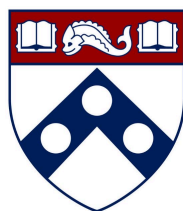


METHODOLOGY AND TERMINOLOGY USED IN EVIDENCE-INFORMED GUIDELINES IN ORAL HEALTH: A SYSTEMATIC SURVEY

Francisca Verdugo-Paiva, Ana María Rojas-Gómez, Vicente Wielandt,
Javiera Peña, Iván Silva-Ruz, Francisco Novillo,
Camila Ávila-Oliver, Michael Glick and Alonso Carrasco-Labra

UAB
Universitat Autònoma
de Barcelona



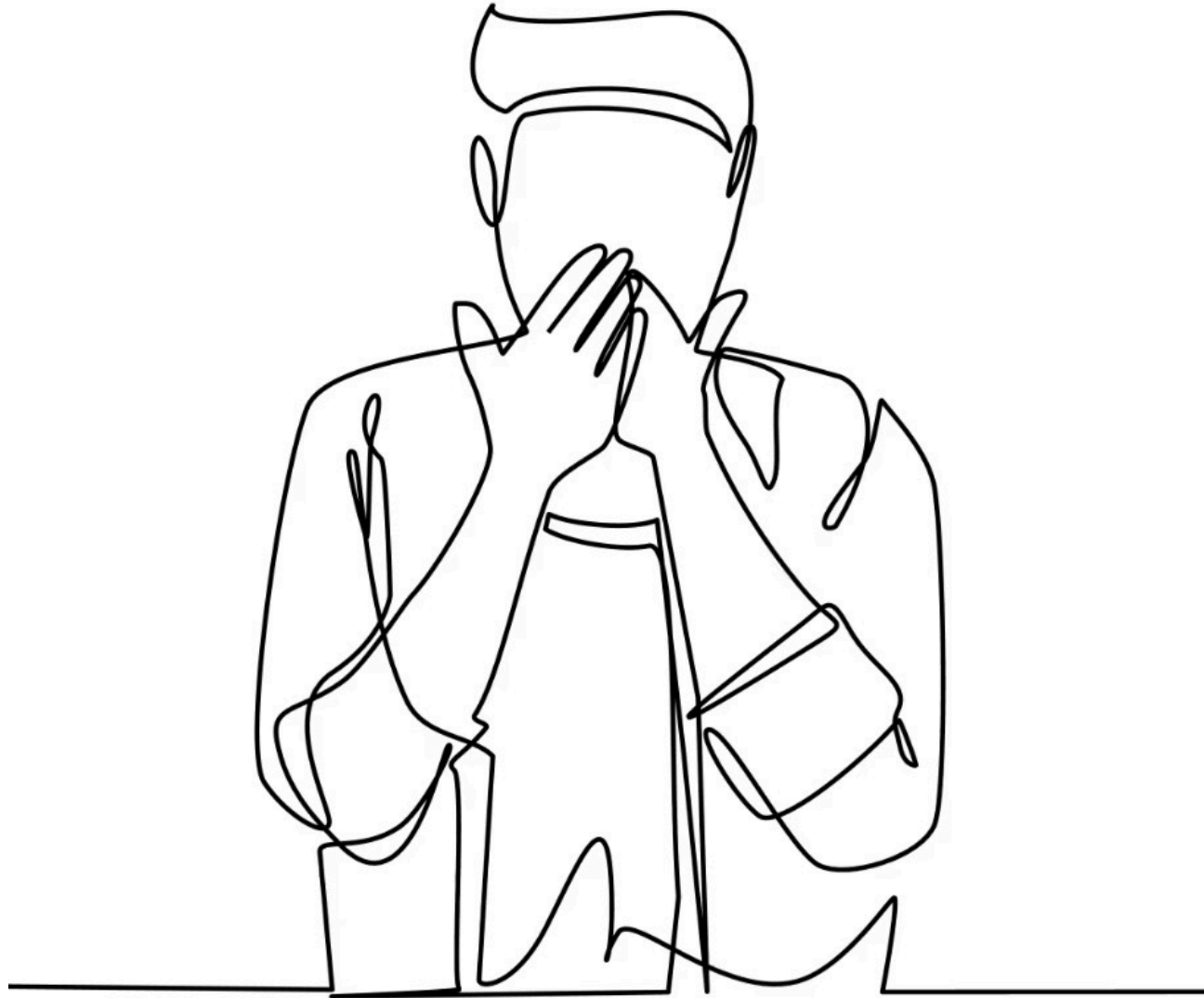
Penn
Dental Medicine
UNIVERSITY of PENNSYLVANIA



DECLARATION

I have no actual or potential conflict of interest in relation to this presentation

Funded by a scholarship (Doctorado en el Extranjero Becas Chile Convocatoria 2023) from the Chilean National Agency of Research and Development (ANID).



