



2019 National Occupational Analysis Canadian Dental Assisting

December 8, 2020



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Executive Summary

The National Occupational Analysis (NOA)¹ for dental assisting in Canada is completed approximately every five years and is used primarily to assist in the development and confirmation of the Occupational Standard and to update Domain Descriptions and inform NDAEB exam revisions. The NOA provides a timely profile of emerging trends in the dental assisting profession and serves an important role in informing training, curriculum development, accreditation of training programs, recruitment, performance improvement, career development, and the examination and credentialing of practitioners. It also represents an important resource for provincial regulators and can inform government regulation and policy development.

The National Dental Assisting Examining Board (NDAEB) and the Canadian Dental Assistants' Association (CDAA) solicited the partnership of the Canadian Dental Assisting Regulatory Authorities (CDARA) and the Ontario Dental Assistants Association (ODAA) for the purpose of completing the 2019 NOA. The partners recommended members to a Steering Committee which guided the project.² The Committee assisted in defining the scope of the NOA and developing the national online survey questionnaire. The Committee also reviewed the draft NOA report and provided feedback which contributed to the final report.

The timing of the 2019 NOA happened to coincide with the start of the COVID-19 pandemic³ which resulted in a short delay in completing the NOA.⁴ Provincial health officers have indicated that COVID-19 is expected to continue to circulate in the general population for an extended period of time.

The impact of COVID-19 on healthcare workers in general is significant in terms of changes to practice and the psychological effects of the pandemic. It's anticipated that on-going measures will be used by oral healthcare professionals to control the spread of the disease, including

¹ An Occupational Analysis is a detailed examination of the (1) tasks (performance elements) that make up a job (employee role), (2) conditions under which they are performed, and (3) skills, knowledge, and attitudes (behaviour characteristics) that are required by the job.

² The Steering Committee consisted of representation from a broad range of interests including regulators and provincial organizations as well as educators, researchers, and private practice representatives. The complete list of Steering Committee members is presented in Appendix A.

³ COVID-19 is a novel (new) coronavirus that was first identified in Wuhan, China in late 2019. The World Health Organization (WHO) classified COVID-19 as a pandemic on March 11, 2020. SARS-CoV-2 is the virus that causes COVID-19. For clarity, in this document the term COVID-19 is used to refer to both the virus and the disease. The first Canadian case of COVID-19 was reported by Health Canada on January 25, 2020. On March 24, Health Canada officially reported that local transmission had become the primary source of cases in Canada. As of November 19, 2020, Canada reported a total of 315,751 cases of COVID-19 of which 252,293 cases have recovered and 52,193 cases remain active. The number of deaths related to COVID-19 in Canada as of November 19 was 11,265 (Health Canada).

⁴ The national survey for the occupational analysis was completed in Nov./Dec. 2019 prior to the outbreak of the pandemic but the supporting focus groups were postponed until June 2020 and conducted as virtual meetings.

requirements to practice physical distancing of at least 2 metres (wherever possible), use of appropriate personal protective equipment (PPE) and related hand hygiene procedures, increased frequency and monitoring of environmental cleaning and disinfection practices, and increased patient screening for signs, symptoms and risk factors for COVID-19. As knowledge about COVID-19 continues to evolve, practice considerations in dental settings may need to change with the evidence. The impact of COVID-19 on the dental assisting profession is discussed further throughout the report.

SCOPE OF PRACTICE

As multi-skilled professionals, dental assistants possess a diverse knowledge base and effectively perform a wide range of clinical and administrative procedures within provincial legislation.

Dental assistants prepare and support patients for treatment by practising standard precautions and infection control and they perform a variety of clinical procedures including restorative, preventive, orthodontic, and prosthodontic intra-oral procedures as well as post treatment care. In some jurisdictions, dental assistants produce radiographs/images for use in dental treatment.

Dental assistants provide patients with education on preventive dental care interventions and self-care techniques and they may be employed in a community health setting where they promote oral health to enhance the overall health and wellbeing of the population.

Dental assistants may also perform basic practice management procedures. These may include maintaining inventory of dental supplies, managing patients' appointments or maintaining financial records.

Digital technology is transforming the dental field at a fast pace and as new technologies and procedures emerge, dental assistants' scope of practice continually evolves. For this reason, dental assistants have a professional responsibility to learn about new technologies, to consider the impact of these new technologies on the dental profession and their own scope of practice, participate actively in their professional associations and upgrade their skills as regulations change.

METHODS

The key methods used in the occupational analysis consisted of a national survey along with focus groups and key informant interviews. The national survey was modified from the 2014 version to focus on skills that the Steering Committee deemed a priority for review at this time. Survey participants were asked to report on the frequency of task performance, risk assessment and any important changes / trends in practice, technology, knowledge and abilities over the last few years. The modifications served to reduce the overall length of the survey and ultimately contributed to a much higher response rate than was previously achieved. Provincial

organizations / regulatory authorities played an important role in promoting the survey to their membership which boosted participation.

A total of 4,458 individuals completed the survey which represents approximately 16% of the dental assistants in Canada. The total response was more than three times higher than the response for the 2014 survey with substantial increases in participation from every province, as well as representation from two of the three Territories.

The survey respondents represent a broad range of practice / work-settings with the majority of respondents (69%) working in the general dentistry field through a private practice and 17% working in specialized fields in private practices. Approximately 13% of the respondents work in other capacities (e.g. educational facilities, community public health, hospitals).

The survey respondents also represent a broad range of practice experience with 39% having more than 20 years of experience, 42% having between 6 and 20 years of experience, and 19% having 5 years or less experience. Approximately 64% of the survey respondents spend more than 75% of their time performing clinical activities (e.g. working chairside, sterilization, etc.).

Following the completion of the national survey, regional focus groups and key informant interviews were conducted to gain additional context and a fuller understanding of the survey results. A total of 46 dental assistants, educators and other relevant stakeholders participated in these sessions. These discussions also provided important insights into trends and issues facing the dental assisting profession.

FINDINGS

Major trends in practice / skills utilization are summarized below along with brief notes on alterations that were made to the occupational standards (tasks / sub-tasks). It is important to note that some of the trends identified by the survey and focus group participants extend across a range of activities performed by dental assistants. For example, participants observed that greater attention is being given to infection prevention and control (IPAC) measures in oral healthcare facilities and this has relevance across numerous areas of responsibility including professional competence (Block A), clinical procedures (Block C), laboratory procedures (Block F), equipment and instrument maintenance (Block G), and practice management (Block H).⁵ Rather than attempting to include / embed a reference to IPAC under each applicable block, the analysis identifies (cross-references) the relevant section(s) of the NOA (i.e. task and block) where IPAC is covered. This approach helps to ensure that content duplication is minimized in the NOA.

⁵ The duties performed by the dental assistant are presented in terms of blocks, tasks, sub-tasks and context. 'Block' is the largest division within the analysis and reflects a distinct operation relevant to the occupation. See the introduction to Chapter 4 for the definitions of the different categories of duties performed by dental assistants.

Detailed observations on trends and alterations to tasks / sub-tasks are presented in Chapter 3 of the report.

Professionalism

Professionalism is a necessary aspect of working as a dental assistant. Key attributes that dental assistants associate with professionalism include adherence to quality standards and commitment to continually enhance and improve knowledge and skills. It is crucially important for dental assistants to remain up to date with the relevant skills and knowledge they need to maintain competency and gain confidence and experience applying professional judgement. Dentistry is constantly evolving with new innovations and technology and dental assistants should be familiar with clinical and technical innovations that may potentially impact their practice.

No alterations were made to the tasks/sub-tasks under this competency block as they remain relevant and adequately reflect current practice. It's important to note that professionalism reaches across many different aspects of dental assisting including infection prevention and control (IPAC), patient comfort, and patient privacy (Block B).

Supporting knowledge and abilities associated with professionalism align with a number of essential skills (e.g. written and oral communication skills, collaboration, knowledge of digital technology, continuous learning). These skills provide the foundation for learning other skills and enable people to evolve with their jobs and adapt to workplace change.⁶

Treatment Support Procedures

The most common trend observed under this competency block is the increased focus on infection prevention and control protocols (this finding preceded the emergence of the COVID-19 pandemic). Other notable trends include the increased use of digital record-keeping and attention to patient privacy and documenting activities. Respondents also commented on the growing interest in / importance of patient-centred care and providing patients with more information. Another important trend is the on-going introduction of new equipment / technology and new treatment products.

A small number of word changes were made to some of the tasks / sub-tasks within this competency block to better reflect the occupational activity. There was also a significant addition with the inclusion of a new sub-task (11.08 Assists with Implants Procedures) under Task 11 Assists with Operative Dentistry Procedures.

Some of the trends identified under this competency area are also covered to some degree under other competency blocks. For example, impressions are covered under Task 12 Performs Intra-Oral Procedures and Task 15 Performs Prosthodontic Procedures (Block C), and Task 22 Fabricates Dental Models (Block F). Knowledge of changes in technologies is covered under

⁶ See Appendix E for additional background on essentials skills related to dental assisting.

Task 2 Maintains Professional Competence (Block A). Digital radiography is covered under Task 18 Produces Radiographs/Images (Block D).

Clinical Procedures

The most common trends observed under this competency block relate to the introduction and use of new materials (e.g. cements, bonds, fluoride products) and the increased use of digital technology (e.g. scanners, computer-aided design / computer-aided manufacturing - CAD/CAM).

A small number of word changes were made to some of the tasks / sub-tasks within this competency block to better reflect the occupational activity. One sub-task was removed (17.04 Polishes Amalgam Restoration) under Task 17 Performs Post-Treatment Care. This sub-task is no longer recommended as safe practice.

Some of the trends identified under this competency area are also covered to some degree under other competency blocks. For example, infection prevention and control standards are covered extensively under Task 1 Communicates Effectively (Block A) and Task 4 Practices Infection Control (Block B). Knowledge of changes in technologies is covered under Task 2 Maintains Professional Competence (Block A).

Radiography

The most common trend observed under this competency block relates to the increased use of digital x-rays and digital technology in general.

Only one alteration was made to a sub-task within this competency block to highlight that both digital and conventional film x-rays machines are being used in dentistry.

Some of the trends identified under this competency area are also covered to some degree under other competency blocks. For example, infection prevention and control standards are covered extensively under Task 1 Communicates Effectively (Block A) and Task 4 Practices Infection Control (Block B). Knowledge of changes in technologies is covered under Task 2 Maintains Professional Competence (Block A).

Oral Health and Promotion

The most common trends observed under this competency block are related to the increased focus on reaching out to specific demographics / marginalized populations (e.g. new Canadians, First Nations/Inuit, low income groups, youth, seniors, etc.) and increased focus on prevention education (e.g. dental care, diet, vaping, legal use of cannabis).

No alterations were made to the tasks/sub-tasks within this competency block as they remain relevant and adequately reflect current practice.

The national survey confirmed that some dental assistants work in community / public health settings (approximately 3% of the respondents) and this potentially represents a service area

where the role of the dental assistant will continue to expand (e.g. providing support / care in long term care residences).

Laboratory Procedures

The most common trends observed under this competency block relate to the increased use of digital scanning and other technology (e.g. 3D printing) as well as new equipment and materials in general. Another important trend is the increased focus on infection prevention and control protocols.

A small number of word changes were made to some of the tasks / sub-tasks within this competency block to better reflect the occupational activity.

Some of the trends identified under this competency area are also covered to some degree under other competency blocks. For example, infection prevention and control standards are covered extensively under Task 1 Communicates Effectively (Block A) and Task 4 Practices Infection Control (Block B). Knowledge of changes in technologies is covered under Task 2 Maintains Professional Competence (Block A).

There appears to be an increase in the use of external dental labs. However, a relatively small number of respondents identified the trend and existing standards were maintained for the 2019 NOA.

Equipment and Instrument Maintenance

The most common trends observed under this competency block relate to the increased importance attached to reviewing / understanding digital equipment instructions and proper handling and maintenance procedures as well as the increased focus on infection prevention and control protocols as they relate to the equipment.

Only one alteration was made to a sub-task within this competency block to reinforce the importance of documenting activities related to infection prevention and control.

Some of the trends identified under this competency area are also covered to some degree under other competency blocks. For example, knowledge of digital processing techniques and ability to operate processing equipment according to manufacturer's directions is covered under Task 19 Processes Films/Sensors (Block D). Infection prevention and control standards are covered under Task 1 Communicates Effectively (Block A) and Task 4 Practices Infection Control (Block B).

There appears to be an increase in the use of external repair technicians. However, a relatively small number of respondents identified the trend and existing standards were maintained for the 2019 NOA.

Practice Management

The most common trends observed under this competency block relate to the transition to digital record-keeping and the increased focus on quality assurance protocols / procedures / audits including infection prevention and control protocols. Respondents also commented on the growing importance of patient privacy and consent procedures.

No alterations were made to the tasks/sub-tasks within this competency block as they remain relevant and adequately reflect current practice.

Some of the trends identified under this competency area are also covered to some degree under other competency blocks. For example, record-keeping and patient privacy is covered under Task 7 Initiates and Maintains Patient Records (Block B). Continuing education is covered under Task 2 Maintains Professional Development (Block A).

ADDITIONAL OBSERVATIONS

The use of regional focus groups and key informant interviews were extremely valuable for gaining additional context and a fuller understanding of the survey results. These discussions also provided important insights into trends and issues facing the dental assisting profession. These discussions happened to coincide with the emergence of the COVID-19 pandemic and participants shared early observations on the impact of the pandemic on the dental assisting profession.

With respect to major findings, several key themes were identified and are summarized below.

Importance of Quality Assurance / Safe Practice Protocols

The NOA survey and focus groups revealed that dental assistants associate quality assurance with professionalism and confirmed that dental assistants take their responsibility seriously when it comes to implementing and following quality assurance protocols to ensure safe patient care. Indeed, focus group participants observed that the amount of time and attention that dental facilities have given to safe practice protocols has progressively improved over time and reported that attention to IPAC measures and public health guidelines has intensified further in the context of the COVID-19 pandemic. However, a number of factors were identified that can limit or undermine the ability of dental assistants to fulfil this responsibility:

- The adoption / implementation of standards and guidelines can vary depending on the workplace and some employers may not promote / prioritize safe practice protocols to the required / recommended level which can ultimately contribute to dental assistants adopting / internalizing a lower standard of practice.
- The subjectivity of the information / guidance provided by public health officials and/or regulatory bodies on safe practice protocols can potentially result in some procedures

being prioritized over others (i.e. certain activities/procedures are required while others are recommended).

- In workplaces where the employer/dentist places an emphasis on maximizing the number of daily patients there is considerable pressure to work faster and do more which can cause dental assistants to shorten or modify some procedures in order to maintain the work pace expected in the facility.
- Relaxed hiring requirements in some provinces provides an opportunity for individuals with no prior IPAC training to be hired off the street and can potentially result in lower standards of practice in the workplace.
- Dental assistants have relatively little authority in the workplace which makes it challenging for them to effect change in the facility. Job security concerns and/or pressure from employers and/or co-workers may influence the way dental assistants react to situations where they are asked to perform skills that are outside their legal / recognized scope of practice and/or follow instructions that fall below best practice guidelines and standards.
- Dental assistants working in the un-regulated provinces (Ontario, Quebec and the Territories) are particularly vulnerable to being exploited as they lack the oversight of a regulatory authority providing public protection. These conditions overlay other existing stressful conditions experienced by oral healthcare providers (e.g. heavy workloads, performance pressure) that can impact their psychological health and their ability to provide high quality patient care if they are overly stressed.

Skills Under-utilization

The utilization of dental assistant skills can vary considerably from workplace to workplace and even within a particular work setting depending on the preferences / expectations of the individual dentist. Dental assistants may encounter scenarios where their skills are underutilized and some of the more common skills that are under-utilized (or at risk of being underutilized) typically occur during the middle of a procedure (e.g. matrices and wedges, liners, etching, impressions, sealant). Focus group participants identified a number of factors that can account for this including:

- The interest of the dentist to maintain a convenient / efficient workflow.
- The personal preference of the dentist to perform certain procedures.
- The lack of familiarity that the dentist/employer has with the legal scope of practice for dental assistants in their province.

Another factor that can account for skills underutilization is the use of street hires in private practices to perform RDA/CDA functions on a regular basis.

Inconsistencies in the legal scope of practice for dental assistants across Canada could also be contributing to misunderstandings around the tasks that dental assistants are trained / permitted to perform (e.g. trained dental assistants in Ontario are not permitted to perform some of the skills that are taught in Ontario training institutions and trained dental assistants in Quebec are legally prohibited from doing many of the skills they have been trained in).

Opportunities for dental assistants to practice their full range of skills could be further impacted by the COVID-19 pandemic. With the heightened focus on IPAC standards and the introduction of new safe practice protocols, it has become less convenient for dentists to move between patients (e.g. doffing and donning personal protective equipment) which could result in dentists remaining with each patient throughout the entire procedure and personally completing more of the intermediate skills that they might normally delegate to the dental assistant.

Focus group participants commented on the need for greater dialogue and coordination between dentists and dental assistants in determining the most appropriate scope of practice for dental assistants. Dental assistants and educators also stressed the importance of regulating the profession in Ontario and Quebec to promote patient safety and reinforce the trust and confidence the public and the dental profession places in dental assistants.

Skills used in Select Jurisdictions and/or in Specialized Private Practices

The NOA survey revealed that a number of skills (sub-tasks) are performed very infrequently or not at all by a large majority of dental assistants (over 70% of the survey respondents). In some cases, the skills are only permitted in a small number of provinces and/or are more commonly performed in specialized private practices (e.g. Oral Surgery, Pediatric Dentistry, Prosthodontic, Orthodontic). Given that there continues to be a small proportion of dental assistants that perform these skills on a regular basis, it was determined that these skills should remain listed as occupational standards. These skills should be reviewed / monitored during the next iteration of the NOA to confirm the extent to which they are still being practiced. The sub-tasks are listed below and a detailed breakdown of the frequency of performance for these skills is provided in Appendix F of the report.

- Sub-task 9.03 Assists with Administration of Intravenous Sedation
- Sub-task 9.04 Assists with Administration of General Anaesthetic
- Sub-task 12.10 Prepares Face-bow Transfers
- Sub-task 12.13 Performs Coronal Whitening using Direct Application
- Sub-task 13.02 Adjusts Occlusion Following Pit and Fissure Sealant Application
- Sub-task 13.07 Performs Periodontal Screening
- Sub-task 13.08 Performs Limited Scaling Procedures
- Sub-task 15.06 Images and Fabricates Permanent Direct Restorations
- Sub-task 17.02 Removes Post-Surgical Dressings

- Sub-task 17.03 Removes Sutures
- Sub-task 23.02 Removable Prosthesis and Repairs
- Sub-task 23.03 Repairs Appliances

Changes in Technology

The NOA survey and focus groups confirmed that the adoption of digital technology (e.g. intraoral cameras, CAD/CAM systems, 3-D printing, digital radiography) continues to be a major trend affecting many areas of dentistry. However, it appears that analog systems / procedures are still widely used and remain relevant in the occupational standard.

Another on-going technology trend is the movement to computer-based practice and patient management records. With digital transmission replacing more traditional methods of information transfer, it's become increasingly important to be aware of and follow electronic information security standards to protect the confidentiality of patients.

Teledentistry is positioned to transform access to oral healthcare services for children, seniors, and other underserved populations in remote communities and those who face travel, physical mobility, and other barriers.⁷ The value /utility of teledentistry is especially evident in the context of the COVID-19 pandemic.⁸ Teledentistry involves the use of information and communication technologies to provide care remotely and enables dentists to serve a variety of dental care needs while avoiding close contact with patients. While not a replacement for physical dental examinations, dentists have found effective ways to utilize this technology to treat their patients (e.g. emergency patient evaluation, orthodontic consultations, oral health education, and remote care in nursing homes).⁹ Teledentistry represents a new service area where dental assistants could potentially provide a supporting role.

Dental Assistant Training and Continuing Education

Dental assisting training programs are typically structured as short-term programs (e.g. 10 months) and the training covers a broad range of skills that are frequently used and also covered in the national exam. With on-going advances in dentistry technology and new products / materials, it's challenging for training institutions to account for every new innovation in the curriculum.

⁷ Canadian Dental Association. January 10, 2019. https://oasisdiscussions.ca/2019/01/10/shaping-teledentistry-in-canada/

⁸ For example, the Royal College of Dental Surgeons of Ontario recommended that, for the duration of the COVID-19 crisis, dentists should consider the use of teledentistry for the remote assessment, triage, and provision of dental care where possible and appropriate. COVID-19: Guidance for the Use of Teledentistry.

https://www.rcdso.org/en-ca/rcdso-members/2019-novel-coronavirus/covid-19---emergency-screening-of-dental-patients-using-teledentistry

⁹ OralHealth - How COVID-19 Revealed the Value of Teledentistry. May 27, 2020.

https://www.oralhealthgroup.com/blogs/how-covid-19-revealed-the-value-of-teledentistry/

Dental assistants should anticipate some level of on-the-job training depending on the technology in use at their place of employment. They should also have an understanding that it's part of their responsibility to continue to advance their skills as they learn on-the-job and work alongside experienced staff in the workplace and through continuing education courses.

NOA survey and focus group participants confirmed that soft skills are important in the dental assisting profession (e.g. communication, interpersonal, critical thinking) for the purpose of working with patients as well as working with other staff in the workplace. Training institutions cover soft skills as part of the curriculum and content has been expanded to include intercultural communication / cultural sensitivity and diversity training. As with technical skills, new graduates should have an understanding that it's their responsibility to continue to develop their soft skills as they gain work experience and participate in relevant continuing education courses.

With respect to continuing education requirements, focus group participants reported that requirements for dental assistants vary from province to province and the lack of conformity can lead to confusion. Participants indicated that it would be beneficial to have more continuing education opportunities in the following areas: implants, sedation, new infection prevention and control procedures, silver diamine fluoride.

AREAS FOR FUTURE CONSIDERATION

The thematic analysis of the feedback provided by the dental assistants that participated in this study revealed three key areas for future consideration including: **quality assurance**, **skills utilization**, and **education / training**. The points listed below reflect the viewpoints and suggestions brought forward by dental assistants.

Quality Assurance

The COVID-19 pandemic has profoundly impacted the dental profession in many ways and has brought greater attention to the important role of quality assurance standards in protecting and improving the public's health. Ideally, there should be a holistic view to promoting and implementing quality assurance protocols in the workplace (i.e. all staff should feel they have some level of responsibility for ensuring that safe practice protocols are adhered to).

- 1. Leading stakeholders should continue to define and monitor quality assurance as a shared commitment. Dental assistants feel that regulators in particular could play a key role here.
- 2. In light of the growing concerns about the possible spread of blood-borne diseases and the impact of emerging, highly contagious respiratory and other illnesses, consideration should be given to making it a requirement for all members of the oral healthcare team to have formal training in infection prevention and control protocols and for these protocols to be reviewed on a regular basis (e.g. annually or every two or three years).

3. As with other oral health professions, the governance of dental assisting falls under the provincial review of regulators. There are a number of different models under which the dental assisting profession in Canada is governed (e.g. the profession is regulated by the profession itself under provincial statute, the profession is regulated by an external body - a dental college, there is a dental assisting association which delivers member services but there is no statute that regulates the profession, the profession is unregulated and there is no dental assisting organization nor any formal regulation of the profession). Dental assisting remains an unregulated profession in Ontario, Quebec and the Territories and there are no requirements upon dentists to hire qualified assistants.

In the interest of public safety, efforts should continue to regulate the dental assisting profession in Ontario, Quebec and the Territories. As this transition takes place, CDAA should provide support to members as they navigate through the changes and NDAEB should work to ensure that integrated certification processes are in place.

4. NDAEB should continue with plans to regularly review and update the Domain Description for Dental Assisting to ensure a common standard for education in DA programs, and the certification process, in Canada.

Skills Utilization in the Workplace

Dental assistants are multi-skilled professionals but there continues to be considerable differences in the number/type of procedures permitted across jurisdictions which can create confusion in the workplace.

5. Canadian Dental Assisting Regulatory Authorities could consider consulting with relevant stakeholders to develop a common (or more consistent) scope of practice for the dental assisting profession across Canada. CDAA could support this process.

Education / Training

Educators have a relatively short period in which to train students (e.g. 10 months) and it's important for the curriculum to cover a broad range of skills that are used frequently including skills that are specifically covered in the national exam. With rapid advances occurring in new technology and procedures related to oral healthcare, it can be challenging for training institutions to keep pace with every change that's introduced to the workplace. Updating the curriculum can be a slow and sometimes costly process when it involves the introduction of new technology / equipment (i.e. obtaining authorization to alter the curriculum and securing funding for new equipment / resources can be a prolonged process).

6. Opportunities for dialogue and collaboration between dental schools and dental assistant training institutions should be encouraged and supported to ensure that the

training curriculum focuses on the most relevant and legal skills needed by dental assistants.¹⁰

- 7. To better enable student access to new and emerging technologies, opportunities to establish partnerships between training institutions and industry leaders should be encouraged.
- 8. Non-accredited programs should be encouraged to include thorough IPAC training.
- 9. With respect to continuing education, some course offerings are primarily focused on the role of the dentist and the role of the dental assistant has limited coverage. Relevant bodies engaged in developing and offering continuing education courses for oral healthcare providers should consider including content that is specifically targeted at dental assistants. A system of skills verification should be in place (e.g. examinations).
- 10. The work demands of dental assisting are both physical and psychological and these stressors have become more intense within the context of the COVID-19 pandemic (e.g. psychologic distress experienced as a result of providing direct patient care, vicarious trauma, quarantine or self-isolation). The impact of COVID-19 on the work environment reinforces the importance of equipping dental assistants with the necessary skills to build up resiliency to stress and establish coping strategies for stress and trauma.

Personal well-being / psychological first aid training should be included as part of the standard training curriculum and/or part of the continuing education / competency requirements for all oral healthcare professionals including dental assistants. An interprofessional approach should be used in all dental facilities to promote / support personal well being.

OTHER CONSIDERATIONS

Provincial scope of practice indicators are reviewed and updated every two years by provincial regulators. The most recent review was completed in 2018 and the 2020 review is currently in progress. The reader should be aware that some of the provincial indicators presented in this version of the NOA may not reflect current practice. The results of the 2020 review should be incorporated in the next version of the NOA.

Consultations on updates to the Canada Safety Procedures for the Use of Dental X-ray Equipment (Safety Code 30) are ongoing and should be reviewed when completing the next

¹⁰ This observation is consistent with the findings reported in the Ad Hoc Committee on Dental Auxiliaries Report. Department of National Health and Welfare. Canada. 1970. Wells, D.C.

version of the NOA to ensure that the appropriate knowledge and skills are reflected in the relevant sections of the NOA.

CDAA should use the results of the NOA to inform discussions with Government of Canada to update the National Occupational Classification for the dental assisting profession.

Next Version of the NOA

The Steering Committee provided valuable input to the development of the survey tool and this process should be maintained for the next NOA. The changes made to the 2019 NOA survey contributed to a higher response rate in general and better representation from each provincial jurisdiction. Changes made to two metrics (frequency of task performance and risk assessment) provided meaningful results.

As part of the next NOA, the demographic questions in the NOA survey should be reviewed to determine if any additional level of detail might be helpful for interpreting the results. For example, asking the respondents where they obtained their education / training (e.g. Canadian based institution vs. international institution).

Pilot-testing the survey with a small sample of dental assistants representing different areas of practice provided important feedback for finalizing the tool before it was fully deployed. The survey tool used for the next NOA should be pilot-tested if any substantial modifications are made.

The use of four regional virtual focus groups was an effective and efficient means of engaging with dental assistants and educators for the purpose of exploring additional questions that emerged from the analysis of the national survey data. This approach should be maintained for the next NOA and key informant interviews should be conducted with a small number of dental assistants and/or educators from any jurisdictions that are unable to participate in the focus groups.

Acknowledgements

The consulting team of Harry Cummings and Associates (HCA) would like to thank the members of the NOA Steering Committee for committing their time to this study. The NOA would not have been possible without the support and guidance of the Committee.¹¹

We also thank the provincial organizations / regulatory authorities that promoted the online NOA survey to their membership. A key interest of the 2019 NOA was to increase the survey response rate from the previous NOA (2014) and this was achieved with more than three times the number of participants in 2019.

We would like to thank the 4,458 dental assistants and other relevant stakeholders that completed the national survey. The input provided by this group serves to ensure that the occupational standards for dental assisting reflect current and emerging practices.

Finally, we would like to thank the 46 dental assistants, educators and other relevant stakeholders that participated in the regional focus group discussions and key informant interviews. These discussions were used to explore additional questions that emerged from the results of the national survey and provided valuable insights.¹²

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¹¹ The complete list of Steering Committee members is presented in Appendix A.

¹² The complete list of focus group participants and key informant interviewees is presented in Appendix B.

List of Acronyms used in this Report

AGP	Aerosol Generating Procedure ¹³
CAD/CAM	Computer-Aided Design / Computer-Aided Manufacturing
CDA	Certified Dental Assistant
CDAA	Canadian Dental Assistants' Association
CDARA	Canadian Dental Assisting Regulatory Authorities
COVID-19	Novel Coronavirus
CPR	Cardiopulmonary Resuscitation
DND	Department of National Defence
HCA	Harry Cummings and Associates
IPAC	Infection Prevention and Control
NDAEB	National Dental Assisting Examining Board
NOA	National Occupational Analysis
ODAA	Ontario Dental Assistants Association
PPE	Personal Protective Equipment
RDA	Registered Dental Assistant
WHMIS	Workplace Hazardous Materials Information System
WHO	World Health Organization

¹³ Variations of this acronym include AGMP (Medical) and AGDP (Dental).

Contents

Executive Summary	i
Acknowledgements	xv
List of Acronyms used in this Report	xvi
1.0 Introduction	1
1.1 Development of the Occupational Standard	4
1.2 Methods	4
Document Review	5
NOA Survey and Respondent Profile	5
NOA Survey Data Analysis	15
NOA Focus Groups and Key Informant Interviews	15
2.0 Scope of Practice	17
3.0 Occupational Observations	
3.1 Professionalism	20
3.2 Treatment Support Procedures	22
3.3 Clinical Procedures	25
3.4 Radiography	
3.5 Oral Health Education and Promotion	29
3.6 Laboratory Procedures	
3.7 Equipment and Instrument Maintenance	
3.8 Practice Management	
3.9 Additional Observations on the Dental Assisting Profession	
4.0 Occupational Analysis	
Block A Professionalism	41
Task 1 Communicates Effectively	41
Task 2 Maintains Professional Competence	43
Task 3 Performs Duties in a Professional Manner	
Block B Treatment Support Procedures	
Task 4 Practices Infection Control	
Task 5 Organizes Equipment and Supplies	53
Task 6 Attends to Patient's Comfort	
Task 7 Initiates and Maintains Patient Records	60
Task 8 Provides Patient with Treatment Information	65

Task 9 Assists with Administration of Anaesthetics	69
Task 10 Assists with General Dental Procedures	74
Task 11 Assists with Operative Dentistry Procedures	79
Block C Clinical Procedures	88
Task 12 Performs Intra-Oral Procedures	88
Task 13 Performs Intra-Oral Preventive Procedures	
Task 14 Performs Orthodontic Procedures	113
Task 15 Performs Prosthodontic Procedures	119
Task 16 Administers and/or Participates in Emergency Care	128
Task 17 Performs Post-Treatment Care	131
Block D Radiography	135
Task 18 Produces Radiographs/Images	135
Task 19 Processes Films/Sensors	141
Block E Oral Health Education and Promotion	147
Task 20 Counsels Patients on Oral Health	147
Task 21 Participates in Community Oral Health Programs	151
Block F Laboratory Procedures	156
Task 22 Fabricates Dental Models	156
Task 23 Fabricates Trays, Fabricates Sports Guards/Retainers, and Repairs Appliances	161
Block G Equipment and Instrument Maintenance	168
Task 24 Performs Routine Maintenance of Equipment	168
Task 25 Performs Routine Maintenance of Instruments	174
Block H Practice Management	178
Task 26 Adherence to Quality Assurance Protocols	178
Task 27 Maintains Inventory	
Task 28 Manages Patients' Files	
Task 29 Maintains Financial Records	
5.0 Observations / Future Considerations	
Appendix A: NOA Steering Committee and Project Management	
Appendix B: NOA Focus Group Participants and Key Informant Interviewees	
Appendix C: Map of Research Inputs / Methods / Outputs	201
Appendix D: 2019 NOA Survey Questionnaire	
Appendix E: Essentials Skills and Personal Attributes	224

Appendix F: Skills used in Select Jurisdictions and/or Specialized Private Practices	
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1.0 Introduction

There are an estimated 28,000 dental assistants employed across Canada in all provinces and territories. As with other oral health professions, the governance of dental assisting falls under the provincial review of regulators. In addition, all regulated provincial jurisdictions in Canada (and Ontario) recognize the National Dental Assisting Examining Board (NDAEB) to develop and manage a common exam process for individuals entering the profession.

The NDAEB was established by the Canadian Dental Assistants' Association (CDAA) in 1997 and was federally-incorporated as a separate non-profit organization in 1998. The NDAEB is responsible for the development, maintenance, and administration of the national written examination and the Clinical Practice Evaluation (CPE) to over 2,220 dental assisting candidates annually.¹⁴

The CDAA is the national association for the profession whose membership is comprised of provincial and military dental assisting organizations who work collaboratively to advance the interests of dental assisting in Canada. Approximately 8,000 dental assistants are members of six provincial associations which form the corporate membership of the CDAA.¹⁵ Other provincial associations not associated with CDAA include approximately 15,000 to 18,000 dental assistants in their memberships.¹⁶

The CDAA works on behalf of the profession in various ways including advocacy, research, capacity building at the national level and is a funding partner with the NDAEB on the 2019 National Occupational Analysis (NOA) project.

An Occupational Analysis (OA) is a detailed examination of the (1) tasks (performance elements) that make up a job (employee role), (2) conditions under which they are performed,

¹⁴ The NDAEB exam and CPE are key elements of the Mutual Recognition Agreement (MRA) for Dental Assisting, which came into force on July 1, 2001. The MRA facilitates the labour mobility of dental assistants in Canada. The NDAEB is comprised of representatives of eight Dental Assisting Regulatory Authorities, the Canadian Dental Assistant's Association, the Canadian Dental Association, the Commission on Dental Accreditation of Canada, educators representing accredited and non-accredited educational institutes, and the public. The Province of Quebec is not represented on the Board of Directors and does not require the NDAEB certificate for dental assistants employed in the province.

¹⁵ The six provinces consist of Alberta, Manitoba, Quebec, New Brunswick, Nova Scotia, and Newfoundland and Labrador.

¹⁶ The dental assisting profession is not regulated in Ontario, Quebec and the Territories. In the absence of regulation in Ontario, the ODAA provides a voluntary certification program to allow dental assistants to meet the national standard. In 2019, 4777 Ontario dental assistants were certified to this standard (CDA II). An additional 1222 dental assistants were certified with limited duties (CDA or CPDA-Certified Preventive Dental Assistant). The ODAA recognizes the NDAEB for individuals maintaining voluntary certification in Ontario at the national level. All dental assistants certified as CDA II hold the NDAEB certificate or completed a Transfer of Credentials process prior to 2003.

In Quebec, dental assisting is not recognized as a profession under the provincial Professional Code. Dental assisting training in Quebec is unique in that it is provided through school boards in a 13-month program certified by the Ministry of Education. Many dental assistants are trained in their profession but there are no requirements upon dentists to hire qualified assistants. Graduates with a diploma from Quebec's Ministry of Education have access to the NDAEB written exam should they wish to practice in other provinces. The Association des assistant(e)s dentaires du Quebec (AADQ) is the professional membership association for dental assistants and membership is voluntary. AADQ's membership stands at about 135 (based on Aug. 2017 CDAA Research Paper).

and (3) what skills, knowledge, and attitudes (behaviour characteristics) are required by the job. Information gleaned from an OA is used to assist in the development and confirmation of the Occupational Standard. It is common practice for professions to have scheduled reviews of OAs and subsequent revisions that reflect modifications in practice protocols, the implementation of new technologies, and changes in regulation.

The NOA for dental assisting in Canada is completed approximately every five years and is used primarily to assist in the development and confirmation of the Occupational Standard and to update Domain Descriptions and inform NDAEB exam revisions. The NOA provides a timely profile of emerging trends in the dental assisting profession and serves an important role in informing training, curriculum development, accreditation of training programs, recruitment, performance improvement, career development, and the examination and credentialing of practitioners. It also represents an important resource for provincial regulators and can inform government regulation and policy development.

The National Dental Assisting Examining Board (NDAEB) and the Canadian Dental Assistants' Association (CDAA) solicited the partnership of the Canadian Dental Assisting Regulatory Authorities (CDARA) and the Ontario Dental Assistants Association (ODAA) for the purpose of completing the 2019 NOA. The partners recommended members to a Steering Committee which guided the project.¹⁷ The Committee assisted in defining the scope of the NOA and developing the national online survey questionnaire. The Committee also reviewed the draft NOA report and provided feedback which contributed to the final report.

NOA in the context of the COVID-19 pandemic

The timing of the 2019 NOA happened to coincide with the start of the COVID-19 pandemic which resulted in a short delay in completing the NOA.¹⁸ COVID-19 is a novel (new) coronavirus that was first identified in Wuhan, China in late 2019.¹⁹ The World Health Organization (WHO) declared the COVID-19 outbreak a public health emergency of international concern on January 30, 2020 and classified COVID-19 as a pandemic on March 11, 2020.²⁰

The first Canadian case of COVID-19 was reported by Health Canada on January 25, 2020. By February 26, Canada had 12 confirmed cases, all related to travel from China or Iran. In early March, Canadian cases began to climb as a result of travellers from countries that were not known hotspots (i.e. India, United Kingdom, United States). Compounding the issue was the

¹⁷ The Steering Committee consisted of representation from a broad range of interests including regulators and provincial organizations as well as educators, researchers, and private practice representatives. The complete list of Steering Committee members is presented in Appendix A.

¹⁸ The national survey for the occupational analysis was completed in Nov./Dec. 2019 prior to the outbreak of the pandemic but the supporting focus groups were postponed until June 2020 and conducted as virtual meetings.
¹⁹ Coronaviruses originate in animals but are known to cause respiratory illness in humans, particularly during the fall and winter months. Other novel coronaviruses include Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS-CoV).

²⁰ A pandemic is the worldwide spread of a new disease. SARS-CoV-2 is the virus that causes COVID-19. For clarity, in this report the term COVID-19 is used to refer to both the virus and the disease.

growing awareness that the virus could be transmitted by asymptomatic people.²¹ On March 24, Health Canada officially reported that local transmission had become the primary source of cases in Canada.²² As of August 27, 2020, Canada reported a total of 126,848 cases of COVID-19 of which 112,825 cases have recovered and 4,921 cases remain active. The number of deaths related to COVID-19 in Canada as of August 27 was 9,102 (Health Canada).

