

# EXAMINATION CONTENT AND PREPARATION MATERIALS

## EXAMINATION CONTENT AND SPECIFICATIONS

### The Domain of Dentistry

The INBDE was designed to integrate the biomedical, clinical, and behavioral sciences in its evaluation of candidate dental cognitive skills. This integration occurs through the use of the Domain of Dentistry, which serves as the content domain for the examination. The Domain of Dentistry represents the Clinical Content areas and Foundation Knowledge areas required for the safe, independent, general practice of dentistry by entry-level practitioners. It contains 56 Clinical Content (CC) areas and 10 Foundation Knowledge (FK) areas. Through this approach the clinical relevance of examination content is maximized. The Domain of Dentistry serves as the key reference for the INBDE test specifications, which indicate the percentage of items allocated to topic areas.

### Clinical Content Areas

INBDE Clinical Content areas represent the fundamental tasks that are performed by entry-level general practitioners. These areas are grouped into three component sections: *Diagnosis and Treatment Planning*, *Oral Health Management*, and *Practice and Profession*.

### Diagnosis and Treatment Planning

*Diagnosis and Treatment Planning* includes all aspects of diagnosis, assessment, interpretation of laboratory results, physical evaluation of structure, appearance and function, as well as background, characteristics, circumstances, underlying conditions and psychological, social or behavioral influences to derive an accurate diagnosis and treatment plan, as well as identify reasonable and safe treatment alternatives for any patient. Within the Joint Commission’s Domain of Dentistry, *Diagnosis and Treatment Planning* is represented by the tasks indicated below.

#	DIAGNOSIS AND TREATMENT PLANNING
1	Interpret patient information and medical data to assess and manage patients.
2	Identify the chief complaint and understand the contributing factors.
3	Perform head and neck and intraoral examinations, interpreting and evaluating the clinical findings.
4	Use clinical and epidemiological data to diagnose and establish a prognosis for dental abnormalities and pathology.
5	Recognize the normal range of clinical findings and distinguish significant deviations that require monitoring, treatment, or management.
6	Predict the most likely diagnostic result given available patient information.
7	Interpret diagnostic results to inform understanding of the patient's condition.
8	Recognize the manifestations of systemic disease and how the disease and its management may affect the delivery of dental care.
9	Recognize the interrelationship between oral health and systemic disease, and implement strategies for improving overall health.

<b>10</b>	Select the diagnostic tools most likely to establish or confirm the diagnosis.
<b>11</b>	Collect information from diverse sources (patient, guardian, patient records, allied staff, and other healthcare professionals) to make informed decisions.
<b>12</b>	Formulate a comprehensive diagnosis and treatment plan for patient management.
<b>13</b>	Discuss etiologies, treatment alternatives, and prognoses with patients so they are educated and can make informed decisions concerning the management of their care.
<b>14</b>	Understand how patient attributes (e.g., sex, age, race, ethnicity, and special needs), social background and values influence the provision of oral health care at all stages of life.
<b>15</b>	Interact and communicate with patients using psychological, social, and behavioral principles.

## Oral Health Management

*Oral Health Management* includes all aspects of patient care delivery, including provision and modification of treatment, handling of complications, intervention outcomes assessment, and all developments that arise in the course of managing a patient's oral health care. Within the Joint Commission's Domain of Dentistry, *Oral Health Management* is represented by the tasks indicated below.

#	ORAL HEALTH MANAGEMENT
16	Prevent, recognize, and manage medical emergencies (e.g., cardiac arrest).
17	Prevent, recognize, and manage dental emergencies.
18	Recognize and manage acute pain, hemorrhage, trauma, and infection of the orofacial complex.
19	Prevent, diagnose, and manage pain during treatment.
20	Prevent, diagnose, and manage pulpal and periradicular diseases.
21	Prevent, diagnose, and manage caries.
22	Prevent, diagnose, and manage periodontal diseases.
23	Prevent, diagnose, and manage oral mucosal and osseous diseases.
24	Recognize, manage, and report patient abuse and neglect.
25	Recognize and manage substance abuse.
26	Select and administer or prescribe pharmacological agents in the treatment of dental patients.
27	Anticipate, prevent, and manage complications arising from the use of therapeutic and pharmacological agents in patient care.
28	Diagnose endodontic conditions and perform endodontic procedures.
29	Diagnose and manage the restorative needs of edentulous and partially edentulous patients.
30	Restore tooth function, structure, and esthetics by replacing missing and defective tooth structure, while promoting soft and hard tissue health.
31	Perform prosthetic restorations (fixed or removable) and implant procedures for edentulous and partially edentulous patients.
32	Diagnose and manage oral surgical treatment needs.
33	Perform oral surgical procedures.
34	Prevent, diagnose, and manage developmental or acquired occlusal problems.

**35** Prevent, diagnose, and manage temporomandibular disorders.

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**36** Diagnose and manage patients requiring modification of oral tissues to optimize form, function and esthetics.

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**37** Evaluate outcomes of comprehensive dental care.

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**38** Manage the oral esthetic needs of patients.

