

Effectiveness of Strategies for Changing Professional Practice in Primary Care: A Systematic Review of Reviews

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Implementation strategies

- Aimed at optimising uptake of complex interventions, by overcoming barriers identified by implementers, to ensure fidelity.

EPOC taxonomy

- Cochrane Effective Practice and Organisation of Care Group
- EPOC Interventions – improve the delivery, practice and organisation of health care services (<http://epoc.cochrane.org/epoc-author-resources>)

EPOC taxonomy

Professional

- Distribution of educational materials
- Educational meetings
- Educational outreach visits
- Audit & feedback, local opinion leaders

Organisational

- Revision of roles
- Multi-disciplinary teams
- Skill mix changes
- Continuity of care

Financial

- Fee-for-service
- Capitation
- Provider/ institution incentives

Regulatory

- Change health services by law
- Changes in medical liability

Aim/Objectives

1. Overall effectiveness of implementation strategies
 - Single
 - Multifaceted
2. Effectiveness according to type of targeted behaviour
3. Features associated with effectiveness
4. Cost-effectiveness

Population

Primary care in developed countries

Reviews that include $\geq 50\%$ original studies based in primary care

Intervention

Single/multifaceted strategies for implementing complex interventions

Comparator

- Control or no strategy
- Another strategy (single/multifaceted)

Outcomes

Degree of implementation,

- Measures of process of care (e.g. referral rates)
- Professionals' behaviour or performance (e.g. adherence to guidelines)

Study type(s)

- Systematic reviews
- Meta-analyses
- Literature review
- Transparent methods (e.g. identification, inclusion/exclusion)

Methods

Identification

Comprehensive search x 5 databases (*Medline, Embase, Cochrane Lib, CINAHL, PsycINFO*)