OBJECTIVE

This study aimed to systematically identify organizations that develop evidence-informed guidelines in oral health globally and survey the methodological process followed to formulate recommendations.

METHODS

Eligibility criteria

Organizations that develop evidence-informed guidelines in oral health.

Information sources and selection of organizations

(January 2012–October 2023)

Systematic search in
electronic databases and
guideline repositories
(eg,. GIN library)

Manual search in guideline
developers', scientific
societies, and health
ministries' websites

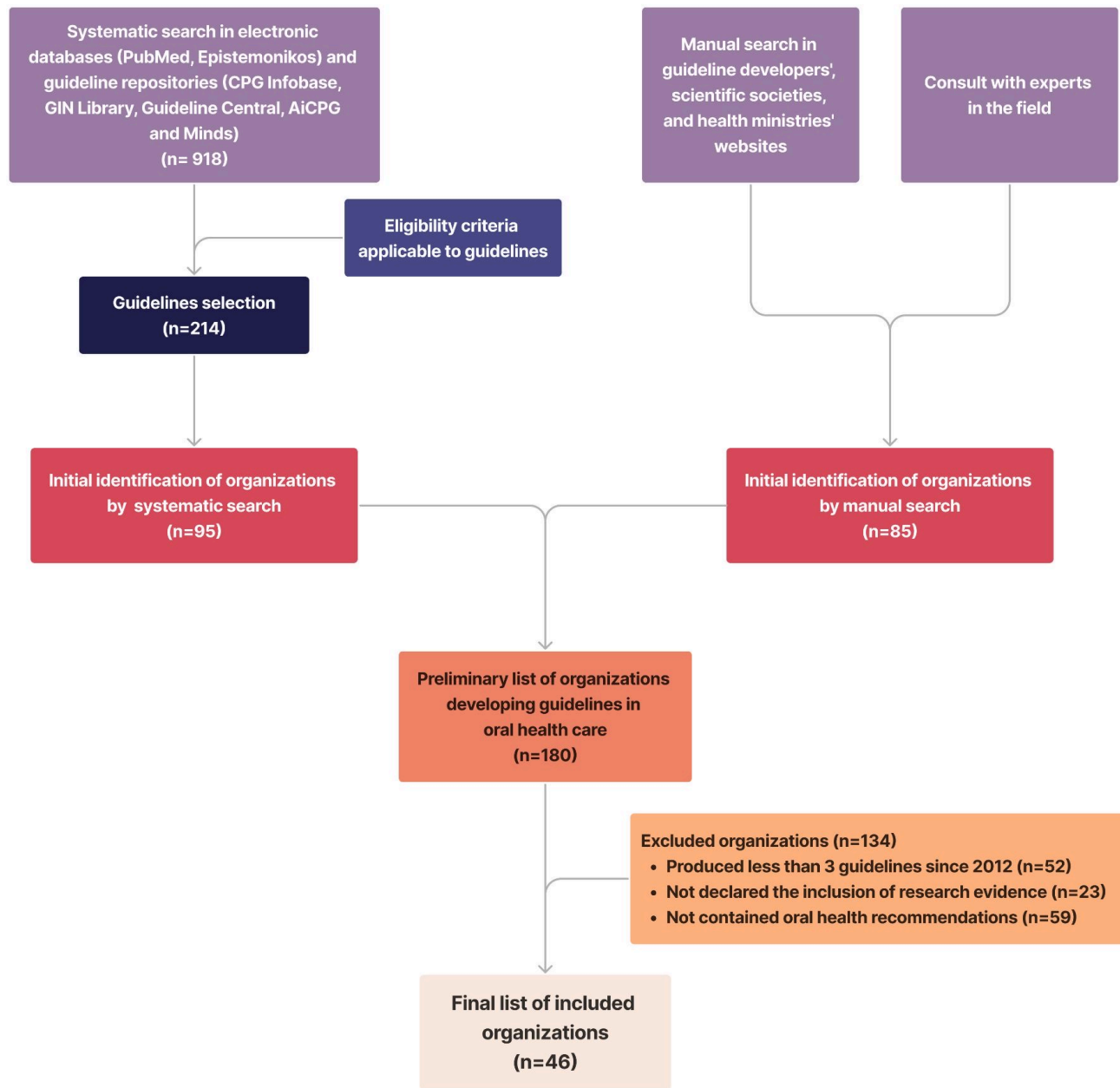
+

Consults with experts in the field

METHODS

Data collection

- Organization's characteristics
- Terminology used to describe the type of guideline document they produce
- Guidelines and policy documents characteristics
- Methods to develop recommendations:
 - **Methodology to assess the certainty/quality of evidence**
 - **Approach for grading the strength of recommendations**
 - **Frameworks used to move from evidence to decisions**



