2010 Negley Awards for Excellence in Risk Management

Lakeside's Best Practices: Minimizing Medication Errors

Lakeside Behavioral Healthcare, Winner of The President's Award

According to the FDA, "Medication errors cause at least one death every day and injure approximately 1.3 million people annually in the United States" (FDA, 2009, p. 1). Clearly the importance of reducing medication errors cannot be overstated. The FDA reports that errors occur during prescribing, repackaging, dispensing, administering or monitoring of medications as a result of poor communication, ambiguities (in names, directions or writing), poor procedures or patient misunderstanding.

Lakeside Behavioral Healthcare, Inc. takes a comprehensive and aggressive approach to monitoring and minimizing medication errors. This approach includes a) client education and informed consent; b) careful prescribing, administration and monitoring of medications; c) the development and implementation of an agency-wide Medication Management system for Medication Reconciliation and electronic prescriptions; d) an on-site Pharmacy that provides close monitoring, consultation and education regarding prescribing practices; e) increased education and a "no-blame" approach for nursing staff and f) ongoing audits and reports for performance improvement. As we are Joint Commission accredited, we adhere strictly to the Joint Commission standards and National Patient Safety Goals.

Before clients are given a new medication, they receive education on the risks and benefits of the medication and are provided with a Medication Consent form for each medication they are prescribed. These consents contain up to date, pertinent information about each medication including possible side effects *(Attachment A - Medication Consents and Procedure 1540c- Informed Choice and Expressed Consent)*. Inpatient clients are evaluated for their competency to consent to treatment within 24 hours of their admission and assigned a Healthcare Proxy to consent to treatment for them if they are not found competent *(Attachment B - Procedure 4430b - Treatment Considerations)*. All inpatient and outpatient programs provide medication education to clients and their families as an ongoing part of treatment.

Careful prescribing, administration, and monitoring of medication is another critical part of our approach to minimizing medication errors. Lakeside Behavioral Healthcare, Inc. has several policies and procedures in place to ensure we follow best practices related to these in addition to providing ongoing staff training and auditing *(Attachment C - Procedure 4521d- Drug Prescribing and Ordering)*. All staff have easy access to all of our policies and procedures as they are on our Intranet.

Physicians can view all ... current medications, discontinue ... and prescribe medications on electronic prescriptions at the same time, thus allowing our physicians to consider drug interactions and reconcile each client's medications.

All medications must be ordered by a physician or ARNP. A physician may give a verbal order to a Registered Nurse only. In this case, the RN must document the order on the Physician's order sheet carefully with the name of the physician giving the order, the date and time the order was received and that he/she read the order back to the physician with TORB or VORB. The physician is then required to counter-sign the verbal order within 24 hours. All medication orders are transcribed to a separate Medication Administration Record (MAR) for each client from the physician's order sheet. The medication order must be transcribed by one nurse and verified by the charge nurse or another RN on the MAR. All nurses are trained on the acceptable abbreviations to use on the physician's order and MAR as well as on the Joint Commission "Do Not Use" abbreviation list *(Attachment D - Procedure 4050f - Medication Charting & Official "Do Not Use" abbreviation list)*. These lists are also available on our Intranet as well as the Lexi-Comp PDR.

Before administering a medication, the medication nurse verifies that the medication order is correct, checks the order against any known allergies, and checks the medication container label and drug three times before placing the pill in the container for administration. Before the client is given the medication, the nurse is required to verify the client's identity by at least two forms of identification. All medication administrations or refusals are documented on the MAR. In addition, each time a client receives the first dose of a medication, the client's response must be documented on the PRN/ETO/ First Dose Justification Record *(Attachment E - MAR, PRN/ETO/First Dose Justification Record and Procedure 4522e - Administering Medications)*. Client lab work is also ordered and reviewed as clinically necessary for certain medications *(Attachment F - Procedure 4525.3c - Blood Level Monitoring)*. These procedures are monitored monthly by Clinical Peer Reviews and Quality Management audits.

