



Long Term Care Pharmacy Alliance

White Paper: Description of Long Term Care Pharmacy Services

Introduction

The 2003 Medicare Modernization Act (MMA) contains a provision requiring the Secretary to conduct a study to review and report on the current standards of practice for pharmacy services provided to Medicare beneficiaries residing within nursing facilities. Specifically, the study is intended to provide:

- A thorough assessment of the current standards of practice, clinical services, and other service requirements generally used for pharmacy services in long-term care settings, and;
- An evaluation of the impact of those standards with respect to patient safety, reduction of medication errors and quality of care.

The report to Congress is to include:

- A description of the plans of the Secretary to implement the provisions of the Act in a manner consistent with the applicable State and Federal laws designed to protect the safety and quality of care of nursing facility patients, and;
- Recommendations regarding necessary actions and appropriate reimbursement to ensure the provision of prescription drugs to Medicare beneficiaries residing in nursing facilities in a manner consistent with existing patient safety and quality of care standards under applicable state and federal laws.

This document explains the specialty services LTC pharmacies provide to nursing home residents which are critical in ensuring prescription drug safety, quality, and timely drug access. LTC pharmacies provide standard services that are more extensive than those provided by retail pharmacies. These services reflect the special needs of LTC patients in institutional settings and help to ensure they receive safe, appropriate, and optimal drug therapy throughout their stay.

LTC pharmacies provide services on a continuum that begins when a physician prescription order is received and continues throughout a LTC resident's stay. This continuum has evolved over the last two decades in concert with changing federal nursing home regulations requiring low medication error rates (42 CFR§483.25(m)), reduction in unnecessary drug use (§483.25(l)), and monthly drug regimen review (§483.60). State nursing home regulations often mirror these federal regulations. These federal and state regulations require Medicare and Medicaid certified nursing facilities to provide quality and effective pharmacy services to all of their residents. With effective

pharmacy and consultant pharmacist services, nursing facilities ensure residents receive the best care possible and reduce the probability of receiving deficiencies during the survey and certification process.

To meet these federal and state regulatory requirements, nursing facilities contract with LTC pharmacies. Many states require nursing facilities to have two separate contracts with LTC pharmacies. One contract is a pharmacy provider contract and the second is a consultant pharmacist services contract. The pharmacy provider contract establishes a relationship between the nursing facility and the LTC pharmacy so medications can be delivered to residents. Consultant pharmacists, who are required to review medication use and outcomes in each facility, are secured by nursing facilities either through contracts with LTC pharmacies, or directly with an independent consultant pharmacist. LTC pharmacy and consultant pharmacist contracts are typically individualized to meet each facility's needs. These contracts differ from those of retail pharmacies as LTC pharmacies directly contract with the healthcare provider while retail pharmacies contract with insurers.

When a patient enters a nursing facility, physician orders including medication prescriptions must be filled. This order triggers LTC pharmacy provider services, product packaging and administration, clinical monitoring, assessment and intervention, and consultant pharmacist services. However, independent of whether a resident receives a new drug regimen at admittance, the resident will still have access to LTC pharmacy professional services and their medical record will be reviewed carefully to ensure appropriate drug therapy. This paper begins with a description of the characteristics of today's nursing facility population and then outlines the services LTC pharmacies provide to this population.

Demographics

The U.S. Census 2000 reported there were 35 million people aged 65 years or older with 16.6 million aged 85 and older. It is estimated that a 65 year old has a 43 percent chance of entering a nursing home at some point in his or her life.ⁱ According to the 1999 National Nursing Home Survey, there were over 1.8 million beds nationwide with over 1.6 million current nursing home residents. Nearly half of all nursing home residents are admitted following hospitalization, while 30 percent come from private or semi-private residences.ⁱⁱ

Unlike a typical ambulatory patient, the typical nursing home resident is older, in poorer health, and in need of higher level of care. This population is generally more sensitive to and less tolerant of many medications. In some cases, residents are unable to take drugs orally and must receive medications in a crushed or intravenous form. The following list describes the usual characteristics of the nursing home population.