RESULTS

Fig. 1 Selection process flowchart

CHARACTERISTICS OF INCLUDED ORGANIZATIONS

General characteristics	Organizations (n=46)
Organization type	
Non-governmental organizations	31 (67%)
Governmental organization	13 (28%)
Academic and research institutions	2 (5%)
Continent	
Europe	19 (41%)
North America	10 (22%)
South America	6 (13%)
Oceania	2 (9%)
Asia	3 (7%)
Africa	0



7.4 Fissure Sealants



KEY RECOMMENDATION

For all children, place fissure sealants on the permanent molars as early as possible after eruption.

(Strong recommendation; moderate quality evidence)



EVIDENCE

Evidence for the effectiveness of fissure sealants was reviewed for SIGN guideline 138.¹⁷

Both resin based and glass ionomer sealants are effective in preventing caries (moderate and low to very low quality of evidence respectively). Resin based sealants showing better retention. Further discussion of the evidence on which this section of the guidance is based is provided in Section 15.1.

What is the evidence for effectiveness of sealants in preventing dental caries in children?

Evidence Summary



Evidence for the effectiveness of fissure sealants was reviewed for SIGN guideline 138.¹⁷ Fissure sealants have been shown to reduce pit and fissure caries in primary and permanent teeth⁷³ and are more effective in reducing decay in occlusal surfaces than fluoride varnish.¹¹⁰ Both resin-based and glass ionomer sealants are effective (moderate and low to very low quality evidence respectively).

There is no clear evidence to suggest which sealant material is more effective at preventing caries but resin-based sealants have been shown to be better retained than glass ionomer sealants.⁷³ This is consistent with the most recent systematic review and recommendations of the American Dental Association.^{111,112} Fissure sealants are also used in the management of carious lesions (see Sections 8 and 9).

Considered judgement



The evidence from two Cochrane systematic reviews and a systematic review by the American Dental Association supports the use of fissure sealants. Resin-based sealants may be preferable based on their superior retention. However, glass ionomer sealants are effective and may be particularly useful for application to newly erupted teeth. In agreement with SIGN guideline 138, recommending the application of fissure sealants to the permanent molars of all children in Scotland to prevent dental caries is considered likely to be beneficial. Some children may also benefit from sealant application to other teeth.

Methodology to assess the certainty/quality of evidence	Approach for grading the strength of recommendations	Frameworks used for EtD process
GRADE	GRADE	GRADE-EtD

3.1.3 | Does the use of augmentation procedures affect the implant survival?

Pooled data from 25 studies (6 RCTs, 11 prospective, 8 retrospective studies, 802 implants) with an observation period of up to 120 months could be identified where bone augmentation procedures were performed during implant placement. Implants placed immediately in conjunction with or without bone augmentation procedures showed similar survival rates (97.5% and 98.3%, respectively). However, the working group suggested that, in general, caution is required when data are pooled from a variety of studies with different designs which may not be comparable.

Information on simultaneous soft tissue grafting was available in 12 studies (4 RCTs, 3 prospective, 5 retrospective studies, 429 implants) with an observation period of up to 60 months. The evaluation of these studies showed a survival rate for non-grafted implants of 98.9% and implants with tissue grafts of 94.9%.

CONSENSUS STATEMENT

Based on the available data, there is no robust evidence to indicate that the use of bone and/or soft tissue augmentation procedures may affect the survival rate of single-tooth replacement in the anterior maxilla in conjunction with different implant timings or loading protocols.