Study selection

Double-screening¹) titles/abstracts; 2) full text articles

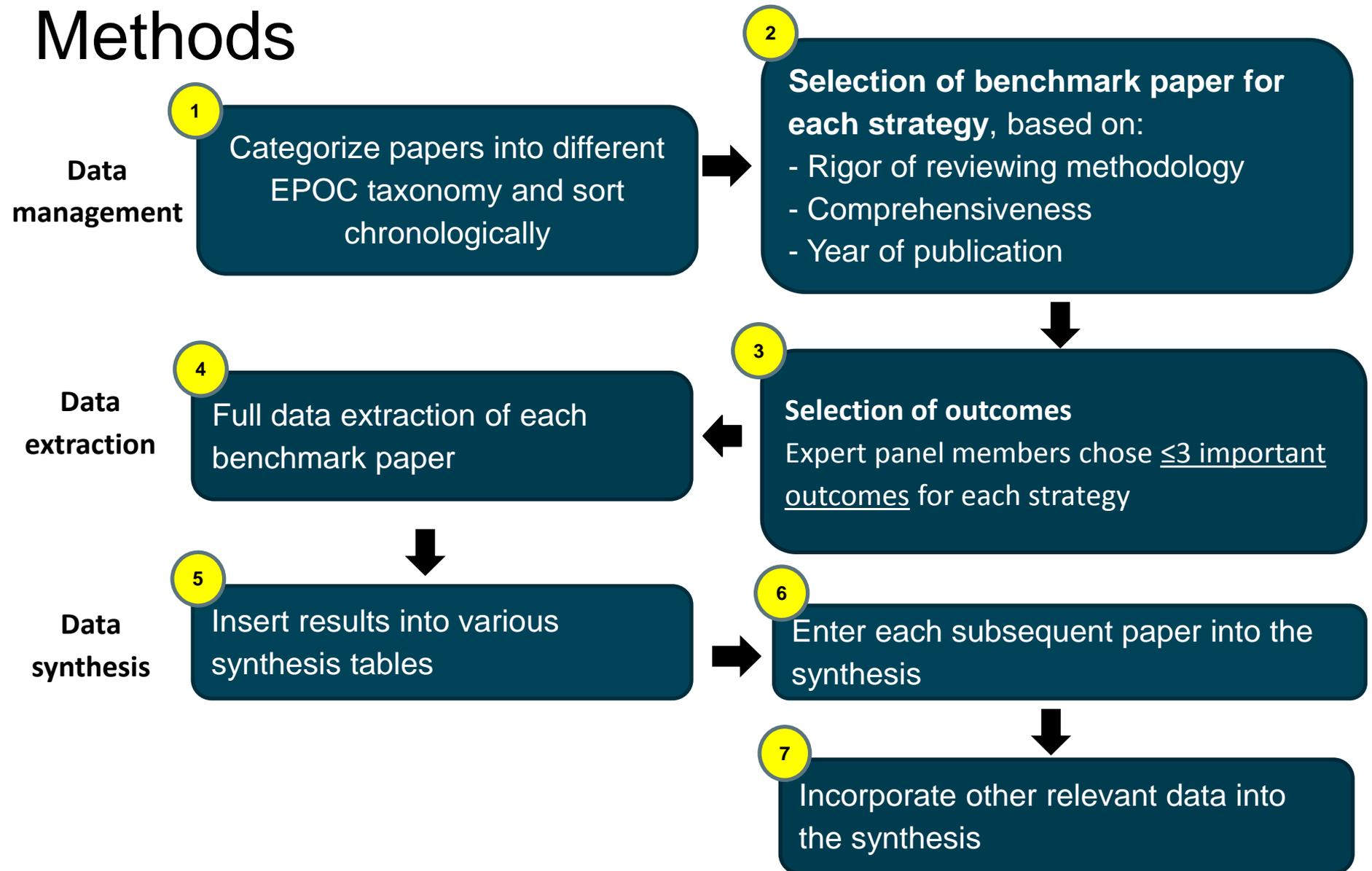
Data Extraction

