94TH ANNUAL CONFERENCE
JUNE 14-19, 2017
JACKSONVILLE, FL

LEARN ENGAGE ADVANCE

CE Course Handout

With so many studies continually published, how do you keep track? Practice makes perfect: Strategies for Keeping Up with Research

June 15th, 2017

American Dental Hygienists' Association

PICO Exercise

Most EBD questions can be broken down into 4, independent, conceptual parts.

1. The population or participants. **P**
2. The intervention or indicator. **I**
3. The comparator or control. **C**
4. The outcome. **O**

Types of questions.

1. **Prevalence** What is frequency of the problem?
2. **Etiology or risk factors** What causes the problem?
3. **Diagnosis** Does this person have the problem?
4. **Therapy** What is the best treatment for the problem?
5. **Prognosis** Who will get the problem?

What is your original question?

_____

_____

_____

Fill in the PICO elements for your question

P:_____

I:_____

C:_____

O:_____

Write Question in PICO format

In <POPULATION> does <INTERVENTION> compared to <COMPARISON> result in <OUTCOME>?

_____

_____

_____

_____

_____

Is this a Prevalence, Etiology, Diagnosis, Therapy, or Prognosis question?

_____

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JUNE 14-19, 2017 | JACKSONVILLE, FL

Welcome!

With so many studies continually published, how do you keep track? Practice makes perfect: Strategies for Keeping Up with Research

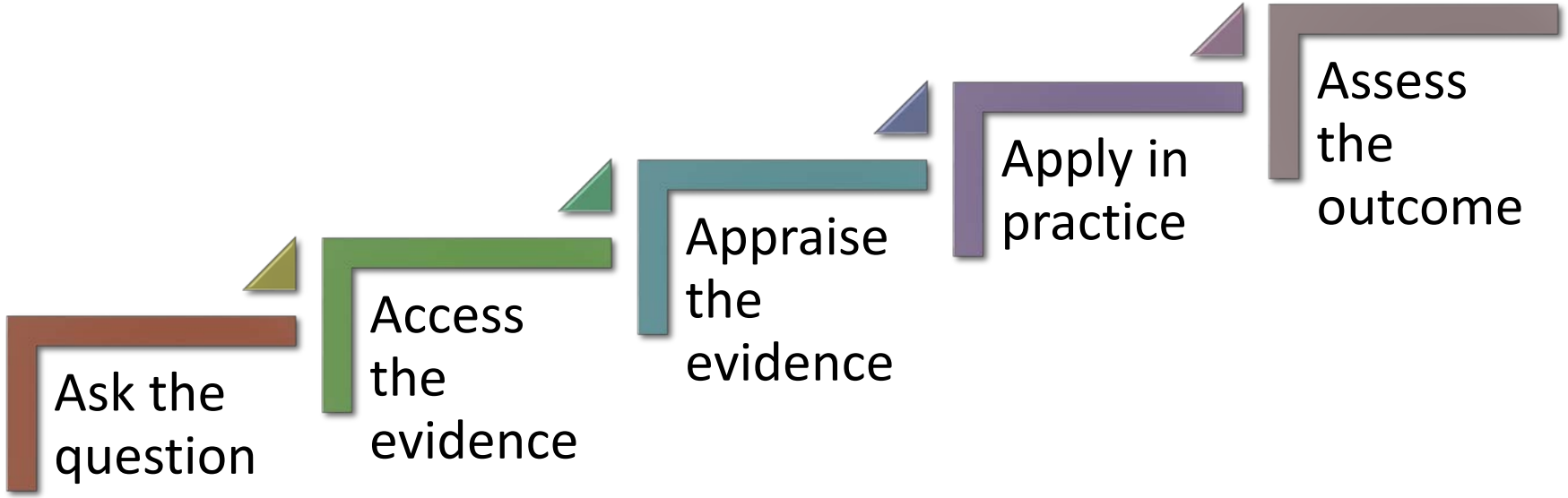
DAGMAR ELSE SLOT, RDH, PHD

JULIE FRANTSVE-HAWLEY, RDH, PHD

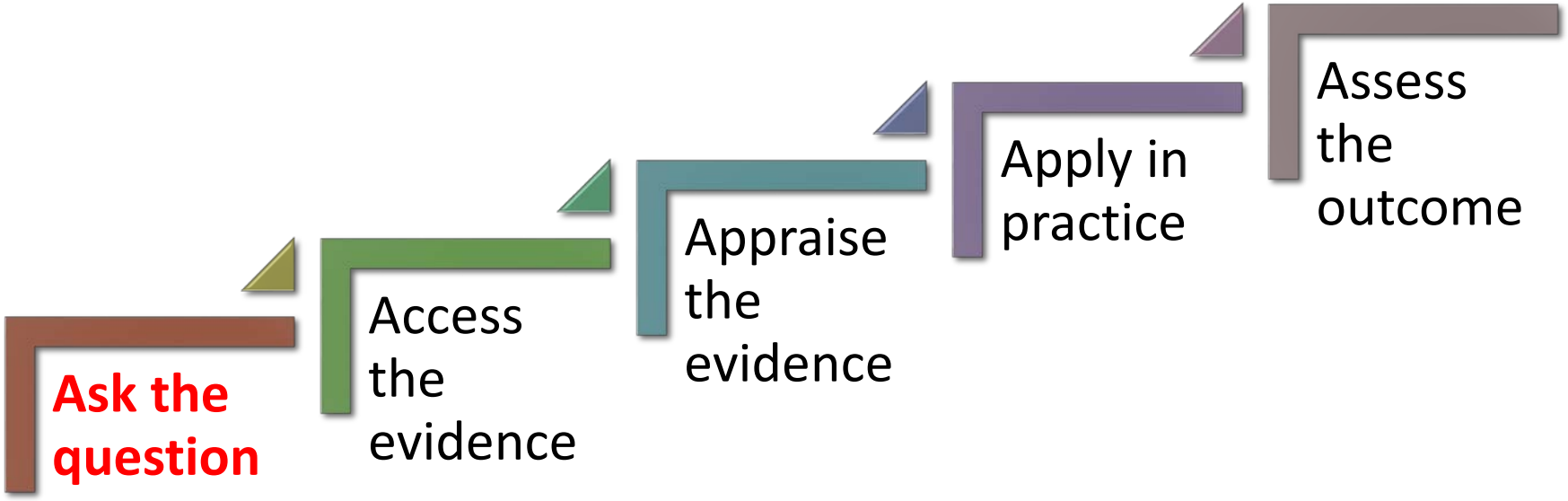
Evidence-Based Health Care: “The integration of best research evidence with clinical experience and patient values”

Shared Decision-Making

5 steps to the EBD Process



5 steps to the EBD Process



- Know what you are seeking
- Know when you've found the ans
- Help to find it quickly
- Identify search terms

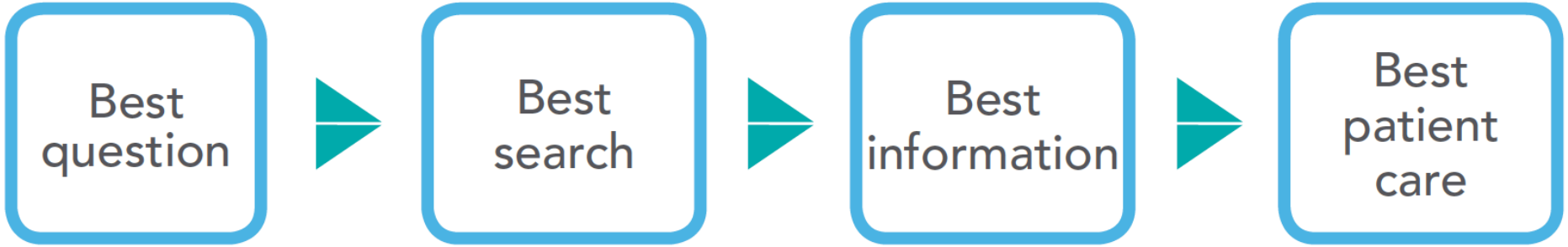


Fig 3-1 Framing the right question is an important part of providing excellent patient care.

Step 1: Framing the Answerable Question

P	Population or Problem
I (E)	Intervention or Exposure
C	Comparison (Optional)
O	Outcome

Question	Topic
What is frequency of problem?	Prevalence
What causes problem?	Etiology / risk
Does person have problem?	Diagnosis
What is the best treatment for problem?	Therapy
Who will get the problem?	Prognosis

In patients with periodontal disease, will short-term systemic antibiotics, when compared to surgery, reduce pocket depth?

Population

In patients with periodontal disease, will short-term systemic antibiotics, when compared to surgery, reduce pocket depth?

Intervention

In patients with periodontal disease, will short-term systemic antibiotics, when compared to surgery, reduce pocket depth?

Intervention

In patients with periodontal disease, will short-term systemic antibiotics, when compared to surgery, reduce pocket depth?

Comparison

In patients with periodontal disease, will short-term systemic antibiotics, when compared to surgery, reduce pocket depth?

Comparison

In patients with periodontal disease, will short-term systemic antibiotics, when compared to surgery, reduce pocket depth?

