


DECIDE




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Universiteit van Amsterdam


Making recommendations for medical tests: a tool for defining the clinical pathway

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The DECIDE project has received funding from the European Community's Seventh Framework Programme (FP7/2007-2013) under Grant Agreement no 258583



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Developing evidence-based
recommendations for medical tests



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Phase 1 Phase 2 Phase 3



Understand

- Systematic review of current methodologies
Implementation Science 2013;8:78
- **In-depth interviews**
- Applying GRADE to DTA Cochrane Reviews
JCE 2014;67:760-8

Enhance current strategies and/or **fill gaps**

- **Clinical pathway tool**
- Interactive SoF table (GRADE)
- Framework to move from evidence to decisions on tests (GRADE)

User test and refine strategies via an iterative process (testing in real guidelines)

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GRADE

Challenges with evidence for medical tests: background

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- Usually no direct estimate of the effect on health outcomes
- Studies usually not comparative or contextual
- Different roles and positions in diagnostic pathways

Bossuyt PM BMJ 2006; 332: 1089-92

Roles of tests and positions in existing diagnostic pathways

Define the clinical pathway at the start of the GL process

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What is the Clinical Pathway?

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An example

Figure 2-1. Application of USPSTF analytic framework to test evaluation*

Research Questions

1. Direct evidence that testing reduces morbidity and/or mortality?
2. Test accuracy?
3. Impact of test on management?
4. Impact of management on health outcomes?
5. Impact of management on intermediate outcomes?
6. Impact of intermediate outcomes on health outcomes?
7. Adverse events, acceptability of test procedure?
8. Adverse events of subsequent treatment/other tests?

*Adapted from Harris et al., 2001⁷

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DECIDE GRADE Guideline developers recognize the value of **amC** Academisch Medisch Centrum Universiteit van Amsterdam



“Care pathway helps clinicians to **make the link** between test accuracy and clinical outcomes.”

“Defining clinical pathway **helps to define diagnostic questions** to be addressed.”

“That’s usually when it kind of ticks off in their brain...helps them to kind of see the **bigger picture**.”

“Consideration of the clinical pathway and how tests fit in that pathway, **that should have a more central role** in the whole process.”



“I just don’t think that clinicians need a lot of spoon feeding of how to make those judgments, once their clinical pathway in their head is clear, but **quite often it’s not very clear** (...).”


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DECIDE GRADE ...but it is not often part of existing grading methodologies **amC** Academisch Medisch Centrum


(Sub) Category	Grading system	AHAPG	EGAPP	EULAR	ESC	GRADE	ICSI	NHMRC	NICE DAF	OCEMB	SIGN	SORT	USPSTF	Row Totals
1. Structuring the Search														
1a	Preparatory steps prior to evidence collection	●	●	○	○	●	○	◐	●	◐	●	○	●	8/12
1b	Scoping the literature	●	●	○	○	○	○	●	●	○	●	○	●	6/12
1c	Formulating a PICO styled key question	○	●	○	○	●	○	○	○	●	●	○	●	5/12
1d	Defining outcomes of interest	○	●	○	○	●	○	●	●	●	●	○	●	7/12
1e	Clinical scenario	○	●	○	○	○	○	○	●	○	○	○	○	2/12
1f	Care pathway	○	○	○	○	○	○	○	●	○	○	○	○	1/12
1g	Analytical framework	○	●	○	○	○	○	○	○	○	○	○	●	2/12

Gopalakrishna et al. Implementation Science 2013, 8:78 <http://www.implementationscience.com/content/8/1/78>

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A tool for defining the clinical pathway: methods

