



**National Behavioral
Health Network**

for Tobacco & Cancer Control

from NATIONAL COUNCIL FOR
MENTAL WELLBEING

mHealth Apps for Tobacco Cessation and Guidance for Evaluation and Implementation

August 15th, 2024

Welcome from The National Behavioral Health Network Team!



Alex Hurst, MHA
He, him
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Project Manager



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She, hers
Project Coordinator



Housekeeping

This session is being recorded and will be available on www.BHTheChange.org after the webinar.

For audio access, participants can either dial into the conference line or listen through your computer speakers.

You can ask questions by typing them into the Q&A box.

Closed captioning can be accessed by turning on the closed captioning feature on the zoom dashboard.



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A Note on Language & Terminology

- **Mental wellbeing:** Thriving regardless of a mental health or substance use challenge.
- **Commercial tobacco use/tobacco use:** The use of commercial tobacco and nicotine products (including electronic nicotine devices, otherwise known as ENDS).*
- ***All references to smoking and tobacco use is referring to commercial tobacco and not the sacred and traditional use of tobacco by some American Indian and Alaskan Native communities.**



Agenda

- ✓ Housekeeping
- ✓ Introduction to NBHN
- ✓ Didactic Presentation
- ✓ Q & A
- ✓ Wrap-up



National Behavioral Health Network for Tobacco & Cancer Control

Jointly funded by CDC's *Office on Smoking & Health & Division of Cancer Prevention & Control*

Provides resources and tools to help organizations reduce tobacco use and cancer among individuals experiencing mental health and substance use challenges

1 of 9 CDC National Networks dedicated to eliminating cancer and tobacco disparities in priority populations

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Smoking Cessation
Leadership Center



University of California
San Francisco

**National Behavioral
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Networks Driving Action: A National Network Approach to Promoting Tobacco and Cancer-Related Health Equity in Special Populations



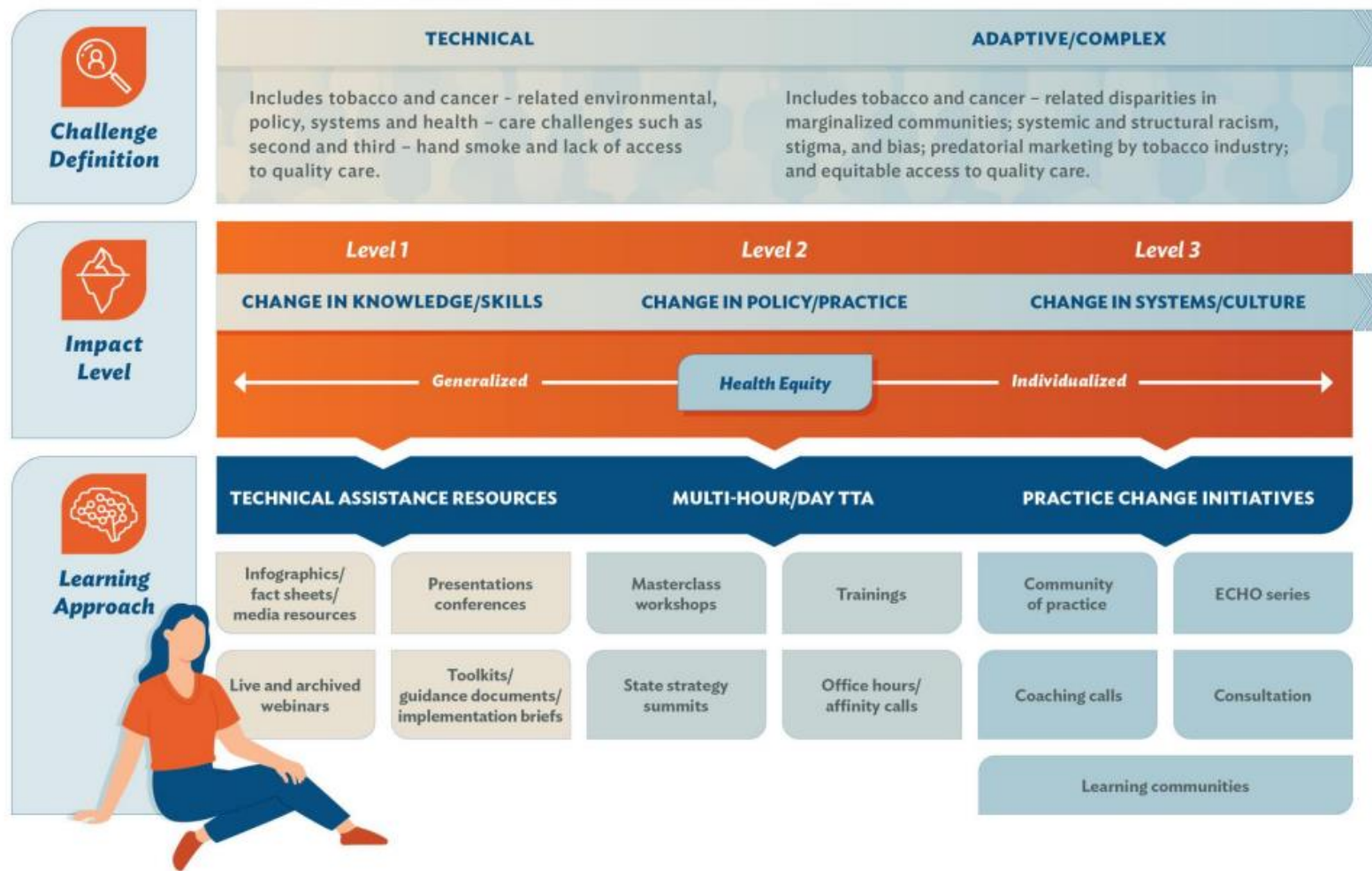
- A consortium of nine national networks sponsored by the CDC's Office on Smoking and Health and Division of Cancer Prevention and Control.
- Our partnership provides leadership on and promotion of evidence-based approaches for preventing commercial tobacco use and cancer for priority populations on a national, state, tribal and territorial level.
- <https://www.cdc.gov/tobacco/php/tobacco-control-programs/coop-agreement.html>



from NATIONAL COUNCIL FOR MENTAL WELLBEING

National Behavioral Health Network for Tobacco & Cancer Control

Learning Agenda





National Behavioral Health Network

for Tobacco & Cancer Control

from NATIONAL COUNCIL FOR MENTAL WELLBEING

NBHN's learning agenda is designed to advance health equity by...



Reducing tobacco and cancer-related disparities among individuals with mental health and substance use challenges.



Addressing social and political that influence tobacco and cancer-related disparities.



Strengthening, supporting and mobilizing communities and partnerships in tobacco control, cancer control and behavioral health.



Building, championing, and implementing tobacco-free policies, plans and laws.



Improving the availability, accessibility and effectiveness for cessation and counseling services.



Implementing trauma-informed resilience oriented prevention and cessation messaging.



