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of Ontario



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de l'Ontario

STANDING COMMITTEE ON PUBLIC ACCOUNTS

INFECTION PREVENTION AND CONTROL
AT LONG-TERM-CARE HOMES
(Section 3.06, 2009 Annual Report of the Auditor General of Ontario)

2nd Session, 39th Parliament
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The Honourable Steve Peters, MPP
Speaker of the Legislative Assembly

Sir,

Your Standing Committee on Public Accounts has the honour to present its Report and commends it to the House.

A handwritten signature in black ink, appearing to read 'Norm. Sterling'.

Norman W. Sterling, MPP
Chair

Queen's Park
February 2011

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MARIA VAN BOMMEL was replaced by WAYNE ARTHURS on September 22, 2010.

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PREAMBLE

In May 2010 the Standing Committee on Public Accounts held public hearings on Infection Prevention and Control at Long-Term Care Homes, the subject of an audit by the Auditor General in 2009.¹ Witnesses from the Ministry of Health and Long-Term Care (Ministry) who appeared before the Committee included the Deputy Minister and senior staff. Other witnesses included representatives of the three audited long-term care homes: Extencicare York (a 288-bed for-profit nursing home in Sudbury), Nisbet Lodge (a 103-bed charitable home in Toronto), and Regency Manor (a 60-bed for-profit nursing home in Port Hope). This Committee report highlights the Auditor's observations and recommendations contained in Sec. 3.06 of his *2009 Annual Report* and presents the Standing Committee's own findings, views, and recommendations.

Acknowledgements

The Standing Committee endorses the Auditor's findings and recommendations. It also thanks the Auditor and his team for drawing attention to the important issue of infectious diseases in Ontario's long-term care (LTC) homes and how such homes seek to prevent and control these infections.² The Standing Committee also extends its appreciation to officials from the Ministry as well as officials from Extencicare York, Nisbet Lodge, and Regency Manor for their attendance at the hearing. Finally, the Committee acknowledges the assistance provided during the hearings and report writing by the Office of the Auditor General, the Clerk of the Committee, and staff of the Legislative Research Service.

OVERVIEW

Objectives and Scope of the Audit

A special report was issued by the Auditor in September 2008 on prevention and control of hospital-acquired infections. On October 29 of that year the Public Accounts Committee held a public hearing in connection with that audit and issued a report. The Auditor decided to review the same issue in long-term care homes.

The audit's objective was to assess whether selected LTC homes followed effective policies and procedures to prevent and control infections.

¹ For a transcript of proceedings see: Ontario, Legislative Assembly, Standing Committee on Public Accounts, *Hansard: Official Report of Debates*, 39th Parliament, Second Session (12 May 2010), Internet site at http://www.ontla.on.ca/committee-proceedings/transcripts/files_pdf/12-MAY-2010_P006.pdf, accessed on October 7, 2010.

² See: Section 3.06 of Ontario, Office of the Auditor General, *2009 Annual Report* (Toronto: The Office, 2009), pp. 159-185, Internet site at http://www.auditor.on.ca/en/reports_en/en09/306en09.pdf, accessed on October 7, 2010.

Audit work was conducted at the three LTC homes mentioned above. Excluded from the audit were municipally-run LTC homes because the *Auditor General Act* does not apply to municipal grants (other than permitting the Auditor General to examine a municipality's accounting records to determine whether a grant was spent for intended purposes).

The audit team examined the Ministry's inspection and other reports related to infection prevention and control in the three homes. The team did not review the Ministry's inspection process in depth because the Office of the Ombudsman of Ontario was conducting a review of this process at the time of the audit.

Due to their potential negative impact on resident health, the Auditor focused on four infectious diseases: *Clostridium difficile* (*C. difficile*), febrile respiratory illness (FRI), methicillin-resistant *Staphylococcus aureus* (MRSA), and vancomycin-resistant enterococci (VRE). Each can be transmitted through contact. Therefore, hand hygiene and cleaning and disinfecting surfaces are critical to preventing their spread. Also examined were preventative measures pertaining to urinary tract infections and skin breakdowns prone to infection (such as bed sores).

Legislative and Regulatory Framework

The *Long-Term Care Homes Act* (LTCHA) was passed in 2007. The new Act and regulations (which came into force on July 1, 2010) replace three different laws governing long-term care homes³ as well as the *Long-Term Care Homes Program Manual*. Requirements in the new act and regulations include:

- a detailed review as part of the inspection process of the infection prevention and control programs, procedures, and responses at each LTC home in Ontario;
- infection, prevention, and control programs, including daily monitoring of residents at all LTC homes to detect the presence of resident infection;
- measures to prevent the transmission of such infections; and
- standards and requirements that LTC homes' infection prevention and control programs must comply with.⁴

Number and Types of Homes

More than 600 LTC homes in Ontario provide care, services, and accommodations to about 75,000 individuals, mostly over age 65, who are unable to live independently and require 24-hour nursing care and supervision in a secure setting. LTC homes essentially become "home" for most of their residents. All

³ *Nursing Homes Act*, the *Charitable Institutions Act*, and the *Homes for the Aged and Rest Homes Act*.

⁴ See: Standards and requirements, sec. 86. (3) *Long-Term Care Homes Act, 2007*, S.O. 2007, Chapter 8, Internet site at http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_07108_e.htm.

homes fall within one of four categories: for-profit and not-for-profit nursing homes, charitable homes, and municipal homes for the aged, as illustrated below in Figure 1. Almost 60% of the homes are for-profit nursing homes.

