



IR 101

Implementation Research 101: What, Why, Frameworks,
Outcomes



December 2024



Apa itu IR?

Membentuk pertanyaan
penelitian
riset **implementasi**

Terapi kombinasi artemisinin (ACT) terbukti memiliki **98% efikasi**. Berapa persen (%) pasien malaria yang benar-benar

Efficacy of ACT = **98%**

Proportion of malaria patients benefiting from ACTs deployment at the different stages of implementation.

Intervensi **efektif** yang **menjanjikan** seringkali tidak sampai pada penerima **manfaat**.

Promise	Problem
Insecticide Impregnated bednets for malaria	< 50 % of population at risk sleeps under ITN
Praziquantel for schistosomiasis	< 14% of target population receive treatment
Effective diagnostics for TB	< 65 % of new cases diagnosed and notified
Integrated vector management for dengue	Insufficient coverage to prevent transmission
Morbidity management for Lymphatic filariasis	Reaches only a fraction of lymphoedema cases

Agar **manfaat** pada penerima tercapai, **riset implementasi** diperlukan.

Efficacy of ACT = **98%**

60% of suspected malaria patients accessing clinics with ACT

Appropriate diagnostic test performed in **95%** of malaria patients

95% of malaria patients prescribed appropriate ACT

70% of patients adhering to prescribed ACT

37% of malaria patients effectively benefiting from ACT

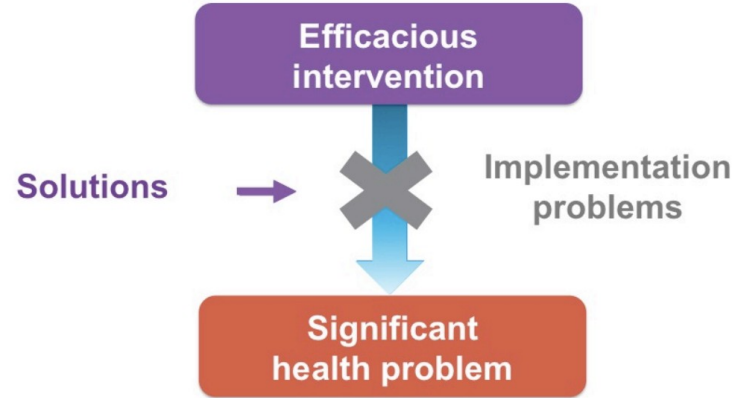
Proportion of malaria patients benefiting from ACTs deployment at the different stages of implementation.

60%

57%

54%

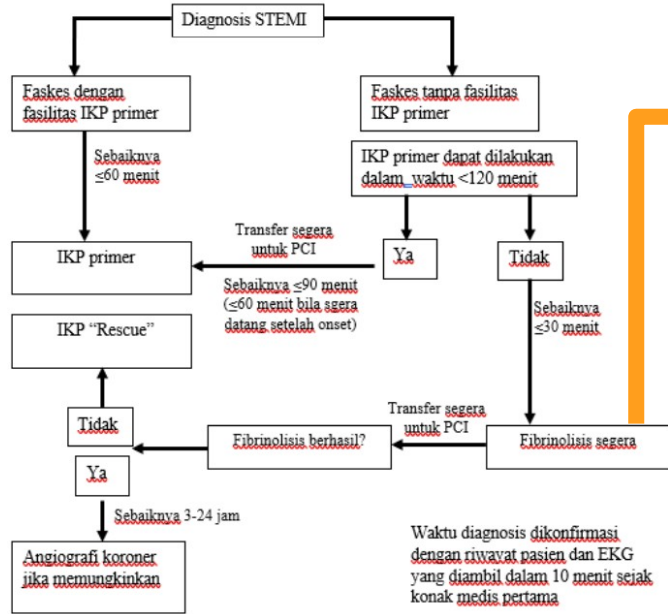
37%



Riset implementasi menangani **intervensi terbukti** yang tidak mencapai *expected impact* dan **intervensi baru** di mana masalah implementasi besar diantisipasi.

1. Mengidentifikasi & menginvestigasi **masalah-masalah** yang mencegah **implementasi** intervensi efektif
2. Mengembangkan dan menguji **strategi implementasi** sebagai solusi masalah

Masalah implementasi menjadi penghambat didapatkannya manfaat dari intervensi yang terbukti secara



Fibrinolisis sebagai **tatalaksana evidence-based** yang **efektif menurunkan mortalitas** bila pPCI tidak dapat diakses dalam 120 menit.



Masalah-masalah implementasi

- Regulasi
- Ketersediaan obat
- Kebiasaan fasyankes; tekanan pimpinan/lingkungan
- Ekspektasi masyarakat
- Pengetahuan, sikap, dan perilaku tenaga kesehatan
- dll.

Pasien STEMI di faskes yang jauh dari pPCI mendapatkan **fibrinolisis**.

Gambar 3. Algoritma reperfusi pada STEMI

Dikutip dari: (Gabriel Steg, et al. ESC Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation. European Heart Journal 2012;33)

Riset implementasi berbeda dari riset

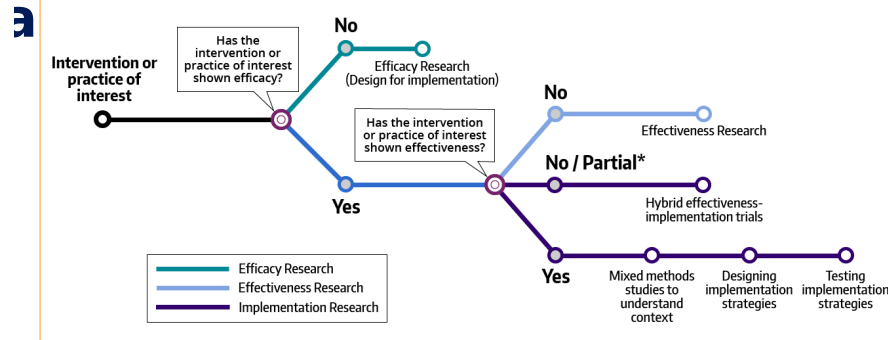
Operational research:
solving operational problems of local health programs

Intervention research:
developing, improving and testing the efficacy of new interventions

Implementation research:
solving implementation problems for proven interventions

Health systems research:
studying systems problems affecting performance of health system as a whole

Effectiveness research:
assessing the effect of an intervention under real life conditions



IR is NOT:

- Basic biomedical research (e.g., discovery of a new gene pathway or aetiology research).
- Initial or replication of intervention efficacy trials in a top-down controlled setting.
- Routine programme progress reporting.
- Simple implementation of health interventions.

Table 3 Intervention vs. Implementation Trial Design Perspectives: A Hypothetical Example of the Use of Motivational Interviewing (MI) for Substance Use Disorders in the Homeless Population

	Efficacy Design Principles	Effectiveness Design Principles	Implementation Design Principles
Hypothesis	MI beats control	MI beats control	MI will be adopted and sustained
Population & setting	Exclude psychosis, bipolar, anxiety; any setting with cooperative patients	Include most comorbidities; typical setting is nonspecialized practice sites	Unit of observation may be patients, providers, or clinics; typical setting is nonspecialized practice sites
Outcome measures	Health outcomes, many: "just in case..."	Health outcomes, short & sweet	Emphasize MI adoption measures
Intervention: clinicians	PhDs, MSWs hired & trained by PI	Addiction counselors hired as study staff	Endogenous addiction counselors
Intervention: fidelity	Trained to criterion, audiotaped for fidelity	Trained to criterion, QI-type monitoring as in clinical system	Formative evaluation the focus
Context	Make sure that the trial is successful, at all costs	Work within "typical" conditions	Maintain typical conditions
Research support	Crypto-case management	Research support, but "firewalled"	Research support limited; e.g., only for training
Validity emphasis	Internal >> external	External > internal	Plan to optimize protocol in real time using formative evaluation, in violation of "traditional" considerations of internal validity, while systematically documenting adaptations

Diskusi: Apakah **pertanyaan penelitian** berikut untuk riset **implementasi**?

Riset epidemiologi

Bagaimana hubungan defisiensi zinc dengan keparahan diare pada anak?

Riset efektivitas

Bagaimana dampak skrining mamografi massal di Provinsi A pada stadium kanker payudara saat pertama terdiagnosis?

Riset implementasi

Mengapa tidak semua pasien hipertensi rutin kontrol?

Riset efektivitas

Bagaimana tingkat prevalensi obesitas di Kecamatan X setelah diberlakukan program senam bersama?

Riset implementasi

Bagaimana program skrining diabetes Kecamatan Y dapat secara optimal diterapkan secara lebih luas di Provinsi B?

Riset efektivitas

Berapakah tingkatan mortalitas pada kelompok pasien STEMI yang diberi obat tenecteplase sesuai indikasi?

Riset implementasi

Berapakah persentase pasien STEMI berlokasi jauh dari fasilitas PCI yang menerima tenecteplase sesuai indikasi?



Pertanyaan-pertanyaan riset implementasi bisa dieksplorasi guna menggali banyak **masalah** ataupun mencapai ragam **objektif**.

How do contextual factors influence implementation success or failure? How can they be modified to increase chances of success?

What are the most effective techniques to incorporate new discoveries and evidence-based practices into care delivery?

What are the most effective techniques to improve the distribution and receipt of evidence in the real world?

What are the most effective techniques to de-implement practices that are no longer effective or were never effective?

QUESTIONS RELATING TO THE CHALLENGE OF:

Scaling Up	▼
<ul style="list-style-type: none"> › How can coverage and usage of a proven intervention be improved to meet set targets? › How can a program be scaled up to broader regions or populations? 	
Sustainability	▶
Replication	▶
Program Integration	▶
Equitability	▶
Real-World Effectiveness	▶

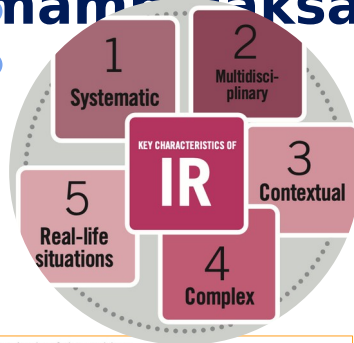
Adapted from *Fundamentals of Implementation Research* (2012)

QUESTIONS RELATING TO THE OBJECTIVE OF:

Exploring	▶
Describing	▼
<ul style="list-style-type: none"> › What describes the context in which implementation occurs? › What describes the main factors influencing implementation in a given context? 	
Influencing	▶
Explaining	▶
Predicting	▶

Adapted from *Implementation Research: What it is and how to do it* (2013)

Riset implementasi harus **relevan** secara **kontekstual** dan **mampu dilaksanakan**.



- Magnitude of the problem.
- Distribution of the health needs of the population.
- Risk factors for specific problems.
- People's awareness of the problem.
- Utilization patterns of relevant services.
- Cost-effectiveness of available and potential/new interventions.

- Coverage of priority health needs.
- Coverage among target groups.
- Acceptability of services.
- Quality of services.
- Cost-effectiveness of the intervention(s).
- Impact of the programme on health outcomes.

- Availability.
- Acceptability.
- Affordability.
- Service delivery challenges/barriers.

IR questions:

Address the needs of health care providers, programme managers and policy-makers, not only academics

Describe the health situation and intervention (including those in place and potential interventions)

Provide information required to evaluate ongoing interventions or progress needed for making adjustments in the intervention

Analyse possible causes of missed targets in order to find solutions

Should be:

Of interest to the research community, researchers, policy- and decision-makers, funding agencies, and health care providers

Answerable and provide important information

Shaped by the problem and in turn shape the research design

Clear and specific

Feasible

Pay attention to:

Relevance

Avoiding duplication

Urgency of need

Political acceptability

Feasibility

Applicability of results or recommendations

Ethical acceptability



CFIR

**Consolidated Framework for
Implementation Research**

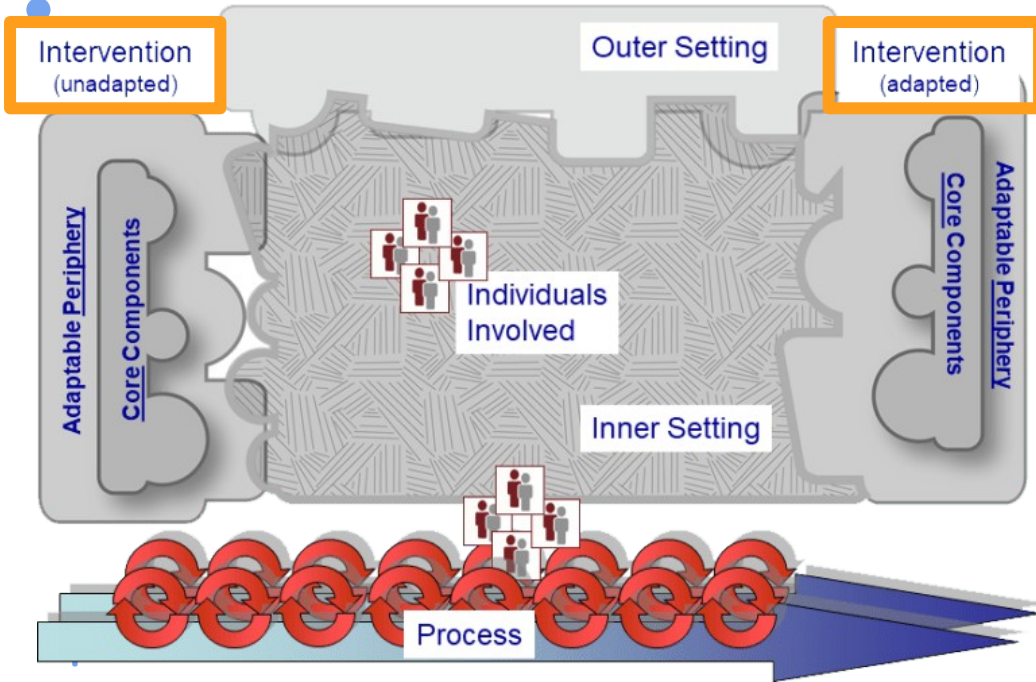
Ada banyak kerangka teori dalam riset implementasi.

