

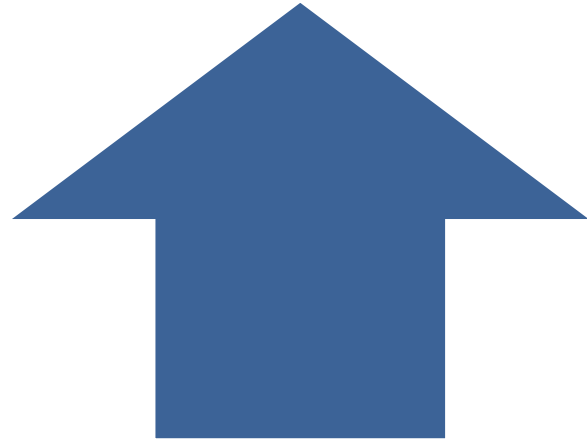
MODULE 5 | LECTURE 5D

Choosing and using implementation outcomes

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Implementation science

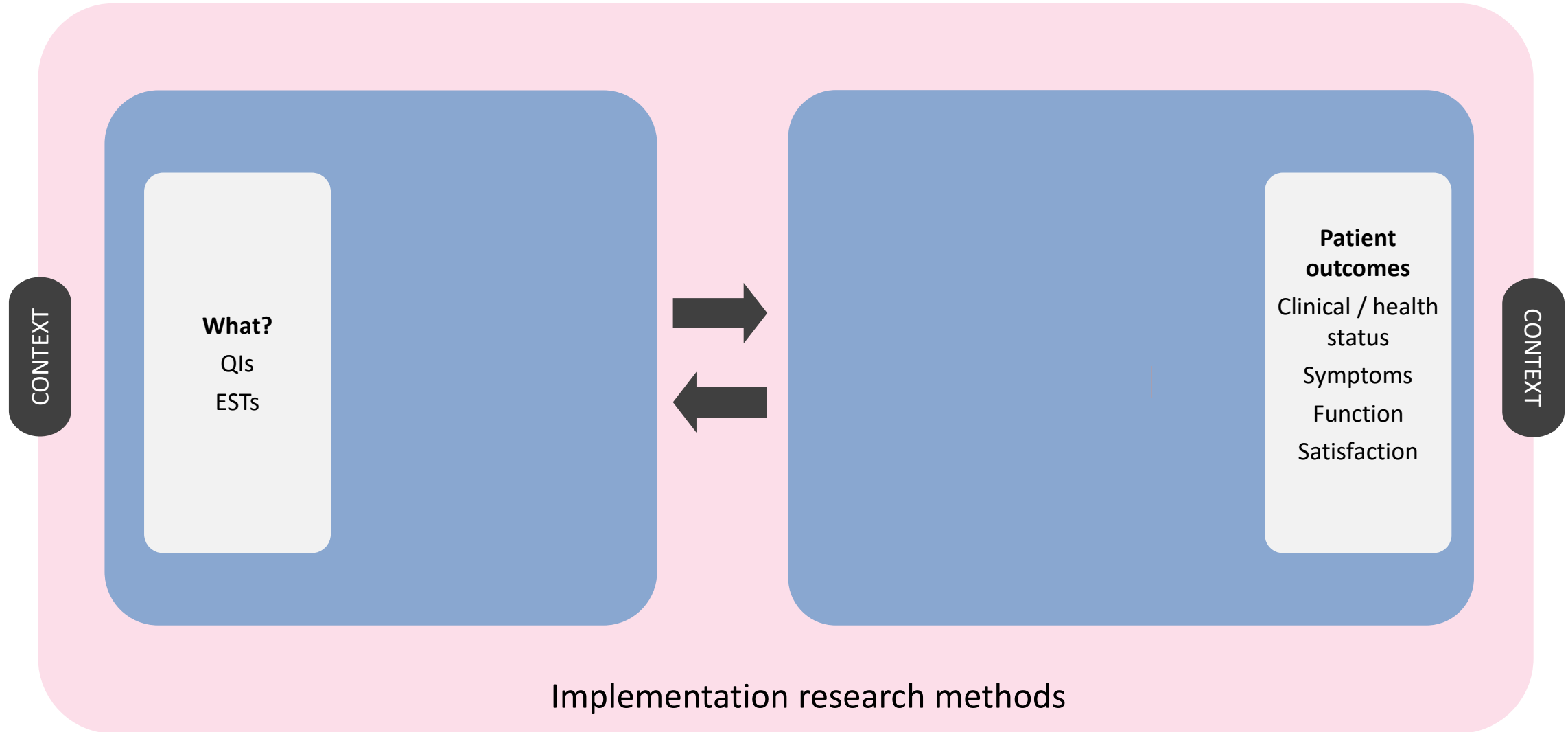


Accelerate and increase
use of discoveries from
research

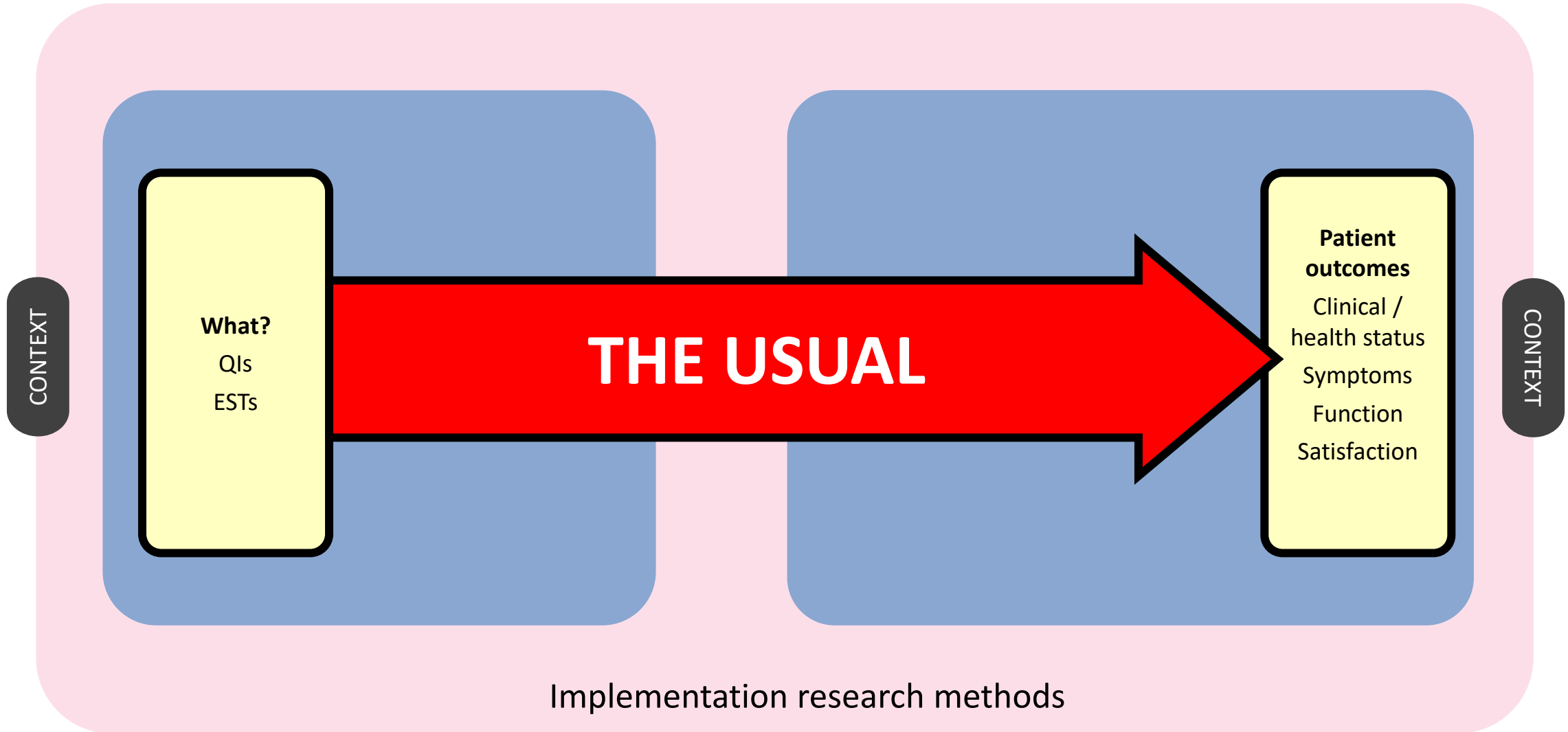