3.2 | Clinical recommendations

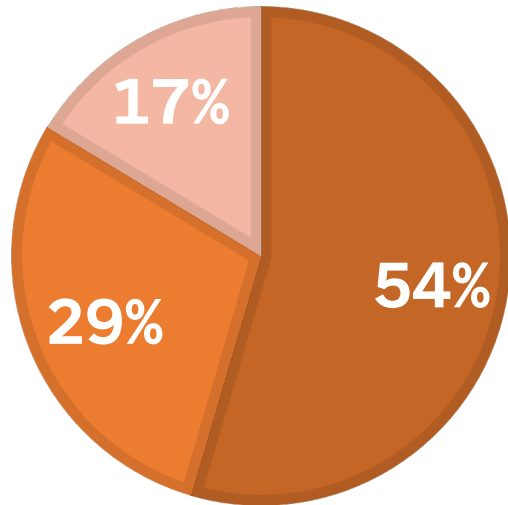
Different timings of implant placement / loading in relation to tooth extraction / implantation presented high implant survival rates and similar levels of bone loss for single-tooth implants in the anterior maxilla. Taking into consideration, that the current literature does not clearly favour (in terms of implant survival) one specific timing of implant placement / loading over the other, the clinician should consider all relevant biological, anatomical and aesthetic factors prior to the selection of any of these procedures.

Methodology to assess the certainty/quality of evidence	Approach for grading the strength of recommendations	Frameworks used for EtD process
No information	No information	No information

