
EASIER ACCESS TO SERVICES FOR VULNERABLE POPULATIONS: BRINGING ONLINE THERAPEUTIC SERVICES INTO PUBLIC SECTOR SYSTEMS OF CARE “THE TECHNOLOGY SUITE”



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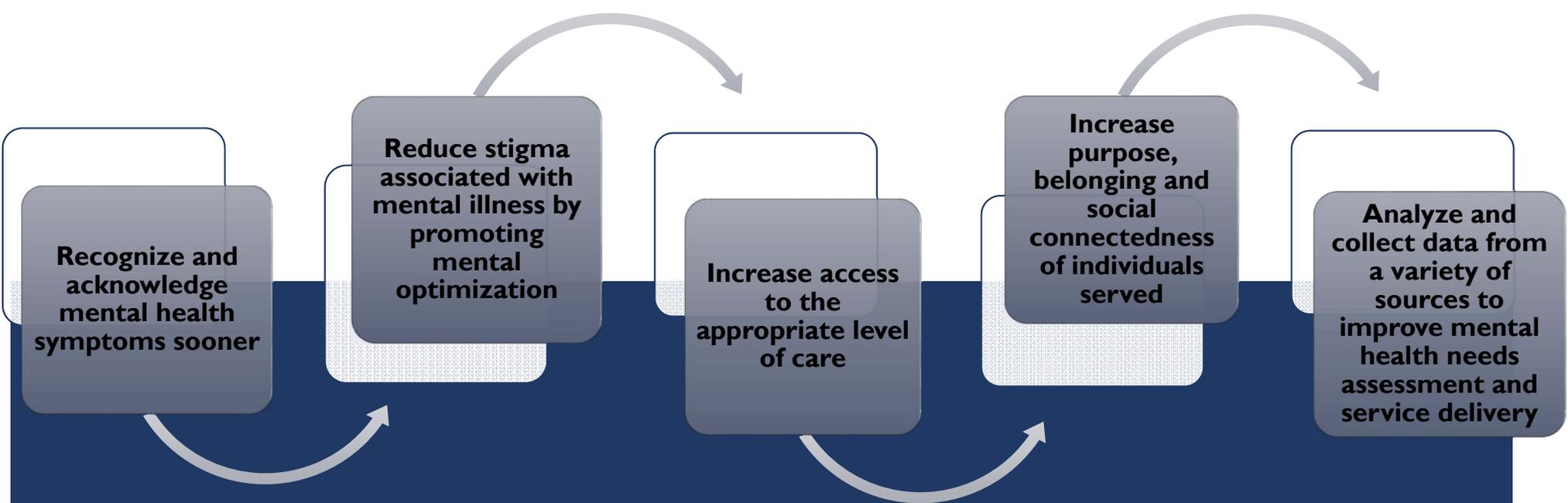
May 2, 2018 Behavioral Health Informatics Conference



WHAT WE AIM TO ACCOMPLISH

A MULTI-COUNTY, MULTI-VENDOR COLLABORATIVE TO INCREASE ACCESS TO MENTAL HEALTH CARE - AND SUPPORT AND PROMOTE EARLY DETECTION OF MENTAL HEALTH SYMPTOMS THAT PREDICT THE ONSET OF MENTAL ILLNESS.

PARTICIPATING COUNTIES: LOS ANGELES, KERN, MONO, ORANGE, AND MODOC



THE INNOVATION

CREATE AND ADVANCE A SUITE OF TECHNOLOGY-BASED MENTAL HEALTH SOLUTIONS



TECHNOLOGY AND PUBLIC MENTAL HEALTH CURRENTLY

TARGET POPULATIONS

Individuals with sub-clinical mental health symptom presentations, including those who may not recognize that they are experiencing symptoms

Individuals identified as at risk for developing mental health symptoms or who are at risk for relapsing back into mental illness

Socially isolated individuals, including older adults at risk of depression

Clients or potential clients in the outlying or rural areas who have difficulty accessing care due to transportation limitations

High utilizers of inpatient psychiatric facilities

Existing mental health clients seeking additional sources support or seeking care/support in a non-traditional mental health setting

Family members with either children or adults suffering from mental illness who are seeking support

Individuals at increased risk or in the early stages of a psychotic disorder.