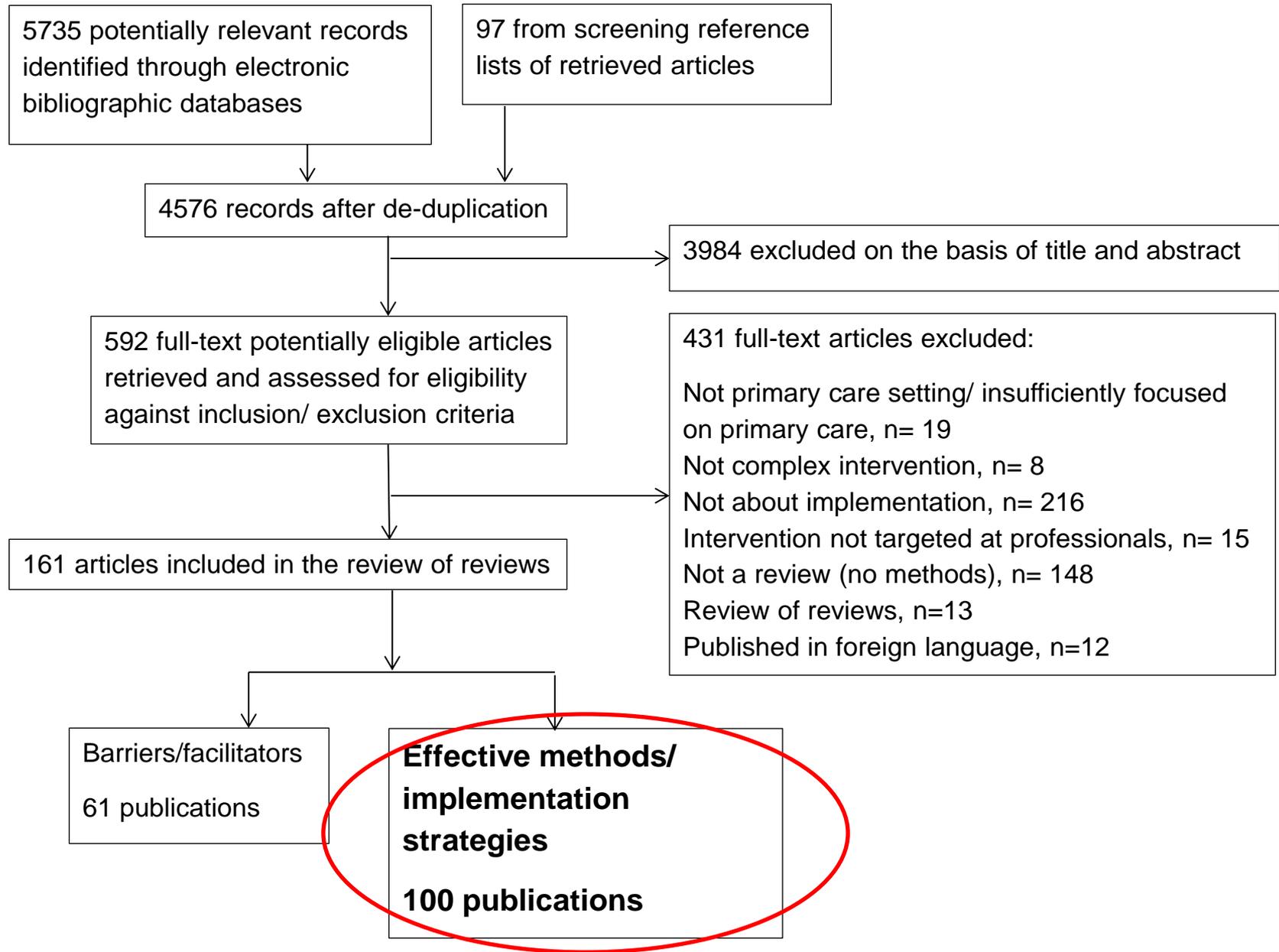
Standardised forms (*characteristics of reviews, results for different comparisons, cost-effectiveness*)

