Physical Evaluation in Dental Practice

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Patients consult clinicians to obtain relief from symptoms and to return to full health. When cure is not possible, intervention to improve the quality of life is warranted. Consequently, oral healthcare providers' primary obligation is the timely delivery of quality care within the bounds of the clinical circumstances presented by patients. The provision of quality care will depend on timely execution of the clinical process.

Essential Elements of the Clinical Process

The clinical process represents a continuous interplay between science and art and may be conveniently divided into three phases.

Phase I

Phase I of the clinical process is physical evaluation and consists of eliciting a historical profile, performing an examination, obtaining appropriate radiographs, ordering laboratory tests, and, when indicated, initiating consultations with or referrals to other healthcare providers. The information obtained is systematically recorded. In order to optimize the yield, clinicians need to possess an inquiring mind, discipline, sensitivity, perseverance, and patience.

Phase II

Phase II of the clinical process involves an analysis of all data obtained during Phase I. Interpretation and correlation of these data, in the light of principles gained from the basic biomedical and clinical sciences, will create the diagnostic fabric that will lead to a coherent, defendable, relevant, and timely diagnosis. This is an intellectual and, at times, intuitive activity. In making diagnoses, clinicians must recall their knowledge of disease.

Phase III

Phase III of the clinical process is centered around the timely development and implementation of necessary preventive and therapeutic strategies and communicating these strategies to the patient or guardian in order to obtain consent and to encourage compliance with and participation in the execution of the plan. In deciding on management strategies, clinicians must think in terms of illness and the total impact of a disease on a given patient and his or her immediate family.

Quality Management in the Clinical Process

A four-part control cycle (plan-do-check-act) introduced to industry in the 1930s is applicable to total quality management (TQM) in the clinical process and is reflected in the acronym CEAR (pronounced CARE): criteria-execution-assessment-response. Criteria are intended to maintain established standards. Ideally, standards should be based on knowledge derived from well-conducted trials or extensive, controlled observations. In the absence of such data, they should reflect the best-informed, most authoritative opinion available. Execution is the implementation of activities intended to meet stated standards. Assessment is comparing the impact of execution (outcome) against the stated standards. Response refers to the activities intended to reconcile differences between stated standards and observed outcome (Table 1.1).

TQM provides the fabric for a disciplined approach to work design, work practices, and constant reassessment of the clinical process. In TQM there is no minimum standard of "good enough"; there is only "better and better." Defects are signals that point to parts of a process that must be improved so that quality is the result.

Table 1.1. Activities intended to correct a problem identified by the control cycle.

Reconsider the criteria (standard).
Redesign the activities intended to achieve the criteria
Review the assessment process.
Remediate without changing the criteria or the activities intended to achieve the criteria.
Reject the samples that do not meet the criteria.
Apply residual learning to the next control cycle.

Factors Affecting Quality

Amenities of Care

The amenities of care represent the desirable attributes of the setting within which the clinical process is implemented. They include convenience (access, availability of service), comfort, safety, and privacy. In private practice these are the responsibilities of the clinician. In institutional settings, the responsibility lies with the administrators of the institution.

Performance of the Clinician

The clinical process is a combination of intellectual and manipulative activities by which disease is identified and illness is treated. As we seek to define its quality, we must consider the performance of clinicians. There are two elements in the performance of clinicians that affect quality, one technical and the other interpersonal.

Technical performance depends on the knowledge and judgment used in arriving at appropriate diagnostic, therapeutic, and preventive strategies and on the skillful execution of those strategies. The quality of technical performance is judged in comparison with the best in practice. The best in practice, in turn, has earned that distinction because it is known or is believed to lead to the best outcome. The second element in the performance of the clinician that affects quality is interpersonal skills (see "Patient-Doctor Communication in the Clinical Process").

Performance of the Patient

In considering variables that affect the quality of the clinical process, contributions made by the patient, as well as by family members, must also be factored into the equation. In those situations in which the outcome of the clinical process is found to be inferior because of lack of optimal participation by the patient, the practitioner must be judged blameless.

Assessing Quality

Effective control over quality can best be achieved by designing and executing a clinical process that meets professional standards and also acknowledges patients' expectations. The information from which inferences can be drawn about quality may be classified under three headings: structure, process, and outcome.