Category	Description	Examples
Process models	Specify steps (stages, phases) in the process of translating research into practice, including the implementation and use of research. The aim of process models is to describe and/or guide the process of translating research into practice. An action model is a type of process model that provides practical guidance in the planning and execution of implementation endeavours and/or implementation strategies to facilitate implementation. Note that the terms “model” and “framework” are both used, but the former appears to be the most common	Model by Huberman [40], model by Landry et al. [41], model by Davies et al. [43], model by Majdzadeh et al. [44], the CIHR Model of Knowledge Translation [42], the K2A Framework [15], the Stetler Model [47], the ACE Star Model of Knowledge Transformation [48], the Knowledge-to-Action Model [13], the Iowa Model [49,50], the Ottawa Model [51,52], model by Grol and Wensing [53], model by Pronovost et al. [54], the Quality Implementation Framework [27]
Determinant frameworks	Specify types (also known as classes or domains) of determinants and individual determinants, which act as barriers and enablers (independent variables) that influence implementation outcomes (dependent variables). Some frameworks also specify relationships between some types of determinants. The overarching aim is to understand and/or explain influences on implementation outcomes, e.g. predicting outcomes or interpreting outcomes retrospectively	PARIHS [5,64], Active Implementation Frameworks [63,68], Understanding-User-Context Framework [62], Conceptual Model [17], framework by Grol et al. [22], framework by Cochrane et al. [59], framework by Nutley et al. [21], Ecological Framework by Durlak and DuPre [57], CFIR [60] framework by Gurses et al. [58], framework by Ferlie and Shortell [61], Theoretical Domains Framework [66]
Classic theories	Theories that originate from fields external to implementation science, e.g. psychology, sociology and organizational theory, which can be applied to provide understanding and/or explanation of aspects of implementation	Theory of Diffusion [107], social cognitive theories, theories concerning cognitive processes and decision making, social networks theories, social capital theories, communities of practice, professional theories, organizational theories
Implementation theories	Theories that have been developed by implementation researchers (from scratch or by adapting existing theories and concepts) to provide understanding and/or explanation of aspects of implementation	Implementation Climate [116], Absorptive Capacity [117], Organizational Readiness [118], COM-B [119], Normalization Process Theory [120]
Evaluation frameworks	Specify aspects of implementation that could be evaluated to determine implementation success	RE-AIM [124]; PRECEDE-PROCEED [125]; framework by Proctor et al. [126]

Nilsen P. Making sense of implementation theories, models and frameworks. *Implement Sci.* 2015 Apr 21;10:53. doi: 10.1186/s13012-015-0242-0. <https://pmc.ncbi.nlm.nih.gov/articles/PMC4406164/>

ACE Academic Center for Evidence-Based Practice, CFIR Consolidated Framework for Implementation Research, CIHR Canadian Institutes of Health Research Knowledge, COM-B Capacity-Opportunities-Motivation-Behaviour, *Conceptual Model* Conceptual Model for Considering the Determinants of Diffusion, Dissemination, and Implementation of Innovations in Health Service Delivery and Organization (full title), K2A Knowledge-to-Action, PARIHS Promoting Action on Research Implementation in Health Services, PRECEDE-PROCEED Predisposing, Reinforcing and Enabling Constructs in Educational Diagnosis and Evaluation-Policy, Regulatory, and Organizational Constructs in Educational and Environmental Development, RE-AIM Reach, Effectiveness, Adoption, Implementation, Maintenance.

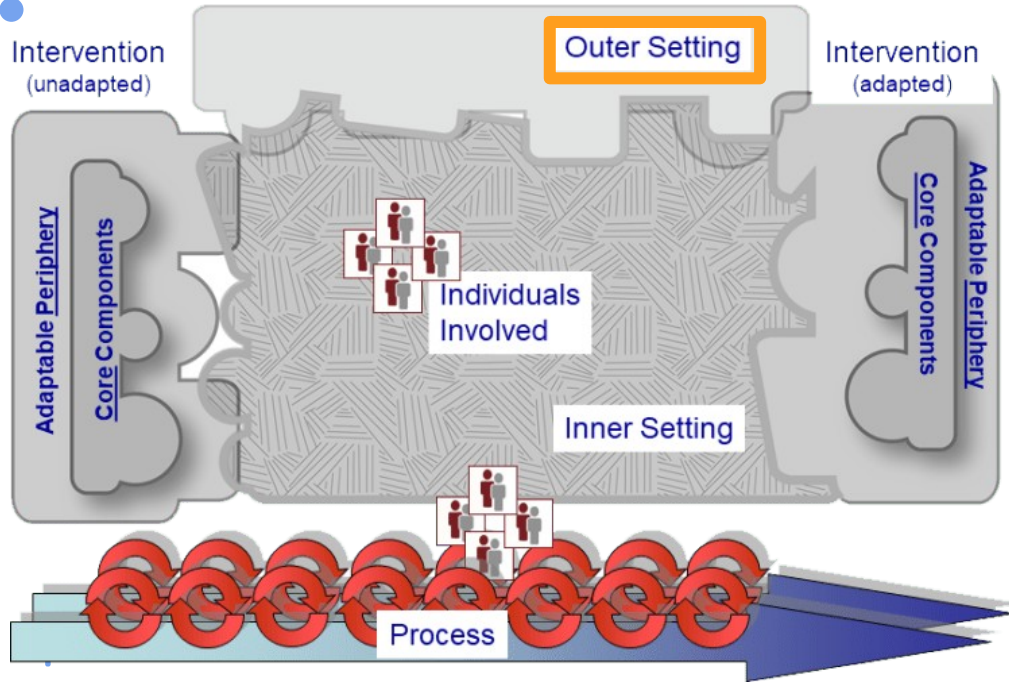
Domain dan konstruk **CFIR** merangkum faktor-faktor **determinan** yang bisa memengaruhi implementasi. (1/5)



I. INNOVATION DOMAIN	
Construct Name	Construct Definition
	<i>The degree to which:</i>
A. Innovation Source	The group that developed and/or visibly sponsored use of the innovation is reputable, credible, and/or trustable.
B. Innovation Evidence-Base	The innovation has robust evidence supporting its
C. Innovation Relative Advantage	The innovation is better than other available innovations or
D. Innovation Adaptability	The innovation can be modified, tailored, or refined to fit
E. Innovation Trialability	The innovation can be tested or piloted on a small scale and
F. Innovation Complexity	The innovation is complicated, which may be reflected by its scope and/or the nature and number of connections and
G. Innovation Design	The innovation is well designed and packaged, including how it is assembled, bundled, and presented.
H. Innovation Cost	The innovation purchase and operating costs are affordable.

<https://cfirguide.org/constructs/>

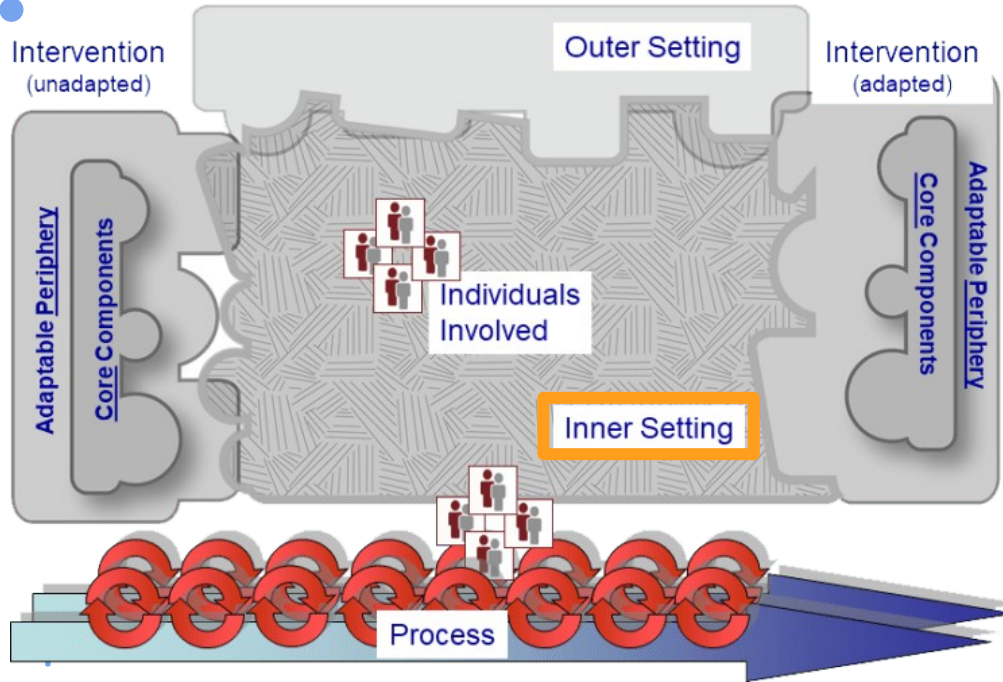
Domain dan konstruk **CFIR** merangkum faktor-faktor **determinan** yang bisa memengaruhi implementasi. (2/5)



II. OUTER SETTING DOMAIN	
Construct Name	Construct Definition
	<i>The degree to which:</i>
A. Critical Incidents	Large-scale and/or unanticipated events disrupt implementation and/or delivery of the innovation.
B. Local Attitudes	Sociocultural values (e.g., shared responsibility in helping recipients) and beliefs (e.g., convictions about the worthiness of recipients) encourage the Outer Setting to support implementation
C. Local Conditions	Economic, environmental, political, and/or technological conditions enable the Outer Setting to support implementation
D. Partnerships & Connections	The Inner Setting is networked with external entities, including referral networks, academic affiliations, and professional
E. Policies & Laws	Legislation, regulations, professional group guidelines and recommendations, or accreditation standards support implementation and/or delivery of the innovation.
F. Financing	Funding from external entities (e.g., grants, reimbursement) is available to implement and/or deliver the innovation.
G. External Pressure	External pressures drive implementation and/or delivery of the innovation. Note: Use this construct to capture themes related to External Pressures that are not included in the subconstructs below.
1. Societal Pressure	Mass media campaigns, advocacy groups, or social movements or protests drive implementation and/or delivery
2. Market Pressure	Competing with and/or imitating peer entities drives implementation and/or delivery of the innovation.
3. Performance-Measurement Pressure	Quality or benchmarking metrics or established service goals drive implementation and/or delivery of the innovation.

