

National Dental Specialty Examination

Protocol

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Section 1 - General Examination Information

1.1 About the National Dental Specialty Examination (NDSE)

The purpose of the NDSE is to test entry-level competencies required of specialists. The NDSE covers general specialty knowledge including basic sciences, clinical diagnosis, and treatment planning. The level of knowledge required is consistent with Commission on Dental Accreditation of Canada requirements in each of the specialties.

The NDSE is a six-hour examination, delivered electronically, with one or more breaks. The number of questions and question values will vary depending on the specialty. Specifics for each dental specialty can be found in the corresponding parts of the protocol.

1.2 Examination Locations

The NDSE will be offered at test centres throughout Canada and the United States. There is no guarantee you will be able to take the examination in the city in which you are located. Space at examination centres may be limited and examination centre selection is on a first come first served basis.

1.3 Examination Preparation

1.3.1 Important Definitions

Differential Diagnosis: two or more likely diagnoses based on the information provided.

Emergency treatment: the urgent treatment required at this appointment for that specific clinical case.

Immediate management: the management required at that appointment for that specific clinical case.

Initial treatment: the first step in a more complex or comprehensive treatment or the first step in that specific clinical case.

 $\textbf{Investigations:} \ \textbf{all investigations for that specific clinical case, and may include}$

laboratory and clinical tests, radiographs, biopsies, etc.

Management: all patient centered therapies for that specific clinical case and may

include restorative, surgical, pharmacological, non-pharmacological treatments, nutritional therapies, education, counseling, monitoring, and follow-up.

Most appropriate: the most suitable correct answer for that specific clinical case.

Example: the most appropriate management.

Most likely: the most probable correct answer for that specific clinical case.

Example: the most likely diagnosis.

Next step: the next step you would take in the management of that specific clinical case.

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1.3.2 Examples of Formulations

Example of ONE treatment in the management of a specific clinical case

[Case history and periapical radiograph provided of tooth 2.6.]

Select ONE correct answer.

Which of the following is the most appropriate management of tooth 2.6?

- o Occlusal equilibration.
- o Non-surgical endodontic retreatment.
- o Surgical endodontic treatment (apicoectomy).
- o Extraction.
- o Observation and re-evaluation.
- o No treatment.

Example of ONE OR MORE treatments for the management of a specific clinical case

[case history, photograph and periapical radiograph of tooth 8.5.]

Select ONE OR MORE correct answers.

Which of the following is an appropriate management of tooth 8.5?

- o Indirect pulp capping.
- o Direct pulp capping.
- o Direct restoration.
- o Pulpotomy.
- o Pulpectomy.
- o Extraction.

In the question above, tooth 8.5 would receive a pulpotomy and a direct restoration.

Example of ONE OR MORE treatment options for the management of a specific clinical case

[case history, photograph and periapical radiograph of tooth 8.5.]

Select ONE OR MORE correct answers.

Which of the following is an appropriate management options of tooth 8.5?

o Indirect pulp capping.

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Direct restoration.
Pulpotomy.
Pulpectomy.
Extraction.
In the question above, tooth 8.5 would receive a pulpotomy and a direct restoration or could be extracted.

Example of ONE OR MORE diagnoses for a specific clinical case

[case history, photographs and radiographs]

Select ONE OR MORE correct answers.

Which of the following is the periodontal diagnoses?

o Clinical gingival health.

o Direct pulp capping.

- o Gingivitis.
- o Periodontitis.
- o Intact periodontium.
- o Reduced periodontium.
- o Non-periodontitis patient.
- o Stable periodontitis patient.

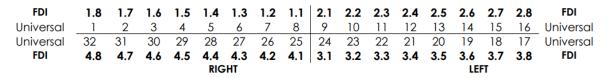
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1.3.3 Tooth Numbering System

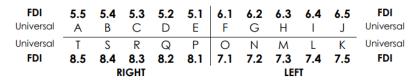
The FDI two-digit tooth numbering system is used in all examinations.

FDI / UNIVERSAL NUMBERING SYSTEM

PERMANENT DENTITION



PRIMARY DENTITION



1.4 NDSE Training Courses Statement

The RCDC is aware of third-party providers of test preparation courses. Be advised that the RCDC is not affiliated with, nor does it endorse any third-party providers of test preparation courses. The disclosure, distribution, solicitation and reconstruction of NDSE content is strictly prohibited, as is the use for commercial purposes of NDSE content, including the released examination material on the NDSE website.

1.5 Examination Confidentiality, Security, and Integrity

All NDSE content, including examination content, is the property of the RCDC. Unauthorized use, disclosure, reproduction, and publication of NDSE content is against the law and is strictly prohibited.

The RCDC has implemented security policies and measures to preserve the confidentiality and integrity of its examination content. These measures are in place to eliminate any unfair advantage among examinees and avoid the high costs associated with replacing compromised examination content.

1.6 Candidate Misconduct

All NDSE content, including examination content, is for personal use only. Any other use of NDSE content is strictly prohibited. Examples of prohibited use of RCDC content include but are not limited to receiving from or disclosing NDSE content, reproducing (through memorization or by any other means), and publishing any NDSE content in whole or in part. Conduct that compromises the confidentiality and integrity of the RCDC's processes and examinations will be investigated and is subject to the RCDC's policies and procedures regarding candidate misconduct.

