

Encoding dental caries lesion in the electronic dental record with dental diagnostic terminology, EDR/DDT-GICO Ninoska Abreu-Placeres, Henry Adames Vargas



INTRODUCTION

The use of electronic health records (EHR) is becoming more popular every day because it allows professionals to have organized and editable data of patients' health information. Basically, these records facilitate the coding of dental terminology allowing dentists to standardize diagnoses and treatments with a positive impact on the management of patient information and research. The Dental Diagnostic Terminology (DDT) is a very widely used system created with the idea of having a unification of criteria for dental terminology in electronic dental records (EDR).

On the other hand, the detection of dental caries has been studied worldwide and several systems have been implemented in order to standardize the criteria of the terms used related to the severity of the lesions. Nowadays, different systems have been applied in order to obtain the best way to describe with certainty each detected lesion and to make management decisions according to the best available evidence. Currently, the DDT derived from the Dental Diagnostic System includes dental caries detection codes taking into account the International Caries Detection and Assessment System (ICDAS) that could be more difficult to implement by dentists in clinical practice. However, the International Caries Classification and Management System (ICCMS) has been described as a very comprehensive system that integrates caries lesion assessment and patient information to plan the management of dental caries disease. In addition, ICCMS includes caries lesion detection categories that merge the ICDAS codes to facilitate the detection and coding process by clinicians.

OBJECTIVE

To describe a method of encoding dental caries lesion in the electronic dental record with dental diagnostic terminology, EDR/DDT-GICO.

MATERIALS AND METHODS

After the creation of the GICO software, ICCMS merge categories will be included in order to facilitate the encoding of the lesions for the program. The suggested method is as recommended by ICCMS in table 1.



Figure 1. GICO software creation process

RESULTS





Figure 3. ICCMS codes included in the suggested odontogram



By integrating the ICCMS categories with the GICO Software, it would be possible for users to start the coding of caries lesions by surfaces taking into account their severity. This method will allow more specific information on the stage of dental caries lesions on each surface, facilitating decision-making for the management of these lesions based on the best available scientific evidence and in accordance with best practices.

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