# Chapter 13 Sunrise Regional Health Authority—Infection Prevention and Control in Long-Term Care Facilities

#### 1.0 MAIN POINTS

The Regional Health Services Act makes each Regional Health Authority (RHA) responsible for the operation of long-term care facilities and the services provided in those facilities. Their responsibilities include preventing and controlling the spread of infections in all of their facilities. If systems are not in place to effectively prevent and control infections in long-term care facilities, residents, staff, and visitors could be exposed to a higher risk of infection, which leads to poor health and increased healthcare costs. RHAs must have effective infection prevention and control processes to reduce the incidence of infections, improve healthcare quality, and make the best use of available resources.

This chapter reports that Sunrise Regional Health Authority (Sunrise) had effective processes to prevent and control infections in its long-term care facilities other than it needs to:

- Expand its infection prevention and control plan to include goals, actions, and targets related to long-term care facilities, and have the plan approved
- Use consistent practices related to communication, hand hygiene, cleaning, and laundry in all long-term care facilities
- Develop a training plan to give formal updates on infection prevention and control practices for long-term care facility staff
- Develop a system to collect, analyze, and routinely report infection rates and trends in long-term care facilities on key types of infections that affect residents in long-term care facilities

We encourage other regional health authorities to use the information in this chapter to assess their processes for infection prevention and control in long-term care facilities.

### 2.0 Introduction

Under *The Regional Health Services Act*, each RHA is responsible for the planning, organization, delivery, and evaluation of health services within their respective health regions. Their responsibilities include preventing and controlling the spread of infections in all of their facilities. The occurrence of, and exposure to, infections pose health and safety risks to residents, staff, and visitors.

Most RHAs operate long-term care facilities. Long-term care facilities (also called "special-care homes" or "nursing homes") care for individuals whose needs cannot be appropriately met through home care or community-based services (i.e., they require 24-hour nursing care and supervision in a secure setting). Individuals are admitted to long-term care facilities based on their assessed needs.



The Ministry of Health recognizes that preventing and controlling infections in long-term care facilities is key to reducing and managing health and safety risks to residents, staff, and visitors. The Ministry of Health has established standards for operating long-term care facilities called Program Guidelines for Special-care Homes. Effective April 2013, these guidelines include a policy related to developing an Infection Control Program to monitor, reduce and/or control the incidence and spread of infectious organisms.1

In 2012-13, Sunrise had a population of 57,678. The average age of its population is significantly older than the provincial average with 21.2% of the population over the age of 65. Provincially, 14.4% of the population is over the age of 65.2 As a result, the percentage of the population potentially requiring long-term care is higher in Sunrise than elsewhere in the province.

In 2012-13, Sunrise employed approximately 2,900 people and operated 22 healthcare facilities.3 Fourteen of the 22 facilities provide long-term care. This includes long-term care delivered in facilities owned and operated by Sunrise or by its affiliates (who receive funding from Sunrise to provide these services).

At March 2013, Sunrise had 806 long-term care beds and 36 other beds that include respite and convalescent beds<sup>4</sup> in 14 facilities. Figure 1 shows the number of beds by facility. Sunrise's long-term care facilities are located in various communities. These facilities have varied proximities to other health facilities and access to other medical services and professionals.

This chapter reports the results of our audit of Sunrise's processes to prevent and control infections in its long-term care facilities.

<sup>&</sup>lt;sup>1</sup> www.health.gov.sk.ca/adx/aspx/adxGetMedia.aspx?DocID=843ea94d-23bd-4a0a-8531-de690caccbe6 (14 April 2014). www.sunrisehealthregion.sk.ca/images/Articles/28\_2012-13%20Annual%20Report%20-%20FINAL%20optim.pdf (14 April 20 2014).

<sup>&</sup>lt;sup>4</sup> Respite care is for individuals who normally live at home but are dependent on family for support. Respite care provides temporary relief to families or other primary care providers. Convalescent care is the provision of a period of additional recuperative time following serious illness or injury, usually following a stay in hospital. <a href="www.health.gov.sk.ca/special-care-">www.health.gov.sk.ca/special-care-</a> homes (14 April 2014).

