

IMPLEMENTING A NOVEL CHART REVIEW TOOL FOR OREGON’S DENTAL PILOT PROJECT PROGRAM

Objective

The Oregon Health Authority, OHA, functions as an overseeing body for Dental Pilot Projects. It is incumbent upon individual projects to demonstrate quality and efficacy of new provider types. OHA has developed at Chart Review Tool for the purposes of monitoring for patient safety. This tool is a step toward standardizing chart review processes that other organizations could adapt for variety of uses.

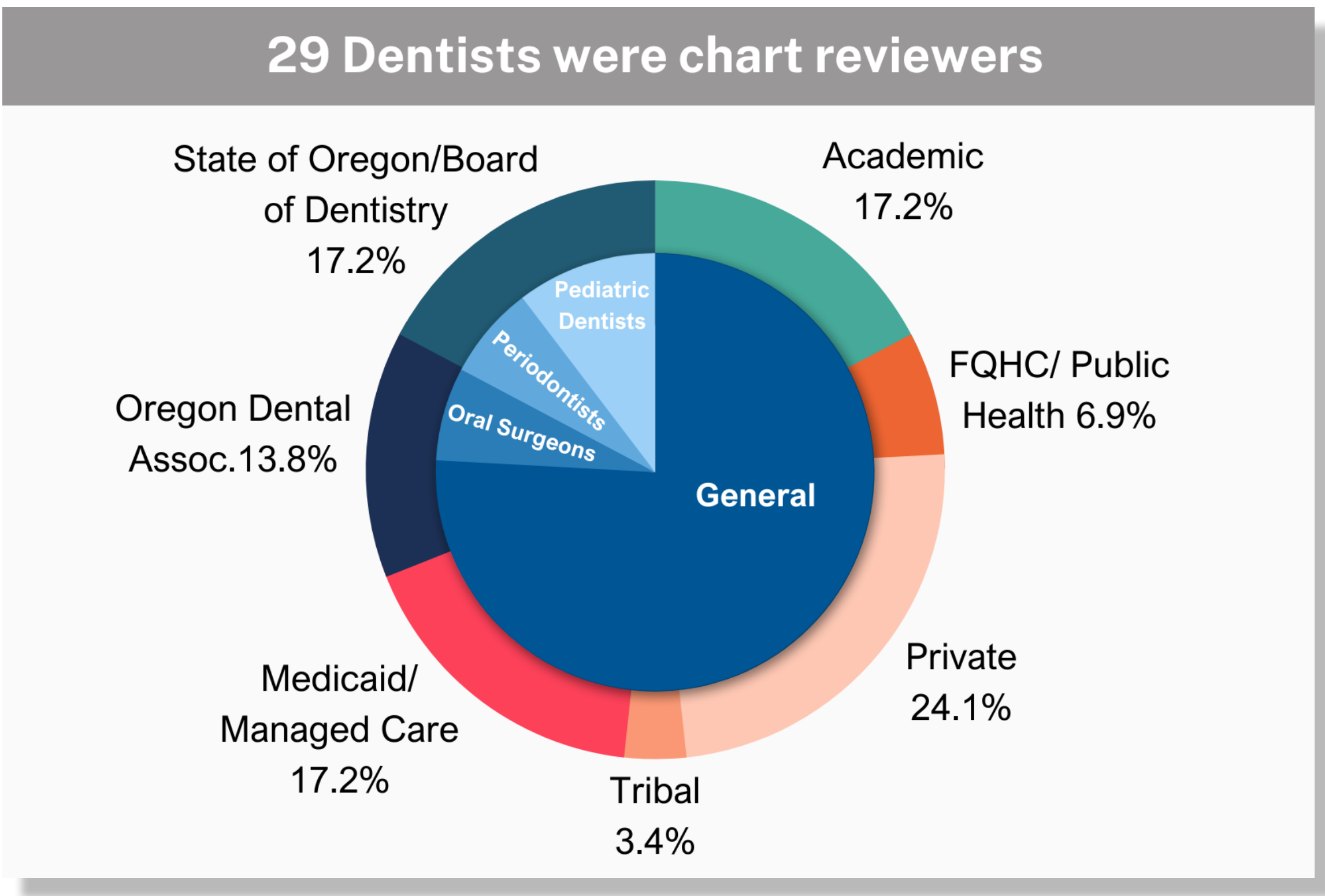
At the onset of the Pilot Project Program, there was a **distinct lack of standardized tools available for evaluating dental care**, especially in the context of evaluating minimum standard of care using clinical records instead of in person evaluation.

The tool allows Advisory Committee members who are subject-matter experts (dentists) the opportunity to review and make assessments and determinations of the quality of care provided by the trainees within the constraints and limitations of a chart auditing review.

OHA follows up with the project and if necessary a corrective action plan may be required if there are concerns about patient safety or quality of care provided by the trainee.