THE SUITE COMPONENTS



SUITE COMPONENTS

Tech Solutions



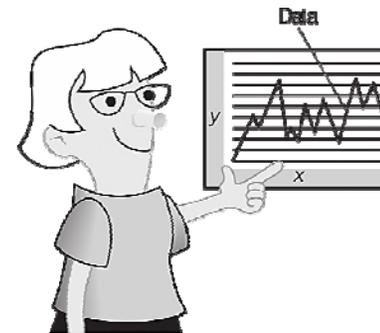
- **24/7 Peer Chat and Digital Therapeutics**
- **Therapy Avatar**
- **Digital phenotyping**

Marketing



- **Promotion**
- **Engagement**

Evaluation



- **Data collection**
- **Analysis**
- **Performance monitoring (QI)**

24/7 PEER CHAT AND DIGITAL THERAPEUTICS

- **What is it?**
 - Technology-based mental health solutions designed to engage, educate, assess and intervene with individuals experiencing symptoms of mental illness
- **What does this component do?**
 - Offers chat with a trained peer mentor
 - AI (Artificial Intelligence) assistance for peer mentor during chat
- **Why do we need it?**
 - Large scale access
 - Support any time during the day

Note: Paid peers will be recruited in each participating county (to the level and scope specified by the county)





PEER CHAT AND DIGITAL THERAPEUTICS: EXAMPLES

Virtual Peer chatting through trained and certified paid peers with lived experience.

Virtual communities of support for specific populations, such as family members of children or adults with mental illness, those experiencing depression, trauma and other populations.

Virtual chat options for parents with children engaged in the mental health system – and for parents of adults with mental illness

Virtual manualized interventions, such as mindfulness exercises, cognitive behavioral or dialectical behavior interventions delivered in a simple, intuitive fashion.

Referral process for customers requiring face-to-face mental health services by County Department of Mental/Behavioral Health.

THERAPY AVATAR

- **What is it?**
 - Virtual manualized evidence-based interventions delivered via an avatar
- **What does this component do?**
 - Offers scripted mindfulness exercises and Cognitive Behavioral Therapy interventions
 - Exercises are customized through AI and based on a person's responses
 - Interactive process between the person and Avatar
- **Why do we need it?**
 - Access point for individuals who prefer anonymity





VIRTUAL EVIDENCE-BASED THERAPY UTILIZING AN AVATAR: EXAMPLES

Computerized-Cognitive Behavioral treatment, as well as other treatment constructed by clinical experts in the behavioral health field.

Interactive interface with the capability of customization and modification based on user's feedback.

Referral process for customers requiring face-to-face mental health services by County Department of Mental/Behavioral Health Protocol to determine when a user may need to be referred for mental health assessment, including when a user may require an emergent evaluation.

Access to a directory for referrals to public mental health services.

DIGITAL PHENOTYPING

■ What is it?

- Analyzes factors associated with cell phone usage (passive sensory data) to engage, educate and suggest behavioral activation strategies to users
- Interacts with the user via pop-up or chat functionality to increase user understanding of thought and feeling states
- Informs targeted communications and recommended interventions
- Incorporate emerging research in the field of mental health early detection to target individuals at risk of or experiencing early symptoms of mental illness and used passive data collection to identify risk/symptoms or potential for relapse.

■ What does this component do?