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Figure 1—Number of Long-Term Care Beds in the Sunrise Region by Facility

| Facility  | Long-term care beds | Other<br>Beds | Total |
|---|---------------------|---------------|-------|
| Canora Hospital*  | 6                   | 2             | 8     |
| Kamsack Hospital & District Nursing Home                    | 61                  | 2             | 63    |
| Preeceville & District Health Centre*                       | 38                  | 2             | 40    |
| Canora Gateway Lodge*                                       | 63                  | 1             | 64    |
| Esterhazy-Centennial Special Care Home                      | 52                  | 1             | 53    |
| Foam Lake Jubilee Home*                                     | 49                  | 2             | 51    |
| Invermay Health Centre                                      | 24                  | 2             | 26    |
| Ituna Pioneer Health Centre                                 | 35                  | 3             | 38    |
| Langenburg Health Care Complex/Centennial Special Care Home | 44                  | 3             | 47    |
| Norquay Health Centre*                                      | 30                  | 2             | 32    |
| Saltcoats - Lakeside Manor Care Home*                       | 29                  | 1             | 30    |
| Melville - St. Paul Lutheran Home (affiliate)*              | 128                 | 1             | 129   |
| Theodore Health Centre*                                     | 18                  | 1             | 19    |
| Yorkton & District Nursing Home*                            | 229                 | 13            | 242   |
| Total   | 806                 | 36            | 842   |

Source: Sunrise Health Region Annual Report 2012-13

#### IMPORTANCE OF GOOD INFECTION CONTROL 3.0

Infections are costly to the healthcare system. Infections acquired in healthcare settings can create illness and in some cases, cause death.

Some serious infections are transmitted through contact (e.g., person-to-person touching), and/or droplet (e.g., mucus or other secretions). These include Clostridium difficile (CDI), respiratory illnesses, Methicillin-resistant Staphylococcus aureus (MRSA),5 and Vancomycin-resistant Enterococci (VRE).6 According to the 2008 Canadian Patient Safety Institute study of the economic burden of infections in Canadian hospitals, the estimated cost per case is \$10,809 for CDI, \$14,484 for MRSA infections, and \$14,414 for VRE infections. The Institute stated that each infection was 37% preventable.<sup>7</sup>

As highlighted in the 2009 Canadian Nosocomial Infection Surveillance Program national survey of MRSA,8 the incidence of infections in healthcare facilities has increased over time. The survey was conducted at healthcare facilities, including long-term care

www.phac-aspc.gc.ca/nois-sinp (14 April 2014).

<sup>\*</sup> Indicates the facilities visited by us during the audit period

<sup>&</sup>lt;sup>5</sup> MRSA (Methicillin Resistant Staphylococcus aureus) is a bacteria resistant to common antibiotics and that affects the heart, lungs, bones, joints, and/or bloodstream.

<sup>&</sup>lt;sup>6</sup> CDI (Clostridium difficile) is a bacterial spore that causes irritation in the bowel leading to severe cramps and diarrhea; VRE (Vancomycin-resistant Enterococcus) is a bacteria resistant to common antibiotics that causes severe urinary tract infections. www.patientsafetyinstitute.ca/English/research/commissionedResearch/EconomicsofPatientSafety/Documents/Economics% 20of%20Patient%20Safety%20-%20Acute%20Care%20-%20Final%20Report.pdf (14 April 2014).



facilities. It reported that from 1995 to 2009, healthcare-associated MRSA rates<sup>9</sup> increased from under one case per 1,000 patient admissions to over six cases per 1,000 patient admissions. Increased infection rates pose a greater risk to the health and safety of residents, staff, and visitors to long-term care facilities. Not only does infection affect the health of residents, there are negative emotional impacts on residents due to isolation.<sup>10</sup>

Infection prevention and control is a factor in healthcare quality. It has been identified as a priority safety issue in long-term care settings. Long-term care residents are particularly vulnerable to infections due to age, complex health issues, and shared living spaces. Residents of long-term care facilities are frequently admitted to hospital for infection-related reasons. Also, long-term care residents who have recently been discharged from a hospital back to a long-term care facility may be carrying infections that were acquired while they were in hospital. These infections could then be transmitted to other residents in the long-term care facility.