Figure 1: Ontario's Long-term-care Homes by Type, November 2008

Source of data: Ministry of Health and Long-Term Care

Home type	# of Homes	# of Beds
nursing home (for profit)	353	40,100
nursing home (not-for-profit)	95	11,200
charitable (not-for-profit)	54	7,500
municipal (not-for-profit)	103	16,400
Total	605	75,200

Prepared by the Office of the Auditor General of Ontario.

Administering and Funding LTC Homes

In fiscal 2009/10 the Ministry, through the Local Health Integration Networks (LHINs), provided \$2.9 billion in funding to LTC homes.⁵ In addition, the Ministry provided another \$0.4 billion directly to LTC homes, resulting in total funding for this sector of \$3.3 billion in 2009-10.⁶ According to the Ministry, there has been more than a 50% increase in funding to the LTC homes sector since 2003/04.⁷ These amounts cover a portion of the total costs; residents must also pay between \$1,600 and \$2,200 a month (approx.) for their accommodations, depending on whether they occupy a basic, semi-private, or private room.

As infection prevention and control activities are integrated throughout their operations, none of the three homes visited by the audit team separately tracked the costs of preventing and controlling infections.

Infection Risk among Residents in LTC Homes

A high risk of infectious diseases spreading among residents of long-term care homes (hereafter referred to as "residents" and "homes") exists because residents often share rooms and generally eat and participate in activities together. Residents also have a higher risk than the general population of acquiring an infection due to advanced age, vulnerability to illness, and cognitive impairment.

⁵ In 2009-10, Ministry operating expenses for over 600 LTC homes, apportioned among the 14 LHINs, totalled \$2,877,608,964. See: Ontario, Ministry of Finance, *Public Accounts of Ontario 2009-2010*, Ministry Statements and Schedules, Vol 1 (Toronto: The Ministry), pp. 2-240 to 2-243.

⁶ Funding information showing the split between LHIN funding and Ministry managed funding was provided by senior officials, Ministry of Health and Long-Term Care, November 26, 2010.

⁷ Total LTCH funding increased from \$2,116,615,872 in 2003/04 to \$3,261,455,653 in 2009/10. See *Ibid.*

Health Care Associated Infections (HAI)

When a resident in a home acquires an infection it is considered a health care associated infection (HAI). An HAI's impact on residents can range in severity from feeling unwell to requiring antibiotics or even admission to hospital. In severe cases, HAIs can cause death.

Although information is unavailable on the total number of HAIs that occur in Ontario's homes annually, studies indicate that infection is one of the most common reasons for resident hospitalization—the main medical reason for about 27% of all hospital admissions of residents, according to one U.S. study.

Roles and Responsibilities for Infection Prevention and Control

The Ministry sets standards of care and conducts annual, unannounced inspections of all LTC homes to monitor compliance with legislation and Ministry policies. During these inspections, aspects of infection prevention and control are monitored.

LTC homes are responsible for adopting effective infection-prevention-and-control policies and procedures.

Physicians and nurses working in the home likewise have professional responsibilities related to infection prevention and control: these are set out in standards and guidelines published by their respective regulatory colleges.

Others in the home, including personal support workers, cleaning staff, residents, and visitors, all play a role in preventing and controlling the spread of infections in homes. So, too, do other organizations such as the 14 Regional Infection Control Networks (RICNs) and local public health units. As well, the Provincial Infectious Diseases Advisory Committee (PIDAC) provides evidence-based advice regarding multiple aspects of infectious disease identification, prevention, and control to Ontario's Chief Medical Officer of Health. PIDAC was established in the wake of the 2003 SARS outbreak in Ontario and abroad. It has developed best practices documents that are applicable to LTC homes which incorporate guidelines and recommendations from various entities such as the Public Health Agency of Canada and the College of Physicians and Surgeons of Ontario.

ISSUES RAISED IN THE AUDIT AND BEFORE THE COMMITTEE

Significant issues were raised by the audit, and before the Committee. The Committee attaches particular importance to those issues discussed below:

Screening

Screening helps homes to identify newly admitted residents who have an infectious organism or disease, and to implement additional measures and precautions. Samples, taken from residents at risk—and forwarded to a laboratory—will determine whether the residents have the organism or disease.

The Provincial Infectious Diseases Advisory Committee (PIDAC) views screening as an important step in keeping an infectious organism or disease from spreading to other residents, staff, and visitors.

Although the three audited homes all had policies to screen new residents for febrile respiratory illnesses (FRIs), only two of the homes documented this process. At these two homes, just 60-80% of new residents in the Auditor's sample were actually screened. The third home had no evidence of formal screening for FRIs.

The Auditor recommended that LTC homes monitor whether their screening processes are in accordance with the recommendations made by PIDAC and with the legislative requirements.

Public Hearings

Members asked about formal notification processes or protocols for transferring a resident from a LTC home to hospital, from hospital to a LTC home, and from one LTC home to another LTC home, where infectious diseases in residents are suspected.