More information can be found on the NDSE website in the Policies and Procedures.

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1.7 Examination Day Regulations

- Candidates must provide their confirmation of examination registration to the on-site registration staff.
- Bring a current, government-issued photo identification (ID) with signature (driver's license, immigration card, passport, U.S. passport card, state ID card, provincial driver's license, provincial ID card, or military ID card). You will NOT be admitted without proper identification. Candidates who fail to provide proper identification will be considered a no-show and could lead to a forfeiture of the examination fees.
- Original documents are required.
- Your first and last name on the confirmation notice must match the first and last name on your identification exactly.
- Nicknames are not acceptable.
- If you have more than one last name or a suffix listed on your government-issued photo ID, the same last names must be reflected on the confirmation notice.
- Presenting name change documentation (marriage license, etc.) at the testing center is not acceptable. Name change documentation must be submitted at least two (2) weeks prior to your testing appointment to the NDSE Administration staff if required.

1.7.1 General Instructions

- Cell phones are NOT permitted at the examination site. Any examination candidate with a cell
 phone in the examination room could be dismissed from the examination room immediately and
 denied re-entry.
- Smoking is NOT permitted at the exam site.
- Food and beverages are NOT allowed in the exam area.
- Personal items will NOT be allowed in the exam room and must be left outside of the exam room AT YOUR OWN RISK.
- Friends and relatives, including children, will NOT be allowed in the examination building.
- Please refrain from wearing colognes or perfumes as scents may disturb others in the testing center.
- Bring earplugs if you are sensitive to ambient noise. If you choose to bring earplugs, they will be subject to examination by the testing center staff.
- Computer-based testing facilities offer exam services to multiple agencies. There may be other individuals in the testing room with you who are sitting for examinations from different organizations. The rules for their examinations may be slightly different than the rules for your examination in terms of examination time and what is and is not allowed at their station.
- Computer-based tests are delivered via secure internet connections. Internet connections are
 subject to local internet providers. While it is not the norm, internet connections can, on occasion,
 be lost momentarily, requiring the proctor to log you back into your examination. If you lose your
 internet connection, inform the proctor, who will assist you in logging back into your examination.
 Upon logging back into your examination, you will resume at the first unanswered question. Your
 examination time remaining will be exactly the same as it was when the internet connection was
 lost.
- Candidates are strictly prohibited from attempting to access any outside information, programs, or websites while testing.

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1.7.2 Prohibited Items

Candidates are expressly prohibited from bringing the following items to the test site:

- Cameras, cell phones, optical readers, or other electronic devices that include the ability to photograph, photocopy, or otherwise copy test materials;
- Notes, books, dictionaries, or language dictionaries
- Bookbags or luggage;
- Purses or handbags;
- iPods, mp3 players, tablets, headphones, or pagers;
- Calculators, computers, PDAs, or other electronic devices with one or more memories;
- Personal writing utensils such as pencils, pens, and highlighters;
- Google and smart glasses (any glasses with electronics);
- Watches, smart devices, and other jewelry except wedding or engagement rings;
- Weapons;
- Medicine, including cough drops unless the candidate has an approved requirement as part of an accommodation
- Food and beverages; and
- Coats and jackets.
- Hats, hoods, or other headwear are not permitted in the examination room unless required for religious purposes.
- Please note that sweaters and sweatshirts without pockets or hoods are permitted to be worn.

1.7.3 Smart Glasses: Candidates wearing glasses may be asked to give them to the proctor for inspection. No glasses with electronics, even if they have prescription lenses, will be permitted in the examination room.

1.7.4 Exam Security: Exam security is a serious matter. In addition to leaving all personal items outside of the examination room, candidates may be asked to turn pockets inside out as well as show that nothing is hidden under shirt sleeves or in the hems of pant legs. Also note that most sites record testing sessions. Candidates caught with prohibited items in the examination room risk examination invalidation, disciplinary action, and/or legal liability. If the proctor determines that you have brought any prohibited items to the examination site, the items may be demanded and held by Meazure Learning testing staff. Meazure Learning reserves the right to review the memory of any electronic device to determine whether any test materials have been photographed or otherwise copied. If the review determines that any test materials are in the memory of any such device, Meazure Learning reserves the right to delete such materials and/or retain them for subsequent disciplinary action. Upon completion of the review and any applicable deletions, Meazure Learning will return your device to you but will not be responsible for the deletion of any materials that may result from the review, whether or not such materials are test materials. By bringing any such device into the test site in violation of Meazure Learning policies, you expressly waive

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any confidentiality or other similar rights with respect to your device, Meazure Learning's review of the memory of your device, and/or the deletion of any materials. Meazure Learning, the examination site, and the test administration staff are not liable for lost or damaged items brought to the examination site.

1.7.5 Important: The content, including each question, of this examination is the property of the test provider. The examination content is copyrighted and is strictly confidential information. You are strictly prohibited from retaining, copying, distributing, disclosing, discussing, possessing, or receiving any examination content, including even partial questions, by written, electronic, oral, or other form of communication. This includes, but is not limited to, emailing, copying, or printing of electronic files and reconstructing content through memorization and/or dictation before, during, or after the examination. Doing so may result in disciplinary action, assessment of monetary damages, and legal liability. By proceeding further with the examination process, you are acknowledging and agreeing that you understand these restrictions and the consequences if you break these restrictions.