- 75% of nursing home residents are aged 75 or older and 70% are female;ⁱⁱⁱ
- The average length of stay among all residents (including short stay) is 2.4 years;^{iv}
- The typical resident has 7.8 medical conditions;^v

- The leading admission diagnosis for nursing home residents is for diseases of the circulatory system (hypertension, congestive heart failure, etc), followed by cognitive disorders and injuries;^{vi}
- 75% of nursing home residents require assistance with 3 or more Activities of Daily Living (ADLs) and more than one third need extensive assistance with 4 or more ADLs;^{vii}
- Almost 75% of nursing home residents have a cognitive impairment and 15% of residents have a severe or very severe cognitive impairment;^{viii}
- The majority of residents use an average of 6.7 routine medications and another 2.6 medications as needed.^{ix}
- Approximately 20 % of medication prescribed is over the counter (OTC)^x;
- Approximately 15 % of medication prescribed is infused or non-orally administered^{xi}; and
- Approximately 7% of residents have dysphagia, which is the inability to swallow, and as a result require tube feeding.^{xii}

Frail residents' elevated care needs require intensive services from nursing facilities and LTC pharmacies. The descriptions of LTC pharmacy services outlined below are based on the experience of Long Term Care Pharmacy Alliance membership, site visits to two long-term care pharmacies, and current literature regarding long-term care.

LTC Pharmacy Provider Services

LTC pharmacies provide a wide range of services beyond the scope of services provided by retail pharmacies. This elevated level of service is based upon the complex needs of the patients and facilities LTC pharmacies serve. These special services include: quality assurance checks, emergency drug kits and medication carts, regular and emergency (24-hour-a-day) delivery services, and in-service training programs for nurse aides, nurses, and other professional nursing facility staff.

- *Quality assurance procedures.* LTC pharmacists provide several layers of review before prescriptions are delivered to a nursing facility. When a medication order is faxed to the LTC pharmacy by the nursing facility, a pharmacist reviews the order and checks the patients' drug record (or creates a record for a new patient) for contraindications with any of the other drugs the patient is taking. In addition, the pharmacist works through the nurse to obtain any necessary prior authorization or medical necessity documentation. Without this adjudication residents could not receive off-formulary or non-preferred drugs more commonly used in the nursing home population. The order is then given to a technician who physically fills and packages the order. The filled drug order and paperwork is then given to another pharmacist who confirms that the drug filled matches the medication label. Once a drug is delivered to a facility, a nurse must ensure the orders received match the facility's records. These multiple checks ensure residents receive the medications prescribed and adverse medication events are minimized. Controlled substances have additional layers of review and responsibility for pharmacists and nursing facilities.

- *Emergency drug kits and medication carts.* LTC pharmacies supply facilities with emergency medication kits that are maintained and controlled by the pharmacy. These emergency kits allow immediate access to urgent care drugs, giving the nursing staff the capability of administering primary dosing even before the LTC pharmacy fills the new medication order. LTC pharmacies also provide organized medication carts to facilities as part of their contractual relationships. Within the cart each patient has his or her own drawer that houses all prescribed medications with each drug in unit dose packaging. The system of compartmentalizing each drug in separate drawers for each patient greatly reduces drug administration errors. The use of medication carts and emergency drug kits by LTC facilities is essential for the safe administration of medication and for the effective care of residents.
- *Regular and emergency delivery.* LTC pharmacies deliver medications to the nursing facilities multiple times daily and provide emergency deliveries 24 hours a day, 7 days a week. Routine deliveries allow nursing facilities to replenish resident prescriptions on a weekly or monthly basis and, depending on state law, return unused, non-narcotic medications. At times, nursing facility residents may need immediate access to emergency medications for treatment of acute infections, cardiac emergencies, severe pain, etc. and making these critical medications available around the clock is the standard of practice for LTC pharmacies. In addition, nursing facility admissions from hospitals frequently occur in late afternoons or early evenings, particularly on Fridays. Patients admitted from hospitals generally require many new medications upon their arrival. LTC pharmacies are responsive to these off-hour needs. Delivery trucks and pharmacists are available 24 hours a day at LTC pharmacies to ensure nursing facilities can get emergency or new prescriptions filled within one to two hours.
- *In-service training programs.* In-service training programs are a distinctive type of service LTC pharmacies provide to nursing home staff. LTC pharmacies provide the expertise of consultant pharmacists who go directly to the nursing facilities for the purpose of educating health professionals on a range of drug-therapy issues and drug administration techniques in the LTC setting. They conduct regular in-service training for nurses, physicians and dieticians on topics which include: monitoring residents on complex drug regimens, the use of infusion pumps, and the administration of IVs, and how to administer certain subcutaneous injections.