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## Practice and Profession

*Practice and Profession* includes the understanding, implementation and monitoring of effective systems, procedures, and policies that support professional practice integrity, quality control and self or organizational performance assessment, as well as systems, procedures, and policies that enable skillful integration of new knowledge, products and technology, and that minimize risk and enhance the quality of care provided or improve community oral health. Within the Joint Commission's Domain of Dentistry, *Practice and Profession* is represented by the tasks indicated below.

#	PRACTICE AND PROFESSION
39	Evaluate and integrate emerging trends in health care.
40	Evaluate social and economic trends and adapt to accommodate their impact on oral health care.
41	Evaluate scientific literature and integrate new knowledge and best research outcomes with patient values and other sources of information to make decisions about treatment.
42	Practice within the general dentist's scope of competence and consult with or refer to professional colleagues when indicated.
43	Evaluate and utilize available and emerging resources (e.g., laboratory and clinical resources, information technology) to facilitate patient care, practice management, and professional development.
44	Conduct practice activities in a manner that manages risk and is consistent with jurisprudence and ethical requirements in dentistry and healthcare.
45	Recognize and respond to situations involving ethical and jurisprudence considerations.
46	Maintain patient records in accordance with jurisprudence and ethical requirements.
47	Conduct practice related business activities and financial operations in accordance with sound business practices and jurisprudence (e.g., OSHA and HIPAA).
48	Develop a catastrophe preparedness plan for the dental practice.
49	Manage, coordinate, and supervise the activity of allied dental health personnel.
50	Assess one's personal level of skills and knowledge relative to dental practice.
51	Adhere to standard precautions for infection control for all clinical procedures.
52	Use prevention, intervention, and patient education strategies to maximize oral health.
53	Collaborate with dental team members and other health care professionals to promote health and manage disease in communities.
54	Evaluate and implement systems of oral health care management and delivery that will address the needs of patient populations served.

- 55** Apply quality assurance, assessment, and improvement concepts to improve outcomes.
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- 56** Communicate case design to laboratory technicians and evaluate the resultant restoration or prosthesis.
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## Foundation Knowledge (FK) Areas

Within the Domain of Dentistry, Foundation Knowledge (FK) Areas represent the knowledge, skills, and abilities that are required to successfully perform tasks represented in the aforementioned Clinical Content Areas. Knowledge in each area is applied by the dentist to aid in the prevention, diagnosis, and management of oral disease and to promote and maintain oral health. The Domain of Dentistry Foundation Knowledge areas are as follows:

#	FOUNDATION KNOWLEDGE AREAS
1	Molecular, biochemical, cellular, and systems-level development, structure, and function
2	Physics and chemistry to explain normal biology and pathobiology
3	Physics and chemistry to explain the characteristics and use of technologies and materials
4	Principles of genetic, congenital, and developmental diseases and conditions and their clinical features to understand patient risk
5	Cellular and molecular bases of immune and non-immune host defense mechanism.
6	General and disease-specific pathology to assess patient risk
7	The biology of microorganisms in physiology and pathology
8	Pharmacology
9	Behavioral sciences, ethics, and jurisprudence
10	Research methodology and analysis, and informatics tools

A detailed description and explanation of the Foundation Knowledge areas is provided on the JCNDE's website, in a document entitled "[Foundation Knowledge for the General Dentist](#)" that can be accessed via the INBDE Test Preparation web page, [JCNDE.ADA.org/INBDE/INBDE-prepare](#). This document presents the following concerning each Foundation Knowledge area:

- Statement describing the general content associated with the area.
- Examples of dental disciplines relevant to the area.
- Examples of clinical dental science areas relevant to the area.
- Major topics and subtopics within each area, including relevant disciplines and detailed examples.

Candidates are urged to read this document to learn more about the Foundation Knowledge areas assessed by the INBDE.

## Test Specifications\*

Test specifications provide information concerning how many examination questions (items) are allocated to specific areas of a content domain. The INBDE test specifications appear in the table below. These specifications show the percentage of examination items allocated to each clinical component section and each Foundation Knowledge Area. Additionally, the table also shows how items are allocated within each section and area.

FOUNDATION KNOWLEDGE AREAS	FK 1	FK 2	FK 3	FK 4	FK 5	FK 6	FK 7	FK 8	FK 9	FK 10	TOTAL
Diagnosis & Treatment Planning	5%	2%	2%	5%	4%	5%	4%	3%	3%	3%	36%
Oral Health Management	7%	4%	4%	4%	4%	4%	4%	4%	3%	3%	42%
Practice and Profession	<1%	<1%	2%	2%	1%	3%	2%	3%	5%	4%	22%
<b>Total</b>	<b>12%</b>	<b>7%</b>	<b>8%</b>	<b>11%</b>	<b>9%</b>	<b>12%</b>	<b>11%</b>	<b>11%</b>	<b>11%</b>	<b>10%</b>	<b>100%</b>

\*All values have been rounded to facilitate interpretation. Due to this rounding, marginal totals may not precisely equal the sum of the respective cells.

### INBDE Test Specifications (500 items)