While it is not possible to prevent all infections in healthcare facilities, effective prevention and control can reduce the incidence of infections, improve healthcare quality, and make the best use of available resources. Good infection control practices prevent most infections, thus avoiding patients' pain and extra costs to the health system. For example, consistent hand washing and general facility cleaning practices can reduce the rate of infections. Other infections can be prevented with the use of specific prevention protocols (e.g., limited use of urinary catheters). Good governance and accountability are also important.

Lack of effective processes to prevent and control infections in long-term care facilities could result in poor health, loss of human life, and increased healthcare costs.

### 4.0 OBJECTIVE, SCOPE, CRITERIA, AND CONCLUSION

The objective of this audit was to assess whether Sunrise had effective processes to prevent and control infections in its long-term care facilities for the period of April 1, 2013 to March 31, 2014. Our work did not include assessing prevention and control of infections at Sunrise's acute care facilities.

To conduct this audit, we followed the standards for assurance engagements published in the *CPA Canada Handbook – Assurance*. We examined Sunrise's policy and procedures manual, reports, and other relevant documents. We also visited various long-term care facilities in Sunrise to observe practices and operations.

We used criteria based on the work of other auditors and past audits on infection prevention and control carried out by our Office. Sunrise's management agreed with the criteria in **Figure 2**.

<sup>&</sup>lt;sup>9</sup> Healthcare-associated cases include infections or colonization originating from exposure in a healthcare facility including long-term care or clinics in 54 facilities in 10 provinces.

<sup>10</sup> www.phac-aspc.gc.ca/nois-sinp/guide/ps-sp (14 April 2014).

<sup>11</sup> Ibid.

<sup>&</sup>lt;sup>12</sup>www.patientsafetyinstitute.ca/English/research/commissionedResearch/SafetyinLongTermCareSettings/Documents/Reports (14 April 2014).

#### Figure 2—Audit Criteria

To have effective processes to prevent and control infections in long-term care facilities, Sunrise Regional Health Authority should:

#### 1. Plan to manage infections acquired in long-term care facilities

- 1.1 Identify legislative and policy requirements
- 1.2 Set out clear expectations, including accountability, for long-term care facilities in an infection control plan
- 1.3 Update the infection control plan regularly
- 1.4 Communicate the infection control plan

#### 2. Use good practices to prevent, control, and monitor infections

- 2.1 Adopt methods to prevent and control infections
- 2.2 Train staff in safe practices
- 2.3 Provide resources (e.g., supplies, staff, guidance)
- 2.4 Monitor infection control processes regularly

#### 3. Use information systems effectively

- 3.1 Use a centralized system to monitor infections
- 3.2 Control quality of data about infections
- 3.3 Analyze data to identify emerging risks, trends and areas for action

#### 4. Report results for continuous improvement

- 4.1 Report infection outbreaks promptly
- 4.2 Report infection rates to management and stakeholders
- 4.3 Review infection control reporting regularly
- 4.4 Inform relevant stakeholders about infection risks and trends

We concluded that, for the period of April 1, 2013 to March 31, 2014, Sunrise had effective processes to prevent and control infections in long-term care facilities except it needs to:

- Expand its infection prevention and control plan to include goals, actions, and targets related to long-term care facilities, and have the plan approved
- Use consistent practices related to communication, hand hygiene, cleaning, and laundry in all long-term care facilities
- Develop a training plan to give formal updates on infection prevention and control practices for long-term care facility staff
- Develop a system to collect, analyze and routinely report infection rates and trends in long-term care facilities on key types of infections that affect residents in long-term care facilities



#### 5.0 **KEY FINDINGS AND RECOMMENDATIONS**

#### 5.1 **Infection Control Planning Needs Some Improvement**

### 5.1.1 Legislative and Policy Requirements Identified

To prevent and control infections in its long-term care facilities, Sunrise uses Accreditation Canada's 13 recommended practices for infection control. Sunrise also uses the requirements set out in legislation (The Regional Health Services Act and The Housing and Special-care Regulations) and the Ministry of Health's Program Guidelines for Special-care Homes.