Outcome

In patients with periodontal disease, will short-term systemic antibiotics, when compared to surgery, reduce pocket depth?

Outcome

In patients with periodontal disease, will short-term systemic antibiotics, when compared to surgery, reduce pocket depth?

What type of question is this?

Therapy

What are your search terms?

Are children with high *S. mutans* counts, when compared to children with low *S. mutans* counts, at increased risk of caries?

Population

Are children with high *S. mutans* counts, when compared to children with low *S. mutans* counts, at increased risk of caries?

Population

Are children with high *S. mutans* counts, when compared to children with low *S. mutans* counts, at increased risk of caries?

Exposure

Are children with high *S. mutans* counts, when compared to children with low *S. mutans* counts, at increased risk of caries?

Exposure

Are children with high *S. mutans* counts, when compared to children with low *S. mutans* counts, at increased risk of caries?

Comparison

Are children with high *S. mutans* counts, when compared to children with low *S. mutans* counts, at increased risk of caries?

Comparison

Are children with high *S. mutans* counts, when compared to children with low *S. mutans* counts, at increased risk of caries?

Outcome

Are children with high *S. mutans* counts, when compared to children with low *S. mutans* counts, at increased risk of caries?

Outcome

Are children with high *S. mutans* counts, when compared to children with low *S. mutans* counts, at increased risk of caries?

What type of question is this?

Etiology/Risk

What are your search terms?

Do your patients ask PICO questions?

Can fluoride varnish prevent root caries?

Can you put something on my teeth so I won't get more cavities?

In adults at high caries risk, does fluoride varnish reduce future caries incidence?

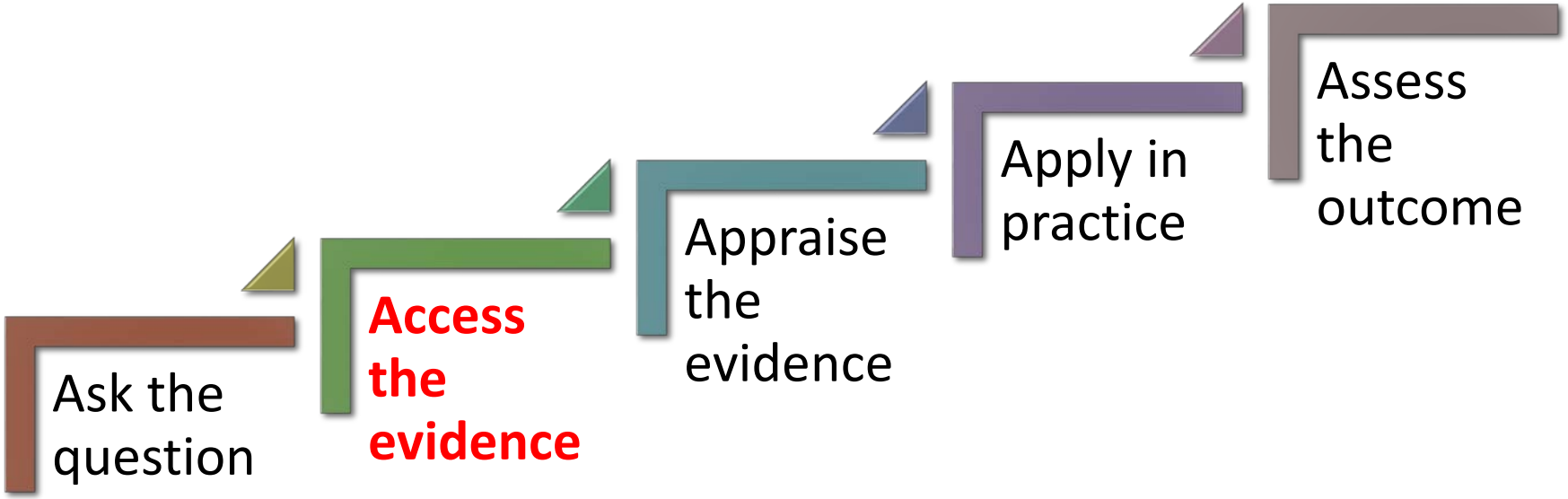
P	Adults at high caries risk
I	Fluoride varnish
C	None (or other type of fluoride)
O	Caries incidence