Methods

- Reviews are conducted on a per procedure basis and are limited to restorations and extractions. Therefore, there may be multiple reviews conducted on a single patient chart.
- Each project must submit a record of procedures performed under the Pilot Project Program. A random sample of approximately 10% of irreversible procedures are pulled from this database for review.
- The full panel of dentist reviewers are comprised of a collaboration between the Dental Pilot Project Advisory Committee, the OHA Statewide Dental Director, an external contracted expert from the OHSU-School of Dentistry and the Oregon Board of Dentistry, and are required to attend a chart review training and calibration session before reviewing charts.
- A debrief is held following the chart review process with the reviewers when there are concerns about a procedure and whether there is a concern if the minimum standard of care is not being met or if an adverse event occurred.



Results

- Early concepts of the tool indicated a need for more specific criteria and guidance for reviewers to make their assessments. The lack of specific criteria resulted in a wide variety of assessments from reviewers as to whether a procedure met the minimum standard of care.
- In the first part of the tool, reviewers are asked to score the appropriateness and success of the overall procedure. To address subconscious bias in assessing overall performance, in subsequent iterations of the tool, specific criteria that can be assessed using images and notes were selected from WREB standards and adapted for use here.
- Using an iterative process approach to updating questions, standards and criteria within the tool facilitated significant improvements in inter-rater agreement and reliability. To address expected variability in reviewer expert opinion and scoring, even after training to improve alignment, we continue to use a minimum of three reviewers per procedure reviewed.
- Versions of this tool have been utilized in two separate pilot projects to date. In one project across seven site visits, 176 individual procedures have been reviewed.

References

⁵ Indian Health Service. Oral Health Program Guide. 2007.

⁶ Western Regional Exam Board. Dental Exam Candidate Guide. 2019.

⁷ Kalendarian E, Obadan-Udoh E, Maramaldi P, et al. Classifying Adverse Events in the Dental Office [published online ahead of print, 2017 Jun 30]. J Patient Saf. 2017; doi:10.1097/PTS.0000000000000407

Chart Review Tool

The Chart Review Tool was developed using an iterative process of input Advisory Committee members and other sources from literature (5, 6, 7). The final tool used for each project depends upon the specific scope of practice for the approved project.

The tool is divided into three parts:

Section 1	Section 2	Section 3
Assessment of minimum standard of care and appropriateness of the following: diagnosis, treatment plan, radiographs, intra-oral images, and progress notes.	Determination if an adverse event has occurred utilizing a Dental AE Type Classification and Severity Category process adapted from E. Kalendarian.	Procedures are scored using criteria adapted from WREB. Reviewers determine if each area meets the minimum standard of care. Areas scored include prep and finish.

OHA Clinical Chart Review Form & Guidelines : DPP #300

Reminders:

- N/A (Not Applicable) and Unable to Determine are always additional answer options
- Please provide additional comments whenever possible. Comments are required when rating below the minimum standard of care.
- Please note in comment sections whenever images are not sufficient for dependable evaluation.

Chart Number: _____
Tooth Number: _____

CRITERIA	Description	Assessment	Comments
Diagnosis			
1. Diagnosis Description Appropriate.	Yes: Falls within minimum standard of care.	No: Must indicate deficiency in comments.	
2. Planned treatment based upon the given diagnosis is appropriate.	Yes: Falls within minimum standard of care.	No: Must indicate deficiency in comments.	
Images			
1. Radiographs available and sufficient for diagnosis.	Present: Radiographs are present and adequate for evaluation. Inadequate: Radiographs are present, but not adequate for evaluation. Please describe why.	Not Present: Radiographs are not present for this procedure.	
2. Intra-Oral Images are sufficient for evaluation.	Present: Intra-oral images are present and adequate for evaluation. Inadequate: Intra-oral images are present, but not adequate for evaluation. Please describe why.	Not Present: Intra-oral images are not present for this procedure.	
Evaluation of Procedure – Reviewer must use appropriate chart rubric to answer corresponding questions.			
1. Overall impression of procedure quality – used for all procedures	1: Significant deficiencies exist. Procedure can be considered a failure 2: Significant deficiencies exist, procedure falls under absolute minimum standard of care	3: Minimum standard of care. Only minor deficiencies present.	4: Procedure quality is adequate to good. Only minor deficiencies present.
2. Extractions – Treatment is appropriate for diagnosis	Yes: Minimum standard of care, tooth removed successfully with no complications	No: Extraction is outside scope of practice ¹ or does not meet minimum standard of practice. Please describe why.	5: Procedure is highly successful, no deficiencies present.

¹ DPP#300 Extraction Scope: Simple extraction of erupted primary teeth and teeth with severe periodontal disease (class III mobility)



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OHA conducts **site visits** to ensure health and safety through compliance with administrative rules. These site visits include both participant interviews and clinical records review and include both qualitative and quantitative methods. This tool was developed to conduct these clinical records (chart) reviews with a focus on patient safety and minimum standard of care.

Conclusion

- Chart reviews are limited to what the chart notes contain and often the quality of the intra-oral images provided by the project. However, this chart review tool has been successful in facilitating a large number of chart reviews with a highly diverse panel of licensed professional dentists.
- Determining whether Adverse Events have occurred in dentistry is a relatively new process. Incorporating and training dentist reviewers and continually meeting to calibrate the reviewers is key to obtaining interrater agreement.



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