COVID-19 is primarily spread person-to-person through close unprotected contact with someone who is infected, via respiratory droplet or contact transmission (i.e. touching a surface or an object contaminated with the virus and then proceeding to touch one's eyes, nose and mouth). Dental assistants and other members of the dental team have an increased risk of catching and/or transmitting the viral infection because of their need to work in close contact with patients and the use of aerosol generating procedures (AGP). Certain dental procedures are associated with significant aerosol generation, including ultrasonic scalers, high-speed dental handpieces (e.g. tooth preparation with air abrasion, air turbine handpiece), air polishers, and air-water syringes. Although there are few reports of respiratory disease transmission, the potential exists due to the ubiquity of AGMPs in dental settings (Focus on COVID-19 in Dental Care Settings. Public Health Ontario. August 2020).

Provincial health officers have indicated that COVID-19 is expected to continue to circulate in the general population for an extended period of time. The impact of COVID-19 on healthcare workers in general is significant in terms of changes to practice and the psychological effects of the pandemic. It is anticipated that on-going measures will be used by oral healthcare professionals to control the spread of the disease, including requirements to practice physical distancing of at least 2 metres (wherever possible), use of appropriate personal protective equipment (PPE) and related hand hygiene procedures, increased frequency and monitoring of environmental cleaning and disinfection practices, and increased patient screening for signs, symptoms and risk factors for COVID-19. As knowledge about COVID-19 continues to evolve, practice considerations in dental settings may need to change with the evidence. The impact of COVID-19 on the dental assisting profession is discussed further throughout the report.

²¹ Asymptomatic infection occurs when an individual is infected but experiences no symptoms, while asymptomatic transmission occurs when an infected individual without symptoms transmits the virus to another person.

²² On March 13, Health Canada advised travellers to avoid all non-essential travel 'until further notice' and on March 16, Health Canada instructed all travellers entering Canada from anywhere else in the world to go into quarantine for 14 days. On March 18, Canada announced a ban on all foreign nationals entering Canada. Canada also reached an agreement with the U.S. to suspend all non-essential travel across the border (COVID-19: A Canadian timeline. Canadian Healthcare Network. April 8, 2020).

1.1 Development of the Occupational Standard

The Occupational Standard was developed and validated by practicing dental assistants with extensive knowledge and experience in the profession of dental assisting. It has undergone several reviews and augmentations since its adoption in 2000.

	October	Extensive research was conducted into existing provincial and international standards.
2000	November	An Occupational Analysis Workshop was conducted in Charlottetown, Prince Edward Island, with 14 professional practitioners mostly from Eastern Canada.
2004	January	A second Occupational Analysis Workshop was conducted in Calgary, Alberta, with nine professional practitioners mostly from Western Canada.
2001	March/April	The document was validated by over 300 practitioners in workshops held in every province of Canada.
2007	March	The document was reviewed and revised at an Occupational Analysis Workshop in Gatineau, Quebec, by 10 practitioners from Eastern Canada.
	April	The document was reviewed and revised at an Occupational Analysis Workshop held in Edmonton, Alberta, by eight practitioners from Western Canada.
2014	Winter	A national occupational analysis was conducted using an online survey tool. Two workshops were conducted, one in Edmonton and one in Ottawa, to review the results.
2019 / 2020	Sept. 2019 to Nov. 2020*	A national occupational analysis was conducted using an online survey tool. Four regional focus groups were conducted with representation from across Canada, to discuss additional questions that arose from the survey results. Key informant interviews were also conducted. The draft NOA report was reviewed by the Steering Committee and finalized.

Developmental Timeline

* The NOA survey was conducted in Nov./Dec. 2019. The follow-up focus groups were originally scheduled for March 2020 but were postponed until June 2020 due to the COVID-19 pandemic.

1.2 Methods

In April 2019, an independent consultant (Harry Cummings and Associates - HCA) was hired to complete the NOA with the support and guidance of the CDAA Executive Director, the NDAEB Chief Administrative Office/Registrar, and a Steering Committee consisting of representation from a broad range of interests including regulators and provincial organizations as well as educators, researchers, and private practice representatives.²³

The initial meeting with the Steering Committee was conducted in April 2019 to discuss the scope of the NOA and additional meetings were conducted over the May – October period where the committee provided feedback/input on the research approach and methods.²⁴

A 'map' of the research process was developed in collaboration with the Steering Committee during the early phase of the study. The map identifies the key inputs / stakeholder groups to

²³ The complete list of Steering Committee members is presented in Appendix A.

²⁴ A further role of the Steering Committee was to provide input to the structure / format of the final NOA report.

be engaged in the study and the principal research methods to be used in collecting data (i.e. document review, national survey, focus groups, key informant interviews). The map also highlights the expected outputs/deliverables for the study.²⁵

Document Review

The following background documents were reviewed as part of the 2019 NOA:

- 2007 Occupational Analysis Canadian Dental Assisting
- 2014 Occupational Analysis Canadian Dental Assisting
- Dental Assisting Across Canada An overview of the organization of the profession in each region of Canada (CDAA Research Series Papers updated 2017)
- 2017 Dental Assisting Domain Description
- 2018 Canadian Dental Assisting Legal Scope of Practice by Province

NOA Survey and Respondent Profile

Several meetings were conducted with the Steering Committee to review and discuss the structure and content of the NOA survey questionnaire. The national survey was modified from the 2014 version to focus on skills that the Committee deemed a priority for review at this time. Survey participants were asked to report on the frequency of task performance and any important changes / trends in practice, technology, knowledge and abilities over the last few years. Screening questions were strategically placed throughout the survey to help respondents quickly access the competency areas that were most relevant to them.²⁶ The modifications served to reduce the overall length of the survey and ultimately contributed to a much higher response rate than was previously achieved.

A key change to the 2019 NOA survey was the adoption of a more specific five-point scale for measuring the frequency of task performance. The 2019 and 2014 frequency scales/categories are shown below. It is hoped the scale may be used in future iterations.

Frequency of task performance								
	1 2 3 4 5							
2019 NOA survey	Never	Occasionally	Monthly	Weekly	Daily	Not relevant/		
2014 NOA survey	Never	Rarely	Occasionally	Frequently	Very frequently	applicable		

The other key measurement change made to the 2019 NOA survey involved the question of task importance. In the 2014 NOA survey, respondents were asked to rate the importance of each task/activity using a four-point scale (not important, somewhat important, important, very important – and not relevant). For the 2019 survey, it was decided to replace this question and assess the consequences for safety, quality and/or liability when tasks are not performed

²⁵ The map of inputs, methods and outputs is presented in Appendix C.

²⁶ The 2019 NOA survey questionnaire is presented in Appendix D.

correctly.²⁷ The new question was developed through a review of best practices used in other occupational assessments and adapted for the NOA for dental assisting. Respondents were asked to assess the consequences for safety, quality and/or liability if the collective tasks under each competency area were performed below accepted standards. As a way of reducing the overall length of the survey (i.e. number of questions), this question was purposefully posed as an overarching assessment of the tasks/ activities under each key competency area. Respondents were encouraged to expand on their assessment if they wanted to provide additional context and/or single out any specific tasks/activities. The following five-point scale was used to asses risk to safety, quality and/or liability in the 2019 NOA survey.

If the tasks are performed below accepted standards, the consequences for safety, quality								
and/or liability are								
1	2	3	4	5	Don't Not relevant/ know applicable			
Extremely low	Low	Moderate	High	Extremely high				

An online pilot test of the NOA survey was conducted with a select number of contacts provided by the Steering Committee (28 individuals participated in the pilot test with broad representation across different demographic variables). The survey respondents were asked to complete the survey in their professional capacity (as if they were responding to the actual national survey) and they were also asked to review/appraise the content of the survey and provide feedback. The 2019 NOA survey was finalized based on the result of the pilot test and final feedback from the Steering Committee. The 2019 NOA survey was translated into French and reviewed and edited by CDAA and NDAEB officials.

Provincial organizations / regulatory authorities were informed about the NOA survey and asked to promote the survey to their membership.²⁸

The 2019 NOA survey was launched the week of November 4th 2019. Responses were tracked by province and weekly email updates were provided to the Steering Committee. The provincial organizations / regulatory authorities were asked to send out reminder emails to their membership as needed.

The initial plan was to leave the survey open until the end of November. However, the launch of the survey was delayed in a small number of provinces and it was decided to leave the survey open until December 13.

²⁷ The following definitions were provided in the survey for reference:

[•] Safety refers to preventing harm (physical, emotional or otherwise)

[•] Quality refers to using best practices in performing clinical and administrative procedures that lead to optimal patient outcomes

[•] Liability refers to the financial or legal responsibilities that arise from a negligent act or omission ²⁸ Provincial organizations / regulatory authorities were provided with an online survey link that members could use to access the survey. British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Nova Scotia, New Brunswick and Newfoundland and Labrador offered an incentive to members to complete the survey (i.e. a continuing education / professional development credit).

A total of 4,458 individuals completed the survey which represents approximately 16% of the dental assistants in Canada.²⁹ As shown in the following table, the total response was more than three times higher than the response for the 2014 survey with substantial increases in participation from every province, as well as representation from two of the three Territories.

Although Ontario accounts for a substantial proportion of the respondents in the 2019 NOA survey (46%), its proportional representation is much lower than it was in the 2014 survey (63%) and the other provinces are better represented in the 2019 NOA survey.

		2019 NOA	Survey	2014 NOA Survey			
Province / Territory *	Approx. Total Number of DAs (2017 estimate)**	Number of DAs that Completed the Survey	Percent Responding Nationally	Percent Responding Provincially	Approx. Total Number of DAs (2014 estimate)	Number of DAs that Completed the Survey	Percent Responding Provincially
British Columbia	6,000	603	13.5	10.1	5,347	146	2.7
Alberta	5,500	449	10.1	8.2	5,514	110	2.0
Saskatchewan	1,400	371	8.3	26.5	1,300	122	9.4
Manitoba	1,275	253	5.7	19.8	1,224	24	2.0
Ontario***	7,000	2,050	46.0	29.3	7,055	821	11.6
Quebec****	5,500	123	2.8	2.2	5,000	7	0.1
New Brunswick	600	88	2.0	14.7	800	28	3.5
Nova Scotia	760	352	7.9	46.3	795	24	3.0
PEI	180	58	1.3	32.2	100	8	8.0
NFLD	150	86	1.9	57.3	172	4	2.3
Nunavut		6	0.1	NA		NA	
NWT			0.0	NA		NA	
Yukon		2	0.0	NA		NA	
Outside Canada		8	0.2	NA		NA	
Not applicable		9	0.2	NA		NA	
Total	28,365	4,458	100.0		30,000	1,294	

* Respondents were asked to identify the province or territory where they work for the majority of their time. ** Totals are approximate.

*** Consists of dental assistants certified to meet the national standard, dental assistants certified with limited duties and uncertified dental assistants.

**** Graduates of a Quebec dental assisting program are not eligible to write the NDAEB Written Examination since the NDAEB cannot confirm the entire contents of Quebec programs. The NDAEB will recognize the education as comparable to a Level 1, chair side dental assisting education program if the diploma was issued by Le Ministère de l'Éducation, du Loisirs et du Sport du Québec (Ministry of Education). In order to qualify to write the NDAEB exam, an individual must successfully complete formal upgrading at a dental assisting education program whose graduates are eligible to write the NDAEB exam. The upgrading program must include all mandatory intraoral skills including "Expose dental radiographs."

²⁹ The actual response rate is closer to 20% as only a small number of DAs in Quebec were formally invited to participate in the survey – based on the membership of approximately 135 DAs in the Association des assistant(e)s dentaires du Quebec (AADQ) (the AADQ membership figure is taken from the Aug. 2017 CDAA Research Paper).

Survey Respondent Profile: Primary Place of Employment

The survey respondents represent a broad range of practice / work-settings with the majority of respondents (69%) working in the general dentistry field through a private practice and 17% working in specialized fields in private practices. Approximately 13% of the respondents work in other capacities (e.g. educational facilities, community public health, hospitals).

Primary employment / work-setting	Number	Percent
Private Practice – General Dentistry	3,095	69.4
Private Practice – Orthodontic	330	7.4
Private Practice – Oral Surgery	119	2.7
Private Practice – Pediatric Dentistry	110	2.5
Private Practice – Periodontic	106	2.4
Private Practice – Endodontic	62	1.4
Private Practice – Prosthodontic	38	0.9
Educational Facility – Instructional	156	3.5
Educational Facility – Non-instructional	48	1.1
Community / Public Health	134	3.0
Hospital	51	1.1
Department of National Defence	75	1.7
Other government	12	0.3
Dental Supply Company	15	0.3
Insurance Company	5	0.1
Other ^a	102	2.3
Total	4,458	100.0

 Table 2: Distribution of Respondents by Primary Place of Employment / Work-Setting

^a 'Other' includes denture clinics, dental labs, oral medicine, mobile dental labs, corporate dental services, nonprofit services, and representatives with provincial regulators or associations. It also includes a small number of individuals who are currently not working in the dental sector.

Survey Respondent Profile: Community of Practice

Communities of varying size/population are represented in the 2019 NOA survey. Approximately 14% of the respondents are working in large urban centres (over 1 million residents) while 42% are working in large cities (100,000 to 1 million residents) and 24% are working in small cities (25,000 to 99,999 residents). Approximately 20% of the respondents are working in small towns or rural areas (less than 25,000 residents).

Table 3: Distribution of Responde	nts by Communit	y of Practice

Size of community of practice	Number	Percent	Valid Percent
Large urban centre (over 1 million residents)	600	13.5	14.2
Large city (100,000 to 1 million residents)	1777	39.9	42.1
Small city (25,000 to 99,999 residents)	1001	22.5	23.7
Small town (fewer than 25,000 residents)	839	18.8	19.9
Total	4217	94.6	100.0
Prefer not to answer / did not respond	241	5.4	
Total	4458	100.0	

Survey Respondent Profile: Years of Practice as a Dental Assistant

Survey respondents represent a broad range of practice experience. Approximately 19% of the respondents have 5 years or less practice experience while 42% have between 6 and 20 years of practice experience and 39% have more than 20 years of experience.

Number of years of practice	Number	Percent	Valid Percent
Less than 1 year	164	3.7	3.8
1 to 2 years	247	5.5	5.7
3 to 5 years	411	9.2	9.5
6 to 10 years	617	13.8	14.3
11 to 15 years	606	13.6	14.0
16 to 20 years	585	13.1	13.5
21 to 25 years	507	11.4	11.7
26 to 30 years	460	10.3	10.6
31 to 35 years	356	8.0	8.2
More than 35 years	369	8.3	8.5
Total	4322	96.9	100.0
Prefer not to answer / did not respond	114	2.6	
Not applicable	22	0.5	
Total	4458	100.0	

 Table 4: Distribution of Respondents by Years of Practice

Survey Respondent Profile: Age

Survey respondents represent a broad range of ages. Approximately 7% of the respondents are under the age of 25 while 34% are between the ages of 25 and 39 and 28% are between the ages of 40 and 49. Approximately 32% of the respondents are 50 years of age or more.

Age group	Number	Percent	Valid Percent
Under 25	288	6.5	6.8
25 to 29	439	9.8	10.3
30 to 34	518	11.6	12.2
35 to 39	473	10.6	11.1
40 to 44	574	12.9	13.5
45 to 49	622	14.0	14.6
50 to 54	599	13.4	14.1
55 to 59	485	10.9	11.4
60 to 64	212	4.8	5.0
65 or older	53	1.2	1.2
Total	4263	95.6	100.0
Prefer not to answer / did not respond	195	4.4	
Total	4458	100.0	

Survey Respondent Profile: Highest Level of Education Completed

The large majority of the survey respondents (89%) have a Dental Assistant diploma / certificate.

. , , ,			
Level of education	Number	Percent	Valid Percent
Dental assistant diploma/certificate	3731	83.7	89.1
Associate degree	75	1.7	1.8
Baccalaureate degree	247	5.5	5.9
Master's degree	51	1.1	1.2
PhD	6	0.1	0.1
Other ^a	79	1.8	1.9
Total	4189	94.0	100.0
Prefer not to answer / did not respond	269	6.0	
Total	4458	100.0	

Table 6: Distribution of Respondents by Highest Level of Education Completed

^a 'Other' includes Dental hygiene diploma, Doctor of Dental Medicine, Certified Dental Receptionist / Office Administration, internationally trained and now certified/licenced in Canada, College certificate / diploma in other fields.

Survey Respondent Profile: Current Employment Status

The majority of the survey respondents (55%) are working full-time in a single position while a further 16% are working full-time in two or more positions. Approximately 16% of the respondents are working part-time.

· · · ·		
Employment status ^a	Number	Percent
Working full-time – single position	2437	54.7
Working full-time – 2 or more positions	728	16.3
Working part-time – single position	554	12.4
Working part-time – 2 or more positions	178	4.0
On contract	39	0.9
On maternity leave	127	2.8
Currently unemployed and looking for work	91	2.0
Currently unemployed and not looking for work	74	1.7
Retired	44	1.0
Prefer not to answer / did not respond	39	0.9
Other ^b	147	3.3
Total	4458	100.0

Table 7: Distribution of Respondents by Current Employment Status

^a Respondents not currently practicing were asked to reference the most recent year they practiced.

^b 'Other' includes being on medical / disability leave, student / in-training, temping / relief work / casual work, working as a dental hygienist, not practicing as a dental assistant at this time (other personal obligations), not working in the dental field.

Survey Respondent Profile: NDAEB Certificate

Overall, approximately 77% of the survey respondents reported that they have a NDAEB certificate. More than 80% of the respondents in Alberta, Saskatchewan, Ontario, New Brunswick, Newfoundland and Labrador, and Nunavut / Yukon reported that they have a NDAEB certificate. Approximately 15% of the survey respondents indicated that they did not have a NDAEB certificate while 8% were unsure if they have a certificate. Members of the Steering Committee confirmed that it is not mandatory for any dental assistant that graduated prior to 1998 to hold a NDAEB certificate. Members of the Steering Committee also confirmed that it is possible for some dental assistants to be uncertain if they hold a NDAEB certificate.

Drovince (Territory		Do you h	Total		
Province / Territory	Yes	No	Not sure	TOLAI	
British Columbia	Number	376	143	84	603
British Columbia	Percent	62.4	23.7	13.9	100.0
Alberto	Number	378	26	44	448
Alberta	Percent	84.4	5.8	9.8	100.0
Saskatshowan	Number	322	23	25	370
Saskalthewan	Percent	87.0	6.2	6.8	100.0
Manitaha	Number	167	57	26	250
Wallitoba	Percent	66.8	22.8	10.4	100.0
Ontorio	Number	1635	270	107	2012
Untario	Percent	81.3	13.4	5.3	100.0
Quebec	Number	19	53	30	102
Quebec	Percent	18.6	52.0	29.4	100.0
New Brunswick	Number	78	5	5	88
	Percent	88.6	5.7	5.7	100.0
Nova Scotia	Number	268	43	41	352
	Percent	76.1	12.2	11.6	100.0
Newfoundland and	Number	86	0	0	86
Labrador	Percent	100.0	0.0	0.0	100.0
Drinco Edward Island	Number	34	11	4	49
Prince Edward Island	Percent	69.4	22.4	8.2	100.0
Nuppyut and Yukon	Number	8	0	0	8
	Percent	100.0	0.0	0.0	100.0
Outside Canada	Number	8	0	0	8
	Percent	100.0	0.0	0.0	100.0
Notapplicable	Number	2	4	2	8
	Percent	25.0	50.0	25.0	100.0
Total	Number	3381	635	368	4384
TULAI	Percent	77.1	14.5	8.4	100.0

Table 8: Distribution of Respondents by NDAEB Certificate

Survey Respondent Profile: Time Spent Performing Clinical Activities

Overall, approximately 64% of the survey respondents spend the large majority of their time (76-100%) performing clinical activities (e.g. working chairside, sterilization, etc.) while a further 14% spend between 51-75% of their time performing clinical activities.

Close to 80% or more of the respondents in all of the provinces with the exception of Ontario (un-regulated province) spend over 50% of their time performing clinical activities and 65% or more of the respondents spend over 75% of their time performing clinical activities. In Ontario, approximately 70% of the respondents spend over 50% of their time performing clinical activities and 56% of the respondents spend over 75% of their time performing clinical activities activities.

Although the sample is small, it's worth noting that a very large proportion of the Quebec respondents regularly engage in clinical activities (i.e. 87% of the Quebec respondents spend over 50% of their time performing clinical activities). Quebec is an un-regulated province and trained dental assistants are legally prohibited from doing many of the skills they have been trained in. Focus group participants in Quebec reported that it is not uncommon for dentists to ask dental assistants to perform skills they are not legally permitted to perform and dental assistants will comply with these requests because there is no regulatory authority that empowers them to refuse the request.

Province / Territory		Time spent performing clinical activities (e.g. working chairside, sterilization, etc.)					Total
		None	1-25%	26-50%	51-75%	76-100%	
Dritich Columbia	Number	9	48	26	73	397	553
British Columbia	Percent	1.6	8.7	4.7	13.2	71.8	100.0
Alborto	Number	9	29	22	78	263	401
Alberta	Percent	2.2	7.2	5.5	19.5	65.6	100.0
Sackatchowan	Number	30	34	15	41	228	348
Saskatchewan	Percent	8.6	9.8	4.3	11.8	65.5	100.0
Manitoha	Number	3	17	13	32	152	217
Manitoba	Percent	1.4	7.8	6.0	14.7	70.0	100.0
Ontaria	Number	141	277	139	251	1049	1857
Ontario	Percent	7.6	14.9	7.5	13.5	56.5	100.0
Quebec	Number	0	8	5	17	73	103
	Percent	0.0	7.8	4.9	16.5	70.9	100.0
New Brunswick	Number	2	10	5	9	57	83
	Percent	2.4	12.0	6.0	10.8	68.7	100.0
	Number	8	24	20	30	251	333
NOVA SCOLIA	Percent	2.4	7.2	6.0	9.0	75.4	100.0
Newfoundland and	Number	3	5	4	8	63	83
Labrador	Percent	3.6	6.0	4.8	9.6	75.9	100.0
Prince Edward Island	Number	0	7	5	7	37	56
	Percent	0.0	12.5	8.9	12.5	66.1	100.0
	Number	0	1	0	0	6	7
	Percent	0.0	14.3	0.0	0.0	85.7	100.0
Tatal	Number	205	460	254	546	2576	4041
Total	Percent	5.1	11.4	6.3	13.5	63.7	100.0

Table 9: Distribution of Respondents by Time Spent Performing Clinical Activities

<u>Survey Respondent Profile: Time Spent Performing Administration Tasks</u> Close to 80% or more of the respondents in all of the provinces spend some portion of their time performing administration tasks.

The majority of respondents in British Columbia (57%), Alberta (58%), Saskatchewan (57%) and Manitoba (60%) spend between 1 - 25% of their time performing administration tasks.

The majority of respondents in Nova Scotia (61%), New Brunswick (59%), Newfoundland and Labrador (55%) and PEI (51%) spend between 1 – 25% of their time performing administration tasks.

The majority of respondents in Quebec (57%) spend between 1 - 25% of their time performing administration tasks while 47% of the respondents in Ontario spend between 1 - 25% of their time performing administration tasks.

Province / Territory		Time spent performing administration tasks (e.g. reception tasks, appointment scheduling, etc.)					Total
		None	1-25%	26-50%	51-75%	76-100%	
Dritich Columbia	Number	118	317	45	22	50	552
British Columbia	Percent	21.4	57.4	8.2	4.0	9.1	100.0
Alborta	Number	59	232	50	36	23	400
Alberta	Percent	14.8	58.0	12.5	9.0	5.8	100.0
Sackatchowan	Number	50	198	34	17	48	347
Saskatulewall	Percent	14.4	57.1	9.8	4.9	13.8	100.0
Manitoha	Number	35	131	21	16	14	217
Wantoba	Percent	16.1	60.4	9.7	7.4	6.5	100.0
Ontaria	Number	274	864	203	137	363	1841
Ontario	Percent	14.9	46.9	11.0	7.4	19.7	100.0
Quebec	Number	24	58	10	3	6	101
	Percent	23.8	57.4	9.9	3.0	5.9	100.0
Now Brunswick	Number	13	49	7	3	11	83
New Drunswick	Percent	15.7	59.0	8.4	3.6	13.3	100.0
Nova Scotia	Number	65	202	30	4	31	332
NOVA SCOLIA	Percent	19.6	60.8	9.0	1.2	9.3	100.0
Newfoundland and	Number	10	46	9	12	6	83
Labrador	Percent	12.0	55.4	10.8	14.5	7.2	100.0
Prince Edward Island	Number	5	28	12	3	7	55
	Percent	9.1	50.9	21.8	5.5	12.7	100.0
Nuppyut and Yukon	Number	0	7	0	0	0	7
	Percent	0.0	100.0	0.0	0.0	0.0	100.0
Tatal	Number	653	2132	421	253	559	4018
Total	Percent	16.3	53.1	10.5	6.3	13.9	100.0

	Table 10: Distribution of	Respondents by 1	Time Spent Performing	Administration Tasks
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NOA Survey Data Analysis

The 2019 NOA survey data was cleaned and analyzed. Descriptive statistics (data tables) were prepared for each question in the survey and compiled in a preliminary findings report. Content analysis was conducted for the open-ended questions (i.e. important changes/trends in the profession over the last few years) and findings were summarized in the preliminary findings report. The preliminary findings report was shared and discussed with the Steering Committee, which provided feedback on where additional data analysis would be beneficial.

A key interest of the Steering Committee was to understand if the responses of any particular subgroup(s) was influencing the survey results in a disproportionate way.

A comprehensive review was conducted of the frequency of task performance data by province of practice (including regulated vs. un-regulated), work-setting (private practices, other), and employment status (full-time, part-time, other) and confirmed that the response pattern was generally consistent across the different subgroups.³⁰

A comprehensive review of the safety risk assessment data was also conducted to determine if there was any particular subgroup(s) that accounted for the 'low' safety risk responses that showed up in the results as these findings were somewhat unexpected, especially in relation to tasks that are generally known / accepted as high-risk tasks.³¹ The analysis confirmed that the response pattern was generally consistent across the different subgroups (i.e. the occurrence of 'low' safety risk responses appears to be broadly distributed and not concentrated within any one subgroup).

After further discussion with the Steering Committee, it was decided to review the safety risk findings with practicing dental assistants and other relevant stakeholders including educators through the focus group discussions (see below) to explore the factors that might account for these findings.

NOA Focus Groups and Key Informant Interviews

Regional focus groups were used to explore a select few questions that emerged from the results of the national survey. The Steering Committee provided input on the key questions to be addressed (discussion topics) as well as the format of the focus groups.

The following questions were posed during the focus groups:

1. Over the last few years, has there been a notable change in the level of attention that is given to quality assurance protocols / safe practice protocols in the workplace? If so, in what way have things changed and what factors account for the change?

³⁰ This was based on a review of common core tasks (i.e. tasks performed in every province).

³¹ For example, approximately 9% of the survey respondents (352 of 3,749) indicated that if tasks related to Practicing Infection Prevention and Control are performed below accepted standards, the consequences for safety, quality and/or liability are low or extremely low. HCA examined the safety risk assessment data by province of practice (including regulated vs. un-regulated), years of practice (5 years or less, 6-15 years, 16-25 years, more than 25 years), work-setting (private practices, other), employment status (full-time, part-time, other), and time spent performing clinical activities and administration tasks (none, 1-25%, 26-50%, 51-75%, 76-100%).
- 2. What types of DA skills are being under-utilized in the workplace and what related factors account for this?
- 3. Are there any parts of the DA training / education curriculum (including continuing education) that are lagging behind changes that are occurring in the workplace?

A total of four regional focus groups were planned in consultation with the Steering Committee The regions were selected based on similarities in scope of practice. Convenience sampling was used to recruit practicing dental assistants and educators/instructors for the focus groups (i.e. Steering Committee members promoted the focus groups through their networks).³²

A total of 44 dental assistants and educators participated in the four focus groups. The regional focus groups were conducted on the following dates:³³

Ontario	June 3, 2020	9 participants
Atlantic Canada	June 4, 2020	7 participants (5 NS, 1 NB, 1 NFLD)
Western Canada	June 9, 2020	17 participants (6 BC, 5 AB, 3 SK, 3 MB)
Quebec	June 10, 2020	11 participants

Each focus group was structured as a 90-minute session and used a virtual platform for hosting the discussion (Zoom).

Key informant interviews were conducted with an educator in PEI and a dental clinic office manager in NWT to ensure that representation from these regions was included as part of the post-survey consultation.

The complete list of focus group participants and key informant interviewees is presented in Appendix B.

³² An emphasis was placed on inviting / recruiting individuals who were enthusiastic about participating and willing to share their experience and insights on issues and trends / changes in the profession.

³³ The focus groups were initially scheduled to take place in March 2020 but it was decided to postpone the sessions until June due the COVID-19 pandemic.

2.0 Scope of Practice

As multi-skilled professionals, dental assistants possess a diverse knowledge base. They effectively perform clinical and administrative procedures through assignment and delegation of duties and responsibilities within provincial legislation.

Dental assistants are skilled at using technology for communication, exercising critical thinking and decision-making abilities and applying dental knowledge to clinical situations. Their education, training, professionalism and experience, coupled with provincial registration and licensing, qualify them to perform a variety of direct and supportive patient care procedures. Dental assistants practice effective interpersonal skills and maintain collaborative relationships with all members of the oral healthcare team.

Dental assistants assist with and perform a variety of clinical procedures. Using four or sixhanded dentistry they assist the operator with the administration of anaesthetics, dental speciality and general dentistry procedures. They perform restorative, preventive, orthodontic, and prosthodontic intra-oral procedures as well as post treatment care. These may include selective coronal polishing, preliminary impressions, dental dams and fluoride application.

Dental assistants prepare and support patients for treatment by practising standard precautions and infection control, organising equipment and supplies, attending to patients' comfort and collecting and updating health histories.

In some jurisdictions, dental assistants expose, process and mount dental radiographs for use in dental treatment. They produce records such as dental photographs and study models to aid in diagnosis. Dental assistants support clinical treatment procedures by performing certain laboratory functions. They fabricate study models and appliances as well as perform minor repairs. It is vital that instruments and equipment are in proper working order so that patient care can be delivered safely and effectively. Dental assistants are responsible for routine maintenance of instruments and equipment in a dental practice.

Dental assistants may also perform basic practice management procedures. These may include maintaining inventory of dental supplies, managing patients' appointments or maintaining financial records.

Dental assistants provide oral self-care, disease prevention recommendations, post-operative care, nutritional counselling and health education to patients and groups.

As new technologies emerge, dental assistants' scope of practice continually evolves. For this reason, dental assistants have a professional responsibility to learn about new technologies, to consider the impact of these new technologies on the dental profession and their own scope of practice, participate actively in their professional associations and upgrade their skills as regulations change.

As health professionals, dental assistants adhere to a code of ethics. The Canadian Dental Assistant Association Code of Ethics is used by the six provincial associations which form the

corporate membership of the CDAA. The remaining provinces adhere to those established by their regulatory body. All include the basic ethical principles of autonomy, non-malfeasance, beneficence, justice, confidentiality, and veracity.

When reviewing the analysis, the interprovincial differences in scope of practice must be considered.

Education / Training

Educational requirements to enter a dental assisting program vary however many include successful completion of secondary school diploma with biology and chemistry. Some programs require a valid CPR (cardiopulmonary resuscitation) Level C certificate.

In all provinces, except Quebec, the National Dental Assisting Examining Board (NDAEB) certificate is required for dental assistants entering practice and seeking registration or certification for licensure for the first time.³⁴ Internationally trained dental health professionals are required to complete the NDAEB exam and the NDAEB Clinical Practice Evaluation to attain license to practice in all provinces except Quebec.

For internationally trained dental professionals to be eligible to complete the NDAEB exam and evaluation they must have their academic credentials assessed by a credentialed assessment agency acceptable to the NDAEB.

³⁴ In Ontario, the NDAEB certificate is recommended.

3.0 Occupational Observations

NOA survey respondents were asked to comment on important changes / trends (practice, technology, knowledge and abilities) they observed / experienced over the last few years under each of the following key competency areas (Blocks):

- Professionalism
- Treatment Support Procedures
- Clinical Procedures³⁵
- Radiography
- Oral Health Education and Promotion
- Laboratory Procedures
- Equipment and Instrument Maintenance
- Practice Management

This information was used to identify where it was appropriate to adjust / refine the occupational standards to reflect current practice. The survey results are summarized below along with the rationale for retaining and/or editing the content of the NOA.

It is important to note that some of the trends identified by the survey and focus group participants extend across a range of activities performed by dental assistants. For example, participants observed that greater attention is being given to infection prevention and control (IPAC) measures in oral healthcare facilities and this has relevance across numerous areas of responsibility including professional competence (Block A), clinical procedures (Block C), laboratory procedures (Block F), equipment and instrument maintenance (Block G), and practice management (Block H).³⁶ Rather than attempting to include / embed a reference to IPAC under each applicable block, the analysis identifies (cross-references) the relevant section(s) of the NOA (i.e. task and block) where IPAC is covered. This approach helps to ensure that content duplication is minimized in the NOA.

³⁵ A stand-alone question related to orthodontic procedures was included in the survey to better understand the number of dental assistants taking formal orthodontic training and the changes occurring in performing these procedures.

³⁶ The duties performed by the dental assistant are presented in terms of blocks, tasks, sub-tasks and context. 'Block' is the largest division within the analysis and reflects a distinct operation relevant to the occupation. See the introduction to Chapter 4 for the definitions of the different categories of duties performed by dental assistants.

3.1 Professionalism

Approximately 50% of the survey respondents (2,114 of 4,230) confirmed that important changes / trends have occurred in relation to demonstrating professionalism in the workplace and 1,342 respondents elaborated on the changes they have observed (and/or what they consider to be the markers of professionalism).³⁷

The most common trends observed with respect to demonstrating professionalism include using the newest technology and adopting and maintaining infection prevention and control protocols (IPAC). Other important markers of professionalism include maintaining continuing education requirements and providing patient-centred care. Additional details are provided in Table 11.

	Number of respondents (n=1,342)	Percent
Increased knowledge and use of new technology and practices (e.g. digital technology – scanners / x-rays / 3D printers / etc., paperless / electronic record-keeping, use of social media in promotions and patient education).	376	28.0
Increased importance of adopting / maintaining infection prevention and control protocols (e.g. sterilization practices, detailed record-keeping, etc.).	285	21.2
Increased importance of maintaining continuing education / professional development requirements for DA certification and self-improvement. For example, attending training seminars on various topics (e.g. new technology / equipment / materials, new procedures, infection prevention and control - IPAC, WHIMIS, CPR and first aid, gender diversity and cultural competency, privacy act, ethics, etc.), attending lunch and learn sessions and team meetings, participating in performance reviews and evaluation, etc. A small number of respondents (8) specifically referred to the importance of Quality Assurance policies / practices (e.g. continuing education, best practices, etc.).	240	17.9
Greater interest in providing patient-centred care (e.g. being respectful and responsive to patient preferences in relation to service and treatment, responding to information requests, providing special attention when working with children and their parents, being culturally / emotionally / gender sensitive, etc.).	233	17.4
Increased importance of following communication protocols (e.g. with co-workers and patients - oral / written / electronic) and using effective communication skills.	121	9.0
Increased importance of implementing / maintaining patient privacy and consent protocols.	89	6.6
Increased importance of promoting a healthy and respectful workplace (e.g. workplace is free from bullying / abuse / harassment from co-workers and patients, workplace is supportive and interactions are collaborative / transparent).	77	5.7
Greater interest in professional attire (e.g. scrubs, safety glasses, proper foot wear, etc.), use of appropriate workplace language, cell phone etiquette in the workplace.	71	5.3
Increased importance of adopting and using a code of ethics that outlines standards of practice and conduct.	45	3.4

Table 11: Changes / Trends Related to Professionalism

³⁷ At least 34% of the respondents in each of the individual provinces confirmed that important changes / trends have occurred in relation to demonstrating professionalism in the workplace.

Rationale for Retaining and/or Editing the NOA content related to Professionalism

In the review of the existing NOA tasks, context statements, sub-tasks and supporting knowledge and abilities, it was determined that the trends related to professional development are generally well covered under Block A of the NOA or are featured in other sections of the NOA. For example, infection prevention and control standards are covered extensively under Task 4 Practices Infection Control, patient-centred care is covered under Task 6 Attends to Patient's Comfort, and patient privacy is covered under Task 7 Initiates and Maintains Patient Records (Block B).

The supporting knowledge and abilities that are listed under the professionalism sub-tasks in the NOA align with a number of essential skills (e.g. written and oral communication skills, collaboration, knowledge of digital technology, continuous learning). These skills provide the foundation for learning other skills and enable people to evolve with their jobs and adapt to workplace change.³⁸

Dental assistants confirmed the importance of practicing professionalism through the 2019 NOA survey. Professionalism was ranked as the number one personal attribute that enables a dental assistant to succeed in their career. Other important personal attributes that were identified include being responsible and aware of your obligations, being well organized and thorough (i.e. attention to detail), being empathetic and able to manage relations in the workplace, and being respectful.³⁹

³⁸ See Appendix E for additional background on essentials skills related to dental assisting.

³⁹ See Appendix E for additional details on the important personal attributes for dental assistants.

3.2 Treatment Support Procedures

Approximately 68% of the survey respondents (2,870 of 4,229) confirmed that important changes / trends are occurring in relation to treatment support procedures and 1,803 respondents elaborated on the trends they have observed.⁴⁰

The most common trend observed is the increased focus on infection prevention and control protocols. This finding is especially notable given that the survey was conducted prior to the emergence of the COVID-19 pandemic and additional IPAC measures have since been introduced by provincial health officers to control the spread of the disease (e.g. practicing physical distancing, using appropriate PPE and related hand hygiene procedures, increased frequency and monitoring of environmental cleaning and disinfection practices, and increased patient screening for signs, symptoms and risk factors for COVID-19).

Other notable trends include the increased use of digital record-keeping and attention to patient privacy and documenting activities. Respondents also commented on the growing interest in / importance of patient-centred care and providing patients with more information. Another important trend is the on-going introduction of new equipment / technology and new treatment products. Additional details are provided in Table 12.

