SETTING THE STAGE FOR SUCCESS: ESSENTIAL CONTRIBUTIONS OF PRE-IMPLEMENTATION

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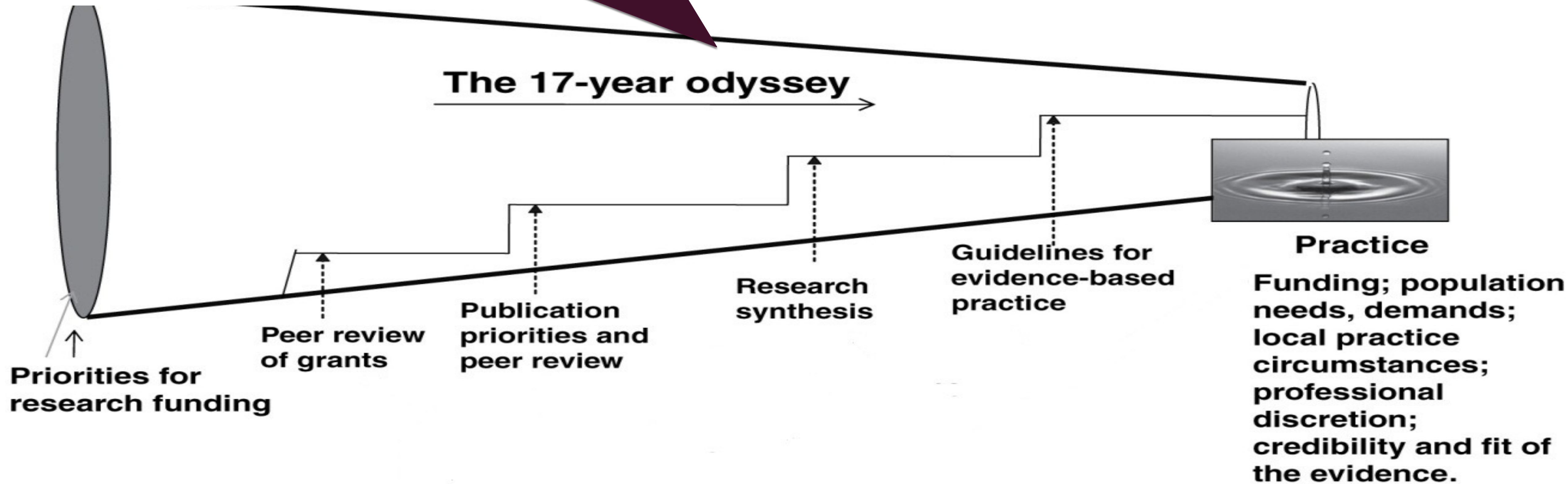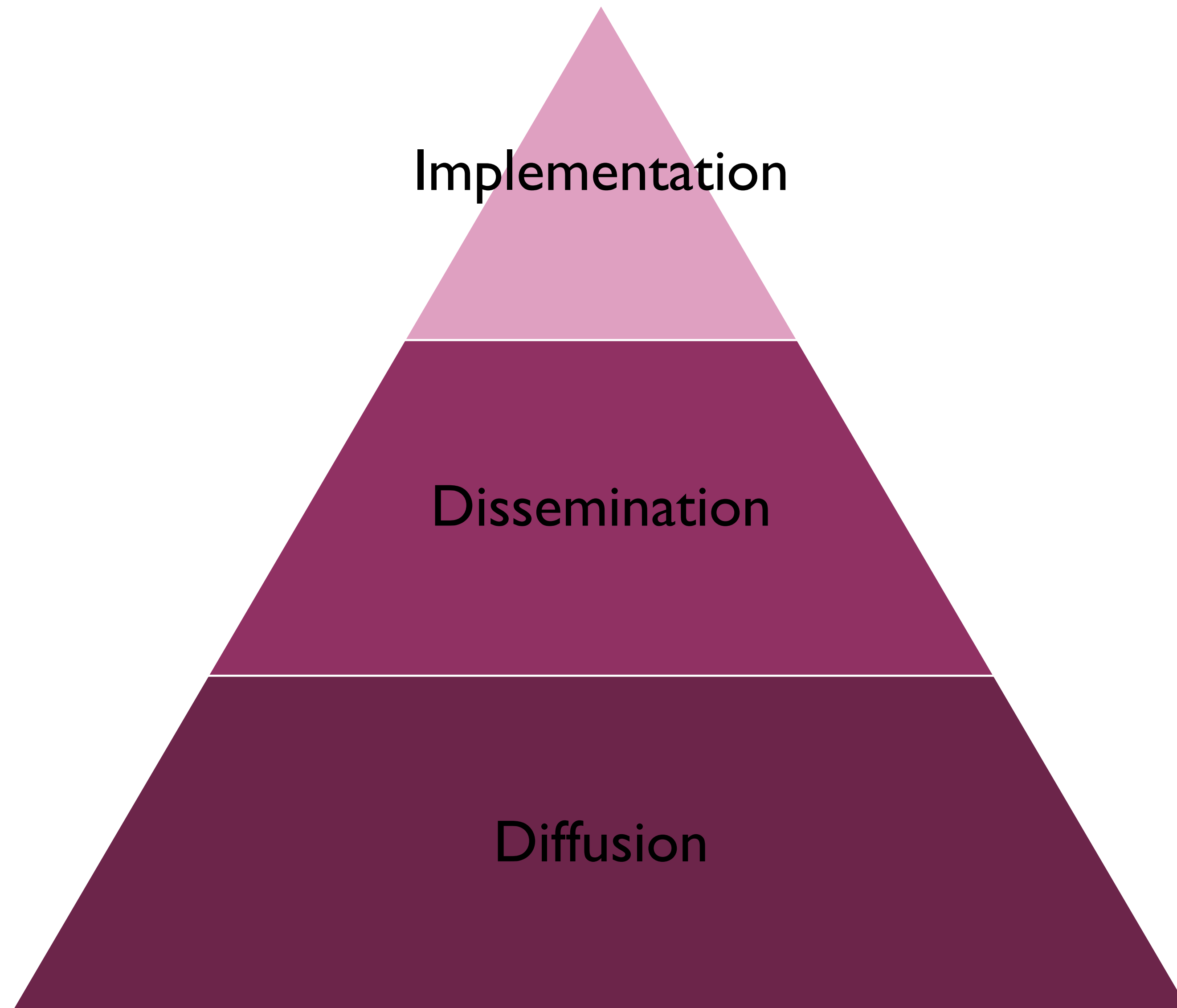
CHESTNUT HEALTH SYSTEMS™

The Stages of Implementation Completion ®
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It takes 17 years to turn 14 % of original research to the benefit of patient care
(Balas & Boren, 2000)

The 17-year odyssey

Priorities for research funding

Peer review of grants

Publication priorities and peer review

Research synthesis

Guidelines for evidence-based practice

Practice

Funding; population needs, demands; local practice circumstances; professional discretion; credibility and fit of the evidence.