Structure

In addition to the amenities of care discussed earlier, structure also denotes the attributes of material resources (e.g., facilities and equipment), human resources (e.g., the number and qualification of personnel), and organizational resources (e.g., convenience [access, availability of service], comfort, safety, privacy, methods of payment). Since structure affects the amenities of the oral healthcare setting, it can be inferred that good structure increases the likelihood of a good process.

Process

Process denotes what is actually done in the clinical process. It includes the clinician's activities in developing and recommending diagnostic, therapeutic, and preventive strategies; and the execution of those strategies, both by the clinician and the patient. Process also includes the values and virtues that the interpersonal patient-doctor relationship is expected to have (i.e., confidentiality, informed consent, empathy, congruence, honesty, tact, and sensitivity). In general, it can be assumed that a good process increases the likelihood of good outcome.

Outcome

Outcome denotes the effects of the clinical process on the identification and treatment of consequential problems, improvement in health, and changes in behavior. Because many factors influence outcome, it is not

possible to determine the extent to which an observed outcome is attributable to an antecedent structure or process. However, outcome assessment does provide a mechanism to monitor performance to determine whether it continues to remain within acceptable bounds.

Patient-Doctor Communication in the Clinical Process

Poor skills in communicating with patients are associated with lower levels of patient satisfaction, higher rates of complaints, an increased risk of malpractice claims, and poorer health outcomes. Clearly, in the clinical process, the performance of clinicians as it relates to interpersonal skills is the very source of their vulnerability. The process of establishing a patient-doctor relationship, however, is not easy. To illustrate this point, let us consider the clinical process in dealing with a patient in pain, the most common complaint causing a person to seek the services of an oral healthcare provider.

Ideally, the clinician should initiate the clinical process in a quiet, comfortable, private setting and foster a warm, friendly, concerned, and supportive approach with the patient. However, this may be a challenging task since it is well established that many patients experience anticipatory stress in the oral healthcare setting. Such stress may provoke patients to experience a state of disequilibrium or crisis characterized by anxiety, that is, an intense unpleasant subjective feeling and an inability to function normally. The sequence of events, which leads from equilibrium to a crisis situation (disequilibrium) and back to equilibrium, includes a hazardous event, a vulnerable state, a precipitating factor, an active crisis state, and a reintegration state.

Hazardous Event

A hazardous event is any stressful life event that taxes the patient's ability to cope. The experience can be either internal (the psychological stress of dental phobia) or external (such as a natural disaster, the death of a loved one, or the loss of employment). Clinicians may be unaware of such hazardous events and patients may not readily volunteer such information.

Vulnerable State

Depending on subjective interpretation, one person may see the hazardous event as a challenge, while another may see the same event as a threat. If one views the event as a threat, the increased physical and emotional tension may manifest itself as perceptions of helplessness, anxiety, anger, and depression.

Precipitating Factor

The precipitating factor (in our example, pain) is the actual event that moves the patient from the vulnerable state to the active crisis state. This event, especially when added onto other stressful life events (hazardous events), can cause a person to suffer a crisis. In susceptible patients, not only pain but even minor dental problems requiring a visit to the dentist can precipitate an active crisis state.

Active Crisis State

During the active crisis state, the patient is emotionally and psychologically aroused because of pain, negative self-critical thoughts about what brought him or her into the clinician's domain, unfamiliarity with the environment, and fear that the clinician will be judgmental or punitive. The model for crisis

intervention has six characteristic phases and follows the acronym CRISIS: calm confidence, responsiveness, involvement, supportiveness, "I can" statements, and situation.

Calm Confidence

People who are in a crisis situation generally are not attuned to the words being spoken to them, but they are responsive to nonverbal communication. Behaviorally, calm confidence is displayed by establishing eye contact with the patient, by guiding the patient into the chair, or by touching the patient's shoulders. All of these measures reflect inner self-confidence and control over the situation. If the clinician is perceived as being calm and confident, the patient is more likely to calm down and give trust and control to the clinician.