In addition, Sunrise has set policies to address the Ministry of Health's requirements such as reporting of certain infections and accountability for quality of care and patient safety as required by law. It maintains an infection prevention and control policy and procedures manual for staff to follow. For example, the manual includes definitions of an outbreak for specific types of infections, and who should be notified of suspected outbreaks. Also, Sunrise maintains policies to prevent and control infections including hand hygiene methods, infection outbreaks, dress code, and cleaning (e.g., resident room cleaning and specific cleaning methods required for certain infections).

# 5.1.2 Assignment of Responsibilities for Preventing and **Controlling Infections Clear**

Sunrise has assigned overall responsibility for infection prevention and control in all of its regional facilities, including long-term care facilities, to Sunrise's Integrated Health Services Division (Division) under the direction of the Vice-President of Integrated Health Services.

The infection prevention and control program area of this Division, led by a Director of Health Services, provides support and direction to management and staff throughout the region on all aspects of infection prevention and control. This includes:

- Developing and providing training
- Monitoring compliance with related requirements and policies
- Reviewing and recommending changes to infection prevention and control policies and procedures
- Reporting required data on infections to the Ministry of Health

<sup>13</sup> Accreditation Canada is an independent non-profit organization that accredits health regions and facilities across Canada. Every four years, peer reviewers evaluate the extent to which regions and facilities are meeting quality standards in a variety of areas. Accreditation Canada evaluates the results of the peer review to determine whether the region or facility will be accredited and makes recommendations for improvement through an accreditation report. Health regions, facilities, and organizations use these reports to create and implement action plans to address the recommendations. www.accreditation.ca (4 April 2014).

- Providing support through resources such as infection prevention and control nurses
- Working with Sunrise's committees that focus on infection prevention and control activities

Sunrise's key committees include the Regional Infection Prevention and Control Quality Improvement Team, and three Local Infection Prevention and Control Committees in the North, South, and Central areas of the region. The Regional Infection Prevention and Control Quality Improvement Team is accountable to the Vice-President of Integrated Health Services. Each of the three local committees are accountable to the Regional Infection Prevention and Control Quality Improvement Team.

The committees have various roles such as coordinating infection prevention and control programs in the region, developing procedures, and maintaining outbreak surveillance and reporting. Committee membership includes medical professionals, long-term care facility management, infection prevention and control nurses, and other operational support services positions (e.g., laundry, housekeeping).

Sunrise has made the Medical Health Officer the official spokesperson for the region to declare outbreaks of infections. Once an outbreak is declared, Sunrise communicates the outbreak to all healthcare facilities and staff.

In its policies, Sunrise assigns some responsibility directly to front-line staff (e.g., the responsibility to identify and report infections).

# 5.1.3 Infection Prevention and Control Action Plan Not Approved or Complete

In response to recommendations from Accreditation Canada for infection prevention and control, Sunrise developed, and the Board approved, an Infection Prevention and Control Action Plan (plan) for the region as a whole in 2012. The plan is for all types of facilities – both acute care facilities (hospital) and non-hospital settings.

#### The plan:

- Includes objectives and actions for hand hygiene, education of staff, access to alcohol rub, infection outbreaks, and tracking infection rates
- Identifies targets, timelines and key initiatives
- Assigns responsibility for key initiatives and includes updates on progress toward meeting objectives

In 2013, the plan was revised to include potential future actions for improving infection prevention and control. At March 2014, neither senior management nor the Board had approved the revised plan.

The plan is not sufficiently comprehensive as it does not include all key aspects of infection prevention and control. For example, the plan does not include any goals, actions, or targets related specifically to preventing contamination of linen, equipment, medical devices, and supplies. Also, there is limited information related to long-term



care facilities. The plan could include more goals, actions, and targets related specifically to long-term care facilities. The plan also does not set out formal reporting requirements (e.g., reports to senior management or the Board on progress).

Expanding its plan would help Sunrise direct attention to high-risk areas in long-term care facilities and monitor the results of all infection control processes. The plan should also be approved by senior management and the Board.

