The ADA Stakeholder Caries Classification System (CCS)

ADA Council on Scientific Affairs

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What is the Need?

➢ Dentistry has been using a static restorative classification system to describe *Caries – a dynamic process*

➢ *Diagnostic criteria* – *Clinical Stage, Activity and Severity*

➢ practical, meaningful diagnostic codes (EHR)

➢ EBD most effective treatment options available

➢ patient-centered management of Caries as a disease continuum, esp. *treatment for early lesions*, not just sequelae of disease

➢ *Epidemiologic data - Public Health and Access to Care Issues*

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2001 NIH Consensus Development Conference

"the identification and clinical staging of the presence, activity and severity of dental caries is of paramount importance in the deployment of treatment strategies that employ increasingly important nonsurgical modalities such as fluoride, antimicrobials, sealants and no treatment."

2001 NIH Consensus Development Conference:
"Diagnosis and Management of Dental Caries Throughout Life"
- JADA Vol. 132:1153-61, August 2001

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What's in the future?

➢ *Detection Technologies* for accurate, quantitative analysis of surface texture and degree of mineralization

➢ Advanced *rapid diagnostics*, e.g. salivary and genetic markers for caries activity and patient risk

➢ *Remineralizing agents* and new restorative materials

➢ *EHR* and diagnostic code requirements

➢ *EBD* - data mining and comparison from public health studies (epidemiology), clinical studies and general practice

➢ Medical model for treatment of disease before surgical restoration

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New Products for early interventions

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Sound No Disease

"Missing in Action" Are we only "watching" while demineralization progresses to loss of tooth substance?

"There is no clinical logic to support non-treatment based on the evidence we now have or the treatment options available."
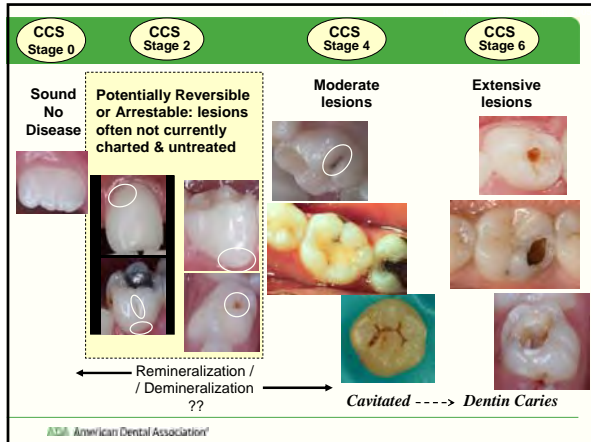
Moderate lesions

Extensive lesions

Cavitated Dentin Caries

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CCS Stage 0	CCS Stage 2	CCS Stage 4	CCS Stage 6
Sound No Disease	**Potentially Reversible or Arrestable: lesions often not currently charted & untreated**	Moderate lesions	Extensive lesions

Remineralization / Demineralization ??

Cavitated - - - -> Dentin Caries

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What is the Goal?

- Universal *caries* classification system – for better data comparisons (CER/EBD)
- Improved Patient understanding of disease process and management
- Goal: *Improved individual Patient and Public Health outcomes*

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CCS Code Descriptions

Stages:

0 (No Disease)   Sound tooth surface

2 (Initial Caries)   Distinct, Visual non-cavitated change in Enamel - with or without air drying

4 (Moderate)   Loss of Surface Integrity (Enamel Breakdown or Loss of Cementum on Root) - with or without clinical signs of dentinal involvement

6 (Extensive)   Distinct Cavity with Visible Dentin

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Proposed CCS

Sites of Caries (1-4)	Stages of Caries			
	0 No disease (ICDAS definition 0)	2 Initial lesion (ICDAS definitions 1+2)	4 Moderate lesion (ICDAS definitions 3+4)	6 Extensive lesion (ICDAS definition 5 + 6)
0 None / Not Applicable	0.0			
1 Pit & Fissure Surfaces	1.0	1.2	1.4	1.6
2 Approximal Surfaces	2.0	2.2	2.4	2.6
3 Cervical + Smooth Surfaces	3.0	3.2	3.4	3.6
4 Root Surfaces	4.0	4.2	4.4	4.6

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Where are we going from here?

Continue to facilitate Stakeholder Communication and Collaboration

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?? Questions ?? Discussion

Cavateez... I fightz dem.