If you have questions or concerns about security procedures at your test site, contact Meazure Learning immediately, before your exam date.

1.7.6 Environmental Distractions: Examination room temperature can be unpredictable; therefore, we suggest that you wear appropriate clothing (e.g., sweatshirt without pockets or a hood or other layered clothing) to help you adapt to a cooler or warmer climate in the examination room. Bring ear plugs if you are sensitive to noise. If you choose to bring earplugs, they will be subject to examination by the testing center staff.

1.8 Test Accommodations

Test accommodations are granted on an individual basis and are dependent on the nature and extent of the request, documentation provided, and requirements of the examination.

More information can be found on the NDSE website in the Policies and Procedures.

1.9 Exceptional Circumstances: Withdrawals, Compassionate Appeals, and Conduct of the Examination

1.9.1 Withdrawals

If, before the examination, you experience a serious medical circumstance or unanticipated exceptional circumstance beyond your control, you must withdraw from the examination. Notice of such a withdrawal should be provided in writing to the NDSE before the examination, if possible, but no later than seven days following the examination. If applicable, supporting documentation must accompany the submission.

More information can be found on the NDSE website in the Policies and Procedures.

1.9.2 Compassionate Appeals

If you believe you have been prevented from demonstrating your ability because of a serious medical circumstance or unanticipated medical circumstance during the examination, you can submit a compassionate appeal to have the results of the examination voided. Compassionate appeals must be submitted using the Compassionate Appeal Request Form within seven days of the examination.

More information can be found on the NDSE website in the Policies and Procedures.

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1.9.3 Conduct of an Examination

If, during the examination, you believe there may have been an irregularity or inconsistency in the conduct of the examination that prevented you from demonstrating your ability, it must be immediately reported to staff at the examination centre.

Should you want to submit an appeal based on the reported irregularity or inconsistency, it must be submitted in writing within seven days of the examination using the Appeal of the Conduct of an Examination Form.

More information can be found on the NDSE website in the Policies and Procedures.

1.10 Results

Results are normally released within 10 weeks of the examination. You will receive an email notification when your results are available in your online profile.

Results will not be released by telephone, mail, or fax.

1.10.1 Result Verification

If you are unsuccessful, you have 30 days to request a verification of your result.

Regrade: Examinees who have taken and failed may request re-evaluation of their score for the constructed responses only.

More information can be found on the NDSE website in the Policies and Procedures.

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NDSE Dental Public Health

Content

The NDSE in dental public health evaluates your knowledge of dental public health principles and public health issues.

Blueprint

Canadian specialists in dental public health are required to have broad knowledge and skills in the seven domains. The following blueprint shows the content areas and approximate percentage of questions (cases, topics, computer-based data analysis, and policy analysis) in each domain.

Dental Public Health Blueprint	Approximate % of questions
Assess community oral health status, needs, and resources	5-15%
Diagnose community oral health problems and identify the cause or strength of contributing factors	10-20%
Assess policies, strategies, programs, services, and devices that affect oral health and the provision of oral health services	15-25%
Plan activities or programs that would be worthwhile in improving oral health within the given ethical, legal, political, social, demographic, economic, and environmental context	10-20%
Manage oral health programs and human resources providing oral health care services, including conduct quality assurance programs and program evaluation.	5-15%
Assemble, synthesize, and communicate relevant, accurate and clear information that will enable individuals, families, communities, public and private health organizations, and government decision-makers to improve oral health	15-25%
Conduct education on and research into community oral health problems and services to assure a diverse and competent public oral health workforce and advancement of the specialty.	5-15%
Total	100%

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Format

The examination will consist of three, two-hour parts of equal weight:

Part 1 will be a data analysis of dental epidemiologic data provided in a format similar to what would be collected using World Health Organization. (2013). *Oral health surveys: Basic methods* (5th ed.). An IBM SPSS® Statistics software data set will be provided on a PC laptop computer with a standard mouse. Data analysis skills will be assessed through a series of short- and long- answer questions.

Part 2 will be a policy analysis of a dental public health topic. A series of long-answer questions will be provided to assess your ability to analyze information provided in a written document, and to write and defend appropriate options for oral health policies to address the problems identified in the document.

Part 3 will consist of a mix of single and multiple-answer multiple-choice questions, and constructed response questions covering basic dental epidemiological principles and dental public health issues in Canada.

Data Analysis

Sample Case and Questions

You have been provided with a database containing epidemiologic examination records of 1000 seniors aged > 65 years. Your assignment is to determine if the prevalence and severity of root caries are independently affected by age and the smoking status of the senior. The age of the senior is obvious; the codes for the smoking status of the senior and the status of the teeth are shown below.