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	Number of respondents (n=1,803)	Percent
Greater focus on infection prevention and control standards / protocols.	1,186	65.8
Increased use of digital records / charts and attention to patient privacy protection.	257	14.3
General increase in record-keeping activities including consent procedures and documenting activities.	216	12.0
Greater focus on patient-centred care and providing patients with more information.	147	8.2
Introduction of newer equipment / technology and newer treatment products.	117	6.5
Increased use of digital impressions.	97	5.4
Greater focus on workplace safety / ethics / team meetings.	86	4.8
Increased use of digital x-rays.	83	4.6
Greater focus on sedation rules / practices.	35	1.9

Table 12: Changes / Trends Related to Treatment Support Procedures

⁴⁰ At least 50% of the respondents in each of the individual provinces confirmed that important changes / trends have occurred in relation to treatment support procedures.

Rationale for Retaining and/or Editing the NOA content related to Treatment Support Procedures

In the review of the existing NOA tasks, context statements, sub-tasks and supporting knowledge and abilities, it was determined that the trends related to clinical procedures are generally well covered under Block B of the NOA or are featured in other sections of the NOA. For example, impressions are covered under Task 12 Performs Intra-Oral Procedures and Task 15 Performs Prosthodontic Procedures (Block C), and Task 22 Fabricates Dental Models (Block F). Knowledge of changes in technologies is covered under Task 2 Maintains Professional Competence (Block A). Digital radiography is covered under Task 18 Produces Radiographs/Images (Block D).

For the purpose of the 2019 NOA survey, the Steering Committee recommended changing the title of Task 5 from 'Organizes Armamentarium' to 'Organizes Equipment and Supplies' as the term '*armamentarium*' is no longer commonly used. This title change for Task 5 has been incorporated into the NOA and the term 'armamentarium' was substituted with 'equipment and supplies' throughout the NOA. The relevant sub-tasks are listed below:

Task 5 Organizes Equipment and Supplies

Sub-task 5.01: Reviews Treatment Record

5.01.06 Ability to relate treatment to required *armamentarium*.

Task 10 Assists with General Dental Procedures

Sub-task 10.01: Assists with Isolation Application and Removal

10.01.06 Ability to prepare *armamentarium* for specific isolation procedures.

Task 11 Assists with Operative Dentistry Procedures

Sub-task 11.01: Assists with Operative / Restorative Procedures

11.01.04 Knowledge of operative dentistry *armamentarium* and procedures.

Sub-task 11.02: Assists with Oral Surgery Procedures

11.02.04 Knowledge of oral surgery *armamentarium* and procedures.

Sub-task 11.05: Assists with Prosthodontic Procedures

11.05.01 Knowledge of fixed and removable prosthodontic *armamentarium* and procedures.

Task 13 Performs Intra-Oral Preventive Procedures

Sub-task 13.02: Adjusts Occlusion Following Pit and Fissure Sealant Application

13.02.06 Ability to select and use armamentarium.

Sub-task 13.03: Performs Selective Coronal Polishing

13.03.05 Knowledge of armamentarium and its operation.

13.03.10 Ability to select and use *armamentarium*.

Task 15 Performs Prosthodontic Procedures

Sub-task 15.06: Images and Fabricates Permanent Direct Restorations

15.06.02 Knowledge of *armamentarium*.

For the purpose of the 2019 NOA survey, the Steering Committee recommended the following changes and they have been incorporated into the NOA:

Task 9 Assists with Administration of Anaesthetics Sub-task 9.02: Assists with Administration of Sedation (Oral and/or Inhalation)

• '(Oral and/or Inhalation)' was added to the title of this sub-task.

Task 11 Assists with Operative Dentistry Procedures

• 'Operative' was added to the title of this task.

Task 11 Assists with Operative Dentistry Procedures Sub-task 11.01: Assists with Operative / Restorative Procedures

• 'Restorative' was added to the title of this sub-task.

For the purpose of the 2019 NOA survey, the Steering Committee recommended the inclusion of a new sub-task (11.08 Assists with Implants Procedures) under Task 11 Assists with Operative Dentistry Procedures. The supporting knowledge and abilities for this sub-task were adapted from the Saskatchewan Dental Assistants' Association Competency Reference and confirmed by the Steering Committee.⁴¹

Task 11 Assists with Operative Dentistry Procedures
Sub-task 11.08: Assists with Implants Procedures
Supporting Knowledge & Abilities
11.08.01 Knowledge of the components of an implant system.
11.08.02 Knowledge of digital technology used in implant dentistry.
11.08.03 Knowledge of provisional restoration(s) of an implant(s).
11.08.04 Knowledge of final implant supported restorations.
11.08.05 Knowledge of the prosthetic procedure for an implant retained restoration.
11.08.06 Knowledge of the maintenance of dental implants.
11.08.07 Knowledge of record retention and storage of implant cases.
11.08.08 Knowledge of infection prevention and control standards in implant dentistry.
11.08.09 Ability to provide pre- and post-operative instructions to patient and caregiver.
11.08.10 Ability to provide post-operative care for patient.

⁴¹ Dental Assisting Competency Reference SDAA July 2019 (Pg. 11-12).

https://sdaa.in1touch.org/document/2811/Dental%20Assisting%20Competency%20Reference.pdf

3.3 Clinical Procedures

Approximately 36% of the survey respondents (1,520 of 4,189) confirmed that important changes / trends have occurred in relation to clinical procedures and 607 respondents elaborated on the changes they have observed.⁴²

The most common trends observed related to the use of new materials (e.g. cements, bonds, fluoride products) and the increased use of digital technology (e.g. scanners, CAD/CAM). Additional details are provided in Table 13.

	Number of respondents (n=607)	Percent
Introduction of new products / materials (cements, bonds, fluoride products and treatments such as varnish and silver diamine fluoride).	123	20.3
Increased use of intraoral / digital scanners.	119	19.6
Increased use of CAD/CAM - CEREC technology / systems.	87	14.3
General increase in new technology and techniques (e.g. endodontic files).	73	12.0
Increased use of clear aligners.	56	9.2
Greater focus on emergency procedures (e.g. defibrillators, first aid, CPR, eye wash station, etc.).	32	5.3
Greater focus on infection prevention and control standards / protocols – sterilization.	30	4.9
Greater use of implants and related technology (vs. bridges / dentures).	19	3.1
Increased use of composite resin fillings (replacing amalgam fillings).	18	3.0
Increased use of CBCT scanning.	13	2.1
Greater focus on patient management and safety (e.g. providing information and instructions pre and post visit).	13	2.1
Greater focus on sedation practices and pain control - pre and post treatment	8	1.3

Table 13: Changes / Trends Related to Clinical Procedures

Survey respondents were asked if they had taken formal orthodontic training. Approximately 21% of the respondents (893 of 4,256) confirmed that they have taken formal training and just over half of these respondents (464) confirmed that important changes / trends have occurred in relation to performing orthodontic procedures.⁴³ A total of 251 respondents elaborated on

⁴² At least 28% of the respondents in each of the individual provinces confirmed that important changes / trends have occurred in relation to clinical procedures.

⁴³ At least 12% of the respondents in each of the individual provinces confirmed that they have taken formal orthodontic training. At least 42% of the respondents in each of the individual provinces confirmed that important changes / trends have occurred in relation to performing orthodontic procedures.

the trends they have observed in relation to performing orthodontic procedures. The most common trend relates to the use of clear aligners⁴⁴ and the increased use of digital scanners. Additional details are provided in Table 14.

	Number of respondents (n=251)	Percent
Increased use of clear aligners.	126	50.2%
Increased use of digital scanners.	87	34.7%
Greater focus on sterilization.	10	4.0%
Greater focus on patient-centred care.	9	3.6%
Increased use of digital x-rays.	8	3.2%
Increased use of digital printers.	7	2.8%
Greater focus on continuing education – maintaining competencies.	4	1.6%

Table 14: Changes / Trends Related to Orthodontic Procedures

Rationale for Retaining and/or Editing the NOA content related to Clinical Procedures

In the review of the existing NOA tasks, context statements, sub-tasks and supporting knowledge and abilities, it was determined that the trends related to clinical procedures are generally well covered under Block C of the NOA or are featured in other sections of the NOA. For example, infection prevention and control standards are covered extensively under Task 1 Communicates Effectively (Block A) and Task 4 Practices Infection Control (Block B). Knowledge of changes in technologies is covered under Task 2 Maintains Professional Competence (Block A).

For the purpose of the 2019 NOA survey, the Steering Committee recommended changing the title of Task 12 from 'Performs Intra-Oral Restorative Procedures' to 'Performs Intra-Oral Procedures'. The Steering Committee recommended changing the title of sub-task 12.07 from 'Places Temporary Restorations' to 'Places Provisional / Temporary Restorations'. These title changes have been incorporated into the NOA.

The Steering Committee recommended removing sub-task 17.04 Polishes Amalgam Restoration (under Task 17 Performs Post-Treatment Care) as this sub-task is no longer considered safe practice. This sub-task has been removed from the NOA.

Emergency procedures are well covered under Task 16 Administers and/or Participates in Emergency Care. The 2019 NOA survey included two questions to examine the frequency of

⁴⁴ Associated with clear aligners are clear retainers.

first aid re-training and CPR re-training. The large majority of respondents confirmed that they participate in first aid and CPR re-training.

Approximately 39% of the respondents reported that they take re-training in first aid every year while 49% reported that they take re-training every two years or more. Only 12% of the respondents reported that first aid re-training is not relevant in their current position.

Approximately 56% of the respondents reported that they take re-training in CPR every year while 42% reported that they take re-training every two years or more. Only 2% of the respondents reported that CPR re-training is not relevant in their current position.

	Frequency of re-training in first aid		Frequently of re-training in CPR	
	Number	Percent	Number	Percent
Annually - every year	1,633	39.0	2,360	55.9
Every two years	967	23.1	980	23.2
Every three years	779	18.6	660	15.6
Every four years or more	298	7.1	120	2.8
Not applicable / not relevant in my position	515	12.3	100	2.4
Total	4,192	100.0	4,220	100.0

3.4 Radiography

Approximately 50% of the survey respondents (1,926 of 3,877) confirmed that important changes / trends have occurred in relation to radiography and a total of 1,146 respondents elaborated on the changes they have observed.⁴⁵

The most common trends relate to the increased use of digital x-rays and digital technology in general. Additional details are provided in Table 16.

	Number of respondents (n=1,146)	Percent
Increased use of digital x-rays.	734	64.0%
Increased use of digital technology in general.	264	23.0%
Increased use of digital scanners.	85	7.4%
Increased use of CBCT scanning.	48	4.2%
Greater focus on infection prevention and control standards / protocols.	8	0.7%
Improved record-keeping.	7	0.6%

Table 16: Changes / Trends Related to Radiography

Rationale for Retaining and/or Editing the NOA content related to Radiography

In the review of the existing NOA tasks, context statements, sub-tasks and supporting knowledge and abilities, it was determined that the trends noted above are generally well covered under Block D of the NOA or are featured in other sections of the NOA.⁴⁶ For example, infection prevention and control standards are covered extensively under Task 1 Communicates Effectively (Block A) and Task 4 Practices Infection Control (Block B). Knowledge of changes in technologies is covered under Task 2 Maintains Professional Competence (Block A).

While digital radiography is becoming more common practice, some dentist facilities continue to use film radiography. The description of the 'knowledge' area for 18.02.03 under sub-task 26.02 has been expanded to reflect that both forms or radiography are in use:

Sub-task 18.02: Selects Radiographic/Imaging Technique Supporting Knowledge & Abilities

18.02.03 Knowledge of x-ray machines' functions and exposure settings (digital and conventional).

⁴⁵ At least 35% of the respondents in each of the individual provinces confirmed that important changes / trends have occurred in relation to radiography.

⁴⁶ Consultations on updates to the Canada Safety Procedures for the Use of Dental X-ray Equipment (Safety Code
30) are ongoing and should be reviewed when completing the next version of the NOA to ensure that the appropriate knowledge and skills are reflected in the NOA.

3.5 Oral Health Education and Promotion

Approximately 50% of the respondents (327 of 649) confirmed that important changes / trends have occurred in relation to oral health education and promotion and a total of 120 respondents elaborated on the changes they have observed.⁴⁷

The most common trends are related to the increased focus on reaching out to specific demographics / marginalized populations (e.g. new Canadians, First Nations/Inuit, low income groups, youth, seniors) and increased focus on prevention education (e.g. dental care, diet, vaping, legal use of cannabis). Additional details are provided in Table 17.

	Number of respondents (n=120)	Percent
Greater focus on reaching out to new Canadians, First Nations/Inuit, low income groups, seniors, etc.	26	21.7
Greater focus on prevention education (e.g. dental care in general and specific to children, diet, vaping, legal use of cannabis).	18	15.0
Greater focus on educating patients - especially youth/parents - in the clinic setting and through outreach (e.g. health fairs, schools).	16	13.3
Greater promotion of new products / procedures in general.	12	10.0
Greater use of technology to help convey information / demonstrate treatment options to patients.	10	8.3
Greater promotion of whole body health.	9	7.5
Patients (including parents of child patients) have become more informed / aware about dental procedures and products through online research. DA's need to monitor the information that patients retrieve through the Internet to ensure its reliable / accurate.	8	6.7
Greater use of social media and computers for promotion / education.	5	4.2
Greater promotion of silver diamine fluoride / fluoride alternatives.	5	4.2
Greater promotion of electric toothbrushes.	4	3.3
Greater promotion of recent changes to Canada's Food Guide.	3	2.5

Table 17: Changes / Trends Related to Oral Health Education and Promotion

Rationale for Retaining and/or Editing the NOA content related to Oral Health Education and Promotion

In the review of the existing NOA tasks, context statements, sub-tasks and supporting knowledge and abilities, it was determined that the trends noted above are generally well covered under Block E of the NOA.

⁴⁷ At least 33% of the respondents in each of the individual provinces confirmed that important changes / trends have occurred in relation to oral health education and promotion.

3.6 Laboratory Procedures

Approximately 23% of the respondents (919 of 3,990) confirmed that important changes / trends have occurred in relation to laboratory procedures and a total of 381 respondents elaborated on the changes they have observed.⁴⁸

The most common trends are related to the increased use of digital scanning and other technology (e.g. 3D printing) as well as new equipment and materials in general. Another important trend is the increased focus on infection prevention and control protocols. Additional details are provided in Table 18.

	Number of	
	respondents	Percent
	(n=381)	
Increased use of digital scanning.	154	40.4
Increased use of external dental labs.	50	13.1
Greater focus on infection prevention and control standards / protocols.	41	10.5
Increased use of 3D printing.	39	10.2
New equipment to aid in the fabrication of trays / retainers, mouth guards,	30	10.2
sports guards, etc.	55	10.2
Introduction of new materials / products to work with in general.	30	7.9
Increased use of computer technology in general.	21	5.5
Increased use of in-house lab technicians.	7	1.8
Increased use of clear aligners.	4	1.0

Table 18: Changes / Trends Related to Laboratory Procedures

Rationale for Retaining and/or Editing the NOA content related to Laboratory Procedures

The review of existing NOA tasks, context statements, sub-tasks and supporting knowledge and abilities revealed that the trends noted above are generally well covered under Block F of the NOA and/or are featured in other sections of the NOA. For example, infection prevention and control standards are covered extensively under Task 1 Communicates Effectively (Block A) and Task 4 Practices Infection Control (Block B). Knowledge of changes in technologies is covered under Task 2 Maintains Professional Competence (Block A).

For the purpose of the 2019 NOA survey, the Steering Committee recommended changing the title of Task 23 from 'Fabricates and Repairs Appliances and Trays' to 'Fabricates Trays, Fabricates Sports Guards / Retainers, and Repairs Appliances'. The Steering Committee also recommended changing the title of sub-task 23.02 from 'Maintains Removable Prothesis' to 'Removable Prothesis and Repairs'. These title changes have been incorporated into the NOA.

There appears to be an increase in use of external dental labs. However, a relatively small number of respondents identified the trend and existing standards were maintained for the NOA.

⁴⁸ At least 16% of the respondents in each of the individual provinces confirmed that important changes / trends have occurred in relation to laboratory procedures.

3.7 Equipment and Instrument Maintenance

Approximately 37% of the respondents (1,272 of 3,426) confirmed that important changes / trends have occurred in relation to equipment and instrument maintenance and a total of 517 respondents elaborated on the changes they have observed.⁴⁹

The most common trends observed relate to the increased importance attached to reviewing / understanding the digital equipment instructions and proper handling and maintenance procedures as well as the increased focus on infection prevention and control protocols as they relate to the equipment. Additional details are provided in Table 19.

	Number of respondents (n=517)	Percent
Greater use of digital equipment and the need to understand the instructions and proper handling and maintenance procedures (testing, lubrication, care and repair - monitoring, being aware of manufacturers guidelines).	245	47.4
Greater focus on infection prevention and control standards / protocols (e.g. auto dental washers, movement away from ultrasonic machine).	229	44.3
Greater focus on record-keeping (e.g. sterilization, wear and tear, malfunctions).	59	11.4
Increased use of external repair technicians (rather than repairing in-house).	21	4.1

Table 19: Changes / Trends Related to Equipment and Instrument Maintenance

Rationale for Retaining and/or Editing the NOA content related to Equipment and Instrument Maintenance

The review of the existing NOA tasks, context statements, sub-tasks and supporting knowledge and abilities revealed that the trends noted above are generally well covered under Block G of the NOA and/or are featured in other sections of the NOA. For example, knowledge of digital processing techniques and ability to operate processing equipment according to manufacturer's directions is covered under Task 19 Processes Films/Sensors (Block D). Infection prevention and control standards are covered extensively under Task 1 Communicates Effectively (Block A) and Task 4 Practices Infection Control (Block B).

Record-keeping related to equipment repairs/maintenance is covered under Task 26 Adherence to Quality Assurance Protocols (Block H). A new 'ability' (26.02.05) was added to sub-task 26.02 which reflects the growing importance of documenting activities related to IPAC:

Sub-task 26.02: Implements and Adheres to QA for Sterilization Process Supporting Knowledge & Abilities 26.02.05 Ability to keep sterilization log.

There appears to be an increase in use of external repair technicians. However, a relatively small number of respondents identified the trend and existing standards were maintained for the 2019 NOA.

⁴⁹ At least 23% of the respondents in each of the individual provinces confirmed that important changes / trends have occurred in relation to equipment and instrument maintenance.

3.8 Practice Management

Approximately 42% of the survey respondents (1,745 of 4,148) confirmed that important changes / trends are occurring in relation to practice management and 682 respondents elaborated on the trends they have observed.⁵⁰

The most common trends observed relate to the movement to digital record-keeping and the increased focus on quality assurance protocols / procedures / audits including infection prevention and control protocols. Respondents also commented on the growing importance of patient privacy and consent procedures. Additional details are provided in Table 20.

	Number of respondents (n=682)	Percent
Increased use of technology for record-keeping / patient management (e.g. electronic charts and records, computerization of file system / records, scheduling, etc.).	290	42.5
Greater focus on quality assurance protocols / procedures / audits.	105	15.4
Greater focus on patient privacy and consent procedures.	88	12.9
General increase in record-keeping (e.g. logging activities).	86	12.6
Greater focus on infection prevention and control standards / protocols.	73	10.7
Greater focus on staff maintaining their training requirements.	10	1.5
Greater focus on promoting workplace safety / healthy respectful workplace.	7	1.0

Table 20: Changes / Trends Related to Practice Management

Rationale for Retaining and/or Editing the NOA content related to Practice Management

In the review of the existing NOA tasks, context statements, sub-tasks and supporting knowledge and abilities it was determined that the trends noted above are generally well covered under Block H of the NOA and/or are featured in other sections of the NOA. For example, record-keeping and patient privacy is covered under Task 7 Initiates and Maintains Patient Records (Block B). Continuing education is covered under Task 2 Maintains Professional Development (Block A).

⁵⁰ At least 29% of the respondents in each of the individual provinces confirmed that important changes / trends have occurred in relation to practice management.

3.9 Additional Observations on the Dental Assisting Profession

Regional focus groups and key informant interviews were used to explore several questions that emerged from the results of the national survey. As noted elsewhere in this report, the national survey was conducted in Nov./Dec. 2019 (prior to the emergence of the COVID-19 pandemic) while the focus groups and key informant interviews were postponed and conducted in June 2020 during a period when dental facilities were starting to re-open with new IPAC guidelines from federal and provincial public health authorities. The timing of the focus groups and key informant interviews enabled the researchers to gain early feedback on the impact of the COVID-19 pandemic on the dental assisting profession.

The following summary observations and related suggestions reflect the opinions/views of the focus group and interview participants.

Importance of Quality Assurance / Safe Practice Protocols

Focus group and key informant interview participants were asked to share their thoughts/views on the importance of quality assurance / safe practice protocols and the factors that might account for the different levels of importance that individuals attach to quality assurance / safe practice protocols.⁵¹

Many of the participants observed that the amount of time and attention that dental facilities have given to safe practice protocols has progressively improved over time and emphasized that this was occurring prior to the emergence of the COVID-19 pandemic. Participants confirmed that the attention around IPAC measures (including the use of PPE) and public health guidelines has increased considerably in the context of the pandemic.

However, participants also emphasized that the adoption / implementation of standards and guidelines can vary depending on the workplace. Participants reported that there can be considerable variation between clinics with some employers / workplace managers not promoting / prioritizing safe practice protocols to the extent required. This could be the result of the employer being complacent about the safe practice protocols they have in place (e.g. adopting the minimum or most necessary standards or being selective about the standards they adopt). It could also be influenced by financial performance considerations (reducing operating expenses by encouraging staff to conserve the use of materials and supplies including PPE). These conditions in the workplace could ultimately contribute to dental assistants adopting / internalizing a lower standard of practice.

Participants noted that the dental office is a busy work environment and even though the dental assistant might have the best intentions to follow through on every detail, the work demands can make this challenging. It can be especially challenging in a work-setting where the employer places an emphasis on maximizing the number of daily patients and there is considerable pressure to work faster and do more. This could result in some dental assistants

⁵¹ For example, approximately 86% of the survey respondents (3,217 of 3,749) indicated that if tasks related to Practicing Infection Prevention and Control are performed below accepted standards, the consequences for safety, quality and/or liability are high or extremely high while 5% (180) indicated the consequences for safety were moderate and 9% (352) indicated the consequences for safety were low or extremely low.

shortening or modifying some safe practice details to ensure that they maintain the pace of work expected in the office.

Many of the focus group participants observed that dental assistants have relatively little authority in the workplace which makes it challenging for them to effect change in the office. It was suggested that job security concerns are a significant factor in influencing the way dental assistants react to situations where they are asked to perform skills that are outside their legal / recognized scope of practice and/or follow instructions that fall below best practice guidelines and standards. Participants emphasized that, ideally, there needs to be a holistic view to promoting and implementing infection prevention and control protocols and guidelines in the workplace (i.e. all staff should feel they have some level of responsibility for ensuring that safe practice protocols are adhered to) and from a practical standpoint, regulators should ensure all employers/dentists demonstrate leadership in continually facilitating application of safe practice protocols.

Participants noted that in the un-regulated provinces (Ontario, Quebec and Territories), dental assistants are particularly vulnerable to being exploited and feel that they have no authority to question on-going practices or effect change in the workplace. In the un-regulated provinces, the ability / capacity of the dental assistant to adhere to safe practice protocols relies heavily on the attitude of the employer and dentists and their level of commitment to support and ensure that safe practice protocols are followed.

Focus group and key informant interview participants identified a number of other factors that could be limiting the importance that dental assistants attach to quality assurance / safe practice protocols including:

- The relaxed hiring requirements in some provinces that allow for individuals with no prior IPAC training to be hired off the street. Although the employer might provide some level of on-the-job IPAC training it could result in staff not being fully or properly trained and reinforce lower standards of practice in the workplace.
- The potential for some dental assistants to be complacent. Participants noted that IPAC procedures over the years have become more complex and more time consuming and some dental assistants might be less willing to adopt new practices / standards if they feel that the old standards are sufficient and more convenient. This attitude could in turn impact the attitude of younger dental assistants, especially recent graduates, who may feel they need to defer to the more senior / more experienced dental assistants in the workplace.
- The subjectivity of the information / guidance being provided on safe practice
 protocols (i.e. certain activities/procedures are required while others are
 recommended). Participants suggested that this could lead to dental assistants
 adopting lower standards of practice, especially in the context of work environments
 where there is an emphasis to stay on schedule and maximize the number of daily
 patients and/or reduce the operating costs of the business.

Several participants suggested that it should be a requirement for dental assistants to review infection prevention and control protocols on a regular basis (e.g. annually or every two or three years) similar to the requirement for dental assistants to be re-trained in first aid and CPR on a regular basis. Several participants suggested that the COVID 19 pandemic might result in a more rigid application of IPAC protocols across Canada and provincial regulators should be questioning if it's appropriate to continue to allow hires without prior training in IPAC. It was also suggested that internationally trained dental assistants should have some form of training / orientation to Canadian / provincial IPAC standards as a precondition of being certified and hired.

Skills that are Under-utilized in the Workplace

Focus group and key informant interview participants were asked if there are any particular dental assisting skills being under-utilized in the workplace and the related factors that account for this.

Participants confirmed that the utilization of dental assistant skills can vary considerably from office to office and even within a particular office setting depending on the preferences / expectations of the individual dentist/employer.

The most common skills that are under-utilized (or at risk of being under-utilized) are skills that typically occur during the middle of the procedure (e.g. matrices and wedges, liners, etching, impressions, sealant).

Factors that contribute to dental assistant skills being under-utilized:

- Convenience (i.e. it is more efficient to the work flow for the dentist to perform certain tasks while they are chairside rather than switching positions with the dental assistant).
- Personal preference of the dentist (e.g. the dentist prefers to perform all of the skills themselves, the dentist wants to periodically practice the skill to ensure they maintain the skill, the dentist wants to establish rapport with a new patient).
- Financial considerations (e.g. the dentist may decide to perform a procedure that allows for a higher charge rate such as opting for a composite filling instead of a sealant).
- Dentist concerns about the competency of new dental assistants (e.g. dentists may feel they need to monitor a new dental assistant and gradually allow them to expand their scope of responsibilities as they gain trust in their competencies).
- The dentist / employer may not be well informed about the legal scope of practice for dental assistants in their province. Inconsistencies in the legal scope of practice for dental assistants across Canada could be contributing to misunderstandings around what tasks dental assistants are trained/permitted to do.

Trained dental assistants in Ontario are not permitted to perform some of the skills that are taught in Ontario training institutions (e.g. CDA IIs in Ontario are not permitted to place matrices, wedges, treatment liners). Participants reported that dental assistants in Ontario have very limited opportunity to practice Level II skills aside from impressions and radiographs.

Ontario focus group participants strongly believe that dentists would have greater respect for and confidence in the skills of the dental assistant if their profession was regulated.

Trained dental assistants in Quebec are legally prohibited from doing many of the skills they have been trained in. The training curriculum for dental assistants was established by the Quebec government over 20 years ago but provincial laws have not been updated to legally permit dental assistants to perform most of the skills they have been trained in. However, Quebec focus group participants reported that it is not uncommon for dentists to ask dental assistants to perform skills they are not legally permitted to perform and dental assistants will comply with these requests because there is no regulatory authority that empowers them to refuse the request.

Focus group and key informant interview participants emphasized that the COVID-19 pandemic could have a major impact on the ability of dental assistants to practice all of their skills. New safe practice protocols have made it more difficult for dentists to move between patients (e.g. doffing and donning personal protective equipment when leaving and returning to each patient) and this could result in dentists remaining with each patient throughout the entire procedure and personally completing more of the intermediate skills that they might normally delegate to the dental assistant.

Participants commented on the need for greater dialogue and coordination between dentists and dental assistants in determining the most appropriate scope of practice for dental assistants. Participants also suggested that there needs to be greater coordination between dental schools and dental assistant training institutions to ensure that the training curriculum focuses on the most relevant and legal skills needed by dental assistants.

Dental Assistant Training / Continuing Education

Focus group and key informant interview participants were asked if there are any particular areas of dental assisting training (including continuing education) that need to be improved.

Participants reported that it can be challenging for training institutions to keep pace with every change that's occurring in the workplace, especially in regards to new technology (e.g. digital systems such as CAD/CAM, new impression systems, panoramic x-rays). Participants also reported that textbooks typically provide a limited amount of detail on technology / equipment.⁵²

Participants commented that it can be a slow process to introduce changes to the curriculum and the costs associated with acquiring new technology/equipment can be a significant barrier for training institutions (e.g. it can take several years to obtain funding to purchase new equipment for students to gain hands on experience). At a minimum, instructors can inform

⁵² Focus group participants also noted that most textbooks are American and educators need to ensure that Canadian / provincial standards are referenced where appropriate during training.

students about the types of technology they might encounter in the workplace and depending on where the student is employed, they may be trained in the use of the technology on-the-job.

Educators noted that they have a relatively short period of time to train students (e.g. 10 months) and it's important for the curriculum to cover a broad range of skills that are used frequently including skills that are specifically covered in the national exam. Participants emphasized that it's difficult for the schools to touch on everything that a dental assistant might encounter in the workplace and new graduates need to treat their training as minimum entry level skills and have an understanding that they will continue to advance their skills as they gain experience in the workplace.

Participants suggested that dental schools and institutions providing training in dental assisting should be consulting with each other to ensure that the dental assisting curriculum is responding to relevant advances in dentistry.

Participants reported that it's important for dental assistants to have soft skills (e.g. communication, interpersonal, critical thinking) for the purpose of working with patients as well as working with other staff (i.e. dentists, dental hygienists, other dental assistants, office administration, etc.). Participants confirmed that training institutions are covering these skills as part of the curriculum and content has been expanded to include intercultural communication / cultural sensitivity and diversity training. Participants emphasized that new graduates will continue to develop their soft skills as they work alongside experienced staff in the workplace.

Educators noted that some schools have also added content related to maintaining personal well-being and psychological first aid. This is an important consideration for standard inclusion in the training curriculum and/or continuing education requirements in light of the challenges experienced by all healthcare workers in the context of the COVID-19 pandemic. Healthcare workers may experience considerable psychologic distress as a result of the COVID-19 pandemic due to providing direct patient care, vicarious trauma, quarantine or self-isolation. Experience from the 2003 severe acute respiratory syndrome (SARS) and early reports related to COVID-19 reveal that healthcare workers experience considerable anxiety, stress and fear.⁵³

Participants observed that some technical skills might be used less frequently by dental assistants than in the past (e.g. matrices and treatment liners) but stressed that it remains important for dental assistants to develop dexterity skills and that hand procedures be retained in the training curriculum to ensure that graduates have hand dexterity experience (depending on the jurisdictions where these skills are permitted).

⁵³ The psychological effects related to the current pandemic are driven by many factors, including uncertainty about the duration of the crisis, lack of proven therapies or a vaccine, and potential shortages of healthcare resources, including personal protective equipment. Health care workers are also distressed by the effects of social distancing balanced against the desire to be present for their families, and the possibility of personal and family illness. All of these concerns are amplified by the rapid availability of information and misinformation on the Internet and social media. Source: Mitigating the psychological effects of COVID-19 on health care workers. *CMAJ* April 27, 2020 192(17) E459-E460; DOI: https://doi.org/10.1503/cmaj.200519

With respect to continuing education / competency requirements, participants reported that requirements for dental assistants vary from province to province and the lack of conformity can lead to confusion.

The extent to which employers / dentists promote and support continuing education can vary considerably from office to office and from dentist to dentist. In-office training is usually specific to equipment / supplies and provided by industry representatives. If the employer is a strong advocate of professional development they might encourage and even cover some or all of the costs associated with continuing education for dental assistants. If the office provides a specialized service, they might support the entire team in accessing the training.

Participants reported that it can be difficult to find continuing education courses that are specifically targeted for dental assistants (e.g. it is not uncommon for the course to be primarily focused on the role of the dentist). Participants indicated that it would be beneficial to have more continuing education opportunities in the following areas: implants, sedation, new infection prevention and control procedures, silver diamine fluoride. Participants also noted that it would be generally beneficial to have regular team meetings to review patient relation procedures and IPAC procedures.

Some participants suggested that with the heightened importance of infection prevention and control procedures, it would be prudent to strengthen the requirement for safe practice training within continuing education / competency programs.

4.0 Occupational Analysis

The following section details the skills, knowledge and abilities of dental assisting practice across Canada. The occupational profile is intended to be inclusive of all skills that a dental assistant might perform. Not all skills will be performed by all dental assistants as dental assisting practice varies from province to province and individual practice is governed by provincial legislation. Furthermore, an individual dental assistant's daily practice will be determined by the context of practice of the employer. For example, those working in general dentistry private practice versus specialized private practices may use a different subset of skills. The duties performed by the undifferentiated dental assistant are set forth below. This is presented in terms of blocks, tasks, sub-tasks and context.

BLOCK is the largest division within the analysis and reflects a distinct operation relevant to the occupation.

TASK is a distinct, observable, measurable activity that, combined with others, makes up the logical and necessary steps the practitioner is required to perform to complete a specific assignment within a block.

CONTEXT STATEMENT defines the parameters of the task.

SUB-TASK is the smallest division, into which it is practical to subdivide any work activity and, combined with others, fully describes all duties constituting a task.

PROVINCIAL INDICATORS identify the skills performed / permitted by province.

- "Yes" indicates the skills may be performed in the province by a dental assistant while "No" indicates a dental assistant is not permitted to perform the skills in the province.
- An "*" indicates additional qualifications that need to be held in the province for the dental assistant to practice the skills (e.g. completion of post-graduate modules in order for these skills to be included in legal scope of practice).
- Sub-tasks are considered **COMMON CORE** if endorsed by seven of 10 provinces (70%) indicating that formal training (i.e., not including post-graduate modules) in the sub-task is required.
- Note: Provincial scope of practice indicators are reviewed and updated every two years by provincial regulators. The most recent review was completed in 2018 and the 2020 review is currently in progress. The reader should be aware that some of the provincial indicators presented in this version of the NOA may not reflect current practice. The results of the 2020 review should be incorporated in the next version of the NOA.

SUPPORTING KNOWLEDGE & ABILITIES are the elements of skills and knowledge an individual must acquire to adequately perform the sub-task.

FREQUENCY OF PRACTICE

Practitioners were provided with an opportunity to rate the frequency of the sub-tasks through the national survey. The results reflect the average rating of frequency based on the following five-point scale:

1	2	3	4	5
Never	Occasionally	Monthly	Weekly	Daily

The higher the average rating, the more frequent the task is performed (i.e. an average rating that approaches '1' indicates the skill is rarely performed while an average rating that approaches '5' indicates the skill is performed almost daily. The average frequency ratings are presented by general practice and specialized private practice.

RISK ASSESSMENT

Practitioners were provided with an opportunity to rate the risk (consequences) for safety, quality, and/or liability when a collection of tasks are performed below accepted standards. The survey results reflect the average rating of risk based on the following five-point scale:

1	2	3	4	5
Extremely	Low	Modorato	High	Extremely
low	LOW	woderate	піgн	high

The higher the average rating, the greater the risk (consequences) for safety, quality, and/or liability if the tasks are performed below an accepted standard (i.e. an average rating that approaches '1' indicates the risk is very minimal while an average rating that approaches '5' indicates the risk is very significant. The average frequency ratings are presented by general practice and specialized private practice.

Block A Professionalism

Note: The frequency of sub-task performance and the risk to safety, quality and/or liability were not examined for Tasks 1 through 3 in the 2019 NOA survey as the Steering Committee determined that it was not a priority for review at this time.

Task 1 Communicates Effectively

Context Statement:

Dental assistants must use interpersonal communication skills to relate to and interact with all persons involved in dental care. In the dental office environment, effective communication between patients and dental team members is critical for patient safety.

Sub-task 1.01: Communicates Orally

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

- **4.01.01** Knowledge of microbiology applicable to infection prevention and control in the dental office.
- **4.01.02** Knowledge of the routes of transmission of infectious diseases.
- **4.01.03** Knowledge of the potential for injury and safe handling techniques for instruments and handpieces.
- **4.01.04** Knowledge of protocol for prevention of injury infection.
- 4.01.05 Knowledge of types of personal protective barriers.
- **4.01.06** Knowledge of types of and methods for use of various infection control solutions.
- 4.01.07 Knowledge of sterilization equipment and methods.
- 4.01.08 Knowledge of technology used to monitor the performance of sterilizers.
- **4.01.09** Knowledge of appropriate instrument handling and storage after sterilization.
- **4.01.10** Ability to clean instruments and/or debride instruments and handpieces prior to sterilization.
- 4.01.11 Ability to set up and operate sterilizers.
- 4.01.12 Ability to sterilize and maintain handpieces according to manufacturers' instructions.
- 4.01.13 Ability to determine method of sterilization based on type and design of instrument.
- 4.01.14 Ability to monitor the performance of the sterilizer.
- 4.01.15 Ability to apply standard precautions (prevent cross-contamination).

Sub-task 1.02: Communicates in Writing

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

- **1.02.01** Knowledge of correct written format for medical and dental terminology and standard abbreviations.
- **1.02.02** Knowledge of professional and respectful language and terminology.
- **1.02.03** Knowledge of appropriate use of all forms of written communication, including electronic formats.
- **1.02.04** Knowledge of jurisdictional privacy legislation.
- **1.02.05** Knowledge of jurisdictional legislation with regards to storage and transfer of written documentation.
- 1.02.06 Knowledge of importance of following written instructions.
- 1.02.07 Ability to write accurately using professional terminology.
- 1.02.08 Ability to employ all forms of written communication, including electronic formats.
- **1.02.09** Ability to accurately and efficiently complete requested tasks and implement written instructions.

Task 2 Maintains Professional Competence

Context statement:

In many jurisdictions, continuing competency is part of the licensing and registration requirements for dental assistants. As practicing health care providers, dental assistants need to ensure currency and continuing competence in the services they provide.

Sub-task 2.01: Develops Life-Long Learning Skills

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

2.01.01 Knowledge of changes in technologies.

2.01.02 Knowledge of changes in practice guidelines and protocols.

2.01.03 Knowledge of continuing education requirements.

2.01.04 Ability to identify continuing education opportunities.

2.01.05 Ability to transfer knowledge to practice.

Task 3 Performs Duties in a Professional Manner

Context statement:

To strengthen patient confidence in their health care provider, dental assistants must exhibit professionalism throughout all services and personal interactions.

Sub-task 3.01: Demonstrates Professionalism

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

3.01.01 Knowledge of the professional roles of dental team members.

3.01.02 Knowledge of the need for inter-professional communication.

3.01.03 Knowledge of jurisdictional code of ethics.

3.01.04 Knowledge of conflict resolution models.

- **3.01.05** Ability to practice within limits of scope of practice and personal knowledge and abilities.
- 3.01.06 Ability to independently reflect on performance and set goals for improvement.
- **3.01.07** Ability to apply the code of ethics.
- 3.01.08 Ability to implement conflict resolution models.