Green LW, et al. 2009.
Annu. Rev. Public Health. 30:151–74

Implementation

Dissemination

Diffusion

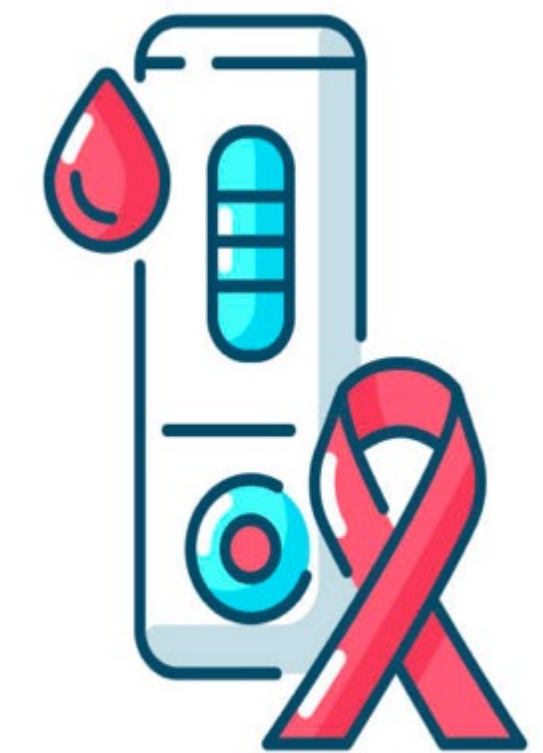"Make it happen"
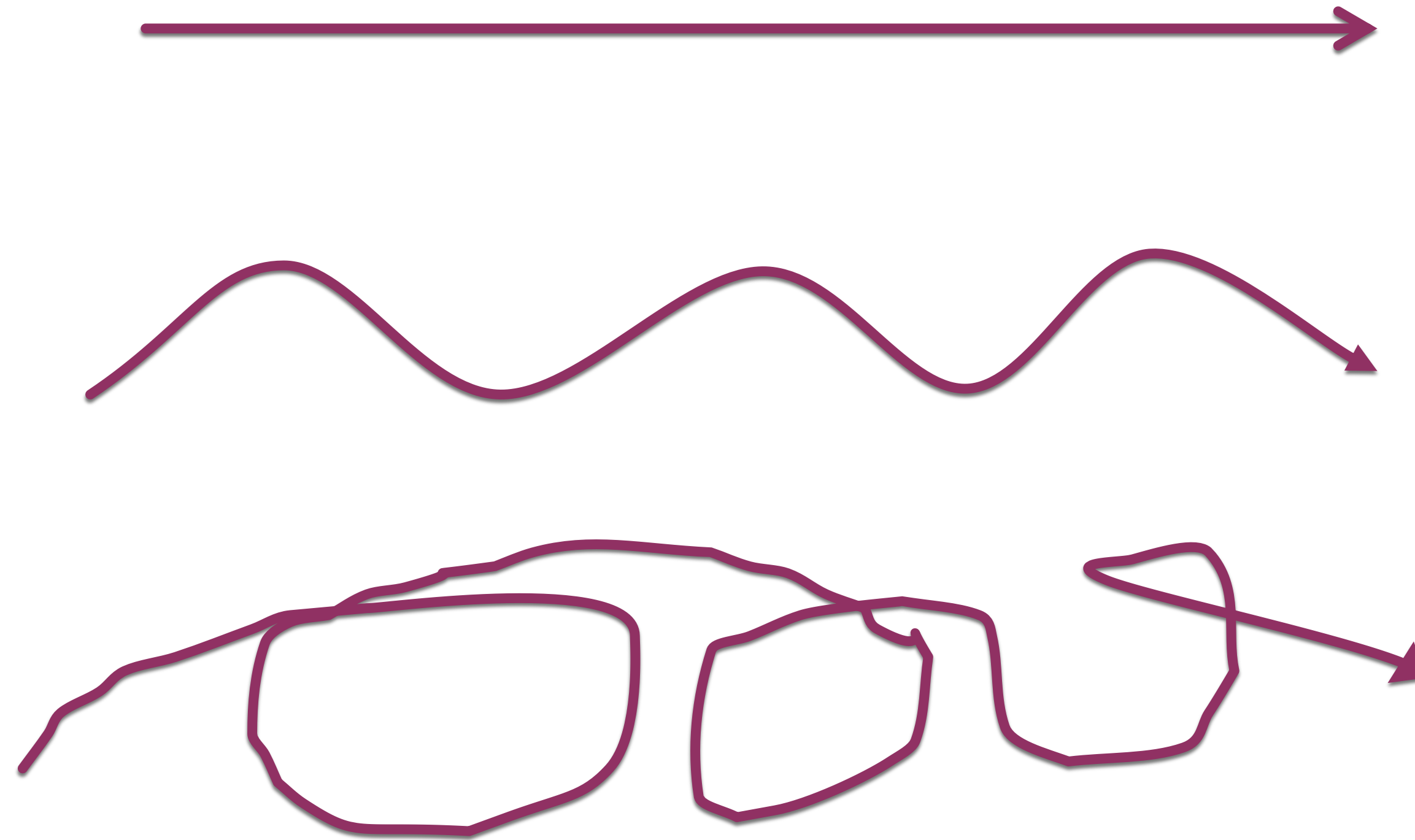
"Help it happen"

"Let it happen"

(Greenhalgh et al., 2004; Lomas, 1993)

ACHIEVING STRONG IMPLEMENTATION PROCESS EFFICIENTLY AND THOROUGHLY TO IMPROVE HEALTH EQUITY

THE IMPLEMENTATION JOURNEY

"METHOD TO THE MADNESS"

- Implementation of new innovations entails extensive planning, training, and quality assurance

- Involves a complex set of interactions between developers, system leaders, front line staff, and consumers

- Recursive process of well-defined stages or steps that are not necessarily linear

IMPLEMENTATION PROCESS MODELS

- Describe and/or guide the process of translating research into practice

- Recognize a temporal sequence of implementation endeavors

- Specify steps (stages, phases) of implementation

Nilson, P. (2015). Making sense of implementation theories, models, and frameworks. *Implementation Science, 10, 53.*