Senior's smoking status:

Never smoked	00
Smoked occasionally, less than one pack per week	01
Smoked 2 - 4 packs per week	02
Smoked one pack per day	03
Smoked more than 2 packs per day	04
Quit smoking more than 10 years ago	05
No response	09

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00 = Sound, no root decay ever or	root n	not exposed
01 = Decayed root surface soft		
02 = Decayed root surface hard		
03 = Decayed root surface soft an	d exte	ends beyond line angles
04 = Root surface filled		
05 =Tooth missing due to caries		
06 =Tooth lost due to trauma, or co	ongen	itally absent
07 = Sound abutment tooth or spe	cial cr	own (e.g., trauma anteriors)
08 = Tooth to be lost due to caries	5	
What is the mean RCI for 65 and fo	or 70 y	rear old seniors? 2 points
Mean RCI for 65 year old seniors		
Mean RCI for 70 year old seniors		
What is an appropriate statistical in means is significant at the 95%		and the P-value of that test to determine if the difference dence level? 2 points
Name of test		
P-value =		

Root status codes:

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Policy Analysis

You will be required to write a policy analysis on a dental public health topic. The following template identifies what should be included in your policy analysis.

- 1. Provide a title for the policy analysis.
- 2. Describe the history, context, and scope of the problem.
- 3. List a minimum of 3 potential options. Briefly describe each option. State the advantages and disadvantages of each option.
- 4. Identify at least 2 stakeholder groups and their likely positions.
- 5. Recommend one policy option.
- 6. Briefly justify the recommended policy option. Explain why the other options are not recommended.
- 7. Discuss a monitoring and evaluation strategy if that policy option was implemented.
- 8. Provide a summary.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select ONE correct answer.".

Sample Question

Select ONE correct answer. 1 point

Which of the following is the most likely cause of cervical caries on the maxillary primary incisors in a 12 month old child?

- Lack of systemic fluoride.
- Poorly formed enamel.
- Lack of calcium during pregnancy.
- Excessive bottle use.

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One or more correct answers multiple-choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select ONE or MORE correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

Constructed-response questions

Sample	e Question
_	uish between a descriptive and an analytical study. Give one example of each type of 2 points

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Sample Question

Fluoridation has recently been challenged as a public health intervention by a small group of committed individuals who oppose the public health measure. What are 2 major objections raised by antifluoridationists? What is the scientific evidence that refutes each objection?

4 points

Objection	Evidence

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NDSE Endodontics

Content

The NDSE in endodontics evaluates your knowledge and clinical competence in endodontics at the specialty level.

Blueprint

Canadian specialists in endodontics are required to have broad knowledge and skills in eleven domains. The blueprint below shows the domains and the approximate percentage of questions covered by each domain.

Endodontics Blueprint	Approximate % of questions
Biomedical sciences: a comprehensive understanding and strong foundation in the following: anatomy, physiology, oral histology, oral pathology, oral histopathology, oral microbiology, immunology, biomaterials.	15-25%
Non-surgical root canal therapy: proficiency in the procedures and materials used in non-surgical endodontic treatment, such as instrumentation, cleaning, shaping, and obturation of root canals, as well as complications and their management.	15-25%
Surgical root canal therapy: principles and techniques of micro-endodontic apical surgery and other surgical interventions related to endodontic treatment. Demonstrating expertise in the procedures and materials/grafting used in surgical endodontic treatment, including the management of complications.	5-15%
Diagnosis, treatment planning, and patient management: accurate diagnoses and developing comprehensive treatment plans while considering the individual needs of patients. Emphasizing the holistic approach to patient care and effective management.	10-20%
Pharmacology: pain management, infection control and knowledge of pharmaceutical agents and their application in endodontic practice.	6-10%
Trauma: management of dento-alveolar injuries, including splinting, post-operative care, and follow-up protocols for patients who have experienced traumatic dental injuries.	5-9%
Anesthesia: knowledge of various anesthesia techniques, local anesthetics (including composition and pharmacological properties), and pain management in endodontics; patient comfort and safety through effective anesthesia is a key focus.	4-8%
Treatment of medically compromised patient: endodontic care to patients with various medical complexities. It involves understanding and addressing the unique needs and potential challenges posed by medically compromised patients.	2-6%

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Radiology: basic radiographic physics, various radiographic techniques, advanced imaging modalities like CBCT, error recognition/artifacts, and radiographic interpretation. The focus will be on the ability to interpret radiographic images accurately and utilize them effectively in diagnosis and treatment planning.	5-15%
Research methods: basics of research methodology, fundamental aspects of evidence-based endodontics, statistics, and their application in the field of endodontics.	0-4%
Miscellaneous topics (includes prosthodontics, periodontics, orthodontics, ethics, asepsis & sterilization, implantology): foundational understanding of these related areas, recognizing their potential relevance to endodontics and patient care.	2-6%
Total	100%

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Format

The examination will be administered in two, three-hour parts. The examination consists of a mix of single and multiple-answer multiple-choice questions that assess knowledge, application of knowledge, diagnosis, and clinical decision-making.

Question & Answer Formats

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select ONE correct answer."

Sample Question

Select ONE correct answer. 1 point

Which of the following antibiotics is CONTRAINDICATED for a patient with a history of a Type 1 anaphylactic reaction to penicillin?

Azithromycin.

Cephalexin.

Clindamycin.

Erythromycin.

