

Dynamic Updating of Clinical Recommendations

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care

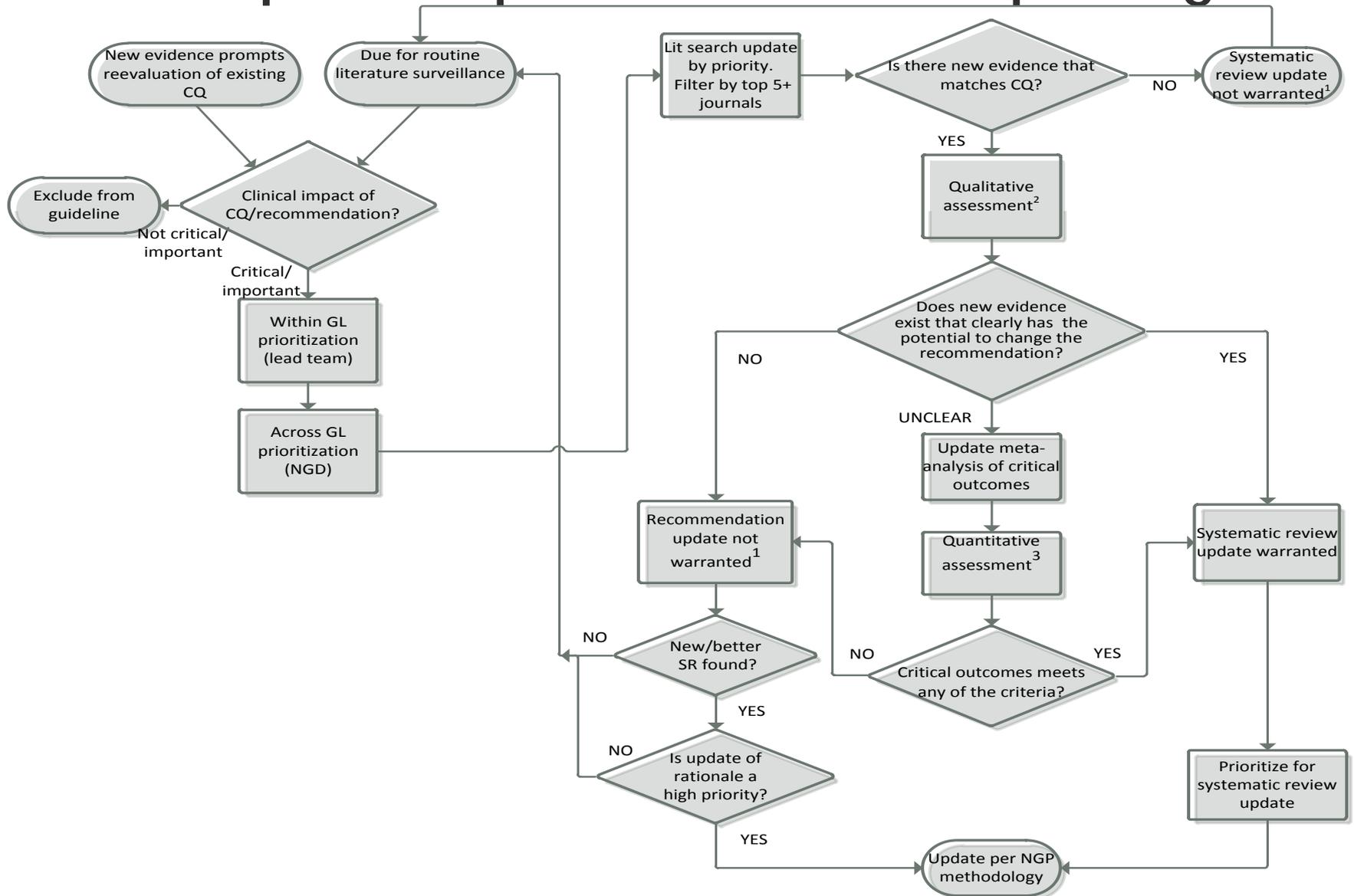
Overview

- Description of Dynamic updating
- Steps in updating process
 - With use of an IT platform
- Benefits

What is dynamic updating?

