ebhc CONFERENCE 2026

THE ECOSYSTEM OF EVIDENCE

Navigating the future
of the ecosystem of evidence

Artificial intelligence and digital transformation
in research and healthcare

11th EBHC International Conference
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#EBHC2026

A worked example demonstrating questionnaire development integrating AI tools and evidence synthesis methods.



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30th 1996-2026 GIMBE EVIDENCE FOR HEALTH

Background

- Introduction of AI and machine learning tools
- Need for a tailored training program
- Assessment of barriers, facilitators, attitudes, and expectations

In press: Work: A Journal of Prevention, Assessment & Rehabilitation · Expected December 2026

Aim

REthink questionnaire development

REuse

qualitative evidence

REpurpose

existing questionnaire items

REfine

with end users

Small target population → reuse existing evidence now, preserve employees for pre-testing and the final survey.

Methods

1	**Define the construct**	AI/ML attitudes and experiences	
2	**Identify theoretical domains**	Rapid review of qualitative evidence	**Reuse**
3	**Identify questionnaire items**	Rapid review of existing questionnaires	**Repurpose**
4	**Select and adapt items**	Match items to domains and sub-domains	
5	**Pre-test and refine**	End-user feedback and final pruning	**Refine**

Results - domains

21

seed studies

qualitative studies

1,643

references

OpenAlex recommendations

41

papers included

8 reviews + 33 primary studies

Framework

analysis

themes mapped and organised

8 major theoretical domains + 20 sub-domains

Results - questions

309

candidate questions (items)

→

244

MATCH TO
framework + sub-domains

85

pre-test draft

→

35

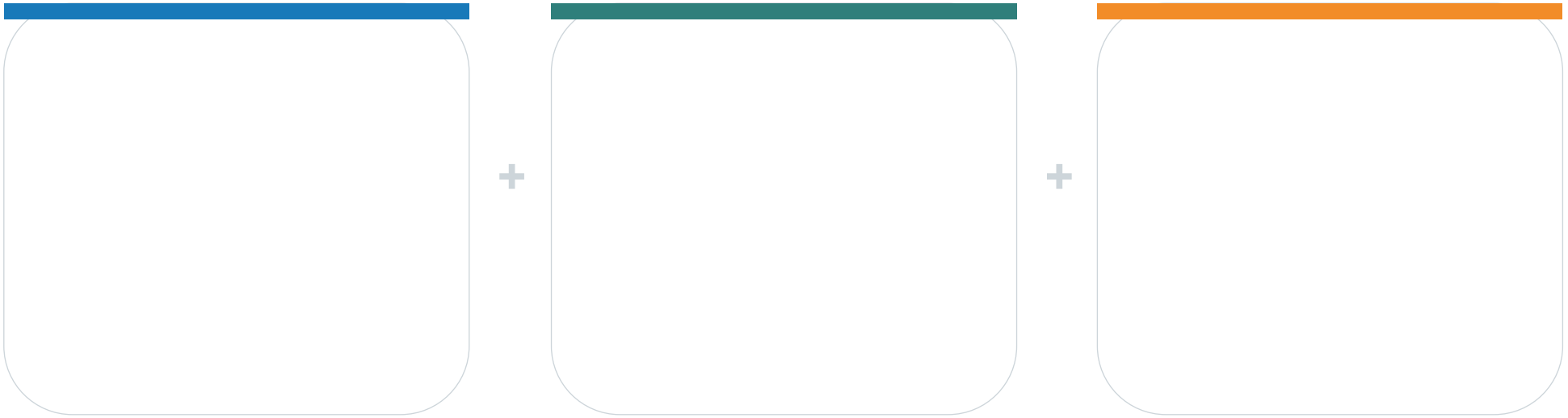
final questions

PRE-TEST
with end users

Systematic filtering first. End-user pruning second.

Results - questions

Qualitative evidence defined what the questionnaire needed to cover.



309 candidate items → 244 matched the framework → 85-item pre-test draft

Results

Shorter questionnaire, not a narrower construct

1. **Knowledge & understanding**
2. **Perceived usefulness**
3. **Trust & reliability**
4. **Concerns & risks**
5. **Emotions & attitudes**
6. **Social & professional context**
7. **Implementation & support**
8. **Future expectations**

35 **questions retained all 8 domains**

Breadth was preserved while respondent burden was reduced.

Discussion

What it adds

Evidence-grounded

Qualitative evidence defines what matters.

Reuse

Existing questionnaires provide wording and cont

Systematic

Broad item generation, then purposeful pruning.

Practical value

Less new data

Reuse existing qualitative evidence.

Protect participants

Preserve a small target population for the survey.

Lower burden

End users remove questions that add little value.

Keep in mind

Rapid, not exhaustive

Speed was prioritised over completeness.

Judgement remains central

AI/ML supported identification, not decisions.

Item generation only

Validity and psychometric testing still remain.

Conclusions

Don’t start from scratch.

1 Let qualitative evidence define what matters.

2 Reuse and adapt existing questionnaire items.

3 Use AI/ML to make evidence identification more efficient.

4 Let end users do the final pruning.



Don’t reinvent. Reuse, repurpose, refine.