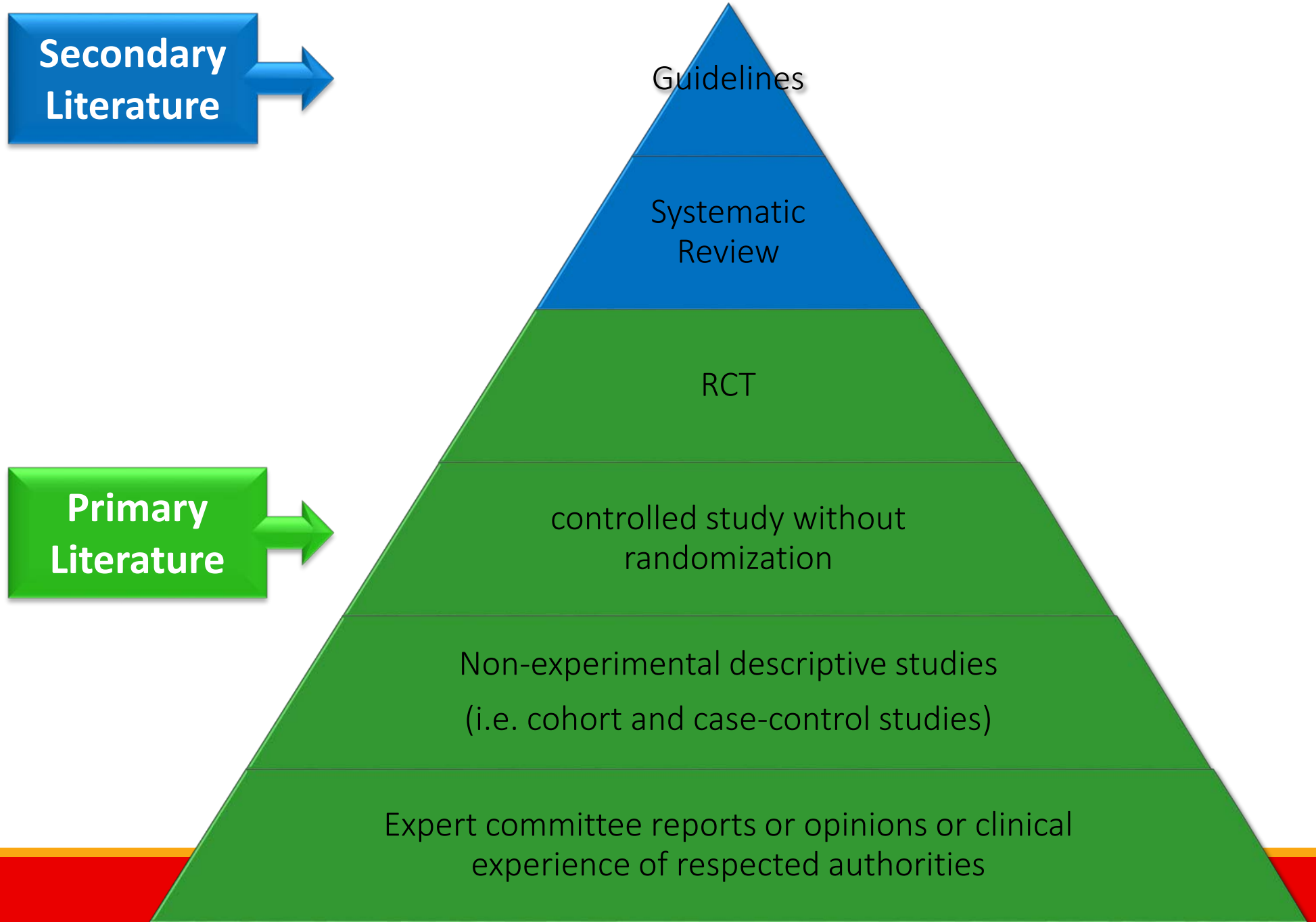
PICO Exercise

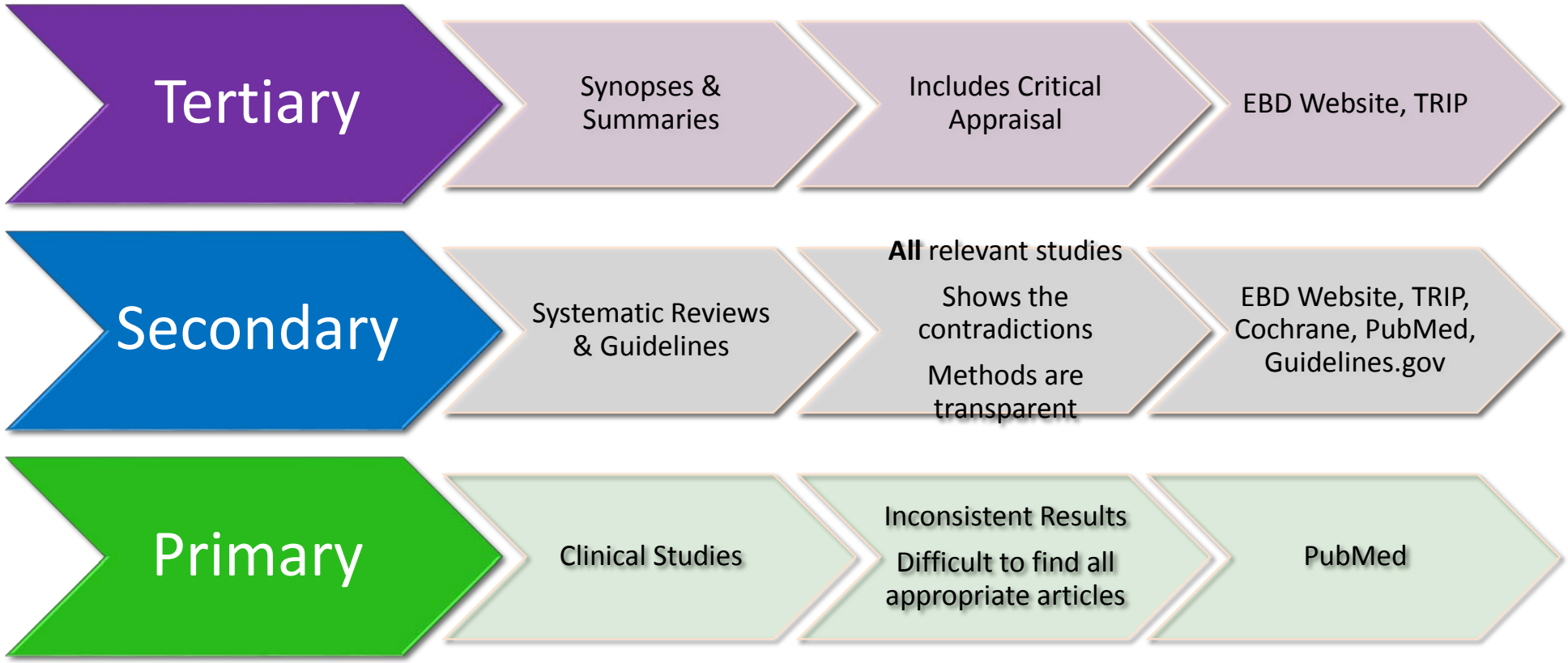
Translate these into PICO Questions:

1. Can sealants be placed on a tooth with an incipient lesion?
2. Is partial caries removal a reasonable alternative to a complete restoration?
3. Is fluoride varnish or gel better at preventing caries?
4. Does periodontal disease cause heart disease?

5 steps to the EBD Process




Secondary Literature
Primary Literature
Guidelines
Systematic Review
RCT
controlled study without randomization
Non-experimental descriptive studies
(i.e. cohort and case-control studies)
Expert committee reports or opinions or clinical experience of respected authorities


Tertiary
Synopses & Summaries
Includes Critical Appraisal
EBD Website, TRIP
Secondary
Systematic Reviews & Guidelines
All relevant studies
Shows the contradictions
Methods are transparent
EBD Website, TRIP, Cochrane, PubMed, Guidelines.gov
Primary
Clinical Studies
Inconsistent Results
Difficult to find all appropriate articles
PubMed

Searching for Summaries

Tertiary → Summary → EBD Website

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Critical Summaries

Systematic Reviews

integrating three important

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Evidence

- Guidelines
- Critical Summaries
- Plain Language Summaries
- *Systematic Reviews*
- Browse Evidence Database

Home > Evidence > **Systematic Reviews**

Share

Systematic Reviews

In the hierarchy of evidence, systematic reviews are preferable to narrative reviews for answering focused clinical questions. They are conducted according to transparent and repeatable processes considering all of the published evidence, not just that of which the reviewer may have prior knowledge or favor. The process also includes assessing the quality of each study, the overall quality of the body of evidence, and a summary of the clinical results. A systematic review typically involves:

- An exhaustive search for studies (the evidence).
- Procedures to maximize objectivity and minimize bias.
- Selection of best available evidence having the strongest study design.
- Critical appraisal of the quality of each study.
- A summary of the results of the included studies.
- Interpretation of the evidence for clinicians and researchers.

Browse Evidence Database

Please note: Due to technical difficulties, the evidence database is not fully functional. We are actively working to

Tertiary → Summary → EBD Website

Cariology and Caries Management

Subcategory All Subcategories

Evidence Type All Evidence Types

Absence of carious lesions at margins of glass-ionomer and amalgam restorations: a meta- analysis

Mickenautsch S, Yengopal V, Leal SC, Oliveira LB, Bezerra AC, Bonecker M. European Journal of Paediatric Dentistry. 2009;10(1):41-6

Guideline
✓ Critical Summary
Plain Language Summary
✓ Systematic Review

Absence of carious lesions at margins of glass-ionomer cement and amalgam restorations: An update of systematic review evidence

Mickenautsch, S., Yengopal, V.. BMC Research Notes. 2011;4():58

Guideline
Critical Summary
Plain Language Summary
✓ Systematic Review

Absence of carious lesions at margins of glass-ionomer cement (GIC) and resin-modified GIC restorations: a systematic review

Mickenautsch, S., Tyas, M. J., Yengopal, V., Oliveira, L. B., Bonecker, M.. European Journal of Prosthodontics & Restorative Dentistry. 2010;18(3):139-45

Guideline
Critical Summary
Plain Language Summary
✓ Systematic Review

Tertiary → Summary → EBD Website

Systematic Review | Critical Summary

Limited evidence exists that glass ionomer restorations in permanent teeth offer a lower risk of developing carious lesions at margins compared with amalgam restorations

Carlos Flores-Mir, DDS, DSc, FRCD(C); Mike John, DDS, MPH, PhD; Debora Matthews DDS, MSC.

Overview

Systematic Review Conclusion

Carious lesions are less common at the margins of single-surface glass ionomer restorations than at the margins of amalgam restorations after restorations have been in permanent teeth for six years.

Critical Summary Assessment

The authors of a systematic review of eight studies found glass ionomer restorations to have a substantial effect in preventing secondary caries compared with amalgam restorations.

Evidence Quality Rating

Limited Evidence

Tertiary | Summary | TRIP

Trip

dental sealants

Search

333 results

- All Secondary Evidence
  - Evidence-based Synopses 25
  - Systematic Reviews 27
  - Guidelines
    - Aus & NZ 5
    - Canada 1
    - UK 6
    - USA 31

Tertiary → Summary → TRIP

Trip

dental sealants

Search

2. Fissure Sealants Arrest Caries Progression in The Primary Dentition With Non-Cavitated Occlusal Caries
UTHSCSA Dental School CAT Library 2013
Share this | Add to BMJ portfolio | CPD/CME | More

3. Bisphenol-A is released after placement of some dental pit and fissure sealants
The Dental Elf 2013
Share this | Add to BMJ portfolio | CPD/CME | More

4. Bisphenol-A is released after placement of some dental pit and fissure sealants
The Dental Elf 2013
Share this | Add to BMJ portfolio | CPD/CME | More

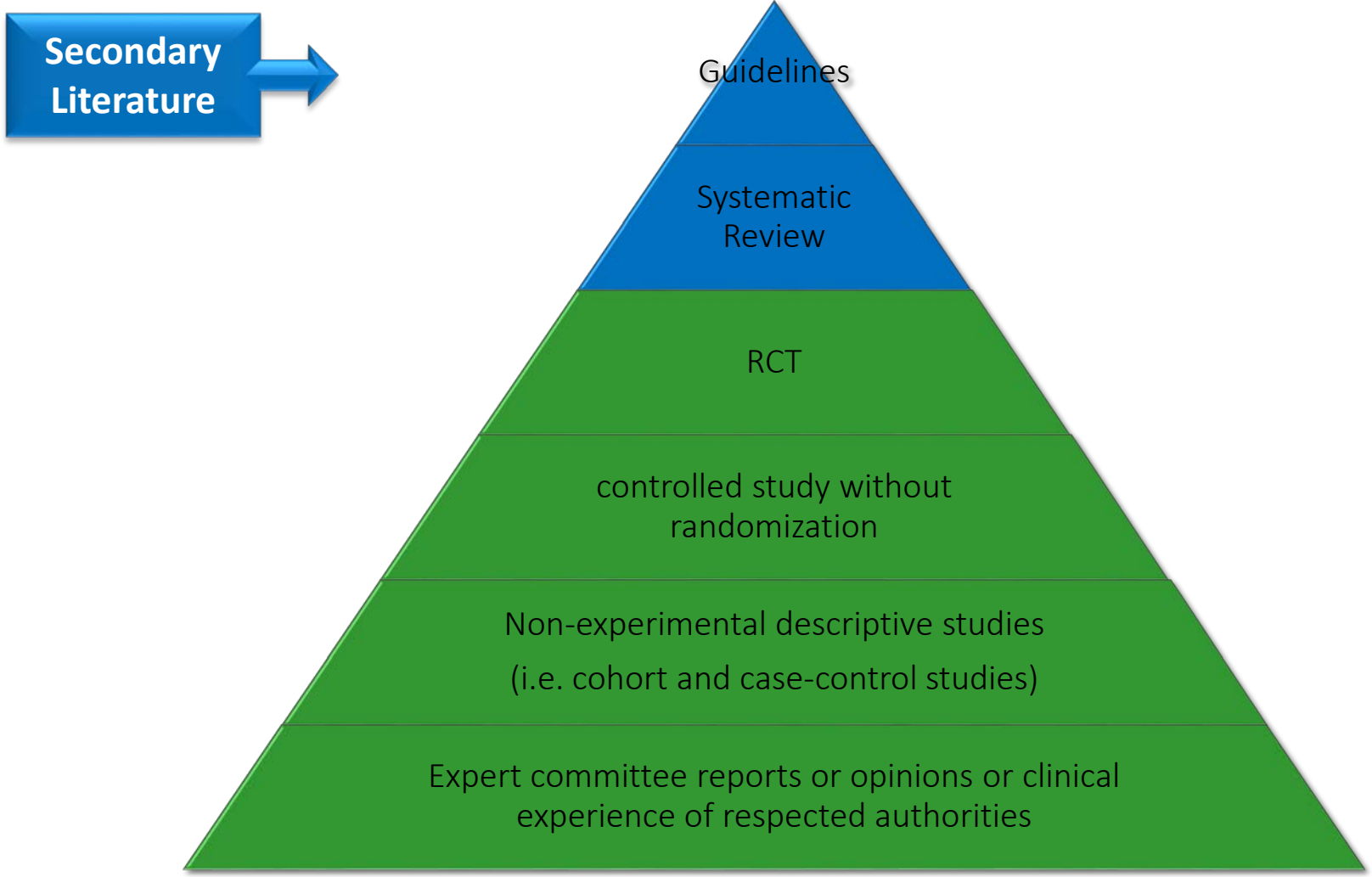
5. Five-year retention rates of resin-based dental sealants higher than glass-ionomers or compomers
ADA Systematic Review Critical Summaries 2013
Share this | Add to BMJ portfolio | CPD/CME | More