Analysis

Narrative synthesis

Methods





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Context-level strategies: Financial interventions

- Benchmark review (Scott et al. 2011): overall effect size not calculated
- Heterogeneity: type of payments/programmes, outcome measures
- +ve but variable effects on a small number of quality measures (n primary studies=7)
- Other relevant reviews (n reviews =9)
- Potential unintended consequences – limited evidence

Organisational-level strategies

- Examples of effective organisational interventions:

Collaborative care for patients with anxiety/ depression

↑ treatment adherence

Telephone medication counselling delivered by non-physicians in depression care

↑ depression outcomes, access

Nurse driven protocol for screening

↑ documentation of follow up plan

Practice facilitators

↑ relationships/comm, ↑ screening rates, facilitated CQI techniques

- Collaborative care more readily adopted – good relationships between primary and secondary care (How?)

Absence of evidence??

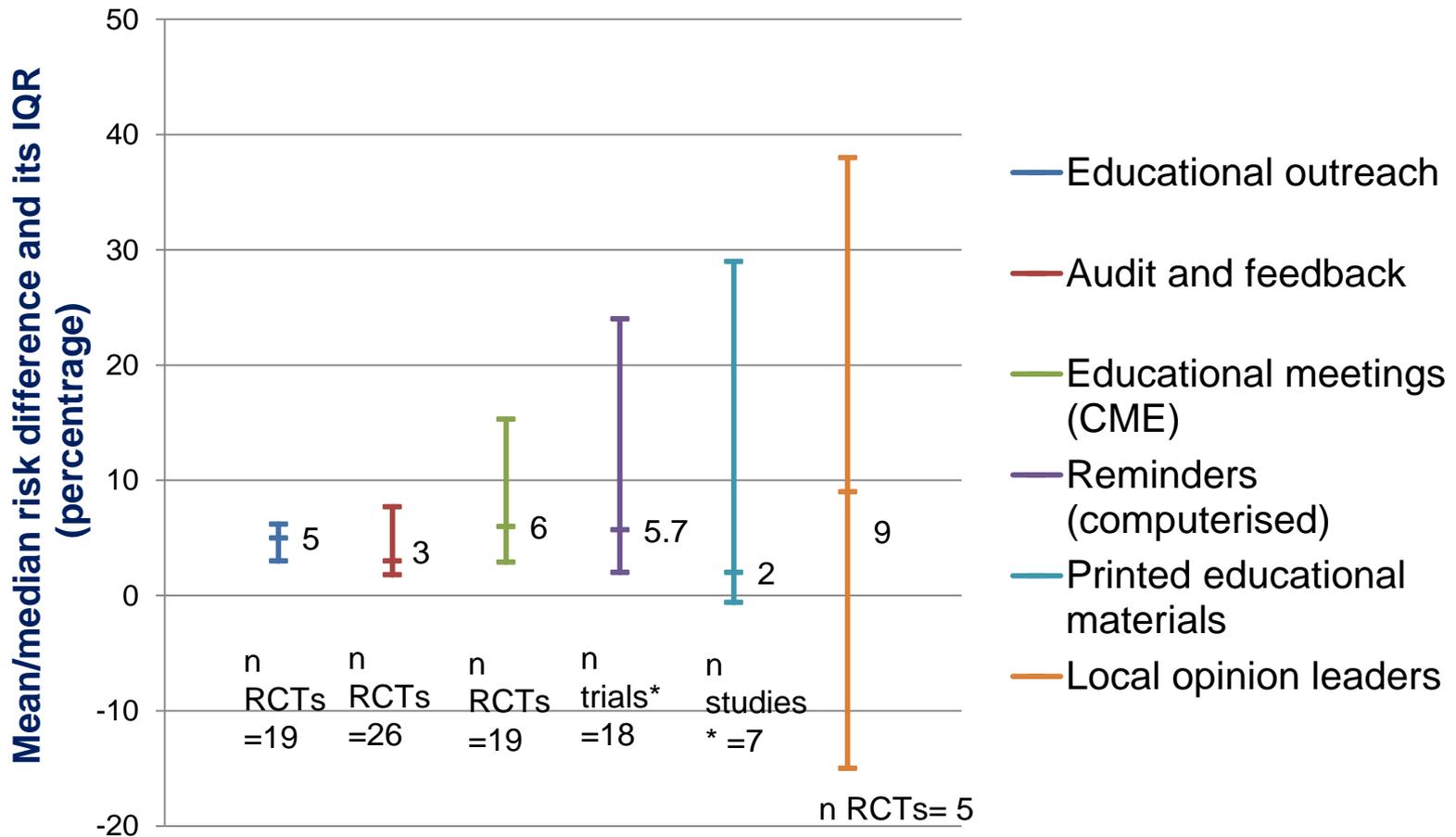
Organisational-level strategies



- Strategies that change organisational culture
- Strategies that improve communication/relationships (regular meetings, team building)
- Strategies that promote leadership (motivate & support)
- Strategies that help reengineer processes
- Strategies that promote good project management
- Measurement of performance (e.g. feedback)
- Different staffing models
- Strategies that promote buy-in & involvement

Individual-level strategies: Professional interventions

Single implementation strategy vs. no strategy on compliance with desired practice – benchmark reviews



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Multifaceted interventions

- Mixed results
- Singles strategies could be as effective as multifaceted strategies:
 - Multifaceted strategies including educational meetings showed similar effectiveness when compared to educational meetings alone (median adjusted RD 6.0 for both groups, $p=0.90$)
- \uparrow no. of strategies \neq \uparrow effect size, reasons:
 - Ceiling effect
 - Relevance
 - Did not include features associated with effectiveness

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Effectiveness, by type of behaviour

Behaviour	A&F	Educational meetings	Outreach visits	Reminders	Printed educational materials	Financial
Guideline	++	+	++	++	x	No data
Disease management	+	x	+	+	No data	Variable
Screening	No data	++	No data	Variable	No data	+
Preventive behaviour	No data	Variable	Variable	+	No data	++
Prescribing behaviour	+	No data	++	+	x	No data

++, effective (more reviews, consistent finding)

+, effective (fewer reviews, less consistent finding)

