

Feasibility Study of Suspicious Lesion Decisions

Among Scottish/U.S. PBRN Dentists

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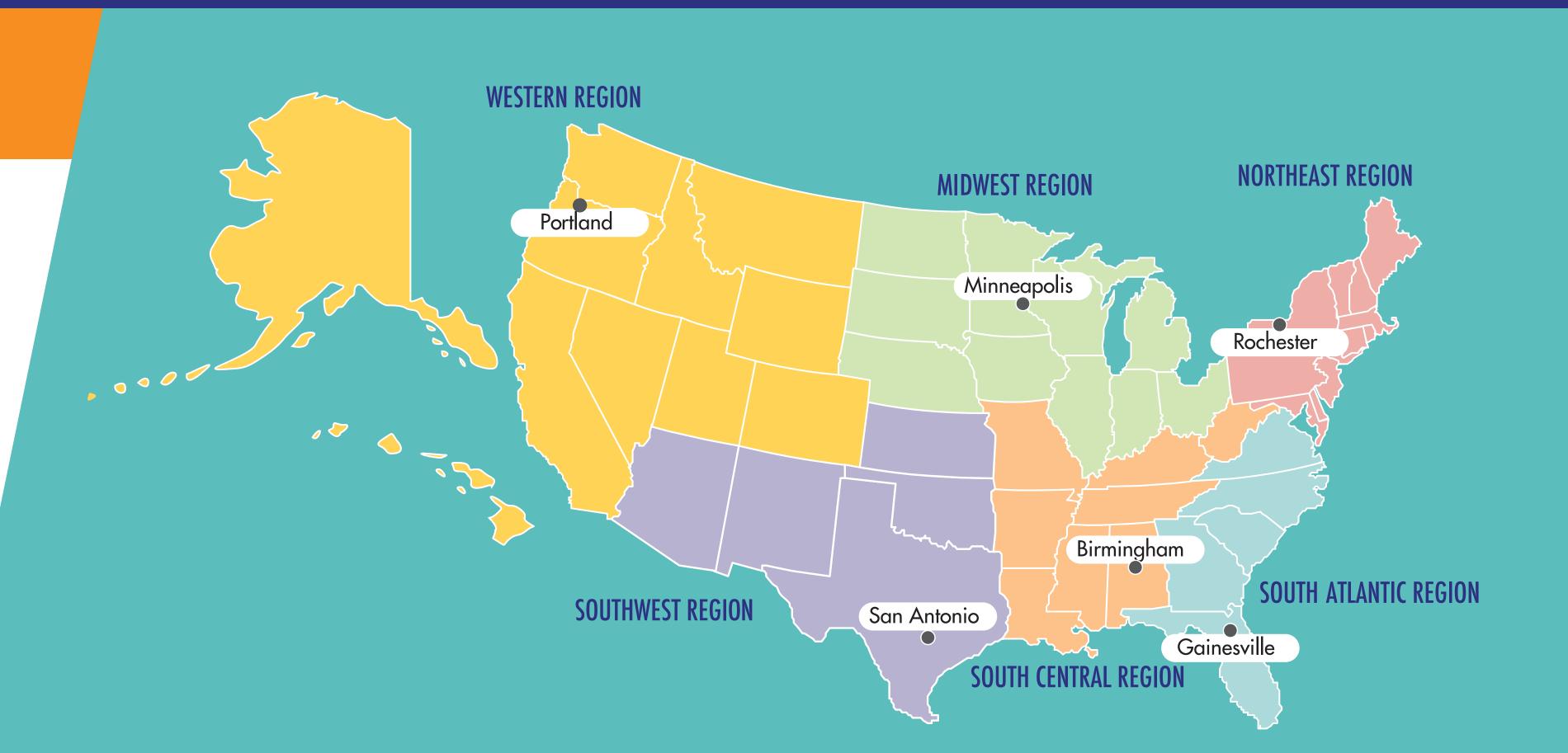
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OBJECTIVES



To test the feasibility of international collaboration for a study involving online case-study presentations (or vignettes).