3.01.09 Ability to represent the profession in a positive manner.

Block B Treatment Support Procedures

Task 4 Practices Infection Control

Context Statement:

Dental assistants are aware of and understand the necessity of infection prevention and control. They must take particular care to ensure that the work areas, operatory, instruments, and equipment are either sterile or free of pathogens, and aseptic technique is maintained throughout procedures. They must closely monitor their own and others' exposure to potential infection. They also monitor the storage, use, and disposal of controlled and bio-hazardous materials and waste for personal and community safety by following federal and provincial guidelines and regulations.

NOTE: the survey results for this task and corresponding sub-tasks reflect behaviours / attitudes prior to the onset of the COVID-19 pandemic and do not take into account new public health directions. It's anticipated that on-going measures will be used by oral healthcare professionals to control the spread of the disease, including requirements to practice physical distancing of at least 2 metres (wherever possible), use of appropriate personal protective equipment (PPE) and related hand hygiene procedures, changing and cleaning of scrub/uniform apparel, increased frequency and monitoring of environmental cleaning and disinfection practices, and increased patient screening for signs, symptoms and risk factors for COVID-19. As knowledge about COVID-19 continues to evolve, practice considerations in dental settings may need to change with the evidence.

Sub-task 4.01: Cleans and Sterilizes Instruments and Handpieces

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (4,087) is 4.6 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 87% of the respondents (3,550) reported that they perform this sub-task daily while only 3% (133) reported that they never perform this sub-task.



- **4.01.01** Knowledge of microbiology applicable to infection prevention and control in the dental office.
- **4.01.02** Knowledge of the routes of transmission of infectious diseases.
- **4.01.03** Knowledge of the potential for injury and safe handling techniques for instruments and handpieces.
- **4.01.04** Knowledge of protocol for prevention of injury infection.
- **4.01.05** Knowledge of types of personal protective barriers.
- **4.01.06** Knowledge of types of and methods for use of various infection control solutions.
- **4.01.07** Knowledge of sterilization equipment and methods.
- **4.01.08** Knowledge of technology used to monitor the performance of sterilizers.
- **4.01.09** Knowledge of appropriate instrument handling and storage after sterilization.
- **4.01.10** Ability to clean instruments and/or debride instruments and handpieces prior to sterilization.
- 4.01.11 Ability to set up and operate sterilizers.
- **4.01.12** Ability to sterilize and maintain handpieces according to manufacturers' instructions.
- **4.01.13** Ability to determine method of sterilization based on type and design of instrument.

4.01.14 Ability to monitor the performance of the sterilizer.

4.01.15 Ability to apply standard precautions (prevent cross-contamination, prevent transmission).

Sub-task 4.02: Disinfects Equipment and Surfaces

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (4,131) is 4.8 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 92% of the respondents (3,786) reported that they perform this sub-task daily while only 1% (58) reported that they never perform this sub-task.



- **4.02.01** Knowledge of microbiology applicable to infection prevention and control in the dental office.
- **4.02.02** Knowledge of the routes of transmission of infectious diseases.
- 4.02.03 Knowledge of Workplace Hazardous Materials Information System (WHMIS).
- 4.02.04 Knowledge of protective barriers.
- **4.02.05** Ability to select products for specific use and application.
- 4.02.06 Ability to handle hazardous materials according to WHMIS.
- **4.02.07** Ability to apply standard precautions (prevent cross-contamination, prevent transmission).

Sub-task 4.03: Wears Personal Protective Equipment (PPE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (4,109) is 4.8 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 92% of the respondents (3,769) reported that they perform this sub-task daily while only 2% (73) reported that they never perform this sub-task.



- **4.03.01** Knowledge of the routes of transmission of infectious diseases as applicable to dentistry.
- **4.03.02** Knowledge of potential for personal injury and infection.
- 4.03.03 Knowledge of types of PPE.
- **4.03.04** Knowledge of level of protection and limitations of protective clothing and devices.
- **4.03.05** Ability to select, wear, maintain, and dispose of protective clothing.
- **4.03.06** Ability to apply standard precautions (prevent cross-contamination, prevent transmission).

Sub-task 4.04: Places and Removes Protective Barriers

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (4,065) is 4.6 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 86% of the respondents (3,508) reported that they perform this sub-task daily while only 4% (153) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

4.04.01 Knowledge of protective barrier products.

- 4.04.02 Knowledge of placement and removal of protective barriers.
- **4.04.03** Knowledge of routes of infectious diseases as applicable to dentistry.
- 4.04.04 Knowledge of standard precautions.
- 4.04.05 Ability to select protective barriers.
- 4.04.06 Ability to place protective barriers.
- 4.04.07 Ability to dispose of protective barriers.
- **4.04.08** Ability to apply standard precautions (prevent cross-contamination, prevent transmission).

Sub-task 4.05: Control the Growth of Micro-organisms in Dental Unit Waterlines (DUWL)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,956) is 4.3 which indicates that this sub-task is commonly performed on a regular basis. Approximately 66% of the respondents (2,611) reported that they perform this sub-task daily while 8% (320) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

4.05.01 Knowledge of dental unit waterlines (DUWL).

4.05.02 Knowledge of the dangers of microbiological growth in lines.

4.05.03 Knowledge of technology available to purge lines.

4.05.04 Ability to purge lines according to manufacturer's directions.

Sub-task 4.06: Disposes of Hazardous Waste

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,918) is 4.2 which indicates that this sub-task is commonly performed on a regular basis. Approximately 67% of the respondents (2,629) reported that they perform this sub-task daily while 7% (279) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

4.06.01 Knowledge of WHMIS.

4.06.02 Knowledge of what constitutes hazardous waste.

4.06.03 Knowledge of hazardous waste storage protocols.

4.06.04 Knowledge of the risks associated with bio-hazardous waste.

4.06.05 Knowledge of hazardous waste disposal protocols.

4.06.06 Knowledge of methods of reducing hazardous waste.

4.06.07 Ability to store hazardous waste securely and according to legislation.

4.06.08 Ability to select and apply protective barriers when handling hazardous waste.

Sub-task 4.07: Flushes and Drains Equipment

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,991) is 4.5 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 75% of the respondents (2,987) reported that they perform this sub-task daily while 5% (216) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

4.07.01 Knowledge of WHMIS.

4.07.02 Knowledge of hazards associated with unflushed equipment.

4.07.03 Knowledge of disinfection and flushing materials and disposal of suction trap filters.

4.07.04 Ability to maintain suction unit.

4.07.05 Ability to follow manufacturer's instructions for maintenance of equipment.
Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (3,749) is 4.3 which indicates that the risk (consequences) for safety, quality, and/or liability is high to extremely high if the above subtasks are performed below an accepted standard. Approximately 86% of the respondents (3,217) rated the risk as high or extremely high.



Block B Treatment Support Procedures

Task 5 Organizes Equipment and Supplies

Context Statement:

Dental assistants are cognizant of the efficiencies of a well-organized workspace and anticipate the needs of the operator and the patient. They must review the patient's treatment record to determine the intended procedure, set up the chairside area to facilitate the process, and ensure that all instruments, equipment, and materials are available and ready for use.

Sub-task 5.01: Reviews Treatment Record

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (4,109) is 4.8 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 91% of the respondents (3,739) reported that they perform this sub-task daily while only 1% (56) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

5.01.01 Knowledge of the importance of confidentiality.

5.01.02 Knowledge of dental procedures.

5.01.03 Knowledge of relevant information in dental treatment record.

5.01.04 Ability to access and interpret dental treatment records.

5.01.05 Ability to maintain confidentiality.

5.01.06 Ability to relate treatment to required equipment and supplies.

Sub-task 5.02: Prepares Materials

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (4,049) is 4.7 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 89% of the respondents (3,585) reported that they perform this sub-task daily while only 3% (118) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

5.02.01 Knowledge of dental materials.

5.02.02 Knowledge of indications and contraindications of the use of dental materials.

5.02.03 Knowledge of the effect of dental material components on hard and soft dental tissues.

5.02.04 Knowledge of materials associated with specific dental procedures.

5.02.05 Knowledge of dental instruments and equipment.

5.02.06 Ability to anticipate how and when to prepare the dental materials.

5.02.07 Ability to manipulate materials following manufacturer's directions.

Sub-task 5.03: Prepares Instruments

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (4,079) is 4.7 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 90% of the respondents (3,685) reported that they perform this sub-task daily while only 3% (101) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

5.03.01 Knowledge of instruments required for specific dental procedures.

- 5.03.02 Knowledge of instrument preparation and tray set-up.
- 5.03.03 Knowledge of safe handling and maintenance of dental instruments.

5.03.04 Ability to assemble and prepare required instruments for specific procedures.

Sub-task 5.04: Prepares Equipment

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (4,057) is 4.7 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 89% of the respondents (3,612) reported that they perform this sub-task daily while only 3% (109) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

5.04.01 Knowledge of dental equipment preparation, operation, and maintenance.

5.04.02 Knowledge of equipment required for specific dental procedures.

5.04.03 Ability to set up and test equipment for specific dental procedures.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (3,773) is 4.2 which indicates that the risk (consequences) for safety, quality, and/or liability is high to extremely high if the above subtasks are performed below an accepted standard. Approximately 82% of the respondents (3,097) rated the risk as high or extremely high.



Task 6 Attends to Patient's Comfort

Note: The frequency of sub-task performance and the risk to safety, quality and/or liability were not examined for Task 6 in the 2019 NOA survey as the Steering Committee determined that it was not a priority for review at this time.

Context Statement:

Typically, dental assistants are the first person a patient meets when entering the treatment area. They must make every effort to put the patient at ease with the process and ensure the patient is seated and prepared for the procedures.

Sub-task 6.01: Greets Patient

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

6.01.01 Knowledge of limitations of patient's physical status.

6.01.02 Ability to access patient's mobility needs.

6.01.03 Ability to put patient at ease.

6.01.04 Ability to apply professional communication skills.

Sub-task 6.02: Seats Patient

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

6.02.01 Knowledge of treatment to be provided.

6.02.02 Knowledge of the patient's physical requirements.

6.02.03 Ability to position dental chair and equipment for ergonomic practice and patient comfort.

6.02.04 Ability to make patient comfortable.

6.02.05 Ability to secure patient's personal belongings.

Sub-task 6.03: Manages Patients Requiring Accommodation Due to Medical, Mental, or Physical Conditions

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

6.03.01 Knowledge of requirements of patients requiring accommodation.

- **6.03.02** Knowledge of considerations and legal requirements of informed consent for treatment.
- **6.03.03** Knowledge of appointment scheduling requirements.
- **6.03.04** Knowledge of methods to assist patient transfer and movement (patient transfer protocol: PTP).
- 6.03.05 Ability to assess level of assistance needed by patients.
- **6.03.06** Ability to modify the operatory to accommodate patients.
- **6.03.07** Ability to relate to patient.
- **6.03.08** Ability to safely apply PTP.

6.03.09 Ability to provide information and instructions to clients and their caregivers.

Task 7 Initiates and Maintains Patient Records

Context Statement:

Dental assistants recognize the need for gathering confidential information discreetly and recording it accurately. It is essential that relevant and important patient information be recorded accurately since this may form the basis for treatment. It is also important that the patient's rights are recognized and that privacy protocols are applied.

Sub-task 7.01: Charts Existing Intra/Extra Oral Conditions

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,968) is 4.3 which indicates that this sub-task is commonly performed on a regular basis. Approximately 73% of the respondents (2,898) reported that they perform this sub-task daily while 5% (186) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

7.01.01 Knowledge of contents and legal requirements of the patient's chart.

7.01.02 Knowledge of dental anatomy and terminology.

7.01.03 Knowledge of charting systems, both paper and paperless.

7.01.04 Knowledge of the requirements and criteria for intra-oral and facial images.

7.01.05 Knowledge of need for intra-oral and extra-oral observation.

7.01.06 Ability to acquire intra-oral and facial images.

7.01.07 Ability to perform intra-oral and extra-oral observations.

7.01.08 Ability to document information and observations.

Sub-task 7.02: Collects Medical History

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (4,061) is 4.4 which indicates that this sub-task is commonly performed on a regular basis. Approximately 79% of the respondents (3,193) reported that they perform this sub-task daily while only 4% (169) reported that they never perform this sub-task.



- 7.02.01 Knowledge of medical terminology.
- 7.02.02 Knowledge of medications and their effect on dental treatment.
- **7.02.03** Knowledge of medical conditions which may require pre-medication prior to dental treatment.
- **7.02.04** Knowledge of the effects and interactions of non-prescription, prescription, and controlled drugs on client care and safety issues surrounding their use as they relate to dental treatment.
- **7.02.05** Knowledge of the purpose of recording prescribed medications or alternatives including dosages and frequency.
- **7.02.06** Knowledge of medical conditions that may complicate, interfere with, or alter dental treatment.
- **7.02.07** Ability to inform patient of the importance of reporting accurate medical information.
- 7.02.08 Ability to interpret information from medication containers.
- 7.02.09 Ability to access reference material.
- 7.02.10 Ability to document information.

Sub-task 7.03: Obtains Vital Signs

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (3,766) is 2.7 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 28% of the respondents (1,065) reported that they perform this sub-task daily while 30% (1,110) reported that they never perform this sub-task. This sub-task is performed much more routinely by dental assistants working in Oral Surgery private practices.



Supporting Knowledge & Abilities

7.03.01 Knowledge of purpose and methods of obtaining vital signs.

- **7.03.02** Knowledge of normal ranges of pulse, blood pressure, temperature, and respiration for various patients.
- 7.03.03 Ability to obtain and record pulse rate.
- 7.03.04 Ability to obtain and record blood pressure.
- 7.03.05 Ability to obtain and record respiration rate.
- **7.03.06** Ability to obtain and record temperature.

Sub-task 7.04: Monitors Patient's Condition

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,892) is 4.2 which indicates that this sub-task is commonly performed on a regular basis. Approximately 74% of the respondents (2,870) reported that they perform this sub-task daily while 7% (271) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

7.04.01 Knowledge of dental and medical terminology.

7.04.02 Knowledge of the significance of the patient's medical and dental information.

7.04.03 Knowledge of confidentiality and information exchange protocols.

7.04.04 Ability to communicate pertinent information to appropriate persons.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (3,742) is 4.2 which indicates that the risk (consequences) for safety, quality, and/or liability is high to extremely high if the above subtasks are performed below an accepted standard. Approximately 81% of the respondents (3,047) rated the risk as high or extremely high.



Task 8 Provides Patient with Treatment Information

Context Statement:

Dental assistants communicate pre-treatment and post-treatment instructions to the patient. They explain the rationale, provide comprehensive detailed instructions, and explain potential implications of treatment in lay-language and ensure the patient has understood.

Sub-task 8.01: Provides Pre-Treatment Instructions

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (4,067) is 4.3 which indicates that this sub-task is commonly performed on a regular basis. Approximately 75% of the respondents (3,058) reported that they perform this sub-task daily while only 4% (168) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

8.01.01 Knowledge of pre-medication indications, contraindications, and instructions for use.

8.01.02 Knowledge of treatment plan and reason for appointment scheduling.

8.01.03 Knowledge of patient/caregiver's level of comprehension.

8.01.04 Ability to instruct patient/caregiver regarding medication.

8.01.05 Ability to provide patient/caregiver preparation for treatment instructions.

8.01.06 Ability to explain reason for treatment and appointment scheduling.

Sub-task 8.02: Presents and Co-ordinates Treatment Options

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (3,915) is 3.8 which indicates that this sub-task is commonly performed on a somewhat regular basis. Approximately 60% of the respondents (2,343) reported that they perform this sub-task daily while 14% (552) reported that they never perform this sub-task.



- 8.02.01 Knowledge of treatment options.
- 8.02.02 Knowledge of essential versus elective procedures or treatments.
- **8.02.03** Knowledge of office professionals' and dental health team's capabilities and scope of practice.
- 8.02.04 Knowledge of fees associated with treatment options.
- 8.02.05 Ability to recognize patient's level of comprehension.
- 8.02.06 Ability to discuss treatment options.
- **8.02.07** Ability to discuss financial arrangements, including insurance coverage and payment plans.
- 8.02.08 Ability to discuss treatment alternatives such as referral to specialty offices.

Sub-task 8.03: Provides Post-Treatment Instructions

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (4,095) is 4.4 which indicates that this sub-task is commonly performed on a regular basis. Approximately 78% of the respondents (3,179) reported that they perform this sub-task daily while only 3% (114) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

8.03.01 Knowledge of treatment performed.

8.03.02 Knowledge of oral health care specific to treatment.

8.03.03 Knowledge of recall and/or post-op timeframe.

8.03.04 Knowledge of potential complications.

8.03.05 Ability to explain specific oral health care requirements.

8.03.06 Ability to explain potential complications and contraindications following treatment.

8.03.07 Ability to advise patient regarding drug prescribed by the dentist.

8.03.08 Ability to advise patient of available emergency care including but not limited to dentist on call, hospital emergency room, and walk-in clinics.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (3,726) is 4.0 which indicates that the risk (consequences) for safety, quality, and/or liability is high to extremely high if the above subtasks are performed below an accepted standard. Approximately 73% of the respondents (2,708) rated the risk as high or extremely high.



Task 9 Assists with Administration of Anaesthetics

Context Statement:

Dental assistants assist the operator with a variety of anaesthetic methods, including topical, local, and general anaesthetic. They also assist with the administration of conscious, intravenous, and general sedation. They attend to the patient's comfort and monitor the patient's condition throughout the delivery of anaesthetic.

Sub-task 9.01: Assists with Administration of Local and Topical Anaesthetic

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,874) is 3.6 which indicates that this sub-task is commonly performed on a somewhat regular basis. Approximately 58% of the respondents (2,230) reported that they perform this sub-task daily while 25% (967) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

9.01.01 Knowledge of indications and contraindications of topical and local anaesthetics.

9.01.02 Knowledge of components of local anaesthetic.

9.01.03 Knowledge of application of topical anaesthetic.

9.01.04 Knowledge of head and neck anatomy.

9.01.05 Knowledge of dental terminology.

9.01.06 Knowledge of length, gauge, and bevel of needles.

9.01.07 Knowledge of needle handling techniques.

9.01.08 Knowledge of signs and symptoms of anaesthetic complications.

9.01.09 Knowledge of appropriate care, storage, and disposal of anaesthetic supplies.

- 9.01.10 Ability to identify topical anaesthetic sites.
- **9.01.11** Ability to select syringe needle length, gauge, and anaesthetic for a specific injection site.
- 9.01.12 Ability to assemble, handle, and disassemble needles and syringes.

9.01.13 Ability to anticipate, comprehend, and respond to operator's instructions.

9.01.14 Ability to provide pre- and post-operative instructions to patient and caregiver.

Sub-task 9.02: Assists with Administration of Sedation (Oral and/or Inhalation)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,568) is 2.0 which indicates that this sub-task is not commonly performed. Approximately 9% of the respondents (332) reported that they perform this sub-task daily while 56% (1,979) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

9.02.01 Knowledge of conscious sedation techniques.

- 9.02.02 Knowledge of levels of sedation.
- 9.02.03 Knowledge of types of sedatives.
- 9.02.04 Knowledge of indications and contraindications of sedation.
- **9.02.05** Knowledge of appropriate care, storage, and disposal of anaesthesia supplies and narcotics.
- **9.02.06** Ability to set up monitor and maintain nitrous oxide and oxygen equipment.
- 9.02.07 Ability to anticipate, comprehend, and respond to operator's instructions.
- 9.02.08 Ability to provide pre- and post-operative instructions to patient and caregiver.
- **9.02.09** Ability to provide post-operative care for patient.

Sub-task 9.03: Assists with Administration of Intravenous Sedation

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,396) is 1.3 which indicates that this sub-task is not commonly performed. Approximately 3% of the respondents (104) reported that they perform this sub-task daily while 87% (2,941) reported that they never perform this sub-task. This sub-task is performed more routinely by dental assistants working in Oral Surgery private practices.



Supporting Knowledge & Abilities

9.03.01 Knowledge of types of intravenous sedation and supplies.

- 9.03.02 Knowledge of contraindications of intravenous sedation.
- **9.03.03** Knowledge of appropriate care, storage, and disposal of anaesthesia supplies and narcotics.

9.03.04 Ability to provide pre- and post-operative instructions to patient and caregiver. **9.03.05** Ability to provide post-operative care for patient.

Sub-task 9.04: Assists with Administration of General Anaesthetic

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,413) is 1.4 which indicates that this sub-task is not commonly performed. Approximately 8% of the respondents (266) reported that they perform this sub-task daily while 85% (2,906) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

9.04.01 Knowledge of types of general anaesthetic.

- 9.04.02 Knowledge of methods of administering general anaesthetic.
- **9.04.03** Knowledge of appropriate care, storage, and disposal of anaesthesia supplies and narcotics.
- 9.04.04 Knowledge of contraindications of general anaesthetics.
- 9.04.05 Ability to monitor recovering patient.
- 9.04.06 Ability to provide pre- and post-operative instructions to patient and caregiver.
- **9.04.07** Ability to provide post-operative care for patient.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (3,278) is 4.4 which indicates that the risk (consequences) for safety, quality, and/or liability is high to extremely high if the above subtasks are performed below an accepted standard. Approximately 86% of the respondents (2,812) rated the risk as high or extremely high.



Task 10 Assists with General Dental Procedures

Context Statement:

Dental assistants proactively assist the operator with a variety of dental treatments such as anticipating the operator's need for instruments, equipment, and materials. To perform these skills, dental assistants must have extensive knowledge of dental, oral, and head and neck anatomy and treatment. Dental assistants must be aware of the limitations of the scope of practice applicable to their jurisdiction.

Sub-task 10.01: Assists with Isolation Application and Removal

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,878) is 4.1 which indicates that this sub-task is commonly performed on a regular basis. Approximately 69% of the respondents (2,681) reported that they perform this sub-task daily while 12% (449) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

10.01.01 Knowledge of indications and contraindications for use of dental dam.

- **10.01.02** Knowledge of considerations in positioning and sizing of holes for dental dam.
- **10.01.03** Knowledge of the complications associated with poor dental dam preparation and application.
- 10.01.04 Knowledge of isolation methods other than dental dam.
- 10.01.05 Knowledge of isolation removal techniques.

10.01.06 Ability to prepare equipment and supplies for specific isolation procedures.

10.01.07 Ability to select dental dam clamps and prepare dental dams for specific procedures.

10.01.08 Ability to apply alternative isolation methods.

Sub-task 10.02: Maintains Visibility and Accessibility for Operator

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,982) is 4.6 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 85% of the respondents (3,379) reported that they perform this sub-task daily while 5% (187) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

10.02.01 Knowledge of methods of retraction.

10.02.02 Knowledge of evacuation equipment.

10.02.03 Knowledge of irrigation techniques.

10.02.04 Knowledge of the field of operation.

10.02.05 Ability to position patient.

10.02.06 Ability to select retraction.

10.02.07 Ability to position operator's light.

10.02.08 Ability to select and position evacuation tips.

10.02.09 Ability to select irrigation device.

10.02.10 Ability to direct irrigation flow.

10.02.11 Ability to anticipate needs of operator.

Sub-task 10.03: Manipulates Materials

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,888) is 4.4 which indicates that this sub-task is commonly performed on a regular basis. Approximately 79% of the respondents (3,078) reported that they perform this sub-task daily while 7% (273) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

10.03.01 Knowledge of dental materials.

- **10.03.02** Knowledge of mixing and polymerization.
- **10.03.03** Knowledge of material storage and disposal requirements.
- 10.03.04 Ability to interpret Material Safety Data Sheets (MSDS).

10.03.05 Ability to select material for application.

10.03.06 Ability to mix and or manipulate material according to manufacturer's recommendations.

Sub-task 10.04: Monitors Patient's Condition During Administration of Anaesthetic and Throughout Dental Treatment

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,796) is 4.3 which indicates that this sub-task is commonly performed on a regular basis. Approximately 79% of the respondents (2,980) reported that they perform this sub-task daily while 9% (336) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

10.04.01 Knowledge of body language.

10.04.02 Knowledge of physiological conditions.

10.04.03 Knowledge of patient's medical history.

10.04.04 Ability to interpret and respond to body language.

10.04.05 Ability to recognize and respond to physiological changes.

10.04.06 Ability to act on patient's distress.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (3,630) is 4.2 which indicates that the risk (consequences) for safety, quality, and/or liability is high to extremely high if the above subtasks are performed below an accepted standard. Approximately 81% of the respondents (2,943) rated the risk as high or extremely high.



Task 11 Assists with Operative Dentistry Procedures

Context Statement:

Dental assistants proactively assist operators in a variety of dental procedures by applying the principles of two, four, and six-handed dentistry. They attend to the comfort and needs of both patient and operator by monitoring behaviours, anticipating instruments and materials, and providing irrigation, evacuation, and accessibility to the operative site. Dental assistants must be aware of the limitations of the scope of practice applicable to their jurisdiction.

Sub-task 11.01: Assists with Operative / Restorative Procedures

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,885) is 4.3 which indicates that this sub-task is commonly performed on a regular basis. Approximately 78% of the respondents (3,024) reported that they perform this sub-task daily while 8% (328) reported that they never perform this sub-task.



- **11.01.01** Knowledge of indications and contraindications of various types of operative treatments.
- **11.01.02** Knowledge of anaesthetics and analgesics.
- **11.01.03** Knowledge of treatment of complications which may arise prior to, during, and after dental procedures.
- **11.01.04** Knowledge of operative dentistry equipment and supplies and procedures.
- 11.01.05 Ability to prepare for operative procedures.
- **11.01.06** Ability to prepare and manipulate restorative materials.
- **11.01.07** Ability to anticipate needs of operator.

Sub-task 11.02: Assists with Oral Surgery Procedures

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,863) is 3.6 which indicates that this sub-task is commonly performed on a somewhat regular basis. Approximately 39% of the respondents (1,509) reported that they perform this sub-task daily while 11% (426) reported that they never perform this sub-task.



- **11.02.01** Knowledge of indications and contraindications for oral surgery.
- **11.02.02** Knowledge of anaesthetics and analgesics.
- **11.02.03** Knowledge of treatment of complications which may arise prior to, during, or after oral surgery.
- **11.02.04** Knowledge of oral surgery equipment and supplies and procedures.
- **11.02.05** Knowledge of extraction techniques.
- **11.02.06** Knowledge of types, indications, and contraindications of dental implants.
- **11.02.07** Knowledge of pathology laboratory resources and specimen submission protocols.
- **11.02.08** Ability to prepare for and assist with common surgical procedures.
- **11.02.09** Ability to maintain a sterile field throughout procedure.
- **11.02.10** Ability to package and store biopsies.
- **11.02.11** Ability to monitor the patient's condition prior to, during, and after oral surgery.
- **11.02.12** Ability to assist with the control of bleeding.
- **11.02.13** Ability to assist with suture removal.
- **11.02.14** Ability to provide pre- and post-operative instructions to patient and caregiver.
- **11.02.15** Ability to provide post-operative care for patient.

Sub-task 11.03: Assists with Endodontic Procedures

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,792) is 3.2 which indicates that this sub-task is commonly performed on an occasional basis. Approximately 24% of the respondents (927) reported that they perform this sub-task daily while 18% (664) reported that they never perform this sub-task. This sub-task is performed much more routinely by dental assistants working in Endodontic private practices.



- **11.03.01** Knowledge of indications and contraindications of endodontic treatment.
- **11.03.02** Knowledge of anaesthetics and analgesics.
- **11.03.03** Knowledge of treatment of complications which may arise prior to, during, and after endodontic procedures.
- **11.03.04** Knowledge of methods of pulp vitality testing.
- **11.03.05** Knowledge of endodontic procedures.
- **11.03.06** Knowledge of a diagnostically acceptable endodontic radiograph/image.
- **11.03.07** Ability to prepare for and assist with endodontic procedures.
- **11.03.08** Ability to prepare and manipulate intra-canal medicaments, cements, and filling materials.
- **11.03.09** Ability to maintain a sterile field during endodontic procedures.
- **11.03.10** Ability to provide pre- and post-operative instructions to patient and care-giver.
- **11.03.11** Ability to provide post-operative care for patient.

Sub-task 11.04: Assists with Periodontic Procedures

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,691) is 2.3 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 13% of the respondents (486) reported that they perform this sub-task daily while 37% (1,374) reported that they never perform this sub-task. This sub-task is performed much more routinely by dental assistants working in Periodontic private practices.



- **11.04.01** Knowledge of indications and contraindications of periodontic treatment.
- **11.04.02** Knowledge of anaesthetics and analgesics.
- **11.04.03** Knowledge of treatment of complications which may arise prior to, during, and after periodontic procedures.
- **11.04.04** Knowledge of periodontal screening and recording.
- **11.04.05** Knowledge of the characteristics of plaque and calculus and their significance in relation to dental caries, periodontal disease, and overall health.
- 11.04.06 Knowledge of the characteristics of healthy and diseased periodontal structures.
- **11.04.07** Knowledge of common periodontic procedures and therapies.
- **11.04.08** Ability to demonstrate periodontal aids.
- 11.04.09 Ability to assist with mixing, placement, and removal of periodontal dressings.
- **11.04.10** Ability to apply irrigation techniques.
- **11.04.11** Ability to provide pre- and post-operative instructions to patient and caregiver.
- **11.04.12** Ability to provide post-operative care for patient.

Sub-task 11.05: Assists with Prosthodontic Procedures

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,738) is 3.0 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 23% of the respondents (875) reported that they perform this sub-task daily while 21% (783) reported that they never perform this sub-task. This sub-task is performed much more routinely by dental assistants working in Prosthodontic private practices.



Supporting Knowledge & Abilities

11.05.01 Knowledge of fixed and removable prosthodontic equipment and supplies and procedures.

11.05.02 Knowledge of anaesthetics and analgesics.

- **11.05.03** Knowledge of treatment of complications which may arise prior to, during, and after prosthodontic procedures.
- **11.05.04** Knowledge of bite registration materials.
- **11.05.05** Knowledge of indications and contraindications for fixed prosthetics and removable prosthetics.
- **11.05.06** Ability to prepare for and assist with common fixed and removable prosthodontic procedures.
- **11.05.07** Ability to prepare for, select, and manipulate materials such as bite registration and final impression.
- 11.05.08 Ability to prepare and assist with direct and indirect prosthodontic procedures.
- **11.05.09** Ability to stabilize and remove final impressions.
- **11.05.10** Ability to provide pre- and post-operative instructions to patient and caregiver.

11.05.11 Ability to provide post-operative care for patient.

Sub-task 11.06: Assists with Paediatric Dental Procedures

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,797) is 3.2 which indicates that this sub-task is commonly performed on an occasional basis. Approximately 29% of the respondents (1,102) reported that they perform this sub-task daily while 16% (615) reported that they never perform this sub-task. This sub-task is performed much more routinely by dental assistants working in Paediatric Dentistry.



Supporting Knowledge & Abilities

11.06.01 Knowledge of patient considerations specific to paediatric dentistry.

- **11.06.02** Knowledge of anaesthetics and analgesics.
- **11.06.03** Knowledge of treatment of complications which may arise prior to, during, and after paediatric dental procedures.
- **11.06.04** Ability to relate to and manage paediatric dental patients.
- **11.06.05** Ability to provide pre- and post-operative instructions to patient and caregiver.
- **11.06.06** Ability to provide post-operative care for patient.

Sub-task 11.07: Assists with Orthodontic Procedures

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,717) is 2.3 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 16% of the respondents (592) reported that they perform this sub-task daily while 40% (1,481) reported that they never perform this sub-task. This sub-task is performed much more routinely by dental assistants working in Orthodontic private practices.



Supporting Knowledge & Abilities

11.07.01 Knowledge of the benefits of orthodontic treatment.

- **11.07.02** Knowledge of indications and contraindications for orthodontic treatment.
- **11.07.03** Knowledge of orthodontic records, procedures, materials, instruments, and appliances.
- **11.07.04** Ability to prepare and manipulate orthodontic materials.
- **11.07.05** Ability to educate the patient in the maintenance of orthodontic appliances.
- **11.07.06** Ability to explain the need for and methods of a retention phase.
- **11.07.07** Ability to provide oral hygiene and home care instructions.
- **11.07.08** Ability to provide pre- and post-operative instructions to patient and caregiver.
- **11.07.09** Ability to provide post-operative care for patient.

Sub-task 11.08: Assists with Implants Procedures

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,702) is 2.3 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 8% of the respondents (295) reported that they perform this sub-task daily while 35% (1,294) reported that they never perform this sub-task. This sub-task is performed much more routinely by dental assistants working in Oral Surgery, Periodontic and Prosthodontic private practices.



Supporting Knowledge & Abilities

11.08.01 Knowledge of the components of an implant system.

- **11.08.02** Knowledge of digital technology used in implant dentistry.
- **11.08.03** Knowledge of provisional restoration(s) of an implant(s).

11.08.04 Knowledge of final implant supported restorations.

11.08.05 Knowledge of the prosthetic procedure for an implant retained restoration.

11.08.06 Knowledge of the maintenance of dental implants.

11.08.07 Knowledge of record retention and storage of implant cases.

11.08.08 Knowledge of infection prevention and control standards in implant dentistry.

11.08.09 Ability to provide pre- and post-operative instructions to patient and caregiver.

11.08.10 Ability to provide post-operative care for patient.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (3,634) is 4.2 which indicates that the risk (consequences) for safety, quality, and/or liability is high to extremely high if the above subtasks are performed below an accepted standard. Approximately 83% of the respondents (3,025) rated the risk as high or extremely high.


Block C Clinical Procedures

Task 12 Performs Intra-Oral Procedures

Context Statement:

Dental assistants may independently perform certain intra-oral procedures under the general direction of the dentist. To perform these skills dental assistants must have extensive knowledge of dental, oral, and head and neck anatomy and treatment. Dental assistants must be aware of the limitations of the scope of practice applicable to their jurisdiction.

Note on the Frequency of Practice results for the sub-tasks under Task 12

The 2019 NOA survey included a screening question for Task 12 that asked respondents to confirm if they performed intra-oral procedures in their practice setting (i.e. routinely or otherwise). Of the 4,250 respondents that responded to this question, 75% (3,198) confirmed that they performed intra-oral procedures (one or more skills) while 25% (1,052) confirmed that they did not. The Frequency of Practice results for the sub-tasks under Task 12 are specific to the group of respondents (3,198) that confirmed they performed intra-oral procedures. The following table shows the breakdown of respondents by work setting.

NOTE: It's important to recognize that the sample size for some of the private practice work settings is small (e.g. less than 30 respondents confirmed that they performed the sub-task and reported on the frequency). Caution should be used when interpreting the frequency figures presented in the corresponding graphs where the sample size is small.

Primary Work Setting	Do you perform intra-oral procedures in your practice setting (i.e. routinely or otherwise)?				
	Yes	No	Total		
Private Practice – General Dentistry	2348	692	3040		
Private Practice – Prosthodontic	29	8	37		
Private Practice – Orthodontic	260	68	328		
Private Practice – Periodontic	75	30	105		
Private Practice – Oral Surgery	81	37	118		
Private Practice – Endodontic	44	18	62		
Private Practice – Pediatric Dentistry	89	19	108		
Community / Public Health	77	56	133		
Hospital	39	10	49		
Educational Facility	61	44	105		
Department of National Defence	45	22	67		
Other ^a	50	48	98		
All respondents	3198	1052	4250		

a 'Other' includes denture clinics, dental labs, oral medicine, mobile dental labs, corporate dental services, nonprofit services, representatives with provincial regulators or associations, representatives with dental supply companies, other government representatives.

Sub-task 12.01: Performs Pulp Vitality Testing (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	No	No	Yes	No	No	No	Yes*	Yes	Yes

* Post graduate module required

Frequency of Practice

The average rating across all survey respondents (2,907) is 1.8 which indicates that this sub-task is not commonly performed. Approximately 8% of the respondents (226) reported that they perform this sub-task daily while 64% (1,846) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

12.01.01 Knowledge of pulp testing techniques.

12.01.02 Knowledge of indications and contraindications of pulp testing.

12.01.03 Knowledge of impact of patient's medical and dental history on treatment.

12.01.04 Ability to select testing method.

12.01.05 Ability to monitor and record patient's response to pulp vitality testing.

12.01.06 Ability to prepare and operate pulp testing devices.

Sub-task 12.02: Applies Topical Anaesthetics

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (3,054) is 3.1 which indicates that this sub-task is commonly performed on an occasional basis. Approximately 41% of the respondents (1,248) reported that they perform this sub-task daily while 25% (768) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

12.02.01 Knowledge of innervation of the oral cavity.

12.02.02 Knowledge of types and application methods of topical anaesthetics.

12.02.03 Knowledge of indications and contraindications of topical anaesthetics.

12.02.04 Knowledge of the impact of the patient's medical and dental history on treatment.

12.02.05 Ability to select specific sites for application of topical anaesthetic.

12.02.06 Ability to apply topical anaesthetic to selected site.

12.02.07 Ability to monitor patient's reaction to topical anaesthetics.

Sub-task 12.03: Applies and Removes Isolation Material

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (3,057) is 3.7 which indicates that this sub-task is commonly performed on a somewhat regular basis. Approximately 56% of the respondents (1,707) reported that they perform this sub-task daily while 14% (427) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

12.03.01 Knowledge of types of isolation.

12.03.02 Knowledge of the impact of the patient's medical and dental history on treatment.

12.03.03 Knowledge of risks involved with application and removal of isolation materials.

12.03.04 Ability to prepare for selected isolation methods.

12.03.05 Ability to select dental dam clamps.

12.03.06 Ability to place dental dam and adapt procedure to patient's comfort and satisfaction.

12.03.07 Ability to evaluate isolation techniques and procedures.

12.03.08 Ability to remove isolation.

Sub-task 12.04: Places Treatment Liners and Bases

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (2,923) is 1.7 which indicates that this sub-task is not commonly performed. Approximately 9% of the respondents (255) reported that they perform this sub-task daily while 67% (1,966) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

12.04.01 Knowledge of types of liners and bases.

12.04.02 Knowledge of indications and contraindications for use.

12.04.03 Ability to isolate operative site.

12.04.04 Ability to place liners and bases according to treatment plan.

12.04.05 Ability to prepare and place liners and bases according to manufacturer's instructions.

Sub-task 12.05: Places and Removes Matrix Systems and Wedges

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (2,957) is 2.4 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 21% of the respondents (617) reported that they perform this sub-task daily while 38% (1,120) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

12.05.01 Knowledge of common matrix systems and wedges.

12.05.02 Knowledge of common placement techniques.

12.05.03 Knowledge of indications and contraindications for use.

12.05.04 Ability to place matrix systems according to treatment plan.

12.05.05 Ability to place matrix systems according to manufacturer's instructions.

12.05.06 Ability to remove and dispose of matrix systems and wedges.

Sub-task 12.06: Applies Acid Etching and Cavity Bonding

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (2,999) is 2.1 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 16% of the respondents (471) reported that they perform this sub-task daily while 54% (1,603) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

- **12.06.01** Knowledge of types of acid etches and bonding materials.
- **12.06.02** Knowledge of indications and contraindications for acid etching and bonding materials.
- 12.06.03 Ability to interpret Material Safety Data Sheets (MSDS).
- **12.06.04** Ability to interpret treatment and manufacturer's instructions.
- 12.06.05 Ability to place materials.
- 12.06.06 Ability to remove materials.

