Discussion This investigation suggests a positive effect of the simultaneous QI development on guideline content concerning specificity of recommendations, clarity of aims to improve quality of care and identification of clinical questions to be addressed in future systematic reviews and/or guidelines.

Implications for Guideline Developers A simultaneous process to develop guidelines and QI is favourable not only to facilitate the assessment of guideline implementation and impact but also to improve guideline content and implementability.

023

FEASIBILITY AND EFFICIENCY OF STRATEGIES FOR UPDATING CLINICAL PRACTICE GUIDELINES

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Background Exhaustive search strategies (ESS) for updating clinical practice guidelines (CPGs) recommendations are laborious and expensive. Highly sensitive and specific alternative search strategies are necessary to improve the efficiency in recommendations updating.

Objectives To compare alternative search strategies against ESS Methods We ran three different search strategies in a convenience sample of four CPGs from the CPGs National Programme in Spain: 1) Original ESS (gold standard); 2) Search strategy in the McMaster Premium LiteratUre Service (PLUS) database; and 3) Restrictive strategy with the least number of MeSH terms and text words from the original ESS. We retrieved the key references (which triggered an update) from the original ESS and evaluated their presence in the PLUS and restrictive strategies results. We calculated the sensitivity, specificity, precision, and accuracy for the PLUS and restrictive strategies compared to the ESS.

Results The overall number of references in the PLUS strategy was lower than in the ESS (39,133 versus 2,635). The PLUS strategy retrieved a range of 1.12% to 12.1% of the total number of references retrieved by the ESS per guideline.

Discussion Our project assessed two novel restrictive search strategies for the updating of CPGs, which could reduce the workload while displaying similar results. Full final findings of this project will be presented at the GIN meeting.

Implications for Guideline Developers/Users Our project has important implications for updating CPGs, informing on the feasibility and efficiency of two novel search strategies.

024

MAXIMISING EFFICIENCY IN UPDATING GUIDELINES THROUGH PRIORITISATION OF CLINICAL OUESTIONS

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Background To maximise efficiency in updating clinical guidelines it is important to understand which of its component clinical questions impact patient care most. Evaluating, editing, and prioritising of each clinical question is required to identify those that warrant updating. Objectives To describe the methods used by a US health care delivery organisation to prioritise questions within an integrated cardiovascular guideline to determine those that were most important for updating.

Methods 127 clinical questions within an integrated cardiovascular guideline were ranked (using a Likert scale of 1–9) by importance for literature monitoring by clinical experts in each disease domain of the guideline. Examples of factors that influenced rankings included existence of high quality systematic reviews, knowledge that current evidence was relatively unchanged, and the notion that the question was no longer clinically relevant. Questions ranked 7–9 in importance for literature monitoring were considered most important for updating. Conversely, questions with low rankings were considered for retirement.

Results Of 127 questions ranked, 16 were identified as important for literature updating; 12 were retired. We were able to address the most important questions and avoid updating delays of 6–18 months.

Discussion Having these questions prioritised at the outset of updating allowed the healthcare organisation to ensure that the most important clinical questions were being addressed thus making the most efficient use of resources.

Implications for Guideline Developers/Users Evaluating, editing, and prioritising clinical questions improves efficiency when updating guidelines.

025

THE EFFICIENCY-VALIDITY METHODOLOGICAL CONTINUUM (EVMC) FOR SUSTAINABLE GUIDELINE (CPG) DEVELOPMENT: A NEGOTIATING TOOL FOR CREDIBLE COMPROMISES IN QUALITY FOR AFFORDABLE TRUSTWORTHY GUIDELINES

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Background Research methodologists and guideline sponsors are on a collision course as growing demands for scientific rigour raise costs and lengthen delays in CPG production.

Objectives To design a tool for CPG developers and sponsors to negotiate methodological compromises while preserving CPG trustworthiness. There are already variations in CPG quality that we tolerate. Flawless systematic reviews and guidelines are unrealistic. Methodological compromises are inevitable and imposed by practical constraints. Negotiating and reporting methodological compromises can fill a transparency gap where methodological choices are made in the development of a CPG.

Methods Three individuals with guideline development experience collaborated to design a tool that aligns stakeholders' interests while preserving 'trustworthiness' and enhancing transparency.

Results The Efficiency-Validity Methodological Continuum (EVMC) is anchored at the extremes by "practical" at the "efficiency" pole and "best achievable" at the "validity" pole, highlighting the tradeoffs. The continuum between these is represented as a solid line. A 'zone of preference' closer to the 'validity' and a 'zone of acceptability' closer to efficiency are negotiating zones. Beyond the anchors, represented as broken lines, are "expedience" at the efficiency end and "ideal" at the validity end. Guideline development should operate within the solid segment of the continuum. The broken segment towards

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'expedient' risks methods with unacceptable threats to validity; and towards ideal, an unaffordable standard not worth the incremental costs. Examples highlight the tool's utility.

