Infection control in long-term care (LTC) is similar to providing routine maintenance for your vehicle. Failing to change the oil, inflate the tires and test your battery will eventually leave you stranded along the side of the road. Residents, as well as the staff caring for them in nursing homes and assisted living facilities, are similarly impacted when infection control standards are not consistently practiced. Immunocompromised residents face the rigors of treatment related to avoidable infections, hospitalizations and even death. If they fail to diligently follow infection control practices, staff can themselves become ill and/or carry drug resistant organisms outside of the facility.

Enter the Ebola virus onto America’s healthcare landscape. Concepts, such as hand hygiene and standard precautions, have given way to personal protective equipment and 21-day incubation periods. To many, the clinical response to this deadly disease looks like an infection control program on steroids! And while it’s hard to imagine Ebola affecting LTC in a widespread fashion, clearly it will have an impact. Changes to admission assessments will likely include questions regarding a resident’s recent travel history. Facilities may very well provide rehabilitation services to residents as they recover from a severely debilitating Ebola infection.

Now is an ideal time for leaders in LTC facilities to reexamine their overall efforts towards infection prevention and control. Using the federal regulation F 441, Infection Control, and the associated guidance to surveyors as a baseline, facilities can determine if they are meeting minimal standards or employing best practices. As is the case with many regulations, F 441 describes broadly defined goals (i.e., “The facility must establish an Infection Control Program under which it investigates, controls, and prevents infections …”) rather than...
Drug Diversion in the Nursing Home

Prepared by: Bethany Schultz, Pharm.D., Clinical Consultant Pharmacist

Diversion of drugs is defined as the unlawful channeling of regulated pharmaceuticals from legal sources to be used illicitly. Drug diversion is a common occurrence in all healthcare facilities; however, the exact number of instances is unknown, since many issues are dealt with internally and are never reported to higher authorities. Nurses who divert medications in the workplace can cause harm to themselves, to the patients, and they can become a liability to their employer. Any employee is capable of diversion - no matter his/her age, education, or time with the company.

The most common medications diverted in healthcare facilities are those that relieve pain or alter mood, or consciousness. These medications include, but are not limited to, benzodiazepines, narcotics, and stimulants. Those who take these medications can be using them in many different ways. Not all people who steal medications are drug addicts. Some signs and actions to look for that may indicate a drug diversion include unexplained employee disappearances from the unit, making rounds at odd times, patients’ reporting the lack of pain relief or increased PRN sign-outs (both usually confined to one unit) offering to medicate co-workers’ patients, discrepancies with narcotic sheets, and unexplained alterations in orders. Although not all employees who divert medications are doing so to consume them, addiction in the workplace is a possibility. Some physical signs of intoxication to watch for can include shakiness, excessive fatigue, watery eyes, weight loss or gain, and changes in pupil dilation.

A common misconception is that if an employee is taking medications, it only brings harm to himself or herself. Stealing medications does not only bring harm to the culprit, but also can harm the patient, as well as the facility. For the offender, stealing medications from the supply chain can result in felony prosecution and civil malpractice actions, as well as actions taken regarding their professional licensure. Patients can be harmed in a number of ways, including suffering injury from withholding pertinent medications, the administration of contaminated drugs in place of the diverted drug, receiving an alternate drug to which they are allergic, or simply the potential risk of being under the care of an impaired individual. The facility itself is at risk by possible loss of revenue and civil liability for failure to prevent diversion. Facilities with significant drug diversion are subject to investigation by local law enforcement, the Board of Pharmacy, the Board of Nursing, and the Drug Enforcement Administration (DEA).

In order to ensure that patients are getting the correct medication and diversion is not occurring, be sure to follow proper procedure when dealing with narcotics throughout the day. This includes the off-going and on-going nurses doing a shift count, looking at both the medications and count sheets, (all narcotics, including contingency stock narcotics, have a count sheet with them). It is essential that the administration of medication is done appropriately with accurate documentation of administration to or refusal by the patient. In addition, documentation of the receipt of medications from the pharmacy must be completed. If there is a discrepancy, notify the charge nurse immediately. If there is suspicion of diversion, do not be afraid to report it to a supervisor. Most facilities have a policy of how to handle these situations, but as a director of nursing or administrator, call your consultant pharmacist as soon as you realize there is a problem. Your team of pharmacists can help you along the way and know whom you need to contact.

Some helpful hints to avoid the surprise of diversion include checking for proper documentation of administered PRN medications, holding surprise audits of narcotic drawers/count sheets, and discontinuing unused PRN medications to eliminate the potential for diversion. Do not forget that any employee can be diverting medications. As soon as diversion is suspected, contact the appropriate people and follow your facility’s policy. No one wants to deal with a theft, but should it occur, your team at Remedi can help you through the process.