Witnesses responded as follows:⁸

- If a home suspects an outbreak, officials notify Public Health immediately and continue surveillance. Public Health will determine whether the home should continue surveillance or has an outbreak.
- Should Public Health officials determine there is an outbreak, they will communicate with community providers and, depending upon the severity of an outbreak, will also determine whether the public should be informed. Community Care Access Centres (CCACs) which coordinate transfers between LTC homes, will call the receiving home about the possible outbreak; it is the latter's decision whether or not to accept the resident. Ministry officials clarified that residents transferring to a different home are screened as new admissions.
- Residents requiring emergency hospital services who have an infectious disease or who are in a home that might be in outbreak, may still be transferred to an acute care hospital, and the transfer form will disclose the person's infection or the outbreak at the home.
- LTC homes have a trial program with their local hospitals whereby an emergency room (ER) nurse will attend the resident in the LTC home in an effort to reduce transfers from the LTC homes to hospitals. Should the resident still require transfer to the hospital, the ER nurse will monitor the resident in hospital and provide relevant feedback to the home when the resident returns. Such feedback might state what infections the resident was exposed to while in hospital so that the home can apply the appropriate

⁸ In the next part of the report, the term "witnesses" refers to one or more of the three audited long-term care homes.

protocols when the resident returns. Members heard that this procedure is consistent across all Ontario's nursing homes.

When Members specifically asked whether a hospital admitting a LTC home resident known to have *C. difficile* would, in all cases, receive the transfer form that confirmed the presence of the infectious disease, the witnesses responded affirmatively.

Committee Recommendation

The Standing Committee on Public Accounts recommends that:

- 1. While recognizing that there is some communication between LTC homes and hospitals regarding patients with an infectious disease, the Ministry of Health and Long-Term Care should determine, in conjunction with LTC homes and hospitals, how best to ensure that this information is communicated on a timely basis for patients transferring to or from hospital, and report to the Standing Committee on steps to be taken for this purpose.**

Use of Private Rooms

The audited homes were designed to specifications dating back to 1972 regarding the size of rooms and number of beds per room. However, similar to newer homes, they generally lack unoccupied rooms into which they can move infectious residents. According to PIDAC, residents with an FRI who share a room should have the curtain drawn around their bed. However, all three homes indicated a reluctance to do this unless specifically requested by the resident.

The Auditor recommended that the Ministry develop guidance to assist homes in determining how best to meet PIDAC's recommendations on isolating and cohorting residents who have or are at high risk of having infectious diseases, given the limited availability of private rooms.

Public Hearings

Ministry officials noted that first and foremost, long-term care homes are the home of the elderly residents. As part of the Province's initiative to modernize and redevelop long-term care beds, current redesign plans call for larger rooms having a maximum of two beds, all with wheelchair-accessible washrooms designed to keep residents with infectious diseases adequately separated. The Ministry plans to redevelop 35,000 beds in older LTC homes over the next decade. According to officials, thirty-seven LTC homes representing approximately 4,200 beds have already committed to the redesign and the Ministry plans to renew approximately 7,000 beds every two years.

One nursing home official from an older home noted that the home was scheduled for redevelopment within the next decade and that currently, in some situations, they used the home's infirmary to house an infectious patient.

During its deliberations the Committee expressed concern about the reluctance of some LTC homes to implement the PIDAC best practice of isolating or cohorting residents. Members cited the example of homes declining to draw the curtains around the beds of residents with an FRI who share a room, unless specifically requested to do so by the resident.

Committee Recommendation

The Standing Committee on Public Accounts recommends that:

2. **The Ministry of Health and Long-Term Care report to the Standing Committee indicating the steps that the LTC homes will take to commence the periodic monitoring of screening processes to ensure alignment with PIDAC recommendations and legislative requirements.**
3. **Given the limited availability of private rooms, the Ministry of Health and Long-Term Care shall, in conjunction with the LTC homes and PIDAC, review PIDAC's recommendations on isolating and cohorting residents who have, or are at high risk of having infectious diseases, and report to the Standing Committee the results of the review.**

Urinary Tract Infections

Research indicates that urinary tract infections (UTIs) are generally the most commonly reported bacterial infections in residents.

All three homes had policies for performing continence assessments within seven days of a resident's admission, and quarterly thereafter, in accordance with the Ministry's Program Manual. The audit team found that initial continence assessments were completed for all residents in the audit sample. However, while one home completed almost all the quarterly assessments, the other two homes completed less than 75%.

Studies indicate that, for general good health, the recommended minimum daily fluid intake for residents is 1,500 millilitres. All three homes had policies consistent with this and monitored the amount of fluid each resident consumed daily. The audit team noted, however, that only 10% to 20% of resident files sampled at two of the homes showed that the resident had consumed the recommended amount of daily fluid. At the third home, all resident files sampled showed that the residents had consumed at least the recommended amount of fluids.

Public Hearings

During the public hearings Members asked why the prevention of UTIs at long-term care homes is such an uphill battle.

A witness responded that UTIs and use of urinary catheters seem to go hand in hand. For this reason, physicians at this home do not support the use of catheters unless it's medically necessary. The home's rate of catheter use is 1.1% versus the provincial rate of 2.9%. With respect to UTIs, the home reported a rate of 4% and the provincial rate was 5.7% in the last quarter. Between 2007 and 2009, the UTI rates in this home have been below the provincial average.

To prevent UTIs, this home serves larger glasses of fluids at meal service and encourages the intake of additional fluids. Staff also monitor residents' fluid intake on a daily basis, and a registered nurse calculates whether the resident has taken enough fluid within each 72-hour period. Continuing concerns about insufficient fluid intake are referred to the dietician. Another witness lacked UTI information as a rate, but indicated four such infections in this year, and said that the home has a prevention program similar to the one described by the previous witness.