Building a diverse and skilled tobacco control, cancer control and behavioral health workforce.



Promoting the improvement, access, and utilization of tobacco, cancer and behavioral health data.

Guest Speakers



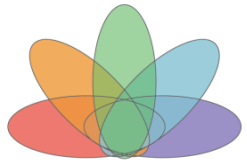
Teresa Mescher, MPH
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Senior Program and Policy Analyst
Behavioral Health and Wellness Program
University of Colorado Anschutz



Behavioral Health &
Wellness Program

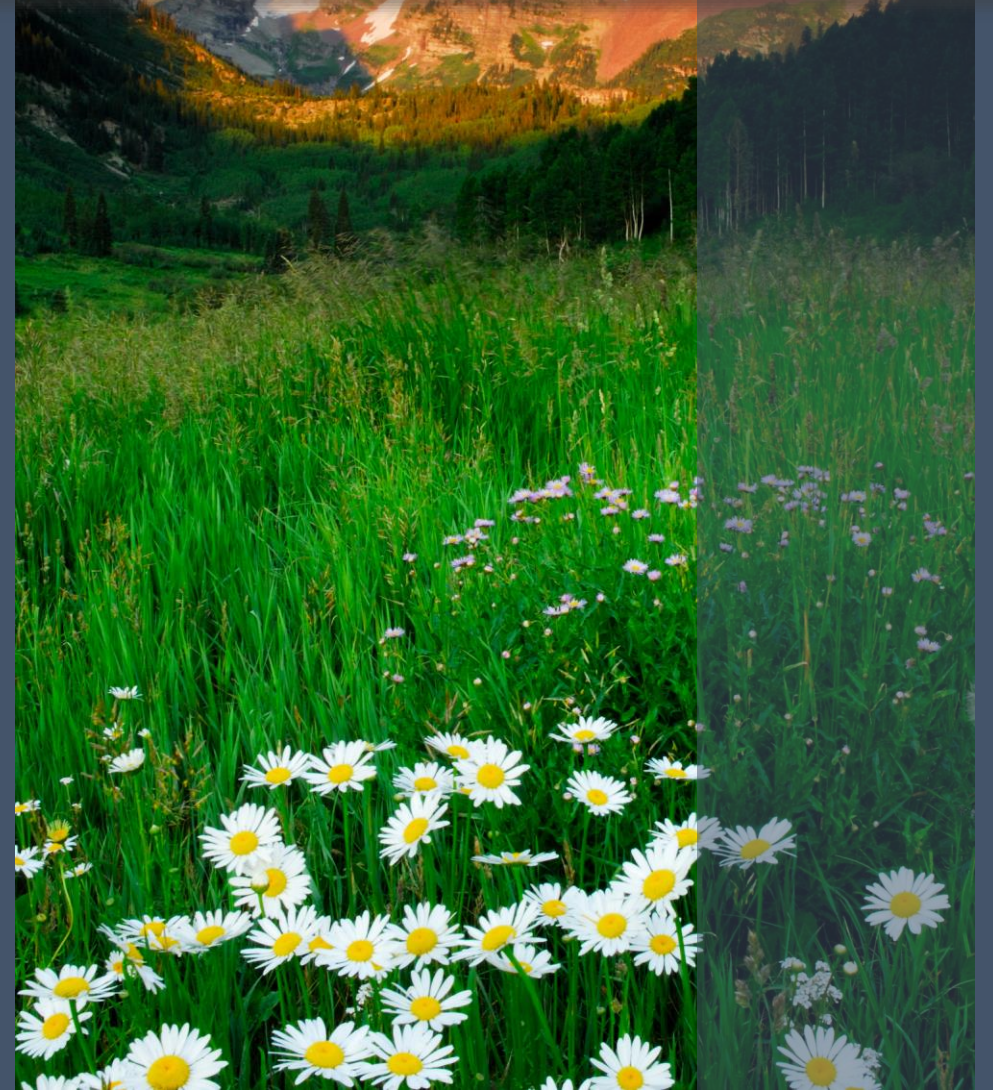
mHealth Apps for Tobacco Cessation and Guidance for Evaluation and Implementation

Teresa Mescher, MPH
Jim Pavlik, MA, CTPP



School of Medicine

UNIVERSITY OF COLORADO
ANSCHUTZ MEDICAL CAMPUS



Objectives

Understand

frameworks, scales, and a searchable database used to evaluate mHealth apps

Recall

guidelines for streamlined mHealth implementation in health care settings

Apply

the recommended tools and guidelines to evaluate popular tobacco cessation apps prior to recommendation or implementation



What is mHealth?