- Continuous updating process based on the most important clinical questions within KP's guideline portfolio
 - Allows KP's National Guideline Program to focus resources on updates that will have the most timely, clinical impact within the KP delivery system
 - Requires review of questions to determine those that are clinically important and those that can be retired or combined with other questions
 - Use of a priority ranking for clinical importance and importance for literature surveillance/monitoring
 - Involves clinical leads and methodologists
- Guidelines no longer updated on bi-annual cycle
 - The most important clinical questions are addressed first followed by the remainder

Clinical question prioritization and updating



Steps in updating process

1. Create priority grid for each guideline
 - Consists of all clinical questions for the specific guideline
2. Create and document search strategy
 - Includes running searches through a filter comprised of the top 5+ journals for that disease area
 - Separate searches constructed for RCTs, SRs, and Cochrane
 - RCTs/SRs searched in PubMed (Medline)
3. Assess filtered studies for inclusion/exclusion
 - Incorporates use of an IT platform
4. Determine if an update is warranted based on included studies
 - Qualitative assessment
 - Quantitative assessment
 - Mini-database (using IT platform)
5. Update rationale/recommendation
 - Using IT platform

1. Create priority grid for each guideline

ICVH Guidelines Priority Ranking							
Originating Guideline	PF# / Topic	KP / CMI Prior Questions	Recommendations	Why Imp to maintain GL rec/Rar	Comments	Use for either priority for lit surveillance (Rank 1)	Qu
DYS	The number 20% is going to be much lower with A1C	New Question - Possible Implementation	This will change, many more patients	A new, undertreated population	Potential new question: take to ES and CES	Also literature on implementation	*Ask CESR h
CAD	2. Screening for CAD	Should individuals be screened for CAD?	Exercise stress testing, CT angiography, and	7		AHRQ-EKG/stress test	9
CAD	10. Anti-platelet therapy post stent	Bare Metal Stent Placement: 1. Which tier?	The following recommendations refer to patients	9			8
DM	22. Glycemic Control Target	What is the optimal HbA1c target for glucose	22A An overall treatment goal of HbA1c < 7%	8	WC: This seems closely	ADA rolled it into one thing	8
DM	19. Management of Blood Glucose	Should intensive (near normal) glucose control	The GDT strongly recommends intensive glucose	7	JD: > 9 very important; focus on this group this year		5
DM*		At what HbA1c level should action be taken to lower blood glucose?		WC: 7	WC: Wrong PF Topic is	ADA for source	WC: 6
HTN	12. Behavioral Change –	What are the most effective strategies to	The following are recommended: 12A Assist	9	*Separate question for		8
HF	18. Sodium Restricted Diet	Should patients with heart failure (systolic a	Moderate sodium restriction, 2 to 2.4 grams	8	AS: Recently		8
HF	17. Heart Failure with Preserved Ejection Fraction	What is the appropriate medication management	In patients with heart failure with preserved e	8	ST: Unlike systolic HF, BB, ACEI/ARBs have not		8
HTN*	9. Discrete Populations – Hypertension Treatment for	What class of medication is the most	9A ACEIs are not recommended for	8			8
DYS*	Discrete Populations – Lipid Treatment for Women	What class of medication is the most	Reference FDA		Not lots of literature		
DM	28 & 29. Self-Monitoring of Blood Glucose in Type 1 and Ty	Should patients with diabetes self-monitor th	28A The GDT strongly recommends that	7	WC: Potentially high opera	Review ADA publication	8
DM (start with this)	1. Intervention to Delay the Onset of Type 2 Diabetes	Is there an intervention that can delay the o	1A For patients with impaired glucose tolera	8	JD: 10 yrs vs. 30 yrs on in	C/E analysis in DPP; N	7
DYS	19. Treatment Strategy For People With Elevated Triglycerid	What is the treatment strategy for people with	For TG = 500 mg/dL: Intensity diet and exerc	7	Differs from Dyslipidemia rationale; is this th		7
DYS	23. Pharmacologic Fish Oil Supplements for Primary and Se	Does fish oil reduce primary and secondary	37A Fish oil supplements (~1 g/day of eicos	7	Need to change recommendation from CAD to CV		7
DM	27. Self-Management Education	Does Diabetes Self-Management Educatio	The GDT recommends patient training in sel	7	WC: Potentially high opera	New literature but not v	7
CAD	6. Aspirin plus oral anticoagulant therapy	Is aspirin recommended for CAD patients w	Low-dose aspirin (81 mg/day) is conditional	7		Internal SR – needs to	7
HTN	7. Initial Combination Treatment of Hypertension*	• Which is the most effective first-line therapy	7A Combination therapy consisting of a thiaz	7	* In nonpregnant adults who do not have diabetes		7
CAD*	3. ACEI therapy	Is ACE inhibitor therapy recommended for	For patients with CAD, with or without LVSD	7		AHRQ 2009; (evidence	7
CAD*	4. ARB therapy	Is ARB therapy recommended for patients w	• Angiotensin II Receptor Blocker (ARB) therapy is recommended for the following patients with CAD with or without hypertension who are intolerant to ACE Inhibitors: – Patients with CAD				