IMPLEMENTATION PROCESS AND HEALTH EQUITY

Elements of Implementation Science that can Support Advancements in Health Equity

- Focus on reach from the very beginning

- Design and select interventions for vulnerable populations and low-resource communities with implementation in mind

- Implement what works and develop implementation strategies that can help reduce inequities in care

Baumann, A.A., Cabassa, L.J. (2020). Reframing implementation science to address inequities in healthcare delivery. *BMC Health Serv Res* 20, 190

Necessary to Achieve Positive INTERVENTION Outcomes Found in Clinical Trials

Adherence to Key Treatment Components

+

Delivering the Components with Competence

Treatment Integrity

Perepletchikova, F., Treat, T.A., & Kazdin, A.E. (2007). Treatment integrity in psychotherapy research: Analysis of the studies and examination of the associated factors. *Journal of Consulting and Clinical Psychology, 75*, 829–841

IMPLEMENTATION FIDELITY

- Performing implementation activities with both adherence and quality

- Goal: To increase positive IMPLEMENTATION outcomes
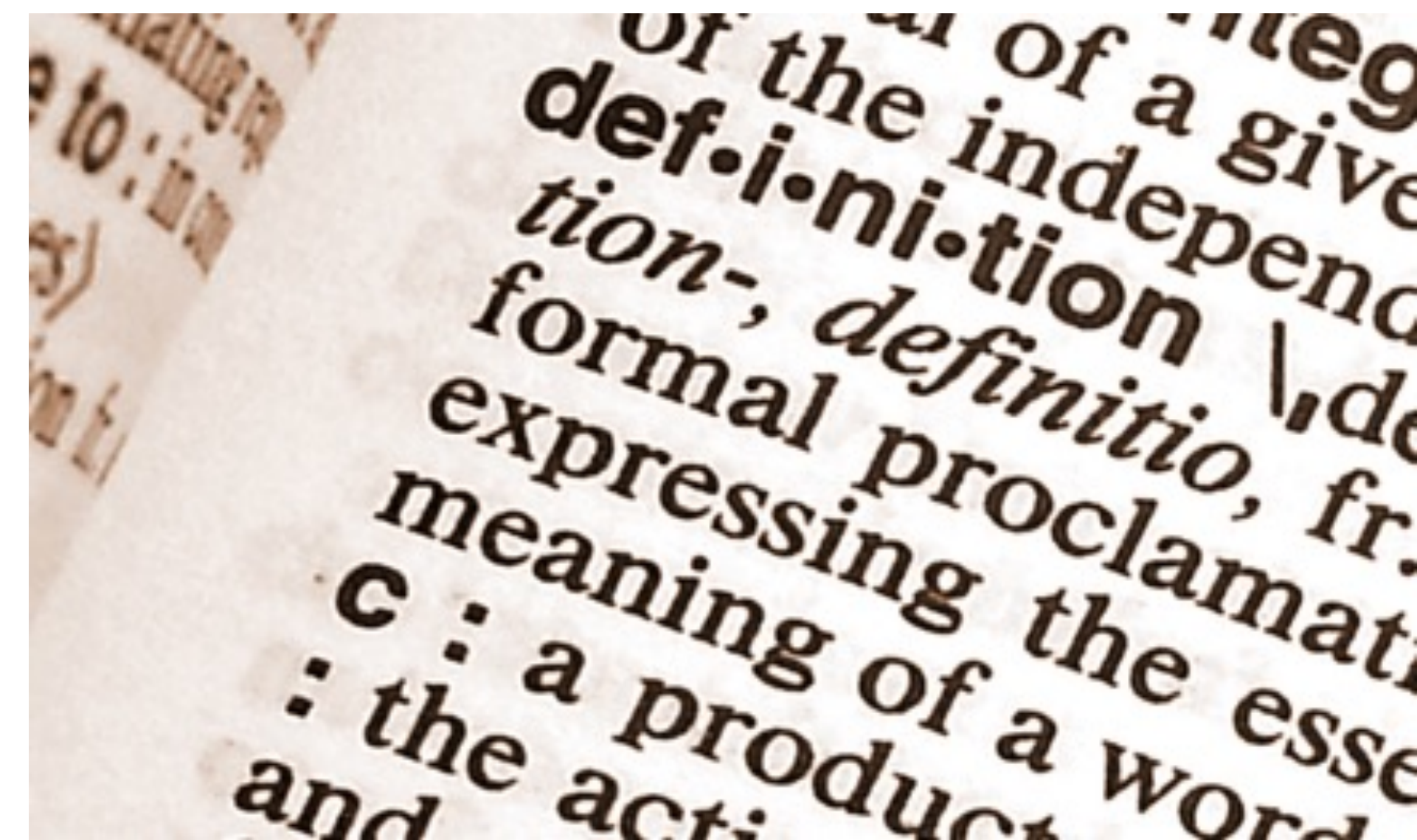
VALUE OF UNDERSTANDING IMPLEMENTATION PROCESS

- Building Blocks for What Makes an Implementation Work

IMPLEMENTATION STRATEGIES ARE…

"…Methods or techniques used to enhance the adoption, implementation, and sustainability of a clinical program or practice"

OR

The "*how*" of implementation

Proctor, Powell, & McMillen, 2013

MEASURING WHAT AND HOW MUCH

EPIS IMPLEMENTATION FRAMEWORK

Aarons GA, Hurlburt M, Horwitz SM. 2011. Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Adm. Policy Ment. Health Ment. Health Serv. Res.* 38:4–23