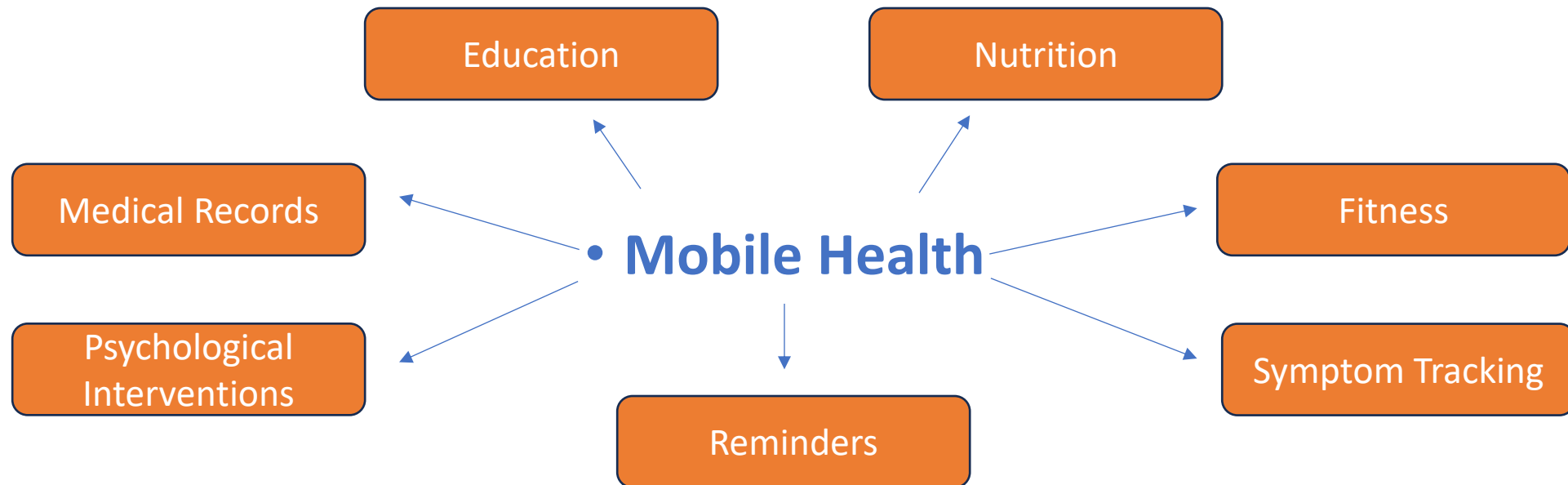


2008
500 & 50 apps



2022
2mil & 3 mil apps
↓
150,000 -
300,000 mHealth

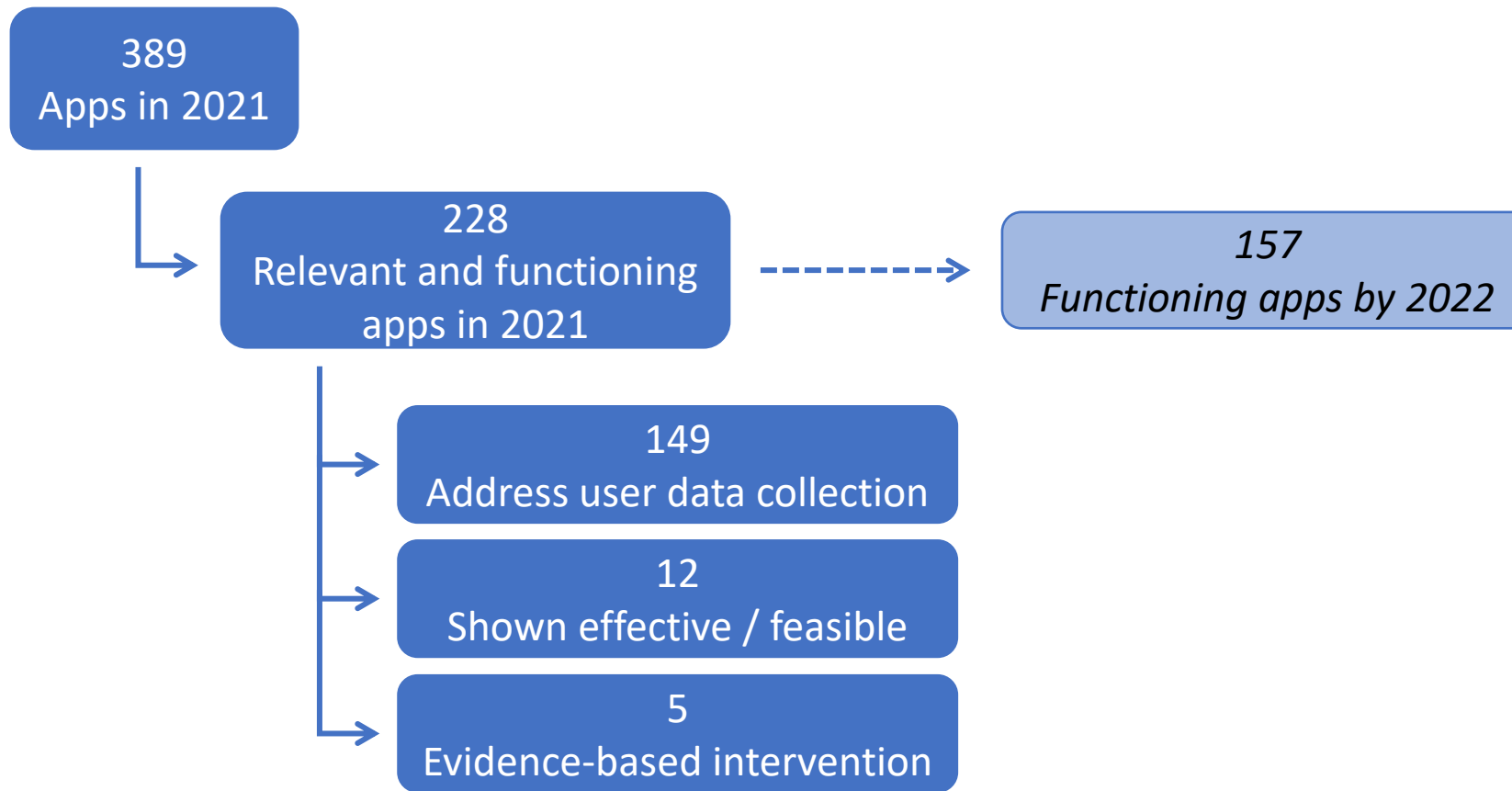
What is mHealth?



Why is Evaluation Important?

- Ever-changing availability on app stores
- Provider knowledge is often lacking
- Efficacy studies are rare
- Built by non-health/medical specialists
- Not FDA-regulated
 - Misinformation
 - Ineffectiveness
 - Privacy and security concerns

mHealth for Tobacco Cessation



mHealth Evaluation Frameworks & Scales

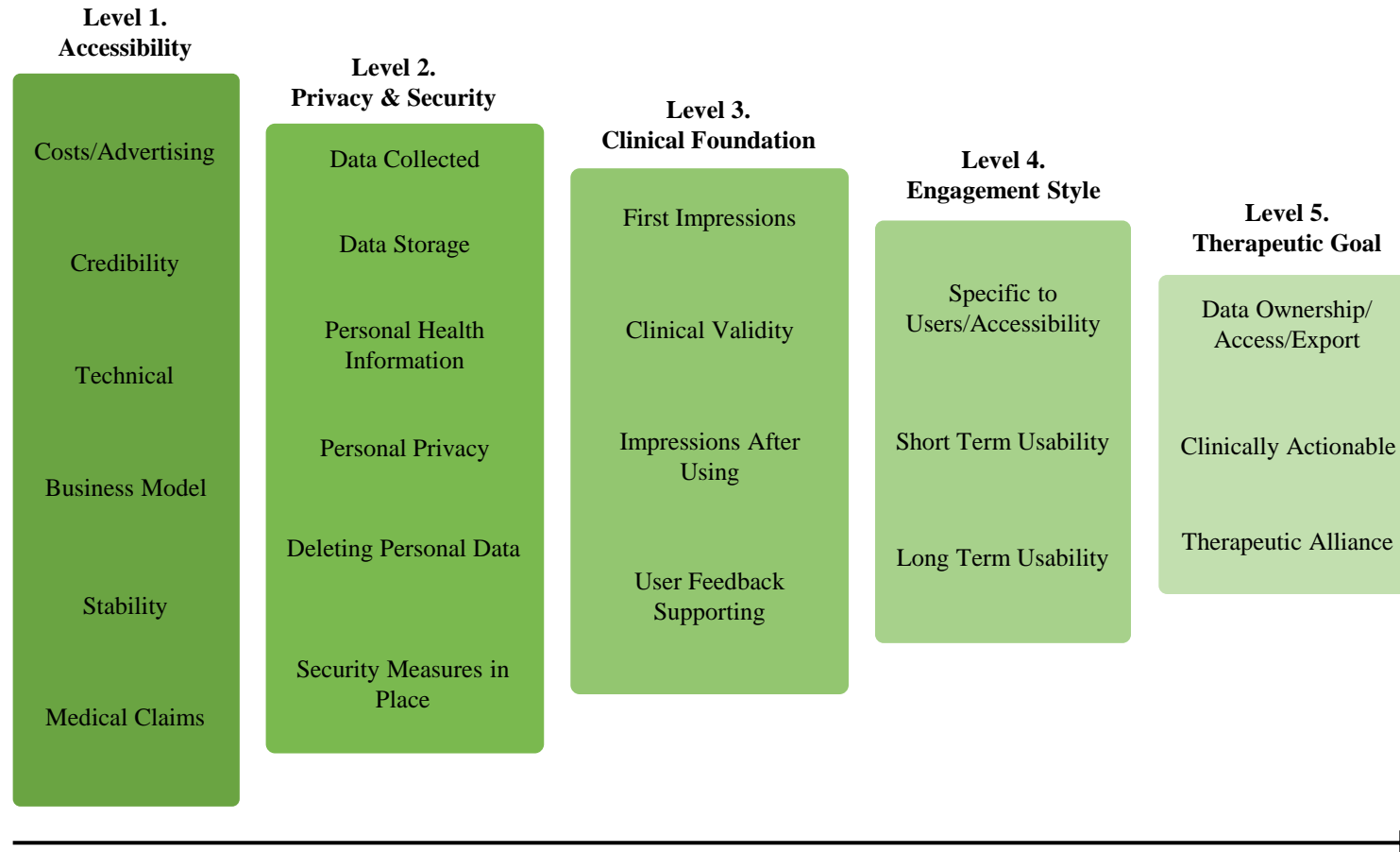
What to Look for in an Evaluation Framework or Scale

