Treat the patient – not charts, images, or lab results

There are several integral aspects of patient evaluation, mainly the consult of electronic dental records (EDR) and electronic medical records (EMR), also referred to as electronic health records (EHR),[1] laboratory findings, and imaging. A thorough medical history, physical evaluation, and medical/dental risk assessments should be completed prior to dental treatment planning on all patients. Records, laboratory findings, traditional dental radiographs, and 3D scans are merely tools to ascertain the diagnosis. At times, it seems that the least amount of the provider's time is spent in a face-to-face discussion with the patient. The clinician gets buried digesting the vast amount of data on the computer screen. Very often, the clinicians lose sight of the human in front of them and treat the images and values of the collected data instead. Connecting the dots and treating the patient appropriately is the goal but if you only consult the chart and its data, are you truly connecting the dots and helping your patients?

EHR usability can be optimized by streamlining the data flow[2] and accelerating training. EHRs can be both a boon and a curse as the information can be easily entered into the software but becomes a herculean task to retrieve and evaluate. Collection of data without properly analyzing and simplifying it for practical application of patient care is useless. The patient deserves their health care providers to spend adequate time obtaining a thorough medical history and examination with their undivided attention. The purpose of new technological inventions is to reduce time spent performing mundane tasks, such as pouring impressions or carving wax-ups, and to allow more quality time spent actually listening to patients.

Intraoral radiographic images, including the bitewings, periapical radiographs, and when needed, the full mouth series (FMX or FMS) are obtained after comprehensive medical and dental history, physical evaluation, and thorough intra- and extraoral examination. Appropriate selection criteria based on the national guidelines are always used for prescribing radiographs. It becomes a problem when an FMX is used as a screening tool for the identification of dental diseases that may or may not need treatment – or much worse, if there is no dental disease at all. A thorough oral evaluation and examination would typically have had the same outcome. Radiographs are prescribed when there is a suspicion of either caries, periodontal disease, or apical pathology that cannot be assessed clinically. The patient's history is of utmost importance. The introduction of CBCT to the dental profession is a great advantage to the field, but like traditional radiographs, there is a significant potential for abuse and over-prescription. Reconfirming findings on an image when you have previously clinically assessed and selected appropriate care does not help the patient, especially if no additional information is gained. A medical model calls for justification for all radiographic prescriptions.

Laboratory findings are integral parts of patient evaluation. Nonessential laboratory tests ordered by the clinician make no meaningful contribution to the treatment plan, and may even hamper the treatment. The value of laboratory tests cannot be underscored in many situations but may not have any real diagnostic value if they were not indicated. For instance, when clinically diagnosed maxillary sinusitis can be safely treated with medication, ordering a CT scan merely to confirm your clinical impression should be avoided. Health care providers must be able to ascertain situations in which a particular test is needed, instead of overprescribing to verify a confirmed finding. More than a decade ago, it was noted that CT scans were rapidly becoming an increased source of radiation[3] due to the rise in unnecessary prescriptions in medical diagnostics. This information reaffirms the overprescribing medical trends of both physicians and dental practitioners. We must not forget a humanistic approach and the value of patient management. There is nothing more important to the patient than lending our ears, sharing our clinical knowledge, and being their strongest advocates.

Isn't it time to start spending more time with the patient, and stop treating only their diagnostic images or laboratory values?

"Do as much as possible for the patient, and as little as possible to the patient" – Bernard Lown.[4]

References

1. Mupparapu M, Kuperstein AS. The changing world of medically complex dental patients: electronic health records and more. Quintessence Int 2012;43:639–640.
2. Alissa R, Hipp JA, Webb K. Saving time for patient care by optimizing physician note templates: A pilot study. Front Digit Health 2022;13:772356.
3. Brenner DJ, Hall EJ. Computed tomography: an increasing source of radiation exposure. N Engl J Med 2007;357:2277–2284.
4. Marcus A. Bernard Lown. Lancet 2021;397:964.

Mel Mupparapu

Mel Mupparapu, DMD
Scientific Associate Editor
Email: mmd@upenn.edu