EPIS AND STAGES OF IMPLEMENTATION COMPLETION ®

Aarons GA, Hurlburt M, Horwitz SM. 2011. Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Adm. Policy Ment. Health Ment. Health Serv. Res.* 38:4–23
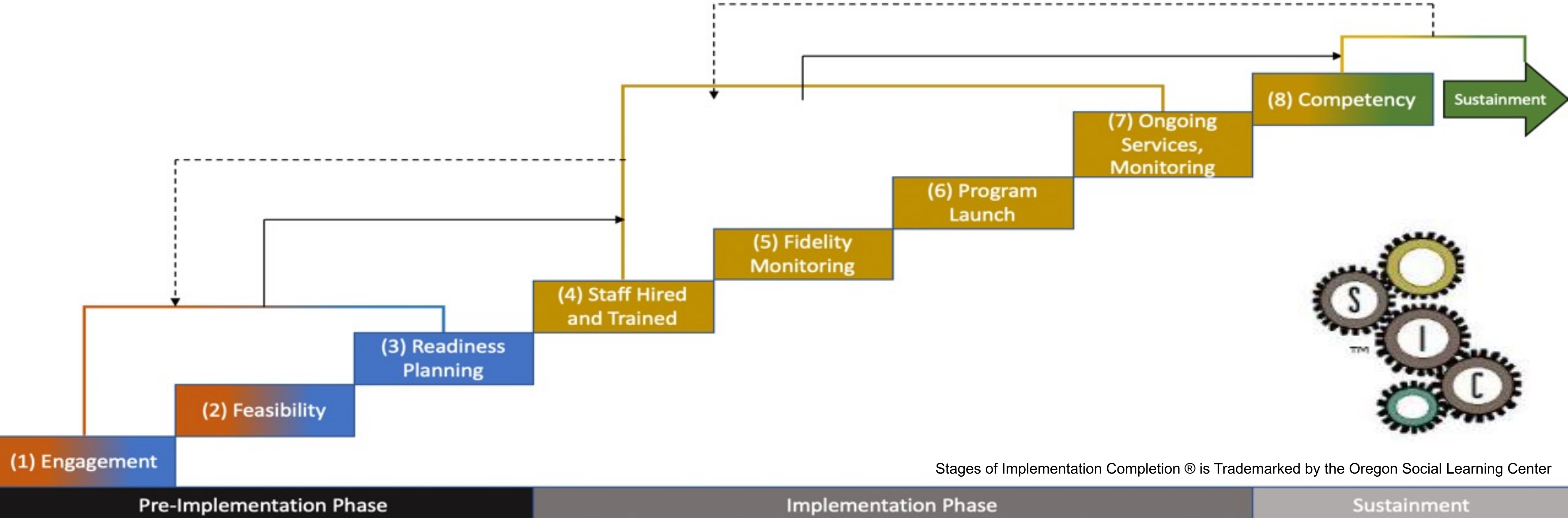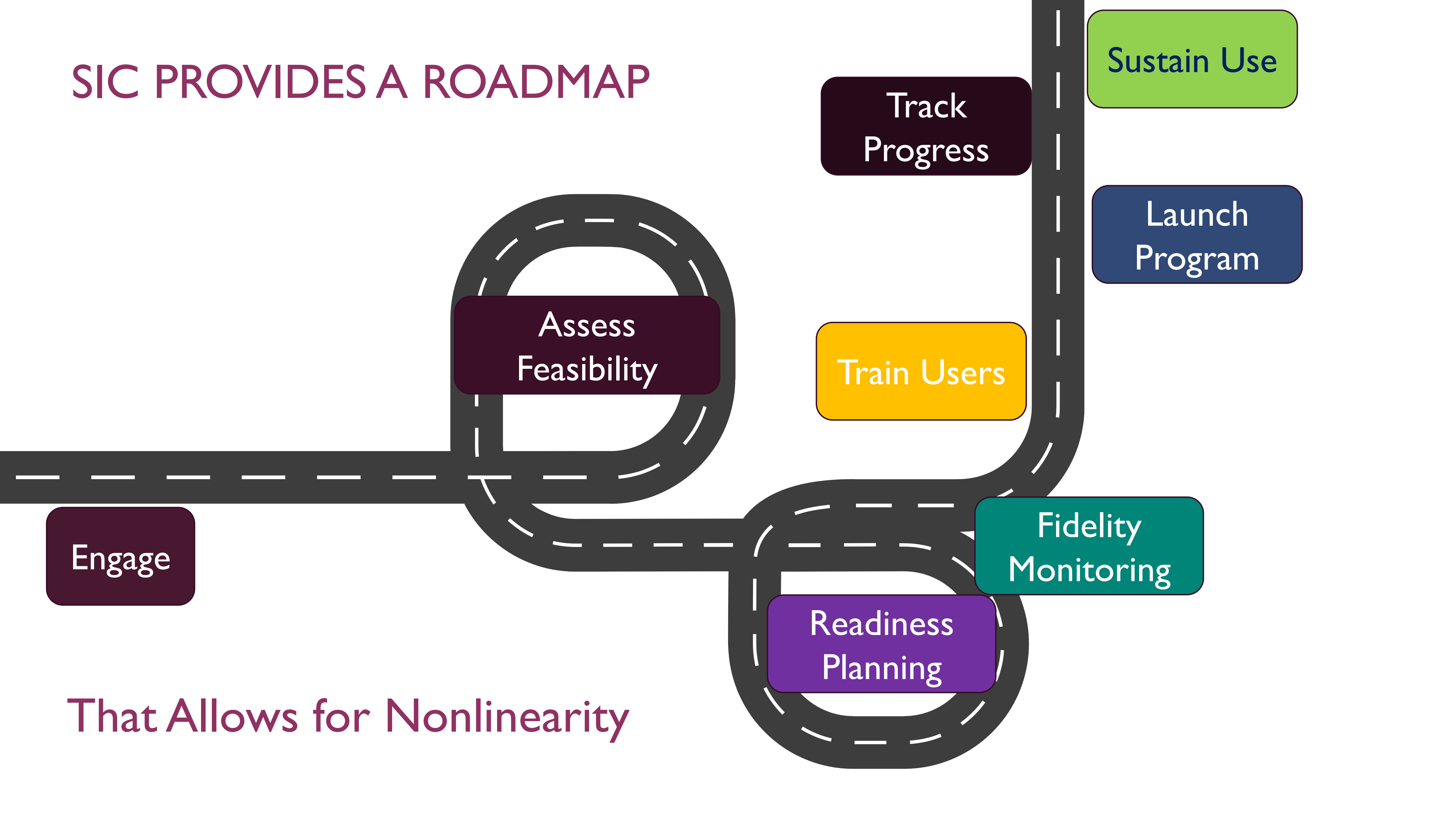
SAMPLE ACTIVITIES WITHIN EACH STAGE

1. Engagement
   Date agreed to consider implementation
2. Consideration of Feasibility
   Date of Community Partner Vision Meeting
3. Readiness Planning
   Date of cost calculator/funding plan review
   Date referral flow established
4. Staff Hired and Trained
   Date of initial supervisor training
5. Fidelity and Adherence Monitoring Established
   Date fidelity technology set-up
6. Services and Consultation Begin
   Date of first patient enrolled
7. Ongoing Services, Consultation, Fidelity, Feedback
   Date of Implementation Review #1
   Date 50% of providers achieve 80% fidelity
8. Competency (certification)
   Date first provider achieves certification standards

SIC PROVIDES A ROADMAP

Track Progress

Sustain Use

Launch Program

Assess Feasibility

Train Users

Engage

Fidelity Monitoring

Readiness Planning

That Allows for Nonlinearity

CONSORT Flow Diagram

LEGEND

Ongoing → The site's implementation activities were ongoing at the time of analysis, and thus still had the potential to achieve competence.