- What metrics should the framework or scale assess?
 - Usability/accessibility, privacy/security, quality, effectiveness
- Does the framework or scale assess the type of technology of interest?
 - mHealth specific
- Is the framework or scale evidence-informed and tested?
 - Based on scientific literature with peer reviewed evidence base

How were Frameworks & Scales Chosen?

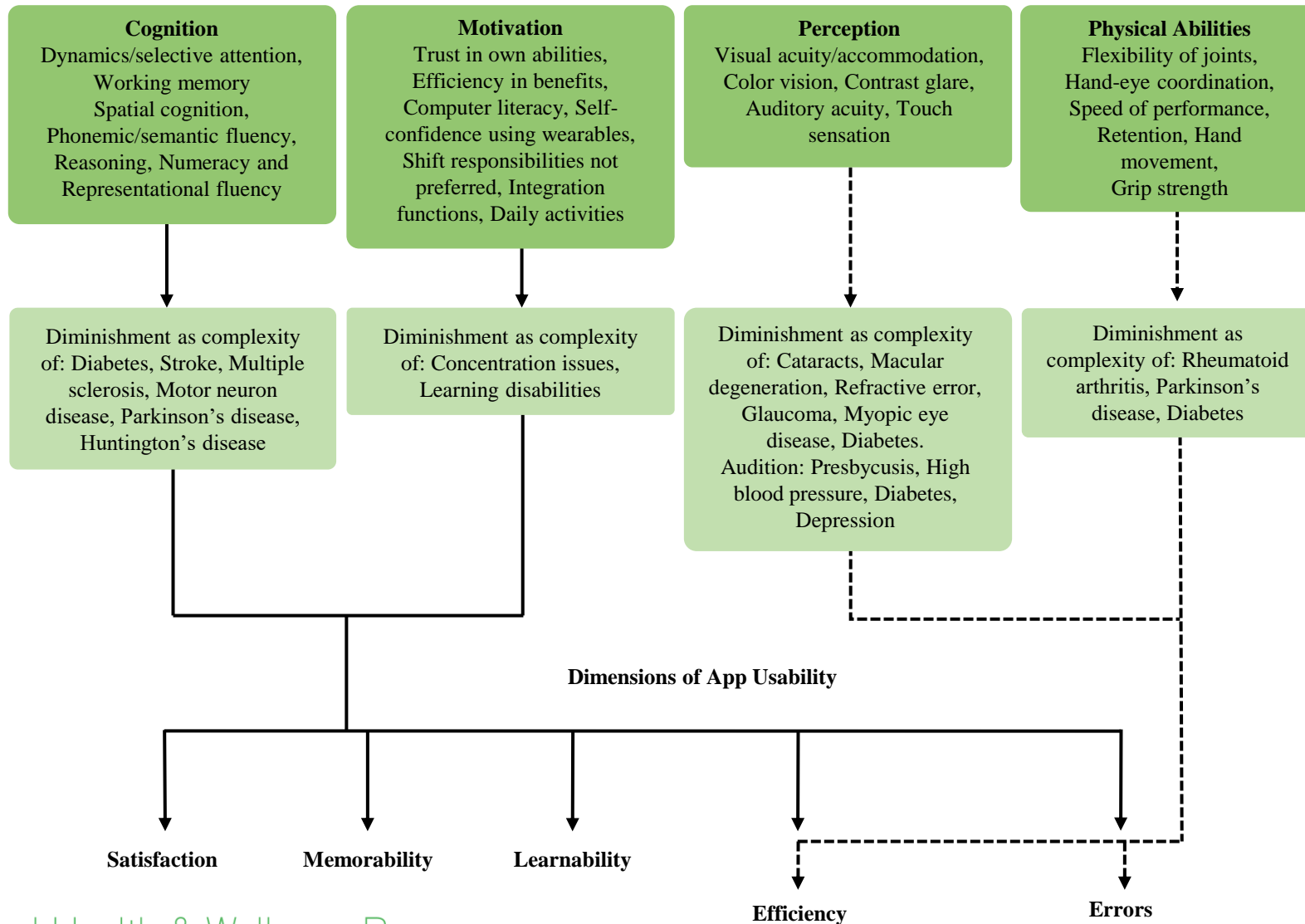
- Accessible online
- Available in English
- mHealth-specific
- Evidence-based and -informed
 - Peer reviewed
 - Statistical validation (scales)
- *Assess privacy and security*

American Psychiatric Association App Evaluation Model (APA)



mHealth for Older Users (MOLD-US)

Barriers Influencing Usability for Older Adults



Adapted Mobile App Rating Scale (A-MARS)

- Apps and e-tools
- 28-items assessed over eight domains
- Requires training to implement
 - A digital navigator focused on evaluation is recommended
- Does *NOT* assess data privacy or security