Decrease use of
ineffective, wasteful, or
harmful interventions

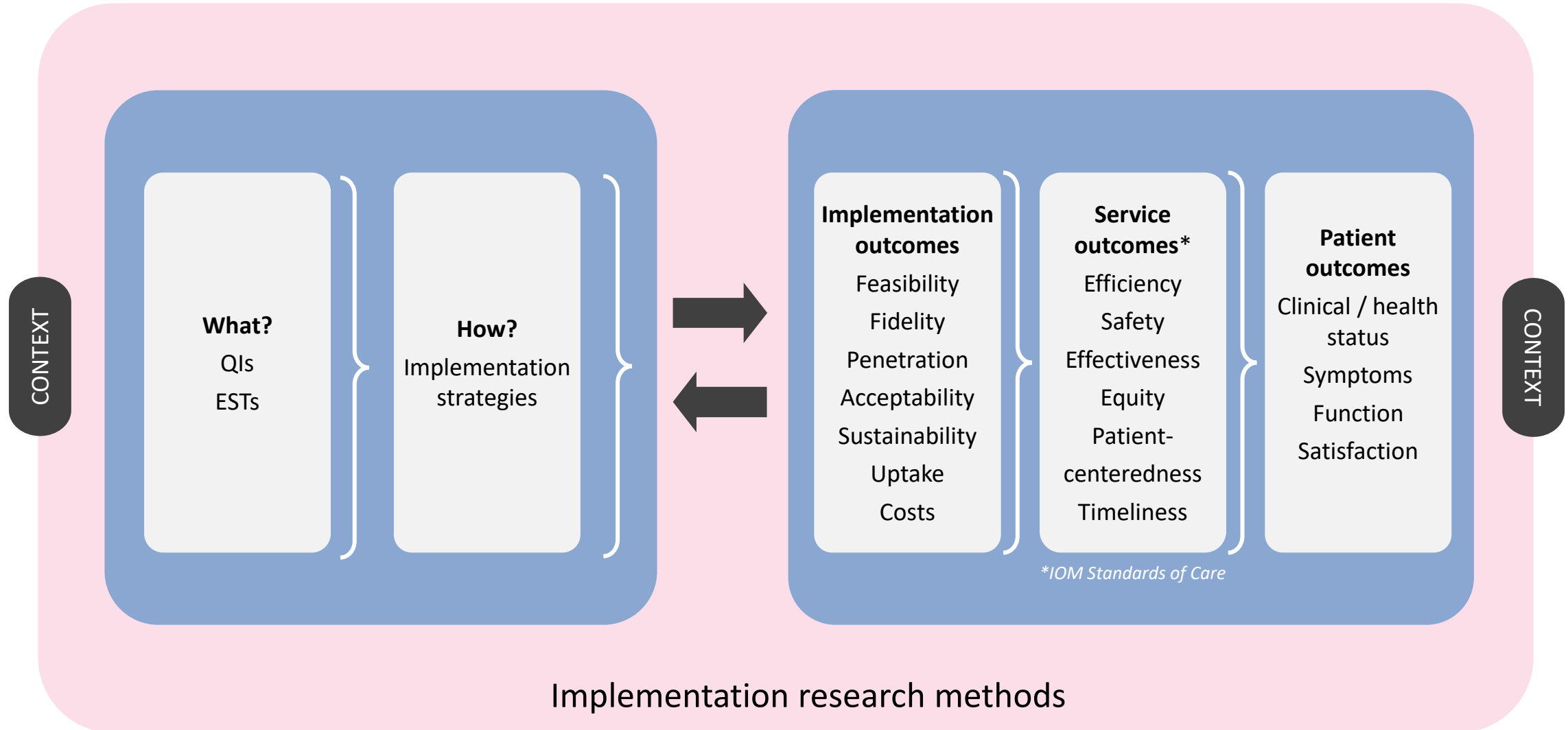
Conceptual Model of Implementation Research



