

Medication safety in long-term care

By Jim Kong and Certina Ho

Medication safety is an essential component of medication use and has become a great benchmark for quality care in all sectors of healthcare. While healthcare services in the community and acute care settings receive much attention and awareness, long-term care (LTC) is a steadily growing industry that cannot be ignored. The current landscape of healthcare shows that, of the approximate five million seniors in Canada, 4.5 per cent reside in care facilities such as nursing homes, long-term care, and chronic care institutions. Moreover, advanced healthcare practices that have led to extended lifespans, along with the ever-rising numbers of aging baby boomers will likely create a significant strain for the already inundated LTC facilities in the near-future. A typical LTC resident is a frail, older adult, with multiple co-morbidities, declining physiologic function, and a complex medication regimen. Further substantiating the risk for medication errors is the multidisciplinary care model that residents receive in LTC facilities, many of which are challenged with time and resource constraints. This article attempts to take a look at two key aspects of medication safety in LTC.

ANTIMICROBIAL STEWARDSHIP

Suboptimal use of antimicrobials (including antibiotics) is a medication safety issue that is largely preventable. Infection outbreaks can be deadly in LTC settings due to both human and environmental-related factors. The

Hospital	Long-term Care
Conduct Medication Reviews	Conduct Medication Reconciliation
<ul style="list-style-type: none"> • E.g. Hospital pharmacists can perform a comprehensive medication review prior to discharging a patient so as to catch dosing errors or non-indicated medications.⁴ 	<ul style="list-style-type: none"> • E.g. A qualified healthcare professional (such as a nurse, pharmacist, or prescriber) should compare the discharge summary with the medications being ordered at the LTC facility and reconcile any discrepancies.⁴
Verify Accuracy of Discharge Plan and Discharge Prescription	
<ul style="list-style-type: none"> • E.g. Prescribers can co-sign discharge summaries to verify all information is correct.⁴ • E.g. Prescribers can provide complete orders for each medication; do not write “continue orders” on discharge summaries.⁴ 	

Figure 1

combination of an aging, immunocompromised patient population with the staggered spacing of beds in healthcare facilities creates the perfect storm for opportunistic infections. Studies in LTC facilities have shown that common infections such as urinary tract, lower respiratory tract, and skin and soft tissue infections are responsible for 54 per cent of acute medical problems, 48 per cent of short-term hospitalizations, and 63 per cent of deaths. It becomes absolutely crucial for antibiotics to be appropriately prescribed, dispensed, and administered in order to mitigate collateral damage from compliance issues and potential adverse effects. A study conducted by Monette et al. demonstrated that an annual education campaign, even something as simple as an antibiotic guide, is an easy and cost-effective way to facilitate antimicrobial stewardship or improve antibiotic medication safety in LTC. Furthermore, clinical pharmacists can perform comprehensive medication

reviews (including the proper use of antibiotics), which will then add an extra layer of safety for LTC residents.

TRANSITION OF CARE

Transition of care is one of the three priority areas of the World Health Organization’s (WHO) third Global Patient Safety Challenge. The transition from hospital to LTC is a complex process fraught with potential medication errors. Erroneous continuation or omission of medications is common and can range from consequences of no harm to life-threatening. Further compounding this issue is the fact that hospital stays typically involve high-alert medications such as anti-coagulants, opioids and injectables, and medical staff may not always be on-site at the LTC facility to conduct a comprehensive resident assessment immediately after admission of a new transfer. Statistics show that there is at least one medication discrepancy in 70 per cent of all hospital transfers to

LTC settings. The most common contributing factors to medication errors during this process are lack of communication across care settings, and mistakes during order transcription.⁴ The Institute for Safe Medication Practices (ISMP) recommends the strategies in figure 1 during transitions of care in order to reduce errors and mitigate patient harm.

CONCLUSION

Antimicrobial stewardship and transition of care are two common areas of concern in LTC patient/medication safety. Other vulnerabilities exist in different stages of the medication-use process, which includes prescribing, order entry or transcribing, dispensing, administration, and monitoring. It is through ongoing collaboration among healthcare professionals and mutual communication with patients and caregivers that a safer healthcare system and safe medication practices can be upheld and embraced. **LC**

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