<https://cfirguide.org/constructs/>

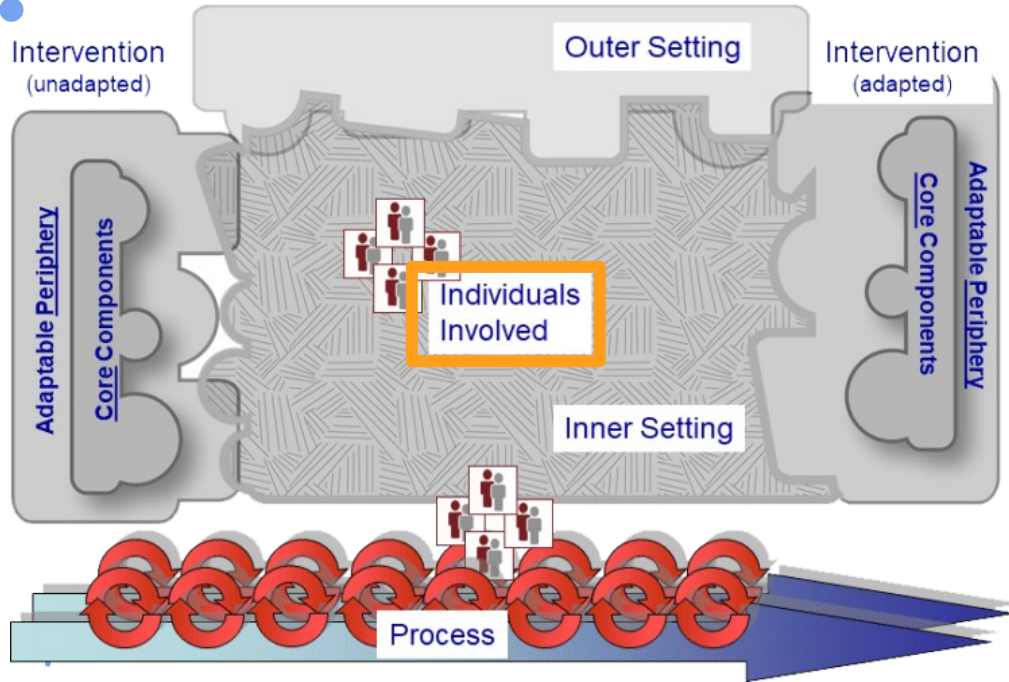
Domain dan konstruk **CFIR** merangkum faktor-faktor **determinan** yang bisa memengaruhi



<https://cfirguide.org/constructs/>

III. INNER SETTING DOMAIN	
Construct Name	Construct Definition
	<i>The degree to which:</i>
<i>Note:</i>	<i>Constructs A – D exist in the Inner Setting regardless of implementation and/or delivery of the innovation, i.e., they are persistent general characteristics of the Inner Setting.</i>
A. Structural Characteristics	Infrastructure components support functional performance of the Inner Setting. <i>Note: Use this construct to capture themes related to Structural Characteristics that are not included in the subconstructs below.</i>
1. Physical Infrastructure	Layout and configuration of space and other tangible material features support functional performance of the Inner Setting.
2. Information Technology Infrastructure	Technological systems for tele-communication, electronic documentation, and data storage, management, reporting, and analysis support functional performance of the Inner Setting.
3. Work Infrastructure	Organization of tasks and responsibilities within and between individuals and teams, and general staffing levels, support functional performance of the Inner Setting.
B. Relational Connections	There are high quality formal and informal relationships, networks, and teams within and across Inner Setting boundaries (e.g., structural, professional).
C. Communications	There are high quality formal and informal information sharing practices within and across Inner Setting boundaries (e.g., structural, professional).
D. Culture	There are shared values, beliefs, and norms across the Inner Setting. <i>Note: Use this construct to capture themes related to Culture that are not included in the subconstructs below.</i>
1. Human Equality-Centeredness	There are shared values, beliefs, and norms about the inherent equal worth and value of all human beings.
2. Recipient-Centeredness	There are shared values, beliefs, and norms around caring, supporting, and addressing the needs and welfare of recipients.
3. Deliverer-Centeredness	There are shared values, beliefs, and norms around caring, supporting, and addressing the needs and welfare of deliverers.
4. Learning-Centeredness	There are shared values, beliefs, and norms around psychological safety, continual improvement, and using data to inform practice.
<i>Note:</i>	<i>Constructs E – K are specific to the implementation and/or delivery of the innovation.</i>
E. Tension for Change	The current situation is intolerable and needs to change.
F. Compatibility	The innovation fits with workflows, systems, and processes.
G. Relative Priority	Implementing and delivering the innovation is important compared to other initiatives.
H. Incentive Systems	Tangible and/or intangible incentives and rewards and/or disincentives and punishments support implementation and delivery of the innovation.
I. Mission Alignment	Implementing and delivering the innovation is in line with the overarching commitment, purpose, or goals in the Inner Setting.
J. Available Resources	Resources are available to implement and deliver the innovation. <i>Note: Use this construct to capture themes related to Available Resources that are not included in the subconstructs below.</i>
1. Funding	Funding is available to implement and deliver the innovation.
2. Space	Physical space is available to implement and deliver the innovation.
3. Materials & Equipment	Supplies are available to implement and deliver the innovation.
K. Access to Knowledge & Information	Guidance and/or training is accessible to implement and deliver the innovation.

Domain dan konstruk **CFIR** merangkum faktor-faktor **determinan** yang bisa memengaruhi implementasi. (4/5)



IV. INDIVIDUALS DOMAIN

ROLES SUBDOMAIN

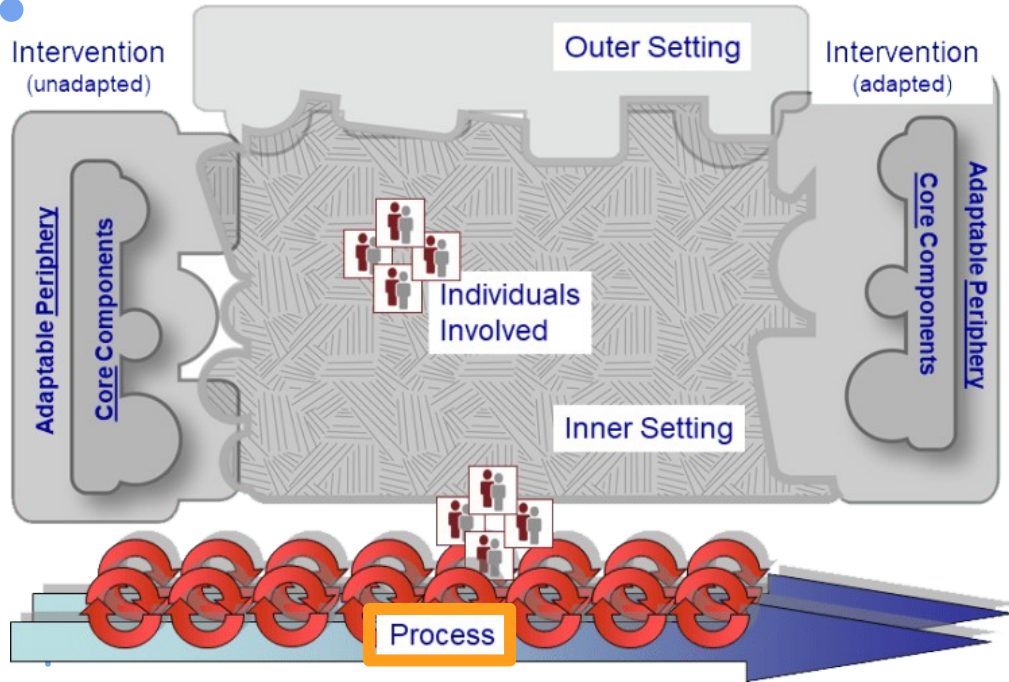
Construct Name	Construct Definition
A. High-level Leaders	Individuals with a high level of authority, including key decision-makers, executive leaders, or directors.
B. Mid-level Leaders	Individuals with a moderate level of authority, including leaders supervised by a high-level leader and who supervise others.
C. Opinion Leaders	Individuals with informal influence on the attitudes and
D. Implementation Facilitators	Individuals with subject matter expertise who assist, coach, or support implementation.
E. Implementation Leads	Individuals who lead efforts to implement the innovation.
F. Implementation Team Members	Individuals who collaborate with and support the Implementation Leads to implement the innovation, ideally including Innovation Deliverers and Recipients.
G. Other Implementation Support	Individuals who support the Implementation Leads and/or Implementation Team Members to implement the innovation.
H. Innovation Deliverers	Individuals who are directly or indirectly delivering the
I. Innovation Recipients	Individuals who are directly or indirectly receiving the

CHARACTERISTICS SUBDOMAIN

Construct Name	Construct Definition: <i>The degree to which:</i>
A. Need	The individual(s) has deficits related to survival, well-being, or personal fulfillment, which will be addressed by implementation and/or delivery of the innovation.
B. Capability	The individual(s) has interpersonal competence, knowledge, and skills to fulfill Role.
C. Opportunity	The individual(s) has availability, scope, and power to fulfill
D. Motivation	The individual(s) is committed to fulfilling Role.

+ <https://cfirguide.org/constructs/>

Domain dan konstruk **CFIR** merangkum faktor-faktor **determinan** yang bisa memengaruhi implementasi (5/5)



V. IMPLEMENTATION PROCESS DOMAIN

Construct Name	Construct Definition <i>The degree to which individuals:</i>
A. Teaming	Join together, intentionally coordinating and collaborating on interdependent tasks, to implement the innovation.
B. Assessing Needs	Collect information about priorities, preferences, and needs of people. Note: Use this construct to capture themes related to Assessing Needs that are not included in the subconstructs below.
1. Innovation Deliverers	Collect information about the priorities, preferences, and needs of deliverers to guide implementation and delivery of the innovation.
2. Innovation Recipients	Collect information about the priorities, preferences, and needs of recipients to guide implementation and delivery of the innovation.
C. Assessing Context	Collect information to identify and appraise barriers and facilitators to implementation and delivery of the innovation.
D. Planning	Identify roles and responsibilities, outline specific steps and milestones, and define goals and measures for implementation success in advance.
E. Tailoring Strategies	Choose and operationalize implementation strategies to address barriers, leverage facilitators, and fit context.
F. Engaging	Attract and encourage participation in implementation and/or the innovation. Note: Use this construct to capture themes related to Engaging that are not included in the subconstructs below.
1. Innovation Deliverers	Attract and encourage deliverers to serve on the implementation team and/or to deliver the innovation.
2. Innovation Recipients	Attract and encourage recipients to serve on the implementation team and/or participate in the innovation.
G. Doing	Implement in small steps, tests, or cycles of change to trial and cumulatively optimize delivery of the innovation.
H. Reflecting & Evaluating	Collect and discuss quantitative and qualitative information about the success of implementation. Note: Use this construct to capture themes related to Reflecting & Evaluating that are not included in the subconstructs below.
1. Implementation	Collect and discuss quantitative and qualitative information about the success of implementation.
2. Innovation	Collect and discuss quantitative and qualitative information about the success of the innovation.
I. Adapting	Modify the innovation and/or the Inner Setting for optimal fit and integration into work processes.

<https://cfirguide.org/constructs/>

Diskusi: kerangka konsep implementasi FASTEMI (adaptasi CFIR)

Outer Setting

- Kebutuhan Pasien
- Ekspektasi Masyarakat
- Hubungan Rumah Sakit Rujukan
 - Kebijakan Dinas Kesehatan
- Pendanaan dan Dukungan Logistik
 - Pengaruh Sosial dan Politik
 - Teknologi dan Informasi

Inner Setting

- Struktur Organisasi
 - Sumber Daya
 - Budaya Organisasi
- Proses Komunikasi Internal
- Faktor Lingkungan Kerja
- Pengaruh Kepemimpinan

Puskesmas

Proses Implementasi

- Evaluasi Kesiapan
- Proses Edukasi atau Pelatihan
- Adaptasikan dengan Konteks Lokal
- Fasilitasi Komunikasi
- Pantau dan Evaluasi Progres
- Keberlanjutan Implementasi

Implementasi FASTEMI

1. Acceptability
2. Adoption
3. Appropriateness
4. Feasibility
5. Fidelity
6. Implementation Cost
7. Penetration
8. Sustainability

Penggunaan Kualitatif CFIR

Damschroder and Lowery *Implementation Science* 2013, **8**:51
<http://www.implementationscience.com/content/8/1/51>



METHODOLOGY

Open Access

Evaluation of a large-scale weight management program using the consolidated framework for implementation research (CFIR)

Laura J Damschroder* and Julie C Lowery

Abstract

Background: In the United States, as in many other parts of the world, the prevalence of overweight/obesity is at epidemic proportions in the adult population and even higher among Veterans. To address the high prevalence of overweight/obesity among Veterans, the MOVE!® weight management program was disseminated nationally to Veteran Affairs (VA) medical centers. The objective of this paper is two-fold: to describe factors that explain the wide variation in implementation of MOVE!; and to illustrate, step-by-step, how to apply a theory-based framework using qualitative data.

Methods: Five VA facilities were selected to maximize variation in implementation effectiveness and geographic location. Twenty-four key stakeholders were interviewed about their experiences in implementing MOVE!. The Consolidated Framework for Implementation Research (CFIR) was used to guide collection and analysis of qualitative data. Constructs that most strongly influence implementation effectiveness were identified through a cross-case comparison of ratings.

Results: Of the 31 CFIR constructs assessed, ten constructs strongly distinguished between facilities with low versus high program implementation effectiveness. The majority (six) were related to the inner setting: networks and communications; tension for change; relative priority; goals and feedback; learning climate; and leadership engagement. One construct each, from intervention characteristics (relative advantage) and outer setting (patient needs and resources), plus two from process (executing and reflecting) also strongly distinguished between high and low implementation. Two additional constructs weakly distinguished, 16 were mixed, three constructs had insufficient data to assess, and one was not applicable. Detailed descriptions of how each distinguishing construct manifested in study facilities and a table of recommendations is provided.

Conclusions: This paper presents an approach for using the CFIR to code and rate qualitative data in a way that will facilitate comparisons across studies. An online Wiki resource (www.wiki.cfirwiki.net) is available, in addition to the information presented here, that contains much of the published information about the CFIR and its constructs and sub-constructs. We hope that the described approach and open access to the CFIR will generate wide use and encourage dialogue and continued refinement of both the framework and approaches for applying it.

