Infection Control Lapse Dental Patient Recall

TO:	Chair and members of the Board of Health	
MEETING DATE:	September 6, 2017	
REPORT NO:	**BH.01.SEP0617.R23**	Pages: 8
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Recommendations

It is recommended that the Board of Health:

1. **Receive this report for information.**

Key Points

- Wellington-Dufferin-Guelph Public Health (WDGPH) received an infection control complaint on June 20, 2017 regarding Guelph Dental Associates (GDA) and an unannounced inspection occurred on June 21, 2017.
- Based on the June 21, 2017 inspection findings, an Order was issued (under the authority of Section 13 of the *Health Protection and Promotion Act*) prohibiting all on-site patient care services.
- On June 26, 2017, WDPGH initiated a dental patient recall by sending letters to 3,660 patients. The Incident Management System (IMS) was used to manage the patient recall, given the scope of the event.
- Outcomes from this investigation include: (i) improvements in IMS response, (ii) increased public awareness of Public Health's role in infection control complaints and (iii) promotion of educational opportunities.

Discussion

On Tuesday, June 20, 2017, WDGPH received an infection control complaint from a parent of a child experiencing a bacterial infection alleged to be as a result of dental care received at Guelph Dental Associates (also called Growing Smiles), in Guelph. WDGPH completed an unannounced inspection of the dental office on June 21, 2017 and found that cleaning, disinfection and sterilization of reusable dental instruments was not being done properly, otherwise referred to as 'reprocessing'. Given the nature of the lapses in infection prevention and control (IPAC) practice, a Section 13 Order was issued to stop all on-site patient care services on June 21, 2017.

Infection Prevention and Control Standards

Some medical devices used in dental clinics are reusable. Given this, there are specific IPAC standards that must be followed for equipment *reprocessing* (cleaning, disinfection and sterilization of medical equipment to kill all microorganisms on the device). If a lapse in IPAC practice occurs and equipment is not properly reprocessed, medical devices can be contaminated with blood from the previous patient. If a virus like hepatitis B, Hepatitis C, or HIV survived inadequate reprocessing it could be passed on to the next patient on whom the device is used.[1,2,3] This creates a potential risk for patients to acquire bloodborne infections (BBIs), although it is not possible to estimate an individual risk for each patient.

IPAC standards in Ontario are issued by the Provincial Infectious Disease Advisory Committee (PIDAC) through two evidence-based, best practice documents (i) *Best Practices for Cleaning, Disinfection, and Sterilization of Medical Equipment* and *Devices* and (ii) *Infection Prevention and Control for Clinical Office Practice.*[1,2] These documents are used by Public Health Units (PHUs) to assess IPAC practices in clinical settings and are supported by the Ministry of Health and Long Term Care (MOHLTC), Public Health Ontario (PHO), and the Royal College of Dental Surgeons of Ontario (RCDSO). When applied consistently, IPAC practices can prevent or reduce the risk of transmission of microorganisms to healthcare providers and clients.[1]

Role of Public Health

PHUs are required to investigate complaints of IPAC lapses in the offices and clinics of regulated health professionals, like dentists, as specified by the Ontario Public Health Standards. An inspection of a dental clinic can only be conducted by Public Health under three conditions:

1. A complaint is received from the public.
2. If during the assessment of a confirmed case of a BBI, a dental procedure occurred during the incubation period for that infection and the procedure is the only known risk factor.
3. A referral for a potential IPAC lapse is received from another PHU.

When one of these situations occurs, an unannounced investigation is initiated within 24 hours by Public Health to identify a potential IPAC lapse. The regulatory college is also informed of the complaint and invited to co-inspect the facility with Public Health.

Risk Assessment by Public Health Ontario

PHUs may request scientific and technical advice from PHO during an IPAC lapse investigation. In this case, WDGPH requested that PHO conduct a risk assessment of transmission of BBIs and assess the need for patient notification. PHO's assessment[4] determined:

- There was a low risk of BBIs for patients of the dental office, specifically hepatitis B, hepatitis C, and HIV due to the nature and number of the IPAC lapses.
- All patients receiving care at the dental office should be notified of the potential low risk for exposure to BBIs.
- All GDA staff are trained in reprocessing and equipment is reprocessed according to best practices.[4]

A decision was made to notify patients who attended the dental practice between January 21, 2015 and June 21, 2017. January 21, 2015 was established as the cut-off date because this was the date that the dental practice changed ownership. WDGPH did not receive any IPAC complaints under the previous owner and it could not be assumed that the previous owner conducted IPAC practices in the same manner as the current owner.