- Automatically tailors wellness strategies to a person's needs
- Connects a person to the other components of the suite

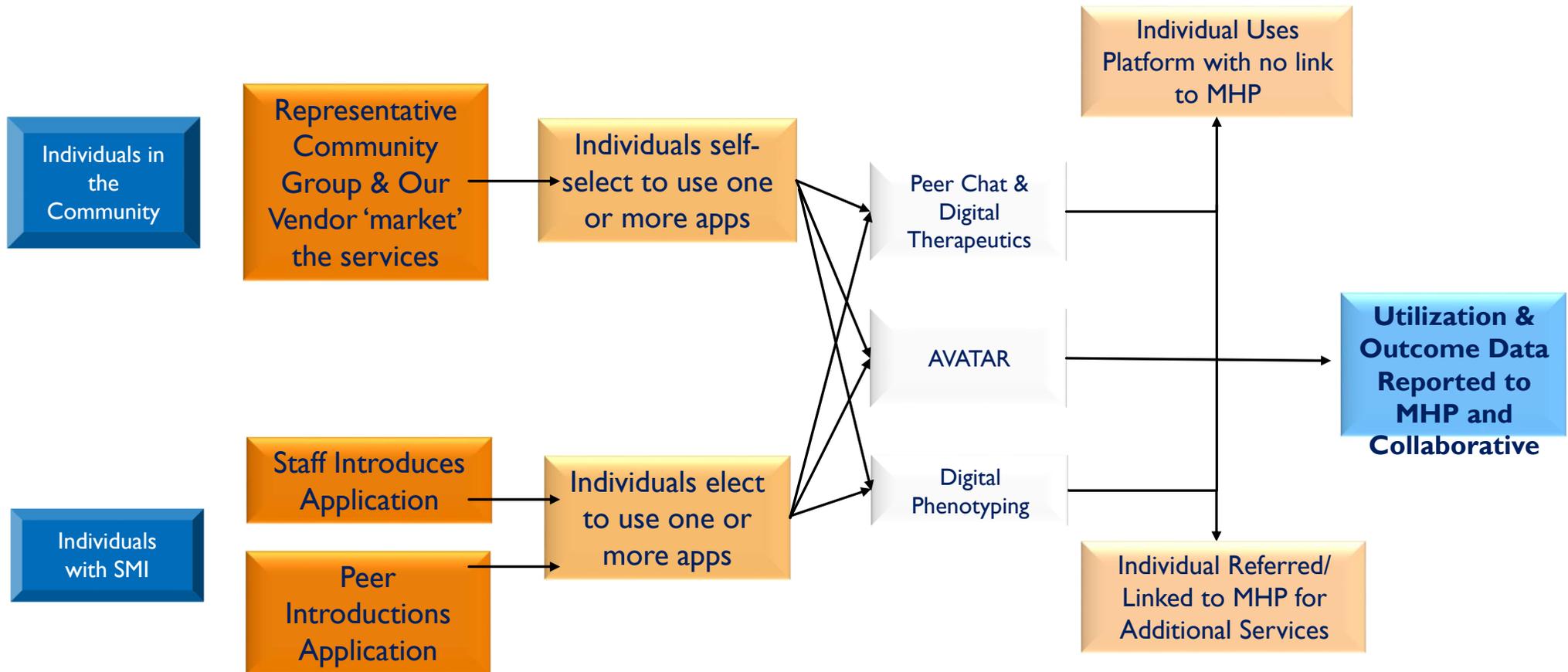
■ Why do we need it?

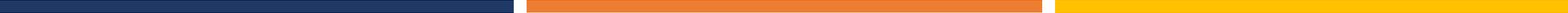
- Detection of early warning signs
- Prevention of mental illness

Hi, Flor! You seem a bit sad today. Would you like to talk?



THE TECH SUITE: CLIENT FLOW





THE CROSS-CUTTING SUITE COMPONENTS

OUTREACH AND MARKETING

EVALUATION

OUTREACH AND MARKETING

- **What is it**
 - A strategic approach to access points that will expose individuals to the technology-based mental health solutions.
- **What does this component do?**
 - Promotion of the Technology Solutions suite of apps
- **How will people know about this project?**
 - Plans to market within:
 - School systems
 - Social media
 - Mental health organizations
 - Public locations



COLLABORATIVE OUTCOME EVALUATION

- Outcome evaluations of all elements of the project, including measuring reach and clinical outcomes.
- Identify outcome measures not included in shared set, but needed per local goals and objectives
- Shared outcome measures
 - Access to care
 - Clinical outcomes
 - Self-reported purpose, belonging and social connectedness
 - Tech-users' ability to identify cognitive, emotional and behavioral changes and act to address them
 - Utilization rates
 - Stigma of mental illness
 - Comparative analyses of population level impacts (tech users vs non-users)
 - Penetration or other unmet need metrics

Each county adds their own, specific evaluation measures based on their local improvement aims.