x, minimal effect or not effective

Variable, variable and inconsistent effects across reviews

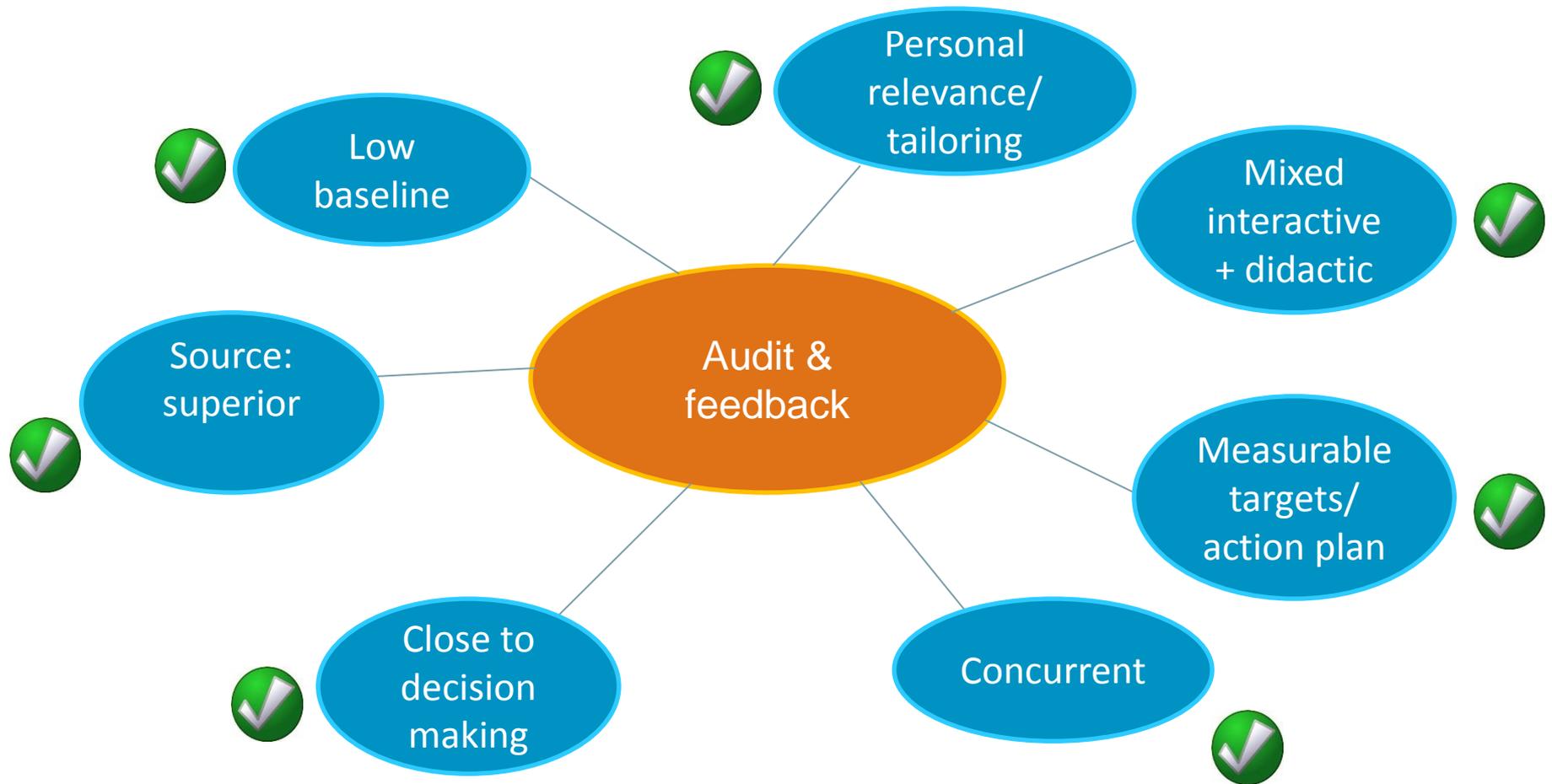
