College of Respiratory Therapists of Ontario
Ordre des Thérapeutes Respiratoires de l'Ontario

College of **Dental Hygienists** of Ontario
L'Ordre des **hygiénistes dentaires** de l'Ontario

Best Practice Recommendations for Oral Care of Invasively Ventilated Patients/Clients: An Interprofessional Collaborative (IPC) Project Between Two Health Regulatory Colleges in Ontario

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Background

- Oral care can reduce the incidence of Ventilator-Acquired Pneumonia (VAP).[1, 2]
- "Interprofessional care can help improve patient/client care while increasing provider satisfaction within a respectful and collaborative environment."[3]
- Together, the CRTO and the CDHO can advocate for best oral care practices to ensure high quality, safe and ethical care in the best interest of mechanically ventilated patients/clients in Ontario.

Objectives of the IPC Project

- To review existing oral care practices to determine if current practices align with evidence-based best practice recommendations;
- To determine if there is a need for the Colleges to develop new clinical best practice guidelines for oral care of mechanically ventilated patients/clients; and
- To make recommendations based on evidence and IPC practices to registered respiratory therapists (RTs), registered dental hygienists (RDHs), other health care providers, patients/clients and the public.

Methods

Electronic Survey

CRTO conducted a survey of RTs to:

- Explore current oral care practices of RTs and other health care providers;
- Request the sharing of organizational policies and procedures; and
- Identify oral care champions (RTs) willing to participate in a focus group.

Facilitated Focus Group

- 5 RTs and 3 RDHs were engaged from across Ontario and a variety of practice settings
- Review current practices and evidence-based literature (clinical and IPC)
- Make recommendations to the CRTO and the CDHO – to improve patient/client care
- Generative Strategies Used – IPC icebreakers; brainstorming; sequential questioning; small group work; process mapping; roundtable discussions

Results

Electronic Survey

Oral Care Survey by CRTO:

- 118 responses
- 33% RTs involved in oral care of ventilated patients/clients
- 89% indicated mostly Nursing practice
- 8.5% indicated interprofessional approach
- 58% had oral care P&P (some willing to share)
- No one had received any training from RDH
- 29% would like to participate in IPC focus group

Do you have an oral care protocol Policy/Procedure/Guideline in place for patients/clients at risk of VAP?

Answer Options	Response Percent	Response Count
Yes	57.4%	58
No	20.8%	21
Don't know	21.8%	22
	answered question	101

Focus Group

Current Practice Review

- Invasive = Endotracheal Tube (ETT) or Tracheostomy Tube in situ
- Oral care practice varied from organization to organization
- Mostly based on *Safer Healthcare Now!* VAP recommendations for oral decontamination
- Need to identify who was on oral care team
- Need to increase awareness and standardize oral care of invasively ventilated patients/clients
- Recommendations could be extended to invasively ventilated patients/clients in community
- Further recommendations for neonatal and pediatric populations; non-invasively ventilated patients/clients should be considered in the future

Other Challenges to Good Oral Care were identified:

- Practicality of oral care prior to intubation in an emergent situation
- Access to oral space (e.g., patient/client presenting condition, trauma, infection, patient biting)
- Patient/client awareness and understanding (e.g., Alzheimer's, dementia, mental health)
- Patient/client compliance (e.g., physical ability, access to assistance)
- At home: cost of oral care, support at home, access to competent oral health care team
- Fear of touching mouth (e.g., lack of understanding, victim of sexual abuse)

Literature Review – Evidence-Based Practice

- Focused on adult, invasively ventilated patients/clients in hospitals
- Oral decontamination prior to intubation can reduce VAP[4]
- Once intubated and ventilated, most recommendations seem to include at least twice a day oral decontamination with chlorhexidine solution, this aligns with *Safer Healthcare Now!* VAP recommendations

Conclusions

General

- No need for Colleges to generate new best practice guidelines at this time
- Focus on current evidence-based recommendations for adult, invasively ventilated patients/clients
- "Oral care should be integrated into the care plan of all intubated patients" (SHN, 2012, p.25)

Summary Clinical Recommendations

- Use routine precautions and additional precautions including Personal Protective Equipment (PPE) when aerosolized droplets are anticipated
- Follow provincial infection prevention and control guidelines (i.e., Ontario's Ministry of Health and Long-Term Care's Provincial Infectious Diseases Advisory Committee's [PIDAC's] Knowledge Products)
- When possible, oral decontamination prior to intubation[1, 4]
- Follow ***Safer Healthcare Now! Prevent VAP Tool Kit (2012)***. These guidelines include recommendations for oral decontamination.

