

# What is the Domain of Dentistry?

The Domain of Dentistry represents the Clinical Content and Foundation Knowledge Areas required for the safe, independent, general practice of dentistry by entry-level practitioners. It contains 65 Clinical Content areas and 10 Foundation Knowledge Areas. The Clinical Content areas are grouped into three component sections: 1) Diagnosis & Treatment Planning; 2) Oral Health Management; and 3) Practice & Profession.

The Domain of Dentistry was established to help support development efforts for the Integrated National Board Dental Examination (INBDE). The INBDE requires examinees to bring to bear basic and/or behavioral science knowledge and cognitive skills in clinical/professional contexts in a way that informs the licensure decision for safe, independent, entry-level competency in the general practice of dentistry. The Domain of Dentistry provides a single, integrated content domain for the INBDE, to maximize the clinical relevance of examination content.

The Domain of Dentistry is structured as a matrix of Clinical Content areas (rows) and Foundation Knowledge Areas (columns). Each cell of the matrix represents the contribution of a given Foundation Knowledge area to the performance of a particular Clinical Content area. Each cell is weighted according to its importance to entry-level dentistry, based on findings from the Joint Commission's most recent comprehensive practice analysis. This weight helps determine the number of examination questions allocated to each cell.

The following pages provide the Clinical Content areas and Foundation Knowledge Areas of the Domain of Dentistry.

*For details about the weighting process and the development of the Domain of Dentistry, please see the Frequently Asked Questions for the INBDE on the Joint Commission's website.*

# Diagnosis and Treatment Planning

Component Section

## Clinical Content Areas

- CC 1 Obtain and interpret patient/medical data, including a thorough intra/extra oral examination, and use these findings to accurately assess and manage all patients.
- CC 2 Identify patient's chief complaints.
- CC 3 Obtain medical, dental, psychosocial, and behavioral histories.
- CC 4 Perform head and neck and intraoral examinations.
- CC 5 Obtain medical and dental consultations when appropriate.
- CC 6 Use clinical and epidemiological data to diagnose and establish a prognosis for dental abnormalities and pathology.
- CC 7 Recognize the normal range of clinical findings and significant deviations that require monitoring, treatment, or management.
- CC 8 Select, obtain and interpret diagnostic images for the individual patient.
- CC 9 Recognize the manifestations of systemic disease and how the disease and its management may affect the delivery of dental care.
- CC 10 Formulate a comprehensive diagnosis, treatment and/or referral plan for the management of patients.
- CC 11 Discuss etiologies, treatment alternatives, and prognoses with patients and educate them so they can participate in the management of their own care.

# Oral Health Management

Component Section

## Clinical Content Areas

- CC 12 Manage patients in a hospital setting.
- CC 13 Manage the unique needs relating to the oral health care of infants.
- CC 14 Manage the unique needs relating to the oral health care of children.
- CC 15 Manage the unique needs relating to the oral health care of adolescents.
- CC 16 Manage the oral health care of adults, including the unique needs of women.
- CC 17 Manage the unique needs relating to the oral health care of geriatric patients.
- CC 18 Manage the unique needs relating to the oral health care of special needs patients.
- CC 19 Select and administer or prescribe pharmacological agents in the treatment of dental patients.
- CC 20 Anticipate, prevent, and manage complications arising from the use of therapeutic and pharmacological agents employed in patient care.
- CC 21 Prevent, diagnose and manage pain and anxiety in the dental patient.
- CC 22 Prevent, diagnose and manage temporomandibular disorders.
- CC 23 Diagnose and manage periodontal diseases.
- CC 24 Implement strategies for the clinical assessment and management of caries.
- CC 25 Maintain function and promote soft and hard tissue health.
- CC 26 Manage patients with oral esthetic needs.
- CC 27 Diagnose and manage developmental or acquired occlusal abnormalities.
- CC 28 Manage the replacement of teeth for the partially or completely edentulous patient.
- CC 29 Restore partial or complete edentulism with uncomplicated fixed or removable prosthetic restorations.
- CC 30 Manage the restoration of partial or complete edentulism using implant procedures.
- CC 31 Diagnose and manage pulpal and periradicular diseases.
- CC 32 Perform uncomplicated endodontic procedures.
- CC 33 Diagnose and manage oral surgical treatment needs.
- CC 34 Perform uncomplicated oral surgical procedures.
- CC 35 Manage patients requiring modification of oral tissues to optimize restoration of form, function and esthetics.
- CC 36 Prevent, recognize and manage medical and dental emergencies.
- CC 37 Perform basic cardiac life support.
- CC 38 Recognize and manage acute pain, hemorrhage, trauma, and infection of the orofacial complex.
- CC 39 Recognize and manage patient abuse and/or neglect.
- CC 40 Recognize and manage substance abuse.
- CC 41 Evaluate outcomes of comprehensive dental care.
- CC 42 Diagnose and manage oral mucosal and osseous diseases