Excluded → The site was missing start-up date and/or date achieved competency and/or has unknown sustainment status.

Competent? → Was the site deemed competent in their delivery of the practice with fidelity?

Over two years past start-up? → Was the site active at more than 730.5 days past the program start-up date?

Over two years past competence? → Was the site active at more than 730.5 days past the date of competence certification?

Unknown → The site's data was entered in conflict with established data entry procedures, leading to anomalous sustainment data.

Insufficient opportunity → The site had only achieved competency but continued to deliver services at the time of analysis, and thus had the potential to achieve sustainment.

Initial Sample (*n* = 1778)

Started up (*n* = 522)

Discontinued prior to start-up (*n* = 861)

Competency Available Sample Competency data available (*N* = 313)

Ongoing (*n* = 209)

Competency Combined Sample Preliminary Sample + Discontinued prior to start-up (*N* = 1174)

Excluded (*n* = 105) Missing key date for analysis

Competent?

Sustainment Available Sample Sustainment data available (*N* = 208)

Sustainment Combined Sample Final Sample + Discontinued prior to start-up (*N* = 1069)

Yes (*n* = 94)   No (*n* = 11)

Competent?

Competent in the Competency Available Sample: *n* = 183 (58.5% of **Competency Available Sample**)

Competent in the Competency Combined Sample: *n* = 183 (15.6% of **Competency Combined Sample**)

Yes (*n* = 89)   No (*n* = 119)

Over two years past competence?

Over two years past start-up?

Yes (*n* = 46)   No (*n* = 18)   Unknown (*n* = 3)   Insufficient opportunity (*n* = 22)

Yes (*n* = 72)   No (*n* = 3)   Insufficient opportunity (*n* = 14)

Sustained (competent) based on **Sustainment Available Sample** excluding insufficient opportunity and unknown sites: *n* = 46 (25.1%)

$$\frac{46}{(208 - 22 - 3)} = 25.1\%$$

Sustained (competent) based on **Sustainment Combined Sample** excluding insufficient opportunity and unknown sites: *n* = 46 (4.4%)

$$\frac{46}{(1069 - 22 - 3)} = 4.4\%$$

Sustained (start-up) based on **Sustainment Available Sample** excluding insufficient opportunity: *n* = 72 (37.1%)