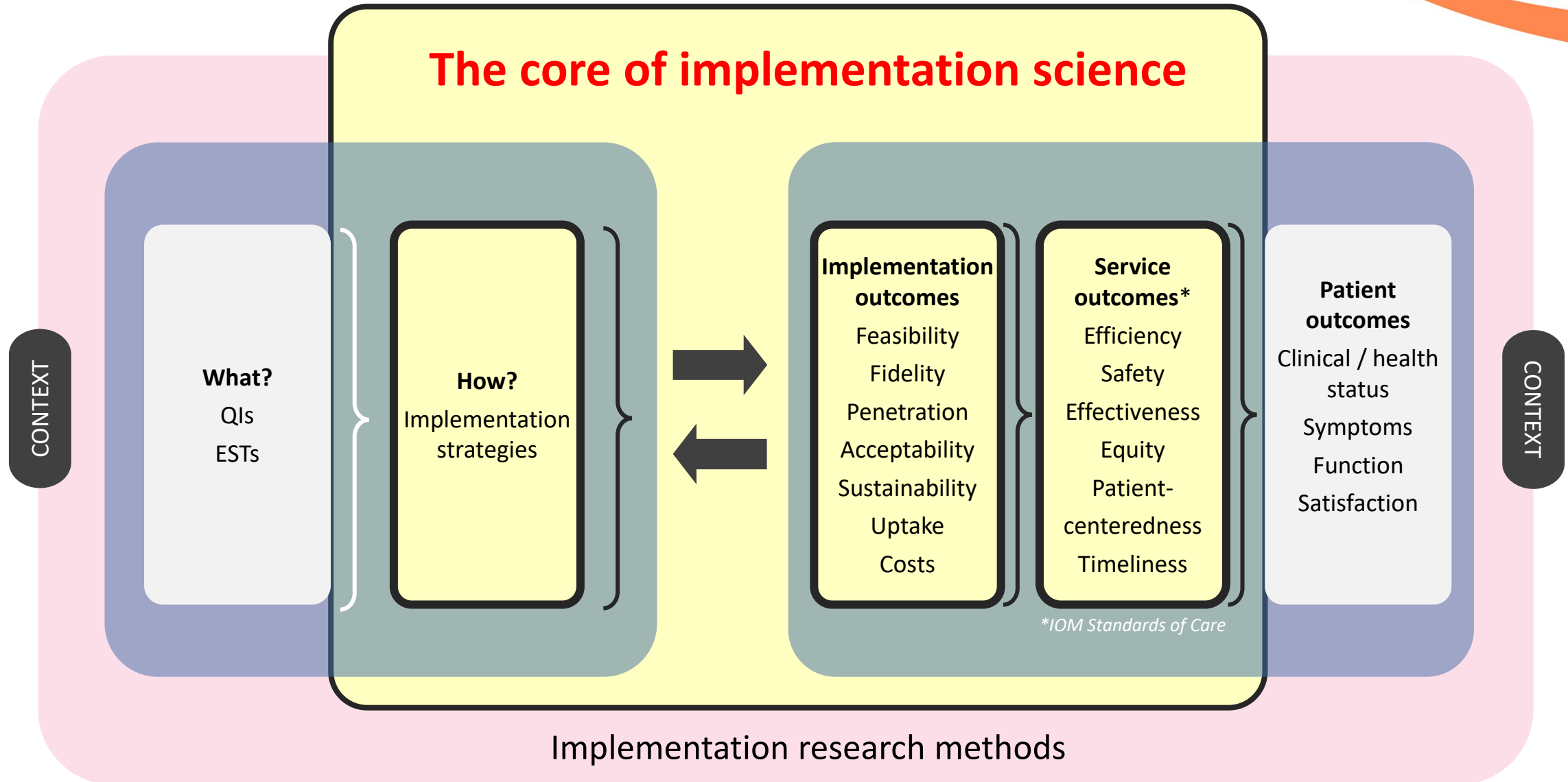
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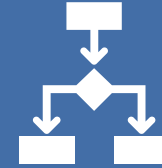