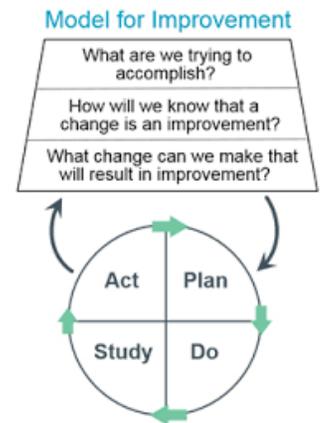
OVERARCHING LEARNING QUESTIONS

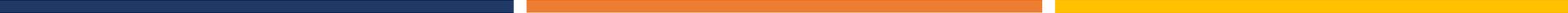
- Will individuals either at risk of or who are experiencing symptoms of mental illness use virtual peer chatting accessed through a website or through a phone application?
- Will individuals who have accessed virtual peer chatting services be compelled to engage in manualized virtual therapeutic interventions?
- Will the use of virtual peer chatting and peer-based interventions result in users reporting greater social connectedness, reduced symptoms and increases in well-being?
- What virtual strategies contribute most significantly to increasing an individual's capability and willingness to seek support?
- Can passive data from mobile devices accurately detect changes in mental status and effectively prompt behavioral change in users?
- How can digital data inform the need for mental health intervention and coordination of care?
- What are effective strategies to reduce time from detection of a mental health problem to linkage to treatment?
- Can we learn the most effective engagement and treatment strategies for patients from passive mobile device data to improve outcomes and reduce readmissions?
- Can mental health clinics effectively use early indicators of mental illness risk or of relapse to enhance clinical assessment and treatment?
- Is early intervention effective in reducing relapse, reducing resource utilization and improving outcomes and does it vary by demographic, ethnographic, condition, intervention strategy and delays in receiving intervention?
- Can online social engagement effectively mitigate the severity of mental health symptoms?
- What are the most effective strategies or approaches in promoting the use of virtual care and support applications and for which populations?

Each county may have learning objectives that reflect unique aspects of the collaborative opportunity.

EVALUATION

- **What does this component do?**
 - Qualitative and quantitative data analysis
 - Support for performance monitoring to support product advancement and process improvement
- **Why do we need it?**
 - Evaluation will identify what we learned
 - How effective are the components for specific populations?
 - Who does it work for?
 - When does it work best?
 - What will this tell us about current services?
 - Performance monitoring will help us to improve in real-time:
 - Opportunities for improved clinical integration
 - Opportunities for improved outreach and engagement
 - Tech changes and/or additions to reach specific populations