Wellington-Dufferin-Guelph Public Health's Response

To manage the notification of patients, on June 26, 2017, WDGPH utilized the IMS, in accordance with the Public Health Emergency Preparedness Standard and Protocol. IMS allows for the redeployment of staff from their normal responsibilities to ensure that there is sufficient staff available to effectively respond to the event. IMS had previously been used in the management of the Riverview Medical Group (RMG) investigation in 2016. BOH Report - BH.01.JUN0116.R09 can be referred to for an overview of the IMS process.

In this situation, IMS was used given the scope of the event and the large number of patients involved. A higher response to notification letters was also anticipated given that approximately 50% of the patients were children and the dental clinic specialized in providing dental care for children with special needs.

There were nine IMS business cycle meetings between June 26, 2017 and July 12, 2017. The use of IMS to manage this incident stopped on July 12, 2017 and a post-operational debrief took place on July 18, 2017.

Patient Notification

On June 30, 2017, a media release was distributed and letters were mailed to over 3,660 patients to notify patients of the investigation. Letters to patients identified the low risk of exposure to hepatitis B, hepatitis C, and HIV due to improper dental instrument sterilization, recommending that patients seek testing through their family physician. Contact information for WDGPH was provided for people to consult with WDGPH.

Responding to Public Inquiries

A call centre was established on June 30, 2017, immediately after the media release was distributed and patient notifications were mailed.

Hours for the call centre were extended over the long weekend – until 7:00 pm on Friday June 30, 2017, and from 10:00 am to 2:00 pm on Saturday July 1, 2017 and Sunday July 2, 2017. The call centre resumed on Tuesday July 4, 2017 and continued to Thursday July 13, 2017.

Staffing for the call centre was determined based on call volume, and by end of day Thursday July 13, 2017, a decision was made to close the call centre due to low call volume. Incoming calls regarding the investigation have been rerouted to a dedicated extension for Control of Infectious Diseases (CID) staff.

Media Coverage

Between June 30, 2017 and July 20, 2017, there were 14 articles written about the dental lapse investigation in CTV Kitchener, Global News, Orangeville Banner, the Wellington Advertiser, The Guelph Mercury Tribune, Magic 106.com, and 570news.com. Dr. Mercer also conducted an interview with CTV Kitchener. Media covered the details of the dental lapse investigation including the low risk of contracting HIV, Hepatitis B and C; the recommendation for testing; and, Public Health's role in investigating infection control complaints for healthcare professionals. The estimated reach of these articles is over 1.2 million people.

Several articles also mentioned WDGPH's *Check Before You Choose* website (CBYC) as a source of information about clinic closures and inspection reports for restaurants and personal service settings. Typically, following the mention of CBYC in a media article, there is an increase in traffic to the website – CBYC traffic increased during this event.

An article regarding the investigation was posted on WDGPH's website and received 9,167 hits between June 30, 2017 and July 19, 2017. A 'Special Alert' banner was also placed across the top of the website homepage and received 1,949 hits by July 19, 2017. A *Stay Well* blog post regarding Public Health's role in inspecting dental clinics was posted on July 4, 2017 and as of July 20, 2017, received 612 views – this is above average as *Stay Well* blog posts typically receive about 300-400 views.

Public Response

Communications monitored and responded to public feedback across online and social media. Feedback from the public ranged from being appreciative of WDGPH's involvement in the IPAC lapse investigation to comments of frustration that WDGPH should have directly contacted patients before notifying the media and mailing letters. Mailed letters were chosen as the method for communicating to patients because it was the most efficient way to contact the large number of patients involved.

Finance and Administration

Using IMS to manage the event along with the Continuity of Operations Plan (COOP) allowed for the redeployment of staff to meet Agency needs for this investigation. Staffing needs were coordinated between the IMS planning lead and the IMS HR/Administration lead based on operational needs. ONA was notified of the event in advance of all employees being notified.