ORAL HEALTH GUIDELINES METHODOLOGY

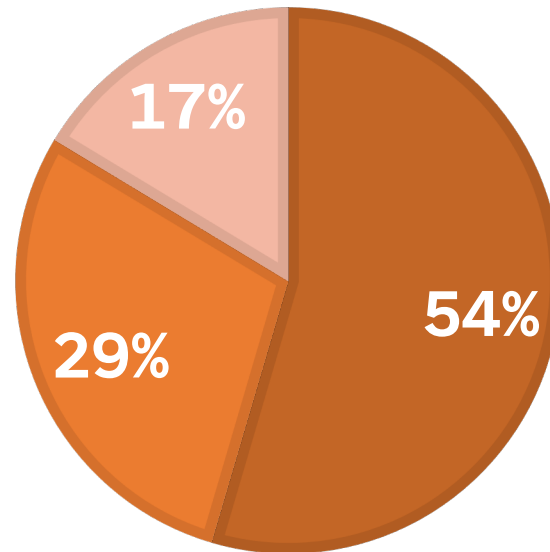
METHODOLOGY TO ASSESS THE CERTAINTY/QUALITY OF EVIDENCE

■ Not reported ■ GRADE ■ Other



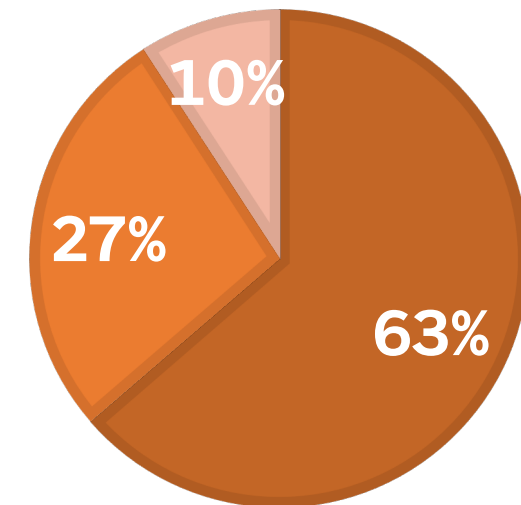
APPROACH FOR GRADING THE STRENGTH OF RECOMMENDATIONS

■ Not reported ■ GRADE ■ Other

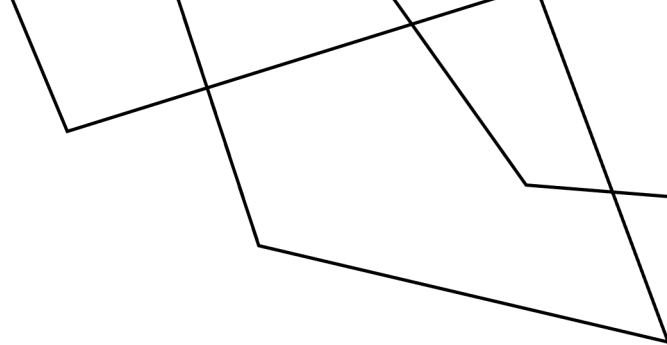


FRAMEWORKS USED TO MOVE FROM EVIDENCE TO DECISIONS

■ Not reported ■ GRADE EtD ■ Other



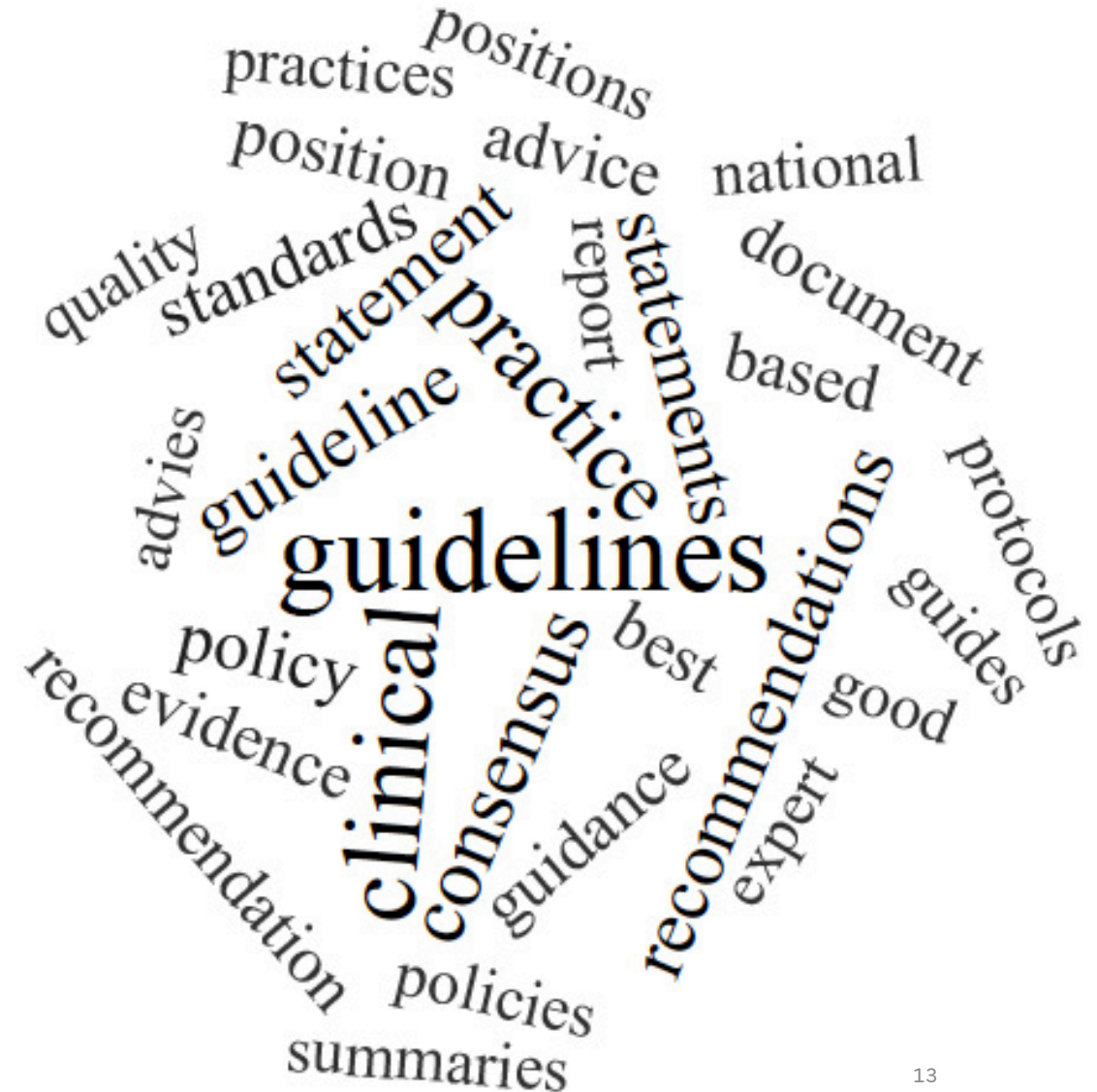
Documents containing oral health care recommendations	Documents containing public health-related recommendations
<ul style="list-style-type: none"> Advice Best clinical practice guidance Best evidence consensus statement Best practice guideline Clinical guidelines Clinical practice guidelines Clinical practice recommendations Clinical practice statements Clinical report Consensus document Consensus recommendations Consensus statements Consensus-based guidelines Evidence- and consensus-based guideline Evidence-based guideline Expert recommendation Good clinical practice Guidance Guidelines Position statements Recommendations Standards 	<ul style="list-style-type: none"> Guidelines Guidance Policy statements Position statements Recommendation statements Statements Quality standards



TERMINOLOGY USED BY ORAL HEALTH ORGANIZATIONS

CONCLUSIONS

- More than half of the included organizations do not follow a structured process for formulating recommendations
- Lack of consensus regarding the terminology the organizations use to describe the type of document they produce



An abstract graphic on the left side of the image consists of several overlapping, tilted white rectangles and lines on a black background, creating a complex, layered geometric pattern.

**THERE IS
NO HEALTH
WITHOUT
ORAL HEALTH**

THANK YOU

fverdugo@epistemonikos.org