$$\frac{72}{(208 - 14)} = 37.1\%$$

Sustained (start-up) based on **Sustainment Combined Sample** excluding insufficient opportunity: *n* = 72 (6.8%)
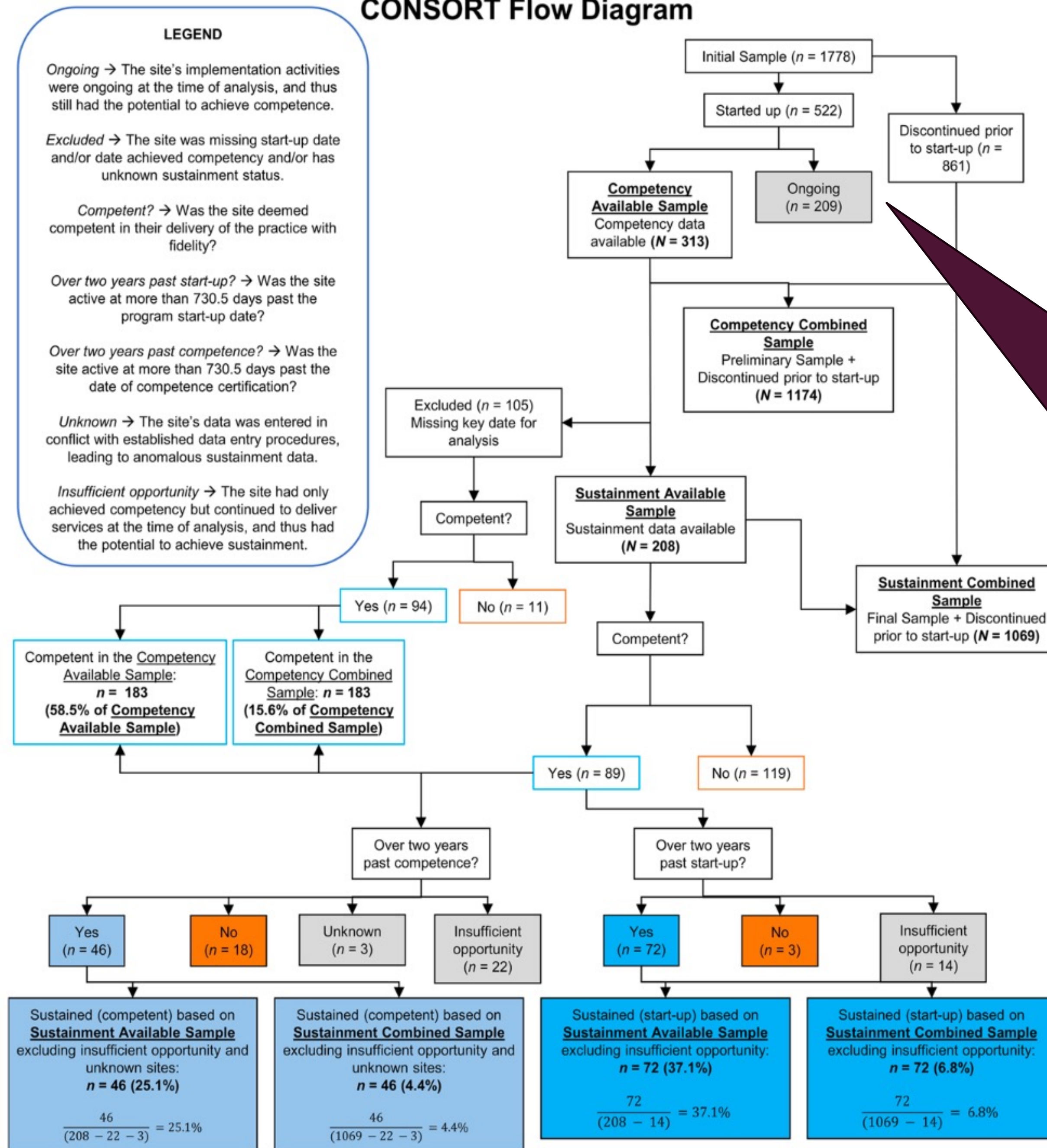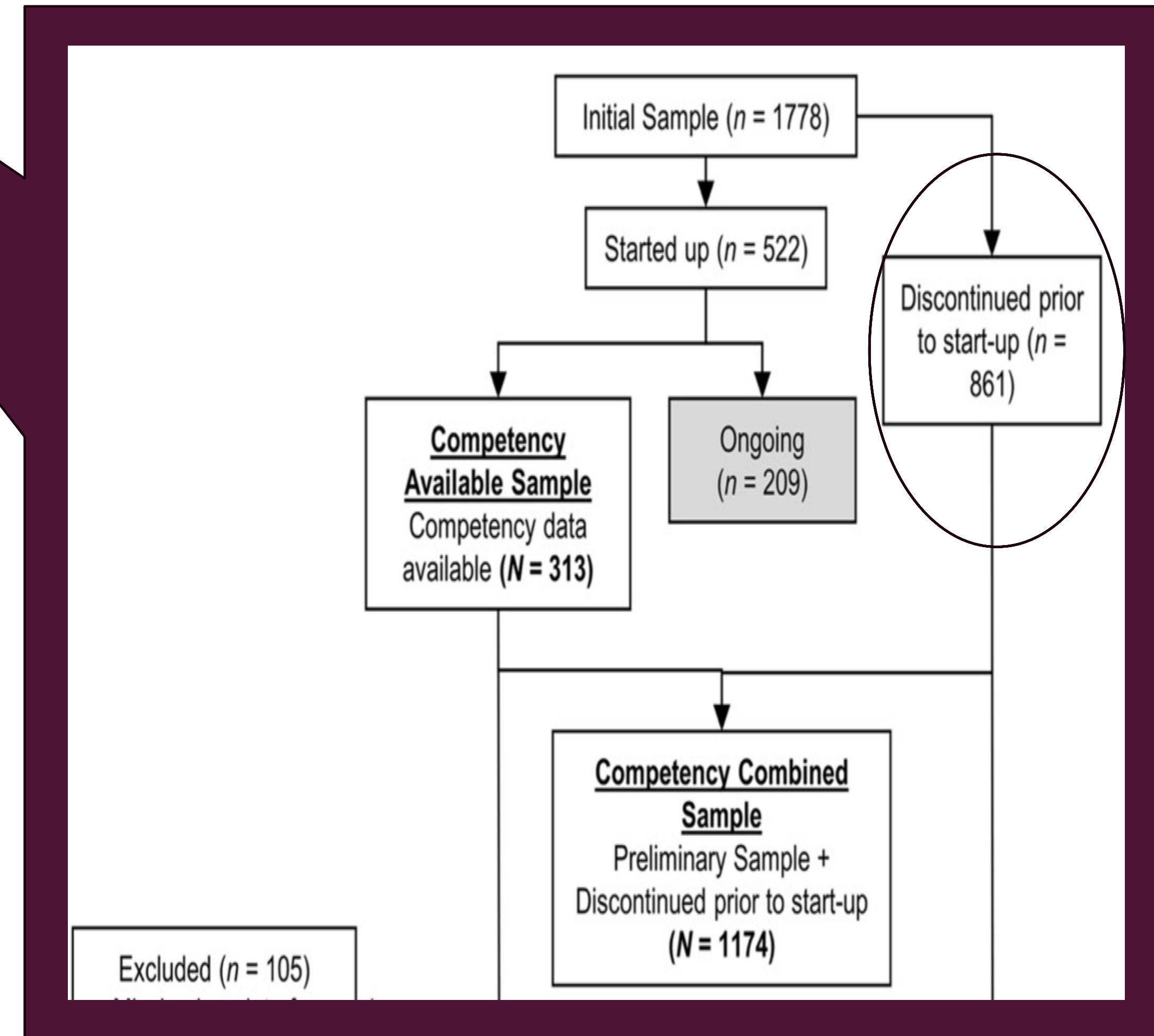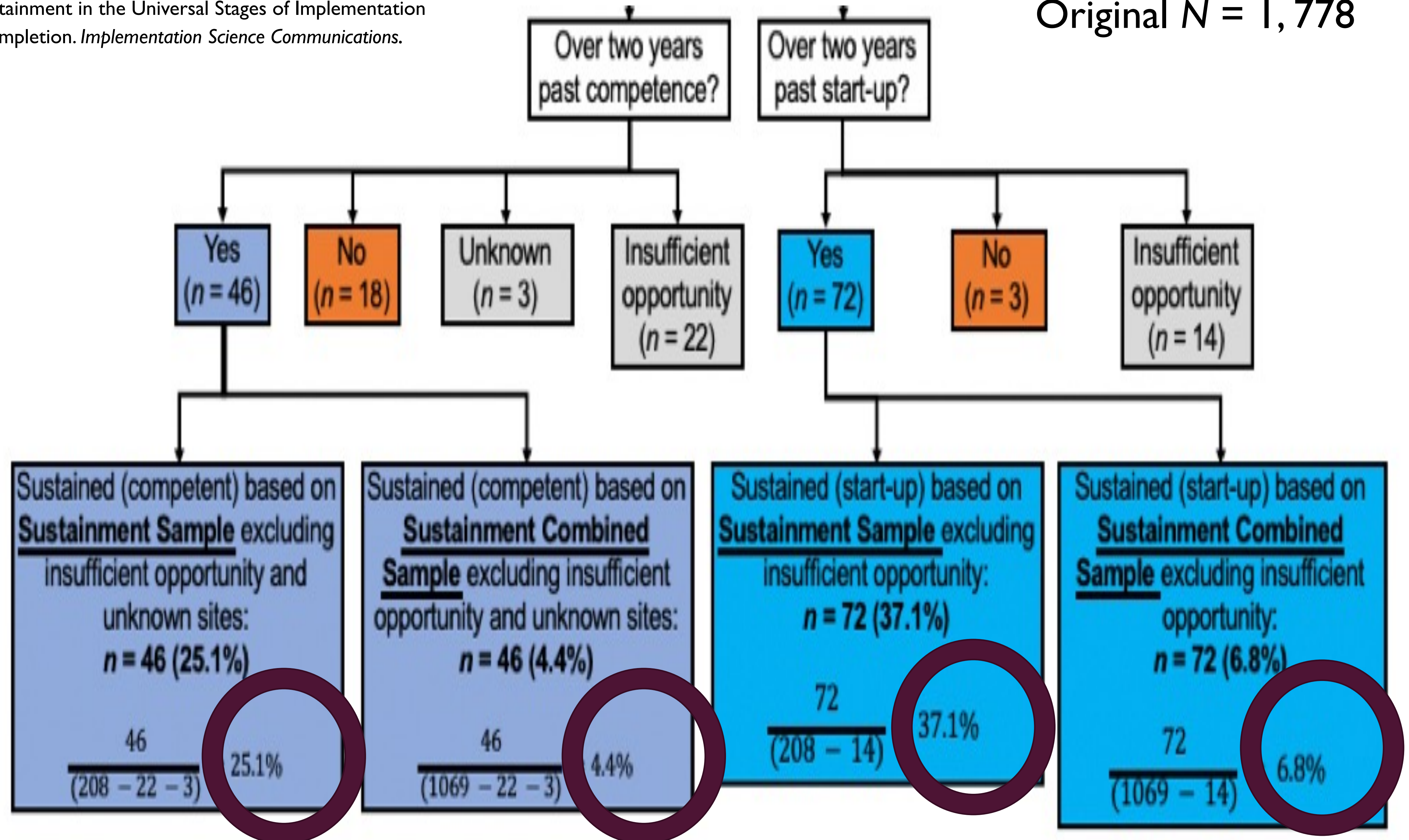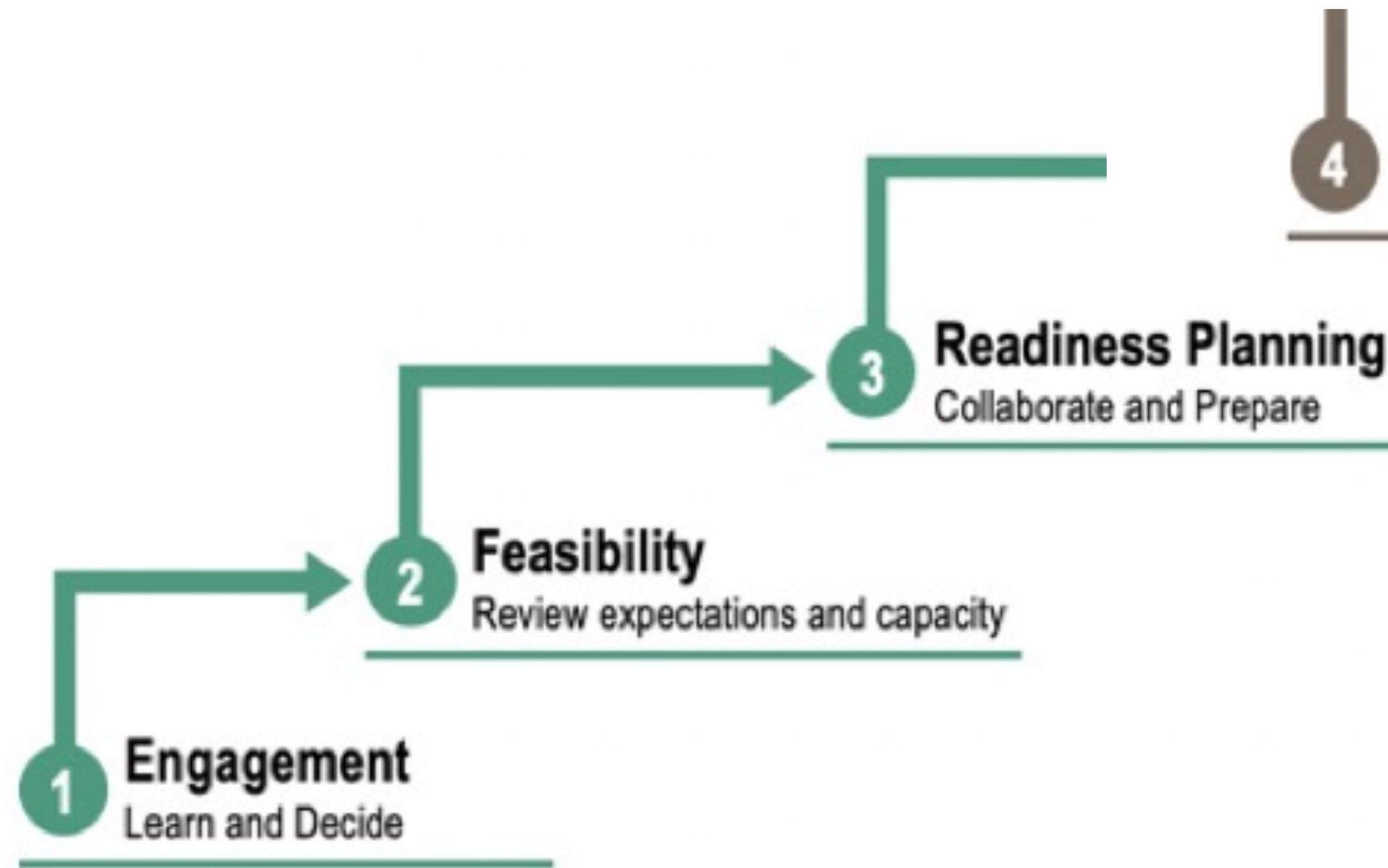
$$\frac{72}{(1069 - 14)} = 6.8\%$$