Staffing was determined primarily through two initiatives: staff reassignment and staff overtime hours. Staff from different program areas and divisions worked additional hours, above and beyond their normal work schedule. In order to maintain service standards, individuals who worked additional hours were not permitted to bank compensation time. Extra hours worked were accordingly paid out to these staff members. IMS compensation practices and scheduling met legal and collective agreement requirements.

Staff hours associated with this IMS event have been tracked, both their normally scheduled working hours, as well as hours beyond their normally scheduled hours. Intermittent staff hours

may continue to be required in subsequent months due to follow-up inquiries.

Staff hours-worked associated with this IMS event are as follows:

Type of Staff	Reassigned hours	Extra hours	Total Hours
Professional Staff (PHI, PHN, IT, HR)	463.25	627.00	1090.25
Administrative Staff (program assistants)	36.50	3.00	39.50
Management Staff	360.00	N/A (salary)	360.00
Total	**859.75**	**630.00**	**1489.75**

Outcomes

WDGPH responded to this dental lapse investigation efficiently and effectively. Outcomes from this investigation include: (i) improvements in incident response, (ii) increased public awareness of Public Health's role, (iii) increased public awareness of the complaint protocol and (iv) promotion of educational resources.

Effective Response

This IPAC lapse investigation ran efficiently and effectively using the IMS structure. There was a clear command structure, well-defined roles and responsibilities and daily business cycle meetings. Internal and external communications shared consistent key messages and were delivered in a timely manner through a variety of mediums (e.g. media release, social media, blog). The call centre was also initiated quickly and well-staffed. Overall, the IMS process allowed WDGPH to be responsive to the emerging needs of this investigation, in a coordinated and collaborative manner.

PHUs are required to conduct at least one exercise, annually, to test the components of their emergency response plan, including the IMS process.[5] Since a control group was activated, this investigation meets this need for 2017.

Lessons learned from this event include: (i) increasing efficiency of daily meetings by including only the area leads, (ii) enhancing staff training regarding IMS and Excelicare, and (iii) strengthening communication between WDGPH and affected dental/healthcare provider clinic to ensure consistent messaging to patients.

Increased Public Awareness

A notable outcome of this dental lapse investigation has been the increase in public complaints. Within two weeks of the announcement of this dental lapse investigation, WDGPH received five complaints regarding dental offices and medical offices. This increase can likely be attributed to increased public awareness about Public Health's role in complaints-based inspections of Regulated Health Professionals through media coverage.

Media coverage continues on the closure of Guelph Dental Associates, as well as Guelph area dental clinics that have subsequently been inspected due to a complaint. A common theme from

these articles is the perceived need for regular inspections of healthcare providers for IPAC compliance, similar to the mandated regular inspections of personal service settings.

Educational Resources

The publicity surrounding this investigation has generated interest among dental clinics, dental consultants and equipment suppliers to consult with WDGPH about IPAC practices and equipment. Due to number of calls and complexity of questions, WDGPH has been directing these callers to contact PHO or RCDSO for more information.

Dental professionals who have contacted WDGPH have also been informed of a seminar that WDGPH has planned for October 18, 2017, *Infection Control in Dental Office Settings*. This seminar is free of charge and is being offered to all dental offices in WDG, including dentists, dental hygienists, dental assistant, and office managers. Topics covered will include: (i) Public Health's role in investigating infection control complaints and issuing Section 13 (Health Hazard) orders; (ii) best practices requirements for cleaning, disinfection, and sterilization; and (iii) staff training requirements for reprocessing. Desired outcomes of this event are to build stronger relationships with dental professionals to increase collaboration and compliance with IPAC standards in dental clinics, thereby alleviating the demand on WDGPH resources in conducting IPAC inspections. Ultimately, this will serve to protect the health and wellbeing of the WDG community.

Conclusion

PHUs are required to investigate IPAC complaints for regulated health professionals, like dentists, as specified by the Ontario Public Health Standards. In accordance with this requirement, WDGPH responded to an infection control complaint at Guelph Dental Associates and issued a Section 13 Order to stop all on-site patient care services on June 21, 2017 due to the nature and number of IPAC infractions. WDGPH's use of IMS allowed for a coordinated and timely response to manage this event.

There were positive outcomes noted from this investigation, in terms of improved efficiency and effectiveness of the Agency's use of IMS: (i) increased public awareness of Public Health's role in investigating infection control complaints, and (ii) an opportunity to advise local dental clinics of available educational resources, including an upcoming seminar WDGPH is hosting regarding IPAC practices in dental clinic settings.