Keywords: Implementation, Qualitative methods, Obesity, Conceptual framework

- **Pengumpulan data:** *Interview guide* bisa dibuat dengan acuan CFIR agar semua determinan dipertimbangkan
- **Analisis data:** *Coding template* berdasarkan konstruk CFIR

Table 2 Criteria used to assign ratings to constructs

Rating	Criteria
-2	The construct is a negative influence in the organization, an impeding influence in work processes, and/or an impeding influence in implementation efforts. The majority of interviewees (at least two) describe explicit examples of how the key or all aspects (or the absence) of a construct manifests itself in a negative way.
-1	The construct is a negative influence in the organization, an impeding influence in work processes, and/or an impeding influence in implementation efforts. Interviewees make general statements about the construct manifesting in a negative way but without concrete examples: <ul style="list-style-type: none"> • The construct is mentioned only in passing or at a high level without examples or evidence of actual, concrete descriptions of how that construct manifests; • There is a mixed effect of different aspects of the construct but with a general overall negative effect; • There is sufficient information to make an indirect inference about the generally negative influence; and/or • Judged as weakly negative by the absence of the construct.
0	A construct has neutral influence if: <ul style="list-style-type: none"> • It appears to have neutral effect (purely descriptive) or is only mentioned generically without valence; • There is no evidence of positive or negative influence; • Credible or reliable interviewees contradict each other • There are positive and negative influences at different levels in the organization that balance each other out; and/or different aspects of the construct have positive influence while others have negative influence and overall, the effect is neutral.
+1	The construct is a positive influence in the organization, a facilitating influence in work processes, and/or a facilitating influence in implementation efforts. Interviewees make general statements about the construct manifesting in a positive way but without concrete examples: <ul style="list-style-type: none"> • The construct is mentioned only in passing or at a high level without examples or evidence of actual, concrete descriptions of how that construct manifests; • There is a mixed effect of different aspects of the construct but with a general overall positive effect; and/or • There is sufficient information to make an indirect inference about the generally positive influence.
+2	The construct is a positive influence in the organization, a facilitating influence in work processes, and/or a facilitating influence in implementation efforts. The majority of interviewees (at least two) describe explicit examples of how the key or all aspects of a construct manifests itself in a positive way.

Missing interviewee(s) were not asked about the presence or influence of the construct or if asked about a construct, their responses did not correspond to the intended construct and were instead coded to another construct. Interviewee(s) lack of knowledge about a construct does not necessarily indicate missing data and may instead indicate the absence of the construct.

Table 3 Ratings assigned to CFIR construct by case

Site ID	Low implementation facilities	Transition facility	High implementation facilities
I. INTERVENTION CHARACTERISTICS			
Intervention Source*	E	E	E
Evidence Strength and Quality	-2	+1	+1
Relative Advantage	-2	+1	+2
Adaptability	-2	+2	+2
Trialability	0	0	+1
Complexity (internal costs)	Missing	-2	-2
Design Quality and Packaging	-2	+2	+1
Cost	0	0	0
II. OUTER SETTING			
Patient Needs and Resources	-2	0 (Mixed)	+1
Comprehension	0	0	+1
Peer Pressure	0	0	0
External Policy and Incentives	-1	-2	N/A
III. INNER SETTING			
Structural Characteristics	Missing	Missing	Missing
Networks and Communications	-2	-2	+1
Culture	Missing	Missing	Missing
Implementation Climate	0	0	+2
Tension for Change	0	0	+2
Compatibility	-2	+1	0
Relative priority	-1	-2	+1
Organizational Incentives and Rewards	+0	-1	0
Goals and Feedback	-2	-1	+1
Learning Climate	Missing	-1	Missing
IV. PROCESS			
Readiness for Implementation	-2	-1	+2
Leadership Engagement	-2	-2	-1
Available resources	-2	-2	+1
Access to knowledge and information	-1	Missing	Missing
Planning			
Engaging	-1	Missing	+1
Opinion Leaders	Missing	Missing	Missing
Formally Appointed Internal Implementation Leaders	-1	+2	+2
Overall Championing	-1	+2	+1
Physician Champion	+2	0	+1
Other Champions	+2	+2	+2
External Change Agents	0	0	0
Executing			
Reliability and Evaluating	N/A	N/A	N/A
	-1	-2	+1

* Construct strongly distinguishes between low and high implementation effectiveness.
 † Construct weakly distinguishes between low and high implementation effectiveness.
 ‡ Treated (N/A) is internally developed. § Treated (N/A) is externally developed.

Penggunaan Kualitatif CFIR

Damschroder and Lowery *Implementation Science* 2013, **8**:51
<http://www.implementationscience.com/content/8/1/51>



METHODOLOGY

Open Access

Evaluation of a large-scale weight management program using the consolidated framework for implementation research (CFIR)

Laura J Damschroder* and Julie C Lowery

Abstract

Background: In the United States, as in many other parts of the world, the prevalence of overweight/obesity is at epidemic proportions in the adult population and even higher among Veterans. To address the high prevalence of overweight/obesity among Veterans, the MOVE!® weight management program was disseminated nationally to Veteran Affairs (VA) medical centers. The objective of this paper is two-fold: to describe factors that explain the wide variation in implementation of MOVE!; and to illustrate, step-by-step, how to apply a theory-based framework using qualitative data.

Methods: Five VA facilities were selected to maximize variation in implementation effectiveness and geographic location. Twenty-four key stakeholders were interviewed about their experiences in implementing MOVE!. The Consolidated Framework for Implementation Research (CFIR) was used to guide collection and analysis of qualitative data. Constructs that most strongly influence implementation effectiveness were identified through a cross-case comparison of ratings.

Results: Of the 31 CFIR constructs assessed, ten constructs strongly distinguished between facilities with low versus high program implementation effectiveness. The majority (six) were related to the inner setting: networks and communications; tension for change; relative priority; goals and feedback; learning climate; and leadership engagement. One construct each, from intervention characteristics (relative advantage) and outer setting (patient needs and resources), plus two from process (executing and reflecting) also strongly distinguished between high and low implementation. Two additional constructs weakly distinguished, 16 were mixed, three constructs had insufficient data to assess, and one was not applicable. Detailed descriptions of how each distinguishing construct manifested in study facilities and a table of recommendations is provided.

Conclusions: This paper presents an approach for using the CFIR to code and rate qualitative data in a way that will facilitate comparisons across studies. An online Wiki resource (www.wiki.cfirwiki.net) is available, in addition to the information presented here, that contains much of the published information about the CFIR and its constructs and sub-constructs. We hope that the described approach and open access to the CFIR will generate wide use and encourage dialogue and continued refinement of both the framework and approaches for applying it.

Keywords: Implementation, Qualitative methods, Obesity, Conceptual framework

- **Pengumpulan data:** *Interview guide* bisa dibuat dengan acuan CFIR agar semua determinan dipertimbangkan
 - **Analisis data:** *Coding template* berdasarkan konstruk CFIR
 - **Interpretasi data:**
- Diberi nilai (-2, -1, 0, +1, +2)

If sample size is sufficient, analysts can conduct simple correlation analyses between construct ratings and outcomes (e.g., referral rates) by organization. For example, in our evaluation of a telephone-based lifestyle coaching program, we identified distinguishing constructs based on correlational analyses with a priori determined cut-offs. See table below.

CFIR Construct	Facility										Correlation	Significance	
Facility	V03-3	V02-6	V03-4	V05-1	V01-2	V03-1	V01-4	V01-3	V02-2	V01-6	V02-3		
Referral Rate	2.0094	2.3236	2.5855	5.9953	6.0434	6.8834	7.7227	10.2359	10.4929	12.7301	14.5311		
Process	V03-3	V02-6	V03-4	V05-1	V01-2	V03-1	V01-4	V01-3	V02-2	V01-6	V02-3		
Planning	1	1	1	2	1	0	0	(-1)	0	M	M	**0.6798	0.044
Engaging													
Implementation Leader	(-2)	2	(-2)	2	1	1	1	2	2	2	2	**0.6487	0.0308
Patients	(-1)	1	1	2	(-1)	1	(-1)	1	1	X	1	0.1414	0.6783
Key Stakeholders	(-1)	1	(-1)	2	1	2	1	2	2	1	2	**0.6559	0.0284
Reflecting & Evaluating	M	(-1)	X	2	M	(-1)	1	1	1	1	0	0.3458	0.3277

Penggunaan **Kuantitatif** CFIR: **Survei berdasarkan konstruk**

Banyak penelitian sudah meninjau secara sistematis beberapa **skala survei** yang digunakan riset-riset implementasi sebelumnya untuk berbagai **konstruk**...

Measures of organizational culture, organizational climate, and implementation climate in behavioral health: A systematic review

Byron J Powell¹, Kayne D Mettert², Caitlin N Dorsey², Bryan J Weiner³, Cameo F Stanick⁴, Rebecca Lengnick-Hall¹, Mark G Ehrhart⁵, Gregory A Aarons⁶, Melanie A Barwick⁷, Laura J Damschroder⁸ and Cara C Lewis²

Abstract

Background: Organizational culture, organizational climate, and implementation climate are key organizational constructs that influence the implementation of evidence-based practices. However, there has been little systematic investigation of the availability of psychometrically strong measures that can be used to assess these constructs in behavioral health. This systematic review identified and assessed the psychometric properties of measures of organizational culture, organizational climate, implementation climate, and related subconstructs as defined by the Consolidated Framework for Implementation Research (CFIR) and Ehrhart and colleagues.

Methods: Data collection involved search string generation, title and abstract screening, full-text review, construct assignment, and citation searches for all known empirical uses. Data relevant to nine psychometric criteria from the Psychometric and Pragmatic Evidence Rating Scale (PAPERS) were extracted: internal consistency, convergent validity, discriminant validity, known-groups validity, predictive validity, concurrent validity, structural validity, responsiveness, and norms. Extracted data for each criterion were rated on a scale from -1 ("poor") to 4 ("excellent"), and each measure was assigned a total score (highest possible score = 36) that formed the basis for head-to-head comparisons of measures for each focal construct.

Results: We identified full measures or relevant subscales of broader measures for organizational culture ($n=21$), organizational climate ($n=36$), implementation climate ($n=2$), tension for change ($n=2$), compatibility ($n=6$), relative priority ($n=2$), organizational incentives and rewards ($n=3$), goals and feedback ($n=3$), and learning climate ($n=2$). Psychometric evidence was most frequently available for internal consistency and norms. Information about other

Implementation Research and Practice
Volume 2: Jan-Dec 2021 1–29
© The Author(s) 2021
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/26334895211018862
journals.sagepub.com/home/irp


Measuring readiness for implementation: A systematic review of measures' psychometric and pragmatic properties

Bryan J. Weiner¹, Kayne D. Mettert², Caitlin N. Dorsey², Elspeth A Nolen¹, Cameo Stanick³, Byron J. Powell⁴ and Cara C. Lewis²


Abstract

Background: Systematic measure reviews can facilitate advances in implementation research and practice by locating reliable, valid, pragmatic measures; identifying promising measures needing refinement and testing; and highlighting measurement gaps. This review identifies and evaluates the psychometric and pragmatic properties of measures of readiness for implementation and its sub-constructs as delineated in the Consolidated Framework for Implementation Research: leadership engagement, available resources, and access to knowledge and information.

Methods: The systematic review methodology is described fully elsewhere. The review, which focused on measures used in mental or behavioral health, proceeded in three phases. Phase I, data collection, involved search string generation, title and abstract screening, full text review, construct assignment, and cited citation searches. Phase II, data extraction, involved coding relevant psychometric and pragmatic information. Phase III, data analysis, involved two trained specialists independently rating each measure using Psychometric and Pragmatic Evidence Rating Scales (PAPERS). Frequencies and central tendencies summarized information availability and PAPERS ratings.

Results: Searches identified 9 measures of readiness for implementation, 24 measures of leadership engagement, 17 measures of available resources, and 6 measures of access to knowledge and information. Information about internal consistency was available for most measures. Information about other psychometric properties was often not available. Ratings for internal consistency were "adequate" or "good." Ratings for other psychometric properties were less than "adequate." Information on pragmatic properties was most often available regarding cost, language readability, and brevity. Information was less often available regarding training burden and interpretation burden. Cost and language readability generally exhibited "good" or "excellent" ratings, interpretation burden generally exhibiting "minimal" ratings, and training burden and brevity exhibiting mixed ratings across measures.

Conclusion: Measures of readiness for implementation and its sub-constructs used in mental health and behavioral health care are unevenly distributed, exhibit unknown or low psychometric quality, and demonstrate mixed pragmatic properties. This review identified a few promising measures, but targeted efforts are needed to systematically develop and test measures that are useful for both research and practice.

Implementation Research and Practice
Volume 1: Jan-Dec 2020 1–29
© The Author(s) 2020
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/2633489520933896
journals.sagepub.com/home/irp


Penggunaan Kuantitatif CFIR: Survei berdasarkan

konstruksi

... dan mengidentifikasi beberapa survei yang unggul dalam **validitas** dan **konsistensinya**.