Responsiveness

Responsiveness is conveyed through verbal communication. It requires a willingness to be directive and to give firm guidance while responding to both the emotional and oral healthcare needs of the patient. The clinician with empathy for the patient does not convey a negative value judgment and, therefore, builds rapport with the patient.

Involvement

A patient in crisis will exhibit behaviors suggesting helplessness or dependency, which might make the clinician feel all the more responsible. Clinicians must relinquish this sense of total responsibility and assist the patient to assume responsibility for his or her own health. The clinician can redirect responsibility by telling patients that their active involvement is needed for a successful long-term outcome. Positive encouragement increases the likelihood that patients will adopt the behaviors necessary to maintain their oral health.

Supportiveness

Listening to the patient relating his or her feelings, concerns, and experiences is a large part of being supportive. Expressing acceptance in a nonjudgmental style, such as sitting near the patient at eye level and nodding in an understanding manner, further conveys support. This does not imply that the clinician must agree with the ideas of the patient, but it does reflect a sense of support and concern for the patient.

"I Can" Statements

Individuals often aggravate a crisis situation by expressing negative thoughts such as "I can't handle this," "This is too much for me," or "I know this is going to be terrible." Here, the clinician's response may go a long way in determining a patient's success in developing coping skills. By saying nothing, the clinician tacitly agrees with and reinforces an unhealthy line of thinking. On the other hand, by teaching the patient to use positive self-statements, the clinician helps foster healthy coping skills. Examples of positive coping thoughts include "One step at a time," "I can handle this situation," or "I can handle this challenge." By positively confronting a crisis situation, the patient experiences less distress and is more responsive to intervention.

Situation

The situation is the crisis of the moment, and it reflects the physical and emotional state of the patient at that moment in time. It must be kept in mind that patients do not consult clinicians to obtain diagnoses, but to obtain relief from symptoms and to return to full health. When a cure is not possible, intervention to improve the quality of life is warranted. Successful resolution of the problem is often directly dependent on timely intervention. The situational component of the crisis mandates that the intervention produce both short-term and long-term results (Table 1.2).

Table 1.2. Primary goals of crisis intervention in the oral healthcare setting.

Identify the problem.
Establish a working diagnosis.
Restore function (at least temporarily).
Develop a plan for definitive treatment.
Help the patient to connect the current crisis with past ineffective behaviors.
Teach the patient new preventive healthcare skills.

Reintegration State

Reintegration refers to the transition back to equilibrium. Ideally, the patient feels that the clinician was responsive. The problem has been resolved in a timely fashion, function has been restored (at least temporarily), a plan for definitive treatment has been agreed upon, the current crisis has been successfully connected with past ineffective behaviors, and new preventive healthcare skills have been instituted.

Characteristics of the Patient-Doctor Relationship

Reflecting on the case of the patient in pain discussed above, it becomes clear that the characteristics that distinguish, promote, and maintain a healthy patient-doctor relationship are empathy, congruence, positive regard, and, as we shall see later, "due process."

Empathy

Empathy refers to the clinician's perception and awareness of the patient's feelings without participating in them. When the patient is sad, the clinician senses and acknowledges the sadness, but does not become sad. In contra-distinction, sympathy implies assumption of, or participation in, another person's feelings.

Congruence

Congruence relates to the matter of words and deeds conveying the same message.

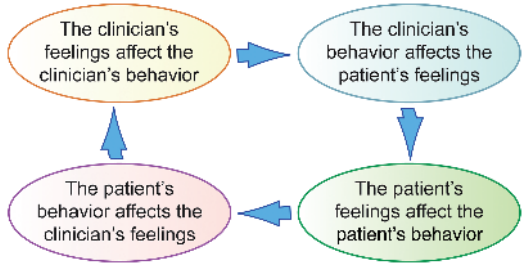


Figure 1.1. Clinician-patient interaction.

Patients will sense whether the clinician's words and deeds are congruent or convey divergent meanings. Similarly, if the patient says, "I am happy," but appears sad and dejected, the clinician should be alert to the discordant messages conveyed by what is heard and what is observed.