 We recommend that Sunrise Regional Health Authority expand its infection prevention and control plan to include goals, actions, and targets for long-term care facilities, and have the plan approved by its Board.

# 5.1.4 Communication with Staff and Public on Infection Risks and Plans Needs Improvement

Sunrise uses a variety of ways to communicate key aspects of its infection prevention and control plans to its healthcare facilities, staff, and the public. As previously noted, its Medical Health Officer is the region's official spokesperson responsible for declaring infection outbreaks. <sup>14</sup> Sunrise then informs all healthcare facilities and staff.

For long-term care facilities, Sunrise uses regular meetings with management and staff to discuss infection prevention and control activities, priorities, and risks. Its policies and procedures manuals related to infection prevention and control are readily accessible to employees within facilities. For example, these manuals set out the procedures to inform staff of suspected infection outbreaks and provide guidance on what staff must do in the case of an outbreak. Sunrise posts and discusses key information (e.g., results of hand hygiene audits, immunization rates) in its "walls" at each facility. Sunrise also posts information about infection outbreaks in its healthcare facilities on its website.

We found that Sunrise informed managers of its long-term care facilities about infection prevention and control activities, priorities, and risks at their regular meetings. Sunrise also followed its processes to inform staff about infections during daily "wall walks". Sunrise advised us that it expects all staff to attend the daily wall walks. However, it recognizes that staff working evenings or nights as well as other than full-time employees (i.e., casual and part-time staff) may have fewer opportunities to attend wall walks. Therefore, there is a risk that staff may not receive current information on infection prevention and control activities, priorities, and risks. To help reduce this risk, staff relay current information to those coming on shift during shift change.

During our audit period, we observed that Sunrise followed its established policies and procedures to declare suspected infection outbreaks and disseminate information to its facilities, staff, and the public.

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<sup>&</sup>lt;sup>14</sup> Infection outbreaks are defined as two or more confirmed cases of the same infection in one facility at the same time.

<sup>&</sup>lt;sup>15</sup> "Walls" are a designated spot in a facility where key information, including LEAN initiatives, is posted. The LEAN initiatives are used to improve employee achievements and progress towards expected tasks.

<sup>16 &</sup>quot;Wall walks" are part of the LEAN initiative to review and communicate employee achievements and progress towards expected tasks.

To help prevent infection outbreaks, Sunrise requires healthcare facilities to inform staff and the public by way of posters and signage about hand hygiene, infection symptoms, and precautions to take if a resident has an infection. However, we found inconsistent use of posters and signage at the long-term care facilities that we visited. For example, while all long-term care facilities had signage at the front entrance for the public on hand hygiene, only two facilities had signs to inform visitors with flu symptoms to see the nurse or postpone their visit. We also noted that most common areas and public washrooms in the long-term facilities that we visited did not have such signage. Consistent signage and posters has been identified as a proposed initiative for 2014-15 in Sunrise's plan.

Informing staff and the public about the danger of spreading infection is important. Residents of long-term care facilities could become seriously ill when they come into contact with staff and the visiting public who may be carrying even minor infections.

We recommend that Sunrise Regional Health Authority consistently communicate its practices on infection prevention and control in its longterm care facilities to front line staff and the public.

# 5.2 Practices to Prevent, Control and Monitor Infections Need Improvement

# 5.2.1 More Detailed Procedures Needed to Prevent and Control Infections

As noted in **Section 5.1.1**, Sunrise has policies and procedures to prevent and control infections. It makes the policies and procedures available to all staff and keeps them up to date. For some key policies, Sunrise has developed easy-to-use guides. For example, easy-to-use guides demonstrate good hand hygiene methods.