One or more correct answers multiple-choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE OR MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

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Additional question information

Case-based Questions

Multiple-choice questions may have an associated scenario and may contain radiographs, photographs, and charts.

Sample Case

A healthy 15 year old patient presents complaining of spontaneous pain in the posterior right mandible. The pain is aggravated by cold.



Photographs/Radiographs

		Tooth 1.6		Tooth 1.5			Tooth 1.4			
Duching	Buccal	3	1	3	3	2	3	2	2	1
Probing	Lingual	3	2	2	2	2	3	1	2	1
Mob	ility		WNL			WNL		WNL		
Percu	ssion		WNL			WNL		WNL		
Palpa	ation	WNL +			WNL					
Cold	Test WNL - WNL									
Electric Pulp Test N/A		N/A		45/80						
Bite Test N/A		N/A		N/A						

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Knowledge of Literature Multiple-choice Questions

Some questions may test knowledge of the literature dealing mostly with results, conclusions and recommendations of various authors and associations. They may be formulated as follows: "According to [Author/reference], which of the following is the main clinical implication of [research]?

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NDSE Prosthodontics

Content

The NDSE in prosthodontics evaluates your knowledge and clinical competence in prosthodontics at the specialty level.

Blueprint

Canadian specialists in prosthodontics are required to have broad knowledge and skills in six domains. The blueprint below presents the six domains and the approximate percentage of questions covered by each domain.

Prosthodontics Blueprint	Approximate % of questions
Removable complete dental prosthesis	5-15%
Removable partial dental prosthesis	5-15%
Fixed dental prosthesis supported by natural teeth	15-25%
Dental implant supported prosthesis	25-50%
Maxillofacial prosthetics	2-8%
General prosthetic topics (including basic sciences, medical management of dental patients, dental management of medically compromised patients, tooth wear, theories of occlusion, materials)	20-30%
Total	100%

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Format

The examination will be administered in two, three-hour parts. The examination will include a mix of single and multiple-answer multiple-choice questions, and a constructed response question that assess knowledge, application of knowledge, diagnosis, and clinical decision-making.

Question and Answer Formats

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select ONE correct answer."

Sample Question

Select ONE correct answer. 1 point

Which of the following antibiotics is CONTRAINDICATED for a patient with a history of a Type 1 anaphylactic reaction to penicillin?

Azithromycin.

Cephalexin.

Clindamycin.

Erythromycin.

One or more correct answers multiple choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE or MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

Constructed-response questions

Sample Question

Scenario

Create a problem list for the patient in the table with each problem on a separate row (use as many or as few rows as you need). Do not list individual teeth as separate problems.

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Problems	
1.	
2.	
3.	
4.	
5.	
6.	

Additional question information

Case-based Questions

Multiple-choice questions and constructed response questions may have an associated scenario and may contain radiographs, photographs, and charts.

Sample Case

A 28 year old patient presents complaining that her maxillary central incisors are not at the same height. The implant and crown replacing tooth 2.1 were placed when the patient was 16 years old.

Which of the following is the most appropriate management?

Photographs	Radiographs	Chart

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NDSE Pediatric Dentistry

Content

The NDSE in pediatric dentistry tests your knowledge and clinical competence in pediatric dentistry at the specialty level.

Blueprint

Canadian specialists in pediatric dentistry are required to have broad knowledge and skills in fourteen domains. The blueprint below presents the fourteen domains and the approximate percentage of questions covered by each domain.

Pediatric Blueprint	Approximate % of questions
Growth and development	7-13%
Cariology, preventive dentistry, and anticipatory guidance	5-15%
Restorative dentistry and oral rehabilitation	8-18%
Child development & non-pharmacological behaviour guidance	4-10%
Pharmacological behaviour guidance	4-10%
Pharmacology	2-8%
Oro-facial trauma	5-15%
Medical management	5-15%
Oral diagnosis, oral pathology, oral medicine, oral radiology	5-15%
Periodontology	0-4%
Pulp Therapy	5-15%
Infection Control and occupational hazards	0-4%
Biostatistics and epidemiology	0-4%
Record keeping and informed consent	0-4%
Total	100%

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Format

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Question and Answer Formats

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Cephalexin.

Clindamycin.

Erythromycin.

One or more correct answers multiple choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE or MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

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Additional question information

Case-based Questions

Multiple-choice questions may have an associated scenario and may contain radiographs, photographs, and charts.

Sample Case

A 10 year old patient presents with a chief complaint of [problem].

Which of the following is the most appropriate management?

PHOTOGRAPHS	RADIOGRAPHS	
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NDSE Orthodontics

Content

The NDSE in orthodontics evaluates your knowledge and clinical competence in orthodontics at the specialty level.

Blueprint

Canadian specialists in orthodontics are required to have broad knowledge and skills in seven domains. The blueprint below indicates the content domains and the approximate percentage of questions in each domain.

Orthodontics Blueprint	Approximate % of questions
Growth and Development/Principles of Growth Modification	5-15%
Etiology of Orthodontic Problems, Diagnosis and Treatment Planning	25-35%
Biologic Basis of Tooth Movement	5-15%
Biomechanics and Orthodontic Appliance Design	5-15%
Patient Management/Treatment	25-35%
Oral Pathology	2-8%
Statistics	2-8%
Total	100%

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Format

The examination will be administered in two, three-hour parts. The examination consists of a mix of single and multiple-answer multiple-choice questions that assess knowledge, application of knowledge, diagnosis, and clinical decision-making.