Conclusions Negotiating and reporting compromises in methodological quality can lead to sensible, transparent methodological choices acceptable to both CPG developers and sponsors.

026

WHAT ORGANISATIONAL RESOURCES HAVE TO BE CONSIDERED WHEN ADAPTING GUIDELINES IN THE CONTEXT OF LOW AND MIDDLE INCOME COUNTRIES (LMIC)? THE ARGENTINEAN EXPERIENCE

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Background Adapting guidelines in resource-constraints countries represents a great challenge. Availability of organisational resources has to be considered before implementing this methodology.

Objectives a) To compare the availability of different organisational resources during seven guidelines adaptation initiatives facilitated by the National Academy of Medicine (Argentina) between 2005 and 2013; b) to analyse the relevance of each type of resource category for adapting guidelines in the context of LMIC.

Methods 7 guidelines adaptation initiatives facilitated by the NAM since 2005 and 2013 are described. Organisational resources were categorised in 4 categories: organisational culture, human resources, economic resources, and condition resources (or states) within the organisation. Conservation of resources (COR) theory was used as the theoretical basis for analysing the relevance of each type of resource for the guideline adaptation process.

Results Four of the 7 initiatives completed the whole process and produced an evidence-based guideline; 1 was interrupted and 2 are still ongoing although 1 of them shows a considerable delay. Among all organisational resource categories, culture and human resource were perceived as the most critical, particularly in what respects to the availability in the guideline developer group of change agents (i.e. internal and external facilitation); disposition to change and motivation and an appropriate mix of skills including leadership, communication, team work, technical competences.

Discussion Guidelines adapting in resource-constraint countries is not easy, although possible if different critical organisational resources are provided from the outset of the process.

Implications for Guideline Developers/Users A minimum organisational resource threshold is necessary for guarantying guidelines adaptation in the context of LMIC.

027

DETERMINANTS OF GUIDELINE USE AMONG PRIMARY CARE PHYSIOTHERAPISTS IN WESTERN SWEDEN: A CROSS-SECTIONAL STUDY

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Background The understanding of attitudes, knowledge, and behaviour related to evidence-based practice (EBP), in particular evidence-based clinical practice guidelines, in primary care physical therapy is limited.

Objectives To investigate self-reported attitudes, knowledge, behaviour, prerequisites, and barriers related to EBP and, in particular, guidelines among physical therapists (PTs) in primary care, and to explore associations of self-reported use of guidelines with these social-cognitive factors.

Methods Cross-sectional survey of PTs (n=400) in primary care in western Sweden using a web-based, validated questionnaire. Logistic regression analysis was used.

Results The response rate was 67.8%. Most PTs (82%–96%) had positive attitudes toward EBP and guidelines. Thirty-three percent reported being aware of guidelines, 13% knew where to find guidelines, and only 9% reported having easy access to guidelines. Less than half reported using guidelines frequently. The most important barriers to using guidelines were lack of time, poor availability and limited access to guidelines, that they are too general and take too long to read. Positive attitudes to EBP and guidelines, knowledge of where to find guidelines, self-efficacy, easy access, ability to integrate patient preferences, and encouragement of EBP in the workplace were associated with frequent use of guidelines.

Discussion Use of guidelines was not as frequent as could be expected in view of the positive attitudes. Attitudes, knowledge, self-efficacy, easy access, ability to integrate patient preferences, and encouragement of EBP may promote guideline use.

Implications for Guideline Developers/Implementers The identified barriers and determinants can be addressed in the development of guideline implementation strategies.

028

HOW DO CLINICIANS LIKE AND UNDERSTAND TRUSTWORTHY GUIDELINES? RANDOMISED CONTROLLED TRIAL USING CLICKERS IN EDUCATIONAL SESSIONS

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Background Clinical practice guidelines (CPG) often have short-comings in presentation formats that limit dissemination at the point of care. As part of the DECIDE project we have developed multilayered CPG presentation formats. Comprehensive user-testing of the formats has provided us with alternative presentation formats now ready for randomised trials but also an important insight: Insufficient conceptual understanding of guideline methodology (e.g. strength of recommendations and quality of evidence) may hamper application of CPG recommendations in practice.

Objectives To determine physicians' understanding, attitudes and preferences concerning trustworthy guidelines in traditional and new presentation formats (DECIDE A and B).

Methods In this randomised controlled trial we will recruit 100 physicians attending a standardised lecture with 3 components: 1) presentation of clinical scenario, 2) explanations of key concepts of trustworthy CPG (e.g. GRADE, AGREE II) and 3) presentation of a current trustworthy CPG relevant to the scenario,