via an HL7 interface or the TIER[®] Fax It Utility. This streamlined process is live and operational within many of our National Association Addiction Treatment Providers (NAATP).

The TIER[®] MAR is a collection of all the vital data needed to make medication administration decisions. All pertinent patient data appear on the screen; vitals, allergies and known issues that allow the nurse to make the administration decision, mark as held or mark as refused/missed. Nursing staff see only medications within a proper administration window; as an example, 1 hour before admin time and one hour after admin time. Once medication administration time has passed the medication is automatically marked as missed and TIER[®] can alert any number of staff. The time spent

questioning hand written cardexs or transferring active meds from one sheet to another is eliminated and nursing is allowed more time to provide safe, quality care.



We used our extensive experience with CPOE and MAR and added a visionary feature in 2005-bar code scanning administration. At that time JCAHO, HHS and FDA appeared ready to mandate unit dosing for inpatient care settings. Our staff re-opened our TIER® MAR and patient identifiers to allow for the use of bar codes. Sequest developed a



revolutionary processes within M/SU software of being able to scan a patient code (wristband or card) automatically opening the MAR and then scanning a unit dose blister pack for the administration of the medication. This process allows for several patient identity authentications; self report, picture on MAR, scanning of wristband as well as accurate administration of medication through the medication bar code. Bar Coding has been utilized by TIER® partners in other areas as well - group attendance, inventory control and staff identification. The combination of our market knowledge and technological ability provides us with unparalleled ability to be prepared for the looming mandates of bar coding and unit dosing.

“Bar codes can help doctors, nurses, and hospitals make sure they give their patients the right drugs at the appropriate dosage”

Tommy Thompson
Former Secretary
Health and Human Services

The bar-code rule is designed to support and encourage widespread adoption of advanced information systems that, in some hospitals, have reduced medication error rates by as much as 85%. In a study conducted at a Veterans Affairs Medical Center employing such a bar-code scanning system, 5.7 million doses of medication were administered to patients with no medication errors.

www.pharmacist.com
February 26, 2004

Medication Administration Record (Collins, Matthew)

Collins, Matthew Admission Filter: 09/19/2007 Client Encounter Close

Current Medication Administered Meds Missed Meds Today's Meds

Current Medications

Med Order Range: All Scheduled PRN Hold

Min: Jan 18 2008 8:32AM

Max: Jan 18 2008 2:32PM

| Client Name | Medication | Dose | Strength | RT | Frequency | Time | Start Date |
|------------------|-------------------------|------|----------|----|-----------|---------|------------|
| Collins, Matthew | LORAZEPAM 2MG TAB | 1 | 2MG | PO | QD | 11:00AM | 01/18/2008 |
| Collins, Matthew | ACETAMINOPHEN 500MG TAB | 1 | 500MG | PO | PRN Q4 | | 01/18/2008 |

Administer Meds Mark Meds as Missed Hold Med

[KETOPROFEN 50MG CAP] Medication Administered

Vital Signs

| Date | Time | BP | Pulse | Resp | Temp |
|------------|----------|--------|-------|------|------|
| 09/27/2007 | 12:28 PM | 126/80 | 67 | 12 | 100 |

It is strongly suggested to all care providers that deliver patient medication to read “Improving the Quality of Health Care for Mental and Substance Use (MH/SU) Conditions.” Sequest Technologies is not alone in its belief that the TIER® Workflow System for Addiction Treatment can assist you in the challenges of patient safety; the research suggests it and it will soon be mandated. **The time of electronic health records being optional within inpatient care settings is over.**

“There are financial and qualitative reasons to embrace CPOE’s in healthcare. Our client research is astounding when it pertains to amount of licensed professionals rewriting and clarifying orders. This time could and should be spent providing care rather than performing administrative tasks.”

Bill Connors, MSW
Sequest President

To examine the TIER® Workflow System for Addiction Treatment and our TIER® CPOE and MAR, please call us at 877-630-TIEr or solutions@sequest.net.