Sub-task 12.07: Places Provisional / Temporary Restorations (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	Yes*	Yes	No						

* Post graduate module required

Frequency of Practice

The average rating across all survey respondents (2,925) is 1.7 which indicates that this sub-task is not commonly performed. Approximately 8% of the respondents (236) reported that they perform this sub-task daily while 67% (1,968) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

12.07.01 Knowledge of types of temporary restorative materials.

12.07.02 Knowledge of occlusion.

12.07.03 Ability to mix and place selected material.

12.07.04 Ability to finish and adjust temporary restorations.

12.07.05 Ability to perform initial occlusal adjustments on temporary restorations.

12.07.06 Ability to cure temporary materials.

Sub-task 12.08: Places and Finishes Amalgam Restorations (NOT COMMON CORE) Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	Yes*	No	No						

* Post graduate module required

Frequency of Practice

The Frequency of Practice was not examined for this sub-task in the 2019 NOA survey as the Steering Committee determined that it was not a priority for review at this time.

Supporting Knowledge & Abilities

12.08.01 Knowledge of types of amalgam materials.

12.08.02 Knowledge of tooth structure and oral anatomy.

12.08.03 Knowledge of occlusion.

12.08.04 Knowledge of isolation techniques.

12.08.05 Knowledge of mixing and placement techniques.

12.08.06 Knowledge of amalgam handling procedures.

12.08.07 Knowledge of indications and contraindications of amalgam restorations.

12.08.08 Knowledge of mercury hygiene procedures.

12.08.09 Ability to select matrices and wedges.

12.08.10 Ability to mix and place amalgam material.

12.08.11 Ability to carve and finish restoration.

12.08.12 Ability to perform initial occlusal check.

12.08.13 Ability to maintain mercury hygiene.

Sub-task 12.09: Takes Preliminary Impressions

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (3,113) is 3.8 which indicates that this sub-task is commonly performed on a somewhat regular basis. Approximately 44% of the respondents (1,375) reported that they perform this sub-task daily while 7% (210) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

12.09.01 Knowledge of impression materials.

12.09.02 Knowledge of impression material mixing techniques.

12.09.03 Knowledge of criteria for an acceptable impression.

12.09.04 Ability to select and fit an impression tray to a patient's mouth.

12.09.05 Ability to apply impression technique.

12.09.06 Ability to place and remove impression tray.

12.09.07 Ability to evaluate impression quality.

12.09.08 Ability to preserve impressions.

Sub-task 12.10: Prepares Face-bow Transfers (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	No	No	Yes*	No	No	No	No	Yes	Yes

* Post graduate module required

Frequency of Practice

The average rating across all survey respondents (2,693) is 1.3 which indicates that this sub-task is not commonly performed. Approximately 4% of the respondents (94) reported that they perform this sub-task daily while 82% (2,218) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

12.10.01 Knowledge of face-bow registration and technique.

12.10.02 Ability to perform face-bow registration.

Sub-task 12.11: Prepares Simple Bite Registrations

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (3,061) is 3.2 which indicates that this sub-task is commonly performed on an occasional basis. Approximately 30% of the respondents (929) reported that they perform this sub-task daily while 18% (535) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

- **12.11.01** Knowledge of bite registration materials.
- **12.11.02** Knowledge of bite registration procedures.
- 12.11.03 Knowledge of centric occlusion.
- 12.11.04 Ability to take impressions and bite registrations.
- 12.11.05 Ability to select bite registration material.

Sub-task 12.12: Performs Coronal Whitening using Bleaching Trays

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (2,861) is 1.8 which indicates that this sub-task is not commonly performed. Approximately 6% of the respondents (156) reported that they perform this sub-task daily while 56% (1,611) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

12.12.01 Knowledge of indications and contraindications of whitening agents.

- **12.12.02** Knowledge of indications and contraindications of treatment.
- **12.12.03** Knowledge of types, methods, and benefits of whitening treatments.
- 12.12.04 Knowledge of risks associated with whitening agents.
- **12.12.05** Knowledge of timing of treatment.
- **12.12.06** Ability to fill tray and adapt to patient's mouth.
- **12.12.07** Ability to insert and remove tray from patient's mouth.
- **12.12.08** Ability to provide post-operative instructions to patient and caregiver.
- 12.12.09 Ability to educate patient on use of kit.

Sub-task 12.13: Performs Coronal Whitening using Direct Application (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	No	No	Yes	No	Yes*	Yes	Yes	Yes	Yes

* Only Spadent is permitted.

Frequency of Practice

The average rating across all survey respondents (2,799) is 1.4 which indicates that this sub-task is not commonly performed. Approximately 3% of the respondents (71) reported that they perform this sub-task daily while 77% (2,151) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

- **12.13.01** Knowledge of indications and contraindications of whitening agents.
- **12.13.02** Knowledge of indications and contraindications of treatment.
- **12.13.03** Knowledge of types, methods and benefits of treatments.
- **12.13.04** Knowledge of risks associated with whitening agents such as ingestion and adverse patient reaction.
- **12.13.05** Knowledge of timing of treatment.
- 12.13.06 Ability to provide gingival protection.
- **12.13.07** Ability to directly apply whitening agents to tooth surface.
- 12.13.08 Ability to provide pre and post-operative instructions to patient and caregiver.
- **12.13.09** Ability to provide post-operative care for patient.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (2,805) is 4.1 which indicates that the risk (consequences) for safety, quality, and/or liability is high if the above sub-tasks are performed below an accepted standard. Approximately 77% of the respondents (2,163) rated the risk as high or extremely high.



Task 13 Performs Intra-Oral Preventive Procedures

Context Statement:

Dental assistants independently perform certain intra-oral preventive procedures under the direction of the dentist. To perform these skills, dental assistants must have extensive knowledge of oral and dental anatomy. Dental assistants must be aware of the limitations of the scope of practice applicable to their jurisdiction.

Note on the Frequency of Practice results for the sub-tasks under Task 13

The 2019 NOA survey included a screening question for Task 13 that asked respondents to confirm if they performed intra-oral preventive procedures in their practice setting (i.e. routinely or otherwise). Of the 4,232 respondents that responded to this question, 63% (2,675) confirmed that they performed intra-oral procedures (one or more skills) while 37% (1,557) confirmed that they did not. The Frequency of Practice results for the sub-tasks under Task 13 are specific to the group of respondents (2,675) that confirmed they performed intra-oral preventive procedures. The following table shows the breakdown of respondents by work setting.

NOTE: It's important to recognize that the sample size for some of the private practice work settings is small (e.g. less than 30 respondents confirmed that they performed the sub-task and reported on the frequency). Caution should be used when interpreting the frequency figures presented in the corresponding graphs where the sample size is small.

	Do you perforn	n intra-oral preve actice setting (i.e.	ntive procedures routinely or
Primary Work Setting	in your pro	otherwise)?	routinely of
	Yes	No	Total
Private Practice – General Dentistry	2102	924	3026
Private Practice – Prosthodontic	15	22	37
Private Practice – Orthodontic	143	185	328
Private Practice – Periodontic	60	45	105
Private Practice – Oral Surgery	30	88	118
Private Practice – Endodontic	14	48	62
Private Practice – Pediatric Dentistry	83	25	108
Community / Public Health	74	57	131
Hospital	31	18	49
Educational Facility	54	51	105
Department of National Defence	31	36	67
Other ^a	38	58	96
All respondents	2675	1557	4232

a 'Other' includes denture clinics, dental labs, oral medicine, mobile dental labs, corporate dental services, nonprofit services, representatives with provincial regulators or associations, representatives with dental supply companies, other government representatives.

Sub-task 13.01: Applies Pit and Fissure Sealants

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (2,562) is 2.2 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 8% of the respondents (192) reported that they perform this sub-task daily while 36% (916) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

13.01.01 Knowledge of indications and contraindications of pit and fissure sealant placement.

13.01.02 Knowledge of types of sealant materials and their properties.

13.01.03 Knowledge of Material Safety Data Sheets (MSDS).

13.01.04 Knowledge of preparation and etching techniques.

13.01.05 Knowledge of sealant placement techniques.

13.01.06 Ability to place pit and fissure sealants following manufacturer's directions.

13.01.07 Ability to evaluate application.

Sub-task 13.02: Adjusts Occlusion Following Pit and Fissure Sealant Application (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	Yes	Yes	Yes						

Frequency of Practice

The average rating across all survey respondents (2,516) is 1.5 which indicates that this sub-task is not commonly performed. Approximately 4% of the respondents (96) reported that they perform this sub-task daily while 70% (1,764) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

13.02.01 Knowledge of isolation techniques and methods.

13.02.02 Knowledge of handpiece operation.

13.02.03 Knowledge of occlusion.

13.02.04 Knowledge of risk factors.

13.02.05 Ability to adjust technique to maximize patient comfort.

13.02.06 Ability to select and use equipment and supplies.

13.02.07 Ability to operate handpiece.

13.02.08 Ability to evaluate adjustment.

Sub-task 13.03: Performs Selective Coronal Polishing

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (2,609) is 3.0 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 25% of the respondents (651) reported that they perform this sub-task daily while 18% (458) reported that they never perform this sub-task. This sub-task is performed much more routinely by dental assistants working in Pediatric private practices.



Supporting Knowledge & Abilities

13.03.01 Knowledge of polishing methods.

13.03.02 Knowledge of rationale for selective polishing.

13.03.03 Knowledge of hard and soft deposits.

13.03.04 Knowledge of intrinsic and extrinsic stains.

13.03.05 Knowledge of equipment and supplies and their use.

13.03.06 Knowledge of types of polishing materials.

13.03.07 Knowledge of treatment procedures.

13.03.08 Knowledge of risk factors.

13.03.09 Ability to adjust technique to maximize patient comfort.

13.03.10 Ability to select and use equipment and supplies.

13.03.11 Ability to recognize hard and soft deposits.

13.03.12 Ability to remove extrinsic stain and soft deposits.

Sub-task 13.04: Applies Anti-Cariogenic Agents

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (2,533) is 2.4 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 17% of the respondents (425) reported that they perform this sub-task daily while 41% (1,025) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

13.04.01 Knowledge of indications and contraindications of anti-cariogenic agents.

13.04.02 Knowledge of types, methods, and benefits of anti-cariogenic treatments.

13.04.03 Knowledge of isolation techniques.

13.04.04 Ability to identify site to be treated.

13.04.05 Ability to provide pre- and post-operative instructions to patient and caregiver.

Sub-task 13.05: Applies Desensitizing Agents

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (2,569) is 2.5 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 13% of the respondents (325) reported that they perform this sub-task daily while 24% (626) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

13.05.01 Knowledge of types, methods, and benefits of desensitizing agents.

13.05.02 Knowledge of indications and contraindications of desensitizing.

13.05.03 Knowledge of methods of desensitizing agents application.

13.05.04 Ability to place desensitizing agents.

13.05.05 Ability to provide pre- and post-operative instructions to patient and caregiver.

Sub-task 13.06: Applies Disclosing Agents

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (2,511) is 1.7 which indicates that this sub-task is not commonly performed. Approximately 6% of the respondents (147) reported that they perform this sub-task daily while 62% (1,548) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

13.06.01 Knowledge of indications and contraindications of disclosing agents.

13.06.02 Knowledge of types and purpose of disclosing agents.

13.06.03 Knowledge of methods of application.

13.06.04 Knowledge of oral hygiene indices.

13.06.05 Ability to apply disclosing agents following manufacturer's directions.

13.06.06 Ability to interpret and record results of disclosing agents.

13.06.07 Ability to assess and record oral hygiene indices.

Sub-task 13.07: Performs Periodontal Screening (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	No	No	Yes	No	No	Yes*	No	Yes	No

* Post graduate module required.

Frequency of Practice

The average rating across all survey respondents (2,443) is 1.5 which indicates that this sub-task is not commonly performed. Approximately 6% of the respondents (149) reported that they perform this sub-task daily while 79% (1,928) reported that they never perform this sub-task. This sub-task is performed more routinely by dental assistants working in Periodontic private practices.



Supporting Knowledge & Abilities

13.07.01 Knowledge of dental and oral anatomy.

- **13.07.02** Knowledge of probing techniques and instruments.
- **13.07.03** Knowledge of impact of the patient's medical and dental history on periodontal screening.
- **13.07.04** Knowledge of the risks associated with screening.
- 13.07.05 Knowledge of periodontal screening systems.
- 13.07.06 Ability to assess the patient's comfort.
- 13.07.07 Ability to probe.
- 13.07.08 Ability to record the results.
- **13.06.07** Ability to assess and record oral hygiene indices.

Sub-task 13.08: Performs Limited Scaling Procedures (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	No	No	Yes*	No	No	Yes*	No	Yes*	No

* Post graduate module required.

Frequency of Practice

The average rating across all survey respondents (2,447) is 1.3 which indicates that this sub-task is not commonly performed. Approximately 4% of the respondents (93) reported that they perform this sub-task daily while 89% (2,173) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

13.08.01 Knowledge of sulcular depth for treatment determination.

13.08.02 Knowledge of plaque and calculus formation.

13.08.03 Knowledge of periodontal disease classification.

13.08.04 Knowledge of relevance of periodontal screening record.

13.08.05 Knowledge of full mouth probing.

13.08.06 Knowledge of hand scalers.

13.08.07 Knowledge of ultrasonic scalers.

13.08.08 Ability to select instruments for scaling.

13.08.09 Ability to scale teeth to the appropriate depth using hand scalers.

13.08.10 Ability to scale teeth to the appropriate depth using ultrasonic scaler.

13.08.11 Ability to assess treatment results.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (2,351) is 4.0 which indicates that the risk (consequences) for safety, quality, and/or liability is high if the above sub-tasks are performed below an accepted standard. Approximately 75% of the respondents (1,766) rated the risk as high or extremely high.



Task 14 Performs Orthodontic Procedures

Context Statement:

Dental assistants may perform certain orthodontic procedures under the direction of the dentist. To perform these skills, dental assistants must have extensive knowledge of dental, oral, head and neck anatomy, and the physiology of tooth movement and contraindications of treatment as well as dental and skeletal malocclusions. These skills are included in post-graduate training modules in some jurisdictions. Dental assistants must be aware of the limitations of the scope of practice applicable to their jurisdiction.

Note on the NOA survey results for Task 14

The 2019 NOA survey included a screening question for Task 14 that asked respondents to confirm if they had taken any formal orthodontic training. Of the 4,256 respondents that responded to this question, 21% (893) confirmed that they had taken formal orthodontic training. The 2019 NOA survey did not examine the Frequency of Practice for the sub-tasks related to Task 14.

Sub-task 14.01: Places and Removes Separators (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes*	No	Yes*	Yes*	No	No	Yes*	Yes*	Yes*	Yes*

* Post graduate module required.

Supporting Knowledge & Abilities

14.01.01 Knowledge of types of separators.

14.01.02 Knowledge of risks involved.

14.01.03 Knowledge of separation methods.

14.01.04 Knowledge of rationale for separation.

14.01.05 Knowledge of tooth structure and oral tissues.

14.01.06 Ability to select separators and method of insertion and removal.

Sub-task 14.02: Fits Orthodontic Appliances, Bands, and Brackets (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes*	No	Yes*	Yes*	No	No	Yes*	Yes*	Yes*	Yes*

* Post graduate module required.

Supporting Knowledge & Abilities

14.02.01 Knowledge of indications and contraindications for orthodontic appliances, bands and brackets.

14.02.02 Knowledge of risks and benefits associated with placement.

14.02.03 Ability to fit fixed and removable orthodontic appliances.

14.02.04 Ability to select bands and brackets.

14.02.05 Ability to insert appliances, bands and brackets.

14.02.06 Ability to instruct patient on use and care of appliance including head gear.

14.02.07 Ability to adapt bands to fit teeth.

Sub-task 14.03: Applies Direct and Indirect Bracket Bonding Materials (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes*	No	Yes*	Yes*	No	No	Yes*	Yes*	Yes*	Yes*

* Post graduate module required.

Supporting Knowledge & Abilities

14.03.01 Knowledge of types of bonding materials.

14.03.02 Knowledge of direct and indirect bracket bonding techniques.

14.03.03 Knowledge of placement of bonding materials.

14.03.04 Knowledge of properties of bonding materials.

14.03.05 Ability to place bonding materials.

Sub-task 14.04: Places and Bonds Orthodontic Brackets (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes*	No	Yes*	No	No	No	Yes*	Yes*	Yes*	Yes*

* Post graduate module required.

Supporting Knowledge & Abilities

14.04.01 Knowledge of indications and contraindications associated with placement.

14.04.02 Knowledge of rationale for use of brackets.

14.04.03 Knowledge of placement techniques.

14.04.04 Knowledge of types brackets.

14.04.05 Ability to select brackets.

14.04.06 Ability to place brackets.

Sub-task 14.05: Places and Bonds Orthodontic Bands and Fixed Appliances (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes*	No	Yes*	Yes*	No	No	Yes*	Yes*	Yes*	Yes*

* Post graduate module required.

Supporting Knowledge & Abilities

14.05.01 Knowledge of indications and contraindications associated with placement.

14.05.02 Knowledge of rationale for use of orthodontic bands.

14.05.03 Knowledge of placement techniques.

14.05.04 Knowledge of types of orthodontic bands.

14.05.05 Ability to select orthodontic bands.

14.05.06 Ability to insert orthodontic bands.

14.05.07 Ability to apply isolation techniques.

14.05.08 Ability to apply wax or other material to offending material.

14.05.09 Ability to remove offending components.

14.05.10 Ability to select bonding material.

14.05.11 Ability to remove excess cement.

Sub-task 14.06: Places and Bonds Orthodontic Appliances (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes*	No	Yes*	Yes*	No	No	Yes*	Yes*	Yes*	Yes*

* Post graduate module required.

Supporting Knowledge & Abilities

14.06.01 Knowledge of indications and contraindications associated with placement.

14.06.02 Knowledge of rationale for use of appliances.

14.06.03 Knowledge of placement techniques.

14.06.04 Knowledge of types of appliances.

14.06.05 Ability to place fixed and removable orthodontic appliances.

14.06.06 Ability to select bonding material.

14.06.07 Ability to insert appliances.

14.06.08 Ability to apply isolation techniques.

14.06.09 Ability to apply wax or other material to offending components.

14.06.10 Ability to select bonding material.

14.06.11 Ability to remove excess bonding material.

Sub-task 14.07: Removes Orthodontic Appliances (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes*	No	Yes*	Yes*	No	No	Yes*	Yes*	Yes*	Yes*

* Post graduate module required.

Supporting Knowledge & Abilities

14.07.01 Knowledge of types of orthodontic appliances.

14.07.02 Knowledge of methods of securing orthodontic appliances.

14.07.03 Knowledge of risks associated with removal of fixed orthodontic appliances.

14.07.04 Ability to remove cement and bonding material.

14.07.05 Ability to remove appliance.

Sub-task 14.08: Removes Orthodontic Bands and Brackets (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes*	No	Yes*	Yes*	No	No	Yes*	Yes*	Yes*	Yes*

* Post graduate module required.

Supporting Knowledge & Abilities

14.08.01 Knowledge of types of orthodontic bands and brackets.

14.08.02 Knowledge of methods of securing orthodontic bands and brackets.

14.08.03 Knowledge of risks associated with removal of orthodontic bands and brackets.

14.08.04 Ability to remove cement and bonding material.

14.08.05 Ability to remove orthodontic bands and brackets.

Sub-task 14.09: Places and Removes Adapted Arch Wires (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes*	No	Yes*	Yes*	No	No	Yes*	Yes*	Yes*	Yes*

* Post graduate module required.

Supporting Knowledge & Abilities

14.09.01 Knowledge of types and properties of arch wires.

14.09.02 Knowledge of placement of arch wires.

14.09.03 Knowledge of removal techniques of arch wires.

14.09.04 Ability to place arch wires.

14.09.05 Ability to remove arch wires.

Sub-task 14.10 Places and Removes Ligatures (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes*	No	Yes*	Yes*	No	No	Yes*	Yes*	Yes*	Yes*

* Post graduate module required.

Supporting Knowledge & Abilities

14.10.01 Knowledge of types and properties of ligatures.

14.10.02 Knowledge of placement of ligatures.

14.10.03 Knowledge of removal techniques of ligatures.

14.10.04 Ability to place ligatures.

14.10.05 Ability to remove ligatures.

Sub-task 14.11: Traces and Measures Cephalometric Radiographs and Digital Images (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes*	No	Yes*	Yes*	No	No	Yes*	Yes*	Yes	Yes

* Post graduate module required.

Supporting Knowledge & Abilities

14.11.01 Knowledge of head and neck anatomy.

14.11.02 Knowledge of dental anatomy.

14.11.03 Knowledge of orthodontic landmarks.

14.11.04 Ability to record measurements and angles.

Sub-task 14.12: Places Orthodontic Elastics (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	No	Yes*	No	No	No	Yes*	Yes*	Yes*	Yes*

* Post graduate module required.

Supporting Knowledge & Abilities

14.12.01 Knowledge of Angle's classification of occlusion.

14.12.02 Knowledge of placement method for different classes.

14.12.03 Knowledge of elastic sizes and weights.

14.12.04 Ability to place elastics as prescribed.

14.12.05 Ability to instruct patient on elastic insertion and removal.

14.12.06 Ability to provide pre- and post-operative instructions to patient and caregiver.

Task 15 Performs Prosthodontic Procedures

Context Statement:

Dental assistants perform prosthodontic procedures. They may fabricate and cement provisional prostheses and place and remove retraction cords under the direction of the dentist. To perform these skills dental assistants must have extensive knowledge of dental, oral, head and neck anatomy. These skills are included in post-graduate training modules in some jurisdictions. Dental assistants must be aware of the limitations of the scope of practice applicable to their jurisdiction.

Note on the Frequency of Practice results for the sub-tasks under Task 15

The 2019 NOA survey included a screening question for Task 15 that asked respondents to confirm if they performed prosthodontic procedures in their practice setting (i.e. routinely or otherwise). Of the 4,243 respondents that responded to this question, 39% (1,644) confirmed that they performed prosthodontic procedures (one or more skills) while 61% (2,599) confirmed that they did not. The Frequency of Practice results for the sub-tasks under Task 15 are specific to the group of respondents (1,644) that confirmed they performed prosthodontic procedures. The following table shows the breakdown of respondents by work setting.

NOTE: It's important to recognize that the sample size for some of the private practice work settings is small (e.g. less than 30 respondents confirmed that they performed the sub-task and reported on the frequency). Caution should be used when interpreting the frequency figures presented in the corresponding graphs where the sample size is small.

Primary Work Setting	Do you perform prosthodontic procedures in yo practice setting (i.e. routinely or otherwise)?				
	Yes	No	Total		
Private Practice – General Dentistry	1418	1616	3034		
Private Practice – Prosthodontic	25	12	37		
Private Practice – Orthodontic	11	317	328		
Private Practice – Periodontic	18	87	105		
Private Practice – Oral Surgery	17	101	118		
Private Practice – Endodontic	2	60	62		
Private Practice – Pediatric Dentistry	9	98	107		
Community / Public Health	18	114	132		
Hospital	18	31	49		
Educational Facility	43	64	107		
Department of National Defence	39	28	67		
Other ^a	26	71	97		
All respondents	1644	2599	4243		

a 'Other' includes denture clinics, dental labs, oral medicine, mobile dental labs, corporate dental services, nonprofit services, representatives with provincial regulators or associations, representatives with dental supply companies, other government representatives.

Sub-task 15.01: Fabricates and Places Direct Provisional Fixed Prostheses (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	Yes*	Yes	Yes*						

* Post graduate module required.

Frequency of Practice

The average rating across all survey respondents (1,602) is 2.3 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 13% of the respondents (212) reported that they perform this sub-task daily while 44% (711) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

15.01.01 Knowledge of provisional materials.

15.01.02 Knowledge of types of tooth preparations.

15.01.03 Knowledge of occlusal relationships.

15.01.04 Ability to obtain preliminary impressions.

15.01.05 Ability to finish and polish provisionals.

15.01.06 Ability to modify, place, and fit provisionals.

15.01.07 Ability to select appropriate shade for provisionals.

Sub-task 15.02: Cements and Removes Direct Provisional Fixed Prosthesis (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	Yes*	Yes	Yes**						

* Post graduate module required.

** May be performed by practicing CDAs who have a minimum of one year full-time clinical experience or equivalent and have received training that will allow them to provide the service competently and safely. Permitted to remove provisional cement; gross removal of supragingival permanent cement using an appropriate hand instrument (excluding use of dental handpiece). Removes temporary and permanent cements using appropriate hand instruments (excluding the use of dental handpiece). In British Columbia single unit provisionals may be fabricated and cemented without additional module.

Frequency of Practice

The average rating across all survey respondents (1,612) is 2.3 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 13% of the respondents (210) reported that they perform this sub-task daily while 47% (752) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

15.02.01 Knowledge of provisional cements.

15.02.02 Ability to interpret and follow manufacturer's instructions.

15.02.03 Ability to place and evaluate placement.

15.02.04 Ability to remove provisionals.

Sub-task 15.03: Places Retraction Cord (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	Yes*	Yes	Yes*						

* Post graduate module required.

Frequency of Practice

The average rating across all survey respondents (1,606) is 1.8 which indicates that this sub-task is not commonly performed. Approximately 8% of the respondents (124) reported that they perform this sub-task daily while 61% (983) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

- **15.03.01** Knowledge of indications and contraindications of retraction materials and medicaments.
- **15.03.02** Knowledge of types of prosthodontic tooth preparations.
- **15.03.03** Knowledge of materials and medicaments.
- 15.03.04 Knowledge of sulcus anatomy.
- **15.03.05** Ability to place retraction cord following manufacturer's directions.

Sub-task 15.04: Removes Retraction Cord (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	Yes	Yes	Yes						

Frequency of Practice

The average rating across all survey respondents (1,615) is 2.3 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 12% of the respondents (187) reported that they perform this sub-task daily while 37% (599) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

15.04.01 Knowledge of indications and contraindications of treatment.

- **15.04.02** Knowledge of types of prosthodontic tooth preparations.
- **15.04.03** Knowledge of sulcus anatomy.

15.04.04 Ability to remove retraction cord following manufacturer's directions.
Sub-task 15.05: Selects Moulds and Shades of Teeth (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	Yes	Yes	Yes						

Frequency of Practice

The average rating across all survey respondents (1,639) is 3.4 which indicates that this sub-task is commonly performed on an occasional basis. Approximately 31% of the respondents (506) reported that they perform this sub-task daily while 9% (149) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

15.05.01 Knowledge of facial types.

15.05.02 Knowledge of tooth shapes in relation to facial features.

15.05.03 Knowledge of colour characteristics of restorative material.

15.05.04 Knowledge of product availability.

15.05.05 Knowledge of ambient conditions that affect shade selection choices.

15.05.06 Knowledge of laboratory limitations.

15.05.07 Ability to select appropriate tooth shape and size.

15.05.08 Ability to select shade.

15.05.09 Ability to communicate information to laboratory.

Sub-task 15.06: Images and Fabricates Permanent Direct Restorations (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	Yes*	Yes	Yes						

* Post graduate module required.

Frequency of Practice

The average rating across all survey respondents (1,524) is 1.5 which indicates that this sub-task is not commonly performed. Approximately 6% of the respondents (97) reported that they perform this sub-task daily while 79% (1,203) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

15.06.01 Knowledge of computer assisted design/manufacturing (CAD/CAM) equipment.

15.06.02 Knowledge of equipment and supplies.

15.06.03 Knowledge of types of tooth preparation.

15.06.04 Knowledge of milling station maintenance.

15.06.05 Ability to select shade for porcelain/composite block.

15.06.06 Ability to select type of tooth preparation.

15.06.07 Ability to finish and polish direct restoration.

15.06.08 Ability to operate instruments according to manufacturer's directions.

Sub-task 15.07: Performs Restorative Implant Procedures (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	Yes*	No	No						

* Post graduate module required.

Frequency of Practice

The Frequency of Practice was not examined for this sub-task in the 2019 NOA survey as the Steering Committee determined that it was not a priority for review at this time.

Supporting Knowledge & Abilities

15.07.01 Knowledge of surgical and restorative implant procedures.

- **15.07.02** Ability to adjust provisional appliance for fixed and removable prosthetic procedures.
- **15.07.03** Ability to reline provisional appliance for fixed and removable prosthetic procedures.
- **15.07.04** Ability to install and adjust healing abutments.
- 15.07.05 Ability to place surgical dressing.
- **15.07.06** Ability to manipulate final impression material or impression plaster.
- **15.07.07** Ability to place impression copings and seat sub-frames with verification by radiograph/image.
- 15.07.08 Ability to prepare acrylic jigs.
- 15.07.09 Ability to join abutments with acrylics.
- **15.07.10** Ability to tighten abutment screws with torque controller and place appropriate silicone-type sealing material.
- 15.07.11 Ability to fabricate custom trays.
- **15.07.12** Ability to provide pre- and post-operative instructions to patient and caregiver.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (1,442) is 4.1 which indicates that the risk (consequences) for safety, quality, and/or liability is high if the above sub-tasks are performed below an accepted standard. Approximately 76% of the respondents (1,094) rated the risk as high or extremely high.



Task 16 Administers and/or Participates in Emergency Care

Context Statement:

Although most dental treatment is routine, patients may have an adverse reaction to the dental environment or procedures. Therefore, dental assistants must have the ability to recognize the signs and symptoms of distress and respond appropriately to emergency situations.

Sub-task 16.01: Maintains Emergency Drugs, Supplies, and Equipment

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,849) is 2.7 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 14% of the respondents (527) reported that they perform this sub-task daily while 25% (972) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

16.01.01 Knowledge of emergency drugs.

16.01.02 Knowledge of expiration dates.

16.01.03 Knowledge of potential emergency situations.

16.01.04 Knowledge of security requirements of drug storage.

16.01.05 Knowledge of accessibility requirements of emergency supplies.

16.01.06 Knowledge of disposal methods of expired drugs and supplies.

16.01.07 Ability to monitor expiration dates of emergency drugs and supplies.

16.01.08 Ability to restock emergency drugs and supplies.

16.01.09 Ability to store emergency drugs and supplies in secure, easily accessed area.

16.01.10 Ability to dispose of expired drugs and supplies.

Sub-task 16.02: Identifies and Assesses Medical Emergencies

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,810) is 2.5 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 20% of the respondents (743) reported that they perform this sub-task daily while 22% (855) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

16.02.01 Knowledge of common medical emergencies.

16.02.02 Ability to recognize medical emergency situations.

Sub-task 16.03: Follows Emergency Protocol

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The Frequency of Practice was not examined for this sub-task in the 2019 NOA survey as the Steering Committee determined that it was not a priority for review at this time. However, the 2019 NOA survey included two questions to examine the frequency of first aid re-training and CPR re-training. See section 3.3 of this report for additional details.

Supporting Knowledge & Abilities

16.03.01 Knowledge of common office medical emergency protocols.

- 16.03.02 Knowledge of location of emergency supplies.
- 16.03.03 Knowledge of first aid/CPR.
- 16.03.04 Knowledge of the use of emergency support equipment.
- 16.03.05 Ability to follow office emergency protocols.
- 16.03.06 Ability to perform first aid/CPR.
- 16.03.07 Ability to use emergency support equipment.
- 16.03.08 Ability to activate emergency medical systems.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (3,641) is 4.4 which indicates that the risk (consequences) for safety, quality, and/or liability is high to extremely high if the above subtasks are performed below an accepted standard. Approximately 88% of the respondents (3,204) rated the risk as high or extremely high.



Task 17 Performs Post-Treatment Care

Context Statement:

Dental assistants provide certain post treatment care. This may include patient follow-up, monitoring patient's reactions and comfort, removal of dressings and sutures and instructions in self-care under the direction of the dentist. Dental assistants must be aware of the limitations of the scope of practice applicable to their jurisdiction.

Sub-task 17.01: Places Post-Surgical Dressings (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	Yes	No							

Frequency of Practice

The average rating across all survey respondents (3,709) is 1.7 which indicates that this sub-task is not commonly performed. Approximately 8% of the respondents (300) reported that they perform this sub-task daily while 67% (2,474) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

17.01.01 Knowledge of types of surgical dressing.

17.01.02 Knowledge of purposes of surgical dressings.

17.01.03 Knowledge of oral anatomy and soft tissue.

17.01.04 Ability to select appropriate post-surgical dressing.

17.01.05 Ability to place post-surgical dressings.

17.01.06 Ability to prepare site for dressing.

17.01.07 Ability to recognize and report complications.

17.01.08 Ability to provide post-operative instructions for patients and caregivers.

Sub-task 17.02: Removes Post-Surgical Dressings (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	No	No	No	No	No	No	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (3,694) is 1.6 which indicates that this sub-task is not commonly performed. Approximately 6% of the respondents (207) reported that they perform this sub-task daily while 71% (2,630) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

17.02.01 Knowledge of treatment performed.

17.02.02 Ability to recognize and report complications.

17.02.03 Ability to provide post-op instructions for patients and caregivers.

Sub-task 17.03: Removes Sutures

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (3,767) is 1.5 which indicates that this sub-task is not commonly performed. Approximately 3% of the respondents (95) reported that they perform this sub-task daily while 70% (2,639) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

17.03.01 Knowledge of oral anatomy and soft tissue.

- 17.03.02 Knowledge of treatment performed.
- 17.03.03 Knowledge of suture materials and techniques.
- 17.03.04 Ability to assess soft tissue.
- 17.03.05 Ability to recognize and report complications.
- 17.03.06 Ability to remove sutures.
- 17.03.07 Ability to provide post-op instructions for patients and caregivers.
- **17.03.08** Ability to provide post-operative care for patient.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (3,282) is 4.0 which indicates that the risk (consequences) for safety, quality, and/or liability is high if the above sub-tasks are performed below an accepted standard. Approximately 75% of the respondents (2,449) rated the risk as high or extremely high.



Block D Radiography

Task 18 Produces Radiographs/Images

Context Statement:

Dental assistants produce radiographs/images for diagnosis, treatment planning, and follow-up. They must prepare the patient for the procedure, ensure the equipment and materials are appropriate and certified for the intended procedure, apply principles of radiation hygiene, and protect themselves and the patient from undue exposure to radiation. Dental assistants must be aware of the limitations of the scope of practice applicable to their jurisdiction.

Note on the Frequency of Practice results for the sub-tasks under Task 18

The 2019 NOA survey included a screening question for Task 18 that asked respondents to confirm if they produced radiographic images in their practice setting (i.e. routinely or otherwise). Of the 3,903 respondents that responded to this question, 98% (3,808) confirmed that they produced radiographic images (one or more skills) while 2% (95) confirmed that they did not. The Frequency of Practice results for the sub-tasks under Task 18 are specific to the group of respondents (3,808) that confirmed they produced radiographic images. The following table shows the breakdown of respondents by work setting.

NOTE: It's important to recognize that the sample size for some of the private practice work settings is small (e.g. less than 30 respondents confirmed that they performed the sub-task and reported on the frequency). Caution should be used when interpreting the frequency figures presented in the corresponding graphs where the sample size is small.

Primary Work Setting	Do you produ practice settin	ice radiographic ng (i.e. routinely	images in your or otherwise)?
	Yes	No	Total
Private Practice – General Dentistry	2796	77	2873
Private Practice – Prosthodontic	31	1	32
Private Practice – Orthodontic	294	5	299
Private Practice – Periodontic	92	3	95
Private Practice – Oral Surgery	109	3	112
Private Practice – Endodontic	61	0	61
Private Practice – Pediatric Dentistry	103	1	104
Community / Public Health	67	2	69
Hospital	44	0	44
Educational Facility	91	1	92
Department of National Defence	67	0	67
Other ^a	53	2	55
All respondents	3808	95	3903

a 'Other' includes denture clinics, dental labs, oral medicine, mobile dental labs, corporate dental services, nonprofit services, representatives with provincial regulators or associations, representatives with dental supply companies, other government representatives.

Sub-task 18.01: Prepares Patient for Radiographs/Images

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,805) is 4.7 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 88% of the respondents (3,337) reported that they perform this sub-task daily while less than one percent (9) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

- 18.01.01 Knowledge of contraindications for exposure based on health history.
- **18.01.02** Knowledge of fixed and removable obstructions that may interfere with diagnostic images.
- **18.01.03** Knowledge of the rationale, risks, and benefits of radiation exposure to patient.
- **18.01.04** Knowledge of International Commission on Radiological Protection (As Low As Reasonably Achievable) A.L.A.R.A practices.
- **18.01.05** Ability to explain rationale for radiographs/images.
- **18.01.06** Ability to position patient.
- 18.01.07 Ability to place patient protective equipment.
- **18.01.08** Ability to instruct patient for radiographs/images.

Sub-task 18.02: Selects Radiographic/Imaging Technique

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,735) is 4.6 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 85% of the respondents (3,163) reported that they perform this sub-task daily while only 3% (122) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

18.02.01 Knowledge of oral and head and neck anatomy.

- **18.02.02** Knowledge of radiograph/ image types.
- **18.02.03** Knowledge of x-ray machines' functions and exposure settings (digital and conventional).
- 18.02.04 Knowledge of intra-oral film/sensor positioning.
- 18.02.05 Knowledge of degrees of angulation and the affect on the image.
- **18.02.06** Knowledge of obstructions that may interfere with diagnostic images.
- 18.02.07 Ability to select film/sensor size.
- 18.02.08 Ability to assemble and position equipment and film/sensor for exposure.
- **18.02.09** Ability to adapt patient position to maximize image quality.