Conceptual Model of Implementation Research





Acceptability



Fidelity



Adoption



Implementation cost



Appropriateness



Penetration



Feasibility



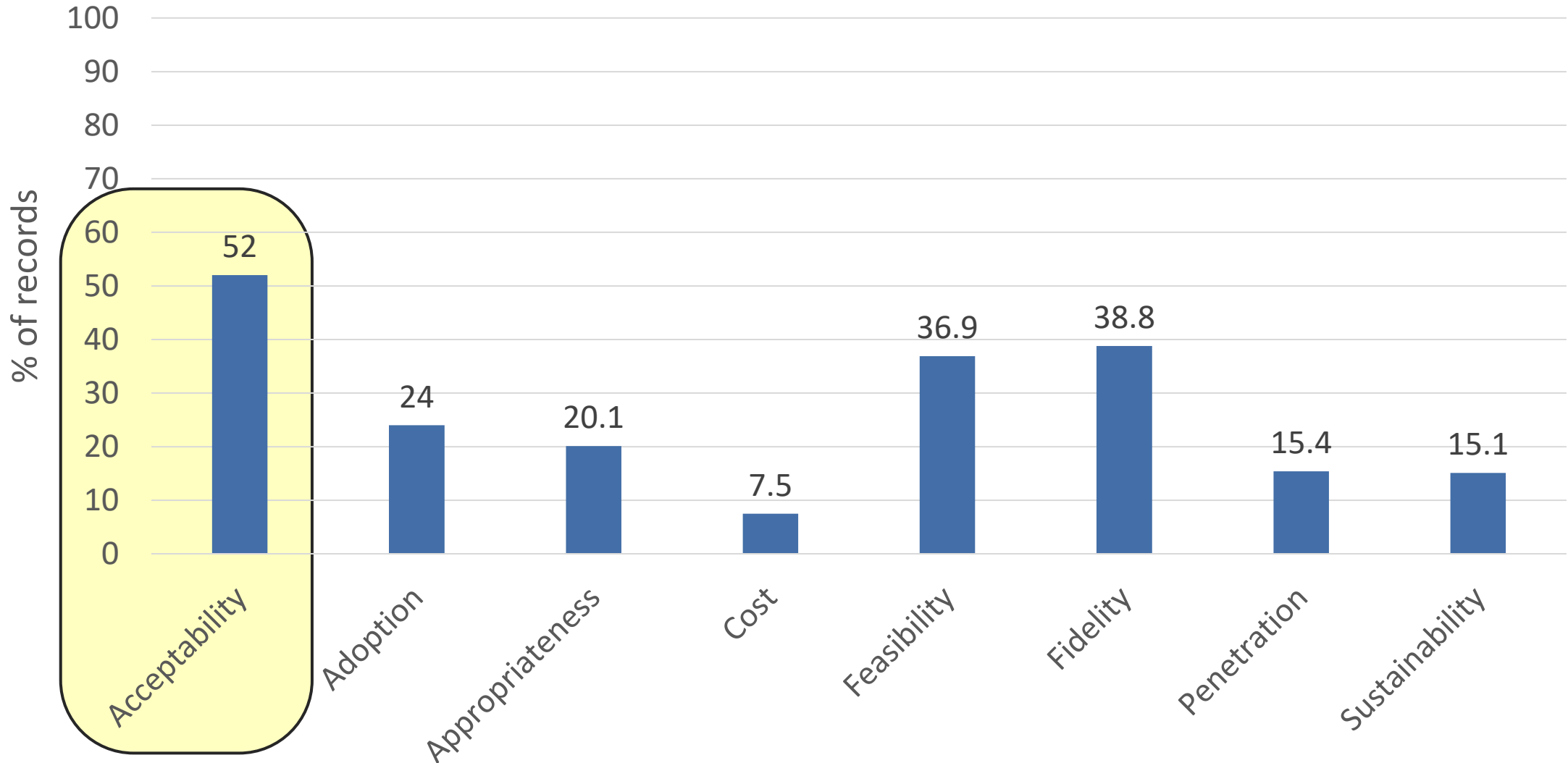
Sustainability

Implementation outcomes need to be measured distinct from intervention outcomes

Could have an effective intervention but...

- ✗ Information never reaches potential users
- ✗ Information poorly understood
- ✗ Poor delivery
- ✗ Poor reach in relevant health systems
- ✗ Implemented but with poor fidelity
- ✗ Not sustained

What outcomes are typically investigated?



How to choose an implementation outcome:

What's the barrier to intervention adoption?