Positive Regard

Positive regard is the act of recognition and active demonstration to the patient that the clinician recognizes the patient as a worthy person. This means that the clinician makes a concentrated effort to get to know what the patient cares about; what makes the patient happy, sad, or angry; what makes the patient likable or unlikable; and identifies qualities that make the patient unique. In this process, the clinician transmits attitudes to the patient by the same unconscious word inflections, tones of voice, and body language by which the patient conveys underlying feelings to the clinician. The human qualities that the clinician and patient bring to the process of the patient-doctor interaction are crucial in either opening or closing the lines of communication (Figure 1.1).

Documentation of the Clinical Process

Attorneys, courts, and juries operate by the dictum "if it isn't written down, it didn't

Table 1.3. Essential elements of a progress note.

Database	Subjective data	The reason for the visit, a statement of the problem (chief complaint), and a qualitative and quantitative description of the symptoms as described by the patient.
	Objective data	"Measurements" (a record of actual clinical, radiographic, and laboratory findings) taken by the clinician undistorted by bias.
Problem list	Assessment	Derived from the database, which leads to a provisional or definitive diagnosis, i.e., "needs" (existing conditions or pathoses).
Disposition	Plan	Proposed treatment plan and actual services (preventive, therapeutic) rendered to alleviate or resolve problems: include plans for consultation or referral to other healthcare providers, prescriptions written, and pre- and postoperative instructions.

happen." Documentation of the clinical process should conform to state laws governing the practice of dentistry and the standards of care established by the American Dental Association and other relevant professional organizations.

Problem-Oriented Dental Record

Problem-oriented record keeping enjoys a significant degree of universality in both medical and dental settings. While there are many acceptable alternatives, the problem-oriented dental record facilitates the standardized sequencing of activities associated with the elicitation and documentation of demographic, diagnostic, preventive and treatment planning, and treatment-related information.

Progress Notes

Logically structured progress notes provide the fabric to effectively document and promote continuing problem-oriented patient care. They facilitate the chronological recording of all patient encounters and are divided into three main components: the database (subjective and objective data), the problem list, and the disposition of the problem (Table 1.3).

Table 1.4. The database.

- Patient identification
- Demographic data
- A statement of the problem
  - Chief complaint
    - Qualitative and quantitative description of the symptoms provided by the patient
  - Other reasons for the visit
    - New patient
    - Established patient
      - Recall
      - Emergency
      - Follow-up
- Historical profile
  - Dental history
  - Medical history
    - Family history
    - Social history
  - Review of organ systems
- Physical examination
  - Vital signs, height, and weight
  - Head and neck examination
  - Examination of the oral cavity
  - Radiographic studies
  - Laboratory studies
- Consultations
  - Dental
  - Medical
- Risk stratification

Database

The database is the product of those activities that are performed during Phase I of the clinical process (Table 1.4). These activities are

effective to screen for significant disease, and the results are likely to be good reference points in the evaluation of future problems. Consequently, screening measures should be validated and focused on identifying those problems that one cannot afford to miss.

An initial database is to be recorded on all new patients (Tables 1.5 and 1.6). The

Table 1.5. Documentation of initial historical profile.

NAME_____ ID NUMBER _____
Date of birth _____ Sex _____
Ethnic origin_____ Occupation _____
Address_____ City _____
State/Zip_____ Phone _____
Emergency contact Name _____ Phone _____
Name _____ Phone _____
Insurance information_____

CHIEF COMPLAINT

DENTAL HISTORY
Frequency of visits to dentist?

Date of most recent radiographic examination?

Types of care received?

History of oro-facial injury (date, cause, type of injury)?

Difficulties with past treatment?

Adverse reactions (local anesthetics, latex products, and dental materials)?

MEDICAL HISTORY
Drug allergies or other adverse drug effects?

Medications (prescribed, OTC, vitamins, dietary supplements, special diets)?

Past and present illnesses?

Last time examined by a physician (why)?

Females only (contraceptives, pregnancy, changes in menstrual pattern)?

Table 1.5. *Continued*

Family history (DM, HTN, heart disease, seizures, cancer, bleeding problems, other)?

_____

_____

_____

Social history (type, amount, frequency of tobacco, alcohol, and recreational drug use)?