Immunization

PIDAC notes that immunization is one of the most effective measures for preventing residents and staff from acquiring communicable diseases. It recommends that homes have immunization programs for residents that include pneumococcal pneumonia immunization and annual influenza immunization.

The Ministry set certain target immunization rates for residents and staff of long-term care homes up to January 2009. As Figure 6 (below) shows, in 2008, the audited homes were generally close to or above the targeted rates for influenza immunization of residents and staff. However, all three homes were below the targeted pneumococcal immunization rate for residents. The Ministry said that it was reviewing the appropriateness of developing updated target vaccination rates because these targets have not been shown to influence immunization rates.

The Auditor recommended that LTC homes continue to promote and monitor the immunization of residents and staff.

Figure 6: Target and Actual Immunization Rates at Three Long-term-care homes, 2008

Source of Data: Ministry of Health and Long-Term Care and audited long-term-care homes

Type of immunization	Range	
	Ministry Target (%)	At homes Visited (%)
annual influenza immunization for residents	95	91 to 96
annual influenza immunization for staff	70	63 to 85
pneumococcal immunization for residents	95	63 to 77

Public Hearings

Members asked the witnesses about the barriers to reaching Ministry target immunization rates for residents and staff

Annual Influenza Immunization of Staff

One witness said that while its influenza education program, delivered by a public health nurse, provides information about the benefits, staff have responded to alternative information on the Internet that discouraged immunization. However, in cases of a confirmed outbreak of influenza A or B, this home has a policy of not allowing staff members to work until they have taken Tamiflu or are immunized. A representative from this home noted that the staff immunization rates for the current year are 37% for the H1N1 influenza vaccine and 21% for the seasonal influenza vaccine. In her view this was an outlier year as the home's staff immunization rates typically reach 60%.

A second witness noted that in addition to providing staff training, the home had offered prizes to encourage staff immunization, but that mixed public messages about the H1N1 vaccine had prompted staff to become fearful. Vaccinations for staff should be mandatory; otherwise the Ministry's 70% target would not be met.

A third witness spoke of difficulties with the whole immunization program during the past flu season: the H1N1 and the seasonal influenza vaccine were released at different times of the year, and many staff assumed that they didn't need the seasonal influenza vaccine because they had earlier been vaccinated with the H1N1. While staff are typically immunized at the work site, this year because of the intermittent availability of the vaccines, some staff sought vaccinations offsite.

Supplementary Information

Statistics Canada released self-reported information about the 2009-10 flu season and immunization rates as follows:

- 60% of Canadians did not get vaccinated against the H1N1 virus. The reasons, in descending order, were that they "did not think it was necessary," they "hadn't gotten around to it," and they had (unspecified) fear of the pH1N1 vaccine.
- 66% of health-care workers said they had been vaccinated against H1N1.
- 55% of Canadians with chronic conditions claimed to have received the vaccine.
- The province having the lowest vaccination rate was Ontario (32%). As Ontario is the only province with a decade-long universal vaccination campaign against influenza, this finding was unexpected. (Newfoundland and Labrador had the highest vaccination rate – 69%).
- The percentage of Canadians who typically receive the seasonal flu vaccine is 32%.

- A total of 428 Canadians died from H1N1 and thousands were infected, according to the Public Health Agency of Canada.⁹

Pneumococcal Immunization of residents

The Committee was told that the pneumococcal vaccine is offered to LTC home residents upon admission and they can choose whether to take or refuse the vaccine. One home's rates increased from 63% in 2008 to 91% in 2009. As a strategy, representatives of this home had spoken to both the residents' and family council about the vaccine's benefits. A recent turnover of residents resulted in newcomers more inclined to vaccination. A witness from another home said that despite discussing the benefits at both the family council and the admission care conference, some residents exercise their right to refuse these vaccinations.

There was a discussion during the hearings about the different rates of immunization for pneumococcal and influenza vaccines. Witnesses explained why residents in all three homes were below the Ministry's targeted immunization rate for pneumococcal but close to the targeted immunization rate for influenza. Whereas the influenza immunization is offered at the home annually, the pneumococcal vaccine lasts for a longer period of time and therefore is generally offered to a resident upon admission and again five years later. A second witness confirmed the same practice at her LTC home. This may explain why the resident immunization rates vary for the pneumococcal and the regular influenza vaccine.

Ministry officials indicated a need to pay closer attention to what is and is not working in terms of encouraging higher immunization rates among residents and staff. They noted that Public Health immunization campaigns against influenza such as "stop the bug" are largely driven by Public Health. Officials also acknowledged that the H1N1 vaccination campaign did throw off the seasonal influenza campaign this past year. One official suggested that reporting on immunization rates in different homes and organizations might be worth considering.

Committee Recommendations

The Standing Committee on Public Accounts recommends that:

- 4. The Ministry of Health and Long-Term Care indicate whether it will require each LTC home to publicly report the influenza immunization rates for the residents and staff of the home, including posting the rates in a prominent place in the home during the flu season. Furthermore, the Ministry shall report to the Standing Committee whether it will publicly report the annual influenza immunization rates (by residents and staff) for each of Ontario's approximately 600 LTC homes on its website.**

⁹ Jeff McIntosh, Canadian Press, "H1N1 shots skipped by 60% of Canadians," *CBC News*, September 30, 2010.