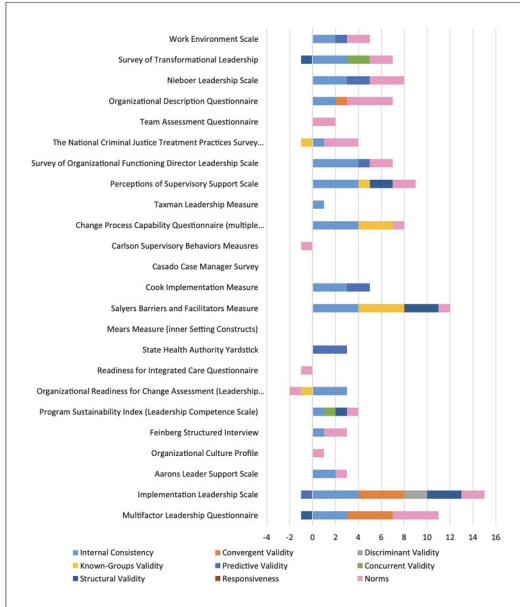


Figure 2. Head-to-head comparison of measures of leadership engagement.

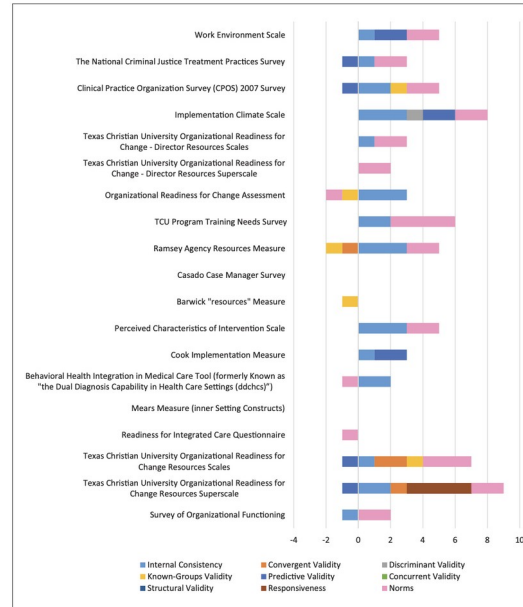


Figure 3. Head-to-head comparison of measures of resource availability.

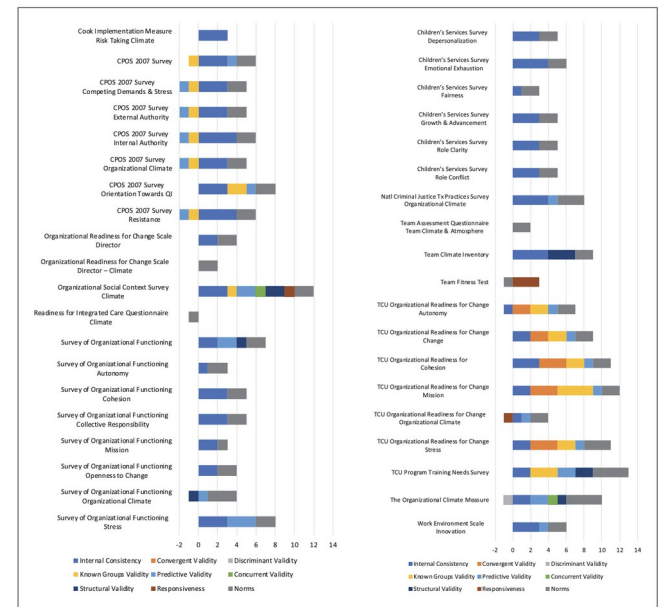


Figure 2. Head-to-head comparison of measures of organizational climate.

Penggunaan **Kuantitatif** CFIR: **Survei berdasarkan konstruk** untuk **implementation climate, organizational incentives**: Implementation

0	1	2	3	4
Not at all	Slight extent	Moderate extent	Great extent	Very great extent

Focus on Evidence-Based Practice

- 1. One of this team/agency's main goals is to use evidence-based practices effectively..... 0 1 2 3 4
- 2. People in this team/agency think that the implementation of evidence-based practices is important..... 0 1 2 3 4
- 3. Using evidence-based practices is a top priority in this team/agency..... 0 1 2 3 4

Educational Support for Evidence-based Practice

- 4. This team/agency provides conferences, workshops, or seminars focusing on evidence-based practices..... 0 1 2 3 4
- 5. This team/agency provides evidence-based practice trainings or in-services..... 0 1 2 3 4
- 6. This team/agency provides evidence-based practice training materials, journals, etc.... 0 1 2 3 4

Recognition for Evidence-Based Practice

- 7. Clinicians in this team/agency who use evidence-based practices are seen as clinical experts..... 0 1 2 3 4
- 8. Clinicians who use evidence-based practices are held in high esteem in this team/agency..... 0 1 2 3 4
- 9. Clinicians in this team/agency who use evidence-based practices are more likely to be promoted..... 0 1 2 3 4

Rewards for Evidence-Based Practice

- 10. This team/agency provides financial incentives for the use of evidence-based practices 0 1 2 3 4
- 11. The better you are at using evidence-based practices, the more likely you are to get a bonus or a raise..... 0 1 2 3 4
- 12. This team/agency provides the ability to accumulate compensated time for the use of evidence-based practices..... 0 1 2 3 4

Selection for Evidence-Based Practice

- 13. This team/agency selects staff who have previously used evidence-based practice..... 0 1 2 3 4
- 14. This team/agency selects staff who have had formal education supporting evidence-based practice 0 1 2 3 4
- 15. This team/agency selects staff who value evidence-based practice..... 0 1 2 3 4

Selection for Openness

- 16. This team/agency selects staff who are adaptable..... 0 1 2 3 4
- 17. This team/agency selects staff who are flexible..... 0 1 2 3 4
- 18. This team/agency selects staff open to new types of interventions 0 1 2 3 4

Penggunaan Kuantitatif CFIR: Survei berdasarkan konstruk untuk *measures of readiness, resource availability, organizational climate, tension for change*: Texas Christian University Organizational Readiness for Change

Organizational Readiness for Change (TCU ORC) Treatment Director Version (TCU ORC-D) Scales and Item Scoring Guide

Scoring Instructions. Numbers for each item indicate its location in the administration version, in which response categories are 1=Strongly Disagree to 5=Strongly Agree; ® designates items with reflected scoring. Scores for each scale are obtained by summing responses to its set of items (after reversing scores on reflected items by subtracting the item response from "6"), dividing the sum by number of items included (yielding an average) and multiplying by 10 in order to rescale final scores so they range from 10 to 50 (e.g., an average response of 2.6 for a scale becomes a score of "26").

Note. Special items (Numbers 24, 30, 36, 41, 67, 73, 77, 82, 86, 98, 101, 114) are not listed because they do not currently load on any single scale. Some capture special information, however, and others are being tested for future additions to scales.

MOTIVATION FOR CHANGE (Needs/Pressure)

Program Needs

- Your program needs additional guidance in –
1. documenting service needs of clients for making treatment placements.
 2. tracking and evaluating performance of clients over time.
 3. obtaining information that can document program effectiveness.
 4. automating client records for billing and financial applications.
 5. evaluating staff performance and organizational functioning.
 6. selecting new treatment interventions and strategies for which staff need training.
 7. improving the recording and retrieval of financial information.
 8. generating timely "management" reports on clinical, financial, and outcome data.

Training Needs

- Your counseling staff needs more training for –
9. assessing client problems and needs.
 10. increasing client participation in treatment.
 11. monitoring client progress.
 12. improving rapport with clients.
 13. improving client thinking and problem solving skills.
 14. improving behavioral management of clients.
 15. improving cognitive focus of clients during group counseling.
 16. using computerized client assessments.

Pressures for Change

- Current pressures to make program changes come from –
17. clients in the program.
 18. program staff members.
 19. program supervisors or managers.
 20. agency board members.
 21. community action groups.
 22. funding and oversight agencies.
 23. accreditation or licensing authorities.

RESOURCES

Offices

25. Your offices and equipment are adequate.
34. Offices here are adequate for conducting group counseling.
74. Offices here allow the privacy needed for individual counseling.
108. This program provides a comfortable reception/waiting area for clients.

Staffing

58. There are enough counselors here to meet current client needs.
92. A larger support staff is needed to help meet program needs. ®
110. Frequent staff turnover is a problem for this program. ®
111. Counselors here are able to spend enough time with clients.
112. Support staff here have the skills they need to do their jobs.
113. Clinical staff here are well-trained.

Training

33. Staff training and continuing education are priorities at this program.
48. You learned new management skills or techniques at a professional conference in the past year.
59. The budget here allows staff to attend professional conferences each year.
85. This program holds regular inservice training.

Equipment

46. Client assessments here are usually conducted using a computer.
56. Computer problems are usually repaired promptly at this program.
62. Most client records here are computerized.
90. You have a computer to use in your personal office space at work.
107. Computer equipment at this program is mostly old and outdated. ®
109. Staff here feel comfortable using computers.
115. More computers are needed in this program for staff to use. ®

Internet

37. You used the Internet (World Wide Web) to communicate with other treatment professionals (e.g. list serves, bulletin boards, chat rooms) in the past month.
44. You have easy access for using the Internet at work.
71. You used the Internet (World Wide Web) to access drug treatment information in the past month.
102. You have convenient access to e-mail at work.

STAFF ATTRIBUTES

Growth

52. This program encourages and supports professional growth.
54. You read about new techniques and treatment information each month.
60. You have enough opportunities to keep your management skills up-to-date.
81. You regularly read professional journal articles or books on drug abuse treatment.
94. You do a good job of regularly updating and improving your skills.

Efficacy

26. You have the skills to conduct effective staff meetings.
49. You consistently plan ahead and carry out your plans.
68. You usually accomplish whatever you set your mind on.
89. You are effective and confident in doing your job.
96. You are highly effective in working with community leaders and board members.

Influence

35. You frequently discuss new counseling ideas with staff.
43. Staff generally regard you as a valuable source of information.
83. Staff readily implement your ideas for changing program procedures.
88. Staff seek your opinions about counseling and treatment issues.
100. Your staff readily follows your leadership.
106. You are viewed as a strong leader by the staff here.

Orientation (scale not computed)

29. Psychodynamic theory is commonly used in counseling here.
39. Pharmacotherapy and medications are important parts of this program.
53. Behavior modification (contingency management) is used with many clients here.
78. 12-step theory (A/A/N/A) is followed by many of the counselors here.
105. Cognitive theory (RET, RBT, Gorski) guides much of the counseling here.

Adaptability

63. You are willing to try new ideas even if some staff members are reluctant.
64. Learning and using new procedures are easy for you.
75. You are sometimes too cautious or slow to make changes. ®
104. You are able to adapt quickly when you have to shift focus.

ORGANIZATIONAL CLIMATE

Mission

27. Some staff get confused about the main goals for this program. ®
31. Program staff understand how this program fits as part of the treatment system in your community.
47. Your duties are clearly related to the goals of this program.
65. This program operates with clear goals and objectives.
99. You have a clear plan for leading this program.

Cohesion

28. Staff here all get along very well.
40. There is too much friction among staff members. ®
45. The staff here always work together as a team.
55. Staff here are always quick to help one another when needed.
61. Mutual trust and cooperation among staff in this program are strong.
91. Some staff here do not do their fair share of work. ®

Autonomy

32. Treatment planning decisions for clients here often have to be revised by a counselor supervisor. ®
38. You fully trust the professional judgment of staff who work with clients here.
51. Counselors here are given broad authority in treating their own clients.
70. Counselors here often try out different techniques to improve their effectiveness.
76. Staff members think there are too many rules here. ®

Communication

42. You always listen to ideas and suggestions from staff.
72. The formal and informal communication channels here work very well.
79. Program staff are always kept well informed.
84. More open discussions about program issues are needed here. ®
95. Staff members always feel free to ask questions and express concerns in this program.

Stress

50. You are under too many pressures to do your job effectively.
66. Staff members often show signs of stress and strain.
80. The heavy workload here reduces program effectiveness.
97. Staff frustrations are common here.

Change

57. Novel treatment ideas by staff are discouraged. ®
69. You can change procedures here quickly to meet new conditions.
87. You frequently hear good staff ideas for improving treatment.
93. The general attitude here is to use new and changing technology.
103. You encourage counselors to try new and different techniques.