THE COLLABORATIVE APPROACH

AMONG VENDORS

ACROSS THE STATE, COUNTY-LEVEL PARTICIPATION



OUR PRINCIPLES AND AIMS FOR COLLABORATION

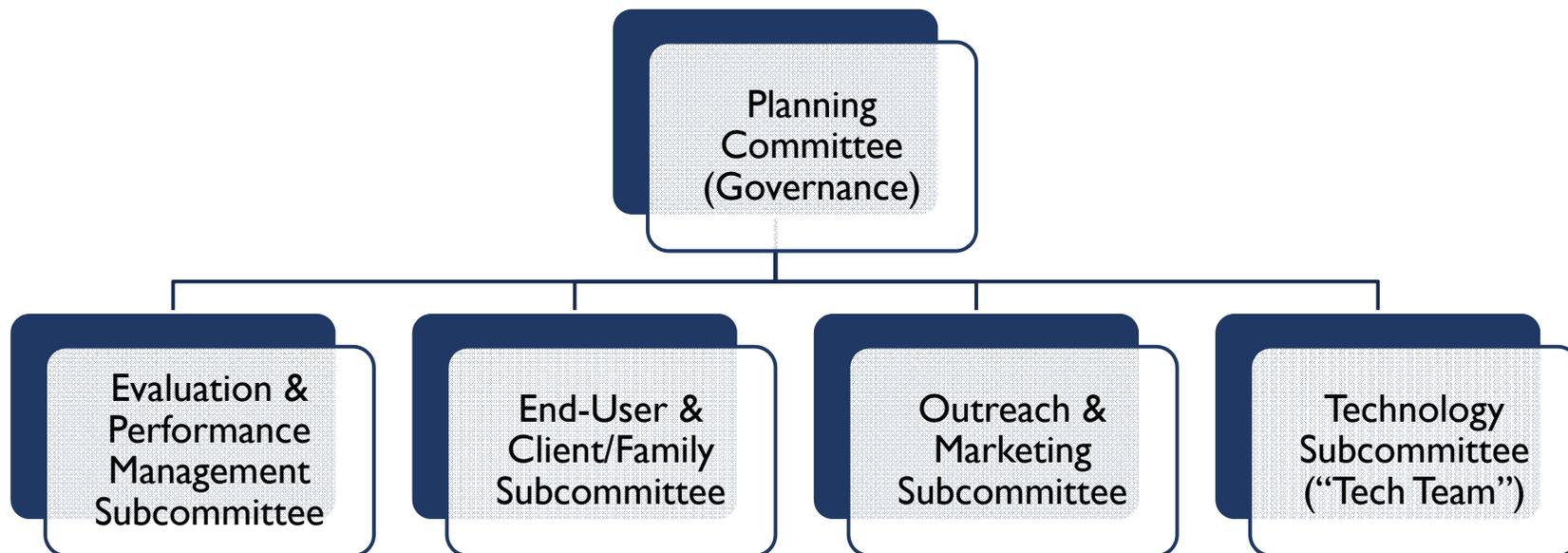
1. Create choice for participating counties
2. Link the individual technologies to support a 'greater whole'
3. Capitalize on shared learning to advance the scope, coverage and effectiveness of the suite
4. Involve end users, peers and stakeholders throughout development and operationalizing of individual applications
5. Utilize data to evaluate impact and inform services/supports for individuals and populations - and the suite as a whole
6. Maintain accountability to and transparency with stakeholders, county boards of supervisors, and the MHSA Oversight and Accountability Commission



CREATING CHOICE

- Build a 'menu' of technology options / 'apps'
 - All qualified vendors remain on the list of available technology providers to participating counties
 - Additional vendors can be qualified in order to be added to the technology options
- County selection of vendors and associated 'apps' from the menu
 - As counties join, they may elect to 'purchase' the same package that Kern/LA have developed; or
 - They may create their own package from the qualified vendors (including new vendors they prefer and qualify)

COLLABORATIVE PLANNING STRUCTURE (WITH PARTICIPATING COUNTY REPRESENTATIVES)





FUNCTIONAL AREAS FOR COLLABORATION

- Application Management & Advancement
- End User Experience & Guidance
- Outreach & Marketing
- Clinical Integration
- Evaluation & Performance Management
- Work Force Development Support
- Privacy & Security Monitoring, Safeguards
- Accounting & Contract Management

PROGRESS AND PLANS FOR IMPLEMENTATION

Application Management & Advancement

Counties are 'practicing' with initial vendor's apps to identify needed improvement, customization, etc.