5. **The Ministry of Health and Long-Term Care report to the Standing Committee on its assessment of the advantages and disadvantages of mandatory influenza immunization programs for staff of LTC homes.**

Antibiotic Use

Residents in LTC homes use antibiotics primarily to treat infections. Research indicates an association between one's increased use of antibiotics and the resistance of infections to certain antibiotics. In addition, individuals are at increased risk for acquiring certain infections (such as *C. difficile* and MRSA) if they are taking antibiotics. One study of Canadian and U.S. LTC homes indicated that antibiotics were prescribed to 79% of residents over a one-year period.

Unlike hospitals, LTC homes are not required to identify outbreaks of *C. difficile* to their local public health unit, or to report the outbreaks to the Ministry, although many homes do. In 2008/09, some 81 *C. difficile* outbreaks in homes were reported to the Ministry. The Auditor has observed that the judicious use of antibiotics has been shown to reduce the incidence of *C. difficile*.

PIDAC's recommendations to limit the increase and spread of antibiotic-resistant infections include directing all LTC settings:

- to develop an "antibiotic stewardship program" by implementing policies and procedures to promote judicious antibiotic use including the policy that homes have an antibiotic drug formulary that lists the antibiotics that physicians can prescribe; and
- to review actual antibiotic use to assess prescribing appropriateness.

While none of the three audited homes had implemented the recommended antibiotic drug formulary, all three homes had processes to monitor antibiotic usage to some extent.

The Auditor recommended that the Ministry, in conjunction with other interested stakeholders, should help LTC homes develop an antibiotic drug formulary. As well, the Ministry should periodically review antibiotic use in LTC homes to facilitate follow-up action where the use seems unusually high.

Public Hearings

Antibiotic Use by Residents

Three practising physicians and a medical advisory committee (MAC) serve one of the LTC homes. The physicians prescribe drugs listed on the Ontario Drug Benefit program and try to follow best practices when prescribing antibiotics. For example, they will not immediately treat a resident's suspected bladder infection with antibiotics unless the resident is exhibiting symptoms. The MAC can access information on the types of antibiotics prescribed at this home, and the physicians prescribing them.

At a second home, the physician can access data from the home's pharmacy indicating the number of antibiotics being prescribed to the residents. Staff are seeking to have the pharmacy change the programming so that when an antibiotic is ordered, it prompts staff to report the condition(s) the antibiotic is being prescribed to treat.

Joint Task Force on Medication Management

On the issue of antibiotic resistance and best practices, Members asked officials to highlight what types of recommendations have been proposed by the Joint Task Force on Medication Management in Long-Term Care.

The Joint Task Force report was an initiative of the Ministry and provider associations¹⁰ that was convened in response to the Auditor-General's *2007 Annual Report* (S. 3.10, Medication Management in Long-Term Care Homes).¹¹ The five recommendations of the Task Force Report focused on four broad areas:

- (1) medication incident reporting
- (2) improved medication reconciliation
- (3) better processes concerning high-risk drugs in the elderly, and
- (4) technology strategies and supports

Beer's List

Since the tabling of the Joint Task Force Report in November 2009, the partners continue to implement the recommendations. A sample of actions taken includes:

- The Ontario Long Term Care Association (OLTCA) is working with the Ontario Long Term Care Physicians Association to help educate sector stakeholders on the Beer's List—certain high-risk drugs that experts have indicated are generally more harmful than beneficial to older adults—as it might be adapted to Ontario.¹²
- The Ministry is working with the Ontario Health Quality Council and the Institute for Safe Medication Practices Canada (ISMP) on the Residents-First

¹⁰ Partners in the Joint Task Force included the Ontario Long Term Care Association, the Ontario Association of Non-Profit Homes & Services for Seniors, and the Institute for Safe Medication Practices (ISMP), Canada.

¹¹ S. 3.10 of the Auditor's *2007 Annual Report* was selected by the Standing Committee on Public Accounts for public hearings in May 2008. The Committee endorsed the Auditor's findings and recommendations and drafted nine of its own recommendations in a 13 page report. See: Ontario, Legislative Assembly, Standing Committee on Public Accounts, Long-Term Care Homes – Medication Management (Sec. 3.10, 2007 Annual Report of the Auditor General of Ontario), First Session, 39th Parliament, November 2009.

¹² The Beers List was first developed in 1991 by Dr. Mark H. Beers, an American gerontologist who created the list according to the following criteria: appropriate use of medication, effectiveness, risk of adverse events, and the availability of safer alternates. Updated in 2002, it includes about 50 medications or classes of medications considered to pose a high risk to adults 65 or older.

initiative to apply continuous quality improvement methods within the homes.¹³

Medication Safety Self-Assessments

Ministry officials highlighted one of the tools for LTC homes that resulted from the task force report—medication safety self-assessments. Approximately 65% of homes undertook a methodical self-assessment of their processes for medication delivery.¹⁴ As a result, homes are seeking to ensure that they have features in their pharmacy contracts such as regular meetings with their pharmacist.