2a. Create and document search strategy

Example: CAD Screening Question

AHRQ Search Terms Using Ovid (Medline) for RCTs and controlled observational studies <i>Key Question 1: Screening</i>	KP Search Terms Using PubMed (Medline) for RCTs and controlled observational studies	Number of Hits
Electrocardiography, ambulatory/ or electrocardiography/ or electrocardiography.mp. (ekg or ecg).mp.	Electrocardiography, ambulatory[mh: noexp] OR electrocardiography[mh: noexp] OR electrocardiography ("ekg" OR "ecg")	7307 4026
3 or 4	#3 OR #4	9432
Exercise test/ (treadmill adj2 test).mp.	exercise test[mh] OR ("exercise" AND "test") OR ("test" AND "exercise") ("treadmill test") OR ("treadmill" AND "test") OR ("test" AND "treadmill")	6684 1124
(treadmill and ett).mp. or/6-8 5 or 9	("ETT" OR "Exercise Tolerance Test*" OR "Cardiac Stress Testing") AND "treadmill" #6 OR #7 OR #8 #5 OR #9	20 6816 15864
Myocardial ischemia/ 10 and 11	(myocardial ischemia[mh]) OR (myocardial ischemia[tiab]) OR (acute coronary syndrome[tiab]) OR (angina [tiab] AND (stable[tiab] OR unstable[tiab] OR pectoris[tiab] OR microvascular[tiab])) OR (coronary disease [tiab]) OR (coronary artery disease [tiab]) OR (coronary[tiab] AND (occlusion[tiab] OR stenosis[tiab] OR restenosis[tiab] OR thrombosis[tiab])) OR (coronary-Subclavian Steal Syndrome [tiab]) OR (myocardial infarction [tiab]) OR (Anterior Wall Myocardial Infarction [tiab]) OR (inferior Wall Myocardial Infarction [tiab]) OR (myocardial stunning [tiab]) OR (cardiogenic shock[tiab])	30125 2938
Mass screening/ 12 and 13	mass screening[mh: noexp] OR mass chest x-ray[mh:noexp] OR multiphasic screening[mh:noexp] OR mass screening[tiab] OR mass chest x-ray[tiab] OR multiphasic screening[tiab]	5737 13
Non-human Search String limit 14 to humans	Animals[mh] NOT Human [MH] #14 NOT #15	186814 13