6. Pit and fissure sealants versus fluoride varnishes for preventing dental decay in children and adolescents
Cochrane Database of Systematic Reviews 2010
Share this | Add to BMJ portfolio | DOI | CPD/CME | More

Search Exercise:

TRIP: http://www.tripdatabase.com

- How many citations did you find?
- What is the highest level of the evidence?
- What are the overall conclusions?



Searching for Guidelines

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Critical Summaries

Systematic Reviews

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Screening for Oral Squamous Cell Carcinomas[1]

In patients reporting for routine dental care, screening for oral cancer provided by dentists, is one component of the patient evaluation to detect any oral abnormality.

Recommendations	Classification
Remain alert for signs of potentially malignant lesions or early-stage cancers in all patients[1], particularly for patients who use tobacco	D
	D
	D

Reconstituted Infant Formula and Enamel Fluorosis: Evidence-based Clinical Recommendations[1]

Levels of evidence and strength of recommendations: Each recommendation is based on the best *available* evidence. The level of evidence available to support each recommendation may differ. Lower levels of evidence *do not* mean the recommendation should not be applied for patient treatment.

D

Recommendations based on lower levels of evidence

Dietary Fluoride Supplements: Evidence-based Clinical Recommendations[1]

Levels of evidence and strength of recommendations: Each recommendation is based on the best available evidence. Lower levels of evidence do not mean the recommendation should not be applied for patient treatment.

Correlate these colors with the text and table below.

A	B	C	D
Recommendation based on higher levels of evidence			Recommendations based on lower levels of evidence or expert opinion

Nonfluoride Caries Preventive Agents: Evidence-Based Clinical Recommendations[1]

Strength of recommendations: Each recommendation is based on the best available evidence. The level of evidence available to support each recommendation may differ.

Strong	In favor	Weak	Against	Expert Opinion
Evidence strongly supports providing this intervention	Evidence favors providing this intervention	Evidence suggests implementing this intervention only after alternatives have been considered	Evidence suggests not implementing this intervention	Evidence is lacking. Any recommendation for or against is based on expert opinion.

Clinical Recommendations for Use of Professionally-Applied or Prescription-Strength, Home-Use Topical Fluoride Agents for Caries Prevention in Patients at Elevated Risk of Developing Caries[1]

Strength of recommendations: Each recommendation is based on the best available evidence. The level of evidence available to support each recommendation may differ.

Strong	In favor	Weak	Expert Opinion For	Expert Opinion Against	Against
Evidence strongly supports providing this intervention	Evidence favors providing this intervention	Evidence suggests implementing this intervention only after alternatives have been considered	Evidence is lacking; the level of certainty is low. Expert opinion guides this recommendation	Evidence is lacking; the level of certainty is low. Expert opinion suggests not implementing this intervention	Evidence suggests not implementing this intervention or discontinuing ineffective procedures

Age Group or Dentition Affected	Professionally-Applied Topical Fluoride Agent	Prescription-Strength, Home-Use Topical Fluoride Agent
Younger than 6 Years	2.26% fluoride varnish at least every 3 to 6 months ● In Favor	
6–18 Years	2.26% fluoride varnish at least every 3 to 6 months ● In Favor OR 1.23% fluoride (APF*) gel for 4 minutes at least every 3 to 6 months ● In Favor	0.09% fluoride mouthrinse at least weekly ● In Favor OR 0.5% fluoride gel or paste twice daily ● Expert Opinion For
Older than 18 Years	2.26% fluoride varnish at least every 3 to 6 months ● Expert Opinion For OR 1.23% fluoride (APF*) gel for 4 minutes at least every 3 to 6 months ● Expert Opinion For	0.09% fluoride mouthrinse at least weekly ● Expert Opinion For OR 0.5% fluoride gel or paste twice daily ● Expert Opinion For
Adult Root Caries	2.26% fluoride varnish at least every 3 to 6 months ● Expert Opinion For OR 1.23% fluoride (APF*) gel for 4 minutes at least every 3 to 6 months ● Expert Opinion For	0.09% fluoride mouthrinse daily ● Expert Opinion For OR 0.5% fluoride gel or paste twice daily ● Expert Opinion For

Additional Information:

- 0.1% fluoride varnish, 1.23% fluoride (APF*) foam, or prophylaxis pastes are not recommended for preventing coronal caries in all age groups (● Expert Opinion Against or ● Against). See JADA publication for recommendation strength by age group.[1] The full report, which includes more details, is available at ebd.ada.org.
- No prescription-strength or professionally-applied topical fluoride agents except 2.26% fluoride varnish are recommended for children younger than 6 years (● Expert Opinion Against or ● Against), but practitioners may consider the use of these other agents on the basis of their assessment of individual patient factors that alter the benefit-to-harm relationship.
- Prophylaxis before 1.23% fluoride (APF*) gel application is not necessary for coronal caries prevention in all age groups (● Expert Opinion Against or ● Against). See JADA publication for recommendation strength by age group.[1] No recommendation can be made for prophylaxis prior to application of other topical fluoride agents. The full report, which includes more details, is available at ebd.ada.org.

*APF: Acidulated phosphate fluoride

Patients at low risk of developing caries may not need additional topical fluorides other than over-the-counter fluoridated toothpaste and fluoridated water.

[1] Weyant RJ, Tracy SL, Anselmo T, Beltrán-Aguilar ED, et al. *Topical Fluoride for Caries Prevention: Executive Summary of the Updated Clinical Recommendations and Supporting Systematic Review. JADA 2013;144(11):1279-1291.*

Secondary | Guideline | TRIP

Trip

dental sealants

Search

33 results for "dental sealants", by quality

With selected | Order | Important papers | Synonyms | Add to automated search | Translate

1. Guideline Summary: Evidence-based clinical recommendations for the use of pit-and-fissure sealants. A report of the American Dental Association Council on Scientific Affairs. [American Dental Association]
info@guideline.gov (NGC) 2013
Share this | Add to BMJ portfolio | CPD/CME | More

2. Guideline Summary: Pit and fissure sealants: evidence-based guidance on the use of sealants for the prevention and management of pit and fissure caries. [Oral Health Services Guideline Initiative]
info@guideline.gov (NGC) 2013
Share this | Add to BMJ portfolio | CPD/CME | More

3. Evidence-based clinical recommendations for the use of pit-and-fissure sealants. A report of the American Dental Association Council on Scientific Affairs.
American Dental Association 2008
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American Dental Association 1

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'oral cancer'

Run an advanced search on this term

Search within: GO

Sort results by: Relevance (what's this?) Publication date

Filter results by: All Years

1-20 of 309 Next >

Compare Guidelines

1. **HealthPartners Dental Group and Clinics oral cancer guideline.** 2007 May 2 (revised 2012 Nov 9).
   NGC:009498
   HealthPartners Dental Group - Professional Association. *View all guidelines by the developer(s)*