While Sunrise's policies and procedures related to infection prevention and control are set out well, we found gaps in a few key areas. For example, Sunrise does not have a written procedure directing facilities on the location of hand hygiene supplies. We found the availability of alcohol rub in long-term care facilities is inconsistent. In some facilities, we observed alcohol rub outside of every resident room. In others, alcohol rub was placed randomly in hallways. In some cases, the closest alcohol rub station was three rooms away. In facilities with alcohol rub outside every room, staff informed us that they view the readily-accessible availability of alcohol rub stations at every point of care as a best practice.<sup>17</sup>

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<sup>&</sup>lt;sup>17</sup> The Provincial Infectious Diseases Advisory Committee in Ontario identifies that installing alcohol rub at the point-of-care improves adherence to hand hygiene. Point-of-care is the place where health care or treatment involves contact between the resident and healthcare provider. Hand hygiene products available at point-of-care are easily accessible to staff by being as close as possible (i.e., within arm's reach to where contact is taking place). This includes making alcohol rub stations available immediately adjacent to the entrance to each resident's room which also allows visitors and those not providing health care easy access to the alcohol rub. <a href="https://www.publichealthontario.ca/en/eRepository/2010-12%20BP%20Hand%20Hygiene.pdf">www.publichealthontario.ca/en/eRepository/2010-12%20BP%20Hand%20Hygiene.pdf</a> (4 April 2014).



Hand hygiene is one of the main ways to prevent and control the spread of infections. Not making hand hygiene products readily available at points of care makes it more difficult for staff and visitors to follow good hand hygiene practices. Not following good hand hygiene practices increases the risk of spreading infections.

3. We recommend that Sunrise Regional Health Authority implement a written procedure to require hand hygiene stations to be readily accessible at points of care in its long-term care facilities.

Sunrise has policies outlining expectations for cleaning resident rooms and levels of cleaning. Levels of cleaning ranged from light to thorough.<sup>18</sup>

While Sunrise has various procedures for cleanliness including general cleaning methods and specific methods required for certain infections (e.g., CDI), we found it has not set specific requirements for the frequency of each level of cleaning expected. While it tracked the frequency of cleaning, it did not always track the level of cleaning carried out.

We found inconsistent practices on the thoroughness of room cleaning. During our audit, we reviewed cleaning logs in the long-term care facilities we visited. For example, some cleaning logs noted the level of cleaning done, whereas others just checked off that the resident room was cleaned. Not tracking the level of cleaning done makes it impossible to tell when and how often a thorough clean was performed. The cleaning logs were not reviewed by a supervisor.

While it has procedures for office and floor cleaning that address infection prevention and control, Sunrise does not have procedures for cleaning common areas such as public washrooms, sitting areas, and activity rooms. Common areas are used by staff, visitors and residents.

We found that most facilities included common areas on their cleaning checklists. However, the level of cleaning required was not identified.

A lack of specific cleaning requirements for common areas and not requiring tracking or review by a supervisor of the level of cleaning carried out could result in facilities not receiving thorough or timely cleaning. Insufficient cleaning increases the risk of spreading infections.

 We recommend that Sunrise Regional Health Authority implement cleaning procedures that identify cleaning requirements for all areas of long-term care facilities.

<sup>&</sup>lt;sup>18</sup> The Provincial Infectious Diseases Advisory Committee in Ontario identifies levels of thoroughness for resident room cleaning. For example, in addition to routine daily cleaning of resident rooms, additional cleaning such as high dusting and cleaning baseboards should occur on a weekly basis.

www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf (4 April 2014).

5. We recommend that Sunrise Regional Health Authority require staff document the level of cleaning completed on each area of long-term care facilities and have the documentation reviewed by a supervisor.

Sunrise policy states that laundry staff should take the same precautions for all personal laundry (e.g., residents' clothing). However, we found that laundry practices differ by facility. Some facilities bagged or segregated wet/soiled personal laundry, while others did not. Bagging and segregating wet/soiled clothes helps control infections. It also allows staff to take extra personal protection precautions when needed.

We found that a number, but not all, of the facilities took steps regarding the layout and access to their laundry area to avoid contaminating clean laundry. For example, some facilities used separate access doors for clean and dirty laundry and separate areas to fold and store clean clothes.

Lack of procedures for handling soiled laundry increases the risk that staff may not have a clear understanding of what they must do and when. This, in turn, can increase the risk of infection to staff and residents.

6. We recommend that Sunrise Regional Health Authority consistently handle and segregate soiled laundry to reduce the risk of infection to staff and residents of long-term care facilities.