When witnesses were asked to comment on the self-assessments, one acknowledged finding the process and the ISMP bulletins that highlight typical medication errors, valuable. Witnesses are seeking to improve medication practices—including the prescribing of selected narcotics to residents. One witness spoke of occasionally finding that the home's physicians were prescribing very strong narcotics (such as Fentanyl) to residents. Consequently, the home approached its partner pharmacy asking that an alert be programmed requiring that a resident's medication history be reviewed whenever such drugs are prescribed. In total, the home's pharmacy programmed into its system a list of about 20 high-risk drugs that will generate such alerts. Now the system's alerts prompt communication between the pharmacy and the physician. The system is working. Recently, the home's pharmacy heard from a physician thanking the pharmacy for an alert that prompted him to alter a resident's prescription.

Witnesses at another home spoke of how they examine high risk medications and medication reconciliation more closely. Staff at this home conducted a medication self-assessment and reviewed the recommendations of the Auditor General's *2007 Annual Report on Medication Management in Long-Term Care Homes*. When the home prepared for accreditation in February 2010, Accreditation Canada acknowledged the home's work in medication management and found not one unmet standard related to medication in the home.

Committee Recommendation

The Standing Committee on Public Accounts recommends that:

- 6. Given the large amount of antibiotics prescribed to many residents of LTC homes and the harm posed by antibiotic-resistant micro-organisms, the Ministry of Health and Long-Term Care shall report to the Standing Committee on the steps it has taken—such as having discussions with the College of Physicians and Surgeons of Ontario—to periodically review the use of antibiotics in each LTC home.**

¹³ For more information on this initiative see the *Residents First* brochure at http://www.residentsfirst.ca/documents/communicationsnewsletters/residentsfirstbrochure_april2010pdf or go to <http://www.residentsfirst.ca/about> (accessed on October 16, 2010).

¹⁴ Standing Committee on Public Accounts, *Hansard*, p.117.

7. **Given that the audited LTC homes found the Medication Safety Self-Assessments beneficial and the Ministry indicated that approximately 65% of homes have undertaken this assessment, the Ministry of Health and Long-Term Care shall report to the Standing Committee on whether homes that have not yet completed the assessment will be required to do so and by what date. The Ministry should also indicate the regular basis by which all of the homes will be required to undertake this self assessment.**

Tracking Infections

While the Ministry has introduced a number of initiatives to help prevent and control infectious diseases in LTC homes, it lacks information on the total number of cases of HAIs in these homes: the information collected at the three audited homes was generally not comparable because the homes defined and counted HAIs differently.

The Auditor recommended that the Ministry require homes to identify and track infections in a consistent and comparable manner, using standard definitions and surveillance methods.

Public Hearings

Members asked the Ministry about the apparent lack of consistency in the identification and tracking of infections in LTC homes.

Ministry officials responded that the Ministry has to work toward comparable measures which could be publicly reported. Regulations under the new *Long-Term Care Homes Act, 2007* which came into force on July 1, 2010 require homes to monitor, record, and analyze information daily relating to the presence of infections in residents, and review such information monthly to detect trends. Moreover, the Ministry's computerized care-management system—expected to be fully implemented in homes by summer 2010—will help health professionals in homes to identify and assess residents with various infections. Officials noted that the system will enable homes to track and monitor resident infections in a consistent manner using the same definitions. This data, comparable across all homes, will be forwarded to the Ministry quarterly.¹⁵

Establishing Benchmarks

PIDAC indicates that it is a best practice to evaluate infection rates against benchmarks. Benchmarks enable homes to evaluate their actual infection rate against a targeted maximum rate. Possible benchmarks that a home could use include the rate of infections in the home at a particular point in time in a prior year (known as a baseline rate), and the incidence rate of infections at other

¹⁵ Ontario, Ministry of Health and Long-Term Care, Office of the Deputy Minister, S. 3.06 Infection Prevention and Control in Long-Term Care Homes, *Summary Status Table* (May 2010), p. 7.

homes. The Regional Infection Control Networks noted in 2008 that only 15% of facilities (primarily LTC homes) used external benchmarks, and 21% did not use any benchmarks at all. None of the three homes had formally established baseline rates. However, all had compared their current infection statistics against statistics from previous periods.

The Auditor recommended that the Ministry, in conjunction with LTC homes, should establish reasonable targeted maximum rates/benchmarks for the more prevalent infections.

Public Hearings

Members were surprised to learn that LTC homes lack external benchmarks against which infection rates can be evaluated and asked Ministry officials why that is the case.

Ministry officials responded that in the aftermath of SARS, infectious disease outbreak management and its associated methodologies have only recently entered the realm of health care. Accordingly, the PIDAC literature emphasizes individual symptomology and how infection can vary within a home, between homes, and from community to community. Officials emphasized the need to constantly monitor particular symptoms presented by individual residents. The straight use of benchmarks can actually be misleading in some circumstances, according to Ministry officials.

The Ministry noted that while tracking of infectious diseases in LTC homes is still in the development state, software methodology for this sector is forthcoming that will allow the Ministry to capture infectious disease reporting, prevention, and control in a way that will ultimately provide important baseline information for trend analysis.

Members asked about the common assessment tool known as the Resident Assessment Instrument (RAI) and wondered how helpful the tool is in terms of ensuring consistency among the different LTC homes in tracking infection rates. When Members asked whether the tool enables the sector to start acquiring the data needed for benchmarking, Ministry officials responded that it did. Elaborating on the RAI-MDS (minimum data set), it was explained that the resident assessment instrument helps to manage patient care as well as facilitate benchmarking. It is being rolled out—not only in LTC homes, but in other settings such as hospitals and CCACs.