_____

_____

_____

REVIEW OF ORGAN SYSTEMS

Skin
- Itching_____
- Rash _____
- Ulcers _____
- Pigmentation _____
- Lack/loss of body hair _____

Extremities
- Varicose veins _____
- Swollen, painful joints _____
- Muscle weakness, pain _____
- Bone deformity, fractures_____
- Prosthetic joint _____

Eyes
- Conjunctivitis_____
- Blurred vision _____
- Double vision _____
- Drooping eyelids_____
- Glaucoma_____

Ear, nose, throat
- Earache_____
- Hearing loss_____
- Nosebleeds _____
- Sinusitis_____
- Sore throat _____
- Hoarseness_____

Respiratory
- Shortness of breath_____
- Coughing, blood in sputum_____
- Bronchitis, emphysema _____
- Wheezing, asthma _____
- TB, or exposure to _____

Cardiovascular
- Hypertension_____
- Pain in chest, MI_____
- Congenital heart disease _____
- Prosthetic valve/pacemaker_____

Gastrointestinal
- Eating disturbance_____
- GERD, abdominal pain, PUD _____
- Liver disease _____
- Jaundice, hepatitis_____

Genitourinary
- Difficulty urinating _____
- Excessive urination _____
- Blood in urine _____
- Kidney problem_____
- STDs _____

Endocrine
- Thyroid problem _____
- Weight change_____
- DM _____
- Excessive thirst_____

Hematopoietic
- Bruising/bleeding _____
- Anemia_____
- White blood cell problems _____
- HIV infection_____
- Spleen problem_____

Neurological
- Headaches _____
- Dizziness, fainting_____
- Seizures _____
- Paresthesia/neuralgia _____
- Paralysis _____

Psychiatric
- Anxiety, phobia_____
- Depression_____
- Other _____

Growth or tumor
- Surgery _____
- Radiotherapy _____
- Chemotherapy_____

Table 1.6. Documentation of initial physical examination.

NAME _____ ID NUMBER _____

VITAL SIGNS, HEIGHT, AND WEIGHT

Blood pressure _____ Pulse _____
Respiration _____ Temperature _____
Weight _____ Height _____

HEAD AND NECK EXAMINATION

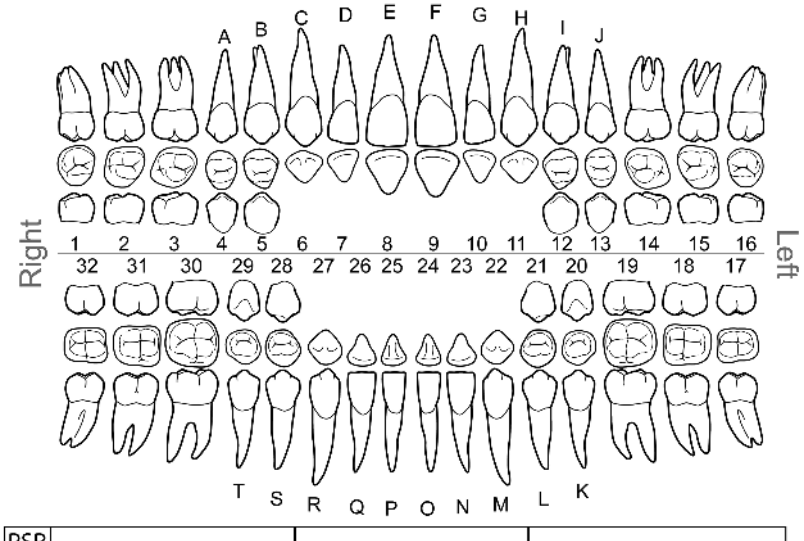
Head _____
Face _____
Facial bones _____
Ears _____
Nose _____
Eyes _____
Hair _____
Neck _____
Lymph nodes _____
TMJ _____
Salivary glands _____
Neurological findings _____

INTRAORAL EXAMINATION

Lips/commissures _____
Mucosa _____
Hard palate _____
Soft palate/tonsillar area _____
Tongue _____
Floor of the mouth _____
Gingivae _____
Breath _____

Teeth/occlusion/periodontal status (PSR)

PSR | | |



PSR | | |

Remarks

documentation is to be made legibly and in ink. The use of symbols such as check marks and underlined or circled answers are best avoided. Responses to queries are to be recorded as "positive" (with appropriate elaboration), "negative," or "not applicable." The database is to be reviewed at all subsequent appointments and changes recorded in the progress notes of that day (Table 1.7).