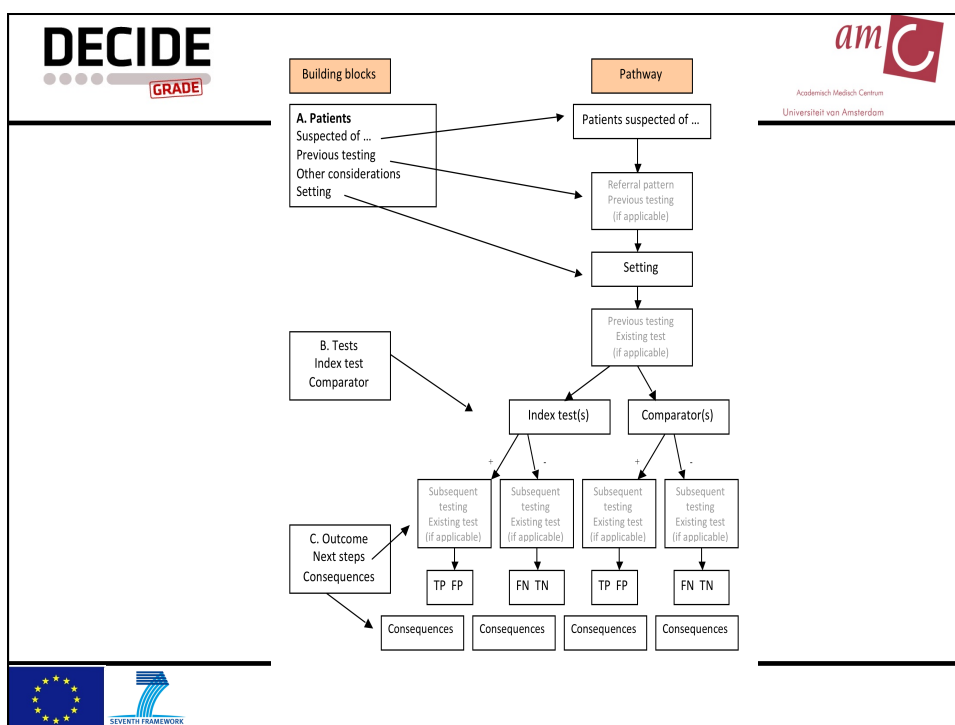



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- Developed a PICO-based list with signaling questions
 - Systematic review of grading systems and interviews with GL developers
 - Brainstorming, literature on evaluation of medical tests, pilot testing
- User-testing
- Workshop + feedback at the DECIDE conference => live demonstration


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Example from user testing


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Should we replace mammography by MRI for breast cancer screening in high risk women?

Some may choose for preventive operation - not included in this screening system

High risk women, below the age of 50


Through GP

Setting: hospital (not all hospitals have MRI)