"The components of ***Safer Healthcare Now!*** **VAP Bundle** (not listed in order of importance):

- ◊ Elevation of the head of the bed to 45° when possible, otherwise attempt to maintain the head of the bed greater than 30° should be considered
- ◊ Daily evaluation of readiness for extubation
- ◊ The utilization of endotracheal tubes with subglottic secretion drainage
- ◊ **Oral care and decontamination with Chlorhexidine (e.g., 15mL of 0.12% every 12 hours)**
- ◊ Initiation of safe enteral nutrition within 24-48h of ICU admission."

- Reduce risk, have two people perform oral care of invasively ventilated patients/clients
- For optimal results, do not rinse the oral cavity within 30 minutes of oral decontamination with chlorhexidine
- Chlorhexidine may cause staining of the teeth but can be professionally removed – consult an RDH
- Mechanical decontamination with a toothbrush is recommended as well as flossing whenever possible (use of swabs/sponges are not recommended best practice)
- Maintain the cleanliness (and sterility) of your environment and oral care tools/products
- Document your care in the patient's/client's medical records
- Monitor and inquire about the quality improvement and safety outcomes of providing best practices for oral health care

Professional Practice Recommendations

- Oral care is an integral part of holistic patient/client centered care
- Act in the best interest of your patient/client at all times
- Act where you are competent and within your scope of practice – be accountable
- Meet the standards of practice of your profession
- IPC is proven to improve patient/client care outcomes.[3] Oral care of invasively ventilated patients/clients requires IPC teamwork due to associated risks (e.g., aspiration and accidental loss of airway)
- Define your role and scope on your oral health care team and understand the roles/scopes of the other health care providers

As a team, ask:

- **What needs to be done?** – Evidence-based best practices, guidelines, policy & procedure, competency, quality assurance
- **Who can?** – Consider legislative scope and perhaps controlled acts involved (e.g., suctioning)
- **Who could?** – Use of authorizing mechanisms (orders, medical directives, delegation) and human resources including the patient/client, family and non-regulated health care professionals
- **Who should?** – What is in the best interest of the patients/clients given the providers and practice setting
- **Who will?** – What is the plan where you work? Formalize/standardize it.

- Evidence-based oral care reduces VAP. Advocate for standardization and adoption of evidence-based best practices based on *Safer Healthcare Now!* VAP Bundle
- Communicate and Document

Suggested Next Steps for CRTO/CDHO

- Joint communiqué(s)
- Presentations, posters, abstracts, papers
  - ◊ Conferences (e.g. Respiratory Therapy Society of Ontario [RTSO] Educational Forum Fall 2011 or Ontario Dental Hygienists' Association [ODHA])
  - ◊ Interprofessional Forum(s) (e.g. Federation of Health Regulatory Colleges)
  - ◊ At hospitals and other organizations (e.g. Education Days)
- Interprofessional Education (IPE) – Canadore, Algonquin, La Cité, and Fanshawe colleges have both approved RT and DH programs
- **Share** with the other health regulatory colleges (e.g. Nurses, Speech Language Pathologists, etc.)

Was This A Successful IPC Project? YES

CIHC Goal of IPC

"A partnership between a team of health providers and a client in a participatory, collaborative and coordinated approach to shared decision-making around health and social issues."[5]

Who is on the Oral Health Care Team?

- Dental Hygienists
- Respiratory Therapists
- Nurses
- Physicians (e.g. Intensivists, ENT specialists, Oral Surgeons, Anesthetists)
- Dentists (e.g., in community, long-term ventilation)
- Speech Language Pathologists
- Pharmacists
- Dieticians
- Social Worker
- Personal Support Workers
- **Patient/client** themselves
- Family care givers

Acknowledgements

Focus Group Participants

From left to right: Betty Lou Doucette, RRT, *Children's Hospital of Eastern Ontario (CHEO)*; **Lisa Frisch,** RDH, *Baycrest Geriatric Health Care System, Toronto*; **Jennifer Harrison,** RRT, *Professional Practice Advisor, CRTO;* **Cynthia Harris,** RRT, *Mount Sinai Hospital, Toronto*; **Nancy Fasken,** RDH, *The Ottawa Hospital*; **Tara Fowler,** RRT, *University Health Network, Toronto* (front); **Sheilagh Walsh,** RDH, *Toronto* (behind); **Miranda Zielinski,** GRT, *Kingston General Hospital*; **Bert Reket,** RRT, *Vital Aire, Owen Sound*; **Fran Richardson,** RDH, *Registrar, CDHO*; **Lisa Taylor,** RDH, *Associate Registrar, CDHO* (not present for photo)

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