COLLEGE OF DENTAL HYGIENISTS OF MANITOBA

Mini- Series Part One - Information for Decision-Making

Many of the questions we received, were ones you wanted direct answers for; often, there were no simple answers. The decision-making that ensued involved an element of critical thinking incorporating what information is available in the Interim IPC Guidance document and the CDHM Code of Ethics and Practice Standards.

The first decision-making example is developed from a question we have received many times over the past 2 weeks. The example demonstrates what information would be appropriate to address in making the decision as to what would be 'allowed'

Question: Can you provide further clarity around what is 'allowed' regarding aerosol generating procedures (AGPs) for dental hygienists during a pandemic.

Information to Consider:

Excerpt from the June 1st, 2020, CDHM Interim Infection Prevention Control (IPC) Guidance on Returning to Dental Hygiene Practice During Manitoba's Phase Two of Restoring Safe Services:

> *"During the COVID-19 pandemic, procedures causing aerosol production will be permitted only if the demonstrated health benefits of providing the treatment outweighs the risk of infection to the patient and the procedure cannot be achieved by any other method of treatment."*

Some facts are:

- Dental hygiene clinical decision-making for any treatment is based on the individual oral health needs of the patient rather than standardized care, or routine procedures. Everything depends on the assessed needs of the patient (Darby & Walsh 2015).
    - Code of Ethics Principle: Beneficence
        - Responsibility 1 of 6: Dental Hygienists put the needs, values, and interests of clients first
- During the coronavirus pandemic, risk assessment includes risk of this disease transmission to patients and staff.
- The virus may be spread if an individual is pre-symptomatic or asymptomatic. It should be assumed that all patients can transmit the disease, and this must be a consideration for all staff as well.
- Coronavirus ***exists in saliva***.
- Coronavirus is spread through ***droplet and contact***. Droplets can be difficult to detect, especially once dry. Many dental hygiene interventions are droplet producing. Coughing or sneezing also produce droplets.
- Coronavirus may be spread through ***aerosols.*** Many dental hygiene interventions are aerosol producing or potential aerosol producing procedures.
- Risk mitigation strategies include, but are not limited to, screening of providers and patients, pre-procedural rinse, proper PPE, hand hygiene, enhanced droplet and aerosol precautions and High-Volume Evacuation (HVE). HVE can be difficult to use effectively without 4-handed dentistry technique.

- Rubber dam can also minimize saliva involvement for some procedures; however, this would be inappropriate to use for many dental hygiene procedures.
- Patients must rely on the professionals' judgment for their safety and protection from the virus
- Most dental hygienists in Manitoba are employees. Employers may make the decision for an office to forgo some high-risk procedures during the pandemic; however, the decision and responsibility for providing an AGP is with the provider and cannot be determined by the employer.
    - Code of Ethics Principle: Accountability
        - Responsibility 1 of 7: Dental Hygienists accept responsibility for knowing and acting consistently with the principles, practice standards, laws, and regulations under which they are accountable
        - Responsibility 2 of 7: Dental Hygienists practice within the bounds of their competence, scope of practice, personal and/or professional limitations
        - Responsibility 5 of 7: Dental Hygienists inform their employers about the principles, standards, laws, and regulations to which dental hygienists are accountable and determine whether employment conditions facilitate safe professional practice
        - Responsibility 6 of 7: Dental Hygienists inform their employers and/or appropriate regulatory body of unethical practice by a colleague (See Appendix C of CDHM Code of Ethics))

Point of Care Risk/Benefit Assessment

- Dental hygiene clinical decision-making for any treatment is based on the individual oral health needs of the patient rather than standardized care, or routine procedures. Everything depends on the assessed needs of the patient (Darby, 2012; Sawai, et al, 2015).
- What are the patient's oral health needs and risk profile?
    - Systemic health considerations
    - Current oral health behaviors
    - Caries Risk Assessment
    - Periodontal risk/classification
- Is an AGP recommended for disease treatment or management?
- Is there any other procedure or method of treatment for achieving the health benefit other than an AGP?
- Evaluate Local Public Health Risk. Evaluate your dental hygiene practice setting with respect to the incidence of disease in your community. If there is an increase in COVID-19 cases in your community, determine if there is a need to modify your practice.
- If it is determined that the benefit of an AGP, or potential AGP outweighs the risk of disease transmission, consider ***minimizing the time*** spent on the procedure and consider preforming this procedure at the beginning of the appointment.
- Be aware of droplet and aerosol settling times in conjunction with air filtration of the operatory/office or setting, to determine appointment spacing after an AGP is performed.
- Whenever possible use HVE during any procedure.
- Dental hygienists will use these and other practice considerations when making the decision to provide treatment including AGPs for patients during a pandemic.