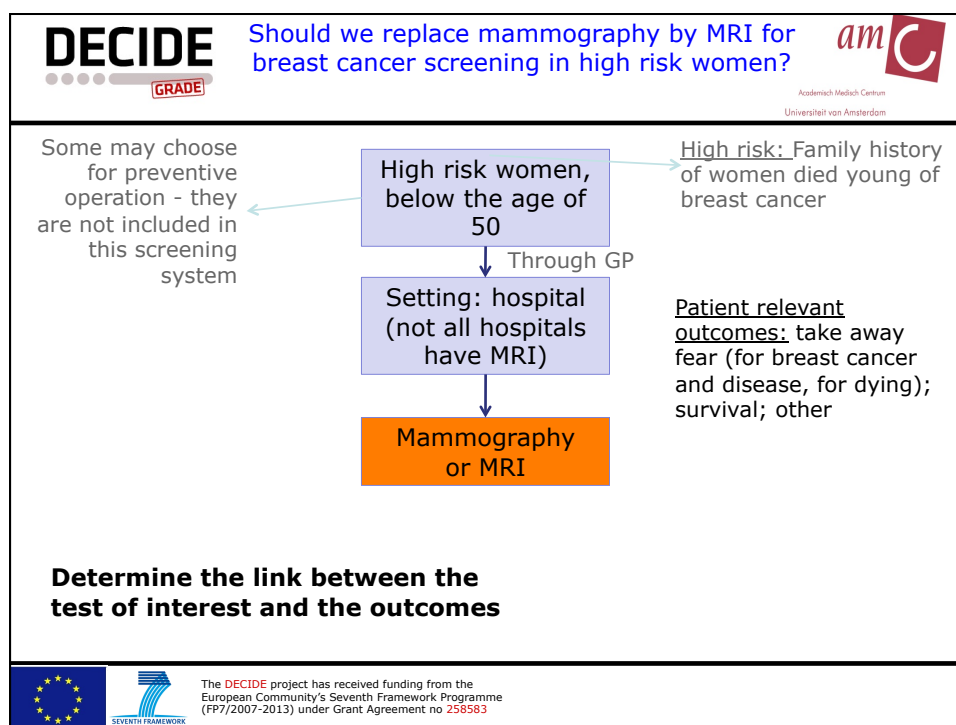
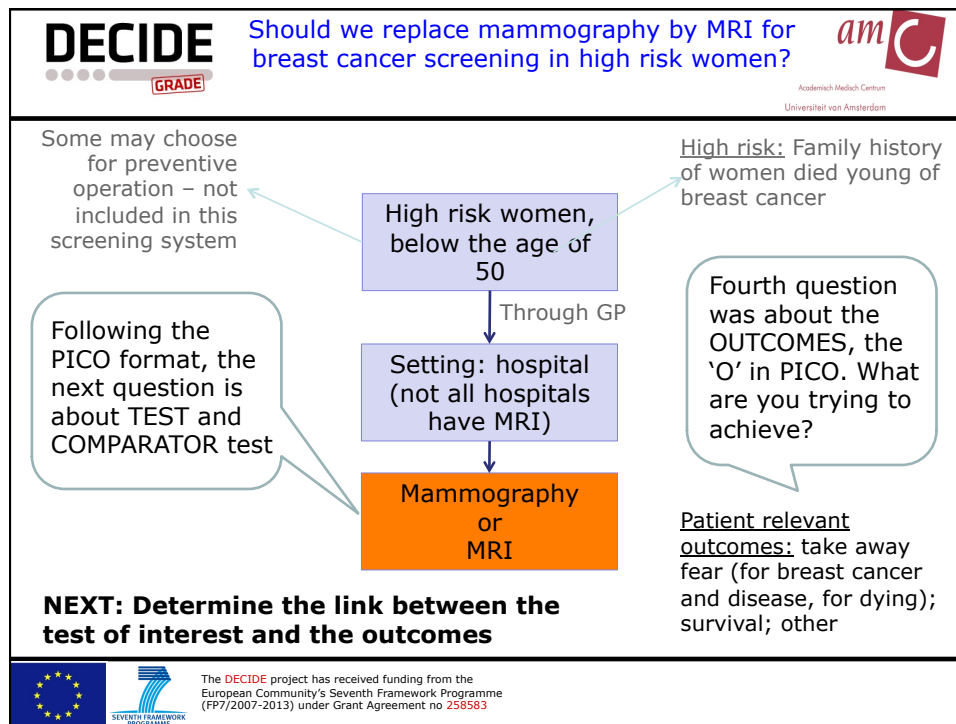
High risk: Family history of women died young of breast cancer