Problem List

A problem is anything that requires diagnosis or treatment or that interferes with the quality of life as perceived by the patient. It may be a firm diagnosis, a physical sign or symptom, or a psychological concern. Problems by their nature may fall into one of several categories (Table 1.8).

A complete database is so essential to the success of the clinical process that clinicians must consider an "incomplete database" as the number one problem until all required data have been obtained. An incomplete database may provide the basis for initial consultation with, and referral to, dental and medical specialists. Subsequently, the resolution of diagnostic problems may lead to further consultations with, or referrals to, colleagues, other healthcare professionals, and allied healthcare workers (see chapter 8).

Disposition of the Problem

The clinical process culminates in the development of timely preventive and therapeutic strategies, along with the explanation of these strategies to the patient or guardian, in order to obtain consent and to encourage compliance with, and participation in implementing the treatment plan (see chapter 8).

Table 1.7. Progress notes.

NAME	ID NUMBER	
Date	PROGRESS NOTES	Signature
00/00/00		
S	Subjective data: reason for the visit; changes to the medical history	
O	Objective data: "measurements" taken by the clinician (clinical, radiographic, and laboratory data; vital signs)	
A	Assessment: diagnosis derived from subjective and objective data (reason for therapeutic intervention)	
P	Plan: treatment plan or actual treatment provided; prescriptions written; postoperative instructions; disposition	
		Signature

Table 1.8. Problem categories with examples.

Anatomic (developmental, acquired)	Psychiatric (anxiety, depression)
Physiological (pallor, jaundice)	Abnormal diagnostic tests
Symptomatic (pain, dyspnea)	Risk factors (heart disease)
Physical (paralysis)	Socio-economic (uninsured)

Designations and Abbreviations

The dental record is an important medicolegal document. Not only does it facilitate diagnosis, treatment planning, and practice management, it is also a valuable means of communication between the primary clinician and other providers, and it may be used in defense of allegations of malpractice and aid in the identification of a dead or missing person. The record of the initial database shows missing teeth, existing restorations, and diseases and other abnormalities, while the chronological record of progress notes reflect treatment provided and diseases and other abnormalities that have occurred after the initial examination. The dental record is also a source of important information for the ongoing monitoring and evaluation of oral healthcare. Consequently, the charted record of the clinical process must be in conformity throughout the dental record.

While there are acceptable alternatives, for purposes of brevity and exactness, the alphabetical designation of primary teeth (Table 1.9) and the numerical designation of permanent teeth are advocated (Table 1.10).

Table 1.9. Alphabetical designation of primary teeth.

Tooth	Designation
Right maxillary primary second molar	A
Right maxillary primary first molar	B
Right maxillary primary cuspid	C
Right maxillary primary lateral incisor	D
Right maxillary primary central incisor	E
Left maxillary primary central incisor	F
Left maxillary primary lateral incisor	G
Left maxillary primary cuspid	H
Left maxillary primary first molar	I
Left maxillary primary second molar	J
Left mandibular primary second molar	K
Left mandibular primary first molar	L
Left mandibular primary cuspid	M
Left mandibular primary lateral incisor	N
Left mandibular primary central incisor	O
Right mandibular primary central incisor	P
Right mandibular primary lateral incisor	Q
Right mandibular primary cuspid	R
Right mandibular primary first molar	S
Right mandibular primary second molar	T

Table 1.10. Numerical designation of permanent teeth.