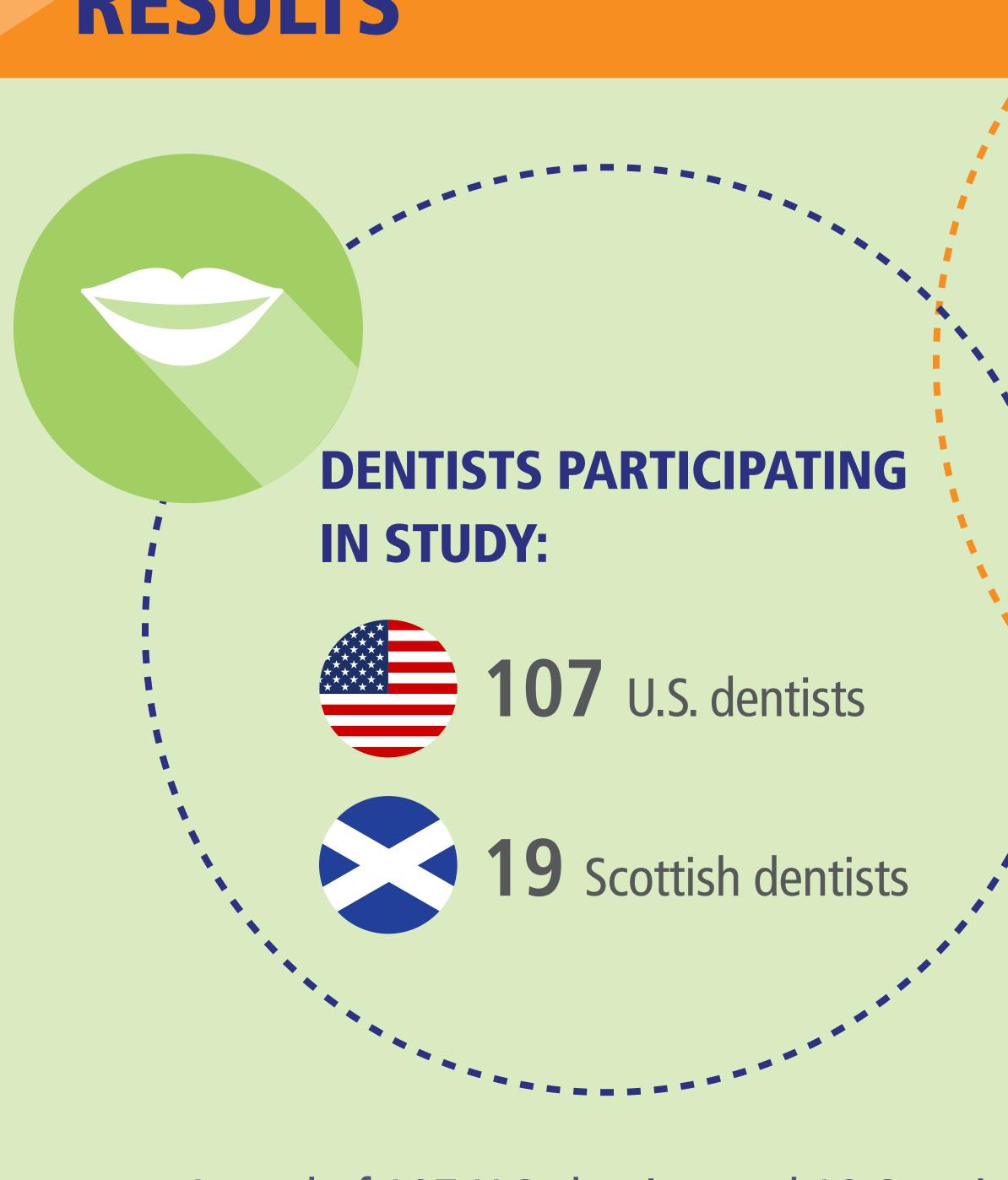


METHODS



An international collaboration was established between the U.S. National Dental Practice-Based Research Network (PBRN) and the Scottish Dental PBRN, to test the feasibility of using identical questionnaires to measure practitioners' treatment decisions. An online questionnaire from the National Dental PBRN study "Decision Aids for the Management of Suspicious Occlusal Caries Lesions (SOCLs)" was used. The main questionnaire objective was to assess dentists' decision policies for SOCLs. An online patient vignette system was used to capture individual decision policies (idiographic analysis). Practitioners were presented a series of 16 vignettes that represented all combinations of 4 cues: color, luster, lesion roughness, and patient-level caries risk. Each vignette included a description of the patient and a picture of a tooth that, taken together, presented the 4 cues. Dentists were asked to decide the likelihood that the lesion was in dentin for each vignette.