The Ministry is reviewing the appropriateness of establishing targeted maximum rates or benchmarks for the more prevalent infections. The Ministry explained that the rates of selected infections such as influenza and noroviruses in each LTC home often reflect the rates of these viruses in their local communities. Rates are also influenced by the vulnerability of the resident population in the home. As

such, the rates of these infections may not be reflective of the homes' internal infection-prevention-and-control practices, according to the Ministry.¹⁶

With respect to specific infections such as skin infections, however, the Ministry pointed out that each home should establish its own baseline to provide the home with the necessary information to assess the impact of the home's infection-prevention-and-control program over time.

Committee Recommendation

The Standing Committee on Public Accounts recommends that:

- 8. The Ministry of Health and Long-Term Care report to the Standing Committee whether or not it will establish benchmark standards for infection rates in LTC homes by type of infection existing in LTC homes. If not, the Ministry shall explain its reasoning to the Committee for not doing so.**

Publicly Reporting Patient Safety Indicators

Under the *Health Protection and Promotion Act*, LTC homes must report information to their local public health unit on certain diseases such as TB and influenza, as well as outbreaks of respiratory infections and gastroenteritis. Any outbreaks that homes reported to their local public health unit must also be reported directly to the Ministry. However, homes are not required to report other infectious diseases such as MRSA and VRE. Although hospitals must report (since September 1, 2008) when a gastroenteritis outbreak is caused by *C. difficile*, LTC homes are not required to report this.

Ontario hospitals are also required to report publicly on several patient-safety indicators including HAIs such as *C. difficile*, MRSA, and VRE, and on hand hygiene compliance among health-care workers. LTC homes are not subject to similar reporting requirements. However, one of the three homes publicly posted information on the number of certain infections within the home. No information on infection rates was publicly reported by the other two homes.

The Auditor recommended that the Ministry, in conjunction with LTC homes, look into having the homes report publicly, as hospitals do, on certain patient safety indicators, such as cases of *C. difficile* and hand hygiene compliance among resident care staff, using standard definitions and surveillance methods.

Public Hearings

In response to questions, Ministry officials spoke about their support for public reporting of quality measures in the long-term care sector. To that end, the province created the Ontario Health Quality Council. The Council began public reporting on approximately 30 quality indicators from a selection of "early adopter" LTC homes that have been using the data collection tool, the resident

¹⁶ Ibid.

assessment instrument—minimum data set (RAI-MDS) for at least a year. Individual home results are presented as well as provincial results. The featured indicators include health measures that fall into the following five broad domains related to the quality of long-term care in the province:

- (1) keeping people healthy;
- (2) keeping residents safe;
- (3) ensuring that services are resident-centred;
- (4) ensuring access to LTC homes; and
- (5) ensuring that homes are appropriately resourced to meet residents' needs.¹⁷

Members raised another aspect of public reporting with Ministry officials. Pointing out the finding from p. 181 in the Auditor's *2009 Annual Report* that "Ontario hospitals are required to report publicly on several patient-safety factors including health-care-acquired infectious diseases, such as *C. difficile*, MRSA, and VRE, and on hand-hygiene compliance with health-care workers," Members observed that "long-term care homes, however, are not subject to similar reporting requirements." They wondered why the methodology used in hospitals could not be applied to LTC homes.

Ministry officials replied that teams at the Ministry are looking at the viability and meaningfulness of reporting on patient safety indicators in long-term care. As well, the Ministry needs to consider the administrative burden that this might place on homes. While the Ministry maintains its commitment to public reporting, and has the technical capability, it is still working towards comparable measures, according to officials.

Ministry officials asked the Auditor questions about infectious diseases benchmarking in the acute care hospital sector. The Auditor replied that his audit: *Prevention and Control of Hospital-Acquired Infections*—released as a Special Report on September 29, 2008—recommended that the Ministry in conjunction with the LHINs and hospitals consider public reporting.¹⁸ As of September 2008, the Ministry set out some guidelines and now there is public reporting of HAIs in the hospitals.

The audited homes were asked to comment about their experiences and involvement with public reporting. One witness noted that the Ministry publicly reports the results of every home's annual inspection. An official from a second home indicated that they support public reporting through the Ontario Health Quality Council.

¹⁷ See Ontario Health Quality Council, Long-Term Care, *Frequently Asked Questions*, Internet site at http://ohqc.ca/en/ltc_fac.php, accessed on October 15, 2010.

¹⁸ See Recommendation 4 of Ontario, Office of the Auditor General, Special Report, *Prevention and Control of Hospital-acquired Infections* (Toronto: The Office, September 2008), p. 35, Internet site at http://www.auditor.on.ca/en/reports_en/hai_en.pdf, accessed on October 15, 2010.

Committee Recommendation

The Standing Committee on Public Accounts recommends that:

- 9. The Ministry of Health and Long-Term Care report to the Standing Committee on its timeline for requiring LTC homes to publicly report comparable information on patient safety indicators, such as cases of *C. difficile*, similar to what is already required for hospitals. If a phased in approach is planned, the Ministry shall indicate to the Committee the patient safety indicators which will be reported by LTC homes and the date by which the homes are expected to start reporting each indicator.**

Infection Prevention and Control Professional

The audit team observed that all three visited homes had designated an Infection Prevention and Control Professional (ICP) in compliance with Ministry requirements. But, none of the ICPs had specific training in infection prevention and control as recommended by PIDAC. All three homes indicated that they lacked the resources to meet this recommendation. All of these designated individuals performed the ICP role in addition to other functions. The homes indicated that recruiting and retaining well-trained ICPs has been a challenge.