Product Packaging and Administration

LTC pharmacies provide a wide range of special packaging, labeling, and dispensing services. The specialized dispensing systems are uniquely suited to the needs of nursing home residents, allowing the nursing staff to accurately administer drugs in proper pre-measured doses, while reducing errors and promoting efficiency in drug administration. Many residents require alternative dosage forms because of an inability to swallow (dysphagia), have a feeding tube or a cognitive impairment. In institutional settings, such as hospitals and nursing facilities, a structured system of packaging, labeling, distribution

and communication is the required standard of practice to ensure the accurate and safe administration of medication. All medications are specially packaged and placed in medication carts for administration to residents.

- *Unit dose and other specialized packaging (also known as “bingo cards” or “bubble wraps”)*. Most pharmaceutical manufacturers do not package their products in unit dose form. Most unit dose packages must be created by LTC pharmacies prior to dispensing. The special packaging allows for greater control of the drugs and dosages to ensure that medications are taken appropriately without error and the unit dose system provides a uniform and easily managed process for drug delivery through the central administration point of the LTC nurses. LTC pharmacies typically dispense 30 day or weekly supplies of unit dose packages.
- *Specialized administration*. LTC pharmacies provide several different modes of medication administration including split tablets, IV or suspended liquid medications. Tablet splitting services can be required for patients who are prescribed less than an entire tablet. Some patients refuse medications or cannot swallow medications. These patients must receive their medications in liquid or alternate forms. LTC pharmacies work with nursing staff and physicians to identify the best administration form and either obtain or prepare the medications for the resident.
- *Intravenous Medications:* Given the medical condition of the average nursing facility resident, it is not surprising that residents will routinely require the administration of intravenous medications; antibiotics, re-hydration fluids and other drugs that are more often used in hospital settings. LTC pharmacies provide IV fluid preparations for nursing home residents and assist in their administration. In order to provide this service, LTC pharmacies must make an investment in the equipment required to compound these products, including specialized ventilation hoods and clean rooms. Ultimately, the ability to provide these products at the nursing facility rather than require transportation to an acute-care hospital, results in better care for the resident and lower costs for the programs that pay for the care.

Clinical Monitoring, Assessment, and Intervention

When a drug is dispensed, and periodically throughout residents' stays, clinical monitoring and assessments are done to ensure appropriate medication use. Interventions are also made when a sentinel event occurs, for example a fall. Providing an alternative drug treatment may reduce the probability of another fall.

- *LTC staff pharmacist services*. LTC pharmacists review and monitor residents' prescribed drug regimens on an ongoing basis. Nursing home residents receive medication from a sole source allowing LTC staff pharmacists access to their entire medical record, past and present drug treatments, and treatment outcomes reports. LTC staff pharmacists identify potential or actual drug therapy contraindications when a medication is prescribed. In addition, the staff pharmacists work closely with the nursing facility to understand the resident's

diagnosis and formulate a medication treatment plan that addresses the resident's condition. The medication treatment plan defines treatment goals in the context of the diagnosis and assesses therapy alternatives. The plan also establishes an outcome monitoring plan in close consultation with the nursing facility. Based on the resident's progress in meeting treatment goals and outcomes, the staff pharmacist modifies the medication treatment plan to improve the resident's response to medication or to reduce adverse side-effects.