The National Patient Safety Goal regarding Medication Reconciliation inspired our Performance Improvement (P1) and Information Technology (IT)

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Departments to work aggressively to develop a system where our physicians would always have available a complete list of client medications to review when they are prescribing. The IT department developed a software application that allows assessment staff to enter all medications a client is taking that are not prescribed by Lakeside including over-the-counter medications, vitamins and herbs. This application is available to both inpatient and outpatient staff and physicians. From this application, physicians can view all of a client's current medications, discontinue medications and prescribe medications on electronic prescriptions at the same time, thus allowing our physicians to consider drug interactions and reconcile each client's medications. In addition, the system has almost eliminated handwritten prescriptions therefore eliminating filling errors related to ambiguities in names, directions and handwriting. Lakeside Behavioral Healthcare, Inc. has had no (zero) ordering errors in the past three years. Once a prescription is entered into the system, the updated information is automatically entered in our Electronic Medical Record (EMR) and a copy of the updated medication list is also given to clients to take with them for their benefit and the benefit of their caregivers in order to reduce patient misunderstanding *(Attachment G - Screen shots of Medication Management System).* Even though Joint Commission has suspended the medication reconciliation standards due to problems with implementation in many agencies, Lakeside has chosen to continue to require these standards in our facilities.

Lakeside also has our own on-site pharmacy which follows Pharmaceutical Best Practices regarding the labeling of medication, monitoring of interactions (with software support), monitoring of patient education *(See attachment H - Procedure 4502b-Medication Treatment Education).* The pharmacy has recently improved their method of labeling medications with both the generic and brand name in addition to the labeling of "high alert" medications which has dramatically reduced the amount of filling and labeling errors from .036 in fiscal year 2006/2007 to .016 in fiscal years 2007/2008 and 2008/2009 even though our pharmacy filled 115,526 inpatient and outpatient prescription orders this past fiscal year. The pharmacy has also recently upgraded their pharmacy management system which profiles every medication order. As a result, the system is able to check for prescribing errors, drug interactions and various types of allergies *(Attachment I - Procedure 4523d - Food and Drug Interaction Counseling).* Being onsite also allows the pharmacy easy access to prescribers if there are any questions about a prescription so these can quickly be resolved.

Another way the pharmacy works with the agency to prevent errors is by providing consultation and training to Lakeside clinical staff. Under the direction of the Director of Pharmacy Services and the Medical Staff Committee, Lakeside developed and maintains a procedure manual designed to standardize company practices for the use and control of medications *(Attachment J - Procedure 1216f - Administration and Management of Pharmacy Services and Medication Use & Pharmacy Services & Medication Use Policy and Procedure Manual).* In addition, the pharmacy performs monthly inspections of every area that medication is stored to ensure that medications are stored in accordance with accepted principles and laws *(Attachment K - Procedure 1665.31-Inspection of Drug Storage Areas).* In addition to pharmacy inspections, two nurses are required to perform this inspection on each unit during each change of shift. As a result, the inpatient units have maintained over 90% accuracy on these reports.

In addition to the above audits, we encourage nurses to report Medication Variances with a "no-blame" approach that perceives an incident as an opportunity for learning and the development of systematic improvements rather than wasting time finding blame *(Attachment L - Procedure 2912g - Documentation of Medication Variances).* Each time there is a variance, nursing staff receive additional training. Medication variances are primarily transcription/documentation errors that are identified by staff before medications are administered. Though staff are consistently reporting these variances, we have maintained an extremely low rate of variances for several years and no medication variances have resulted in a client needing a higher level of care.

All of these audits/reports are sent to each program manager and the Quality/Risk Management Department for review, trending and corrective action if needed. Pharmacy reports and reports of other Quality Related Events (Medication Variances) are continuously reviewed by the Pharmacy Continuous Quality Improvement (CQI) Committee *(Attachment M-Procedure 1665-Pharmacy CQI Sub-Committee)* who report to the agency's Clinical and Ethical Practices Committee. The Clinical and Ethical Practices Committee reports to the Agency's Performance Improvement Council. The Performance Improvement Council continuously reviews trends and develops action plans for any areas needing improvement in the Agency.

In conclusion, though we have not completely eliminated all variances/errors, our comprehensive, aggressive strategies have proven effective in reducing medication errors and improving the safety of our clients. We have recently purchased the Avatar Practice Management and Clinical Workstation software system and are actively working towards implementing this throughout our agency. With this system, we will be considering the Order-Entry, E-MAR and Info-scriber systems to take us another step closer to *eliminating* medication errors. ❖

References:

Medication Error Reports. (April 2009). US. Department of Health and Human Services Food and Drug Administration. Retrieved 10/30/09 from: http://www.fda.gov/Drugs/DrugSafety/MedicationErrors/ucm080629.htm

Attachments and additional information available from:

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Lakeside has been in business for over 25 years and is accredited by the JCAHO. It serves approximately 18,000 people annually in three primary locations in the Orlando area, employing approximately 650 professionals and support/administrative staff.

The mission of Lakeside is to provide compassionate, comprehensive, cost-effective behavioral healthcare services that focus on individualized recovery to the people of Central Florida.