Tooth	Designation
Right maxillary third molar	1
Right maxillary second molar	2
Right maxillary first molar	3
Right maxillary second bicuspid	4
Right maxillary first bicuspid	5
Right maxillary cuspid	6
Right maxillary lateral incisor	7
Right maxillary central incisor	8
Left maxillary central incisor	9
Left maxillary lateral incisor	10
Left maxillary cuspid	11
Left maxillary first bicuspid	12
Left maxillary second bicuspid	13
Left maxillary first molar	14
Left maxillary second molar	15
Left maxillary third molar	16
Left mandibular third molar	17
Left mandibular second molar	18
Left mandibular first molar	19
Left mandibular second bicuspid	20
Left mandibular first bicuspid	21
Left mandibular cuspid	22
Left mandibular lateral incisor	23
Left mandibular central incisor	24
Right mandibular central incisor	25
Right mandibular lateral incisor	26
Right mandibular cuspid	27
Right mandibular first bicuspid	28
Right mandibular second bicuspid	29
Right mandibular first molar	30
Right mandibular second molar	31
Right mandibular third molar	32

To record pathologic conditions and subsequent restorations of teeth, the following designations of tooth surfaces are used universally: facial (F), lingual (L), occlusal (O), mesial (M), distal (D), and incisal (I). Clinical circumstances may require the use of combinations of designations to identify and locate caries and to record treatment plans, operations, or restorations in the teeth involved. For example, 8-MID would refer to the mesial, incisal, and distal aspects of a right maxillary central incisor; 22-DF, the distal and facial aspects of a left mandibular cuspid; and 30-MODF, the mesial, occlusal, distal, and facial aspects of a right mandibular first molar.

When charting missing teeth, existing restorations, and prostheses as part of initial documentation of the database (Table 1.11);

Table 1.11. Standardized chart markings for missing teeth, existing restorations, and prostheses.

Missing teeth	Draw a large "X" on the root or roots of missing teeth.
Edentulous mouth	Inscribe crossing lines, one extending from the maxillary right third molar area to the mandibular left third molar area and the other from the maxillary left third molar area to the mandibular right third molar area.
Edentulous arch	Inscribe crossing lines, each running from the uppermost aspect of the third molar area to the lowermost aspect of the third molar area on the opposite side.
Amalgam restoration	In the diagram of the tooth, draw an outline of the restoration showing size, location, and shape, and block in solidly.
Nonmetallic permanent restoration	In the diagram of the tooth, draw an outline of the restoration showing size, location, and shape.
Gold or other alloy restoration	In the diagram of the tooth, draw an outline of the restoration showing size, location, and shape, and inscribe horizontal lines within the outline. If made of an alloy other than gold, indicate in the REMARKS section that the restoration is made of a metal other than gold (where possible, indicate type of alloy used).
Combination restoration	In the outline of the tooth, draw an outline of the restoration showing size, location, and shape; and partition at junction of materials used and indicate each as above.
Porcelain or acrylic facings and pontic	In the diagram of the tooth, draw an outline of the restoration. Indicate in the REMARKS section that the facing or pontic is made of porcelain or acrylic.
Porcelain or acrylic post crown	In the diagram of the tooth, draw an outline of the restoration; outline approximate size and position of the post or posts. Indicate in the REMARKS section that the crown is made of porcelain or acrylic.
Porcelain or acrylic crown	In the diagram of the tooth, draw an outline of the restoration. Indicate in the REMARKS section that the crown is made of porcelain or acrylic.
Fixed partial denture	In the diagram of each tooth, draw an outline of the restoration; partition at junction of materials used. If made of gold, inscribe diagonal lines for both abutments and pontics. If made of an alloy other than gold, indicate in the REMARKS section that the restoration is made of a metal other than gold (where possible, indicate type of alloy used). Facing material should be indicated in the REMARKS section.
Removable prosthesis	Place a line over numbers of replaced teeth and describe briefly in REMARKS.
Root canal fillings	Outline each canal filled on the diagram of the root or roots of the tooth involved and block in solidly.
Apicoectomy	Draw a small triangle on the root of the tooth involved, apex away from the crown, the base line to show the approximate level of the root amputation.
Temporary restoration	In the diagram of the tooth, draw an outline of the restoration showing size, location, and shape. If possible, describe the material in REMARKS.

when charting diseases and abnormalities (Table 1.12); or when charting treatment completed (Table 1.11), standardized chart markings will further facilitate efficient continuity of care and may establish forensic identification.

Finally, when writing progress notes, the use of standard abbreviations and acronyms may be desirable for expediency (Table 1.13). In addition, the use of well-known medical and scientific signs and symbols, such as Rx, WNL, BP, H_2O, and others, is recommended.