LTC staff pharmacists prepare and use medication treatment plans with all residents. Some treatments involve more active monitoring such as intravenous drug delivery and anticoagulant drug therapy. These therapies typically require more intensive monitoring and assessment of laboratory results and patient response to the medications. This requires working closely with the nursing facility care team to monitor lab results and patient progress on a daily, weekly and monthly basis.

- *Consultant pharmacist services.* Skilled nursing facilities are required (§483.60) to obtain the services of a licensed pharmacist who: (1) provides consultation on all aspects of pharmacy services in the facility, (2) establishes a system of records of receipt and disposition of all controlled drugs, (3) determines drug records are in order and the accounting of controlled substances is well maintained, (4) perform a drug regimen review at least once a month for each resident, and (5) report any problems or irregularities to the attending physician and nursing staff. Nursing facilities fulfill these requirements by contracting with LTC pharmacies that employ consultant pharmacists, or directly with an independent consultant pharmacist.

Over the last two decades, the consultant pharmacist's roles have broadened beyond these requirements. Many consultant pharmacists now also conduct in-facility training and work closely with the entire care planning team to ensure the patient's medications meet the goals of their individualized care plans.

The critical consultant pharmacist service, however, is the monthly, or more frequent, drug regimen review for each patient. The drug review service is an important element of LTC pharmacies specialty services because in contrast to their ambulatory counterparts, nursing facility residents are at higher risk for drug related problems due to the physiological effects of aging that alter the patient's ability to metabolize certain drug products. The consultant pharmacists conduct ongoing reviews of the residents' drug regimens; follow up on changes in condition or lack of improvement; and work with LTC staff pharmacists, nurses, and physicians to ensure appropriate treatment modifications. These reviews consist of a written report for each patient and include recommendations by the consultant pharmacist to change the patient's drug regimen. The attending physician is required, by regulation, to acknowledge this recommendation and is free to concur with, or reject, the recommendation.

Prior Authorization, Medical Necessity, and Claims Adjudication

The primary tasks of LTC pharmacies are providing clinical and professional services to nursing facilities and LTC residents. In addition, LTC pharmacies, unlike retail pharmacies, are obligated through their contract with nursing facilities to dispense medications with or without certainty of payment. LTC pharmacies must spend significant time adjudicating claims either prior to dispensing or post-dispensing to ensure all medications are approved by third-party payers, such as Medicare or Medicaid. For every drug dispensed that is not on a third-party insurer's formulary or Medicaid preferred drug list, medical necessity and/or prior authorization must be secured from the intermediary. While much of this occurs prior to dispensing, the immediate urgency for some prescriptions may delay adjudication until after a medication is dispensed.

Conclusion

The wide range of services LTC pharmacies provide, including ongoing quality assurance checks and drug review, medication carts, specialized packaging, 24 hours delivery, nursing home staff training, and consultant pharmacist review, has improved quality of care for LTC residents. In addition, the provision of these services help nursing facilities meet regulatory and quality of care standards necessary to ensure residents' safety and quality of life. These services lead to reduced adverse drug events, better treatment outcomes, and improved quality of life.

The purpose of standard operating procedures for LTC pharmacies is to assure the safest, most efficient medication use process within LTC facilities. In addition, by providing 24 hour/7 days a week emergency delivery services and emergency drug kits, LTC pharmacies reduce the need to transfer nursing facility residents by ambulance to a hospital for urgent treatment. The nursing staff has the ability to treat the need for urgent conditions requiring emergency medication with the emergency drug kits and can then order more of the drug for stat delivery from the LTC pharmacy.