Selected References


The Anticholinergic Burden

Prepared by David Hicov, R.Ph., MBA, Clinical Consultant Pharmacist

A recent editorial published by The New York Times highlighted ongoing concerns that commonly prescribed medications may exhibit anticholinergic properties. The elderly are particularly susceptible to anticholinergic adverse effects that could lead to delirium, worsening dementia, cognitive dysfunction, oversedation, falls, dry mouth, urinary retention, etc., ultimately resulting in excess morbidity and mortality. Anticholinergic effects may also be linked to reduced effectiveness of drug therapy regimens treating dementia, such as cholinesterase inhibitors like Aricept. Reducing and predicting the risk of anticholinergic-induced adverse effects has led to the development of scales designed to assign a quantifiable score to individual medications to determine relative anticholinergic risk.

The attached table outlines some, but not all, drugs assigned to the respective groups. Drugs are classified with an ACB (Anticholinergic Burden) score of 1 (mild), ACB 2 (moderate), and ACB 3 (severe). When the components of a patient's medication regimen are evaluated, the ACB scores are added to obtain anticholinergic risk. Interestingly, the traditional first generation antihistamines all appear in the ACB 3 list, leading to potential complications for people that may be self-treating problems with OTC medications. Antipsychotic medications, both first and second generation, permeate the list between ACB scores of 1 and 3. Agents not normally suspected of possessing anticholinergic effects are also found in the table (i.e., Metoprolol, Atenolol, Nifedipine, Nitrates, warfarin, etc.). Individual drugs within a therapeutic class may have properties (Paroxetine, Alprazolam, etc.) while others do not. The amount of medications with anticholinergic effects is profound and somewhat troubling.

One study has linked mortality, along with expected cognitive impairment, to anticholinergic burden. An ACB score of 4 or greater was associated with higher mortality rates, with odds of death increasing by 26% after the addition of each subsequent point. This particular study obviously cannot be viewed as the final statement on anticholinergic induced adverse effects but when combined with similar studies, it is certain that anticholinergic adverse effects significantly increase the risk of delirium.

Taking into account an aging population and polypharmacy, it becomes imperative that members of the health care team familiarize themselves with these medications. Through systematic analysis and individualized regimen scoring, patient specific data can be utilized to predict and possibly mitigate anticholinergic induced adverse effects. If you have any questions or would like more information, please contact your Remedi consultant pharmacist.

Selected References


specific interventions as requirements for compliance. Therefore, facilities should be well versed with the standards published by such organizations as the Center for Disease Control (CDC) and the Association for Professionals in Infection Control and Epidemiology (APIC) as they develop and refine their infection control programs. Areas of heightened regulatory risk include the following:

- **Human Resources**: Gone are the days when the facility’s infection control practitioner wore several other hats (DON, in-service director, director of employee health, etc.). While the federal regulations do not specify staffing in the area of infection control, failing to allocate sufficient resources to provide on-going oversight of the infection control program frequently results in deficiencies.
- **Immunizations**: A robust immunization program for both residents and employees is central to any infection control program. For example, few interventions offer as much proven benefit to residents as influenza vaccinations for staff, and many organizations are currently making them mandatory as a condition of employment. Use the expertise of your medical director and consultant pharmacist when developing this aspect of your infection control program.
- **Hand Hygiene**: Like many aspects of clinical care, attention to detail and incorporating evidenced-based practices into daily routines can improve outcomes dramatically. Nothing highlights these principles like the simple act of consistently washing one’s hands while providing care. F 441 specifically requires staff to “… wash their hands after each direct resident contact for which hand washing is indicated by accepted professional practice.” Surveyors are attentive to this issue, and deficiencies are consistently written related to the lack of appropriate hand hygiene. An excellent resource on point is provided by the CDC at www.cdc.gov/handhygiene.
- **Surveillance**: As the saying goes, “what gets measured gets done.” Facilities are required by regulation to “maintain a record of incidents and corrective actions related to infections,” in other words, conduct surveillance. Diagnosing trends and patterns related to infections is a powerful component of any infection control program. And with the push to limit preventable hospitalizations, this activity can have a direct benefit to both residents and facilities.
- **Quality Assurance**: A critical review of antibiotic use is a best practice that should be part of a facility’s infection control program. The prescribing practices of individual practitioners should be evaluated to assure that an evidenced-based approach is used to address potential infections. Remedi SeniorCare can provide facility-specific reports on antibiotic use through the “MyRemedi” web portal. Such reports will likely become critical as facilities seek to comply with the soon to be published federal quality assurance/performance improvement (QAPI) regulations which are expected to focus heavily on data-driven metrics.

As you work to improve your quality assurance program and better the lives of your residents and staff, please use the resources available through your Remedi account manager and consultant pharmacist. We are eager to partner with you in this important effort.