2b. Run searches through a specified high-impact journal filter

Example: CAD Screening Question

Specialty Journal Search (KQ 1)

The New England Journal of Medicine (N Engl J Med)	#16 AND N Engl J Med[ta]	0
Lancet (Lancet)	#16 AND Lancet[ta]	0
The Journal of the American Medical Association (JAMA)	#16 AND JAMA[ta]	1
Annals of Internal Medicine (Ann Intern Med.)	#16 AND Ann Intern Med[ta]	2
British Medical Journal (BMJ.)	#16 AND BMJ[ta]	0
Circulation (Circulation.)	#16 AND Circulation[ta]	0
Journal of the American College of Cardiology (J Am Coll Cardiol.)	#16 AND J Am Coll Cardiol[ta]	0
European Heart Journal (Eur Heart J)	#16 AND Eur Heart J[ta]	0
The American Journal of Cardiology (Am J Cardiol.)	#16 AND Am J Cardiol[ta]	0
Total from Specialty Journals		3

**Journals in red box indicate top 5 journals were chosen using a methodology similar to AHRQ; Clinical Leads were polled for other high-impact journals relevant to each sub-domain.

3. Evaluate filtered studies using inclusion/exclusion criteria

Welcome to Kaiser Quality and Care Delivery Excellence

Favourites Sharing CAD ACEI ARB MI only CAD Screen EKG

Quick Search
Search Entire Package Search Framed Question Tip Advanced Search

Welcome to Doctor Evidence

Studies Conducted on CAD Screen EKG :: 0 Assigned Studies / 1211 Total

PubMed Studies - CAD Screen KQ1 EKG

All Studies | 13 Unclassified

DrE ID	MedlineID	Acronym	Authors	Reference Title	Journal	Publication Type	Your Rating	Full Text	Abstract	Favourit...	Sharing	Study Design	Status
1	297798	21335273	Lim LS, Haq N,...	Atherosclerotic cardiovascular disease screening in ad...	American journa...	Clinical Trial	Not Rated		Abstract	★		Unclassified ▾	Failed Journal Filter ▾
2	335050	21248673	Elsarawy MA,...	Screening for asymptomatic cardiovascular disease in...	International ang...	Clinical Trial	Not Rated		Abstract	★		Unclassified ▾	Failed Journal Filter ▾
3	348304	21269454	Lièvre MM, Mouli...	Detection of silent myocardial ischemia in asymptomatic...	Trials	Meta Analysis	Not Rated	Full Text	Abstract	★		Unclassified ▾	Failed Journal Filter ▾
4	422652	23198292		Summaries for patients. Screening for coronary heart di...	Annals of intern...	Clinical Trial	Not Rated		Abstract	★		Unclassified ▾	Under Review ▾
5	422653	22847227	Moyer VA,	Screening for coronary heart disease with electrocardi...	Annals of intern...	Clinical Trial	Not Rated	Full Text	Abstract	★		Unclassified ▾	Under Review ▾
6	422654	22790682	Iino R, Yokoyam...	Impact of combined assessment of coronary artery calc...	International hea...	Clinical Trial	Not Rated		Abstract	★		Unclassified ▾	Failed Journal Filter ▾
7	422655	22249950	Rubin JB, Borde...	Coronary heart disease in young adults.	Current atheros...	Review	Not Rated		Abstract	★		Unclassified ▾	Failed Journal Filter ▾
8	422656	21764347	Blanchet Deverl...	Silent myocardial ischaemia and risk factors in a diabeti...	Diabetes & meta...	Clinical Trial	Not Rated		Abstract	★		Unclassified ▾	Failed Journal Filter ▾
9	422657	21693746	Lovett KM, Lian...	Direct-to-consumer cardiac screening and suspect risk...	JAMA : the jour...	Clinical Trial	Not Rated		Abstract	★		Unclassified ▾	Under Review ▾
10	422658	21601777	Tait J, Ashton T,	Critical left main coronary artery stenosis identified by c...	The Canadian jo...	Clinical Trial	Not Rated		Abstract	★		Unclassified ▾	Failed Journal Filter ▾
11	422659	21344047	Cilli A, Batmaz F...	The diagnostic yield of exercise stress testing as a scr...	Journal of clinic...	Clinical Trial	Not Rated		Abstract	★		Unclassified ▾	Failed Journal Filter ▾
12	422660	21258164	Chang HJ, Chun...	Clinical perspective of coronary computed tomographic...	Circulation journ...	Review	Not Rated		Abstract	★		Unclassified ▾	Failed Journal Filter ▾
13	422661	21135585	Passaseo I, Cac...	Acute myocardial infarction in patient with cerebrotendi...	Journal of cardi...	Clinical Trial	Not Rated		Abstract	★		Unclassified ▾	Failed Journal Filter ▾