RESULTS



A total of 107 U.S. dentists and 19 Scottish dentists participated.

86% of U.S. PBRN dentists had a statistically reliable decision policy compared to 89% for the Scottish PBRN dentists.

The Percentages of dentists who made reliable use of a cue:

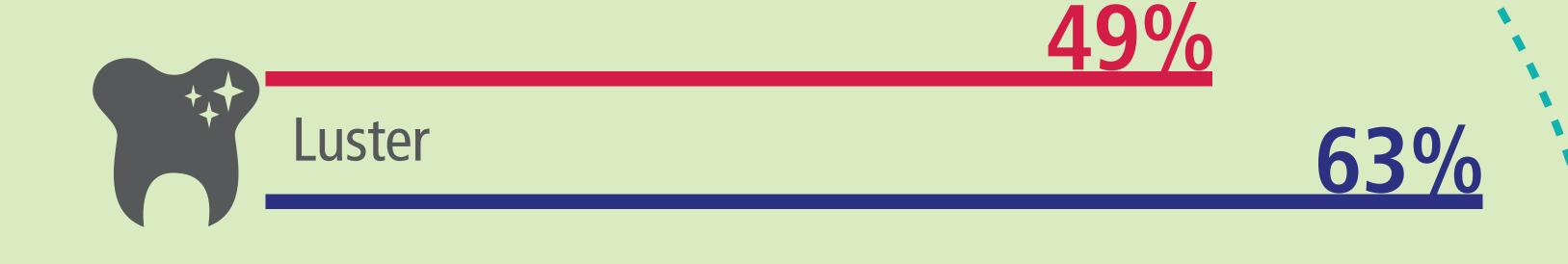
- **1** luster (49%-U.S.; 63% Scottish)
- **)** color (58%-U.S.; 53% Scottish)
- roughness (36% U.S.; 47% Scottish)
- risk (35% U.S.; 42% Scottish)

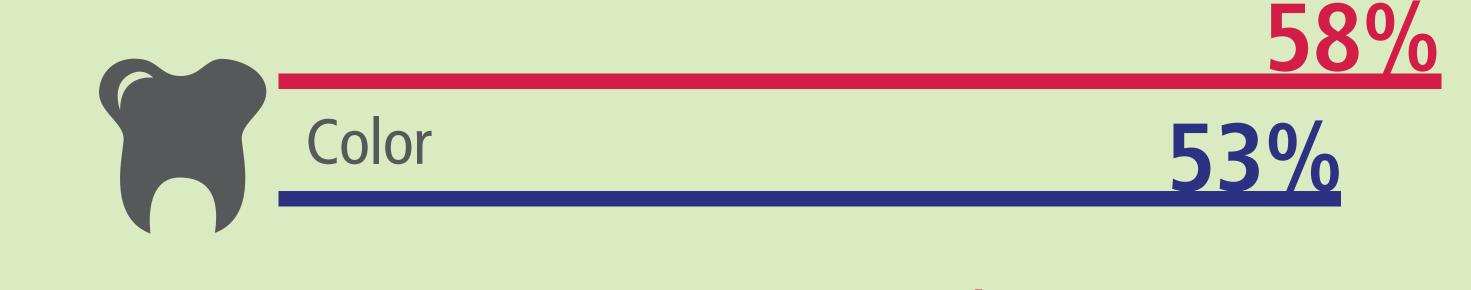
ESTABLISHED RELIABLE DECISION-MAKING POLICY:



89% Scottish dentists

DENTISTS WHO MADE RELIABLE USE OF A CUE:









CONCLUSION



The online system demonstrated that decision strategies are highly individualized. U.S. and Scottish PBRN dentists were similar in their decisions. Dentists' adoption of more evidence-based treatment approaches could be facilitated by knowing that most dentists are consistent in their cue use. There is little evidence about how dentists use these cues when judging the extent of caries progression. International collaborations on these topics appear feasible.