End User Experience & Guidance

App review and selection process includes peers and other end users
Preparing to conduct focus groups, develop 'super users', and other end-user engagement activities
Initiating steps to hire a full-time peer lead for the collaborative

Outreach & Marketing

RFP process underway to select vendor for initial branding, outreach and marketing, etc.
Proposals to be reviewed in mid-April and vendor selected in early May

Clinical Integration

Mapping of select apps across the care continuum to begin in May
Integration activities to include vendors, clinical managers, end-users and peers (kick-off on May 11th)

Evaluation & Performance Management

RFP for evaluator under development
RFP to be issued to qualified vendor by end of April

Privacy & Security Monitoring, Safeguards

Legal requirements related to information security under development

Accounting & Contract Management

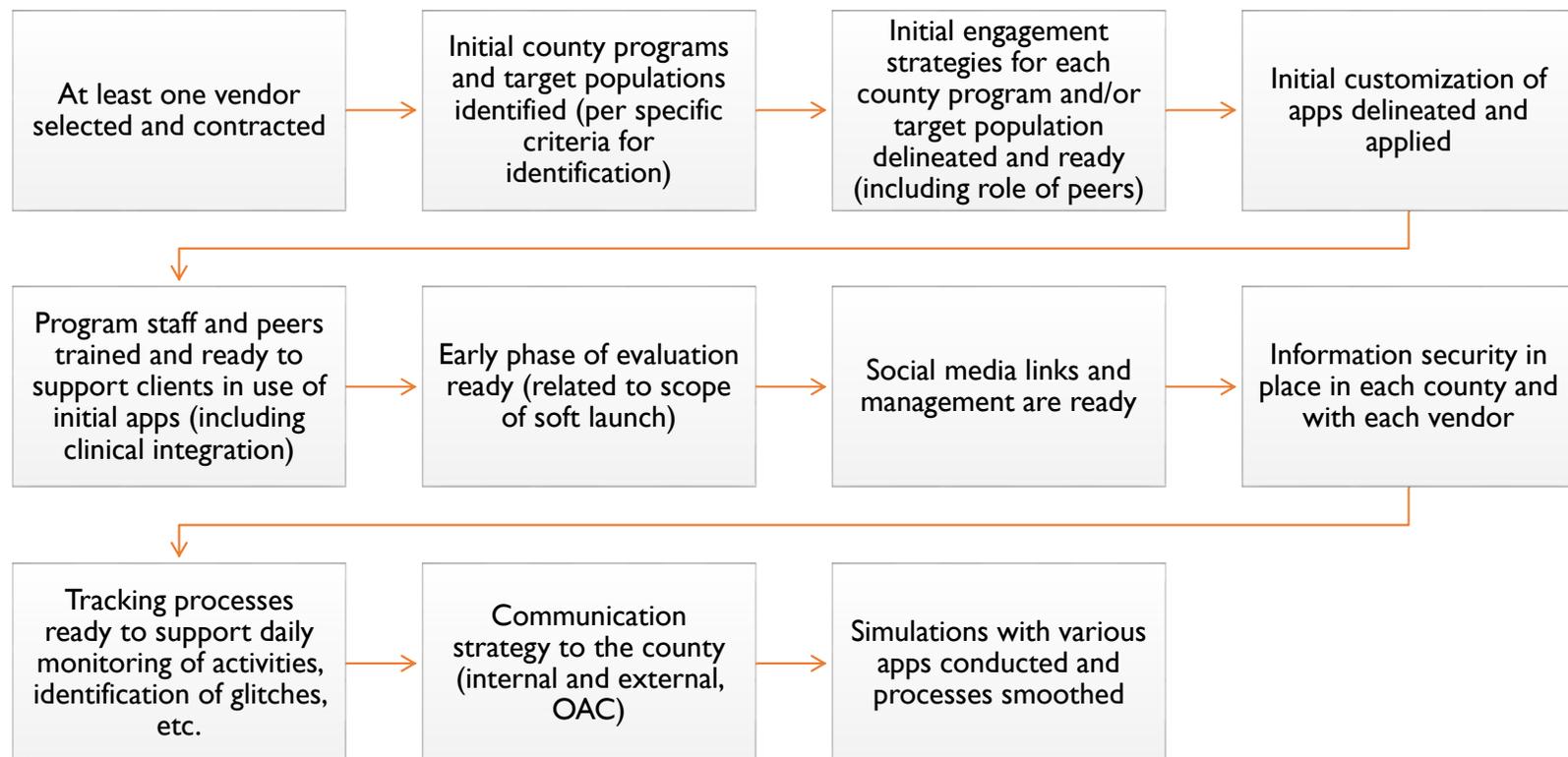
Budget model designed to support fee negotiation, budgeting and quarterly 'transactions' with vendors, as well as individual county budgeting