This document presents a picture of the many services provided to LTC residents and nursing facilities by LTC pharmacies. These specialized services are essential to LTC resident quality of life and safety. In the current environment, LTC pharmacies frequently receive the same dispensing fee as traditional retail pharmacy to perform these additional services. Under Medicaid and commercial insurance, dispensing fees paid to LTC pharmacies only cover a small portion of the costs associated with the high level of drug regimen review, high specialized packaging costs, and delivery costs the pharmacies incur. Any new evaluation of LTC pharmacy services by Medicare should include an analysis of the additional costs associated with the specialized services LTC pharmacies provide relative to retail pharmacies

Endnotes:

ⁱ Sheel M. Pandya et al. “Nursing Homes”. Public Policy Institute, Public Affairs. AARP. February, 2001.

ⁱⁱ Centers for Disease Control and Prevention/National Center for Health Statistics, The National Nursing Home Survey, Hyattsville, MD, 1999.

ⁱⁱⁱ Centers for Disease Control and Prevention/National Center for Health Statistics, The National Nursing Home Survey, Hyattsville, MD, 1999.

^{iv} Centers for Disease Control and Prevention/National Center for Health Statistics, The National Nursing Home Survey, Hyattsville, MD, 1999.

^v “Long Term Care for the Frail Elderly People—The On-Lok Model”. Bodenheimer, T. *New England Journal of Medicine*. 341: 1324-8; 1999

^{vi} Centers for Disease Control and Prevention/National Center for Health Statistics, The National Nursing Home Survey, Hyattsville, MD, 1999.

^{vii} Centers for Disease Control and Prevention/National Center for Health Statistics, The National Nursing Home Survey, Hyattsville, MD, 1999.

^{viii} Centers for Disease Control and Prevention/National Center for Health Statistics, The National Nursing Home Survey, Hyattsville, MD, 1999.

^{ix} “General and psychotherapeutic medication use in 328 facilities: a year 2000 national survey.” *Consultant Pharmacist* 2001; 16(1):54-64.

^x LTCPA member company estimates, March 2004.

^{xi} LTCPA member company estimates, March 2004.

^{xii} Nursing Home Data Compendium, CMS, 2001.

Further Reading Suggestions:

1. Mendelson et al. "Prescription Drugs in Nursing Homes: Managing Costs and Quality in a Complex Environment". George Washington University and Health Strategies Consultancy, November, 2002.
2. "Potentially Inappropriate Drug Use in the Community Dwelling Elderly". JAMA, December, 2001.
3. BDO Seidman, LLP. "Institutional Pharmacy Dispensing Cost Study." Prepared for LTCPA, April 2002.
4. Henry and Felman. "Integrating Quality into Pharmacy Cost Containment Initiatives in Nursing Homes". The Health Strategies Consultancy LLC and the Center for Health Care Strategies, December, 2003.
5. Nash et al. "Why the Elderly Need Individualized Pharmaceutical Care". The Office of Health Policy and Clinical Outcomes, Thomas Jefferson University. April, 2000.
6. Smith, Vernon et al. "Coordinating Medicaid and Medicare Prescription Drug Coverage: Findings from a Focus Group Discussion with Medicaid Directors." Kaiser Commission on Medicaid and the Uninsured, November 2003.
7. Huskamp and Keating. "The New Medicare Drug Benefit: Potential Effects of Pharmacy Management Tools on Access to Medications." Kaiser Family Foundation, July 2004.
8. Tobias, DE, Sey M. "General and psychotherapeutic medication use in 328 facilities: a year 2000 national survey." *Consultant Pharmacist* 2001; 16(1):54-64.
9. American Society of Consultant Pharmacists letter to Dennis Smith, Acting Administrator of CMS, March 10, 2004,
<http://www.ascp.com/medicarerx/letters/cms/ASCPtoCMS-03-10-04.pdf>