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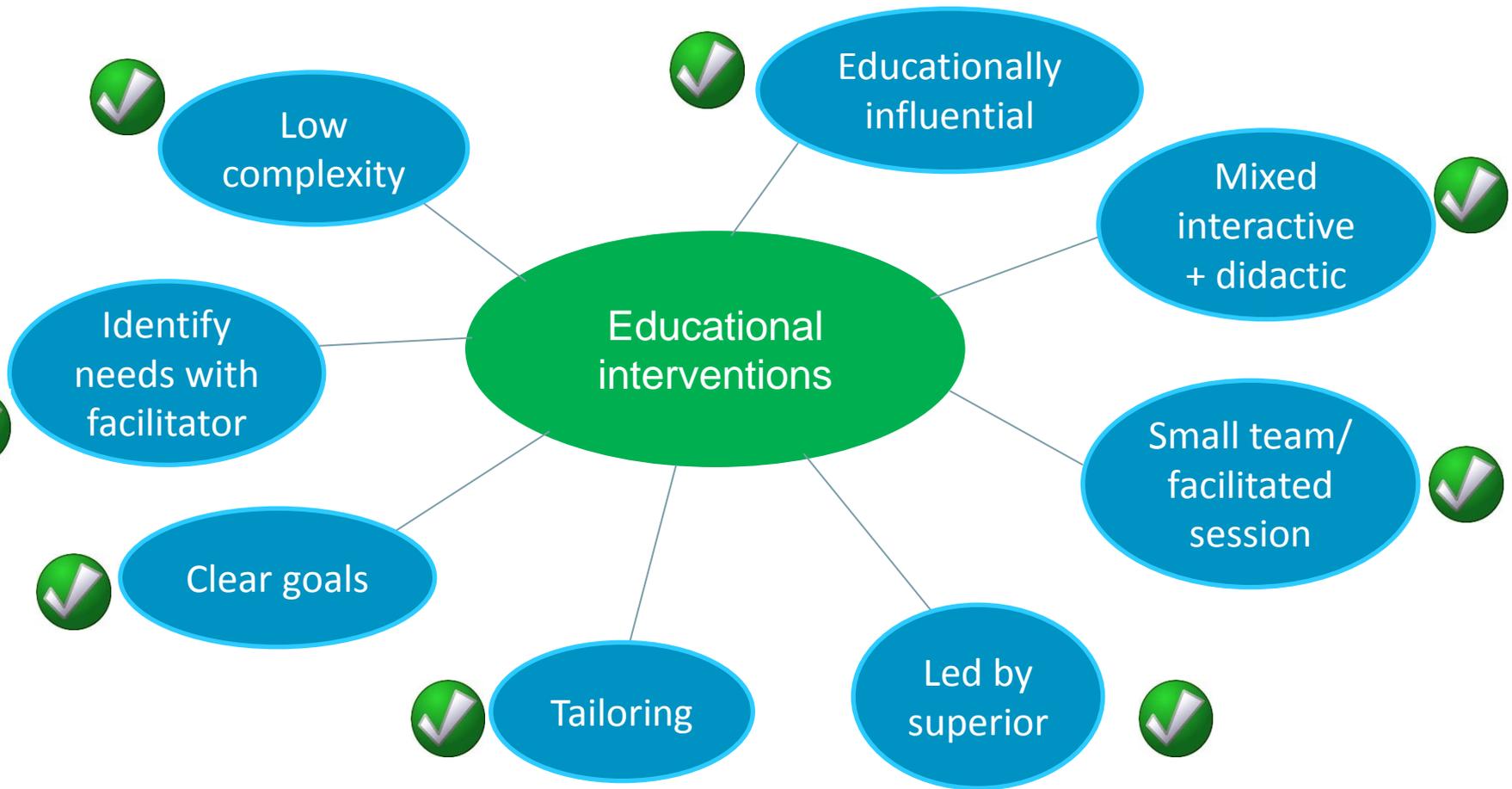
Features associated with effectiveness