Page 1 of 1
Export to Reference Manager (RIS)
Export to Excel
Quorum Chart
Show All Rating
Show All ▾
Displaying Abstracts 1 - 13 of 13

4a. Qualitative Evaluation

- When matching, relevant systematic reviews and/or individual studies are found in the filtered literature search, ES staff qualitatively evaluates them for their potential to change the prior clinical recommendation(s).
 - New studies change the interpretation of “effectiveness”
 - New studies change the balance of benefits and harms
 - New studies introduce a potentially alternative intervention
 - New studies introduce a clinically important expansion of screening, testing or treatment
- If an update is warranted, ES staff puts the clinical question into the queue for an update of the systematic review and, as needed, the rationale and clinical recommendation(s).
 - This requires a complete review of all articles elicited from search strategy

4b. Quantitative Evaluation

- When the qualitative assessment finds that the impact of the identified systematic reviews and/or studies is unclear, a quantitative assessment is performed.
- Consists of a cumulative meta-analysis, including the new data, to determine whether a change in the clinical recommendation(s) may be warranted.
 - The new confidence interval (CI) crosses 1.0 when the old one did not.
 - The updated CI does not cross 1.0, when the prior CI did.
 - The CI includes appreciable effect while the old CI did not; AND both the new and old CI included 1.0.
 - The new CI does NOT include appreciable effect while the old one did; AND both the new and old CI included 1.0.
- If an update is warranted, ES staff puts the clinical question into the queue for an update of the systematic review and, as needed, the rationale and clinical recommendation(s).
 - This requires a complete review of all articles elicited from search strategy

Additional Evaluation Information

- When no systematic reviews or studies are found that match the clinical question (as documented in PICO format) or meet inclusion criteria, or if the qualitative/quantitative assessment demonstrates no change to the current recommendation(s), the GLT determines that an update of the systematic review is not warranted and the clinical question is returned to the queue for future literature surveillance.
- In cases where an identified new systematic review does not change a recommendation, but the GLT determines it is of higher quality, is quantitative, or is more current than the prior systematic review, ES staff puts the clinical question into the queue for an update of the rationale utilizing the replacement systematic review and following the NGP methodology.
 - Update dependent on resource availability

4b. Meta-Analysis: Adding Custom Data

		Fatal, 2 years	(0.7%)	(2.6%)	(0.01 to 6.45)	
<input checked="" type="checkbox"/>	Colivicchi 2002	Myocardial Infarction, Non-Fatal, 1 year	4/40 (10%)	7/41 (17.1%)	RR 0.59 (0.19 to 1.85)	3.02
	RECALCULATE	Myocardial Infarction, 4 weeks to 47 months	213/4623 (4.6%)	228/4599 (5%)	RR 0.93 (0.78 to 1.12)	100%

[Add Custom Data ?](#)

Add custom data to quickly assess potential impact of new studies

Create a custom meta-analysis with hypothetical data or recreate published meta-analyses

Add Custom Data

Study Name (Author/Year)