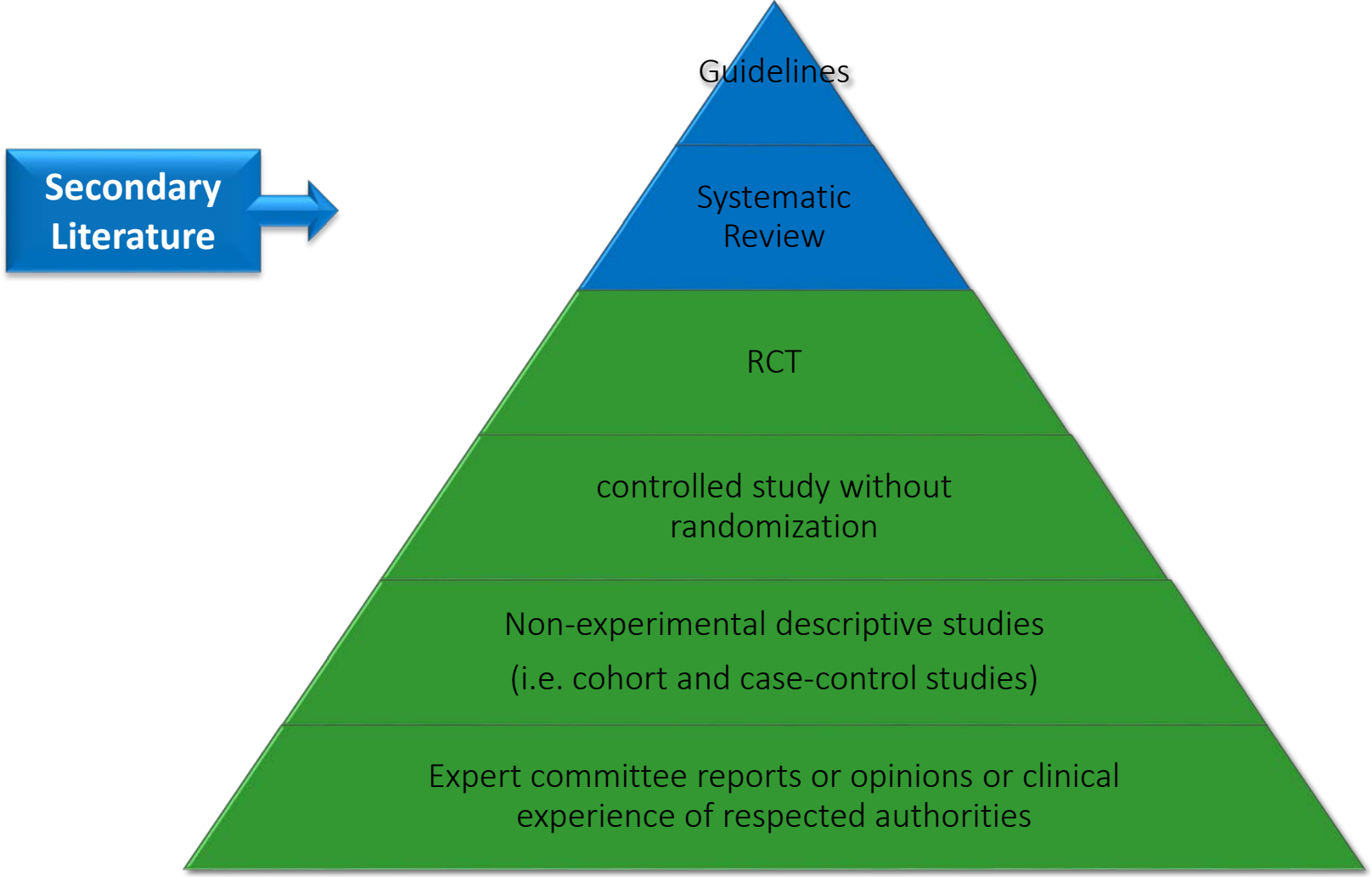
2. **Evidence-based clinical recommendations regarding screening for oral squamous cell carcinomas.**
   2010 May. NGC:008055
   American Dental Association - Professional Association. *View all guidelines by the developer(s)*

3. **Early detection of cancers. In: Guidelines for preventive activities in general practice, 8th edition.**
   2012. NGC:009647
   Royal Australian College of General Practitioners - Professional Association. *View all guidelines by the developer(s)*

Search Exercise:

NGC: http://www.guideline.gov

- How many citations did you find?
- What is the highest level of the evidence?
- What are the overall conclusions?



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Systematic Review | Critical Summary

Absence of carious lesions at margins of glass-ionomer and amalgam restorations: a meta- analysis

Mickenautsch S, Yengopal V, Leal SC, Oliveira LB, Bezerra AC, Bonecker M. European Journal of Paediatric Dentistry. 2009;10(1):41-6

AIM: To report on the absence of carious lesions at margins of glass ionomer cement (GIC) and amalgam restorations. METHODS: Six Anglophone and 1 Lusophone databases were searched for articles up to 5 January 2008. Inclusion criteria for articles were: (i) titles/abstracts relevant to topic; (ii) published in English, Portuguese or Spanish language; (iii) reporting on a randomised control trial. Exclusion criteria were: (i) insufficient random allocation of study subjects (ii) operator and subject not blinded, where appropriate; (iii) not all entered subjects accounted for at trial conclusion; (iv) subjects of both groups not followed up the same way. Articles were accepted only if they complied with all the criteria. Ten articles complied with the inclusion criteria and were selected for review. From these 4 were rejected and 6 articles reporting on 8 separate studies accepted. Due to aspects of heterogeneity, studies were sub-grouped before meta- analysis. RESULTS: Significantly less carious lesions were observed on single-surface GIC restorations in permanent teeth after 6 years as compared to restorations with amalgam (OR 2.64 - CI 95% 1.39 - 5.03, p= 0.003). No studies investigating multiple-surface restorations on permanent teeth were identified. Studies investigating carious lesions at margins of restorations in primary teeth showed no difference between both materials after 3 and 8 years. CONCLUSIONS: Carious lesions at margins of single-surface GIC restorations are less common than with amalgam fillings after 6 years in permanent teeth. No difference was observed in primary teeth. More trials are needed in order to confirm these results.

Secondary | Systematic Review | EBD Website

Trip

dental sealants

Search

Refine 540 results by evidence type

All Secondary Evidence

Evidence-based Synopses 35

27 results for "dental sealants", by quality

With selected | Order | Important papers | Synonyms | Add to automated search | Translate

1. Pit and fissure sealants versus fluoride varnishes for preventing dental decay in children and adolescents

Cochrane Database of Systematic Reviews 2010

Share this | Add to BMJ portfolio | DOI | CPD/CME | More

2. Pit and fissure sealants for preventing dental decay in the permanent teeth of children and adolescents

Cochrane Database of Systematic Reviews 2009

Share this | Add to BMJ portfolio | CPD/CME | More

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Aus & NZ 8

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PubMed.gov
US National Library of Medicine
National Institutes of Health

PubMed | Search

Limits Advanced Help

PubMed

PubMed comprises more than 21 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.

Using PubMed

- PubMed Quick Start Guide
- Full Text Articles
- PubMed FAQs
- PubMed Tutorials
- New and Noteworthy

PubMed Tools

- PubMed Mobile
- Single Citation Matcher
- Batch Citation Matcher
- Clinical Queries
- Topic-Specific Queries

More Resources

- MeSH Database
- Journals in NCBI Databases
- Clinical Trials
- E-Utilities
- LinkOut

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PubMed Clinical Queries

Search Search Clear

Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use PubMed directly.

Clinical Study Categories

Category: Therapy

Scope: Broad

Sample Results of Clinical Study Category Query

Filter citations to a specific clinical study category and scope. These search filters were developed by Haynes RB et al.

Systematic Reviews

Sample Results of Systematic Reviews Query

Filter citations for systematic reviews, meta-analyses, reviews of clinical trials, evidence-based medicine, consensus development conferences, and guidelines. See related sources.

Medical Genetics

Topic: All

Sample Results of Medicinal Genetics Query

Filter citations to topics in medical genetics.

Secondary | Systematic Review | PubMed

PubMed Clinical Queries

Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use Publ

"Pit and Fissure Sealants"[Mesh]

Clinical Study Categories

Category: Therapy

Scope: Broad

Results: 5 of 1686

Caries management by risk assessment.

Takulla NF, Wolff MS, Schenkel AB.

N Y State Dent J. 2012 Nov; 78(6):41-5.

Cost-effectiveness models for dental caries prevention programmes among Chilean schoolchildren.

Mariño R, Fajardo J, Morgan M.

Community Dent Health. 2012 Dec; 29(4):302-8.

Caries prevalence in 12-year-old Cypriot children.

Systematic Reviews

Results: 5 of 75

Guideline on pediatric restorative dentistry.

American Academy of Pediatric Dentistry. Clinical Affairs Committee – Restorative Dentistry Subcommittee.