- Features that enhance effectiveness/ implementation (active features)
- Why are they important?

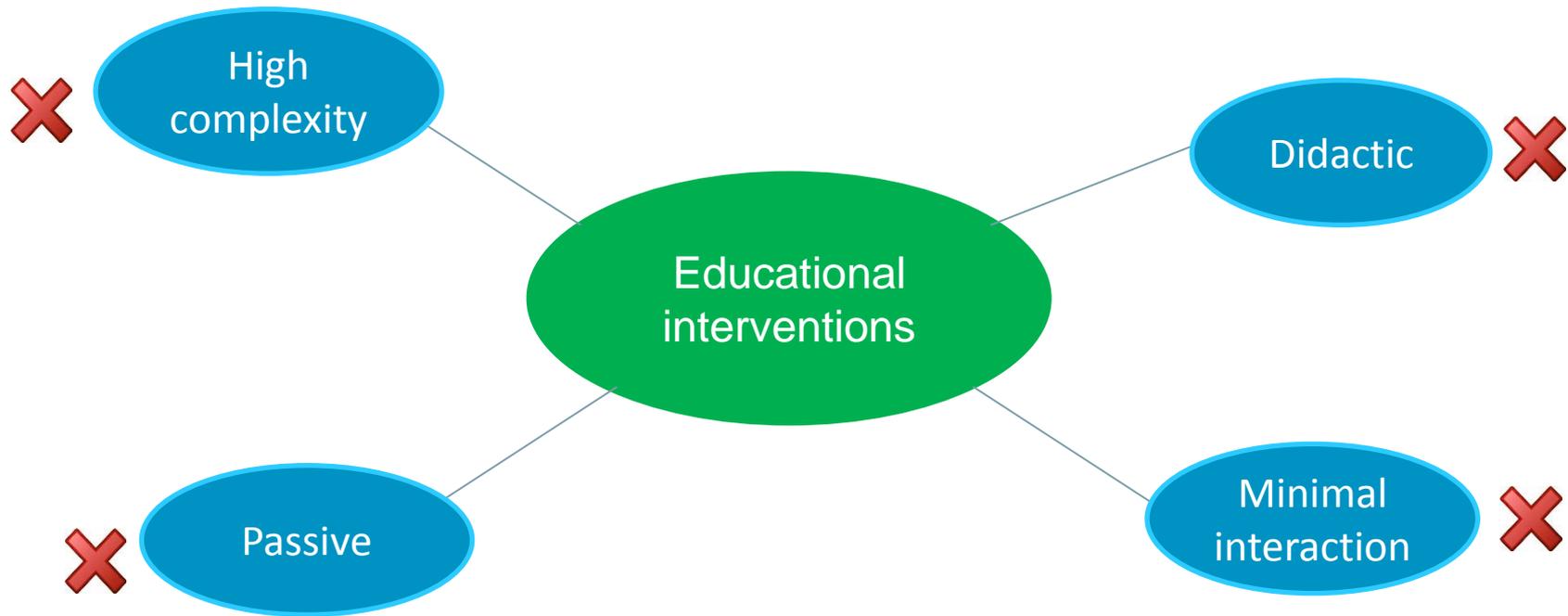
Audit & feedback: active features



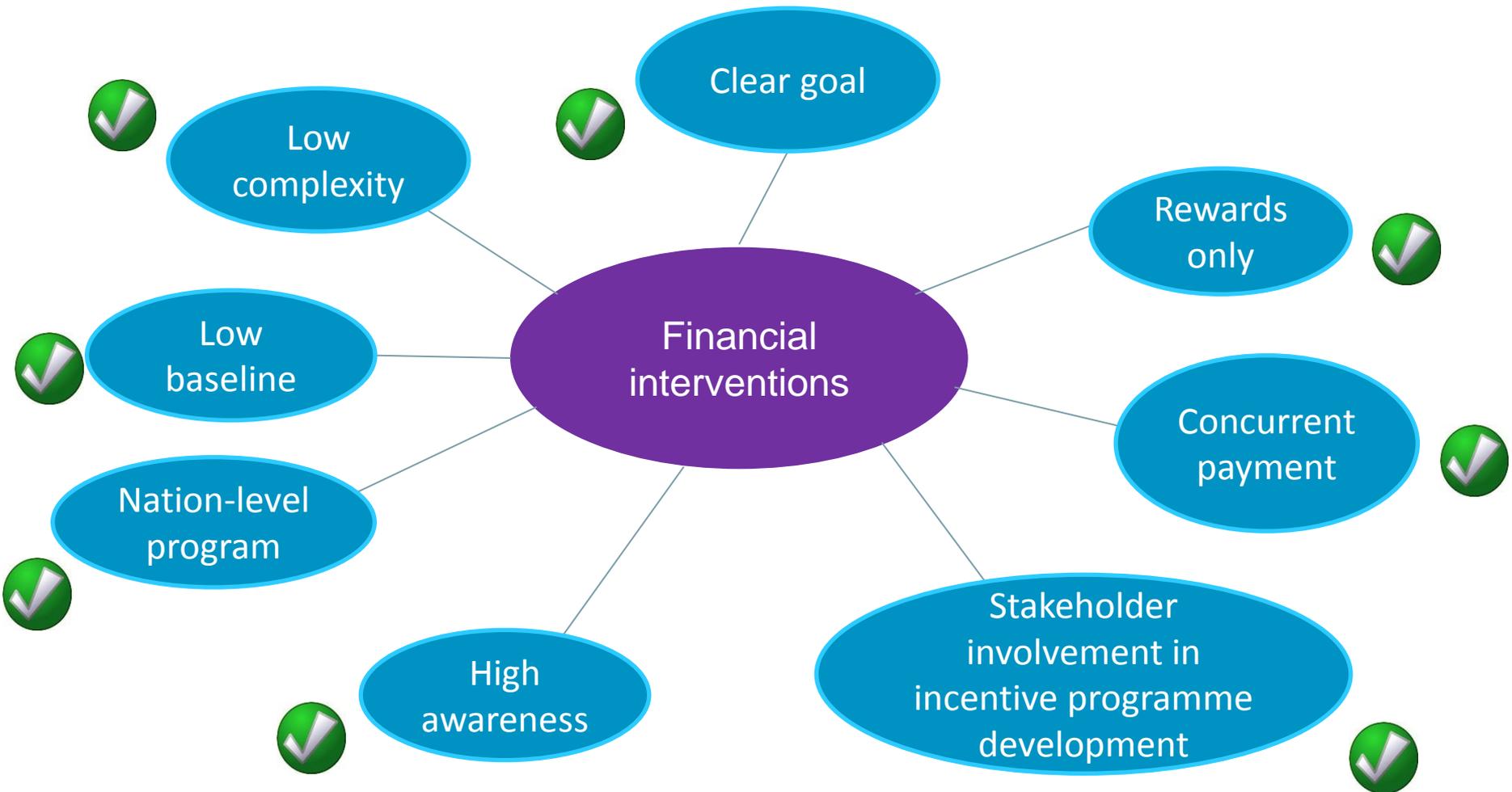
Educational interventions: active features