Outcome

Intervention Comparator

Events

Participants

Kaiser: CAD - Statins Home : [Clinical](#) : Custom Meta Analysis

Custom Meta Analysis

Number of Studies:

Outcome:

Intervention Name:

Comparator Name:

Data Point Type: Binary Continuous

5. Update Rationale in VCW

Doctor Evidence | DOC™ Create - Windows Internet Explorer

http://evp.doctorevidence.com/vcw/vcw.aspx#9

File Edit View Favorites Tools Help

Convert Select

McAfee

Favorites AHRQ At A Glance Missio... Suggested Sites

Doctor Evidence | DOC™ Create

Doctor Evidence | DOC™ Create

Document Manage Documents

Table of Contents

Filter by name All...

Document - CVD RR

- Introduction
- Definitions
- Screening Recommendation
 - Screening for Hypertension
 - Lipid Screening in Asymptomatic Patients
 - Lipid Screening in Patients with Coronary Artery Disease
 - Screening for Type 2 Diabetes
 - Test to Screen for Coronary Artery Disease
 - Postpartum Screening for Coronary Artery Disease
 - Screening for Coronary Artery Disease
- Behavioral and Lifestyle
 - Smoking Cessation
 - Lifestyle Modification
 - Physical Activity
 - Alcohol Consumption
 - Medication and Life
- Pharmacotherapy
- TREATMENT INITIATION
 - CVD Prevention
 - Lipid lowerin
 - statins in
 - Antiaggrega
 - Aspirin in
 - Other An
 - Anticoag
 - Aspirin in
 - ACE inhibitor

Administration

The following recommendation refers to patients with no clear contraindications and no other clinical indication for statin treatment

Topic: Statins for CVD RR in patients with asymptomatic non-coronary atherosclerosis

Recommendation

For patients with asymptomatic non-coronary atherosclerosis, including asymptomatic peripheral arterial disease (PAD), carotid stenosis and aortic atherosclerosis, a statin is an option to reduce the risk of developing symptomatic cardiovascular disease.

(weak recommendation)

Basis of Recommendation

There is insufficient direct evidence to determine the balance of benefits versus harms of statins in this population. However, there is an indirect chain of evidence linking statins to clinical benefit. Epidemiologic studies demonstrate an association between asymptomatic atherosclerosis and risk of CVD. There is good evidence that statins benefit patients with a range of baseline CVD risks, including those at a lower risk for CVD. Therefore, those with asymptomatic atherosclerosis are expected to also benefit from statins.

Cost and potential for harms are low, and the underlying values & preferences put more weight on the potential benefits than the potential harms. Ease of implementation was an important consideration.

Balance of desirable and undesirable effects

Direct evidence on mortality and cardiovascular outcomes is lacking. There is no evidence in patients with asymptomatic PAD, and evidence in patients with asymptomatic carotid stenosis and aortic atherosclerosis primarily focuses on the intermediate outcome of disease progression. However, indirect evidence in people at very low risk for CVD (<5%) shows that statins decrease the risk of total coronary events, total stroke, and revascularization with no increased risk of serious adverse events.

Known serious adverse events (myopathy, rhabdomyolitis) are very rare.

Uncertainty: High as the impact on mortality and cardiovascular outcomes in target populations is unknown.

**May only consist of a statement that no new evidence was found or that new evidence didn't change existing SR or recommendations.

Benefits

- The most important clinical questions are updated first
 - Use of prioritization scheme
- Abstract review more efficient
 - Limited to only those identified in the filter
 - Conducted in an IT platform where record of rejects/accepts done automatically
 - Generation of automatic Quorum diagram
- Can quickly assess if new evidence will impact current recommendations
 - Qualitative/quantitative review
 - Use of IT platform
- Revised recommendations stored in IT platform
 - Can be exported to KP's internal library or to other formats in close to "real-time" of update
 - Clinicians able to access most current information
- Saves time and resource use