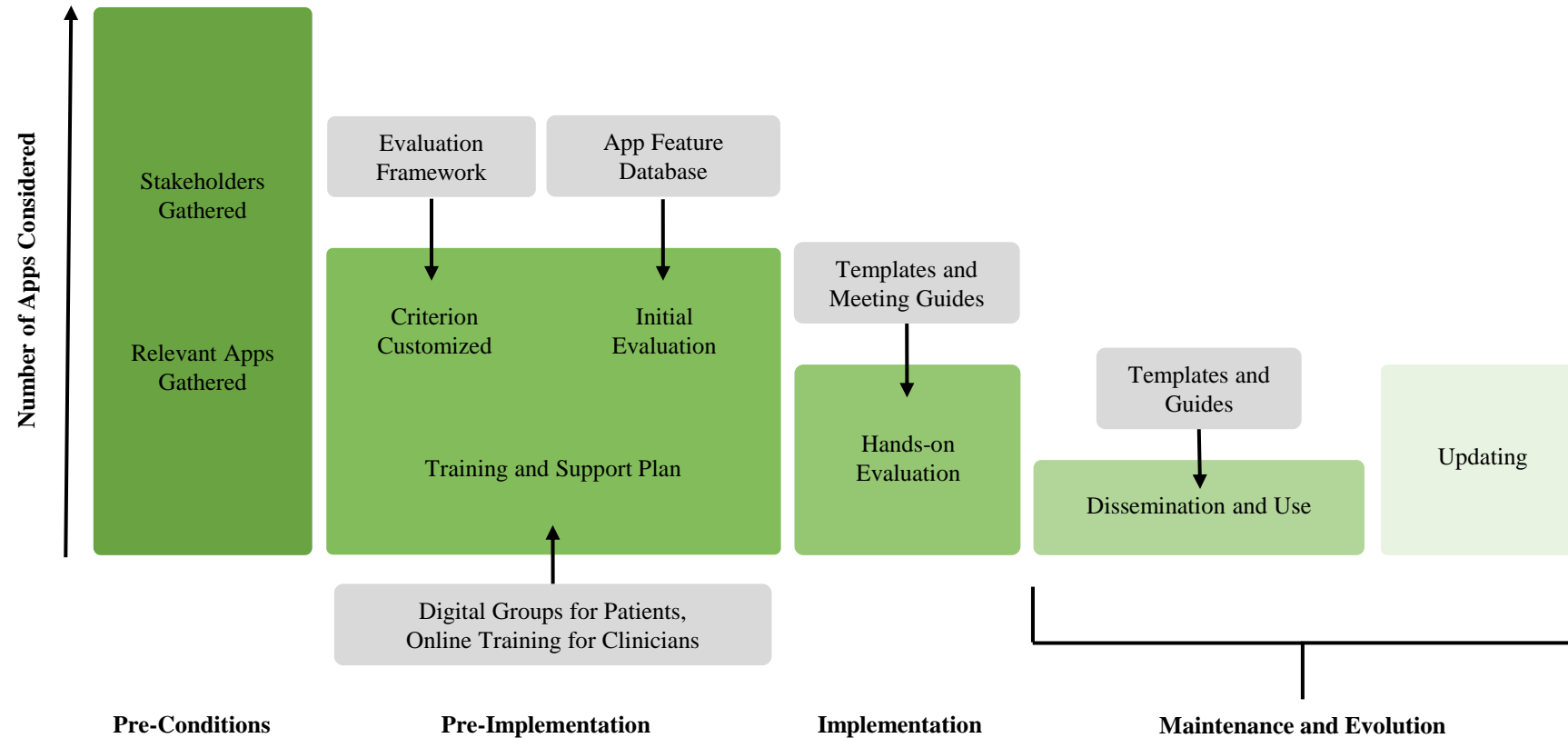
THESIS

Transparency	Health Content	Excellent Technical Content	Security/Privacy	Issues of Usability	Subjective Rating
Cost of app	Appropriate measurement Interpretation of data	Software performance/ stability	Protection against theft/viruses	Installation and setup	App recommendation
Consent	Quality of information Potential for harm	Interoperability	Data sharing	Quality of functionality	
Accuracy of description	Literacy level	Bandwidth to run	Maintenance cycles	Quality of aesthetics	Overall star rating
	Presentation of information	Application size	Anonymization	Customization	
			Optimal authentication	Usability with low literacy	
			Notification of breaches	Availability in multiple languages	

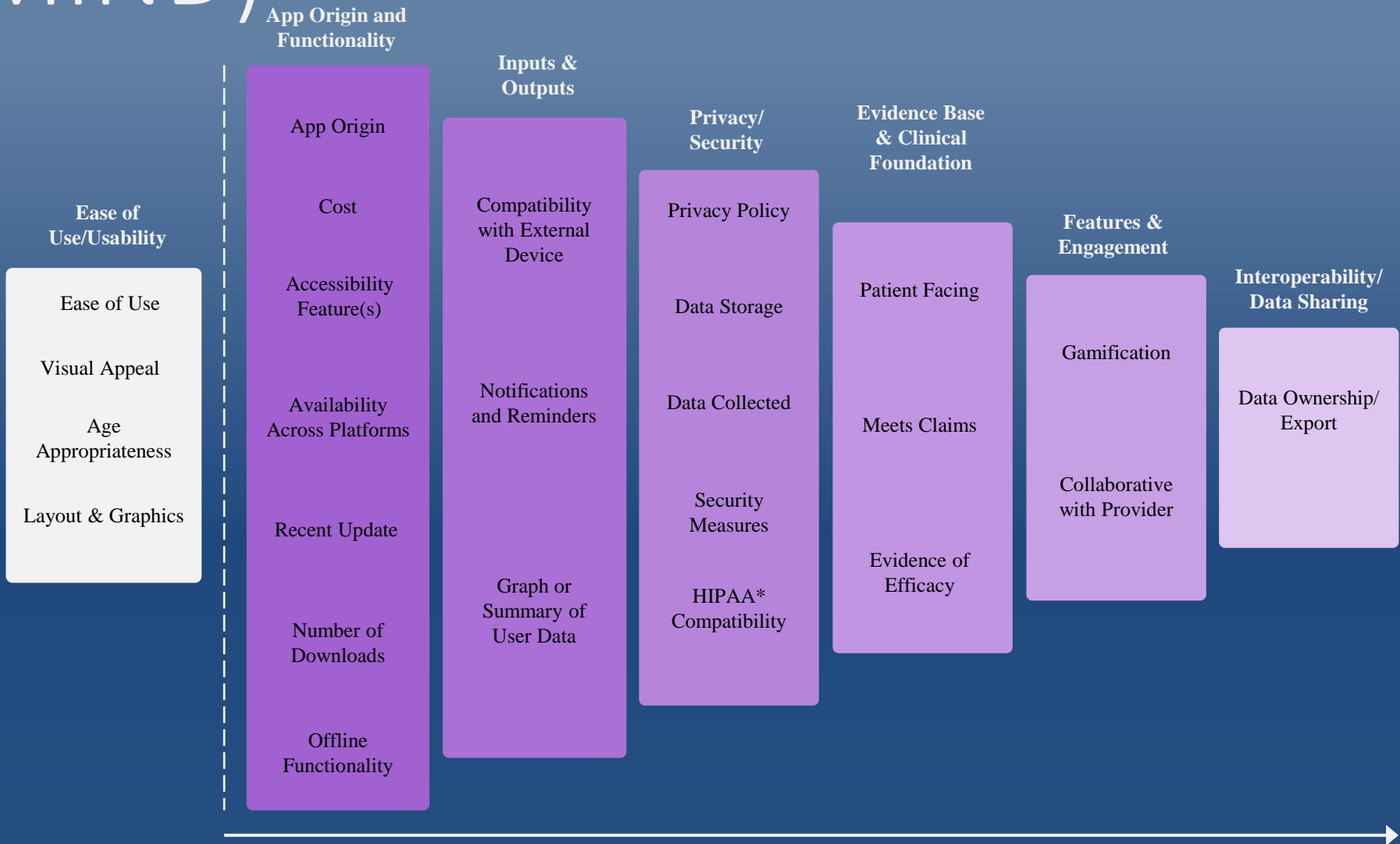
App Behavior Change Scale (ABACUS)