Sub-task 18.03: Protects Self from Exposure

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,794) is 4.8 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 91% of the respondents (3,466) reported that they perform this sub-task daily while less than one percent (25) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

18.03.01 Knowledge of risks associated with radiation exposure.

18.03.02 Knowledge of exposure protection procedures.

18.03.03 Knowledge of personal radiation monitoring devices and procedures.

18.03.04 Ability to select personal monitoring devices and procedures.

18.03.05 Ability to apply personal protection procedures.

18.03.06 Ability to maintain dosimeter and document results.

Sub-task 18.04: Exposes Film/Sensor

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (3,695) is 4.7 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 87% of the respondents (3,197) reported that they perform this sub-task daily while only 2% (88) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

18.04.01 Ability to instruct patient during exposure.

18.04.02 Ability to select exposure setting.

18.04.03 Ability to operate equipment according to manufacturer's instructions.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (3,467) is 4.1 which indicates that the risk (consequences) for safety, quality, and/or liability is high if the above sub-tasks are performed below an accepted standard. Approximately 78% of the respondents (2,695) rated the risk as high or extremely high.



Block D Radiography

Task 19 Processes Films/Sensors

Context Statement:

Dental assistants are responsible for processing exposed films/sensors using various methods. The dental assistant ensures that the radiograph/image reflects the information necessary and is of sufficient diagnostic quality.

Note on the Frequency of Practice results for the sub-tasks under Task 19

The 2019 NOA survey included a screening question for Task 19 that asked respondents to confirm if they processed films / sensors in their practice setting (i.e. routinely or otherwise). Of the 3,895 respondents that responded to this question, 87% (3,397) confirmed that they processed films / sensors (one or more skills) while 13% (498) confirmed that they did not. The Frequency of Practice results for the sub-tasks under Task 19 are specific to the group of respondents (3,397) that confirmed they processed films / sensors. The following table shows the breakdown of respondents by work setting.

NOTE: It's important to recognize that the sample size for some of the private practice work settings is small (e.g. less than 30 respondents confirmed that they performed the sub-task and reported on the frequency). Caution should be used when interpreting the frequency figures presented in the corresponding graphs where the sample size is small.

Primary Work Setting	Do you process films / sensors in your pr setting (i.e. routinely or otherwise)				
	Yes	No	Total		
Private Practice – General Dentistry	2580	287	2867		
Private Practice – Prosthodontic	24	8	32		
Private Practice – Orthodontic	177	121	298		
Private Practice – Periodontic	87	7	94		
Private Practice – Oral Surgery	86	27	113		
Private Practice – Endodontic	57	4	61		
Private Practice – Pediatric Dentistry	98	5	103		
Community / Public Health	65	4	69		
Hospital	38	6	44		
Educational Facility	85	7	92		
Department of National Defence	54	13	67		
Other ^a	46	9	55		
All respondents	3397	498	3895		

a 'Other' includes denture clinics, dental labs, oral medicine, mobile dental labs, corporate dental services, nonprofit services, representatives with provincial regulators or associations, representatives with dental supply companies, other government representatives.

Sub-task 19.01: Processes Exposed Film/Sensors

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,314) is 4.6 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 86% of the respondents (2,842) reported that they perform this sub-task daily while only 2% (71) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

19.01.01 Knowledge of analog and digital processing techniques.

19.01.02 Knowledge of film/sensor handling techniques.

19.01.03 Ability to operate processing equipment according to manufacturer's directions.

Sub-task 19.02: Mounts and Labels Processed Radiograph/Images

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,012) is 4.1 which indicates that this sub-task is commonly performed on a regular basis. Approximately 73% of the respondents (2,203) reported that they perform this sub-task daily while 15% (445) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

19.02.01 Knowledge of head and neck anatomy.

- **19.02.02** Knowledge of dental anatomy.
- **19.02.03** Ability to match radiographs/images to patient.
- 19.02.04 Ability to verify labelling.

19.02.05 Ability to organize radiographs/images.

Sub-task 19.03: Evaluates Radiographic Images

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,121) is 3.4 which indicates that this sub-task is commonly performed on an occasional basis. Approximately 56% of the respondents (1,739) reported that they perform this sub-task daily while 31% (972) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

- **19.03.01** Knowledge of the information needed for a diagnostically acceptable radiograph/image.
- **19.03.02** Ability to recognize diagnostically acceptable radiographs/images.
- **19.03.03** Ability to identify and correct exposure errors.
- **19.03.04** Ability to identify and correct processing errors.
- 19.03.05 Ability to manipulate digital imaging.

Sub-task 19.04: Duplicates Radiographic Images

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (2,905) is 1.7 which indicates that this sub-task is not commonly performed. Approximately 10% of the respondents (275) reported that they perform this sub-task daily while 63% (1,831) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

19.04.01 Knowledge of techniques for duplicating radiographs/images.

19.04.02 Knowledge of duplicating equipment/software.

19.04.03 Ability to operate duplicating equipment/software.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (2,988) is 3.9 which indicates that the risk (consequences) for safety, quality, and/or liability is high if the above sub-tasks are performed below an accepted standard. Approximately 67% of the respondents (2,000) rated the risk as high or extremely high.



Block E Oral Health Education and Promotion

Task 20 Counsels Patients on Oral Health

Context Statement:

Dental assistants provide patients with education on preventive dental care interventions and self-care techniques. In order to do so, the dental assistant must be cognizant of educational techniques to assess, plan, implement, and evaluate effective preventive programs.

Sub-task 20.01: Provides Oral Self-Care Information and Instruction

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (4,041) is 3.7 which indicates that this sub-task is commonly performed on a somewhat regular basis. Approximately 49% of the respondents (1,972) reported that they perform this sub-task daily while 7% (276) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

20.01.01 Knowledge of products and techniques for oral health self-care.

- **20.01.02** Knowledge of product availability.
- **20.01.03** Knowledge of oral pathology.
- **20.01.04** Knowledge of links between oral health and general health and wellness.
- 20.01.05 Knowledge of care for fixed and removable appliances.

20.01.06 Ability to instruct the patient in fixed and removable appliance and prosthesis care.

- **20.01.07** Ability to recommend and demonstrate to the patient oral self care techniques and products.
- 20.01.08 Ability to identify and discuss patient's oral health priorities.

Block E Oral Health Education and Promotion

Sub-task 20.02: Advises Patient of Factors Affecting Oral Health

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (4,037) is 3.7 which indicates that this sub-task is commonly performed on a somewhat regular basis. Approximately 49% of the respondents (1,960) reported that they perform this sub-task daily while 8% (308) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

20.02.01 Knowledge of strategies to reduce oral health risk.

- **20.02.02** Ability to relate symptoms resulting from lifestyle choices, oral habits, and environmental and human conditions.
- 20.02.03 Ability to guide patient towards appropriate interventions.

Sub-task 20.03: Provides Dietary Counselling

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,934) is 2.6 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 23% of the respondents (885) reported that they perform this sub-task daily while 29% (1,152) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

20.03.01 Knowledge of basic principles of dietary counselling as it pertains to oral health.

20.03.02 Knowledge of patient's level of comprehension and oral health awareness.

20.03.03 Knowledge of relationship between diet and oral health.

20.03.04 Knowledge of the Canada's Food Guide.

20.03.05 Ability to relate patient's dietary habits to their oral health.

20.03.06 Ability to provide dietary counselling.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (3,556) is 3.6 which indicates that the risk (consequences) for safety, quality, and/or liability is moderate to high if the above sub-tasks are performed below an accepted standard. Approximately 53% of the respondents (1,895) rated the risk as high or extremely high.



Task 21 Participates in Community Oral Health Programs

Context Statement:

Dental Assistants who are employed in a community health setting strive to promote, protect, and maintain oral health and prevent dental disease to enhance the overall health and wellbeing of the population. They primarily work with the residents of their communities who have the greatest unmet dental needs such as children, the elderly, the poor, the institutionalized, the geographically isolated, and the physically and mentally compromised. They may provide preventive oral health services, provide statistics, organize health promotion projects, provide dental education, or advocate for marginalized populations.

Note on the Frequency of Practice results for the sub-tasks under Task 21

The 2019 NOA survey included a screening question for Task 21 that asked respondents to confirm if they participated in community oral health programs (i.e. routinely or otherwise). Of the 4,223 respondents that responded to this question, 15% (648) confirmed that they participated in community oral health programs (one or more skills) while 85% (3,575) confirmed that they did not. The Frequency of Practice results for the sub-tasks under Task 21 are specific to the group of respondents (648) that confirmed they participated in community oral health programs. The following table shows the breakdown of respondents by work setting.

NOTE: It's important to recognize that the sample size for some of the private practice work settings is small (e.g. less than 30 respondents confirmed that they performed the sub-task and reported on the frequency). Caution should be used when interpreting the frequency figures presented in the corresponding graphs where the sample size is small.

Primary Work Setting	Do you parti programs	cipate in commur (i.e. routinely or	nity oral health otherwise)?
	Yes	No	Total
Private Practice – General Dentistry	390	2629	3019
Private Practice – Prosthodontic	5	32	37
Private Practice – Orthodontic	31	296	327
Private Practice – Periodontic	9	96	105
Private Practice – Oral Surgery	7	110	117
Private Practice – Endodontic	3	59	62
Private Practice – Pediatric Dentistry	22	85	107
Community / Public Health	108	24	132
Hospital	9	40	49
Educational Facility	37	67	104
Department of National Defence	7	60	67
Other ^a	20	77	97
All respondents	648	3575	4223

a 'Other' includes denture clinics, dental labs, oral medicine, mobile dental labs, corporate dental services, nonprofit services, representatives with provincial regulators or associations, representatives with dental supply companies, other government representatives.

Sub-task 21.01: Delivers Community Oral Health Programs

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (618) is 2.3 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 13% of the respondents (81) reported that they perform this sub-task daily while 24% (149) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

- **21.01.01** Knowledge of basic principles of health promotions.
- **21.01.02** Knowledge of existing community oral health programs and promotions.
- **21.01.03** Ability to deliver and support community oral health programs.
- **21.01.04** Ability to counsel individuals/groups on oral health.
- 21.01.05 Ability to assess program effectiveness.

Sub-task 21.02: Carries Out Oral Health Surveys and Screenings

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (587) is 2.1 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 12% of the respondents (72) reported that they perform this sub-task daily while 46% (267) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

21.02.01 Knowledge of survey data collection.

21.02.02 Knowledge of oral health data compilation, analysis, and interpretation.

21.02.03 Ability to collect survey data.

21.02.04 Ability to compile relevant data for analysis and interpretation.

Sub-task 21.03: Performs Screenings (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
No	No	No	No	No	No	Yes	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (577) is 1.9 which indicates that this sub-task is not commonly performed. Approximately 12% of the respondents (67) reported that they perform this sub-task daily while 59% (340) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

- **21.03.01** Knowledge of oral examination processes appropriate to community health assessment.
- **21.03.02** Ability to perform oral assessments.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (530) is 3.7 which indicates that the risk (consequences) for safety, quality, and/or liability is moderate to high if the above sub-tasks are performed below an accepted standard. Approximately 59% of the respondents (313) rated the risk as high or extremely high.



Block F Laboratory Procedures

Task 22 Fabricates Dental Models

Context Statement:

Dental assistants prepare study models for a variety of reasons, such as the fabrication of appliances and crowns. This involves mixing and pouring materials and finishing and trimming models. If external dental laboratories are involved, the dental assistant must ensure that the model, impression, or appliance is contaminant free and forwarded with complete instructions and patient identification.

Note on the Frequency of Practice results for the sub-tasks under Task 22

The 2019 NOA survey included a screening question for Task 22 that asked respondents to confirm if they fabricate dental models in their practice setting (i.e. routinely or otherwise). Of the 4,013 respondents that responded to this question, 74% (2,964) confirmed that they fabricate dental models (one or more skills) while 26% (1,049) confirmed that they did not. The Frequency of Practice results for the sub-tasks under Task 22 are specific to the group of respondents (2,964) that confirmed they fabricate dental models. The following table shows the breakdown of respondents by work setting.

NOTE: It's important to recognize that the sample size for some of the private practice work settings is small (e.g. less than 30 respondents confirmed that they performed the sub-task and reported on the frequency). Caution should be used when interpreting the frequency figures presented in the corresponding graphs where the sample size is small.

Primary Work Setting	Do you fabricate dental models in your practice setting (i.e. routinely or otherwise)?				
	Yes	No	Total		
Private Practice – General Dentistry	2371	589	2960		
Private Practice – Prosthodontic	28	7	35		
Private Practice – Orthodontic	206	116	322		
Private Practice – Periodontic	49	52	101		
Private Practice – Oral Surgery	54	57	111		
Private Practice – Endodontic	5	53	58		
Private Practice – Pediatric Dentistry	40	55	95		
Community / Public Health	22	19	41		
Hospital	31	16	47		
Educational Facility	58	36	94		
Department of National Defence	62	2	64		
Other ^a	38	47	85		
All respondents	2964	1049	4013		

a 'Other' includes denture clinics, dental labs, oral medicine, mobile dental labs, corporate dental services, nonprofit services, representatives with provincial regulators or associations, representatives with dental supply companies, other government representatives.

Sub-task 22.01: Pours Dental Models

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (2,967) is 3.8 which indicates that this sub-task is commonly performed on a somewhat regular basis. Approximately 37% of the respondents (1,094) reported that they perform this sub-task daily while only 1% (41) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

22.01.01 Knowledge of material used in the fabrication.

- **22.01.02** Knowledge of laboratory equipment for pouring impressions.
- 22.01.03 Knowledge of model pouring techniques.

22.01.04 Ability to prepare impression for pouring.

22.01.05 Ability to select material and model pouring techniques.

22.01.06 Ability to separate model from impression.

Sub-task 22.02: Trims Models

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (2,931) is 3.3 which indicates that this sub-task is commonly performed on an occasional basis. Approximately 28% of the respondents (811) reported that they perform this sub-task daily while 14% (420) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

22.02.01 Knowledge of laboratory equipment.

- **22.02.02** Knowledge of trimming angulations.
- **22.02.03** Knowledge of criteria for an acceptable model.

22.02.04 Ability to operate laboratory equipment.

22.02.05 Ability to trim models.

22.02.06 Ability to evaluate models.

Sub-task 22.03: Articulates Models

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes*	No	Yes	No	No	No	No	Yes	Yes	Yes

* Post graduate module required.

Frequency of Practice

The average rating across all survey respondents (2,812) is 1.7 which indicates that this sub-task is not commonly performed. Approximately 8% of the respondents (210) reported that they perform this sub-task daily while 66% (1,844) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

22.03.01 Knowledge of articulators.

22.03.02 Knowledge of face-bow placement on articulator

22.03.03 Ability to mount models on articulator.
Sub-task 22.04: Co-ordinates Laboratory Services

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The Frequency of Practice was not examined for this sub-task in the 2019 NOA survey as the Steering Committee determined that it was not a priority for review at this time.

Supporting Knowledge & Abilities

22.04.01 Knowledge of dental laboratory requirements.
22.04.02 Ability to prepare case contents for delivery to laboratory.
22.04.03 Ability to verify case contents on receipt from laboratory.
22.04.04 Ability to follow-up with laboratory.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (2,605) is 3.4 which indicates that the risk (consequences) for safety, quality, and/or liability is moderate to high if the above sub-tasks are performed below an accepted standard. Approximately 50% of the respondents (1,299) rated the risk as high or extremely high.



Task 23 Fabricates Trays, Fabricates Sports Guards/Retainers, and Repairs Appliances

Context Statement:

Dental assistants may be responsible for certain laboratory procedures. This may include mixing laboratory materials and using laboratory equipment to fabricate appliances such as trays. Repairs to dentures and appliances are normally performed in an external laboratory; however, minor repairs to dentures and appliances may be performed by the dental assistant.

Note on the Frequency of Practice results for the sub-tasks under Task 23

The 2019 NOA survey included a screening question for Task 23 that asked respondents to confirm if they fabricate trays and/or sports guards/retainers and repair appliances in their practice setting (i.e. routinely or otherwise). Of the 4,017 respondents that responded to this question, 56% (2,262) confirmed that they fabricate trays and/or sports guards/retainers and repair appliances (one or more skills) while 44% (1,755) confirmed that they did not. The Frequency of Practice results for the sub-tasks under Task 23 are specific to the group of respondents (2,262) that confirmed they fabricate trays and/or sports guards/retainers and repair appliances. The following table shows the breakdown of respondents by work setting.

NOTE: It's important to recognize that the sample size for some of the private practice work settings is small (e.g. less than 30 respondents confirmed that they performed the sub-task and reported on the frequency). Caution should be used when interpreting the frequency figures presented in the corresponding graphs where the sample size is small.

Primary Work Setting	Do you fabric guards / retaine	ate trays and/or f rs and/or repair a ng (i.e. routinely	abricate sports appliances in your or otherwise)?
	Yes	No	Total
Private Practice – General Dentistry	1806	1158	2964
Private Practice – Prosthodontic	20	15	35
Private Practice – Orthodontic	185	135	320
Private Practice – Periodontic	23	77	100
Private Practice – Oral Surgery	22	89	111
Private Practice – Endodontic	4	54	58
Private Practice – Pediatric Dentistry	26	68	94
Community / Public Health	15	26	41
Hospital	20	28	48
Educational Facility	52	42	94
Department of National Defence	55	12	67
Other ^a	34	51	85
All respondents	2262	1755	4017

a 'Other' includes denture clinics, dental labs, oral medicine, mobile dental labs, corporate dental services, nonprofit services, representatives with provincial regulators or associations, representatives with dental supply companies, other government representatives.

Sub-task 23.01: Fabricates Trays

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (2,200) is 2.8 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 12% of the respondents (261) reported that they perform this sub-task daily while 12% (272) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

- **23.01.01** Knowledge of functions and type of customs trays.
- **23.01.02** Knowledge of equipment and materials.
- **23.01.03** Knowledge of tray construction and fit.
- **23.01.05** Ability to operate laboratory equipment.
- 23.01.06 Ability to select and manipulate materials.
- 23.01.07 Ability to trim trays.

Sub-task 23.02: Removable Prosthesis and Repairs

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (2,087) is 1.5 which indicates that this sub-task is not commonly performed. Approximately 4% of the respondents (75) reported that they perform this sub-task daily while 73% (1,514) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

23.02.01 Knowledge of cleaning and polishing materials.

23.02.02 Knowledge of cleaning and polishing equipment.

23.02.03 Ability to clean and polish removable prosthesis.

23.02.04 Ability to select cleaning and polishing materials.

23.02.05 Ability to perform minor repairs on removable prosthesis.

Sub-task 23.03: Repairs Appliances

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	Yes*	Yes	Yes						

* Post graduate module required.

Frequency of Practice

The average rating across all survey respondents (2,114) is 1.5 which indicates that this sub-task is not commonly performed. Approximately 3% of the respondents (65) reported that they perform this sub-task daily while 73% (1,549) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

23.03.01 Knowledge of types of appliances and equipment.

23.03.02 Knowledge of appliance materials.

23.03.03 Ability to identify defective appliances.

23.03.04 Ability to select and manipulate materials.

23.03.05 Ability to operate equipment.

Sub-task 23.04: Fabricates Sports Guards

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (2,207) is 2.4 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 6% of the respondents (130) reported that they perform this sub-task daily while 18% (407) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

23.04.01 Knowledge of functions and types of sports guards.

23.04.02 Knowledge of equipment and materials.

23.04.03 Knowledge of sports guard fabrication techniques.

23.04.04 Knowledge of sports guard fitting.

23.04.05 Ability to operate equipment.

23.04.06 Ability to select and manipulate material.

23.04.07 Ability to trim sports guards.

Sub-task 23.05: Fabricates Retainers (NOT COMMON CORE)

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes	No	No	Yes	No	Yes	No	Yes	Yes	Yes

Frequency of Practice

The average rating across all survey respondents (2,160) is 2.0 which indicates that this sub-task is not commonly performed. Approximately 8% of the respondents (177) reported that they perform this sub-task daily while 47% (1,004) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

23.05.01 Knowledge of functions and types of retainers.

23.05.02 Knowledge of equipment and materials.

23.05.03 Knowledge of retainer fabrication techniques.

23.05.04 Knowledge of retainer fitting.

23.05.05 Ability to operate equipment according to manufacturer's instructions.

23.05.06 Ability to select and manipulate material.

23.05.07 Ability to trim retainers.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (1,989) is 3.6 which indicates that the risk (consequences) for safety, quality, and/or liability is moderate to high if the above sub-tasks are performed below an accepted standard. Approximately 57% of the respondents (1,138) rated the risk as high or extremely high.



Block G Equipment and Instrument Maintenance

Task 24 Performs Routine Maintenance of Equipment

Context Statement:

Dental assistants ensure the equipment is kept functioning at its optimum level. An important aspect of keeping equipment functioning is performing routine/preventive maintenance.

Note on the Frequency of Practice results for the sub-tasks under Task 24

The 2019 NOA survey included a screening question for Task 24 that asked respondents to confirm if they performed routine maintenance of equipment in their practice setting (i.e. routinely or otherwise). Of the 4,216 respondents that responded to this question, 82% (3,455) confirmed that they performed routine maintenance of equipment (one or more skills) while 18% (761) confirmed that they did not. The Frequency of Practice results for the sub-tasks under Task 24 are specific to the group of respondents (3,455) that confirmed they performed routine maintenance of equipment (one or more skills) while 18% (761) confirmed that they did not. The Frequency of Practice results for the sub-tasks under Task 24 are specific to the group of respondents (3,455) that confirmed they performed routine maintenance of equipment. The following table shows the breakdown of respondents by work setting.

NOTE: It's important to recognize that the sample size for some of the private practice work settings is small (e.g. less than 30 respondents confirmed that they performed the sub-task and reported on the frequency). Caution should be used when interpreting the frequency figures presented in the corresponding graphs where the sample size is small.

Primary Work Setting	Do you perfor your practice se	m maintenance c tting (i.e. routine	of equipment in ly or otherwise)?
	Yes	No	Total
Private Practice – General Dentistry	2545	472	3017
Private Practice – Prosthodontic	29	8	37
Private Practice – Orthodontic	222	102	324
Private Practice – Periodontic	85	19	104
Private Practice – Oral Surgery	93	25	118
Private Practice – Endodontic	59	3	62
Private Practice – Pediatric Dentistry	90	16	106
Community / Public Health	108	22	130
Hospital	34	15	49
Educational Facility	80	25	105
Department of National Defence	62	5	67
Other ^a	48	49	97
All respondents	3455	761	4216

a 'Other' includes denture clinics, dental labs, oral medicine, mobile dental labs, corporate dental services, nonprofit services, representatives with provincial regulators or associations, representatives with dental supply companies, other government representatives.

Sub-task 24.01: Lubricates Equipment

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,430) is 4.6 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 76% of the respondents (2,602) reported that they perform this sub-task daily while only 1% (49) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

24.01.01 Knowledge of operating characteristics of equipment.

24.01.02 Knowledge of lubrication requirements.

24.01.03 Knowledge of lubricants.

24.01.04 Knowledge of risks of improper use of materials.

24.01.05 Ability to follow manufacturer's preventive maintenance instructions.

24.01.06 Ability to select lubricants.

Sub-task 24.02: Cleans Equipment

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,441) is 4.7 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 83% of the respondents (2,868) reported that they perform this sub-task daily while less than one percent (11) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

24.02.01 Knowledge of cleaning materials.

24.02.02 Knowledge of manufacturer's cleaning instructions.

24.02.03 Knowledge of risks of cleaning materials.

24.02.04 Knowledge of Material Safety Data Sheets (MSDS).

24.02.05 Knowledge of frequency of cleaning.

24.02.06 Ability to apply cleaning products.

Sub-task 24.03: Performs Minor Equipment Repairs

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,342) is 2.6 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 15% of the respondents (485) reported that they perform this sub-task daily while 14% (480) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

24.03.01 Knowledge of optimal performance of equipment.

24.03.02 Knowledge of technical requirements of equipment.

24.03.03 Knowledge of equipment's warranties.

24.03.04 Knowledge of appropriate replacement parts.

24.03.05 Ability to follow manufacturer's instruction manuals.

24.03.06 Ability to recognize one's own limitations performing repairs.

24.03.07 Ability to pre-order parts as required.

Sub-task 24.04: Requests Technical Support

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,404) is 2.5 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 6% of the respondents (211) reported that they perform this sub-task daily while 3% (115) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

24.04.01 Knowledge of optimal performance of equipment.

24.04.02 Knowledge of technical requirements of equipment.

24.04.03 Knowledge of equipment's warranties.

24.04.04 Ability to select service provider.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (3,075) is 3.9 which indicates that the risk (consequences) for safety, quality, and/or liability is moderate to high if the above sub-tasks are performed below an accepted standard. Approximately 70% of the respondents (2,151) rated the risk as high or extremely high.



Task 25 Performs Routine Maintenance of Instruments

Context Statement:

Dental assistants use and are responsible for a wide variety of instruments. They must monitor the performance of the instruments to ensure that they continue to function efficiently and are well maintained.

Note on the Frequency of Practice results for the sub-tasks under Task 25

The 2019 NOA survey included a screening question for Task 25 that asked respondents to confirm if they performed routine maintenance of instruments in their practice setting (i.e. routinely or otherwise). Of the 4,216 respondents that responded to this question, 82% (3,455) confirmed that they performed routine maintenance of instruments (one or more skills) while 18% (761) confirmed that they did not. The Frequency of Practice results for the sub-tasks under Task 25 are specific to the group of respondents (3,455) that confirmed they performed routine maintenance of instruments they be shows the breakdown of respondents by work setting.

NOTE: It's important to recognize that the sample size for some of the private practice work settings is small (e.g. less than 30 respondents confirmed that they performed the sub-task and reported on the frequency). Caution should be used when interpreting the frequency figures presented in the corresponding graphs where the sample size is small.

Primary Work Setting	Do you perform maintenance of instruments in your practice setting (i.e. routinely or otherwise)?					
	Yes	No	Total			
Private Practice – General Dentistry	2545	472	3017			
Private Practice – Prosthodontic	29	8	37			
Private Practice – Orthodontic	222	102	324			
Private Practice – Periodontic	85	19	104			
Private Practice – Oral Surgery	93	25	118			
Private Practice – Endodontic	59	3	62			
Private Practice – Pediatric Dentistry	90	16	106			
Community / Public Health	108	22	130			
Hospital	34	15	49			
Educational Facility	80	25	105			
Department of National Defence	62	5	67			
Other ^a	48	49	97			
All respondents	3455	761	4216			

a 'Other' includes denture clinics, dental labs, oral medicine, mobile dental labs, corporate dental services, nonprofit services, representatives with provincial regulators or associations, representatives with dental supply companies, other government representatives.

Sub-task 25.01: Maintains Instruments

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,422) is 4.7 which indicates that this sub-task is commonly performed on a very regular basis. Approximately 85% of the respondents (2,906) reported that they perform this sub-task daily while only 1% (35) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

25.01.01 Knowledge of instrument sharpening techniques.

25.01.02 Knowledge of instrument storage.

25.01.03 Knowledge of contraindications of sterilization techniques.

25.01.04 Ability to sharpen instruments.

25.01.05 Ability to lubricate instruments.

25.01.06 Ability to handle and store sterilized instruments.

Sub-task 25.02: Performs Minor Instrument Repairs

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,306) is 2.3 which indicates that this sub-task is not commonly performed on a regular basis. Approximately 12% of the respondents (396) reported that they perform this sub-task daily while 25% (821) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

25.02.01 Knowledge of appropriate replacement parts.

25.02.02 Ability to follow manufacturer's instruction manuals.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (3,075) is 3.9 which indicates that the risk (consequences) for safety, quality, and/or liability is moderate to high if the above sub-tasks are performed below an accepted standard. Approximately 70% of the respondents (2,151) rated the risk as high or extremely high.



Block H Practice Management

Task 26 Adherence to Quality Assurance Protocols

Context Statement:

Dental assistants must implement and adhere to a variety of Quality Assurance (QA) programs to ensure office efficiencies and safe patient care. In some jurisdictions, government regulations mandate Quality Assurance audits, and the dental assistant must provide evidence of compliance.

Sub-task 26.01: Implements and Adheres to QA for Equipment Maintenance

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,793) is 3.9 which indicates that this sub-task is commonly performed on a somewhat regular basis. Approximately 56% of the respondents (2,139) reported that they perform this sub-task daily while 8% (309) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

26.01.01 Knowledge of manufacturers warranties.

26.01.02 Knowledge office equipment log.

26.01.03 Ability to monitor manufacturers' warranties.

26.01.04 Ability to record repairs and maintenance in equipment log.

178

Sub-task 26.02: Implements and Adheres to QA for Sterilization Process

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,890) is 4.4 which indicates that this sub-task is commonly performed on a regular basis. Approximately 75% of the respondents (2,912) reported that they perform this sub-task daily while 6% (213) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

26.02.01 Knowledge of technology used to monitor performance of sterilizers.

26.02.02 Knowledge of actions required following negative test outcomes.

26.02.03 Ability to monitor the performance of the sterilizers.

26.02.04 Ability to take appropriate corrective or investigative measures following negative test outcomes.

26.02.05 Ability to keep sterilization log.

Sub-task 26.03: Implements and Adheres to QA for Radiography

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,822) is 4.2 which indicates that this sub-task is commonly performed on a regular basis. Approximately 70% of the respondents (2,657) reported that they perform this sub-task daily while 8% (285) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

26.03.01 Knowledge of radiography equipment requirements.

26.03.02 Knowledge of QA tests for radiography equipment

26.03.03 Knowledge of QA test and resulting action required for unsatisfactory results.

26.03.04 Ability to interpret radiography equipment regulations.

26.03.05 Ability to perform QA tests.

26.03.06 Ability to interpret results of QA tests and take corrective actions.

Sub-task 26.04: Implements and Adheres to QA for Inventory Control

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,757) is 4.0 which indicates that this sub-task is commonly performed on a somewhat regular basis. Approximately 55% of the respondents (2,081) reported that they perform this sub-task daily while 9% (347) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

26.04.01 Knowledge of Workplace Hazardous Materials Information System (WHMIS).

26.04.02 Knowledge of expiration dates and impact on patient care

26.04.03 Knowledge of controlled and uncontrolled substances.

26.04.04 Ability to apply the principles of WHMIS.

26.04.05 Ability to control inventory to eliminate impact of expiration dates on patient care.

26.04.06 Ability to provide controlled and uncontrolled substances following legislated protocols.

Sub-task 26.05: Troubleshoots Equipment Problems

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Frequency of Practice

The average rating across all survey respondents (3,813) is 3.1 which indicates that this sub-task is commonly performed on an occasional basis. Approximately 30% of the respondents (1,139) reported that they perform this sub-task daily while 9% (337) reported that they never perform this sub-task.



Supporting Knowledge & Abilities

26.05.01 Knowledge of regular performance of equipment.

26.05.02 Knowledge of warranty details.

26.05.03 Ability to understand manufacturer's instructions.

26.05.04 Ability to recognize non-optimal performance.

26.05.05 Ability to know when to call for technical support.

26.05.06 Ability to keep maintenance log.

Risk to Safety, Quality and/or Liability

The average rating across all survey respondents (3,516) is 4.0 which indicates that the risk (consequences) for safety, quality, and/or liability is high if the above sub-tasks are performed below an accepted standard. Approximately 75% of the respondents (2,621) rated the risk as high or extremely high.



Task 27 Maintains Inventory

Note: The frequency of sub-task performance and the risk to safety, quality and/or liability were not examined for Task 27 in the 2019 NOA survey as the Steering Committee determined that it was not a priority for review at this time.

Context Statement:

Dental assistants maintain inventory by ensuring that office and dental supplies are accessible and available at all times. They may control inventory by monitoring and ordering supplies or by using the inventory maintenance services of dental supply companies. They must monitor expiry dates and rotate stock of perishable supplies as well as keep up-to-date with new products. In addition, they must label and store products according to provincial and federal hazardous material regulations.

Sub-task 27.01: Monitors Inventory

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

27.01.01 Knowledge of Workplace Hazardous Materials Information System (WHMIS).

27.01.02 Knowledge of inventory control systems.

27.01.03 Knowledge of supply organization.

27.01.04 Knowledge of inventory requirements.

27.01.05 Knowledge of expiry dates.

27.01.06 Knowledge of Material Safety Data Sheets (MSDS).

27.01.07 Ability to rotate stock.

27.01.08 Ability to set up inventory control system.

27.01.09 Ability to secure controlled and uncontrolled substances.

Sub-task 27.02: Orders Supplies

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

27.02.01 Knowledge of supply companies.

27.02.02 Knowledge of cost effective ordering.

27.02.03 Knowledge of office ordering protocol.

27.02.04 Knowledge of ordering procedure.

27.02.05 Knowledge of new and/or replacement products.

27.02.06 Ability to document orders.

Sub-task 27.03: Stocks and Replenishes Supplies

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

27.03.01 Knowledge of storage areas.

27.03.02 Knowledge of expiry dates.

27.03.03 Knowledge of supplies required.

27.03.04 Ability to organize supplies.

27.03.05 Ability to reconcile stock deliveries with order and invoice.

Task 28 Manages Patients' Files

Note: The frequency of sub-task performance and the risk to safety, quality and/or liability were not examined for Task 28 in the 2019 NOA survey as the Steering Committee determined that it was not a priority for review at this time.

Context Statement:

Dental assistants communicate with patients regarding appointments, scheduling, and treatment. They maintain patient records to ensure continuity and completeness of treatment. They also manage appointments so that the schedule is economically viable and time efficient. This ensures that the best use of time maximizes revenues and avoids financial losses for the practice.

Sub-task 28.01: Develops and Maintains Filing System

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

28.01.01 Knowledge of legislative requirements for archiving documents.

28.01.02 Knowledge of office filing systems.

28.01.03 Knowledge of privacy acts.

28.01.04 Ability to file records according to office protocol.

28.01.05 Ability to retrieve files.

28.01.06 Ability to archive files according to legislation.

Sub-task 28.02: Maintains Appointment Recall System

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

28.02.01 Knowledge of office recall system.

28.02.02 Knowledge of recall scheduling.

28.02.03 Knowledge of operator/operatory availability.

28.02.04 Ability to assess requests for emergency dental treatment.

28.02.05 Ability to adapt to changes in schedule.

28.02.06 Ability to coordinate recall treatments.

Sub-task 28.03: Collects Personal Information

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

28.03.01 Knowledge of privacy legislation.

28.03.02 Knowledge of recording and compiling information.

28.03.03 Ability to inform patient of importance of accurate personal information.

28.03.04 Ability to assure patient of confidentiality.

28.03.05 Ability to interpret and apply privacy legislation.

28.03.06 Ability to record/secure patient information.

Sub-task 28.04: Operates Computer System

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

28.04.01 Knowledge of computer system.

28.04.02 Knowledge of scheduling software.

28.04.03 Knowledge of occupational specific software.

28.04.04 Knowledge of availability of technical support.

28.04.05 Ability to use software applications.

28.04.06 Ability to contact technical support provider.

Sub-task 28.05: Schedules Appointments

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

28.05.01 Knowledge of scheduling system.

28.05.02 Knowledge of post-operative and continuing care.

28.05.03 Knowledge of dental procedures.

28.05.04 Ability to communicate with patient.

28.05.05 Ability to ask pertinent questions relating to post-treatment needs.

- **28.05.06** Ability to advise patient of their need to return to dental office for post-treatment analysis and/or continuing care.
- **28.05.07** Ability to inform patients of available emergency services including but not limited to on-call dentists and emergency facilities.

Task 29 Maintains Financial Records

Note: The frequency of sub-task performance and the risk to safety, quality and/or liability were not examined for Task 29 in the 2019 NOA survey as the Steering Committee determined that it was not a priority for review at this time.

Context Statement:

Dental assistants may be responsible for managing the dental practice finances. They may ascertain the methods of payment, process insurance claims, and be responsible for reconciling practice accounts.

Sub-task 29.01: Performs Billing and Receiving Activities

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

29.01.01 Knowledge of payment methods.

29.01.02 Knowledge of insurance billing procedures.

29.01.03 Knowledge of fee structure and codes.

29.01.04 Knowledge of accounting principles.

29.01.05 Ability to maintain accounts receivable records.

29.01.06 Ability to inform patient of late payment and cancellation policies.

29.01.07 Ability to explain payment requirements to patients.

29.01.08 Ability to record payments.

29.01.09 Ability to provide patient with payment options.

29.01.10 Ability to complete insurance forms.

29.01.11 Ability to record financial data.

29.01.12 Ability to generate invoices and claims.

29.01.13 Ability to reconcile payments with outstanding balance.

29.01.14 Ability to act on financial policies.

Sub-task 29.02: Maintains and Administers Accounts Payable Records

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

29.02.01 Knowledge of accounting principles.

29.02.02 Ability to maintain accounts payable records.

29.02.03 Ability to act on financial policies.

29.02.05 Ability to generate payments.

Sub-task 29.03: Maintain Daily Financial Records

Provincial Status

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC
Yes									

Supporting Knowledge & Abilities

29.03.01 Knowledge of financial record-keeping.

29.03.02 Knowledge of accounting principles.

29.03.02 Ability to balance cash/credits with daily activity.

29.03.03 Ability to assign billing to operator.

29.03.04 Ability to maintain cash float.

29.03.05 Ability to maintain daily records.

29.03.06 Ability to store cash securely.

29.03.07 Ability to process bank deposits.

5.0 Observations / Future Considerations

The NOA provides a timely profile of emerging trends in the dental assisting profession and serves an important role in informing training, curriculum development, accreditation of training programs, recruitment, performance improvement, career development, and the examination and credentialing of practitioners. It also represents an important resource for provincial regulators and can inform government regulation and policy development.

The national survey was modified from the 2014 version to focus on skills that the Steering Committee deemed a priority for review at this time. The modifications served to reduce the overall length of the survey and ultimately contributed to a much higher response rate than was previously achieved. Provincial organizations / regulatory authorities played an important role in promoting the survey to their membership which boosted participation.

The use of regional focus groups and key informant interviews were extremely valuable for gaining additional context and a fuller understanding of the survey results. These discussions also provided important insights into trends and issues facing the dental assisting profession. These discussions happened to coincide with the emergence of the COVID-19 pandemic and participants shared early observations on the impact of the pandemic on the dental assisting profession.

With respect to major findings, several key themes were identified and are summarized below.

Importance of Quality Assurance / Safe Practice Protocols

The NOA survey and focus groups revealed that dental assistants associate quality assurance with professionalism and confirmed that dental assistants take their responsibility seriously when it comes to implementing and following quality assurance protocols to ensure safe patient care. Indeed, focus group participants observed that the amount of time and attention that dental facilities have given to safe practice protocols has progressively improved over time and reported that attention to IPAC measures and public health guidelines has intensified further in the context of the COVID-19 pandemic. However, a number of factors were identified that can limit or undermine the ability of dental assistants to fulfil this responsibility:

- The adoption / implementation of standards and guidelines can vary depending on the workplace and some employers may not promote / prioritize safe practice protocols to the required / recommended level which can ultimately contribute to dental assistants adopting / internalizing a lower standard of practice.
- The subjectivity of the information / guidance provided by public health officials and/or regulatory bodies on safe practice protocols can potentially result in some procedures being prioritized over others (i.e. certain activities/procedures are required while others are recommended).