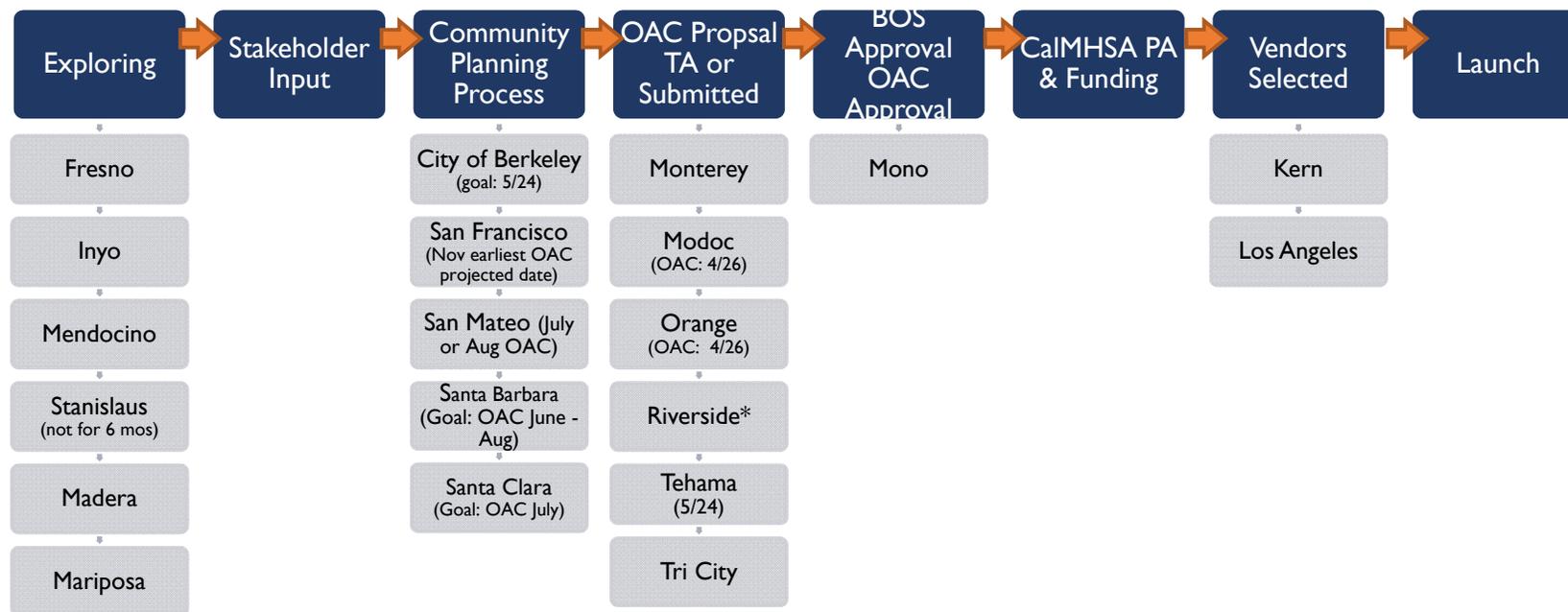
PLAN FOR “SOFT LAUNCH”