Question and Answer Formats

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select ONE correct answer."

Sample Question

Select ONE correct answer. 1 point

Which of the following antibiotics is CONTRAINDICATED for a patient with a history of a Type 1 anaphylactic reaction to penicillin?

Azithromycin.

Cephalexin.

Clindamycin.

Erythromycin.

One or more correct answers multiple-choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE or MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

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Additional question information

Case-based Questions

Multiple-choice questions may have an associated scenario and may contain radiographs, photographs, and charts.

Sample Case

A 15 year old patient is currently undergoing orthodontic treatment to erupt tooth 1.4.

Which of the following is the most appropriate management?

Photographs	Radiographs	Chart

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NDSE Oral and Maxillofacial Surgery

Content

The NDSE in oral and maxillofacial surgery evaluates your knowledge and clinical competence in oral and maxillofacial surgery at the specialty level.

Blueprint

Canadian specialists in oral and maxillofacial surgery are required to have broad knowledge and skills in ten domains. The blueprint below indicates the content domains and approximate percentage of questions in each domain.

Oral and Maxillofacial Surgery Blueprint	Approximate % of questions
Temporomandibular disorders	7-13%
Implants	5-15%
Cleft lip and palate, and craniofacial syndromes	8-18%
Dentoalveolar and preprosthetic surgery	4-10%
Medicine	4-10%
Pathology	2-8%
Orthognathic surgery	5-15%
Reconstructive surgery	5-15%
Trauma	10-20%
Anesthesia and sedation	5-15%
Total	100%

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Format

The examination will be administered in two, three-hour parts. The examination consists of a mix of single and multiple-answer multiple-choice questions that assess knowledge, application of knowledge, diagnosis, and clinical decision-making.

Question and Answer Formats

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select ONE correct answer."

Sample Question

Select ONE correct answer. 1 point

Which of the following antibiotics is CONTRAINDICATED for a patient with a history of a Type 1 anaphylactic reaction to penicillin?

Azithromycin.

Cephalexin.

Clindamycin.

Erythromycin.

One or more correct answers multiple-choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE or MORE** correct answers".

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

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Additional question information

Case-based Questions

Multiple-choice questions may have an associated scenario and may contain radiographs, photographs, and charts.

Sample Case

A 56 year old patient is referred to replace tooth 1.6 with an implant.

Which of the following is the most appropriate management?

Photographs Radiographs	Chart
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NDSE Oral and Maxillofacial Radiology

Content

The NDSE in oral and maxillofacial radiology evaluates your knowledge and clinical competence in oral and maxillofacial radiology at the specialty level.

Blueprint

Canadian specialists in oral and maxillofacial radiology are required to have broad knowledge and skills in five domains. The blueprint below presents the domains and the approximate percentage of the questions covered by each domain.

	Oral and Maxillofacial Radiology	Approximate % of questions
Part 1	Interpretation of diagnostic imaging of the maxillofacial region	50-60%
Part 2	Radiation sciences and imaging techniques: Include but are not limited to radiation physics, projection geometry, the biological effect of radiation, radiation safety, dose and quality assurance, imaging modalities and emerging technologies that are pertinent to Oral and Maxillofacial Radiology: -Techniques and procedures -Uses, application and limitations -Factors affecting image quality and artifact formation -Optimization of imaging techniques	5-25%
	Head and neck anatomy	10-15%
	General head and neck pathology	10-15%
	Total	100%

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Format

The examination will consist of two, three-hour parts.

Part 1 will consist of twelve sets of patient diagnostic images for you to interpret in order to write a radiographic report.

Part 2 will consist of a mix of single correct answer and multiple-answer multiple-choice questions, ordered response questions and constructed response questions that assess knowledge, application of knowledge, diagnosis, and clinical decision-making.

Question and Answer Formats-Part 1

The images may be presented in the following formats:

- CBCT volumes with Anatomage Invivo Dental Viewer.
- Image files.

For each of the 12 cases, you will be asked to:

- Identify the diagnostic image(s) provided, including image modality(ies) and anatomical areas depicted.
- Describe the pertinent findings on the imaging examination(s) in the format of a radiology report.
- Provide a differential or definitive interpretation of the abnormality(ies).
- You may be asked to:
- Give the etiology/pathology/cause of disease/disorder.
- Comment on the management of the case (where applicable, additional imaging, biopsy, bloodwork, other diagnostic tests that may be indicated to provide further information for patient management or treatment).

The entire case is the subject of the report.

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Question and Answer Formats-Part 2

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select ONE correct answer."

Sample Question

Select ONE correct answer. 1 point

Which of the following is the required increase in exposure time when the target-skin distance is doubled?

Doubled.
Tripled.
Quadrupled.
Increased 10
times.

One or more correct answers multiple choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE OR MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

Constructed-response questions

Sample Question

What is the anatomical structure indicated b	y the arrow	? 0.5	point
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Additional question information

Case-based Questions

Multiple-choice questions may have an associated scenario and may contain radiographs, photographs, and charts.