- In workplaces where the employer/dentist places an emphasis on maximizing the number of daily patients there is considerable pressure to work faster and do more which can cause dental assistants to shorten or modify some procedures in order to maintain the work pace expected in the facility.
- Relaxed hiring requirements in some provinces provides an opportunity for individuals with no prior IPAC training to be hired off the street and can potentially result in lower standards of practice in the workplace.
- Dental assistants have relatively little authority in the workplace which makes it challenging for them to effect change in the facility. Job security concerns and/or pressure from employers and/or co-workers may influence the way dental assistants react to situations where they are asked to perform skills that are outside their legal / recognized scope of practice and/or follow instructions that fall below best practice guidelines and standards.
- Dental assistants working in the un-regulated provinces (Ontario, Quebec and the Territories) are particularly vulnerable to being exploited as they lack the oversight of a regulatory authority providing public protection. These conditions overlay other existing stressful conditions experienced by oral healthcare providers (e.g. heavy workloads, performance pressure) that can impact their psychological health and their ability to provide high quality patient care if they are overly stressed.

Skills Under-utilization

The utilization of dental assistant skills can vary considerably from workplace to workplace and even within a particular work setting depending on the preferences / expectations of the individual dentist. Dental assistants may encounter scenarios where their skills are underutilized and some of the more common skills that are under-utilized (or at risk of being underutilized) typically occur during the middle of a procedure (e.g. matrices and wedges, liners, etching, impressions, sealant). Focus group participants identified a number of factors that can account for this including:

- The interest of the dentist to maintain a convenient / efficient workflow.
- The personal preference of the dentist to perform certain procedures.
- The lack of familiarity that the dentist/employer has with the legal scope of practice for dental assistants in their province.

Another factor that can account for skills underutilization is the use of street hires in private practices to perform RDA/CDA functions on a regular basis.

Inconsistencies in the legal scope of practice for dental assistants across Canada could also be contributing to misunderstandings around the tasks that dental assistants are trained / permitted to perform (e.g. trained dental assistants in Ontario are not permitted to perform

some of the skills that are taught in Ontario training institutions and trained dental assistants in Quebec are legally prohibited from doing many of the skills they have been trained in).

Opportunities for dental assistants to practice their full range of skills could be further impacted by the COVID-19 pandemic. With the heightened focus on IPAC standards and the introduction of new safe practice protocols, it has become less convenient for dentists to move between patients (e.g. doffing and donning personal protective equipment) which could result in dentists remaining with each patient throughout the entire procedure and personally completing more of the intermediate skills that they might normally delegate to the dental assistant.

Focus group participants commented on the need for greater dialogue and coordination between dentists and dental assistants in determining the most appropriate scope of practice for dental assistants. Dental assistants and educators also stressed the importance of regulating the profession in Ontario and Quebec to promote patient safety and reinforce the trust and confidence the public and the dental profession places in dental assistants.

Skills used in Select Jurisdictions and/or in Specialized Private Practices

The NOA survey revealed that a number of skills (sub-tasks) are performed very infrequently or not at all by a large majority of dental assistants (over 70% of the survey respondents). In some cases, the skills are only permitted in a small number of provinces and/or are more commonly performed in specialized private practices (e.g. Oral Surgery, Pediatric Dentistry, Prosthodontic, Orthodontic). Given that there continues to be a small proportion of dental assistants that perform these skills on a regular basis, it was determined that these skills should remain listed as occupational standards. These skills should be reviewed / monitored during the next iteration of the NOA to confirm the extent to which they are still being practiced. The sub-tasks are listed below and a detailed breakdown of the frequency of performance for these skills is provided in Appendix F of the report.

- Sub-task 9.03 Assists with Administration of Intravenous Sedation
- Sub-task 9.04 Assists with Administration of General Anaesthetic
- Sub-task 12.10 Prepares Face-bow Transfers
- Sub-task 12.13 Performs Coronal Whitening using Direct Application
- Sub-task 13.02 Adjusts Occlusion Following Pit and Fissure Sealant Application
- Sub-task 13.07 Performs Periodontal Screening
- Sub-task 13.08 Performs Limited Scaling Procedures
- Sub-task 15.06 Images and Fabricates Permanent Direct Restorations
- Sub-task 17.02 Removes Post-Surgical Dressings
- Sub-task 17.03 Removes Sutures
- Sub-task 23.02 Removable Prosthesis and Repairs
- Sub-task 23.03 Repairs Appliances

Changes in Technology

The NOA survey and focus groups confirmed that the adoption of digital technology (e.g. intraoral cameras, CAD/CAM systems, 3-D printing, digital radiography) continues to be a major trend affecting many areas of dentistry. However, it appears that analog systems / procedures are still widely used and remain relevant in the occupational standard.

Another on-going technology trend is the movement to computer-based practice and patient management records. With digital transmission replacing more traditional methods of information transfer, it's become increasingly important to be aware of and follow electronic information security standards to protect the confidentiality of patients.

Teledentistry is positioned to transform access to oral healthcare services for children, seniors, and other underserved populations in remote communities and those who face travel, physical mobility, and other barriers.⁵⁴ The value /utility of teledentistry is especially evident in the context of the COVID-19 pandemic.⁵⁵ Teledentistry involves the use of information and communication technologies to provide care remotely and enables dentists to serve a variety of dental care needs while avoiding close contact with patients. While not a replacement for physical dental examinations, dentists have found effective ways to utilize this technology to treat their patients (e.g. emergency patient evaluation, orthodontic consultations, oral health education, and remote care in nursing homes).⁵⁶ Teledentistry represents a new service area where dental assistants could potentially provide a supporting role.

Dental Assistant Training and Continuing Education

Dental assisting training programs are typically structured as short-term programs (e.g. 10 months) and the training covers a broad range of skills that are frequently used and also covered in the national exam. With on-going advances in dentistry technology and new products / materials, it's challenging for training institutions to account for every new innovation in the curriculum.

Dental assistants should anticipate some level of on-the-job training depending on the technology in use at their place of employment. They should also have an understanding that it's part of their responsibility to continue to advance their skills as they learn on-the-job and work alongside experienced staff in the workplace and through continuing education courses.

NOA survey and focus group participants confirmed that soft skills are important in the dental assisting profession (e.g. communication, interpersonal, critical thinking) for the purpose of

⁵⁴ Canadian Dental Association. January 10, 2019. https://oasisdiscussions.ca/2019/01/10/shaping-teledentistry-in-canada/

⁵⁵ For example, the Royal College of Dental Surgeons of Ontario recommended that, for the duration of the COVID-19 crisis, dentists should consider the use of teledentistry for the remote assessment, triage, and provision of dental care where possible and appropriate. COVID-19: Guidance for the Use of Teledentistry.

https://www.rcdso.org/en-ca/rcdso-members/2019-novel-coronavirus/covid-19---emergency-screening-of-dental-patients-using-teledentistry

⁵⁶ OralHealth - How COVID-19 Revealed the Value of Teledentistry. May 27, 2020.

https://www.oralhealthgroup.com/blogs/how-covid-19-revealed-the-value-of-teledentistry/

working with patients as well as working with other staff in the workplace. Training institutions cover soft skills as part of the curriculum and content has been expanded to include intercultural communication / cultural sensitivity and diversity training. As with technical skills, new graduates should have an understanding that it's their responsibility to continue to develop their soft skills as they gain work experience and participate in relevant continuing education courses.

With respect to continuing education requirements, focus group participants reported that requirements for dental assistants vary from province to province and the lack of conformity can lead to confusion. Participants indicated that it would be beneficial to have more continuing education opportunities in the following areas: implants, sedation, new infection prevention and control procedures, silver diamine fluoride.

AREAS FOR FUTURE CONSIDERATION

The thematic analysis of the feedback provided by the dental assistants that participated in this study revealed three key areas for future consideration including: **quality assurance, skills utilization**, and **education / training**. The points listed below reflect the viewpoints and suggestions brought forward by dental assistants.

Quality Assurance

The COVID-19 pandemic has profoundly impacted the dental profession in many ways and has brought greater attention to the important role of quality assurance standards in protecting and improving the public's health. Ideally, there should be a holistic view to promoting and implementing quality assurance protocols in the workplace (i.e. all staff should feel they have some level of responsibility for ensuring that safe practice protocols are adhered to).

- 1. Leading stakeholders should continue to define and monitor quality assurance as a shared commitment. Dental assistants feel that regulators in particular could play a key role here.
- 2. In light of the growing concerns about the possible spread of blood-borne diseases and the impact of emerging, highly contagious respiratory and other illnesses, consideration should be given to making it a requirement for all members of the oral healthcare team to have formal training in infection prevention and control protocols and for these protocols to be reviewed on a regular basis (e.g. annually or every two or three years).
- 3. As with other oral health professions, the governance of dental assisting falls under the provincial review of regulators. There are a number of different models under which the dental assisting profession in Canada is governed (e.g. the profession is regulated by the profession itself under provincial statute, the profession is regulated by an external body a dental college, there is a dental assisting association which delivers member services but there is no statute that regulates the profession, the profession is unregulated and

there is no dental assisting organization nor any formal regulation of the profession). Dental assisting remains an unregulated profession in Ontario, Quebec and the Territories and there are no requirements upon dentists to hire qualified assistants.

In the interest of public safety, efforts should continue to regulate the dental assisting profession in Ontario, Quebec and the Territories. As this transition takes place, CDAA should provide support to members as they navigate through the changes and NDAEB should work to ensure that integrated certification processes are in place.

4. NDAEB should continue with plans to regularly review and update the Domain Description for Dental Assisting to ensure a common standard for education in DA programs, and the certification process, in Canada.

Skills Utilization in the Workplace

Dental assistants are multi-skilled professionals but there continues to be considerable differences in the number/type of procedures permitted across jurisdictions which can create confusion in the workplace.

5. Canadian Dental Assisting Regulatory Authorities could consider consulting with relevant stakeholders to develop a common (or more consistent) scope of practice for the dental assisting profession across Canada. CDAA could support this process.

Education / Training

Educators have a relatively short period in which to train students (e.g. 10 months) and it's important for the curriculum to cover a broad range of skills that are used frequently including skills that are specifically covered in the national exam. With rapid advances occurring in new technology and procedures related to oral healthcare, it can be challenging for training institutions to keep pace with every change that's introduced to the workplace. Updating the curriculum can be a slow and sometimes costly process when it involves the introduction of new technology / equipment (i.e. obtaining authorization to alter the curriculum and securing funding for new equipment / resources can be a prolonged process).

- 6. Opportunities for dialogue and collaboration between dental schools and dental assistant training institutions should be encouraged and supported to ensure that the training curriculum focuses on the most relevant and legal skills needed by dental assistants.⁵⁷
- 7. To better enable student access to new and emerging technologies, opportunities to establish partnerships between training institutions and industry leaders should be encouraged.
- 8. Non-accredited programs should be encouraged include thorough IPAC training.

⁵⁷ This observation is consistent with the findings reported in the Ad Hoc Committee on Dental Auxiliaries Report. Department of National Health and Welfare. Canada. 1970. Wells, D.C.
- 9. With respect to continuing education, some course offerings are primarily focused on the role of the dentist and the role of the dental assistant has limited coverage. Relevant bodies engaged in developing and offering continuing education courses for oral healthcare providers should consider including content that is specifically targeted at dental assistants. A system of skills verification should be in place (e.g. examinations).
- 10. The work demands of dental assisting are both physical and psychological and these stressors have become more intense within the context of the COVID-19 pandemic (e.g. psychologic distress experienced as a result of providing direct patient care, vicarious trauma, quarantine or self-isolation). The impact of COVID-19 on the work environment reinforces the importance of equipping dental assistants with the necessary skills to build up resiliency to stress and establish coping strategies for stress and trauma.

Personal well-being / psychological first aid training should be included as part of the standard training curriculum and/or part of the continuing education / competency requirements for all oral healthcare professionals including dental assistants. An interprofessional approach should be used in all dental facilities to promote / support personal well being.

OTHER CONSIDERATIONS

Provincial scope of practice indicators are reviewed and updated every two years by provincial regulators. The most recent review was completed in 2018 and the 2020 review is currently in progress. The reader should be aware that some of the provincial indicators presented in this version of the NOA may not reflect current practice. The results of the 2020 review should be incorporated in the next version of the NOA.

Consultations on updates to the Canada Safety Procedures for the Use of Dental X-ray Equipment (Safety Code 30) are ongoing and should be reviewed when completing the next version of the NOA to ensure that the appropriate knowledge and skills are reflected in the relevant sections of the NOA.

CDAA should use the results of the NOA to inform discussions with Government of Canada to update the National Occupational Classification for the dental assisting profession.

Next Version of the NOA

The Steering Committee provided valuable input to the development of the survey tool and this process should be maintained for the next NOA. The changes made to the 2019 NOA survey contributed to a higher response rate in general and better representation from each provincial jurisdiction. Changes made to two metrics (frequency of task performance and risk assessment) provided meaningful results.

As part of the next NOA, the demographic questions in the NOA survey should be reviewed to determine if any additional level of detail might be helpful for interpreting the results. For

example, asking the respondents where they obtained their education / training (e.g. Canadian based institution vs. international institution).

Pilot-testing the survey with a small sample of dental assistants representing different areas of practice provided important feedback for finalizing the tool before it was fully deployed. The survey tool used for the next NOA should be pilot-tested if any substantial modifications are made.

The use of four regional virtual focus groups was an effective and efficient means of engaging with dental assistants and educators for the purpose of exploring additional questions that emerged from the analysis of the national survey data. This approach should be maintained for the next NOA and key informant interviews should be conducted with a small number of dental assistants and/or educators from any jurisdictions that are unable to participate in the focus groups.

Appendix A: NOA Steering Committee and Project Management

NOA Steering Committee:

Donna Selski	CDA/RDA, Chief Examiner (NDAEB Written Examination)
Dr. Elizabeth Constantinides	Canadian Dental Association (NDAEB Board representative)
Dianne Hennig	OStJ RDA MFR, Corporate Agent, Association of Alberta Dental Assistants (CDAA President and CDAA Board director)
Tammy Thomson	Curriculum Leader, Dental Assistance Program, Lester B. Pearson School Board (CDAA Board director and Past President of CDAA)
Susan Anholt	Executive Director/Registrar, Saskatchewan Dental Assistants' Association (CDARA Board representative)
Marina Crawford	Board of Director, Provincial Dental Board of Nova Scotia
April Slotsve	Deputy Registrar, College of Alberta Dental Assistants
Dr. Carolyn Hibbs	Executive Director, Ontario Dental Assistants Association
Paula Parsons	RDA, Newfoundland and Labrador Dental Board (NDAEB Board representative)
Carmen Sheridan	Researcher
Kelly Reilly	RDA, Private practice

NOA Project Management:

Stephen Grundy, Chief Administrative Officer/Registrar, NDAEB

National Dental Assisting Examining Board (NDAEB)

The NDAEB contributes to the health and public safety of Canadians through excellence in the examination and evaluation of dental assistants. Our mission is to assure that dental assistants have met the current national standard in the knowledge and skills required by Canadian regulatory authorities.

Through ongoing monitoring of current standards, practice, and assessment, we ensure our examinations are reliable, valid, and relevant.

Each year we assess over 2,000 Dental Assistants through examinations and evaluations offered in both official languages, and across Canada.

Our certificate,

- Enables Dental Assistants to apply for licensure and employment.
- Confirms to Regulators the competency of Dental Assistants applying for a license to enter, or return to, the workforce in their province.
- Signifies to Dentists that the Dental Assistant applying to work in their practice has the basic competencies to be safe, and contribute to the success of their team.
- Demonstrates to the public that the Dental Assistant caring for their oral health has the knowledge and skills necessary to be safe and competent.
- Provides Dental Assisting Programs with an objective measure of student competencies based on the current national domain for dental assisting
- Contributes to the protection of public safety in Canada

Stephanie Mullen-Kavanagh, Executive Director, CDAA

Canadian Dental Assistants' Association (CDAA)

The CDAA provides national leadership for the dental assisting profession furthering the interests of its Organizational Members and advocating from a dental assisting perspective on oral health issues having national impact.

A federation composed of provincial member associations, the CDAA has championed the interests of our provincial member associations and military members of the Royal Canadian Dental Corps for the past 75 years. We work to address issues of importance to the dental assisting profession in Canada; including topics such as labour mobility, occupational analysis and workplace health and safety. CDAA helps to advance awareness of the role of dental assistants in patient care and advocate for dental assistants through our three core values:

- 1. Advocacy and Policy Influence
- 2. Knowledge and Research, and
- 3. Capacity Building for our Organizational Members.

The CDAA ensures that, through our advocacy efforts, the work tasks and responsibilities of dental assistants are taken into account to improve patient care and safety as well as the dental assisting work environment. We also work with provincial regulators, industry partners and consult with government on projects and subjects of mutual interest and concern.

Appendix B: NOA Focus Group Participants and Key Informant Interviewees

A total of 46 dental assistants and related stakeholders including educators/instructors participated in the four regional focus groups and key informant interviews.

Atlantic Canada Focus Group

Sylvie Fortin-Bourque, New Brunswick Lynn Randell, Newfoundland and Labrador Angela O'Hanley, Nova Scotia Donna Frizzle-Rushton, Nova Scotia Melanie Smiley, Nova Scotia Michelle Fowler, Nova Scotia Nicole Whitehouse, Nova Scotia

Western Canada Focus Group

Corene Farrus, Alberta Donna Stasiuk, Alberta Lori Wild, Alberta Nadia Hinz, Alberta Ronaele Wynnyk, Alberta Agnes Arevalo, British Columbia Heidi Parisotto, British Columbia Ling Lo Yan, British Columbia Liza Mah, British Columbia Michele Rosko, British Columbia Penny McGregor, British Columbia Lois Bergs, Manitoba Lorrie Newton, Manitoba Michaela Kissova-Bouska, Manitoba Nina Lobb, Saskatchewan Robin McKay Ganshorn, Saskatchewan Stacy Lynnes, Saskatchewan

Ontario Focus Group

Ailsa Trottier Alicia Marshall Cami Knox Cathy Reginato Chantel Costa Ellen Edet Patricia Parsons Rebekah Mair Rhonda Hilker

Quebec Focus Group

Carmen Marina Pop Isabelle Chevrier Josée Aubin Lucie Martel Mélanie Pilon Mélodie Dubé Stéphanie Beaulieu-Côté Tammy Jean-Bart Valérie Beauchamp Véronique Gagnon Vicky Leboeuf

Key Informant Interviews

Key informant interviews were conducted with Angela MacFarlane (Prince Edward Island) and Jillian Zdebiak (Northwest Territories).

Appendix C: Map of Research Inputs / Methods / Outputs



2019 NOA for Dental Assisting in Canada - Research Project

Appendix D: 2019 NOA Survey Questionnaire

SECTION A: INTRODUCTORY QUESTIONS

1. Which of the following options best describes your current employment status?

- □ Working full-time single position
- □ Working part-time single position
- Working part-time 2 or more positions
 On maternity leave

 \Box Working full-time – 2 or more positions

- \Box On contract
- $\hfill\square$ Currently unemployed and looking for work
- □ Currently unemployed and not looking for work (*go to question 1a*)
- □ Retired (*go to question 1a*)
- □ Prefer not to answer
- Other, please specify: _____

1.a Although you're currently not working, your feedback is valuable to us and we want to provide you with the opportunity to share your views and observations on the changes taking place in the dental assisting profession.

You can do this by completing the full survey or a short version of the survey.

Note: if you choose to complete the full survey some of the questions may not be relevant to you given your current status and you can skip these questions.

Please indicate your preference below.

□ Full survey (go to question 2)

□ Short survey (go to question 2 and then skip to Section C)

2. Please select the setting that best describes your primary work-setting?

If not currently practicing, please reference the most recent year you practiced.

- $\hfill\square$ Private Practice General Dentistry $\hfill\square$ Community / Public Health
- □ Private Practice Prosthodontic □ Hospital

□ Private Practice – Orthodontic □ Educational Facility: Instructional (*go to Section C*)

- □ Private Practice Periodontic □ Educational Facility: Non-instructional (*go to Section C*)
- Private Practice Oral Surgery
 Private Practice Endodontic
- Dental Supply Company (go to Section C)
 Insurance Company (go to Section C)
- □ Private Practice Pediatric Dentistry

Other, please specify: _____

3. Approximately what percentage of your time is spent performing clinical activities (e.g. working chairside, sterilization, etc.)?

 \square None

□ 1 - 25% □ 26 - 50% □ 51 - 75% □ 76 - 100%

4. Approximately what percentage of your time is spent performing administration tasks (e.g. reception tasks, appointment scheduling, etc.)?

🗆 None

□ 1 − 25% □ 26 − 50% □ 51 − 75% □ 76 − 10

SECTION B: TASKS / ACTIVITIES PERFORMED BY DENTAL ASSISTANTS

The next series of questions focus on tasks / activities that dental assistants perform in the workplace. For each major task heading we've provided a brief context statement and we would like you to indicate how frequently you perform the corresponding sub-tasks/activities.

We also ask you to provide a general assessment of the importance of completing activities correctly from the standpoint of safety and quality and liability:

- Safety refers to preventing harm (physical, emotional or otherwise)
- Quality refers to using best practices in performing clinical and administrative procedures that lead to optimal patient outcomes
- Liability refers to the financial or legal responsibilities that arise from a negligent act or omission

As a starting point we'd like to examine Professionalism.

Context statement: Dental assistants must exhibit professionalism throughout all services and personal interactions and they need to remain current and ensure continuing competence in the services they provide.

5. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **demonstrating professionalism** in your workplace (e.g. use of interpersonal communication skills, maintaining professional competence, knowledge and application of code of ethics)?

□ Yes □ No

If yes, please elaborate on the changes / trends you've observed / experienced.

This section of the survey focuses on tasks / activities related to Treatment Support Procedures

Practicing Infection Prevention and Control

Context statement: Dental assistants must take particular care to ensure that the work areas, operatory, instruments, and equipment are either sterile or free of pathogens, and aseptic technique is maintained throughout procedures.

6. Please identify **how frequently** you perform each of the following tasks in your dental assisting practice.

		Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A. C ai	leans and Sterilizes Instruments nd Handpieces						
B. D Si	isinfects Equipment and urfaces						
C. W E	/ears Personal Protective quipment (PPE)						
D. Pl B	laces and Removes Protective arriers						
E. Co O W	ontrol the Growth of Micro- rganisms in Dental Unit /aterlines (DUWL)						
F. D	isposes of Hazardous Waste						
G. Fl	lushes and Drains Equipment						

7. If the tasks noted above are performed **below accepted standards**, the consequences for safety, quality and/or liability are:

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

Organizing Equipment and Supplies

Context statement: Dental assistants must review the patient's treatment record to determine the intended procedure, set up the chairside area to facilitate the process, and ensure that all instruments, equipment, and materials are available and ready for use.

8. Please identify **how frequently** you perform each of the following tasks in your dental assisting practice.

	Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A. Reviews Treatment Record						
B. Prepares Materials						
C. Prepares Instruments						
D. Prepares Equipment						

9. If the tasks noted above are performed **below accepted standards**, the consequences for safety, quality and/or liability are:

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

Initiates and Maintains Patient Records

Context statement: It is essential that relevant and important patient information be recorded accurately since this may form the basis for treatment. It is also important that the patient's rights are recognized and that privacy protocols are applied.

		Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A. Char Conc	ts Existing Intra/Extra Oral ditions						
B. Colle	ects Medical History						
C. Obta	ins Vital Signs						
D. Mon	itors Patient's Condition						

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

Provides Patient with Treatment Information

Context statement: Dental assistants communicate pre-treatment and post-treatment instructions to the patient. They explain the rationale, provide comprehensive detailed instructions, and explain potential implications of treatment in lay-language and ensure the patient has understood.

12. Please identify **how frequently** you perform each of the following tasks in your dental assisting practice.

		Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A.	Provides Pre-Treatment Instructions						
В.	Presents and Co-ordinates Treatment Options						
C.	Provides Post-Treatment Instructions						

13. If the tasks noted above are performed **below accepted standards**, the consequences for safety, quality and/or liability are:

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

Assists with Administration of Anaesthetics

Context statement: Dental assistants assist the operator with a variety of anaesthetic methods, including topical, local, and general anaesthetic. They also assist with the administration of conscious, intravenous, and general sedation.

14. Please identify **how frequently** you assist with performing each of the following tasks in your dental assisting practice.

	Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A. Administration of Topical and Local Anaesthetic						
 B. Administration of Sedation (oral and/or inhalation) 						
C. Administration of Intravenous Sedation						
D. Administration of General Anaesthetic						

15. If the tasks noted above are performed **below accepted standards**, the consequences for safety, guality and/or liability are:

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

Assists with General Dental Procedures

Context statement: Dental assistants proactively assist the operator with a variety of dental treatments such as anticipating the operator's need for instruments, equipment, and materials.

	Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A. Assists with Isolation Application and Removal						
 B. Maintains Visibility and Accessibility for Operator 						
C. Manipulates Materials						
D. Monitors Patient's Condition During Administration of Anaesthetic and Throughout Dental Treatment						

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

Assists with Dental Procedures

Context statement: Dental assistants proactively assist operators in a variety of dental procedures by applying the principles of two, four, and six-handed dentistry. They attend to the comfort and needs of both patient and operator by monitoring behaviours, anticipating instruments and materials, and providing irrigation, evacuation, and accessibility to the operative site.

18. Please identify **how frequently** you assist with performing each of the following tasks in your dental assisting practice.

	Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A. Operative / Restorative Procedures						
B. Oral Surgery Procedures						
C. Endodontic Procedures						
D. Periodontic Procedures						
E. Prosthodontic Procedures						
F. Paediatric Dental Procedures						
G. Orthodontic Procedures						
H. Implants procedures						

19. If the tasks noted above are performed **below accepted standards**, the consequences for safety, quality and/or liability are:

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

20. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **treatment support procedures** in your workplace (e.g. practicing infection control, organizing equipment and supplies, attending to patient comfort, maintaining patient records, providing patients with treatment information, assisting with administration of anaesthetics, assisting with general dental procedures, assisting with operative dentistry procedures)?

□ Yes □ No

If yes, please elaborate on the changes / trends you've observed / experienced.

This section of the survey focuses on tasks / activities related to Clinical Procedures.

Performs Intra-Oral Procedures

Context statement: Dental assistants may independently perform certain intra-oral procedures under the general direction of the dentist. To perform these skills dental assistants must have extensive knowledge of dental, oral, and head and neck anatomy and treatment.

21. Do you perform **intra-oral procedures** in your practice setting (i.e. routinely or otherwise)? □ Yes (continue to question 22) □ No (skip to question 24)

		Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A.	Performs Pulp Vitality Testing						
В.	Applies Topical Anaesthetics						
C.	Applies and Removes Isolation Material						
D.	Places Treatment Liners and Bases						
E.	Places and Removes Matrix Systems and Wedges						
F.	Applies Acid Etching and Cavity Bonding						
G.	Places Provisional / Temporary Restorations (e.g. IRM)						
H.	Takes Preliminary Impressions						
I.	Prepares Face-bow Transfers						
J.	Prepares Simple Bite Registrations						

K.	Performs Coronal Whitening using Bleaching Trays			
L.	Performs Coronal Whitening using Direct Application			

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

Performs Intra-Oral Preventive Procedures

Context statement: Dental assistants independently perform certain intra-oral preventive procedures under the direction of the dentist. To perform these skills, dental assistants must have extensive knowledge of oral and dental anatomy.

24. Do you perform **intra-oral preventive procedures** in your practice setting (i.e. routinely or otherwise)?

 \Box Yes (continue to question 25)

 \Box No (skip to question 27)

		Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A. A	pplies Pit and Fissure Sealants						
B. A a	djusts Occlusion Following Pit nd Fissure Sealant Application						
C. P	erforms Selective Coronal olishing						
D. A	pplies Anti-Cariogenic Agents						
E. A	pplies Desensitizing Agents						
F. A	pplies Disclosing Agents						
G. P	erforms Periodontal Screening						
H. P P	erforms Limited Scaling rocedures						

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

Performs Orthodontic Procedures

Context statement: Dental assistants may perform certain orthodontic procedures under the direction of the dentist. To perform these skills, dental assistants must have extensive knowledge of dental, oral, head and neck anatomy, and the physiology of tooth movement and contraindications of treatment as well as dental and skeletal malocclusions.

27. Have you taken formal **orthodontic** training?□ Yes (continue to question 28)□ No (skip to question 29)

28. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to performing orthodontic procedures?
Yes
No

If yes, please elaborate on the changes / trends you've observed / experienced.

Performs Prosthodontic Procedures

Context statement: Dental assistants perform prosthodontic procedures. They may fabricate and cement provisional prostheses and place and remove retraction cords under the direction of the dentist. To perform these skills dental assistants must have extensive knowledge of dental, oral, head and neck anatomy.

29. Do you perform **prosthodontic procedures** in your practice setting (i.e. routinely or otherwise)? □ Yes (continue to question 30) □ No (skip to question 32)

		Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A.	Fabricates and Places Direct Provisional Fixed Prostheses						
В.	Cements and Removes Direct Provisional Fixed Prosthesis						
C.	Places Retraction Cord						
D.	Removes Retraction Cord						

Ε.	Selects Moulds and Shades of Teeth			
F.	Images and Fabricates Permanent Direct Restorations			

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

Administers and/or Participates in Emergency Care

Context statement: Dental assistants must have the ability to recognize the signs and symptoms of distress and respond appropriately to emergency situations.

32. Please identify **how frequently** you perform each of the following tasks in your dental assisting practice.

		Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A.	Maintains Emergency Drugs, Supplies, and Equipment						
B.	Identifies and Assesses Medical Emergencies						

33. If the tasks noted above are performed **below accepted standards**, the consequences for safety, quality and/or liability are:

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

- 34. How frequently do you take re-training in first aid?
- □ Annually (every year)
- □ Every two years
- □ Every three years
- □ Every four years or more
- □ Not applicable / relevant in my position
- □ Other, please specify: _____

- 35. How frequently do you take re-training in CPR?
- □ Annually (every year)
- □ Every two years
- □ Every three years
- $\hfill\square$ Every four years or more
- □ Not applicable / relevant in my position
- □ Other, please specify: _____

Performs Post-Treatment Care

Context statement: Dental assistants provide certain post treatment care. This may include patient follow- up, monitoring patient's reactions and comfort, removal of dressings and sutures and instructions in self-care under the direction of the dentist.

36. Please identify **how frequently** you perform each of the following tasks in your dental assisting practice.

	Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A. Places Post-Surgical Dressings						
B. Removes Post-Surgical Dressings						
C. Removes Sutures						

37. If the tasks noted above are performed **below accepted standards**, the consequences for safety, quality and/or liability are:

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

38. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **clinical procedures** in your workplace (e.g. performing intra-oral restorative procedures, performing intro-oral preventive procedures, performing orthodontic procedures, performing prosthodontic procedures, administering and/or participating in emergency care, performing post-treatment care)?

□ Yes □ No

If yes, please elaborate on the changes / trends you've observed / experienced.

This section of the survey focuses on tasks / activities related to Radiography.

39. Do you perform any tasks / activities related to **Radiography** (e.g. producing radiographic images, process film/sensors, etc.)?

 \Box Yes (continue to question 40)

□ No (skip to Oral Health Education and Promotion – question 47)

Produces Radiographic images

Context statement: Dental assistants produce radiographs/images for diagnosis, treatment planning, and follow-up. They must prepare the patient for the procedure, ensure the equipment and materials are appropriate and certified for the intended procedure, apply principles of radiation hygiene, and protect themselves and the patient from undue exposure to radiation.

40. Do you **produce radiographic images** in your practice setting (i.e. routinely or otherwise)? □ Yes (continue to question 41) □ No (skip to question 43)

41. Please identify **how frequently** you perform each of the following tasks in your dental assisting practice.

		Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A.	Prepares Patient for Radiographic images						
В.	Selects Radiographic Imaging Technique						
C.	Protects Self from Exposure						
D.	Exposes Film/Sensor						

42. If the tasks noted above are performed **below accepted standards**, the consequences for safety, guality and/or liability are:

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

Processes Films/Sensors

Context statement: Dental assistants are responsible for processing exposed films/sensors using various methods. The dental assistant ensures that the radiographic image reflects the information necessary and is of sufficient diagnostic quality.

43. Do you **process films / sensors** in your practice setting (i.e. routinely or otherwise)? □ Yes (continue to question 44) □ No (skip to question 46)

	Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A. Processes Exposed Film/Sensors						

В.	Mounts and Labels Processed Radiographic Images			
C.	Evaluates Radiographic Images			
D.	Duplicates Radiographic Images			

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

46. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **radiography** in your workplace (e.g. producing radiographic images, processing films/sensors)?

□ Yes □ No

If yes, please elaborate on the changes / trends you've observed / experienced.

This section of the survey focuses on tasks / activities related to Oral Health Education and Promotion.

Counsels Patients on Oral Health

Context statement: Dental assistants provide patients with education on preventive dental care interventions and self-care techniques.

47. Please identify **how frequently** you perform each of the following tasks in your dental assisting practice.

	Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A. Provides Oral Self-Care Information and Instruction						
B. Advises Patient of Factors Affecting Oral Health						
C. Provides Dietary Counselling						

48. If the tasks noted above are performed **below accepted standards**, the consequences for safety, quality and/or liability are:

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

Participates in Community Oral Health Programs

Context statement: Dental Assistants who are employed in a community health setting strive to promote, protect, and maintain oral health and prevent dental disease to enhance the overall health and wellbeing of the population. They may provide preventive oral health services, provide statistics, organize health promotion projects, provide dental education, or advocate for marginalized populations.

49. Do you participate in community oral health programs (i.e. routinely or otherwise)?

□ Yes (continue to question 50)

 \Box No (skip to question 53)

50. Please identify **how frequently** you perform each of the following tasks in your dental assisting practice.

		Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A.	Delivers Community Oral Health Programs						
В.	Carries Out Oral Health Surveys and Screenings						
C.	Performs Screenings						

51. If the tasks noted above are performed **below accepted standards**, the consequences for safety, quality and/or liability are:

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

52. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **oral health education and promotion** in your workplace (e.g. counselling patients on oral health, participating in community oral health programs)? □ Yes □ No

If yes, please elaborate on the changes / trends you've observed / experienced.

This section of the survey focuses on tasks / activities related to Laboratory Procedures.

53. Do you perform any tasks / activities related to **Laboratory Procedures** (e.g. fabricating dental models, fabricating trays, fabricating sports guards / retainers, repairing appliances)?

□ Yes (continue to question 54)

□ No (skip to Equipment and Instrument Maintenance – question 61)

Fabricates Dental Models

Context statement: Dental assistants prepare study models for a variety of reasons, such as the fabrication of appliances and crowns. This involves mixing and pouring materials and finishing and trimming models. If external dental laboratories are involved, the dental assistant must ensure that the model, impression, or appliance is contaminant free and forwarded with complete instructions and patient identification.

54. Do you **fabricate dental models** in your practice setting (i.e. routinely or otherwise)? □ Yes (continue to question 55) □ No (skip to question 57)

55. Please identify **how frequently** you perform each of the following tasks in your dental assisting practice.

	Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A. Pours Dental Models						
B. Trims Models						
C. Articulates Models						

56. If the tasks noted above are performed **below accepted standards**, the consequences for safety, quality and/or liability are:

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

Fabricates Trays, Fabricates Sports Guards / Retainers, and Repairs Appliances

Context statement: Dental assistants may be responsible for certain laboratory procedures including mixing laboratory materials and using laboratory equipment to fabricate appliances such as trays. Repairs to dentures and appliances are normally performed in an external laboratory; however, minor repairs to dentures and appliances may be performed by the dental assistant.

57. Do you **fabricate trays and/or fabricate sports guards / retainers and/or repair appliances** in your practice setting (i.e. routinely or otherwise)?

□ Yes (continue to question 58) □ No (skip to question 60)

	Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A. Fabricates Trays						

B. Removable Prosthesis and Repairs			
C. Repairs Appliances			
D. Fabricates Sports Guards			
E. Fabricates Retainers			

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

60. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **laboratory procedures** in your workplace (e.g. fabricating dental models, and/or fabricate sports guards / retainers and/or repairing appliances)? Yes No

If yes, please elaborate on the changes / trends you've observed / experienced.

This section of the survey focuses on tasks / activities related to <u>Equipment and Instrument</u> <u>Maintenance</u>.

Performs Routine Maintenance of Equipment and Instruments

Context statement: Dental assistants ensure the equipment is kept functioning at its optimum level. An important aspect of keeping equipment functioning is performing routine/preventive maintenance.

61. Do you **perform maintenance of equipment and instruments** in your practice setting (i.e. routinely or otherwise)?

□ Yes (continue to question 62)

□ No (skip to question 65)

	Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A. Lubricates Equipment						
B. Cleans Equipment						
C. Performs Minor Equipment Repairs						
D. Requests Technical Support						

E.	Maintains Instruments			
F.	Performs Minor Instrument Repairs			

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

64. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **equipment and instrument maintenance** in your workplace (e.g. performing routine maintenance of equipment and instruments)?

□ Yes □ No

If yes, please elaborate on the changes / trends you've observed / experienced.

This section of the survey focuses on tasks / activities related to Practice Management.

Quality Assurance Protocols

Context statement: Dental assistants must implement and adhere to a variety of Quality Assurance (QA) programs to ensure office efficiencies and safe patient care (e.g. legislative, manufacturers recommendations, office policy).

	Never	Occasionally	Monthly	Weekly	Daily	Not relevant / applicable
A. Implements and Adheres to QA for Equipment Maintenance						
B. Implements and Adheres to QA for Sterilization Process						
C. Implements and Adheres to QA for Radiography						
D. Implements and Adheres to QA for Inventory Control						
E. Troubleshoots Equipment Problems						

Extremely low	Low	Moderate	High	Extremely high	Don't know	Not relevant / applicable

Please elaborate on your response if you feel you need to distinguish between different activities.

67. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **practice management** in your workplace (e.g. implementing and adhering to quality assurance protocols, maintaining inventory, managing patients' files, maintaining financial records)?

□ Yes □ No

If yes, please elaborate on the changes / trends you've observed / experienced.

Skip to Section D: Final Questions

SECTION C: QUESTIONS FOR EDUCATORS (INSTRUCTIONAL / NON-INSTRUCTIONAL) & THOSE WORKING IN A CORPORATE SETTING

Professionalism

68. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **demonstrating professionalism** in the dental assisting profession (e.g. use of interpersonal communication skills, maintaining professional competence, knowledge and application of code of ethics)?

□ Yes □ No

If yes, please elaborate on the changes / trends you've observed / experienced.