The Auditor recommended that LTC homes ensure that staff, including designated ICPs, have the infection surveillance training recommended for their position.

Public Hearings

Members asked Ministry officials whether the provision that requires an ICP to be appointed in each home has been met, and if not, how consistently is it being enforced?

The Ministry indicated that all homes have a person designated as an ICP. Annual inspections of LTC homes check for that requirement. However, PIDAC would like the ICPs to become formally certified in infection control. Homes are finding this requirement difficult to meet, as the training course takes two years on average to complete. Therefore, while 100% of homes have ICPs on staff, the ICPs lack certification in infection control.

In response to Members' questions, Ministry officials indicated that no deadline or target has been established at this time for ICPs to be trained and certified.

Witnesses were asked questions about the designated ICPs in their homes. When Members asked how the ideas or recommendations of the infection control committee are communicated to front-line staff, and what tangible results came from those quarterly meetings, a witness provided an example. The results of a hand washing audit were communicated to staff highlighting the importance of washing one's hands after touching the environment of a resident's room.

When asked how the homes relate to the Regional Infection Control Networks (RICNs), several witnesses responded that they access the network for education purposes and for support for training initiatives such as *Just Clean Your Hands*. Some homes access the networks regularly and find them to be an extremely helpful resource in terms of educational support and information sharing. Some of the homes are planning to train staff in infection control through their network.

Committee Recommendation

The Standing Committee on Public Accounts recommends that:

- 10. The Ministry of Health and Long-Term Care report to the Standing Committee on the number and percentage of LTC homes that now have a trained and certified Infection Prevention and Control Professional (ICP) on staff.**
- 11. The Ministry of Health and Long-Term Care report to the Standing Committee on other ways that LTC homes can access infection prevention and control expertise in those cases where having a certified Infection Prevention and Control Professional (ICP) on staff may not be practical.**

CONSOLIDATED LIST OF RECOMMENDATIONS

The Standing Committee on Public Accounts requests that the Ministry of Health and Long-Term Care provide the Committee Clerk with its written responses to the Committee's recommendations within 120 calendar days of the tabling of the report with the Speaker of the Legislative Assembly unless otherwise specified in a recommendation.

1. While recognizing that there is some communication between LTC homes and hospitals regarding patients with an infectious disease, the Ministry of Health and Long-Term Care should determine, in conjunction with LTC homes and hospitals, how best to ensure that this information is communicated on a timely basis for patients transferring to or from hospital, and report to the Standing Committee on steps to be taken for this purpose.
2. The Ministry of Health and Long-Term Care report to the Standing Committee indicating the steps that the LTC homes will take to commence the periodic monitoring of screening processes to ensure alignment with PIDAC recommendations and legislative requirements.
3. Given the limited availability of private rooms, the Ministry of Health and Long-Term Care shall, in conjunction with the LTC homes and PIDAC, review PIDAC's recommendations on isolating and cohorting residents who have, or are at high risk of having infectious diseases, and report to the Standing Committee the results of the review.
4. The Ministry of Health and Long-Term Care indicate whether it will require each LTC home to publicly report the influenza immunization rates for the residents and staff of the home, including posting the rates in a prominent place in the home during the flu season. Furthermore, the Ministry shall report to the Standing Committee whether it will publicly report the annual influenza immunization rates (by residents and staff) for each of Ontario's approximately 600 LTC homes on its website.
5. The Ministry of Health and Long-Term Care report to the Standing Committee on its assessment of the advantages and disadvantages of mandatory influenza immunization programs for staff of LTC homes.
6. Given the large amount of antibiotics prescribed to many residents of LTC homes and the harm posed by antibiotic-resistant microorganisms, the Ministry of Health and Long-Term Care shall report to the Standing Committee on the steps it has taken—such as having discussions with the College of Physicians and Surgeons

of Ontario—to periodically review the use of antibiotics in each LTC home.

7. Given that the audited LTC homes found the Medication Safety Self-Assessments beneficial and the Ministry indicated that approximately 65% of homes have undertaken this assessment, the Ministry of Health and Long-Term Care shall report to the Standing Committee on whether homes that have not yet completed the assessment will be required to do so and by what date. The Ministry should also indicate the regular basis by which all of the homes will be required to undertake this self assessment.
8. The Ministry of Health and Long-Term Care report to the Standing Committee whether or not it will establish benchmark standards for infection rates in LTC homes by type of infection existing in LTC homes. If not, the Ministry shall explain its reasoning to the Committee for not doing so.
9. The Ministry of Health and Long-Term Care report to the Standing Committee on its timeline for requiring LTC homes to publicly report comparable information on patient safety indicators, such as cases of *C. difficile*, similar to what is already required for hospitals. If a phased in approach is planned, the Ministry shall indicate to the Committee the patient safety indicators which will be reported by LTC homes and the date by which the homes are expected to start reporting each indicator.
10. The Ministry of Health and Long-Term Care report to the Standing Committee on the number and percentage of LTC homes that now have a trained and certified Infection Prevention and Control Professional (ICP) on staff.
11. The Ministry of Health and Long-Term Care report to the Standing Committee on other ways that LTC homes can access infection prevention and control expertise in those cases where having a certified Infection Prevention and Control Professional (ICP) on staff may not be practical.