Fig. 2 The CONSORT diagram of sites implementing an evidence-based practice showing rates of achieving (1) competency, (2) 2-year sustainment post-program start-up, and (3) 2-year sustainment post-competency

Wong, D. R., Schaper, H., & Saldana (2022). Rates of sustainment in the Universal Stages of Implementation Completion. *Implementation Science Communications*.

Original $N = 1,778$

STRONG PRE-IMPLEMENTATION FIDELITY

Presents the Greatest Opportunity to Move the Needle on Successful Implementations to Promote Equity in Receipt of EBP

CUSTOMIZING OR TAILORING A SIC

- Operationalizing the Implementation Process
- Collaborative and Iterative
- Defining "Completion" of Implementation Activities
- Defining Decision Rules for Validity Checks
- Comparing Skeletal SIC with Reality and Making Adju
- Program onto the SIC website and Training

- 80+ Adaptations/Customizations across multiple service sectors feeding into SIC Repository

Saldana, L., Bennett, I., Powers, D., Vredevoogd, M., Grover, T., Schaper, H., & Campbell, M. (2019). *Scaling implementation of Collaborative Care for Depression: Adaptation of the Stages of Implementation Completion. Administration and Policy in Mental Health Services Resarch*

MISSING DATA TYPES

Truly Not Completed

Expansion Team

Not Applicable

Completed-Date Unknown

THREE SCORES

- Duration

- Proportion

- Stage Score

IC Data Entry! Contact us to learn more · Visit the Resources page for helpful website usage guides! · Outer Context tracking is now available!

Sign In

Email

lsaldana@chestnut.org

Password (forgot password?)

••••••••

☐ Remember Me

Sign in

Cookies must be enabled to log in

Do you want to learn more about the SIC? Click here to learn more.