Treatment Support Procedures

69. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **treatment support procedures** in the dental assisting profession (e.g. practicing infection control, organizing equipment and supplies, attending to patient comfort, maintaining patient records, providing patients with treatment information, assisting with administration of anaesthetics, assisting with general dental procedures, assisting with operative dentistry procedures)?

□ Yes □ No

If yes, please elaborate on the changes / trends you've observed / experienced.

Clinical Procedures

70. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **clinical procedures** in the dental assisting profession (e.g. performing intra-oral restorative procedures, performing intro-oral preventive procedures, performing orthodontic procedures, performing prosthodontic procedures, administering and/or participating in emergency care, performing post-treatment care)?

□ Yes □ No

If yes, please elaborate on the changes / trends you've observed / experienced.

Radiography

71. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **radiography** in the dental assisting profession (e.g. producing radiographic images, processing films/sensors)?

□ Yes □ No

If yes, please elaborate on the changes / trends you've observed / experienced.

Oral Health Education and Promotion

72. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **oral health education and promotion** in the dental assisting profession (e.g. counselling patients on oral health, participating in community oral health programs)?

□ Yes □ No

If yes, please elaborate on the changes / trends you've observed / experienced.

Laboratory Procedures

73. Have you observed / experienced any important changes / trends (practice, technology, knowledge	зe				
and abilities) over the last few years as they relate to laboratory procedures in the dental assisting					
profession (e.g. fabricating dental models, fabricating and repairing appliances and trays)?					
□ Yes – please elaborate □ No					

Equipment and Instrument Maintenance

74. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **equipment and instrument maintenance** in the dental assisting profession (e.g. performing routine maintenance of equipment and instruments)? Yes No

If yes, please elaborate on the changes / trends you've observed / experienced.

Practice Management

75. Have you observed / experienced any important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to **practice management** in the dental assisting profession (e.g. implementing and adhering to quality assurance protocols, maintaining inventory, managing patients' files, maintaining financial records)?

□ Yes □ No

If yes, please elaborate on the changes / trends you've observed / experienced.

Go to Section D: Final Questions

SECTION D: FINAL QUESTIONS

76. Have you observed / experienced any other important changes / trends (practice, technology, knowledge and abilities) over the last few years as they relate to the dental assisting profession that you haven't already commented on in your previous responses?

□ Yes □ No

If yes, please elaborate on the changes / trends you've observed / experienced.

77. What personal attributes do you feel are the most important for enabling a Dental Assistant to succeed in their career? Please select what you consider to be the **top five** attributes from the following list.

Empathy / compassion
Self-motivated
Self-disciplined
Critical thinking
Honesty / integrity
Professionalism
□ Sense of responsibility and accountability
Other, please specify:

78. Are there any general comments that you would like to share on the importance of personal attributes / attitudes and their role in enabling an individual to succeed in the Dental Assistant profession?

The final few questions will help us to better understand the demographic composition of the practitioners that respond to the survey.

79. Do you have a NDAEB certificate?□ Yes□ No□ Not sure

80. In what province or territory do you practice / work the majority of hours? If not currently practicing, please reference the most recent year you practiced.

- □ British Columbia □ Nova Scotia
- □ Alberta □ Newfoundland and Labrador
- □ Saskatchewan □ Nunavut
- □ Manitoba □ Northwest Territories
- □ Ontario □ Yukon
- Quebec
- Outside Canada
 Not applicable
- □ New Brunswick
- Prince Edward Island

 81. Which of the following best describes the location of your primary place of work? If not currently practicing, please reference the most recent year you practiced. Large urban centre (over 1 million residents) Small city (25,000 to 99,999 residents) Prefer not to answer Other, please specify: 					
82. How many years hav	e you practiced as a der	ntal assistant?			
Less than 1 year	□ 11 to 15 year	S	□ 31 to 35 years		
1 to 2 years	🗆 16 to 20 year	S	more than 35 years		
I 3 to 5 years	🗆 21 to 25 year	S	Prefer not to answer		
□ 6 to 10 years	26 to 30 year	S	Not applicable		
83. Please indicate your	age.				
🗆 Under 25	🗆 40 to 44	🗆 60 to 64			
🗆 25 to 29	🗆 45 to 49	🗆 65 or older			
□ 30 to 34	🗆 50 to 54	\Box Prefer not to	answer		
□ 35 to 39	🗆 55 to 59				
84. What is the highest l	evel of education you h	ave completed?			
Dental assistant diploma		Associate degree			
Baccalaureate degreePhD		Master's deg	ree		
Prefer not to answer		□ Other, please	e specify:		

85. Do you have any final comments / observations that you would like to share on the changes / emerging trends and issues occurring in the Dental Assisting profession?

Thank you for participating in our survey for the 2019 National Occupational Analysis for Dental Assisting!

Appendix E: Essentials Skills and Personal Attributes

Essential Skills

The Government of Canada and other national and international agencies have identified and validated nine essential skills: Reading, Document Use, Oral Communication, Writing, Numeracy, Thinking Skills (e.g. problem solving, critical thinking, planning and organizing), Working with Others, Digital Technology (e.g. computer use) and Continuous Learning. These skills are used in nearly every occupation and throughout daily life in different ways. Essential skills are needed for work, learning and life. They provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change.

An Essential Skills Profile for dental assisting was completed as part of the 2007 NOA. The 2007 profile provides a definition for each of the nine essential skills along with corresponding examples relevant to dental assisting and it continues to remain current for understanding the essential skills used by dental assistants.

Personal Attributes

Personal attributes refer to generic characteristics that are desirable for individuals in an occupation. They are useful in describing the characteristics of an individual that is well suited for an occupation and can be used in recruiting for the occupation. They are typically framed as 'attitude' or 'life skills' attributes and are applicable across many of the dental assisting tasks / sub-tasks.

The 2019 NOA survey respondents were asked to identify the most important personal attributes for enabling a Dental Assistant to succeed in their career. Respondents were invited to select up to five (5) attributes from a pre-defined list of options or they could offer their own suggestions.

The top five (5) personal attributes most commonly identified include professionalism (80%), attention to detail (64%), sense of responsibility / accountability (60%), empathy / compassion (55%), and respectfulness (41%). Additional attributes that were identified by the survey respondents are listed in the table below.

During the focus group discussions, many of the participants confirmed the importance of communication and interpersonal skills for assessing and managing patient relations. Participants also spoke about the importance of being compassionate when working with patients and using communication skills to put the patient at ease.

Many of the participants emphasized the importance of being adaptable as dental assistants must be prepared to work in a variety of capacities (e.g. chairside, managing infection prevention and control, front desk / admissions) and adjust to the work preferences of the individual dentist/employer. They must also be prepared to keep up with new technology as it's introduced in the workplace and/or as they encounter it while moving between different facilities.

What personal attributes do you feel are the most important for enabling a Dental Assistant to succeed in their career? (n=4.458)	Number	Percent
Professionalism	3.555	79.7
Attention to detail	2,834	63.6
Sense of responsibility and accountability	2,687	60.3
Empathy / compassion	2,439	54.7
Respectfulness	1,839	41.3
Honesty / integrity	1,739	39.0
Critical thinking	1,619	36.3
Active listening	1,559	35.0
Collaborative / cooperative	1,465	32.9
Self-motivated	1,446	32.4
Flexibility	1,415	31.7
Ambition	989	22.2
Self-disciplined	783	17.6
Self-directed learning	779	17.5
Result-oriented	398	8.9

Appendix F: Skills used in Select Jurisdictions and/or Specialized Private Practices

The NOA survey revealed that a number of skills (sub-tasks) are performed very infrequently or not at all by a large majority of dental assistants (over 70% of the survey respondents). In some cases, the skills are only permitted in a small number of provinces and/or are more commonly performed in specialized private practices (e.g. Oral Surgery, Pediatric Dentistry, Prosthodontic, Orthodontic). Given that there continues to be a small proportion of dental assistants that perform these skills on a regular basis, it was determined that these skills should remain listed as occupational standards. These skills should be reviewed / monitored during the next iteration of the NOA to confirm the extent to which they remain relevant.

Over 80% of the survey respondents reported that they never perform the following sub-tasks:

- Sub-task 9.03 Assists with Administration of Intravenous Sedation
 - Dental assistants are permitted to perform this sub-task in all provinces / territories. It appears that a higher proportion of dental assistants working in Oral Surgery private practices and hospitals are performing this sub-task more frequently than dental assistants working in other practice settings.
- Sub-task 9.04 Assists with Administration of General Anaesthetic
 - Dental assistants are permitted to perform this sub-task in all provinces / territories. It appears that a higher proportion of dental assistants working in Oral Surgery and Pediatric Dentistry private practices as well as hospitals are performing this sub-task more frequently than dental assistants working in other practice settings.
- Sub-task 12.10 Prepares Face-bow Transfers
 - Dental assistants are permitted to perform this sub-task in only two provinces (AB, BC). It appears that a higher proportion of dental assistants working in Prosthodontic and Orthodontic private practices are performing this sub-task more frequently than dental assistants working in other practice settings.
- Sub-task 13.08 Performs Limited Scaling Procedures
 - Dental assistants are permitted to perform this sub-task in only three provinces (NB, MB, AB). This sub-task is performed very infrequently or not at all by a large majority of dental assistants across all areas of practice (i.e. General Dentistry and specialized private practices).

Over 75% of the survey respondents reported that they never perform the following sub-tasks:

- Sub-task 12.13 Performs Coronal Whitening using Direct Application
 - Dental assistants are permitted to perform this sub-task in numerous provinces (NB, ON, MB, SK, AB, BC). This sub-task is performed very infrequently or not at all by a large majority of dental assistants across all areas of practice (i.e. General Dentistry and specialized private practices).
- Sub-task 13.07 Performs Periodontal Screening
 - Dental assistants are permitted to perform this sub-task in only two provinces (NB, AB). It appears that a higher proportion of dental assistants working in Periodontic private practices are performing this sub-task more frequently than dental assistants working in other practice settings.

- Sub-task 15.06 Images and Fabricates Permanent Direct Restorations
 - Dental assistants are permitted to perform this sub-task in only three provinces (SK, AB, BC). This sub-task is performed very infrequently or not at all by a large majority of dental assistants across all areas of practice (i.e. General Dentistry and specialized private practices).

Over 70% of the survey respondents reported that they never perform the following sub-tasks:

- Sub-task 13.02 Adjusts Occlusion Following Pit and Fissure Sealant Application
 - Dental assistants are permitted to perform this sub-task in only two provinces (SK, AB, BC). This sub-task is performed very infrequently or not at all by a large majority of dental assistants across all areas of practice (i.e. General Dentistry and specialized private practices).
- Sub-task 17.02 Removes Post-Surgical Dressings
 - Dental assistants are permitted to perform this sub-task in several provinces (NL, SK, AB, BC). It appears that a higher proportion of dental assistants working in Oral Surgery and Periodontic private practices are performing this sub-task more frequently than dental assistants working in other practice settings.
- Sub-task 17.03 Removes Sutures
 - Dental assistants are permitted to perform this sub-task in numerous provinces (NL, NS, NB, MB, SK, AB, BC). It appears that a higher proportion of dental assistants working in Periodontic and Oral Surgery private practices are performing this sub-task more frequently than dental assistants working in other practice settings.
- Sub-task 23.02 Removable Prosthesis and Repairs
 - Dental assistants are permitted to perform this sub-task in all provinces / territories. This sub-task is performed very infrequently or not at all by a large majority of dental assistants across all areas of practice (i.e. General Dentistry and specialized private practices).
- Sub-task 23.03 Repairs Appliances
 - Dental assistants are permitted to perform this sub-task in all provinces / territories. This sub-task is performed very infrequently or not at all by a large majority of dental assistants across all areas of practice (i.e. General Dentistry and specialized private practices).

A detailed breakdown of the frequency of performance for the sub-tasks noted above is provided in the following tables.

Task 9 Assists with	Administration	of Anaesthetic
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Sub-task 9.03 Assists with Administration of Intravenous Sedation							
			Frequency of performance				Tatal
work setting		Never	Occasionally	Monthly	Weekly	Daily	lotal
Private Practice – General Dentistry	Number	2240	115	78	42	41	2516
	Percent	89.0%	4.6%	3.1%	1.7%	1.6%	100.0%
Private Practice – Prosthodontic	Number	24	1	1	0	0	26
	Percent	92.3%	3.8%	3.8%	0.0%	0.0%	100.0%
Private Practice – Orthodontic	Number	200	1	0	0	1	202
	Percent	99.0%	0.5%	0.0%	0.0%	0.5%	100.0%
Private Practice – Periodontic	Number	62	6	10	3	6	87
	Percent	71.3%	6.9%	11.5%	3.4%	6.9%	100.0%
Private Practice – Oral Surgery	Number	39	9	3	21	38	110
	Percent	35.5%	8.2%	2.7%	19.1%	34.5%	100.0%
Private Practice – Endodontic	Number	45	3	3	0	1	52
	Percent	86.5%	5.8%	5.8%	0.0%	1.9%	100.0%
Private Practice – Pediatric Dentistry	Number	74	6	2	4	2	88
	Percent	84.1%	6.8%	2.3%	4.5%	2.3%	100.0%
Community / Public Health	Number	79	2	0	0	1	82
	Percent	96.3%	2.4%	0.0%	0.0%	1.2%	100.0%
Hospital	Number	31	2	1	2	9	45
	Percent	68.9%	4.4%	2.2%	4.4%	20.0%	100.0%
Educational Facility	Number	56	11	4	1	2	74
	Percent	75.7%	14.9%	5.4%	1.4%	2.7%	100.0%
Department of National Defence	Number	44	4	1	4	1	54
	Percent	81.5%	7.4%	1.9%	7.4%	1.9%	100.0%
Other ^a	Number	47	6	3	2	2	60
	Percent	78.3%	10.0%	5.0%	3.3%	3.3%	100.0%
Total	Number	2941	166	106	79	104	3396
	Percent	86.6%	4.9%	3.1%	2.3%	3.1%	100.0%

Sub-task 9.04 Assists with Administration of General Anaesthetic							
Work setting			Frequency of performance				Total
work setting		Never	Occasionally	Monthly	Weekly	Daily	Total
Private Practice – General Dentistry	Number	2189	78	35	15	222	2539
	Percent	86.2%	3.1%	1.4%	0.6%	8.7%	100.0%
Private Practice – Prosthodontic	Number	23	1	2	0	1	27
	Percent	85.2%	3.7%	7.4%	0.0%	3.7%	100.0%
Private Practice – Orthodontic	Number	192	8	1	0	1	202
	Percent	95.0%	4.0%	0.5%	0.0%	0.5%	100.0%
Private Practice – Periodontic	Number	75	4	1	0	2	82
	Percent	91.5%	4.9%	1.2%	0.0%	2.4%	100.0%
Private Practice – Oral Surgery	Number	55	9	7	17	15	103
	Percent	53.4%	8.7%	6.8%	16.5%	14.6%	100.0%
Private Practice – Endodontic	Number	48	1	1	0	2	52
	Percent	92.3%	1.9%	1.9%	0.0%	3.8%	100.0%
Private Practice – Pediatric Dentistry	Number	50	14	9	16	2	91
	Percent	54.9%	15.4%	9.9%	17.6%	2.2%	100.0%
Community / Public Health	Number	79	1	0	0	4	84
	Percent	94.0%	1.2%	0.0%	0.0%	4.8%	100.0%
Hospital	Number	30	3	2	1	7	43
	Percent	69.8%	7.0%	4.7%	2.3%	16.3%	100.0%
Educational Facility	Number	65	7	0	1	1	74
	Percent	87.8%	9.5%	0.0%	1.4%	1.4%	100.0%
Department of National Defence	Number	49	2	0	1	3	55
	Percent	89.1%	3.6%	0.0%	1.8%	5.5%	100.0%
Other ^a	Number	51	1	2	1	6	61
	Percent	83.6%	1.6%	3.3%	1.6%	9.8%	100.0%
Total	Number	2906	129	60	52	266	3413
	Percent	85.1%	3.8%	1.8%	1.5%	7.8%	100.0%

Task 12 Performs Intra-Oral Procedures

Note: A general screening question was used in the survey to ask respondents if they perform intra-oral procedures in their practice setting (i.e. routinely or otherwise). Approximately 75% (3,198) reported that they did and 25% (1,052) reported that they did not.

Sub-task 12.10 Prepares Face-bow Transfers								
Mark action			Frequency of performance				Tatal	
work setting		Never	Occasionally	Monthly	Weekly	Daily	Total	
Private Practice – General Dentistry	Number	1709	209	27	51	66	2062	
	Percent	82.9%	10.1%	1.3%	2.5%	3.2%	100.0%	
Private Practice – Prosthodontic	Number	13	4	1	3	7	28	
	Percent	46.4%	14.3%	3.6%	10.7%	25.0%	100.0%	
Private Practice – Orthodontic	Number	129	25	4	1	13	172	
	Percent	75.0%	14.5%	2.3%	0.6%	7.6%	100.0%	
Private Practice – Periodontic	Number	42	4	0	0	1	47	
	Percent	89.4%	8.5%	0.0%	0.0%	2.1%	100.0%	
Private Practice – Oral Surgery	Number	39	12	1	2	1	55	
	Percent	70.9%	21.8%	1.8%	3.6%	1.8%	100.0%	
Private Practice – Endodontic	Number	35	1	0	0	0	36	
	Percent	97.2%	2.8%	0.0%	0.0%	0.0%	100.0%	
Private Practice – Pediatric Dentistry	Number	72	3	0	0	1	76	
	Percent	94.7%	3.9%	0.0%	0.0%	1.3%	100.0%	
Community / Public Health	Number	44	2	1	0	1	48	
	Percent	91.7%	4.2%	2.1%	0.0%	2.1%	100.0%	
Hospital	Number	29	4	1	1	1	36	
	Percent	80.6%	11.1%	2.8%	2.8%	2.8%	100.0%	
Educational Facility	Number	36	8	4	2	2	52	
	Percent	69.2%	15.4%	7.7%	3.8%	3.8%	100.0%	
Department of National Defence	Number	37	2	0	1	0	40	
	Percent	92.5%	5.0%	0.0%	2.5%	0.0%	100.0%	
Other ^a	Number	33	6	1	0	1	41	
	Percent	80.5%	14.6%	2.4%	0.0%	2.4%	100.0%	
Total	Number	2218	280	40	61	94	2693	
	Percent	82.4%	10.4%	1.5%	2.3%	3.5%	100.0%	

Sub-task 12.13 Performs Coronal Whitening using Direct Application							
Morely anothing			Frequency of performance				Tatal
work setting		Never	Occasionally	Monthly	Weekly	Daily	Total
Private Practice – General Dentistry	Number	1616	365	89	53	60	2183
	Percent	74.0%	16.7%	4.1%	2.4%	2.7%	100.0%
Private Practice – Prosthodontic	Number	23	2	0	0	0	25
	Percent	92.0%	8.0%	0.0%	0.0%	0.0%	100.0%
Private Practice – Orthodontic	Number	144	12	1	1	2	160
	Percent	90.0%	7.5%	0.6%	0.6%	1.3%	100.0%
Private Practice – Periodontic	Number	40	4	2	2	1	49
	Percent	81.6%	8.2%	4.1%	4.1%	2.0%	100.0%
Private Practice – Oral Surgery	Number	45	2	0	0	1	48
	Percent	93.8%	4.2%	0.0%	0.0%	2.1%	100.0%
Private Practice – Endodontic	Number	33	2	2	0	0	37
	Percent	89.2%	5.4%	5.4%	0.0%	0.0%	100.0%
Private Practice – Pediatric Dentistry	Number	72	5	1	1	0	79
	Percent	91.1%	6.3%	1.3%	1.3%	0.0%	100.0%
Community / Public Health	Number	46	3	0	1	0	50
	Percent	92.0%	6.0%	0.0%	2.0%	0.0%	100.0%
Hospital	Number	33	2	0	0	1	36
	Percent	91.7%	5.6%	0.0%	0.0%	2.8%	100.0%
Educational Facility	Number	34	7	2	3	4	50
	Percent	68.0%	14.0%	4.0%	6.0%	8.0%	100.0%
Department of National Defence	Number	38	1	0	0	0	39
	Percent	97.4%	2.6%	0.0%	0.0%	0.0%	100.0%
Other ^a	Number	27	9	2	3	2	43
	Percent	62.8%	20.9%	4.7%	7.0%	4.7%	100.0%
Total	Number	2151	414	99	64	71	2799
	Percent	76.8%	14.8%	3.5%	2.3%	2.5%	100.0%
Task 13 Performs Intra-Oral Preventive Procedures

Note: A general screening question was used in the survey to ask respondents if they perform intra-oral preventive procedures in their practice setting (i.e. routinely or otherwise). Approximately 63% (2,675) reported that they did and 37% (1,557) reported that they did not.

Sub-task 13.02 Adjusts Occlusion Following Pit and Fissure Sealant Application								
Work setting			Frequenc	cy of perform	nance		Total	
work setting		Never	Occasionally	Monthly	Weekly	Daily	TOLAT	
Private Practice – General Dentistry	Number	1418	418	50	87	76	2049	
	Percent	69.2%	20.4%	2.4%	4.2%	3.7%	100.0%	
Private Practice – Prosthodontic	Number	13	2	0	0	0	15	
	Percent	86.7%	13.3%	0.0%	0.0%	0.0%	100.0%	
Private Practice – Orthodontic	Number	81	7	0	2	1	91	
	Percent	89.0%	7.7%	0.0%	2.2%	1.1%	100.0%	
Private Practice – Periodontic	Number	32	2	0	2	1	37	
	Percent	86.5%	5.4%	0.0%	5.4%	2.7%	100.0%	
Private Practice – Oral Surgery	Number	16	3	1	1	0	21	
	Percent	76.2%	14.3%	4.8%	4.8%	0.0%	100.0%	
Private Practice – Endodontic	Number	9	3	0	0	0	12	
	Percent	75.0%	25.0%	0.0%	0.0%	0.0%	100.0%	
Private Practice – Pediatric Dentistry	Number	58	14	1	3	4	80	
	Percent	72.5%	17.5%	1.3%	3.8%	5.0%	100.0%	
Community / Public Health	Number	49	10	1	3	4	67	
	Percent	73.1%	14.9%	1.5%	4.5%	6.0%	100.0%	
Hospital	Number	24	4	0	0	2	30	
	Percent	80.0%	13.3%	0.0%	0.0%	6.7%	100.0%	
Educational Facility	Number	19	15	2	7	6	49	
	Percent	38.8%	30.6%	4.1%	14.3%	12.2%	100.0%	
Department of National Defence	Number	21	5	0	0	0	26	
	Percent	80.8%	19.2%	0.0%	0.0%	0.0%	100.0%	
Other ^a	Number	24	12	0	1	2	39	
	Percent	61.5%	30.8%	0.0%	2.6%	5.1%	100.0%	
Total	Number	1764	495	55	106	96	2516	
	Percent	70.1%	19.7%	2.2%	4.2%	3.8%	100.0%	

Sub-task 13.07 Performs Periodontal Screening									
Morely anothing			Frequenc	cy of perform	nance		Tatal		
work setting		Never	Occasionally	Monthly	Weekly	Daily	Total		
Private Practice – General Dentistry	Number	1586	227	24	45	102	1984		
	Percent	79.9%	11.4%	1.2%	2.3%	5.1%	100.0%		
Private Practice – Prosthodontic	Number	13	2	0	0	0	15		
	Percent	86.7%	13.3%	0.0%	0.0%	0.0%	100.0%		
Private Practice – Orthodontic	Number	74	7	0	2	8	91		
	Percent	81.3%	7.7%	0.0%	2.2%	8.8%	100.0%		
Private Practice – Periodontic	Number	20	8	0	4	23	55		
	Percent	36.4%	14.5%	0.0%	7.3%	41.8%	100.0%		
Private Practice – Oral Surgery	Number	16	3	0	1	0	20		
	Percent	80.0%	15.0%	0.0%	5.0%	0.0%	100.0%		
Private Practice – Endodontic	Number	10	2	0	0	0	12		
	Percent	83.3%	16.7%	0.0%	0.0%	0.0%	100.0%		
Private Practice – Pediatric Dentistry	Number	64	8	0	0	2	74		
	Percent	86.5%	10.8%	0.0%	0.0%	2.7%	100.0%		
Community / Public Health	Number	43	7	0	3	3	56		
	Percent	76.8%	12.5%	0.0%	5.4%	5.4%	100.0%		
Hospital	Number	21	4	0	1	2	28		
	Percent	75.0%	14.3%	0.0%	3.6%	7.1%	100.0%		
Educational Facility	Number	31	6	0	2	6	45		
	Percent	68.9%	13.3%	0.0%	4.4%	13.3%	100.0%		
Department of National Defence	Number	25	1	1	1	1	29		
	Percent	86.2%	3.4%	3.4%	3.4%	3.4%	100.0%		
Other ^a	Number	25	6	0	1	2	34		
	Percent	73.5%	17.6%	0.0%	2.9%	5.9%	100.0%		
Total	Number	1928	281	25	60	149	2443		
	Percent	78.9%	11.5%	1.0%	2.5%	6.1%	100.0%		

Sub-task 13.08 Performs Limited Scaling Procedures									
More esting			Frequenc	cy of perform	nance		Tatal		
work setting		Never	Occasionally	Monthly	Weekly	Daily	Total		
Private Practice – General Dentistry	Number	1776	102	9	28	68	1983		
	Percent	89.6%	5.1%	0.5%	1.4%	3.4%	100.0%		
Private Practice – Prosthodontic	Number	12	3	0	0	0	15		
	Percent	80.0%	20.0%	0.0%	0.0%	0.0%	100.0%		
Private Practice – Orthodontic	Number	79	12	0	2	5	98		
	Percent	80.6%	12.2%	0.0%	2.0%	5.1%	100.0%		
Private Practice – Periodontic	Number	41	1	1	0	6	49		
	Percent	83.7%	2.0%	2.0%	0.0%	12.2%	100.0%		
Private Practice – Oral Surgery	Number	18	3	0	0	0	21		
	Percent	85.7%	14.3%	0.0%	0.0%	0.0%	100.0%		
Private Practice – Endodontic	Number	10	2	0	0	0	12		
	Percent	83.3%	16.7%	0.0%	0.0%	0.0%	100.0%		
Private Practice – Pediatric Dentistry	Number	67	5	1	0	7	80		
	Percent	83.8%	6.3%	1.3%	0.0%	8.8%	100.0%		
Community / Public Health	Number	53	2	0	1	1	57		
	Percent	93.0%	3.5%	0.0%	1.8%	1.8%	100.0%		
Hospital	Number	24	1	1	0	3	29		
	Percent	82.8%	3.4%	3.4%	0.0%	10.3%	100.0%		
Educational Facility	Number	35	3	0	1	1	40		
	Percent	87.5%	7.5%	0.0%	2.5%	2.5%	100.0%		
Department of National Defence	Number	28	0	0	0	1	29		
	Percent	96.6%	0.0%	0.0%	0.0%	3.4%	100.0%		
Other ^a	Number	30	3	0	0	1	34		
	Percent	88.2%	8.8%	0.0%	0.0%	2.9%	100.0%		
Total	Number	2173	137	12	32	93	2447		
	Percent	88.8%	5.6%	0.5%	1.3%	3.8%	100.0%		

Task 15 Performs Prosthodontic Procedures

Note: A general screening question was used in the survey to ask respondents if they perform prosthodontic procedures in their practice setting (i.e. routinely or otherwise). Approximately 39% (1,644) reported that they did and 61% (2,599) reported that they did not.

Sub-task 15.06 Images and Fabricates Permanent Direct Restorations									
More esting			Frequenc	cy of perform	nance		Tatal		
work setting		Never	Occasionally	Monthly	Weekly	Daily	Total		
Private Practice – General Dentistry	Number	1037	106	16	70	82	1311		
	Percent	79.1%	8.1%	1.2%	5.3%	6.3%	100.0%		
Private Practice – Prosthodontic	Number	19	1	0	1	4	25		
	Percent	76.0%	4.0%	0.0%	4.0%	16.0%	100.0%		
Private Practice – Orthodontic	Number	7	0	0	0	1	8		
	Percent	87.5%	0.0%	0.0%	0.0%	12.5%	100.0%		
Private Practice – Periodontic	Number	11	2	0	2	1	16		
	Percent	68.8%	12.5%	0.0%	12.5%	6.3%	100.0%		
Private Practice – Oral Surgery	Number	14	1	1	1	2	19		
	Percent	73.7%	5.3%	5.3%	5.3%	10.5%	100.0%		
Private Practice – Endodontic	Number	1	0	0	1	0	2		
	Percent	50.0%	0.0%	0.0%	50.0%	0.0%	100.0%		
Private Practice – Pediatric Dentistry	Number	7	2	0	0	0	9		
	Percent	77.8%	22.2%	0.0%	0.0%	0.0%	100.0%		
Community / Public Health	Number	13	4	0	1	0	18		
	Percent	72.2%	22.2%	0.0%	5.6%	0.0%	100.0%		
Hospital	Number	13	0	0	1	1	15		
	Percent	86.7%	0.0%	0.0%	6.7%	6.7%	100.0%		
Educational Facility	Number	25	4	1	1	6	37		
	Percent	67.6%	10.8%	2.7%	2.7%	16.2%	100.0%		
Department of National Defence	Number	36	2	0	0	0	38		
	Percent	94.7%	5.3%	0.0%	0.0%	0.0%	100.0%		
Other ^a	Number	20	4	1	1	0	26		
	Percent	76.9%	15.4%	3.8%	3.8%	0.0%	100.0%		
Total	Number	1203	126	19	79	97	1524		
	Percent	78.9%	8.3%	1.2%	5.2%	6.4%	100.0%		

Task 17 Performs Post Treatment Care

Sub-task 17.02 Removes Post-Surgical Dressings									
			Frequenc	cy of perform	nance		Tatal		
WORK Setting		Never	Occasionally	Monthly	Weekly	Daily	Total		
Private Practice – General Dentistry	Number	1982	499	44	141	140	2806		
	Percent	70.6%	17.8%	1.6%	5.0%	5.0%	100.0%		
Private Practice – Prosthodontic	Number	23	3	0	1	1	28		
	Percent	82.1%	10.7%	0.0%	3.6%	3.6%	100.0%		
Private Practice – Orthodontic	Number	170	14	0	1	1	186		
	Percent	91.4%	7.5%	0.0%	0.5%	0.5%	100.0%		
Private Practice – Periodontic	Number	50	13	2	13	20	98		
	Percent	51.0%	13.3%	2.0%	13.3%	20.4%	100.0%		
Private Practice – Oral Surgery	Number	53	21	0	4	26	104		
	Percent	51.0%	20.2%	0.0%	3.8%	25.0%	100.0%		
Private Practice – Endodontic	Number	45	8	0	2	0	55		
	Percent	81.8%	14.5%	0.0%	3.6%	0.0%	100.0%		
Private Practice – Pediatric Dentistry	Number	68	14	2	1	4	89		
	Percent	76.4%	15.7%	2.2%	1.1%	4.5%	100.0%		
Community / Public Health	Number	68	12	0	2	4	86		
	Percent	79.1%	14.0%	0.0%	2.3%	4.7%	100.0%		
Hospital	Number	28	11	0	1	4	44		
	Percent	63.6%	25.0%	0.0%	2.3%	9.1%	100.0%		
Educational Facility	Number	50	16	2	4	3	75		
	Percent	66.7%	21.3%	2.7%	5.3%	4.0%	100.0%		
Department of National Defence	Number	49	12	0	1	2	64		
	Percent	76.6%	18.8%	0.0%	1.6%	3.1%	100.0%		
Other ^a	Number	44	9	1	3	2	59		
	Percent	74.6%	15.3%	1.7%	5.1%	3.4%	100.0%		
Total	Number	2630	632	51	174	207	3694		
	Percent	71.2%	17.1%	1.4%	4.7%	5.6%	100.0%		

Sub-task 17.03 Removes Sutures									
More esting			Frequenc	cy of perform	nance		Tatal		
work setting		Never	Occasionally	Monthly	Weekly	Daily	Total		
Private Practice – General Dentistry	Number	1989	676	48	92	49	2854		
	Percent	69.7%	23.7%	1.7%	3.2%	1.7%	100.0%		
Private Practice – Prosthodontic	Number	15	9	1	3	2	30		
	Percent	50.0%	30.0%	3.3%	10.0%	6.7%	100.0%		
Private Practice – Orthodontic	Number	171	12	0	1	1	185		
	Percent	92.4%	6.5%	0.0%	0.5%	0.5%	100.0%		
Private Practice – Periodontic	Number	56	10	1	9	22	98		
	Percent	57.1%	10.2%	1.0%	9.2%	22.4%	100.0%		
Private Practice – Oral Surgery	Number	66	23	3	9	9	110		
	Percent	60.0%	20.9%	2.7%	8.2%	8.2%	100.0%		
Private Practice – Endodontic	Number	42	7	4	7	1	61		
	Percent	68.9%	11.5%	6.6%	11.5%	1.6%	100.0%		
Private Practice – Pediatric Dentistry	Number	74	17	0	0	0	91		
	Percent	81.3%	18.7%	0.0%	0.0%	0.0%	100.0%		
Community / Public Health	Number	73	12	2	0	2	89		
	Percent	82.0%	13.5%	2.2%	0.0%	2.2%	100.0%		
Hospital	Number	25	14	0	2	3	44		
	Percent	56.8%	31.8%	0.0%	4.5%	6.8%	100.0%		
Educational Facility	Number	44	26	1	3	4	78		
	Percent	56.4%	33.3%	1.3%	3.8%	5.1%	100.0%		
Department of National Defence	Number	44	19	0	1	1	65		
	Percent	67.7%	29.2%	0.0%	1.5%	1.5%	100.0%		
Other ^a	Number	40	15	2	4	1	62		
	Percent	64.5%	24.2%	3.2%	6.5%	1.6%	100.0%		
Total	Number	2639	840	62	131	95	3767		
	Percent	70.1%	22.3%	1.6%	3.5%	2.5%	100.0%		

Task 23 Fabricates Trays, Fabricates Sports Guards / Retainers, and Repair Appliances

Note: A screening question was used in the survey to ask respondents if they fabricate trays and/or fabricate sports guards / retainers and/or repair appliances in their practice setting (i.e. routinely or otherwise). Approximately 56% (2,262) reported that they did and 44% (1,755) reported that they did not.

Sub-task 23.02 Removable Prosthesis and Repairs										
More esting			Frequenc	cy of perform	nance		T - + - 1			
work setting		Never	Occasionally	Monthly	Weekly	Daily	lotal			
Private Practice – General Dentistry	Number	1225	267	65	91	63	1711			
	Percent	71.6%	15.6%	3.8%	5.3%	3.7%	100.0%			
Private Practice – Prosthodontic	Number	10	2	2	3	2	19			
	Percent	52.6%	10.5%	10.5%	15.8%	10.5%	100.0%			
Private Practice – Orthodontic	Number	121	11	1	1	4	138			
	Percent	87.7%	8.0%	0.7%	0.7%	2.9%	100.0%			
Private Practice – Periodontic	Number	10	6	1	0	2	19			
	Percent	52.6%	31.6%	5.3%	0.0%	10.5%	100.0%			
Private Practice – Oral Surgery	Number	16	2	0	2	0	20			
	Percent	80.0%	10.0%	0.0%	10.0%	0.0%	100.0%			
Private Practice – Endodontic	Number	3	1	0	0	0	4			
	Percent	75.0%	25.0%	0.0%	0.0%	0.0%	100.0%			
Private Practice – Pediatric Dentistry	Number	20	0	0	1	0	21			
	Percent	95.2%	0.0%	0.0%	4.8%	0.0%	100.0%			
Community / Public Health	Number	10	3	0	0	0	13			
	Percent	76.9%	23.1%	0.0%	0.0%	0.0%	100.0%			
Hospital	Number	14	2	0	2	2	20			
	Percent	70.0%	10.0%	0.0%	10.0%	10.0%	100.0%			
Educational Facility	Number	27	8	0	2	1	38			
	Percent	71.1%	21.1%	0.0%	5.3%	2.6%	100.0%			
Department of National Defence	Number	35	14	0	4	0	53			
	Percent	66.0%	26.4%	0.0%	7.5%	0.0%	100.0%			
Other ^a	Number	23	6	1	0	1	31			
	Percent	74.2%	19.4%	3.2%	0.0%	3.2%	100.0%			
Total	Number	1514	322	70	106	75	2087			
	Percent	72.5%	15.4%	3.4%	5.1%	3.6%	100.0%			

Sub-task 23.03 Repairs Appliances									
			Frequenc	cy of perform	nance		Tatal		
Work setting		Never	Occasionally	Monthly	Weekly	Daily	Total		
Private Practice – General Dentistry	Number	1290	281	49	57	39	1716		
	Percent	75.2%	16.4%	2.9%	3.3%	2.3%	100.0%		
Private Practice – Prosthodontic	Number	11	4	0	1	3	19		
	Percent	57.9%	21.1%	0.0%	5.3%	15.8%	100.0%		
Private Practice – Orthodontic	Number	91	35	3	12	18	159		
	Percent	57.2%	22.0%	1.9%	7.5%	11.3%	100.0%		
Private Practice – Periodontic	Number	13	7	0	0	1	21		
	Percent	61.9%	33.3%	0.0%	0.0%	4.8%	100.0%		
Private Practice – Oral Surgery	Number	19	0	0	1	0	20		
	Percent	95.0%	0.0%	0.0%	5.0%	0.0%	100.0%		
Private Practice – Endodontic	Number	3	1	0	0	0	4		
	Percent	75.0%	25.0%	0.0%	0.0%	0.0%	100.0%		
Private Practice – Pediatric Dentistry	Number	17	3	2	0	0	22		
	Percent	77.3%	13.6%	9.1%	0.0%	0.0%	100.0%		
Community / Public Health	Number	9	4	0	0	0	13		
	Percent	69.2%	30.8%	0.0%	0.0%	0.0%	100.0%		
Hospital	Number	12	5	0	2	1	20		
	Percent	60.0%	25.0%	0.0%	10.0%	5.0%	100.0%		
Educational Facility	Number	26	9	1	0	0	36		
	Percent	72.2%	25.0%	2.8%	0.0%	0.0%	100.0%		
Department of National Defence	Number	39	12	1	1	0	53		
	Percent	73.6%	22.6%	1.9%	1.9%	0.0%	100.0%		
Other ^a	Number	19	5	1	3	3	31		
	Percent	61.3%	16.1%	3.2%	9.7%	9.7%	100.0%		
Total	Number	1549	366	57	77	65	2114		
	Percent	73.3%	17.3%	2.7%	3.6%	3.1%	100.0%		