# **5.2.2 Formal Ongoing Training Plan Needed**

Sunrise provides orientation for all new staff. Its general orientation for new staff was designed by staff with expertise from all areas (e.g., acute care, long-term care), including input from Sunrise's infection prevention and control committees. General orientation includes material on infection prevention and control such as immunization, respiratory assessment, hand hygiene, personal protective equipment (e.g., masks, gloves), precautions, risk of infection, and types of infections. New nurses receive additional orientation on infection prevention and control.

At each long-term care facility, Sunrise pairs new staff with senior staff to receive sitespecific training and mentorship.

However, Sunrise does not have a formal, ongoing training plan for staff on infection prevention and control. Rather, it provides periodic ad-hoc refresher sessions on key topics. For example, an Infection Prevention Nurse led voluntary information sessions about once a year, and Operational Support Services management provided facility staff with training on significant changes to practice. In another example, long-term care facilities provided refresher sessions on personal protective equipment (e.g., appropriate use of gowns, gloves and masks). However, staff participation in these sessions varied. In some facilities all staff took part, whereas in others, cleaning and laundry staff were not included.



Formal, ongoing training is important. As infection control practices change, there is a risk that staff may not sufficiently understand or adopt new practices. Formal training provides an opportunity for skills to be reinforced and assessed.

7. We recommend that Sunrise Regional Health Authority develop a training plan to give formal updates on infection prevention and control practices for long-term care facility staff.

# 5.2.3 Key Resource Materials are Available

To help prevent and control infections, Sunrise makes resource materials available to staff in long-term care facilities. We found the following resource materials readily available:

- Policy and procedure manuals which are accessible to staff and available online.
- Quick guides for various infections for staff to use on a daily basis. For example, these guides set out contact precautions to take if a resident has a specific infection, such as MRSA.
- An Infection Prevention Nurse located in each area of the region (i.e., North, South and Central). Infection Prevention Nurses are a direct resource for staff in long-term care facilities. They provide advice, answer questions and provide up-to-date information about infection prevention and control. In every facility we visited, staff expressed appreciation for the Infection Prevention Nurses.
- Personal protective equipment such as gloves and masks and supplies for hand hygiene, such as alcohol rub. However, as noted in **Section 5.2.1**, Sunrise needs to standardize the location of hand hygiene and alcohol rub stations.
- Precaution signs to use in the case of an infection.
- Outbreak carts, containing items such as gowns and masks, which can be located outside of rooms in the case of an infection.

# **5.2.4 Key Practices are Monitored**

To determine whether staff follow expected infection control practices, Sunrise routinely monitors three key infection control practices in its long-term care facilities.

Good hand hygiene is key to preventing and controlling infections. Sunrise does monthly hand hygiene audits in each facility. In these audits, it observes the practices of staff and gives the results to the facility. Results shared include the facility's current compliance rates compared to its past compliance rate, and those of other facilities in the region.

Sunrise monitors cleaning practices through annual room audits. Once each year, staff visually inspect each room in each facility by completing a checklist and provide

feedback to the facility. For example, the facility would be informed if dispensers (e.g., soap) in the rooms were not loaded and ready for use.

While staff influenza immunization is not a requirement, Sunrise monitors staff influenza immunization rates on an annual basis. It shares staff immunization rates at each facility in the region with all facilities.

See **Section 5.4** for reporting to senior management and the Board.

# 5.3 Information Systems Needed

# **5.3.1 System Needed to Monitor Key Infections**

Sunrise has good processes for collecting information on infection outbreaks in its long-term care facilities. As previously noted, Sunrise's policy on outbreak management clearly defines what constitutes an outbreak (i.e., when there are two or more confirmed cases of the same infection in one facility), and what outbreak information to collect and report. Information is collected daily from facilities that have an outbreak. We found that nurses at the facilities manually record the information during outbreaks and submit it to the area Infection Prevention Nurse, as expected.

Also, Sunrise collects information on clostridium difficile (CDI) and reports it to the Ministry of Health as required.