- Code of Ethics Principle: Integrity
  - Responsibility 1 of 7: Dental Hygienists uphold the principles and standards of the profession with clients, colleagues, and others with whom they are engaged in a professional relationship
  - Responsibility 6 of 7: Dental Hygienists promote workplace practices and policies that facilitate professional practice in accordance with the principles, standards, laws, and regulations under which they are accountable

The following two Case Studies provide examples of utilizing Information and completing a Point of Care Risk/Benefit Assessment.
Reprinted with permission from CRDHA's 'COVID-19 Return to Work Guidelines for Dental Hygienists Version 3, published June 15th,2020.

Case Study 1 - Low Risk Community

John, 65-year-old, presents for a dental hygiene appointment. Review of his medical history indicates he was recently diagnosed with type II diabetes that is being managed with medication. He smokes 25 cigarettes per day. He complains of generalized bleeding and tender gums, and sensitivity on the upper left side when eating sweets. He is scheduled for a knee replacement in one month and needs dental clearance. John indicates his oral hygiene has slid and he is lacking motivation with brushing and flossing as a result of being laid off during COVID-19. His last dental hygiene appointment was two years ago.

Point of care Risk Assessment to determine treatment for John Community Profile: Local hospital has no cases of COVID-19 receiving care.

Health benefit of providing dental hygiene care	**Management of risk of exposure of aerosols into environment**
•Several factors in the client profile put this client at an increased risk of periodontitis. Client is a smoker, recently diagnosed diabetic, tender bleeding gums, poor oral hygiene, overdue for dental hygiene therapy. •The clinician can achieve the reduction of subgingival biofilm and calculus removal which will address inflammation present in gingival tissue. •The use of the ultrasonic scaler will reduce the amount of time this individual will need to be in the dental hygiene environment, thus reducing overall risk to the client. •Use of intra-oral radiographs to detect caries and bone loss.	•Evaluation of local public health COVID-19 cases indicates low risk of community spread •Dental hygiene practice has implemented engineering and administrative controls including 4-handed dentistry technique for HVE use during aerosol generating procedures •Pre-Screening of client and staff •Pre-procedural rinses •Evaluation of client for gag response •Employ strategies to avoid stimulation of coughing and vomiting •Appropriate PPE available for AGP(N95, gown, face shield, gloves, bouffant)

•The use of a slow speed hand piece will be beneficial in order to removed residual stain and reduce time in chair for the client.

Dental hygienist's rationale for treatment plan:
Based on this point of care risk assessment, the dental hygienist can justify that the health benefit of providing AGPs outweighs the risk of generating aerosols.

Case Study 2 - High Risk Community, outbreak of COVID-19 in community

John, 65-year-old, presents for a dental hygiene appointment. Review of his medical history indicates he was recently diagnosed with type II diabetes that is being managed with medication. He smokes 25 cigarettes per day. He complains of generalized bleeding and tender gums, and sensitivity on the upper left side when eating sweets. He is scheduled for a knee replacement in one month and needs dental clearance. John indicates his oral hygiene has slid and he is lacking motivation with brushing and flossing as a result of being laid off during COVID-19. His last dental hygiene appointment was two years ago.

Point of Care Risk Assessment to Determine Treatment for John Community Profile: Local hospital is reporting an increase of active COVID-19 cases being admitted due to recent outbreak.

Health benefit of providing dental hygiene care	**Management of risk of exposure of aerosols into environment**
•Several factors in the client profile put this client at an increased risk of periodontitis. Client is a smoker, recently diagnosed diabetic, tender bleeding gums, poor oral hygiene, overdue for dental hygiene therapy. •Hand scaling can achieve debridement and reduction in inflammation, with longer appointment time. •The clinician can achieve the reduction of subgingival biofilm and calculus removal which will address inflammation present in gingival tissue. •Use of extra-oral radiograph.	•Evaluation of local public health COVID-19 cases indicates high risk of community spread due to recent outbreak. Dental hygiene practice has administrative policy in place to restrict AGPs in times of community outbreak to reduce OHS risk to workers and clients •HVE is used during aerosol generating procedures, however there is a shortage of staff to provide additional support through 4-handed dentistry •Pre-Screening of client and staff •Pre procedural rinses •Appropriate PPE is very low for AGPs, but PPE for non-AGPs is currently in stock (Level 2 mask, gown, face shield, gloves, bouffant)

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Dental hygienist's rationale for treatment plan:
Based on this point of care risk assessment, the dental hygienist cannot justify that the health benefit of providing AGPs outweighs the risk of generating aerosols. The community transmission of COVID-19 is high, the office policy limits AGPs in times of community outbreak, 4-handed dentistry is not an option due to lack of staff, and the office is running low on appropriate PPE for AGPs.

If during treatment it is identified that an AGP is required (e.g. powered instrumentation or low-speed handpiece for polishing), the client can be rebooked for that treatment at a time it is safe to perform AGPs (i.e. community spread is low). Dental hygiene care with non-AGPs can be provided at this time based on the client's need (e.g. risk of periodontitis, upcoming surgery).

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