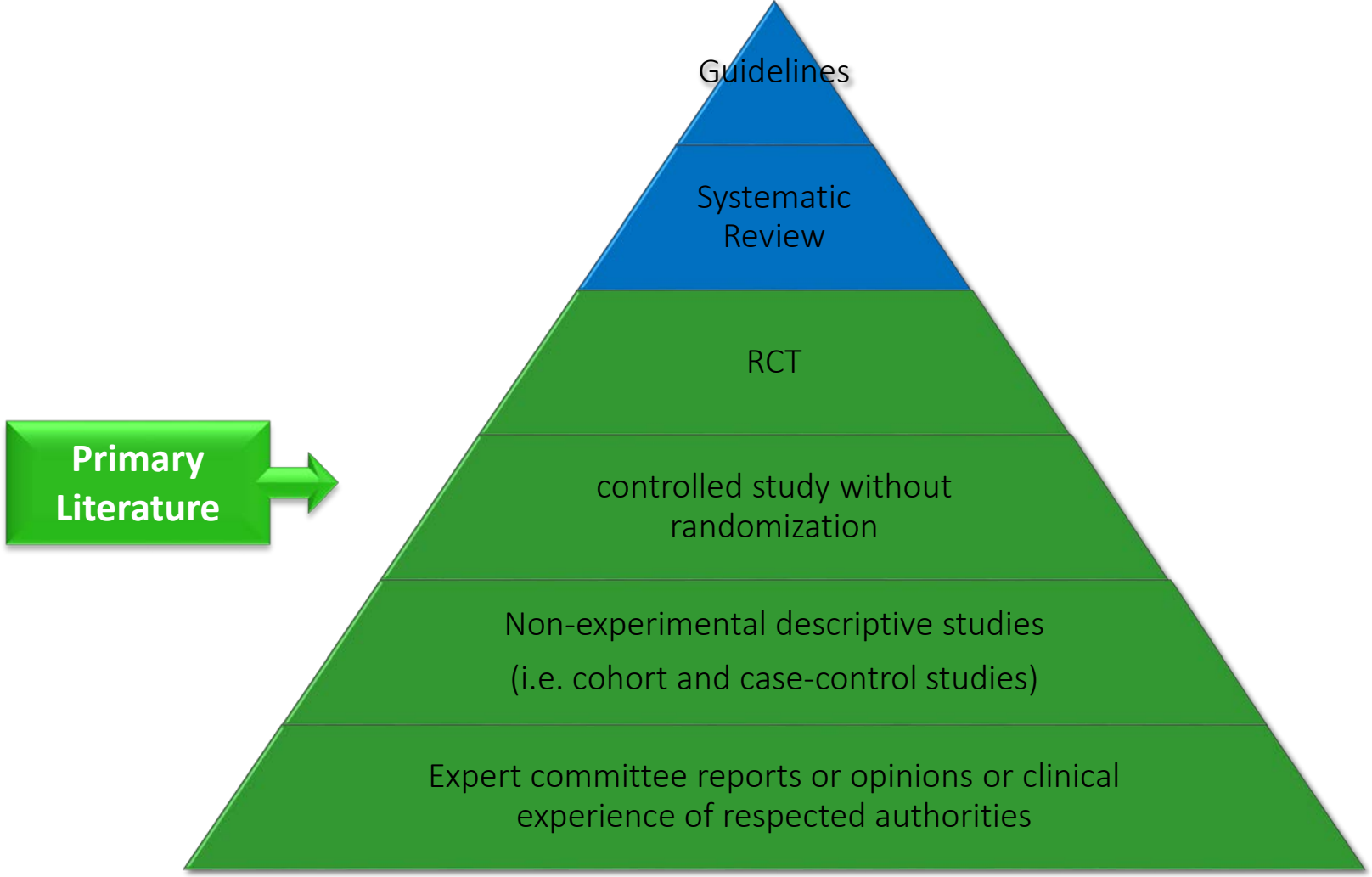
Pediatr Dent. 2012 Sep-Oct; 34(5):173-80.

Indications for fissure sealants and their role in children and adolescents.

Mejàre I.

Dent Update. 2011 Dec; 38(10):699-703.

Longevity of materials for pit and fissure sealing--results



Searching for Clinical Studies

Primary | Clinical Studies | PubMed

PubMed Clinical Queries

Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use PubM

"Pit and Fissure Sealants"[Mesh]

Clinical Study Categories

Category: Therapy

Scope: Broad

Results: 5 of 1686

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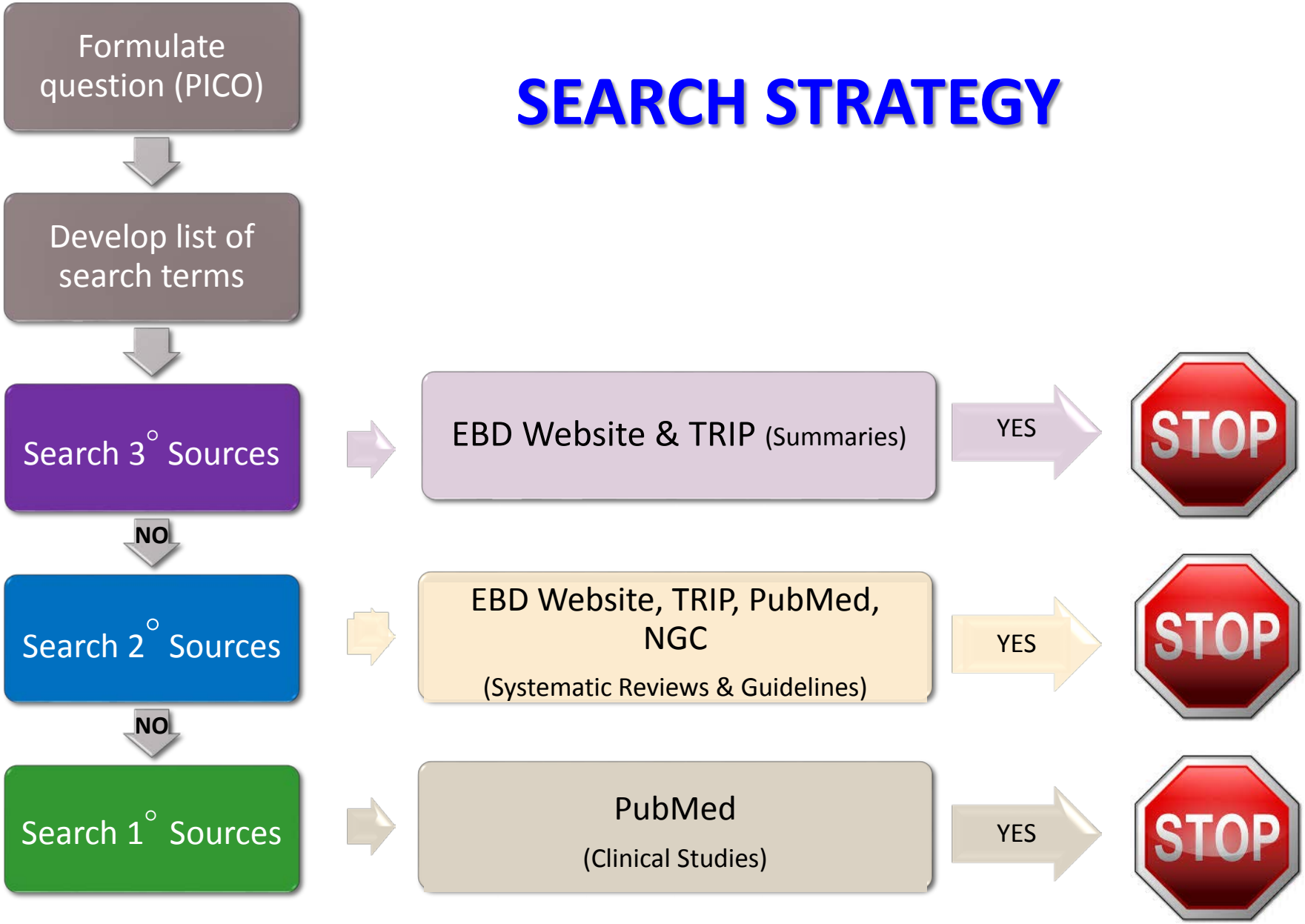
Search Exercise:

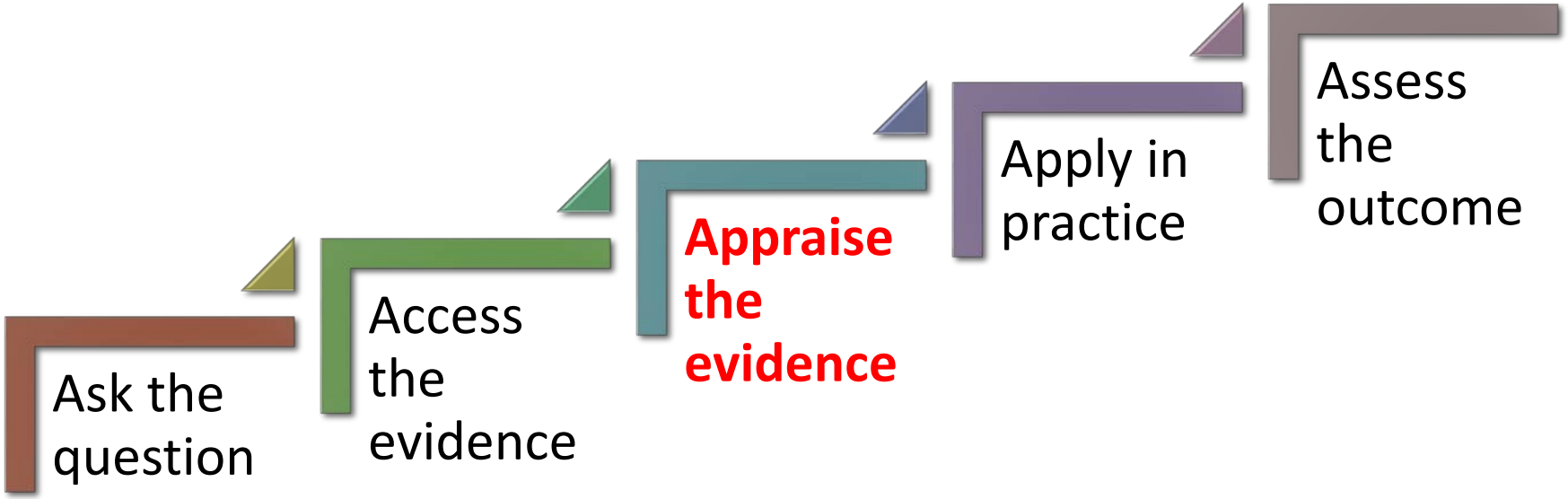
Pubmed Clinical Queries

- How many citations did you find?
- What is the highest level of the evidence?
- What are the overall conclusions?

SEARCH STRATEGY



5 steps to the EBD Process



STEP 3: Appraise the Evidence

- Tools
  - Study design
  - Level of detail
  - Intended application
  - Personal preference
- Resources
  - Critical appraisals/summaries

STEP 3: Appraise the Evidence

- Does this study address a clearly focused question?
- Did the study use valid methods to address this question?
- Are the valid results of this study important?
- Are these valid, important results applicable to my patient or population?

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Critical Appraisal Worksheets

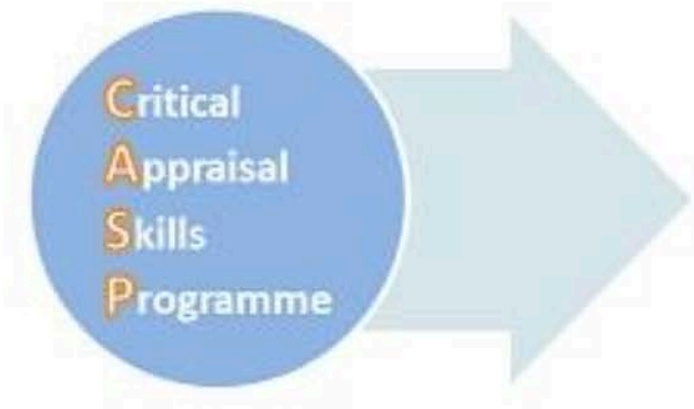
English

- Systematic Review Critical Appraisal Sheet
- Diagnosis Critical Appraisal Sheet
- Prognosis Critical Appraisal Sheet
- Therapy / RCT Critical Appraisal Sheet

CASP Checklist

CASP Systematic Review Checklist	CASP Qualitative Checklist
CASP Randomised Controlled Trial Checklist	CASP Case Control Checklist
CASP Diagnostic Checklist	CASP Cohort Study Checklist
CASP Economic Evaluation Checklist	CASP Clinical Prediction Rule Checklist

Critical Appraisal Skills Programme (CASP) http://www.casp-uk.net/#!casp-tools-checklists/c18f8



10 questions to help you make sense of a review

(A) Are the results of the review valid?

Screening Questions

1. Did the review address a clearly focused question?

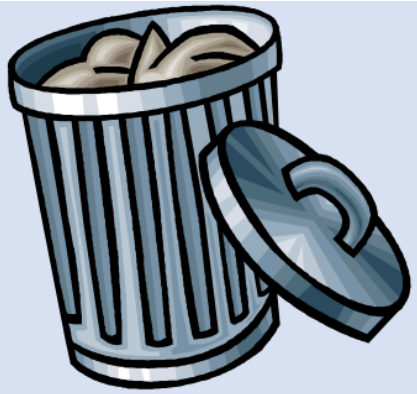
HINT: An issue can be 'focused' In terms of

- The population studied
- The intervention given
- The outcome considered

2. Did the authors look for the right type of papers?

HINT: 'The best sort of studies' would

- Address the reviews question
- Have an appropriate study design (usually RCTs for papers evaluating interventions)



Is it worth continuing?

3. Do you think all the important, relevant studies were included?

HINT: Look for

- Which bibliographic databases were used
- Follow up from reference lists
- Personal contact with experts
- Search for unpublished as well as published studies
- Search for non-English language studies

4. Did the review's authors do enough to assess the quality of the included studies?

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results. ("All that glisters is not gold" Merchant of Venice – Act II Scene 7)

5. If the results of the review have been combined, was it reasonable to do so?

HINT: Consider whether

- The results were similar from study to study
- The results of all the included studies are clearly displayed
- The results of the different studies are similar
- The reasons for any variations in results are discussed

(B) What are the results?

6. What are the overall results of the review?

HINT: Consider

- If you are clear about the review's 'bottom line' results
- What these are (numerically if appropriate)
- How were the results expressed (NNT, odds ratio etc)

7. How precise are the results?

HINT: Look at the confidence intervals, if given

(C) Will the results help locally?

8. Can the results be applied to the local population?

HINT: Consider whether

- The patients covered by the review could be sufficiently different to your population to cause concern
- Your local setting is likely to differ much from that of the review

9. Were all important outcomes considered?

HINT: Consider whether

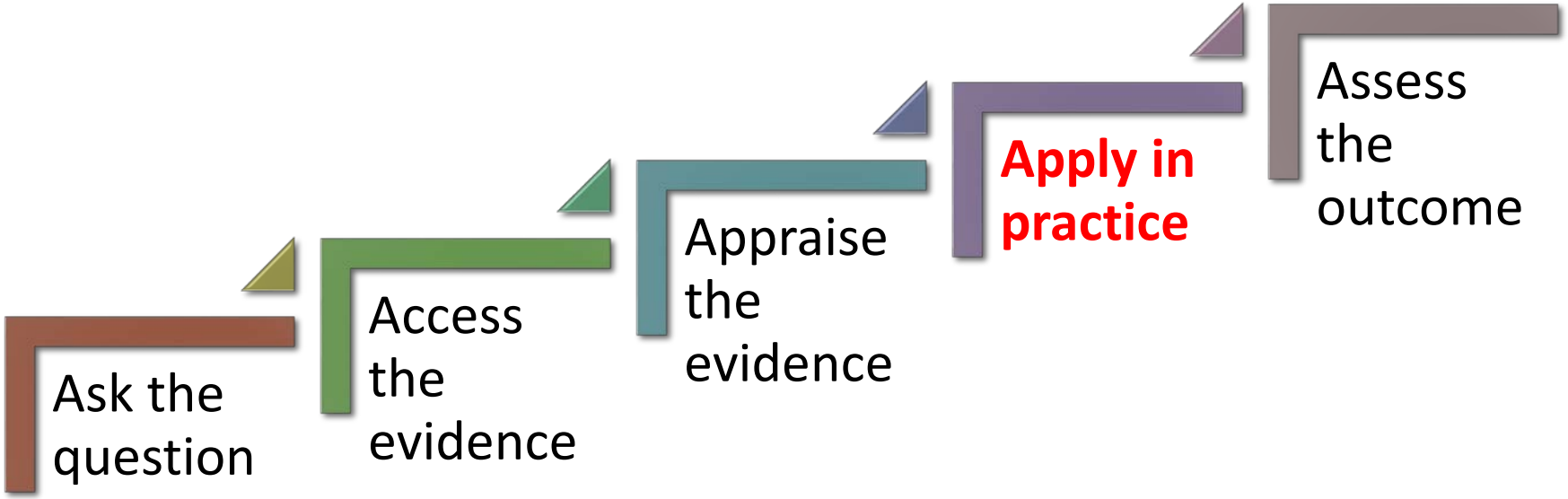
- Is there other information you would like to have seen

10. Are the benefits worth the harms and costs?

HINT: Consider

- Even if this is not addressed by the review, what do you think?

5 steps to the EBD Process



1.Are the results valid?

Quality

- Are the studies well designed and executed?
- What are the types of studies are there?

Quantity

- How many studies are there?
- What are the population sizes?

Consistency

- How consistent are there results?