Ontario Public Health Standard

Infectious Diseases Prevention and Control Standard

Requirement #2: The board of health shall conduct surveillance of:

- Infectious diseases of public health importance, their associated risk factors, and emerging trends; and

- Infection prevention and control practices of inspected premises associated with risk of infectious diseases of public health importance in accordance with the Infectious Diseases Protocol, 2008 (or as current) and the Population Health Assessment and Surveillance Protocol, 2008 (or as current).

Requirement #9: The board of health shall ensure that the medical officer of health or designate receives reports of complaints regarding infection prevention and control practices and responds and/or refers to appropriate regulatory bodies, including regulatory colleges, in accordance with applicable provincial legislation and in accordance with the Infection Prevention and Control Practices Complaint Protocol, 2008 (or as current). In addition, if an infection prevention and control lapse is identified, the board of health shall post an Initial and a Final Report online on the board of health's website, in accordance with the Infection Prevention and Control Practices Complaint Protocol, 2008 (or as current).

Requirement #13: The board of health shall communicate in a timely and comprehensive manner with all relevant health care providers and other partners about urgent and emerging infectious disease issues.

Emergency Preparedness Program Standard

Requirement 2. The board of health shall develop a continuity of operations plan to sustain the ongoing functioning of time-critical board of health services during business disruptions in accordance with the Public Health Emergency Preparedness Protocol, 2008 (or as current).

Requirement 3. The board of health shall develop its emergency response plan, in consultation with community partners and governmental bodies, to address the identified hazards for which the board of health and medical officer of health will have a lead role in responding to, consistent with an Incident Management System and in accordance with the Public Health Emergency Preparedness Protocol, 2008 (or as current).

Requirement 6. The board of health shall ensure the provision of emergency preparedness and response education and training for board of health staff in accordance with the Public Health Emergency Preparedness Protocol, 2008 (or as current).

Requirement 8. The board of health shall exercise, in whole or in part, the continuity of operations plan, emergency response plan, and 24/7 notification procedures in accordance with the Public Health Emergency Preparedness Protocol, 2008 (or as current).

WDGPH Strategic Direction(s)

☐ Health Equity
We will provide programs and services that integrate health equity principles to reduce or eliminate health differences between population groups.

☒ Organizational Capacity
We will improve our capacity to effectively deliver public health programs and services.

☒ Service Centred Approach
We are committed to providing excellent service to anyone interacting with Public Health.

Health Equity

A universal strategy was used to reach all patients of Guelph Dental Associates. Individual letters were mailed to patients' homes. A media release was also issued and widely covered by local media in the hopes that people who had moved or whose address was incorrect would still become aware of the situation.

Public Health is committed to supporting vulnerable populations to access health services. Testing for HIV, Hepatitis B, and Hepatitis C is free of charge through OHIP. Patients were advised to see their family physician for testing. Patients without a family physician were advised to visit Public Health for individual counseling and a lab requisition form for blood testing or to attend a walk-in clinic in the community.

Public Health is also committed to working with dental clinics to build capacity to meet IPAC standards. The upcoming seminar on October 18, 2017, *Infection Control in Dental Office Settings,* is free of charge and open to staff at dental offices in WDG. Dental offices with specific questions about IPAC standards are also being referred to contact PHO and RCDSO for more information.

Appendices

None.

References

1. Ontario Agency of Health Protection and Promotion (Public Health Ontario). Provincial Infectious Diseases Advisory Committee. Best practices for cleaning, disinfection and sterilization of medical equipment/devices. 3rd ed. Toronto, ON: Queen's Printer for Ontario; May 2013.
2. Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Infection Prevention and Control for Clinical Office Practice. 1st Revision. Toronto, ON: Queen's Printer for Ontario; April 2015.
3. Ontario Ministry of Health and Long-Term Care. Infection Prevention and Control Practices Complaint Protocol. 2015. Available from: http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/infection_prevention_complaint.pdf
4. Public Health Ontario. Summary of June 29 2017 Report and Recommendations [Email]. Received 2017 June 29.
5. Ontario Ministry of Health and Long-Term Care. Public Health Emergency Preparedness Protocol, 2015. Available from: http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/emergency_preparedness.pdf