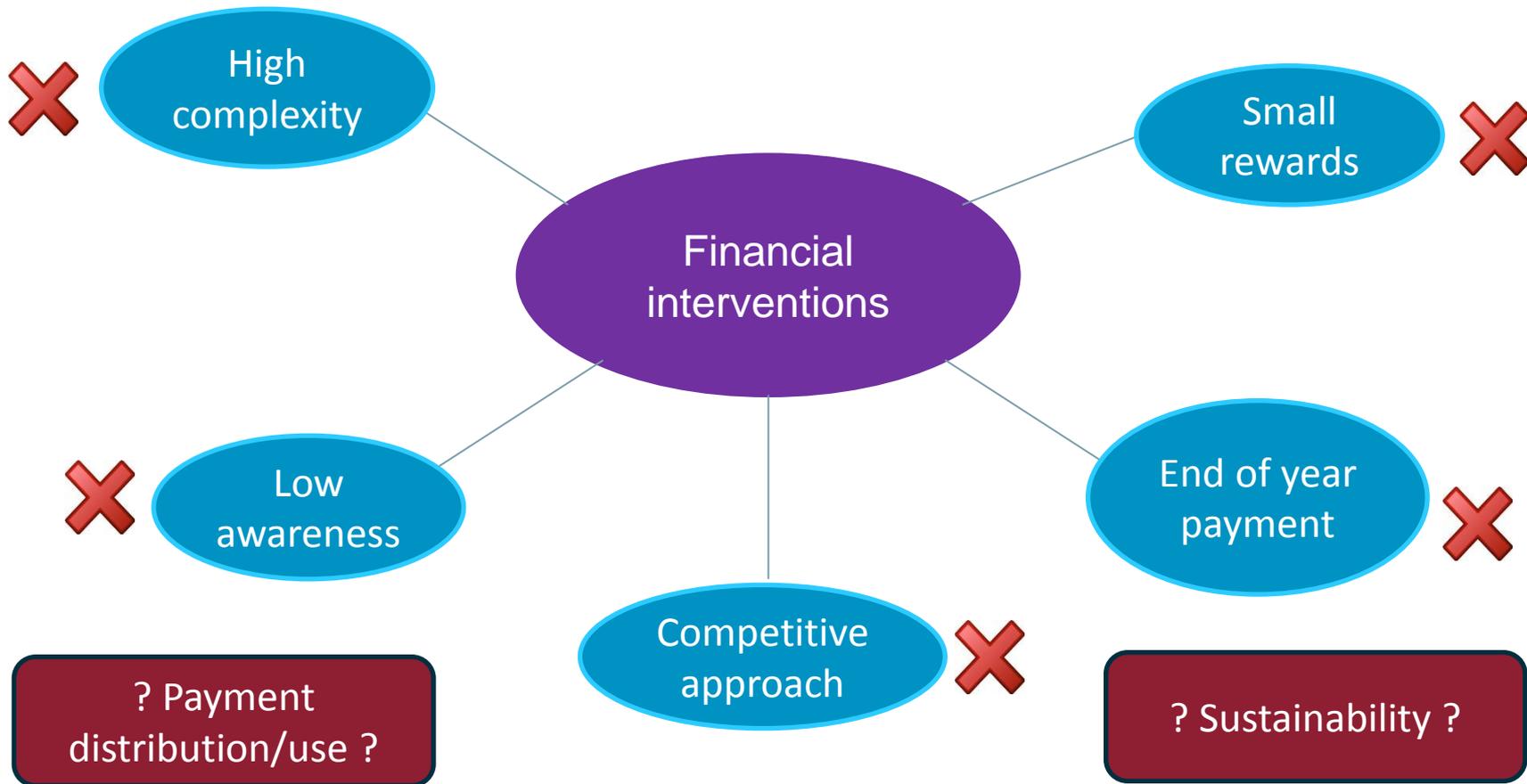
Educational interventions: inactive features



Financial interventions: active features



Financial interventions: inactive features



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Cost-effectiveness

- Limited evidence
- Limited generalisability
- Guideline implementation strategies HTA (*Grimshaw et al, 2004*) – 29% studies reported cost analyses/ economic evaluations
- Some strategies → more resource intensive

Summary (1)

Strategy	Effects on practice/performance
External context level Financial interventions	Variable
Organisational level	?
Individual level Professional interventions	Median improvement 2-9% A&F and Outreach visits – best evidence base
Intervention level	?

- Most research on strategies directed at individual level
- Little research on external context/organisational level strategies

Summary (2)

- No “one size fits all” implementation strategy - context
- Multifaceted vs. single strategies: more is not always better.
- Incorporate active features, where possible
- Long term effects (sustainability)

Future research

- We do not require more research on audit and feedback and educational outreach visits.
- Further studies on:
 - Strategies at the level of external context/organisations
 - What are they?
 - Clinical- and cost-effectiveness
 - How do they work?
 - Which combinations of strategies are more likely to work?

1. Consider context before choosing implementation strategies - use of toolkit?
2. Multifaceted strategies may not be more effective than single strategies alone
3. “Fit” between intervention and context is vital

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