1. Are the results valid?

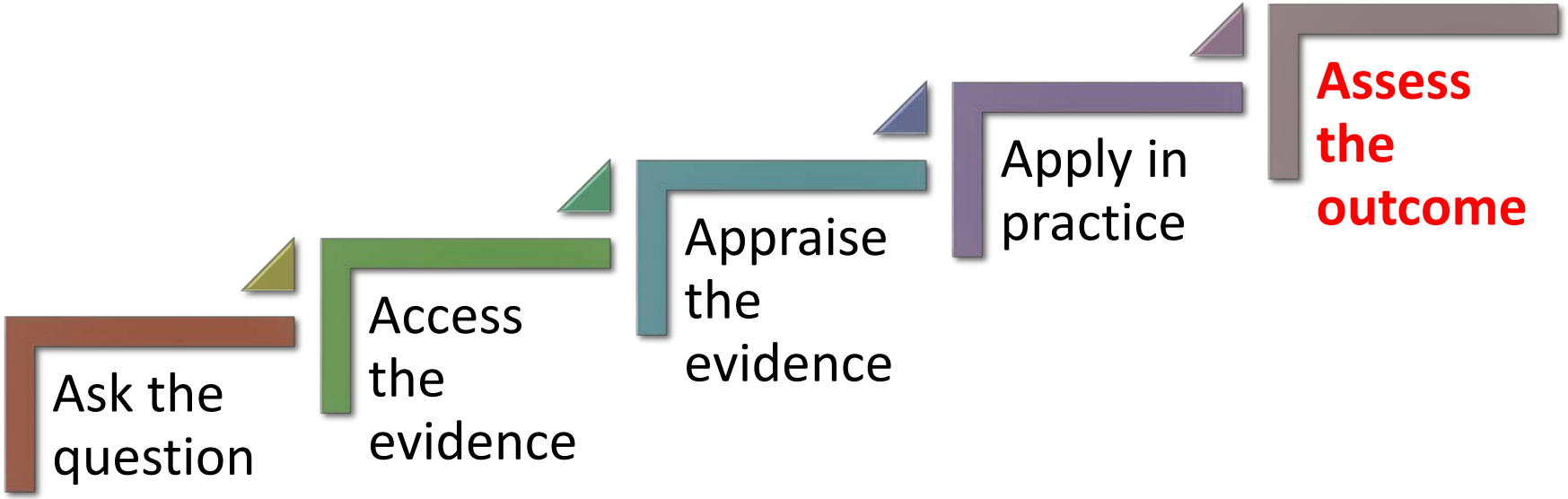
2. What are the results?

- Certainty of the effect
- Magnitude of the effect

1. Are the results valid?
2. What are the results?
3. **Can the results be applied to my patient?**

- Is the population similar?
- Is the provider similar?
- Is the setting similar?

5 steps to the EBD Process



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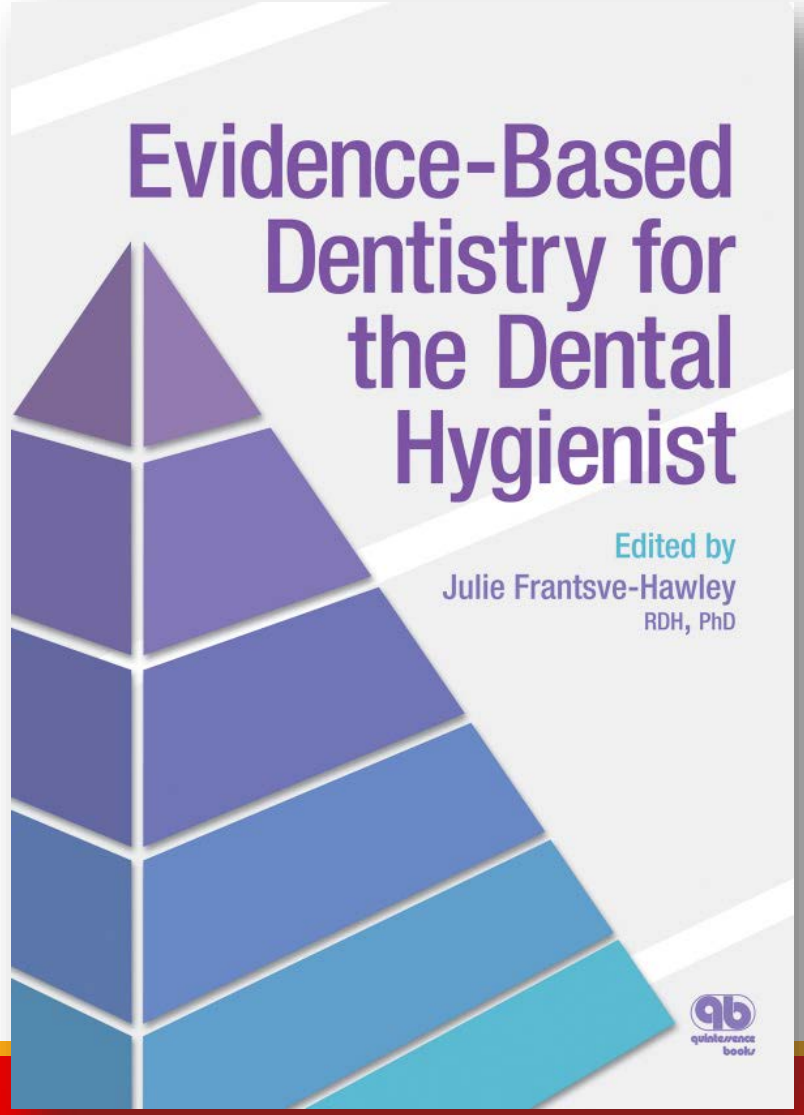


MISSION DAY
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PRESSURE
12.49
PSI
OXYGEN
20.82
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TEMP
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TIME 19 33
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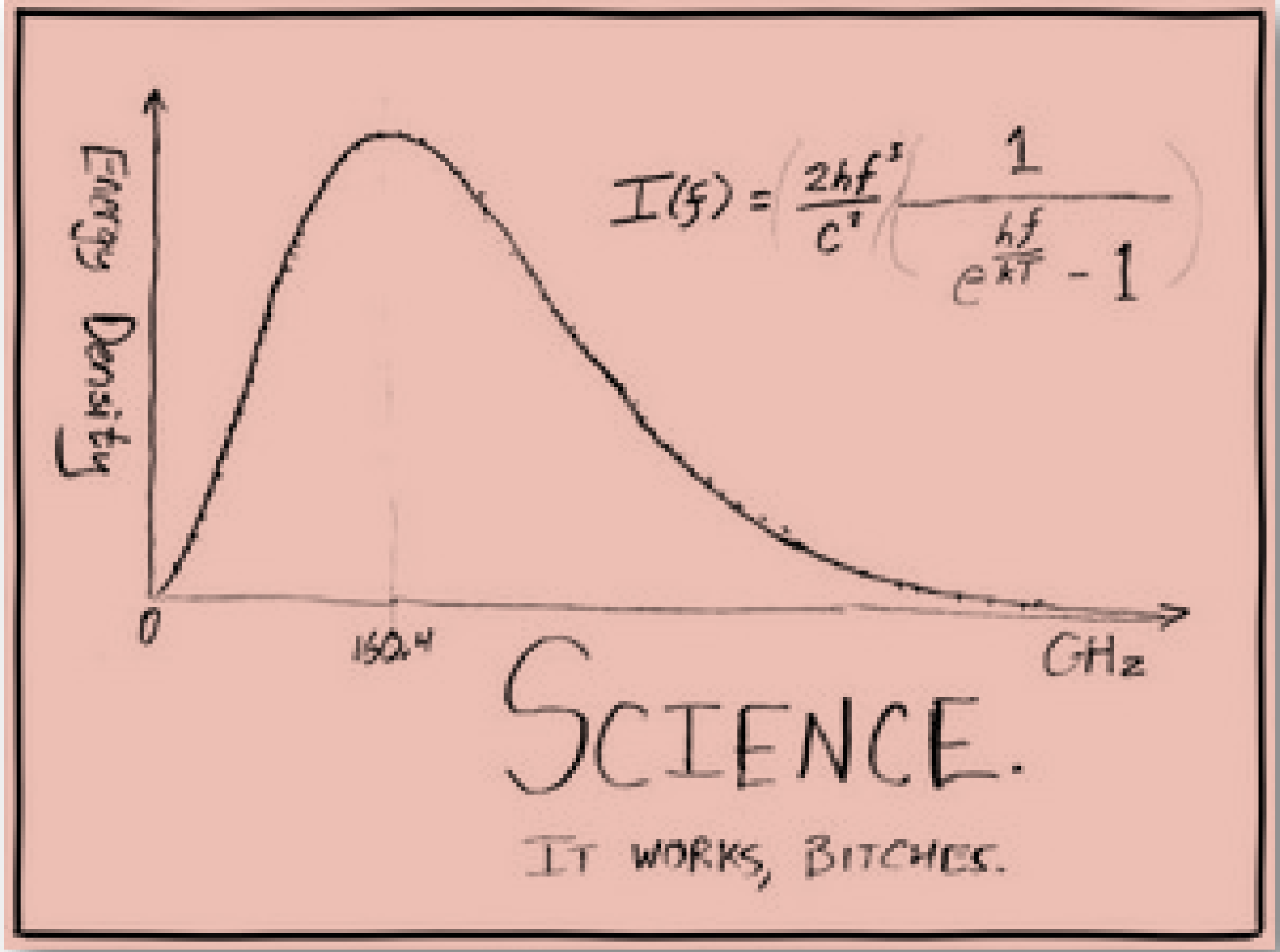

Thank you!

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With so many studies continually published, how do you keep track?
Practice makes perfect: Strategies for Keeping Up with Research

Save the Date!

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