Sample Case

A 63 year old female presents for evaluation of an ulcerated, firm mass in the left maxilla.

Which of the following is the most appropriate management?

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NDSE Periodontics

Content

The NDSE in periodontics evaluates your knowledge and clinical competence in periodontics at the specialty level.

Blueprint

Canadian specialists in periodontics are required to have broad knowledge and skills in eleven domains. The blueprint below indicates the content domains and approximate percentage of questions in each domain.

Periodontics Blueprint	Approximate % of questions
Non-surgical therapy: Plaque control/behaviour modification eg. Smoking cessation; SRP; Pharmacotherapeutics eg. LAA, systemic antibiotics, host modulation therapy; Stress reduction/sedation; Occlusal therapy; Periodontal maintenance therapy	15-20%
Regeneration surgical therapy: Bone replacement grafting; Barrier therapy eg. GTR; Combination graft and barrier; Use of biologics/growth factors/dermal matrices; Soft tissue grafting/pedicle flaps/barrier or combination	15-20%
Resective surgical therapy: Gingivectomy and gingivoplasty; Open flap debridement; Osseous resective (ostectomy/osteoplasty); Root resection; Tooth extraction	15-20%
Dental implants: Site preparation; Placement; Loading protocol; Provisionalization/definitive restorations; Maintenance; Periimplantitis/complications	25-30%
Interdisciplinary therapy: Restorative dentistry/prosthodontics consideration such as crown lengthening; Endodontics consideration; Orthodontics consideration such as canine exposure and forced eruption	10-15%
Oral/systemic interrelationships: Oral medicine/pathology/biopsy; Medicine/medically compromised; Medical emergencies	5-9%
Total	100%

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Format

The examination will be administered in two, three-hour parts. The examination consists of a mix of single and multiple-answer multiple-choice questions that assess knowledge, application of knowledge, diagnosis, and clinical decision-making.

Question & Answer Formats

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple choice questions

Some questions have one correct answer, indicated by the direction "Select ONE correct answer."

Sample Question

Select ONE correct answer. 1 point

Which of the following antibiotics is CONTRAINDICATED for a patient with a history of a Type 1 anaphylactic reaction to penicillin?

Azithromycin.

Cephalexin.

Clindamycin.

Erythromycin.

One or more correct answers multiple choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE or MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

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Additional question information

Case-based Questions

Multiple-choice questions may have an associated scenario and may contain radiographs, photographs, and charts.

Sample Case

A 35 year old smoking female is referred for a comprehensive periodontal examination and treatment with a chief complaint of bad taste in her mouth. The medical, social, and family history are non-contributory. This periodontal charting is representative of the overall periodontal status of this patient. All missing teeth were extracted due to caries.

Which of the following is the most appropriate management?

Photographs Radiographs Charts	
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Periodontal chart

Charts for a group of teeth in a sextant or quadrant use the following chart.

V E	Furcation																		
S	Plaque	•	•					•		•					•		•	•	•
I B	Recession																		
U L	ВОР	•						•	•				•						•
A R	Probing	5	2	2	2	1	2	1	1	1	2	1	4	2	1	2	3	2	4
	Tooth		1.4			1.3			1.2			1.1			2.1			2.2	
	ВОР								•	•									
I N	Probing	2	1	2	2	1	2	1	1	1	2	1	2	2	1	2	2	1	5
G	Recession	•																	•
A	Plaque								•	•							•		•
	Furcation																		
	Mobility																		

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Periodontal implant chart

V	Keratinized Tissue		2	
S	Plaque	•		•
i B	Recession			
VESTIBULAR	ВОР		•	•
A R	Suppuration	•		
	Probing	5	3	4
	Implant		4.2	
	ВОР		•	
L	Suppuration	•	•	
N G U	Probing	2	5	3
Ā	Recession			
	Plaque		•	
	Keratinized Tissue		3	
	Mobility		+	

Keratinized Tissue is measured in millimetres and denotes the finding for the vestibular (midbuccal and/or mid-labial) surfaces of the implants.

Implant Mobility

"-" is used to denote no mobility.

"+" is used to denote mobility.

Bleeding on probing is denoted by "•"

Plaque is denoted by "●".

Suppuration is denoted by "•".

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NDSE Oral Medicine and/or Oral Pathology

Content

The NDSE in oral medicine and/or oral pathology evaluates your knowledge and clinical competence at the specialty level.

Blueprint: Oral medicine only

Canadian specialists in oral medicine are required to have broad knowledge and skills in five domains. The blueprint below indicates the content domains and approximate percentage of questions in each domain.

Oral Medicine Blueprint	Approximate % examination
Basic medical sciences: General and systemic pathology, orofacial anatomy, physiology; Pharmacology and therapeutics; Immunology; Microbiology; General medicine	10-20%
Diseases and conditions of the maxillofacial region: Developmental and congenital conditions, Tooth and periodontal abnormalities, Infectious, Physical, chemical and latrogenic injuries, Allergies and immunologic diseases, Epithelial, Salivary gland, Soft tissue, Hematologic, Bones and joint, Odontogenic, Dermatologic, Oral manifestations of systemic diseases, Benign and malignant tumours	45-55%
Temporomandibular disorders, Oral and dental management of patients with complex medical conditions, Orofacial pain and neurosensory disorders, Orofacial disorders arising from aging, systemic disease and medical therapies	30-40%
Total	100%

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Format: Oral medicine only

The oral medicine examination will be administered in two, three-hour parts. Part 1 and 2 will consist of a mix of single and multiple-answer multiple-choice questions, and constructed response questions that assess general knowledge, application of knowledge, diagnosis, and clinical decision-making.