## Clinical Content Areas

- CC 43 Evaluate emerging trends in health care and integrate new medical knowledge and therapies relevant to oral health care.
- CC 44 Evaluate social and economic trends and their impacts on oral health care.
- CC 45 Utilize critical thinking and problem-solving skills.
- CC 46 Evaluate scientific literature and integrate best research outcomes with patient values and other sources of information to make decisions about dental treatment.
- CC 47 Apply advances in modern biology to clinical practice.
- CC 48 Apply principles of ethics and jurisprudence to the practice of dentistry.
- CC 49 Practice within one's scope of competence and consult with or refer to professional colleagues when indicated.
- CC 50 Apply appropriate interpersonal and communication skills.
- CC 51 Apply psychosocial and behavioral principles in patient-centered care.
- CC 52 Communicate effectively with individuals from diverse populations.
- CC 53 Apply prevention, intervention and educational strategies to maximize oral health.
- CC 54 Participate with dental team members and other health care professionals in health promotion and disease management for individuals and communities.
- CC 55 Evaluate and apply contemporary clinical, laboratory and information technology resources in patient care, practice management and professional development.
- CC 56 Evaluate different models of oral health care management and delivery.
- CC 57 Apply principles of risk management, including informed consent and appropriate record-keeping in patient care.
- CC 58 Use effective business and financial management skills.
- CC 59 Use effective human resource management skills to coordinate and supervise the activity of allied dental health personnel.
- CC 60 Apply quality assurance, assessment and improvement concepts.
- CC 61 Assess one's personal level of skills and knowledge relative to dental practice.
- CC 62 Understand and apply local, state and federal laws and regulations pertaining to dentistry and healthcare, including OSHA and HIPPA.
- CC 63 Develop a catastrophe preparedness plan for the dental practice.
- CC 64 Utilize universal infection control guidelines for all clinical procedures.
- CC 65 Communicate case design with laboratory technicians and evaluate the resultant restoration/prosthesis.

# Foundation Knowledge Areas

The successful entry-level general practitioner is focused on the prevention, diagnosis, and management of oral disease, and the promotion and maintenance of general health. This requires application of knowledge in the following areas:

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| FK1  | Molecular, biochemical, cellular, and systems-level development, structure and function  |
| FK2  | Physics and chemistry to explain normal biology and pathobiology   |
| FK3  | Physics and chemistry to explain the characteristics and use of technologies and materials   |
| FK4  | Principles of genetic, congenital and developmental diseases and conditions and their clinical features to understand patient risk |
| FK5  | Cellular and molecular bases of immune and non-immune host defense mechanisms  |
| FK6  | General and disease-specific pathology to assess patient risk  |
| FK7  | Biology of microorganisms in physiology and pathology  |
| FK8  | Pharmacology   |
| FK9  | Sociology, psychology, ethics and other behavioral sciences  |
| FK10 | Quantitative knowledge, critical thinking, and informatics tools   |

# Document History

Version 1.0 – Approved by the JCNDE April 2013

Version 1.1 –

Interim status: CIE reviewed changes in Oct 2014. Approved with modification. Modifications reviewed by CIE Jan 2015.

Changes:

- Added slide: “What is the Domain of Dentistry?”
- Moved the Foundation Knowledge (FK) areas to a separate slide.
- Reworded the FKs so common phrases are shared at the top.
- Used the JCNDE’s new logo and color scheme.

Interim status 2/27/2015: The R&D Committee recommended submitting to the Committee for Examination Development and the full Joint Commission for approval.

Interim status 4/3/2015: The INBDE TCC recommended changing the term “clinical competency” to “clinical content areas.” This has the same abbreviation (“CC”) which will help the transition. Four CIE members participated in the TCC discussion 3/31/2015. The full CIE has not had an opportunity to discuss this update. This version of the slides includes this change and adopts this convention of capitalization:

- Clinical Content area (abbreviated as “CC”)
- Foundation Knowledge area (abbreviated as “FK”)
- Component Section
- Domain of Dentistry (abbreviated as “DoD”)