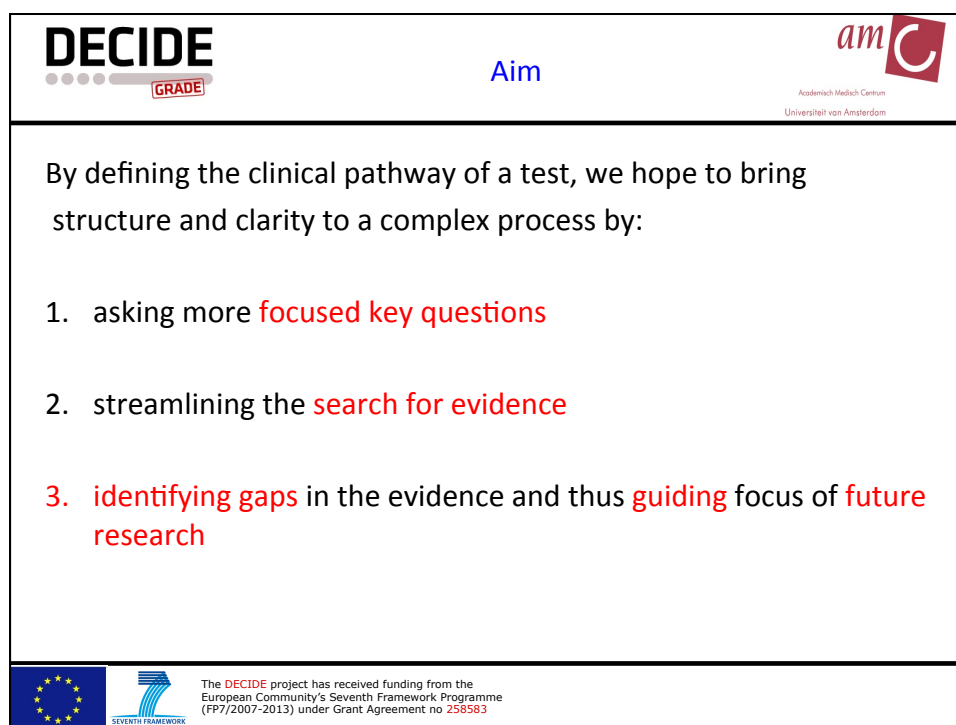
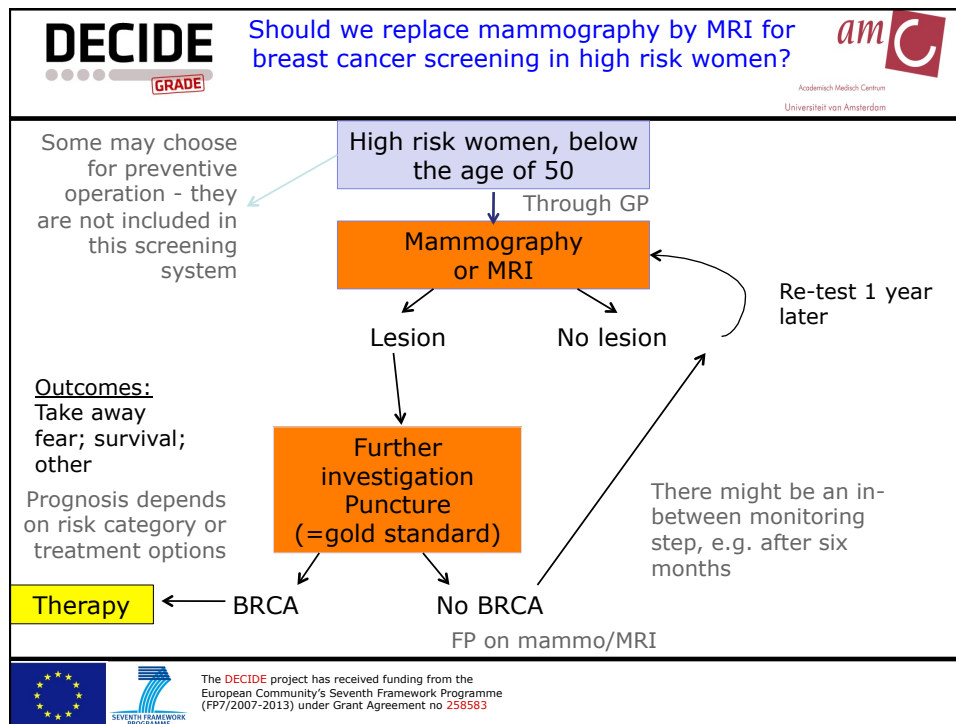
Anything else we want to know about the patients? Any other relevant information?


Following the PICO format, the first question is about for whom this question is relevant: PATIENTS


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Feedback from workshop participants




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- Useful tool but interview or qualitative research skills needed
>> provide escape questions and worked examples
- In an actual GDG setting, group dynamics can make the process more complicated
>> tips to keep discussion focused
- Capture the pathway in a digital format without losing the detail
>> make pathway visual (step by step)

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Next steps



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- Complete the signaling questions, based on feedback
- Further user-testing to provide worked examples
- Paper on the rationale and concept
- Explore ways of visualizing the pathway

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