Penggunaan **Kuantitatif CFIR: Survei berdasarkan konstruk** untuk **leadership engagement**: Implementation Leadership Scale (0-4)

ILS items, subscales, and total	Mean	sd	ICC	a _{wg}	ev	v	α	EFA factor loadings			
								1	2	3	4
1. Proactive leadership	2.12	1.25	0.25	0.68	9.50	79.0%	0.95				
Established clear standards for implementation of EBP	2.16	1.33		0.67				0.96	0.02	0.06	-0.08
Developed a plan to facilitate EBP implementation	2.12	1.29		0.70				0.95	0.00	-0.05	0.05
Removed obstacles to implementation of EBP	2.09	1.30		0.67				0.75	0.02	0.07	0.12
2. Knowledgeable leadership	2.56	1.18	0.26	0.72	0.76	6.3%	0.96				
Knows what he/she is taking about when it comes to EBP	2.58	1.22		0.73				0.09	0.94	-0.03	-0.02
Is knowledgeable about EBP	2.59	1.20		0.71				-0.06	0.87	0.09	0.06
Is able to answer staff questions about EBP	2.50	1.25		0.71				0.30	0.85	0.06	0.04
3. Supportive leadership	2.63	1.15	0.22	0.69	0.49	4.1%	0.95				
Supports employee efforts to use EBP	2.63	1.21		0.70				0.02	0.10	0.84	0.02
Supports employee efforts to learn more about EBP	2.67	1.18		0.72				-0.03	-0.01	0.83	0.16
Recognizes and appreciates employee efforts	2.59	1.25		0.67				0.17	0.17	0.69	-0.08
4. Perseverant leadership	2.36	1.25	0.29	0.69	0.37	3.1%	0.96				
Perseveres through the ups and downs of implementing	2.37	1.29		0.69				0.05	0.07	0.05	0.81
Carries on through the challenges of implementing EBP	2.38	1.31		0.69				0.10	0.02	0.11	0.78
Reacts to critical issues regarding implementation of EBP	2.32	1.30		0.69				0.29	0.18	0.09	0.44
Implementation leadership scale total	2.42	1.12	0.29	0.70			0.98				

Note: *N* = 459 for means and standard deviations and ICC; *n* = 229 for other EFA derived statistics; *sd* = Standard deviation; ICC = intraclass correlation; *a_{wg}* = average within group correlation; *ev* = initial eigenvalue; *v* = variance accounted for before rotation; *α* = Cronbach's alpha; bold font for means and sd indicate the overall scale mean and sd; bold font for EFA factor loadings indicates the scale on which the items load.

Penggunaan **Kuantitatif** CFIR: **Survei berdasarkan konstruk** untuk **access to knowledge and information**: The Structured Interview of

Input Items	Mean	SD
1. Local Networks (7 items)	2.61	0.61
An administrator in another agency in my county/state	2.28	0.96
Regular meetings with professionals in my county/state	3.00	0.98
Nonprofit organizations/foundations	2.29	0.89
Data collected by my agency	3.03	1.07
Federal or state government agencies	2.44	0.91
Regular staff meetings	3.02	0.99
A consultant	2.19	1.03
2. Global Experts (5 items)	3.08	0.65
Someone I heard at a conference	2.82	0.94
Someone who has implemented it	3.37	0.94
People who developed the program	2.76	0.99
Professional association meetings	3.09	1.09
Conferences or workshops	3.35	0.72
3. Global Documents (5 items)	3.10	0.72
Training manuals/books/curricula	3.31	0.90
Academic journals	2.81	0.99
Intermediary organizations	2.72	1.34
Web-based clearinghouses	2.73	1.22
Internet	3.92	0.83
Total Input	2.89	0.48

Output items	Mean	SD
1. Use the Evidence	3.65	0.53
To support decision on adopting program	3.95	0.79
To find a program that meets needs of clients	3.76	0.81
To determine if program could harm participants	3.91	0.87
To eliminate ineffective programs	3.65	0.84
To compare multiple programs strengths and weaknesses	3.27	0.87
To consider information from experts/community members	3.84	0.72
To find the money to implement if evidence is strong enough	3.24	0.85
Review evidence as a team with partner agencies	3.57	0.85
2. Ignore the Evidence	3.18	0.87
If program is not feasible for my county/state	3.20	1.00
If no resources to implement	3.21	1.13
If program is too rigid	3.02	1.07
If program doesn't match staff skill level	3.28	1.04
Total output	3.22	0.46
Total SIEU	3.38	0.37

Process items	Mean	SD
1. Self-Assessment for Validity and Reliability (9 items)	3.82	0.61
Methods clearly described	3.79	0.89
Information from more than one source	3.85	0.84
Strengths and weaknesses listed	4.05	0.74
Tested in the field	4.01	0.79
How evidence is structured	3.99	0.81
Based on theory	3.50	0.93
Credibility of developers	3.61	0.90
Reviewed by intermediary organizations	3.25	1.22
Outcomes	4.34	0.64
2. Reliance on Others (3 items)	3.42	0.74
People I know and trust to assess reliability	3.46	0.92
People I know and trust to assess validity	3.45	0.91
Use of peers to determine relevance	3.35	0.92
3. Self-Assessment for Relevance (4 items)	4.06	0.59
How much it costs to implement	4.18	0.90
Compare own needs with that of research population	4.11	0.73
Time required to train staff	4.02	0.80
Service areas with similar demographics	3.94	0.81
Total process	3.80	0.48

Penggunaan **Kuantitatif** CFIR: **Survei berdasarkan konstruk**

tinjauan sistematis dan kumpulan *resources* lainnya (untuk eksplorasi bersama)

- <https://impsci.uw.edu/implementation-science/research/constructs/>
- https://journals.sagepub.com/topic/collections-irp/irp-1-systematic_reviews_of_methods_to_measure_implementation_constructs/irp
- Clinton-McHarg (2016): Public health & community settings with CFIR constructs
<https://implementationscience.biomedcentral.com/articles/10.1186/s13012-016-0512-5>
- Fernandez et al. (2018): Inner Setting
<https://implementationscience.biomedcentral.com/articles/10.1186/s13012-018-0736-7>
- **+** Stanick et al. (2021): Characters of Individuals
<https://journals.sagepub.com/doi/10.1177/26334895211000458>

Systematic review | [Open access](#) | Published: 08 November 2016

Psychometric properties of implementation measures for public health and community settings and mapping of constructs against the Consolidated Framework for Implementation Research: a systematic review


Tara Clinton-McHarg, Sze Lin Y. Kingsland, Jia Ying Ooi & Luke

Implementation Science 11, Art

12k Accesses | 67 Citations |



Research | [Open access](#) | Published: 27 March 2018

Developing measures to assess constructs from the Inner Setting domain of the Consolidated Framework for Implementation Research

Maria F. Fernandez , Timothy J. Walker, Bryan J. Weiner, William A. Calo, Shuting Liang, Betsy Risendal, Daniela B. Friedman, Shin Ping Tu, Rebecca S. Williams, Sara Jacobs, Alison K. Herrmann & Michelle C. Kegler

Implementation Science 13, Article number: 52 (2018) | [Cite this article](#)

21k Accesses | 118 Citations | 25 Altmetric | [Metrics](#)

 Open access |  | Review article | First published online March 23, 2021

Measuring characteristics of individuals: An updated systematic review of instruments' psychometric properties

Cameo Stanick , Heather Halko, L., and Cara C Lewis  [View all authors and affiliations](#)

[All Articles](#) | <https://doi.org/10.1177/26334895211000458>

 Open access |  | Review article | First published online March 23, 2021

Determining the influence of intervention characteristics on implementation success requires reliable and valid measures: Results from a systematic review

Cara C Lewis , Kayne Mettert , and Aaron R Lyon  [View all authors and affiliations](#)

[All Articles](#) | <https://doi.org/10.1177/26334895211994197>

- Lewis et al. (2021): Intervention Characteristics

Penggunaan Kuantitatif CFIR: Survei gabungan konstruk

Survey introduction	Pilot version	Version used in initial Think Aloud interviews ^a	Final version of pCAT
Question Stem (open-text response):	Please enter your problem area (area for improvement). This should reflect whatever topic you and your team are currently considering. It does not have to be final (e.g., The majority of patients fail to show up for scheduled orientation)	Please enter your problem area (area for improvement). This should reflect whatever topic you and your team are currently considering. It does not have to be final (e.g., The majority of patients fail to show up for scheduled orientation)	We've found that it's best to think concretely about a planned or on-going implementation (as opposed to the more general implementation environment). Include the specifics of the implementation/improvement project here
Identifying Barriers vs. Facilitators (item responses):	Overall, we are most likely to encounter more (check only one): 1=Facilitating forces related to [construct] 2=Hindering forces related to [construct] 3=We cannot think of any facilitating or hindering forces related to [construct]	1=Disagree 2=Neutral 3=Agree	1=Disagree: This means the item is a potential barrier 2=Neutral 3=Agree: This means the item is a potential facilitator
Effect on implementation (item responses):	1=Weak 2=Moderate 3=High	1=Low impact 2=Moderate impact 3=High impact	0=Weak/no effect 1=Strong effect

CFIR-based survey items

CFIR domain	CFIR construct	Short definition	Survey version 1.0	Survey version 2.0	Final survey
Program Characteristics	Relative Advantage	Stakeholders' perception of the advantage of implementing the intervention versus an alternative solution	<i>The extent to which leaders and staff recognize the potential benefit of implementing a change to address your problem area, especially compared to other alternatives, may influence your success</i>	<i>Key people will see the advantage of implementing the change versus an alternative</i>	<i>People here see the advantage of implementing the change versus an alternative</i>
Outer Setting	Patient Needs & Resources	The extent to which patient needs, as well as barriers and facilitators to meet those needs are accurately known and prioritized by the organization	<i>The extent people are aware of Veteran needs and preferences and use that information to improve programs may influence your success</i>	<i>People here regularly seek to understand the needs of patients and make changes to better meet those needs</i>	[NO CHANGE from version used in Think Aloud interviews] <i>People here regularly seek to understand the needs of patients and make changes to better meet those needs</i>
Inner Setting	Structural Characteristics	The social architecture, age, maturity, and size of an organization	<i>The structural characteristics, including the age, size, how people and processes are organized, hierarchical structure, policies and procedures may influence your success</i>	<i>The structures and policies in place here will enable us to make the change</i>	[NO CHANGE from version used in Think Aloud interviews] <i>The structures and policies in place here enable us to make the change</i>
	Networks & Communications	The nature and quality of webs of social networks and the nature and quality of formal and informal communications within an organization	<i>Quality and type of working relationships between people and the quality of communications may influence your success</i>	<i>I have open lines of communication with everyone</i>	[NO CHANGE from version used in Think Aloud interviews] <i>I have open lines of communication with everyone needed to make the change</i>
	Tension for Change	The degree to which stakeholders perceive the current situation as intolerable or needing change	<i>The degree to which stakeholders perceive the current situation as intolerable or needing change may</i>	<i>Key people will see the current situation as intolerable and that the change is needed</i>	<i>People here see the current situation as intolerable and that the change is needed</i>

Pragmatic context assessment tool (pCAT)

- Important to stakeholders
- Low burden (low number of survey items)
- Actionable
- Sensitive to change

Pendek, per konstruk bisa hanya 1 item.

<https://implementationsciencecomms.biomedcentral.com/articles/10.1186/s43058-022-00380-5>

Penggunaan Kuantitatif CFIR: Survei gabungan konstruk

Evidence Scale				
The {proposed practice changes or guideline implementation}: are (is) supported by randomized control trials (RCTs) or other scientific evidence from the VA	Intervention Characteristics	Intervention Characteristics	Evidence Strength & Quality	Evidence Strength & Quality
The {proposed practice changes or guideline implementation}: are (is) supported by randomized control trials (RCTs) or other scientific evidence from other health care systems	Intervention Characteristics	Intervention Characteristics	Evidence Strength & Quality	Evidence Strength & Quality

Context Scale				
Senior leadership/clinical management in {your organization}: reward clinical innovation and creativity to improve patient care	Inner Setting	Inner Setting	Organizational Incentives & Rewards	Organizational Incentives & Rewards
Senior leadership/clinical management in {your organization}: solicit opinions of clinical staff regarding decisions about patient care	Inner Setting	Inner Setting	Networks & Communications	Learning Climate
Senior leadership/clinical management in {your organization}: seek ways to improve patient education and increase patient participation in treatment	Outer Setting	Outer Setting	Patient Needs & Resources	Patient Needs & Resources
Staff members in {your organization}: have a sense of personal responsibility for improving patient care and outcomes	Inner Setting	Inner Setting	Culture	Relative Priority
Staff members in {your organization}: cooperate to maintain and improve effectiveness of patient care	Inner Setting	Inner Setting	Culture	Learning Climate
Staff members in {your organization}: are willing to innovate and/or	Inner Setting	Inner Setting	Learning Climate	Culture

The {proposed practice changes or guideline implementation}: should be effective, based on current scientific knowledge	Intervention Characteristics	Intervention Characteristics	Evidence Strength & Quality	Evidence Strength & Quality
The {proposed practice changes or guideline implementation}: are supported by clinical experience with VA patients	Intervention Characteristics	Intervention Characteristics	Evidence Strength & Quality	Intervention Source
The {proposed practice changes or guideline	Intervention Characteristics	Outer Setting	Evidence Strength &	Patient Needs & Resources

ORCA (Organizational Readiness to Change Assessment)