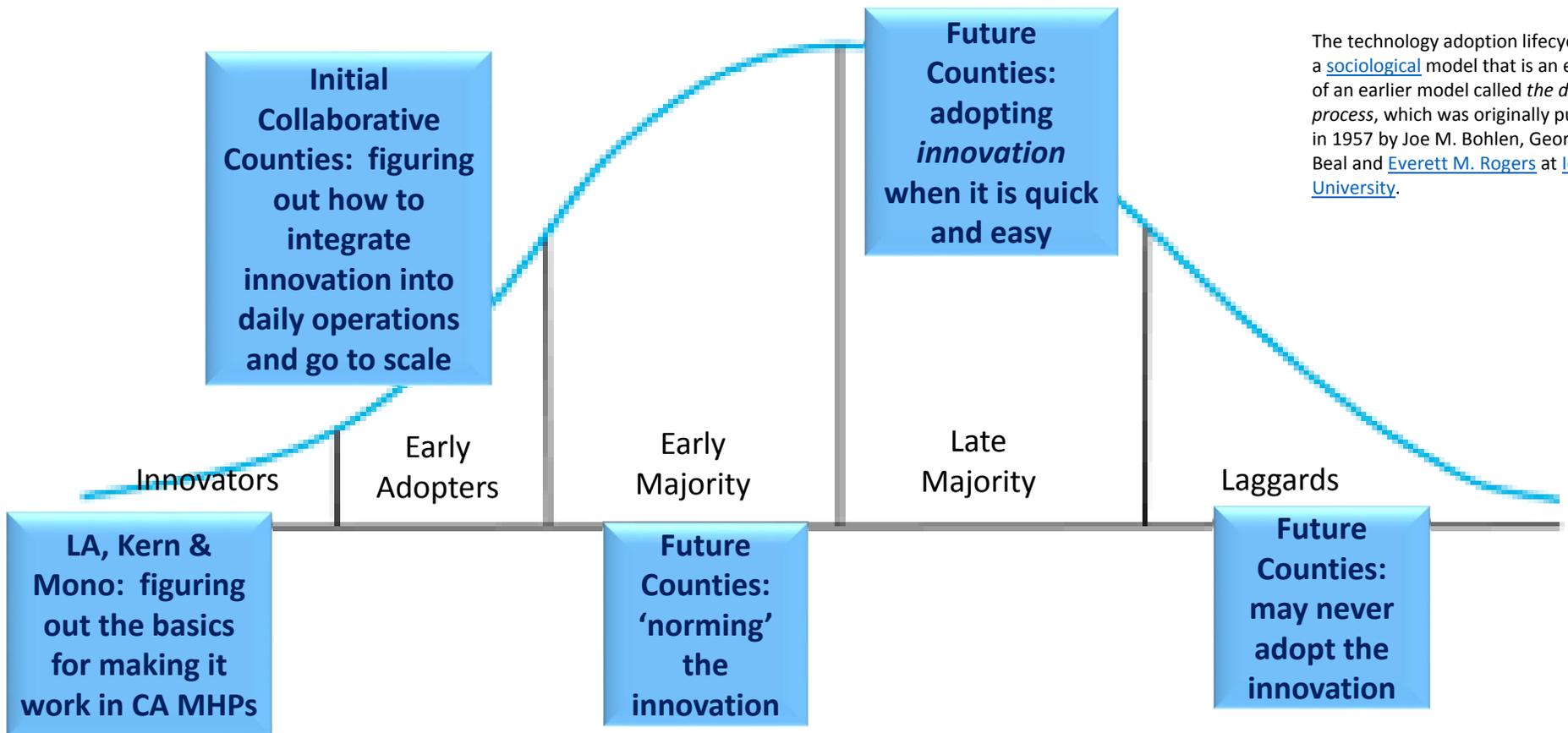
PLAN FOR SOFT LAUNCH FOR LA, KERN, MONO, ORANGE & MODOC: READINESS CRITERIA / “MUST HAVES”



CURRENT AND POTENTIAL FUTURE PARTICIPATING COUNTIES



The Long View of Development & Implementation to Gain State-wideness: Technology Adoption Lifecycle



The technology adoption lifecycle is a [sociological](#) model that is an extension of an earlier model called *the diffusion process*, which was originally published in 1957 by Joe M. Bohlen, George M. Beal and [Everett M. Rogers](#) at [Iowa State University](#).



FOR MORE INFORMATION

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- Statewide information → Karin Kalk, Project Manager Kkalk@cibhs.org