Blueprint: Oral pathology only

Canadian specialists in oral pathology are required to have broad knowledge and skills in five domains. The blueprint below indicates the content domains and approximate percentage of questions in each domain.

Oral Pathology Blueprint	Approximate % examination
Microscopic examination	45-55%
Basic medical sciences: General and systemic pathology, orofacial anatomy, physiology; Pharmacology and therapeutics; Immunology; Microbiology; General medicine	10-20%
Diseases and conditions of the maxillofacial region: Developmental and congenital conditions, Tooth and periodontal abnormalities, Infectious, Physical, chemical and latrogenic injuries, Allergies and immunologic diseases, Epithelial, Salivary gland, Soft tissue, Hematologic, Bones and joint, Odontogenic, Dermatologic, Oral manifestations of systemic diseases, Benign and malignant tumours	27-37%
Laboratory pathology: gross pathology, molecular, immunohistochemistry, tests, electron microscopy, laboratory management	1-5%
Total	100%

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Format: Oral pathology only

The oral pathology examination will consist of two, three-hour parts.

Part 1, the microscopic evaluation, will involve the evaluation and diagnosis of tissue sections using *Leica Aperio ImageScope* pathology slide viewing software. You will be provided with a laptop on which you will find the software and case files.

You can download Leica Aperio ImageScope from http://www2.leicabiosystems.com/l/48532/2019-01-03/7bs4rg.

Cytology specimens, electron micrographs, immunohistochemical and molecular histology tissue sections may be included.

Part 2 will consist of a mix of single and multiple-answer multiple-choice questions, and constructed response questions that assess general knowledge, application of knowledge, diagnosis, and clinical decision-making.

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Blueprint - Oral medicine and oral pathology

Canadian specialists in oral medicine and oral pathology are required to have broad knowledge and skills in five domains. The blueprint below indicates the content domains and approximate percentage of questions in each domain.

Oral Medicine and Oral Pathology Blueprint	Approximate % examination
Microscopic examination	45-55%
Basic medical sciences: General and systemic pathology, orofacial anatomy, physiology; Pharmacology and therapeutics; Immunology; Microbiology; General medicine	4-10%
Diseases and conditions of the maxillofacial region: Developmental and congenital conditions, Tooth and periodontal abnormalities, Infectious, Physical, chemical and latrogenic injuries, Allergies and immunologic diseases, Epithelial, Salivary gland, Soft tissue, Hematologic, Bones and joint, Odontogenic, Dermatologic, Oral manifestations of systemic diseases, Benign and malignant tumours	24-34%
Temporomandibular disorders, Oral and dental management of patients with complex medical conditions, Orofacial pain and neurosensory disorders, Orofacial disorders arising from aging, systemic disease and medical therapies	6-16%
Laboratory pathology: gross pathology, molecular, immunohistochemistry, tests, electron microscopy, laboratory management	1-5%
Total	100%

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Format: Oral medicine and oral pathology

The oral medicine and oral pathology examination will be administered in two, three-hour parts.

Part 1, the microscopic evaluation, will involve the evaluation and diagnosis of tissue sections using *Leica Aperio ImageScope* pathology slide viewing software. You will be provided with a laptop on which you will find the software and case files.

You can download Leica Aperio ImageScope from http://www2.leicabiosystems.com/l/48532/2019-01-03/7bs4rg

Cytology specimens, electron micrographs, immunohistochemical and molecular histology tissue sections may be included.

Part 2 consists of a mix of single and multiple-answer multiple-choice questions, and constructed response questions that assess general knowledge, application of knowledge, diagnosis, and clinical decision-making.

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Question & Answer Formats

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select ONE correct answer."

Sample Question

Select ONE correct answer. 1 point

Which of the following antibiotics is CONTRAINDICATED for a patient with a history of a Type 1 anaphylactic reaction to penicillin?

Azithromycin. Cephalexin.

Clindamycin.

Erythromycin.

One or more correct answers multiple choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE or MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

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Sample Question

What are 2 medications commonly used for the treatment of [disease]? 2 points

1

2

Sample Question

Scenario

What is the most appropriate management? 1 point

Constructed-response questions

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Sample Question

Use the table below to compare disease A and disease B. 12 points

	Disease A	Disease B
Etiology		
Pathogenesis		
Clinical features		
Diagnosis		
Management		
Prognosis		

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Additional question information

Case-based Questions

Questions may have an associated scenario and may contain radiographs, and photographs.

Sample case

A 35 year old asymptomatic smoking female is referred for a red lesion in the right cheek. The lesion has been present for 2 weeks. The patient takes hydrochlorothiazide and captopril.

Which of the following is the most appropriate management?

Photographs	Radiographs
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