- Belum terpublika

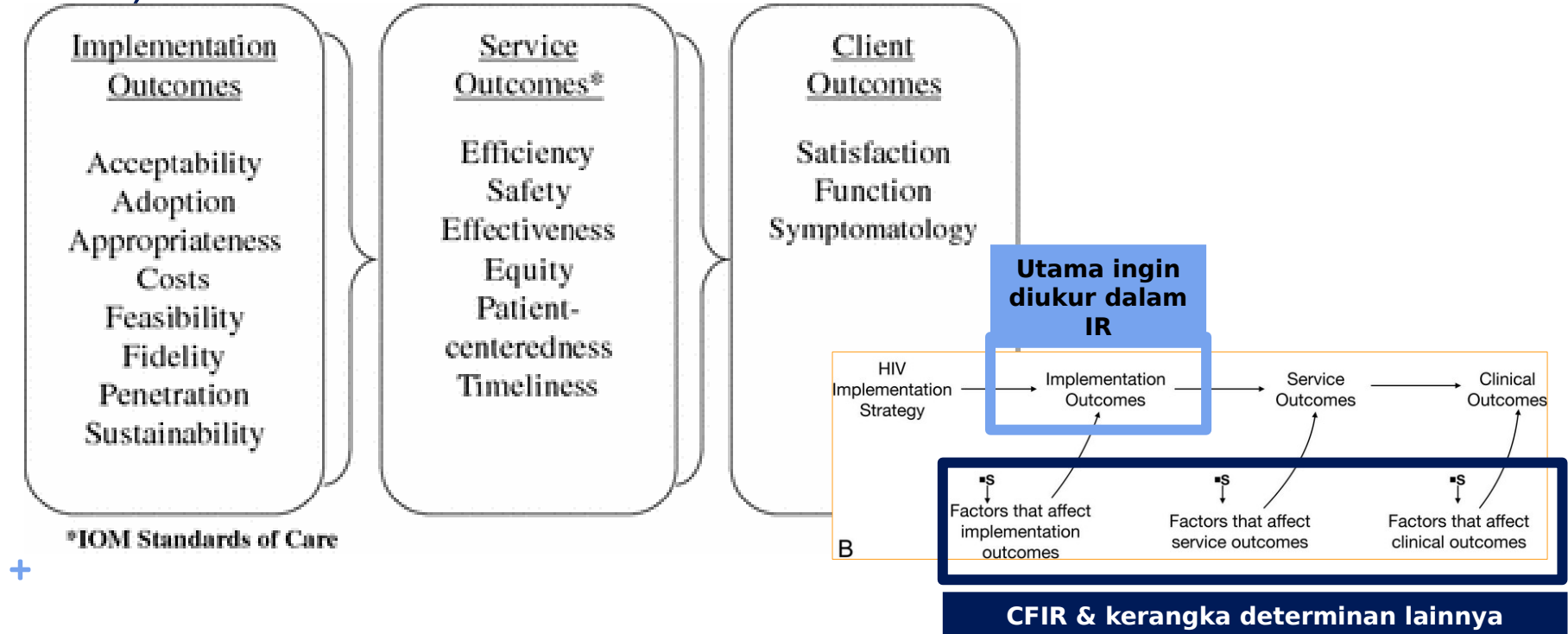
<https://pmc.ncbi.nlm.nih.gov/articles/PMC2716295/>



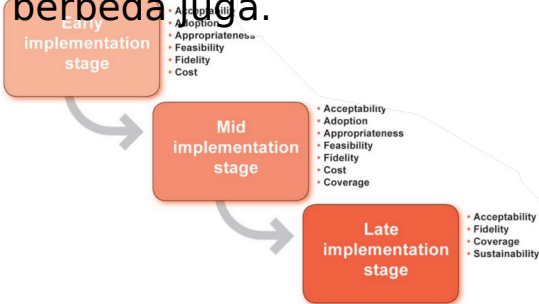
Implementation Outcomes

Focus on Proctor's Taxonomy (2011)

Riset implementasi secara konseptual dapat memiliki tiga jenis luaran: **implementasi**, **layanan**, dan klien (**klinis**). (Proctor, 2009)



Dari ragam kerangka luaran riset implementasi yang ada, IOF (Proctor et al. 2011) relatif paling detail dan berbeda relevan untuk tahapan implementasi yang berbeda juga.



<https://implementationscience.biomedcentral.com/articles/10.1186/s13012-021-01181-5>

RE-AIM Framework [12] (except where noted)	Implementation Outcomes Framework [13]	CFIR Outcomes Addendum
N/A: Not explicitly included	Acceptability: The extent to which an innovation is perceived as "agreeable, palatable, or satisfactory." Appropriateness: The "perceived fit, relevance, or compatibility of the innovation [...] for a given practice setting, provider, or consumer; and/or perceived fit of the innovation to address a particular issue or problem." Feasibility: The extent to which an innovation "can be successfully used or carried out within a given agency or setting."	Antecedent assessments [28]
Adoption: "The absolute number, proportion, and representativeness of: a) settings; and b) intervention agents (people who deliver the program) who are willing to initiate a program." Implementation (setting-level): "The intervention agents' fidelity to the various elements of an intervention's protocol, including consistency of delivery as intended and the time required. Also includes adaptations made and the costs of implementation." Fidelity: "The extent to which the program is implemented consistently across different settings, staff, and patients." Cost: Costs of "replicating a program or policy in different settings;" "costs at the patient-, staff-, clinic-, and organizational levels;" "costs to deliver programs." Adaptation: Adaptations made "prior to, during, and after program implementation." Maintenance (setting-level): The extent to which "a program or policy becomes institutionalized or part of the routine organizational practices and policies. Includes proportion and representativeness of settings that continue the intervention and reasons for maintenance, discontinuance or adaptation."	Adoption: "The intention, initial decision, or action to try or employ an innovation." Penetration (setting-level): "The integration of a practice within a service setting and its subsystems" which "can be calculated in terms of the number of providers who deliver a given service or treatment, divided by the total number of providers trained in or expected to deliver the service." Fidelity: "The degree to which an intervention was implemented as it was prescribed in the original protocol or as it was intended by the program developer." Cost: "The cost impact of an implementation effort," based on "the costs of the particular intervention, the implementation strategy used, and the location of service delivery." N/A: Not explicitly included Sustainability: "The extent to which a newly implemented treatment is maintained or institutionalized within a service setting's ongoing, stable operations."	Actual Implementation Outcomes: Adoption Actual Implementation Outcomes: Implementation N/A: Depending on how cost is defined, it may represent an implementation or innovation determinant or outcome. N/A: Adaption is conceptualized as an implementation determinant in the CFIR Process Domain. Actual Implementation Outcomes: Sustainment
Setting Impact (setting-level): Adoption X Implementation [28, 32] Reach (recipient-level): "The absolute number, proportion, and representativeness of individuals who are willing to participate in a given initiative, intervention, or program." Implementation (recipient-level) "Clients' use of the intervention and implementation strategies." Effectiveness: "The impact of an intervention on important outcomes, including potential negative effects, quality of life, and economic outcomes." Maintenance (recipient-level): The extent to which "behavior is sustained 6 months or more after treatment or intervention." Recipient Impact (recipient-level): Reach X Effectiveness [28, 32]	N/A: Not explicitly included Penetration (recipient-level): "The number of eligible persons who use a service, divided by the total number of persons eligible for the services." Client Outcomes: "Satisfaction, Function, and Symptomology."	N/A: Not explicitly included Innovation Outcomes: Innovation Impact on Recipients, Deliverers, and Key Decision-Makers
N/A: Not explicitly included	N/A: Not explicitly included Service Outcomes: "The extent to which services are safe, effective, patient-centered, timely, efficient, and equitable."	

Proctor et al. (2011) membagi luaran implementasi ke dalam suatu **taksonomi** dengan 8 konstruk. (1/3: Definisi dan terminologi terkait)

IRO	Working definition*	Related terms**
Acceptability	The perception among stakeholders (e.g. consumers, providers, managers, policy-makers) that an intervention is agreeable	Related factors: (e.g. comfort, relative advantage, credibility)
Adoption	The intention, initial decision, or action to try to employ a new intervention	Uptake, utilization, intention to try
Appropriateness	The perceived fit or relevance of the intervention in a particular setting or for a particular target audience (e.g. provider or consumer) or issue	Relevance, perceived fit, compatibility, perceived usefulness or suitability
Feasibility	The extent to which an intervention can be carried out in a particular setting or organization	Practicality, actual fit, utility, trialability

Source: Proctor et al 2011; Peters, Adams, Alonge et al 2013

IRO	Working definition*	Related terms**
Fidelity	The degree to which an intervention was implemented as it was designed in an original protocol, plan, or policy	Adherence, delivery as intended, integrity, quality of delivery, intensity or dosage of delivery
Implementation cost	The incremental cost of the implementation strategy (i.e. how the services are delivered in a particular setting); including the cost of the intervention itself	Marginal cost, total cost***
Penetration/ coverage (more about the health facilities) (more about the population)	Extent to which a practice or program is integrated within a service settings and system (niche saturation). The degree to which the population that is eligible to benefit from an intervention actually receives it	Reach, access, service spread or effective coverage, penetration
Sustainability	The extent to which an intervention is maintained or institutionalized in a given setting	Maintenance, continuation, routinization, institutionalization

Source: Proctor et al 2011; Peters, Adams, Alonge et al 2013



Proctor et al. (2011) membagi luaran implementasi ke dalam suatu **taksonomi** dengan 8 konstruk. (2/3)

Table 1: Definition of implementation outcomes

Outcomes	Definition
Acceptability	The perception among implementation stakeholders that a given treatment, service, practice or innovation is agreeable, palatable, or satisfactory.
Adoption	The intention, initial decision or action to try/employ an innovation or evidence-based practice. Adoption also may be referred to as "uptake".
Appropriateness	The perceived fit, relevance or compatibility of the innovation or evidence based practice for a given practice setting, provider or consumer; and/or perceived fit of the innovation to address a particular issue or problem. "Appropriateness" is conceptually similar to "acceptability".
Cost	The cost impact of an implementation effort. Implementation costs vary according to the complexity of three components: the intervention, the implementation strategy, and the setting(s).
Feasibility	The extent to which a new treatment or an innovation, can be successfully used or carried out in a given agency or setting.
Fidelity	The degree to which an intervention was implemented as it was prescribed in the original protocol or as it was intended by the programme developers.
Penetration	The integration of a practice within a service setting and its sub-systems. Penetration can be calculated in terms of the number of providers who deliver a given service or treatment, divided by the total number of providers trained in or expected to deliver the service.
Sustainability	The extent to which a newly implemented intervention is maintained or institutionalized within a service setting's ongoing, stable operations. There are three stages that determine institutionalization: 1) passage (a single event such as transition from temporary to permanent funding); 2) cycle or routine (i.e. repetitive reinforcement of the importance of the evidence-based intervention through inclusion in organizational or community procedures and behaviours, such as the annual budget and evaluation criteria); and 3) niche saturation (the extent to which an evidence-based intervention is integrated into all sub-systems of an organization).

Adapted from Proctor et al (2011)

Implementation outcome	Level of analysis	Theoretical basis	Other terms in literature	Salience by implementation stage	Available measurement
Acceptability	Individual provider	Rogers: "complexity" and to a certain extent "relative advantage"	Satisfaction with various aspects of the innovation (e.g. content, complexity, comfort, delivery, and credibility)	Early for adoption	Survey
	Individual consumer			Ongoing for penetration	Qualitative or semi-structured interviews
Adoption	Individual provider	RE-AIM: "adoption" Rogers: "trialability" (particularly for early adopters)	Uptake; utilization; initial implementation; intention to try	Late for sustainability	Administrative data
	Organization or setting			Refused/blank	
Appropriateness	Individual provider	Rogers: "compatibility"	Perceived fit; relevance; compatibility; suitability; usefulness; practicability	Early to mid	Administrative data
	Individual consumer			Observation	
	Organization or setting				Qualitative or semi-structured interviews
					Survey
					Survey
					Qualitative or semi-structured interviews
					Survey
					Qualitative or semi-structured interviews
					Focus groups



Proctor et al. (2011) membagi luaran implementasi ke dalam suatu **taksonomi** dengan 8 konstruk. (3/3)

Table 1: Definition of implementation outcomes

Outcomes	Definition
Acceptability	The perception among implementation stakeholders that a given treatment, service, practice or innovation is agreeable, palatable, or satisfactory.
Adoption	The intention, initial decision or action to try/employ an innovation or evidence-based practice. Adoption also may be referred to as "uptake".
Appropriateness	The perceived fit, relevance or compatibility of the innovation or evidence based practice for a given practice setting, provider or consumer; and/or perceived fit of the innovation to address a particular issue or problem. "Appropriateness" is conceptually similar to "acceptability".
Cost	The cost impact of an implementation effort. Implementation costs vary according to the complexity of three components: the intervention, the implementation strategy, and the setting(s).
Feasibility	The extent to which a new treatment or an innovation, can be successfully used or carried out in a given agency or setting.
Fidelity	The degree to which an intervention was implemented as it was prescribed in the original protocol or as it was intended by the programme developers.
Penetration	The integration of a practice within a service setting and its sub-systems. Penetration can be calculated in terms of the number of providers who deliver a given service or treatment, divided by the total number of providers trained in or expected to deliver the service.
Sustainability	The extent to which a newly implemented intervention is maintained or institutionalized within a service setting's ongoing, stable operations. There are three stages that determine institutionalization: 1) passage (a single event such as transition from temporary to permanent funding); 2) cycle or routine (i.e. repetitive reinforcement of the importance of the evidence-based intervention through inclusion in organizational or community procedures and behaviours, such as the annual budget and evaluation criteria); and 3) niche saturation (the extent to which an evidence-based intervention is integrated into all sub-systems of an organization).