- Assesses potential for behavior change
- 21 items across four domains
- Widely used and innovative
- Potential does may not translate to actual change
- Does *NOT* measure other important aspects
 - Usability, privacy/security, quality, etc.

mHealth Implementation



mHealth Index & Navigation Database (MIND)



 MIND Framework
 Usability Considerations Not Covered by MIND

mHealth Evaluation Best Practices

1. Evaluate mHealth apps before recommending to people you serve
2. Framework(s) and/or scale(s) must consider data security, safety, and effectiveness
3. Framework(s) should consider population-specific needs when possible
4. Review mHealth continually as the landscape evolves
5. The MIND database may be a helpful place to start your implementation process
6. It is the provider/organization's responsibility to determine what apps are appropriate for recommendation

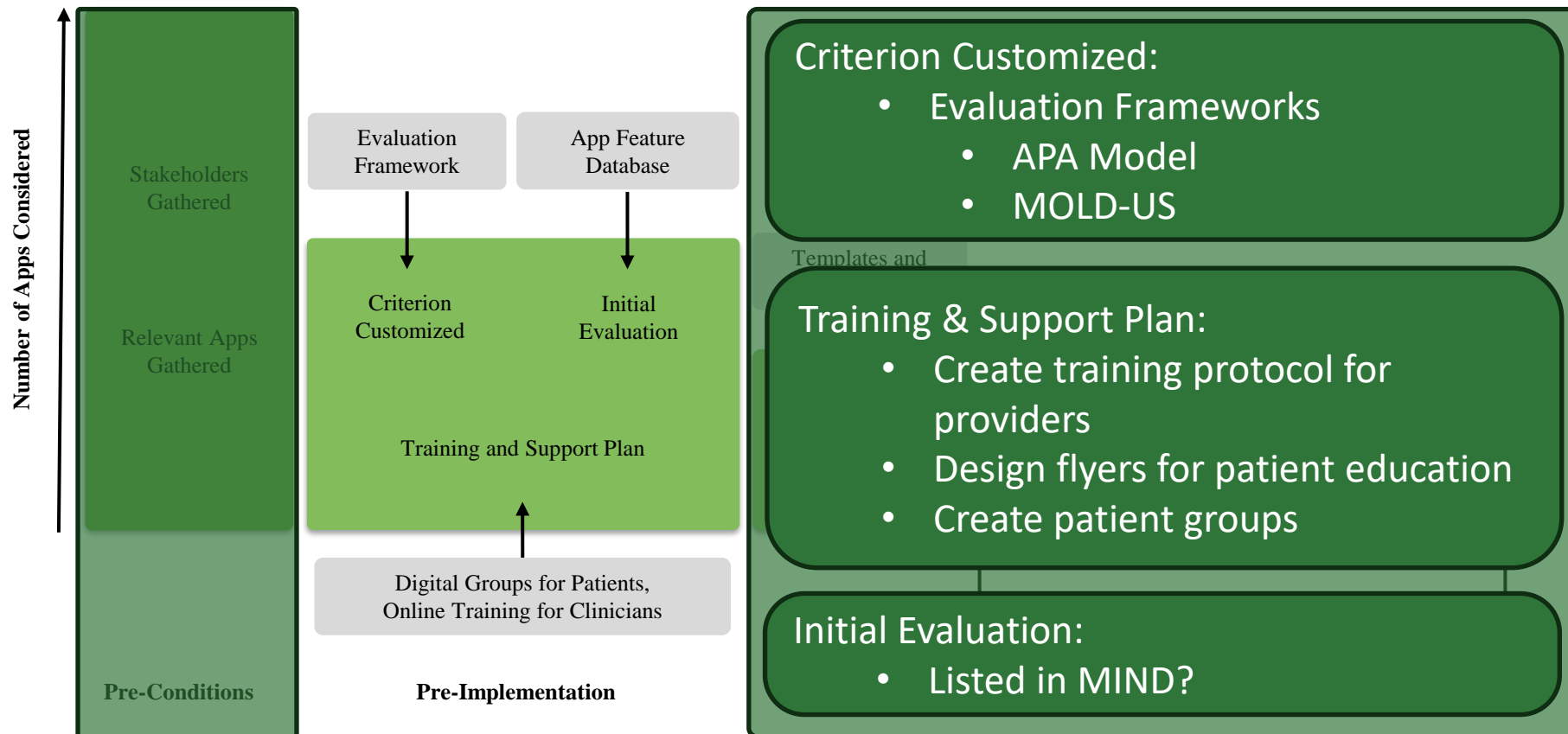




Sample Implementation: *Smoking Cessation Apps for Older Adults*



Sample Implementation: *Smoking Cessation Apps for Older Adults*



Sample Implementation: *MIND Review - QuitNow*



QuitNow: Quit smoking for good

Fewlaps

Android

iOS

Costs: Multiple Associated Costs

App Has Privacy Policy: Yes

Ratings and Reviews (11)

Explore the app's qualitative ratings & reviews

Last Updated: **Mon July 22nd 2024 8:34 AM**

By: daniela_basadre@brown.edu

Qualitative Review

This review represents the view of the app rater and is not an endorsement by MIND.

Not available

Qualitative Ratings

Cost:

Free to Download

In-App Purchase

Subscription

Payment

Privacy:

Has Privacy Policy

Data Stored on Server

App Declares Data Use and Purpose

App Reports Security Measures in Place

Is PHI Shared

Clinical Foundation:

Well Written Relevant Content

Does What it Claims

Patient Facing

Claims to Not Replace Care

Treatment Approach:

Features:

Productivity

Goal Setting/Habits

Peer Support

Chatbot Interaction

Track Symptoms

Conditions Supported:

Substance Use (Smoking & Tobacco)

Engagements:

User Generated Data

Chat/Message

Gamification (Points/Badges)

AI Support

Peer Support

Real Time Response

Inputs:

Surveys

Camera

Social Network

External Devices

Outputs:

Notifications

References/Information

Summary of Data

Social Network

Uses:

Self Help

Developer Types:

For Profit Company

Access:

Spanish

Offline

Accessibility

Email or Export Your Data



Sample Implementation: *MIND Review - QuitNow*



QuitNow: Quit smoking for good

Fewlaps

Android

iOS

Costs: Multiple Associated Costs

App Has Privacy Policy: Yes

Ratings and Reviews (11)

Explore the app's qualitative ratings & reviews

Last Updated: [Mon July 22nd 2024 8:38 AM](#)

By: shreya.sharma@kidshelpphone.ca

Qualitative Review

This review represents the view of the app rater and is not an endorsement by MIND.