Table 1.12. Standardized chart markings for diseases and abnormalities.

Caries	In the diagram of the tooth, draw an outline of the carious portion, showing size, location, and shape, and block in solidly.
Defective restorations	In the diagram of the tooth, outline the defective restoration and block in solidly.
Fractured tooth	Indicate approximate location of fracture with a zigzag line on outline of the tooth.
Partially erupted tooth	In the diagram of the tooth, draw an arcing line through the long axis.
Drifted teeth	Draw an arrow at the designating number of the tooth that has moved, with the point of the arrow indicating the direction of movement. Describe briefly in REMARKS.
Impacted tooth	Outline all aspects of each impacted tooth with a single oval. The long axis of the tooth should be indicated by an arrow pointing in the direction of the crown.
Radiolucency	Outline approximate size, form, and location.
Radiopacity	Outline approximate size, form, and location, and block solidly.
Periodontal status	PSR scores (PSR periodontal probe with a 3.5 mm ball tip and a 3.5–5.5 mm color-coded area) 0: Colored area of the probe remains completely visible in the deepest probing depth in the sextant. No calculus or defective margins are detected. Gingival tissues are healthy and no bleeding occurs after gentle probing. 1: Colored area of the probe remains completely visible in the deepest probing depth in the sextant. No calculus or defective margins are detected. There is bleeding after gentle probing. 2: Colored area of probe remains completely visible in the deepest probing depth in the sextant. Supra- or subgingival calculus or defective margins are detected. 3: Colored area of probe is only partly visible in the deepest probing depth in the sextant. 4: Colored area of probe completely disappears, indicating a probing depth of greater than 5.5 mm.

Table 1.13. Standard abbreviations and acronyms.

Acute necrotizing ulcerative gingivitis	ANUG	Oral health counseling	OHC
All caries not removed	ACNR	Oral surgery	OS
All caries removed	ACR	Panoramic radiograph	Pano.
Amalgam	Am.	Patient	Pt.
Anesthetic(thesia)	Anes.	Patient informed of examination findings and treatment plan	PTINF
Assessment	A	Periapical	PA
Camphorated paramonochlorophenol	CMCP	Pericoronitis	PCOR
Chief complaint	CC	Periodontal screening and recording	PSR
Complete denture	CD	Periodontics	Perio.
Copal varnish	Cop.	Plan	P
Crown	Cr.	Plaque control instructions	PCI
Curettage	Cur.	Porcelain	Porc.
Drain	Drn.	Postoperative treatment	POT
Electric pulp test	EPT	Preparation	Prep.
Endodontics	Endo.	Preventive dentistry	PD
Equilibrate(ation)	Equil.	Prophylaxis	Pro.
Eugenol	Eug.	Prosthodontics	Pros.
Examination	Exam.	Removable partial dentures	RPD
Extration(ed)	Ext.	Restoration(s)	Rest.
Fixed partial denture	FPD	Return to clinic	RTC
Fluoride	Fl.	Root canal filling	RCF
Fracture	Fx.	Root canal therapy	RCT
Gutta percha	GP	Rubber dam	RD
Health questionnaire reviewed	HQR	Scaled(ing)	Scl.
History	Hx.	Subjective	S
Mandibular	Man.	Surgical(ery)	Surg.
Maxillary	Max.	Suture(s)(d)	Su.
No significant findings	NSF	Temporary	Temp.
Objective	O	Topical	Top.
Operative	Oper.	Treatment(ed)	Tx.
Oral cancer screening exam	OCSE	Zinc oxide and eugenol	ZOE
Oral diagnosis	OD		

Conclusion

It is axiomatic that in the clinical process the primary customer is the patient. However, the customer may also be a member of one's own organization (associates, staff) or individuals/organizations outside the institution (consultants, insurance companies, lawyers) who are "downstream" in the clinical process and must work with the product that is handed down to them. The licensed dental practitioner is solely responsibly for all patient care–related activities including those legally provided by auxiliary personnel. This includes obtaining and documenting the patient's history, performing the physical examination, establishing diagnoses, developing and implementing preventive and therapeutic strategies, and properly documenting all services rendered and pertinent communications with patients.

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