Adapted from Proctor et al (2011)

Implementation outcome	Level of analysis	Theoretical basis	Other terms in literature	Saliency by implementation stage	Available measurement
Feasibility	Individual providers	Rogers: "compatibility" and "trialability"	Actual fit or utility; suitability for everyday use; practicability	Early (during adoption)	Survey
	Organization or setting				Administrative data
Fidelity	Individual provider	RE-AIM: part of "implementation"	Delivered as intended; adherence; integrity; quality of program delivery	Early to mid	Observation
					Checklists Self-report
Implementation Cost	Provider or providing institution	TCU Program Change Model: "costs" and "resources"	Marginal cost; cost-effectiveness; cost-benefit	Early for adoption and feasibility Mid for penetration	Administrative data
				Late for sustainability	
Penetration	Organization or setting	RE-AIM: necessary for "reach"	<i>Level of institutionalization? Spread? Service access?</i>	Mid to late	Case audit
Sustainability	Administrators	RE-AIM: "maintenance" Rogers: "confirmation"	Maintenance; continuation; durability; incorporation; integration; institutionalization; sustained use; routinization;	Late	Case audit
	Organization or setting				Semi-structured interviews
					Questionnaires
					Checklists



Data kuantitatif untuk IOF tidak selalu berbentuk survei

Systematic Reviews of Methods to Measure Implementation Constructs - Review



Measuring implementation outcomes: An updated systematic review of measures' psychometric properties

Kayne Mettert ¹, Cara Lewis ¹, Caitlin Dorsey¹, Heather Halko², and Bryan Weiner³

Background: Systematic reviews of measures can facilitate advances in implementation research and practice by locating reliable and valid measures and highlighting measurement gaps. Our team completed a systematic review of implementation outcome measures published in 2015 that indicated a severe measurement gap in the field. Now, we offer an update with this enhanced systematic review to identify and evaluate the psychometric properties of measures of eight implementation outcomes used in behavioral health care.

Methods: The systematic review methodology is described in detail in a previously published protocol paper and summarized here. The review proceeded in three phases. Phase I, data collection, involved search string generation, title and abstract screening, full text review, construct assignment, and measure forward searches. Phase II, data extraction, involved coding psychometric information. Phase III, data analysis, involved two trained specialists independently rating each measure using PAPERS (Psychometric And Pragmatic Evidence Rating Scales).

Results: Searches identified 150 outcomes measures of which 48 were deemed unsuitable for rating and thus excluded, leaving 102 measures for review. We identified measures of acceptability ($N=32$), adoption ($N=26$), appropriateness ($N=6$), cost ($N=31$), feasibility ($N=18$), fidelity ($N=18$), penetration ($N=23$), and sustainability ($N=14$). Information about internal consistency and norms were available for most measures (59%). Information about other psychometric properties was often not available. Ratings for internal consistency and norms ranged from “adequate” to “excellent.” Ratings for other psychometric properties ranged mostly from “poor” to “good.”

Conclusion: While measures of implementation outcomes used in behavioral health care (including mental health, substance use, and other addictive behaviors) are unevenly distributed and exhibit mostly

<https://journals.sagepub.com/doi/10.1177/2633489520936644#bibr38-2633489520936644>

Overview of measures

Searches of electronic databases yielded 150 measures related to the eight implementation outcomes (*acceptability, adoption, appropriateness, cost, feasibility, fidelity, penetration, and sustainability*) that have been used in mental or behavioral health care research. Thirty-two measures of *acceptability* were identified, one of which was a specific scale within a broader measure (i.e., SFTRC Course Evaluation—Attitude scale) (Haug et al., 2008). Twenty-six measures of *adoption* were identified, three of which were scales part of broader measures (e.g., Perceptions of Computerized Therapy Questionnaire—Future Use Intentions scale) (Carper et al., 2013) and two of which were deemed “unsuitable for rating.” As mentioned previously, measures were considered “unsuitable for rating” if the format of construct assessment did not produce psychometric information or format of the measure did not conform to the rating scale (e.g., Fortney Measure of Adoption Rate) (Fortney et al., 2012). Six measures of *appropriateness* were identified, of which one was a scale within a broader measure (i.e., Moore & Benbasat Adoption of IT Innovation Measure—Compatibility scale) (Moore & Benbasat, 1991). Eighteen measures of *feasibility* were identified, four of which were scales within broader measures (e.g., Behavioral Interventionist Satisfaction Survey—Feasibility scale) (McLean, 2013). Eighteen measures of *fidelity* were identified. Twenty-three measures of *penetration* were identified, of which 14 were deemed unsuitable for rating (e.g., Pace Proportion Measure of Penetration) (Pace et al., 2014). Finally, 14 measures of *sustainability* were identified, one of which was deemed unsuitable for rating (i.e., Kirchner Sustainability Measure) (Kirchner et al., 2014), and another was a scale within a larger measure (i.e., Eisen Provider Knowledge & Attitudes Survey—Sustainability scale) (Eisen et al., 2013). Thirty-one measures of implementation *cost* were identified; however, none of them were suitable for rating and thus their psychometric evidence was not assessed. It is worth noting that the number of measures listed above for each outcome does not add up to 150. This is because there were 14 measures identified that had scales relevant in multiple different outcomes. Of these 14 measures, 11 were included in two outcomes, one was included in three outcomes, and one was included in four.

Contoh Survei Kuantitatif IOF: *Adoption*

20-item post-test survey, the **SFTRC Course Evaluation**, which defined EBPs as “treatments with a clearly defined intervention guide (i.e., manual), which have been scientifically tested in a formal research study and shown to improve outcomes.”

Table 1. Practitioner Attitudes and Organizational Barriers^{ab}

Item	M	SD	n
Attitudes—Positive Outcome^c	3.51	0.71	80
Using a treatment manual helps a therapist to evaluate and improve his or her clinical skills. ^d	3.84	0.98	81
Following a treatment manual will enhance therapeutic outcomes by insuring that the treatment being used is supported by research. ^d	3.75	0.84	81
If a treatment has been shown scientifically to be effective, then the counselor is ethically obligated to use the treatment as opposed to one that has not been studied. ^d	2.94	1.05	80
Attitudes—Negative Process^c	2.02	0.67	80
Evidence-based practices make counselors more like technicians than caring human beings.	1.90	0.73	81
Treatment manuals are appropriate for research clients but not “real world” clients.	2.12	0.90	81
Using evidence-based practices detracts from the authenticity of the therapist interaction.	2.04	0.91	80

Organizational Barriers^c	2.34	0.41	76
Evidence-based practices seem overly complicated and hard to put into practice.	2.14	0.68	83
There are influential clinicians at my program that are definitely against evidence-based treatments.	2.27	1.07	81
It would take some very strong incentives, such as restricting our funding, before our treatment program would use evidence-based practices.	2.36	1.06	78
The idea of evidence-based practices sound good in “theory,” but in reality, it’s virtually impossible to scientifically test a phenomenon as complex as substance abuse treatment.	2.11	0.87	80
The treatments that we do at our program may not be “evidence-based,” but they work just as well, or better.	2.88	0.81	78
As long as they don’t conflict with treatments already in place at our program, I don’t see any problem with using a few procedures that are evidence-based. ^e	3.76	1.13	79

^aRespondent scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Not sure, 4 = Agree, 5 = Strongly Agree.

^bCronbach’s alpha ($n = 76$) for 12-item scale = .63; standardized alpha = .67.

^cRepresents subscale statistics.

^dItem is reverse-scored in calculating scale reliability.

^eItem is reverse-scored in calculating scale reliability and subscale mean.

Data IOF bisa, dan **sebaiknya**, diukur pada ragam **tingkatan** (individu, fasilitas, sistem).

Level	Acceptability (N = 32)		Adoption (N = 25)		Appropriateness (N = 6)		Feasibility (N = 18)		Fidelity (N = 18)		Penetration (N = 9)		Sustainability (N = 13)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Consumer	5	16	1	4	1	17	2	11	0	0	1	11	0	0
Organization	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clinic/site	0	0	0	0	0	0	0	0	0	0	1	11	1	8
Provider	20	63	19	76	0	0	13	72	15	83	7	78	9	69
System	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Team	0	0	0	0	0	0	0	0	1	6	0	0	0	0
Director	1	3	3	12	0	0	0	0	0	0	0	0	1	8
Supervisor	3	9	1	4	1	17	1	6	1	6	1	11	1	8
Other	2	6	4	16	1	17	1	6	1	6	0	0	1	8
Not specified	2	6	2	8	3	50	1	6	0	0	0	0	2	15



Diskusi

Apa kabar protocol kita?

Studi kasus 1

Table 5: Hypothesized determinants and outcomes of implementing benefit mandate required fertility preservation care, by assessment level and data type (X Qualitative; O Quantitative; ⊗ Both Qualitative and Quantitative)

Determinants (EPIS level) ⁴¹	Regulators	Insurers	Clinics	Patients
Federal policies, e.g., ACA and HIPAA (outer context)	⊗	⊗		
Inter-organizational networks, e.g., regulator-insurer network for establishing goals related to implementation of benefit mandate required care (outer context) ¹⁰²	O	O		
Individual characteristics e.g., knowledge and attitude toward benefit mandates, benefit design, fertility preservation (outer context, inner context) ^{62,63}			⊗	⊗
Organizational implementation funding, climate, leadership, staff resources and processes (inner context of each level) ^{64,65}	⊗	⊗	⊗	
Other organizational characteristics, e.g., enrollees/patient volumes, client characteristics (inner context of each level) ^{27,48,56,102}		⊗	⊗	
Requirements for coverage in legislation and regulations (innovation factor) ³⁸	⊗	⊗		
Benefit design (eligibility criteria, payment, copayment, and prior authorization requirements) (innovation factor) ^{27,48,56,102}		⊗	⊗	⊗
Requirements for communication to clinics and patients (innovation factor) ³⁷	⊗	⊗	O	O
Communication between levels on benefit mandate, e.g., regulator guidance, insurance evidence of coverage (bridging)	⊗	⊗	⊗	O
Contracts between levels, e.g., insurer-provider (bridging)		⊗	⊗	⊗
Implementation, service, and patient outcomes (Proctor's taxonomy)^{42,43}				
Fidelity, i.e., settings following requirements of the benefit mandate law (implementation)	O	O		
Adoption, i.e., settings agree to participate in insurance benefits (implementation)		⊗	⊗	
Adaptations to fit benefit mandate to context (implementation) ⁶⁶	⊗	⊗	⊗	
Acceptability (satisfaction with) and appropriateness (compatibility) of mandate ⁶⁷	⊗	⊗	⊗	⊗
Effectiveness, i.e., fertility preservation utilization, insurance benefit utilization, patient costs, value of these outcomes to regulators, insurers, clinics (service)	⊗	⊗	⊗	⊗
Patient reported outcomes, e.g., depression, reproductive concerns, self-efficacy, out-of-pocket costs, financial hardship (patient) ⁶⁸⁻⁷²				⊗

Policy implementation research on health benefit mandates for fertility preservation services to improve access to care in young cancer survivor – NCI grant

- Determinants and implementation outcomes are separated
- Quantitative & qualitative mix
- Multi-level
- Cite (psychometric) scale used

https://cancercontrol.cancer.gov/sites/default/files/2023-10/FINAL%20-%201R21CA271184-01A1%20-%20Unlocked_508.pdf

PR bersama

To be discussed

1. ~~Main critical question~~
2. ~~Aims & objectives; hubungan antarvariabel mana yang dianalisis~~
3. Framework apa yang mau dipakai untuk tiap aim
 - CFIR for determinants: we will need to adapt, which constructs?
 - Proctor/RE-AIM for outcomes: which outcomes?
4. Data collection indicators
5. ~~[Detail] Study setting description in protocol~~
6. [Detail] Data collection kualitatif: IDI cukup/FGD juga? Laporan Puskesmas mau tidak? Message grup WA?
7. [Consensus] National stakeholders & patients, mau dikumpulin datanya ga
- 8.+ [Not technically discussed yet] Implementation
- + strategy bundle

Other action items

1. Background
2. Narasi urgensi di Importance & Relevance
3. ~~Deliverables~~
4. Susunan research team