Upon downloading the app, users are prompted to create an account. This account can be linked to a Facebook, Apple account, or email. While creation of an account is not required for the app, it can allow users to access features such as group chats with other users.

Qualitative Ratings

Cost:

Free to Download Totally Free

Privacy:

Has Privacy Policy Data Stored on Server App Declares Data Use and Purpose App Reports Security Measures in Place Is PHI Shared Can Delete Data
De-Identified/Anonymized Data Shared

Clinical Foundation:

Well Written Relevant Content Does What it Claims Patient Facing Supporting Studies

Treatment Approach:

Features:

Productivity Goal Setting/Habits Peer Support Psychoeducation Journaling Picture Gallery/Hope Board Coach/Therapist Connection

Conditions Supported:

Substance Use (Smoking & Tobacco)

Engagements:

User Generated Data Chat/Message Gamification (Points/Badges) Peer Support Network Support

Inputs:

Surveys Camera Diary Microphone

Outputs:

Notifications References/Information Summary of Data Social Network Link to Formal Care/Coaching Graphs of Data Reminders

Uses:

Self Help Youth

Developer Types:

Government

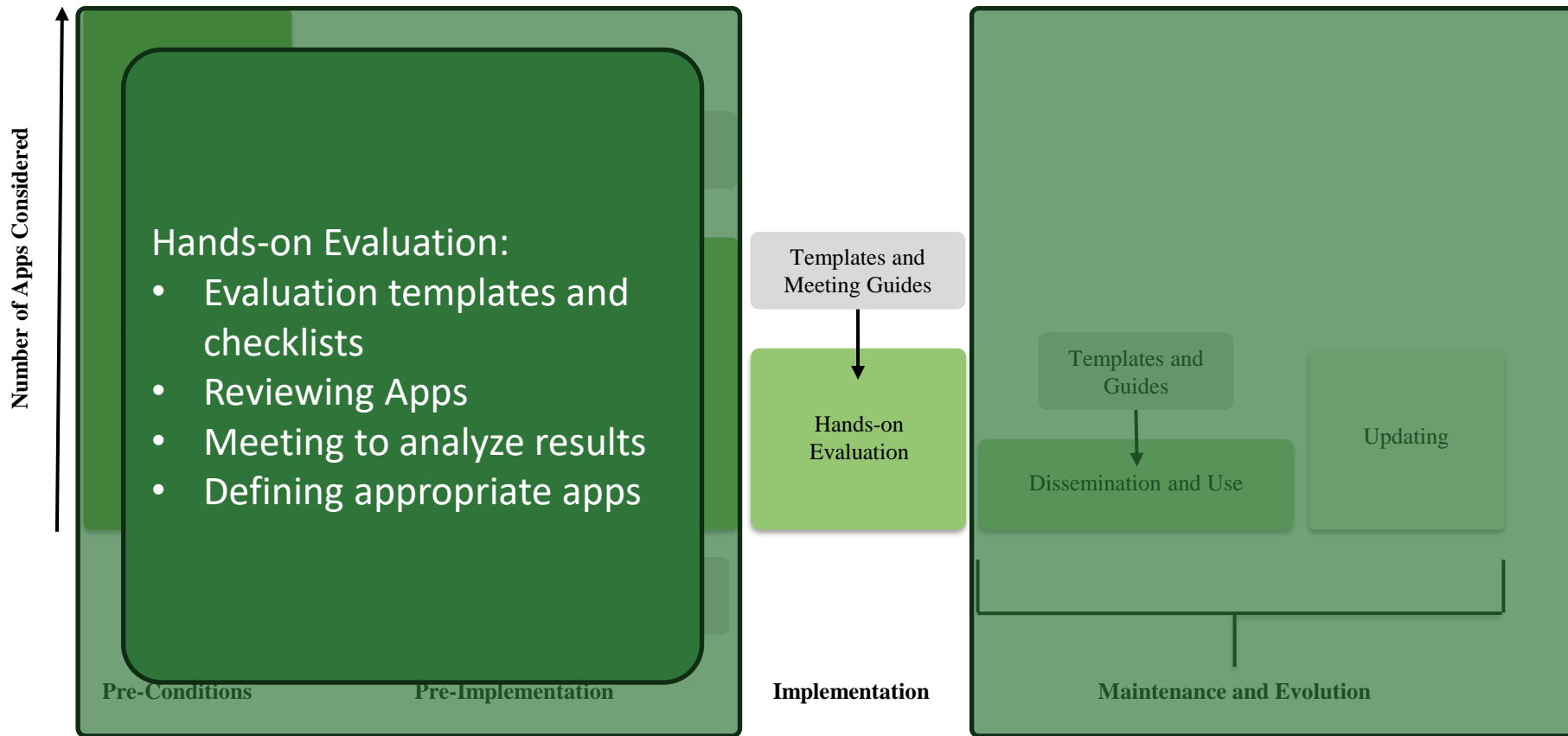
Access:

Offline Accessibility Email or Export Your Data



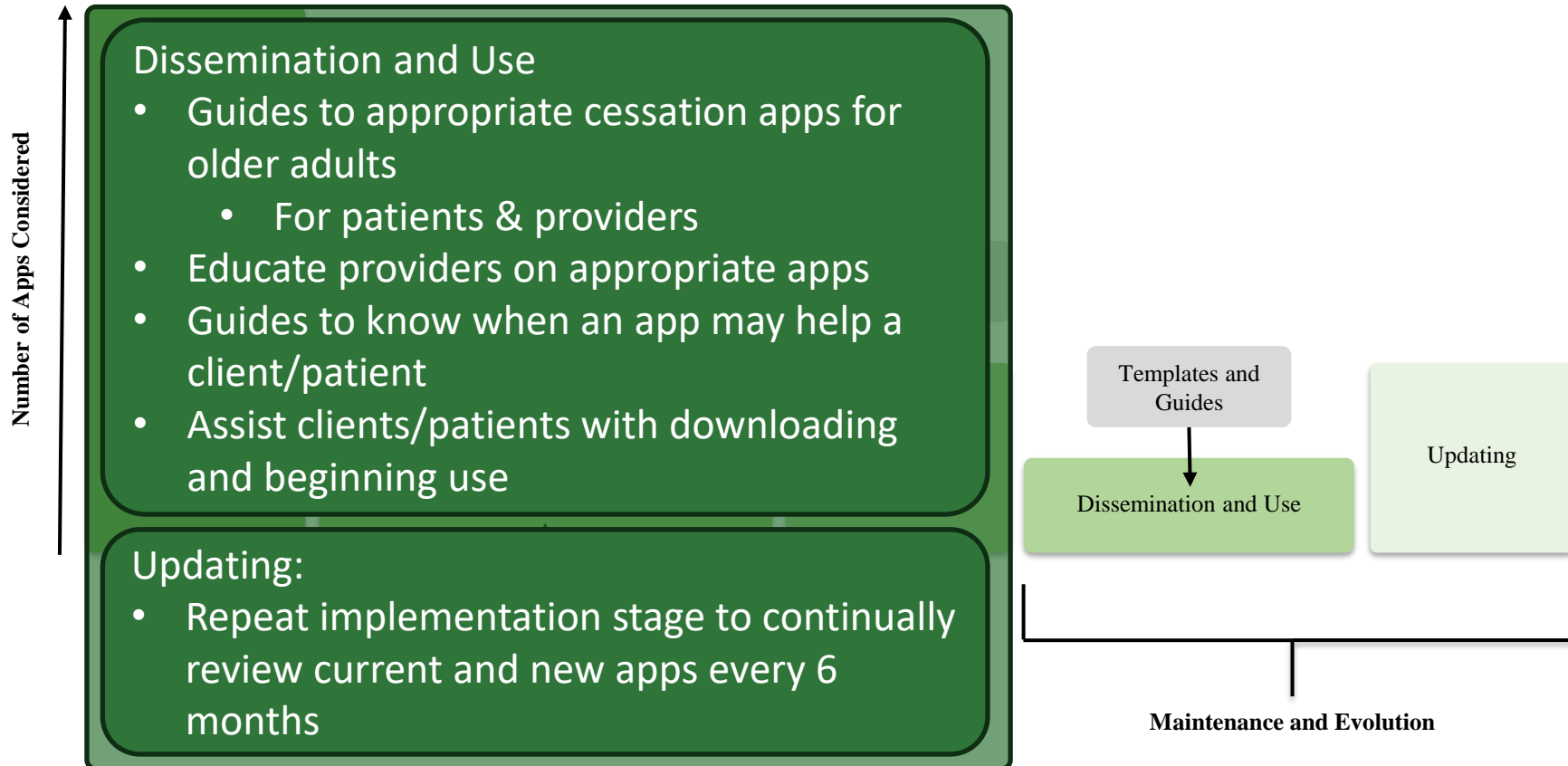


Sample Implementation: *Smoking Cessation Apps for Older Adults*



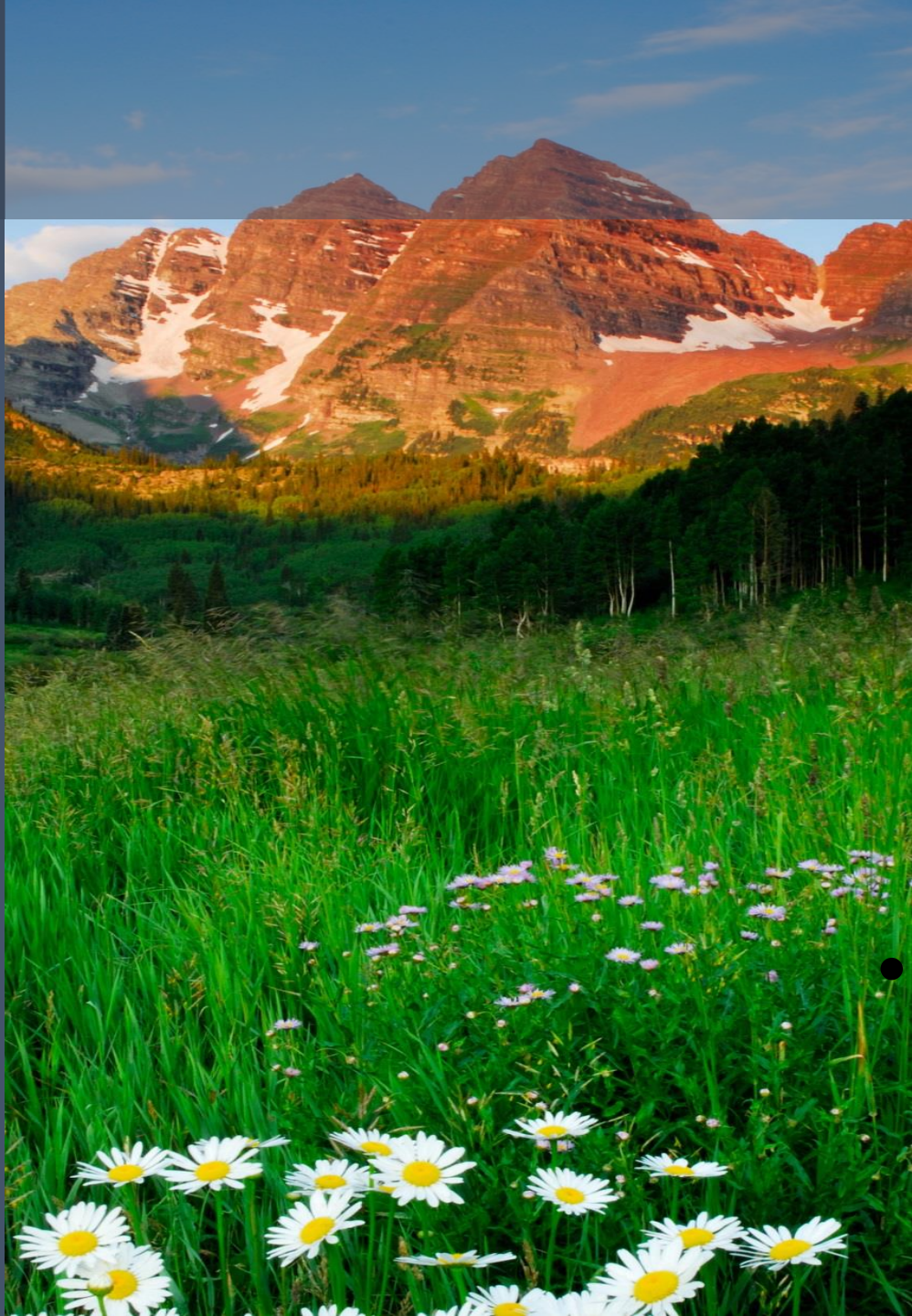


Sample Implementation: *Smoking Cessation Apps for Older Adults*



mHealth Evaluation Toolkit





- Behavioral Health & Wellness Program
 - 303.724.3713
 - bh.wellness@ucdenver.edu
 - www.bhwellness.org



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BHWP_UCD



Questions?

Thank You for Joining Us!

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A recording of this presentation and a copy of the slide deck will be sent to all participants in an email, and posted to our website, within 48 hours after the event.

*For any questions, please email Coyle Shropshire at
CoyleS@thenationalcouncil.org*

Post-session survey:



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