What is the “thing” that could get to quality?

- Evidence-based interventions

What gets in the way of delivering the thing?

- Barriers

What needs to be achieved to let the thing get delivered?

- Implementation outcomes

How do we make it happen?

- Use implementation strategies to attain the relevant implementation outcomes

Example of barriers: lack of understanding

1

The proposed intervention is not acceptable because providers don't understand what it is or how it is relevant to the work they do with the people they serve

2

To improve acceptability, use the implementation strategy of “conduct educational trainings”

3

Each session includes information about what the intervention looks like, how to perform it, and why it matters for the clinic

4

Ideally, the training would help improve the acceptability and bolster success of the implementation

How to choose an implementation outcome:

What is the stage of implementation?

Early exploration

- Appropriateness, Acceptability, Costs

Preparation

- Feasibility

Implementation

- Adoption, Fidelity, Penetration

Later, sustainment

- Fidelity, Sustainment

Evidence-based intervention, programme, or guideline	Implementation outcomes	Clinical outcomes
Rapid antiretroviral therapy for HIV	<ul style="list-style-type: none"> ■ Acceptability ■ Feasibility ■ Cost-effectiveness 	Viral suppression
Tobacco use treatment guidelines	<ul style="list-style-type: none"> ■ Fidelity ■ Cost ■ Organizational readiness to implement change ■ Provider adherence to guidelines 	Smoking abstinence at 6 months

How to choose an implementation outcome:

Change theories, data on sequencing

What does theory say about behavior change?

- Example: attitudes contribute to behavior change, thus acceptability can lead to adoption

What do available data say?

- Evidence that fidelity contributes to penetration

What is the experience of the implementing site?

- What is feasible is more acceptable

What is the context and infrastructure?

- Cost (affordability) contributes to feasibility

Uebel KE et al. (2011) **Task shifting and integration of HIV care into primary care in South Africa: the development and content of the streamlining tasks and roles to expand treatment and care for HIV (STRETCH) intervention.** Implement Sci. 6:86.

Intervention =

Antiretroviral treatment (ART)

Implementation strategy =

Task shifting of prescriptions of antiretrovirals from doctors to nurses

Implementation outcome =

Appropriateness

Rabin BA et al. (2016) **Measurement resources for dissemination and implementation research in health.** Implement Sci. 11:42.

Martinez RG et al. (2014) **Instrumentation issues in implementation science.** Implement Sci. 9:118.

Allen P et al. (2020) **Quantitative measures of health policy implementation determinants and outcomes: a systematic review.** Implement Sci. 15(1):47.

Lewis CC et al. (2015) **Outcomes for implementation science: an enhanced systematic review of instruments using evidence-based rating criteria.** Implement Sci. 10:155.

SHORT
REPORT

DEBATE

SYSTEMATIC
REVIEW

SYSTEMATIC
REVIEW

Data sources for measuring implementation outcomes

Implementation outcome	Data sources
Acceptability	Surveys, interviews, observation
Adoption, scale up, sustainability	Records of use
Appropriateness	Surveys, interviews, observation
Fidelity	Observation, checklists
Implementation cost	Time logs, budget data

Recommendation: Report data source and measurement

Who provided data about appropriateness?



Nurses

What level was appropriateness data collected?



Individual (self-reported)

What data were collected to measure appropriateness?



Quantitative survey items and qualitative focus group questions

Implementation outcome:
Appropriateness

Implementation strategy:
Nurse training component of the task shifting strategy

How we are operationalizing appropriateness:

Did nurses think the content and delivery of the training we used for the task shifting strategy was relevant to/fit their everyday practice?

Key messages

1

Implementation outcomes – such as adoption and feasibility – need to be measured distinct from intervention outcomes

2

Choosing which implementation outcomes to use in your research should be informed by the barriers of implementation adoption, the stage of implementation, and relevant theories

3

When reporting implementation outcomes, report the data source and the measurement



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Thank you!

Disclosure: Enola Proctor

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- Uebel KE et al. (2011) Task shifting and integration of HIV care into primary care in South Africa: the development and content of the streamlining tasks and roles to expand treatment and care for HIV (STRETCH) intervention. *Implement Sci*. 6:86.
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