Sunrise has a policy to monitor health-associated infections in the region. The policy defines the different types of infections (e.g., MRSA, VRE, CDI) and sets out the reporting requirements. At March 2014, Sunrise was revising its policy to make data collection and reporting easier for staff. However, at March 2014, Sunrise did not have a system for collecting and reporting on the key types of infections in long-term care facilities.<sup>19</sup>

Without a system to collect and summarize reports on key types of infections, Sunrise may underestimate the infection risks long-term care staff and residents face and miss opportunities to provide safer and better quality care.

8. We recommend that Sunrise Regional Health Authority collect information on key types of infections that affect long-term care residents.

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<sup>&</sup>lt;sup>19</sup> In Ontario's 2009 audit of Infection Prevention and Control at Long-term-care Homes, it noted that the Provincial Infectious Diseases Advisory Committee suggests that homes consider tracking various infections (CDI, MRSA, VRE, influenza, skin infections, and urinary tract infections).



# 5.3.2 Analysis of Infection Information to Identify Risks and Trends Needed

Sunrise analyzes information about infections collected during infection outbreaks. Once an outbreak is over, medical experts within Sunrise determine the causes of infections, details on individual cases, and recommendations for future prevention. Each year, the Medical Health Officer prepares a detailed analysis of all outbreaks in Sunrise facilities. This analysis includes infection outbreak rates over time, the type of outbreak, the length of time to declare an outbreak, and the length of an outbreak. It also sets out lessons learned and recommendations for improvement. The Medical Health Officer does a similar annual analysis of respiratory outbreaks in long-term care facilities. These reports are shared with staff, managers, and the various committees. From January 1, 2013 to December 31, 2013 Sunrise declared 24 outbreaks. Twenty-one of these outbreaks occurred in long-term care facilities.

Because Sunrise collected only data about CDI and had not collected data on other key types of infections that affect residents in long-term care facilities, it did not analyze those infections.

Through routine analysis of trends of infections that are not part of an outbreak, Sunrise could improve its ability to identify emerging risks and protect long-term care staff and residents from infections. Trends on infections would provide information to understand how many outbreaks were prevented and identify opportunities for improvement at facilities which experience higher than normal rates of infection. In addition, this information would allow Sunrise to better assess the effectiveness of its infection control and prevention plans and activities.

9. We recommend that Sunrise Regional Health Authority routinely analyze information on key types of infections that affect long-term care residents.

# 5.4 Reporting of Results Needs Improvement

# 5.4.1 Infection Outbreaks are Reported Promptly but Reporting of Infection Rates Needs Improvement

As described in **Section 5.3.1**, Sunrise has policies that identify when to report infection outbreaks in long-term care facilities. Once an outbreak is identified, Sunrise issues a Staff and Physician Alert to all facilities. This Alert identifies the symptoms, guidelines, location of related policies and forms, and contact information. Sunrise reports outbreaks to the public by posting information on its website and signs at the entrance of the affected facility.

From April 1, 2013 to March 31, 2014 we observed that Sunrise's website was promptly updated with information on infection outbreaks in long-term care facilities. We found that the various committees and management assigned responsibility for infection prevention and control reviewed reports of infection outbreaks in the region.

While Sunrise does a good job reporting on infection outbreaks in long-term care facilities, it does not currently collect or analyze information on other key infections. Accordingly, it cannot report on infection rates within individual long-term care facilities, or across the region.

Sunrise gives information on infection outbreaks in its long-term care facilities to the Ministry of Health, the public, and to other healthcare facilities across the region. Sunrise informs the public about outbreaks by posting the current infection outbreaks on its website. Also, the visiting public is made aware of precautions to be taken when entering a room when a resident has an infection.

The Board also receives reports on the infection outbreak trends and infection prevention and control activities in the region. However, given the limited information collected on infection rates other than CDI, there are no associated reviews of other infections. Also, Sunrise does not give senior management or its Board reports on infection rates for key types of infections.

Routine written analysis would help Sunrise follow up on trends and recommend actions to reduce the number of infections in its long-term care facilities. Senior management and the Board would then be able to use this information to determine if further action is required to prevent infections.

10. We recommend that Sunrise Regional Health Authority give senior management and the Board routine written analysis on rates and trends of key infections in long-term care facilities.

Once Sunrise completes its written analysis of infection rates and trends, it will be able to inform other stakeholders about infection rates and trends.

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