If you have any questions or would like access, please contact us.

Edit Implementation Team Members | Track Turnover | Add to Contact Log

Discontinue Date: | Discontinue

Demographics

1 Engagement

1.a Date regional DHS (

1.b Date Provider Agen

1.c Date of interest indi

1.d Date of interest indi
Track Staff Hours

1.e Date cost informatio
provider, or commu
ⓘ
Track Staff Hours

1.f Date additional info
Track Staff Hours

Activities

Pre-Implementation

Proportion | Duration

1 2

3 4 5

6

7

2.h - Date of selected Provider Agency shared vision meeting with community partners and system (regional DHS (e.g., child welfare, self-sufficiency, DCFS, etc.)): 03/01/2021

8

● 100%   ● 366 days

1 2

3 4 5

6

7

8 Post

● 100%   ● 343 days

HOW DO I PICK MY STRATEGIES?

WHAT ARE THE CONDITIONS OF IMPLEMENTATION?

- Site Demographics
- Urban vs Rural
- International or Domestic
- Service Sector
- Population Being Served
- Funding Source
- Policy Mandated
- Expansion Characteristics if Applicable

CONSIDERATIONS FOR DEFINING IMPLEMENTATION ACTIVITIES

Readin...

Stages of Imp...

The readiness process is all about getting the "...
other components of the implementation proces...
monitoring intervention fidelity.

Some **typical roles** that might be involved in t...

- **EBP developer:** the researcher or grou...
- **EBP purveyor:** the group who provides...
- **Program champion for the site:** the s...
- **Implementation coordinator:** the liais...
- **Agency or organization director:** the leader or lead... ...plementing site as a whole

The Stages of Implementation Completion (SIC)... readiness activities that are common across many types
of implementations. Although not all activities... ...nt or relevant for each implementation, these are the most
common activities across all different im... ...tion types.

For each activity, in the "consid... ...ns" section, complete the following:

1. **Name:** the activity for your implementation.
2. **Definition:** What does this mean for your implementation process?
3. **Function:** Why is this activity important for your implementation?
4. **Roles:** Who is needed (internal and external partners) to complete this activity?
5. **When:** When in your readiness process does the activity need to be completed?
6. **Action:** What are the steps you can take to ensure you're ready?

For each activity, in the "considerations" section, complete the following:

1. **Name:** the activity for your implementation.
2. **Definition:** What does this mean for your implementation process?
3. **Function:** Why is this activity important for your implementation?
4. **Roles:** Who is needed (internal and external partners) to complete this activity?
5. **When:** When in your readiness process does the activity need to be completed?
6. **Action:** What are the steps you can take to ensure you're ready?

FIRST STEP IN IMPLEMENTING

Stage 1. Engagement

Site is informed/learns services/program available

Site indicates interest

Site initially agrees to try implementation

Initial cost/resource information sent

STAGE 1: ENGAGEMENT
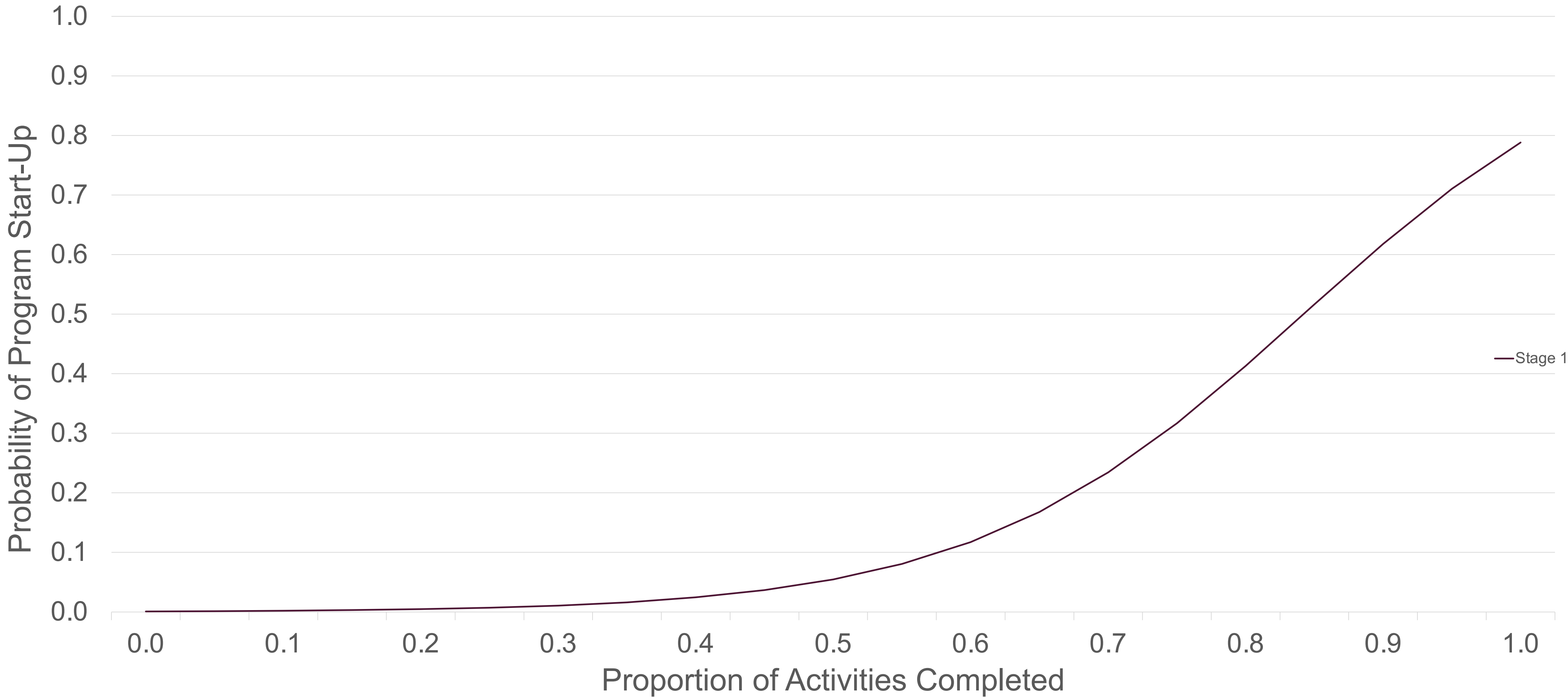
IS THE IMPLEMENTATION FEASIBLE IN THIS CONTEXT?

Stage 2: Consideration of Feasibility
Site planning contact
Community Partner Feasibility Session
Assessment of Feasibility to Do All Components
Program Champion Identified
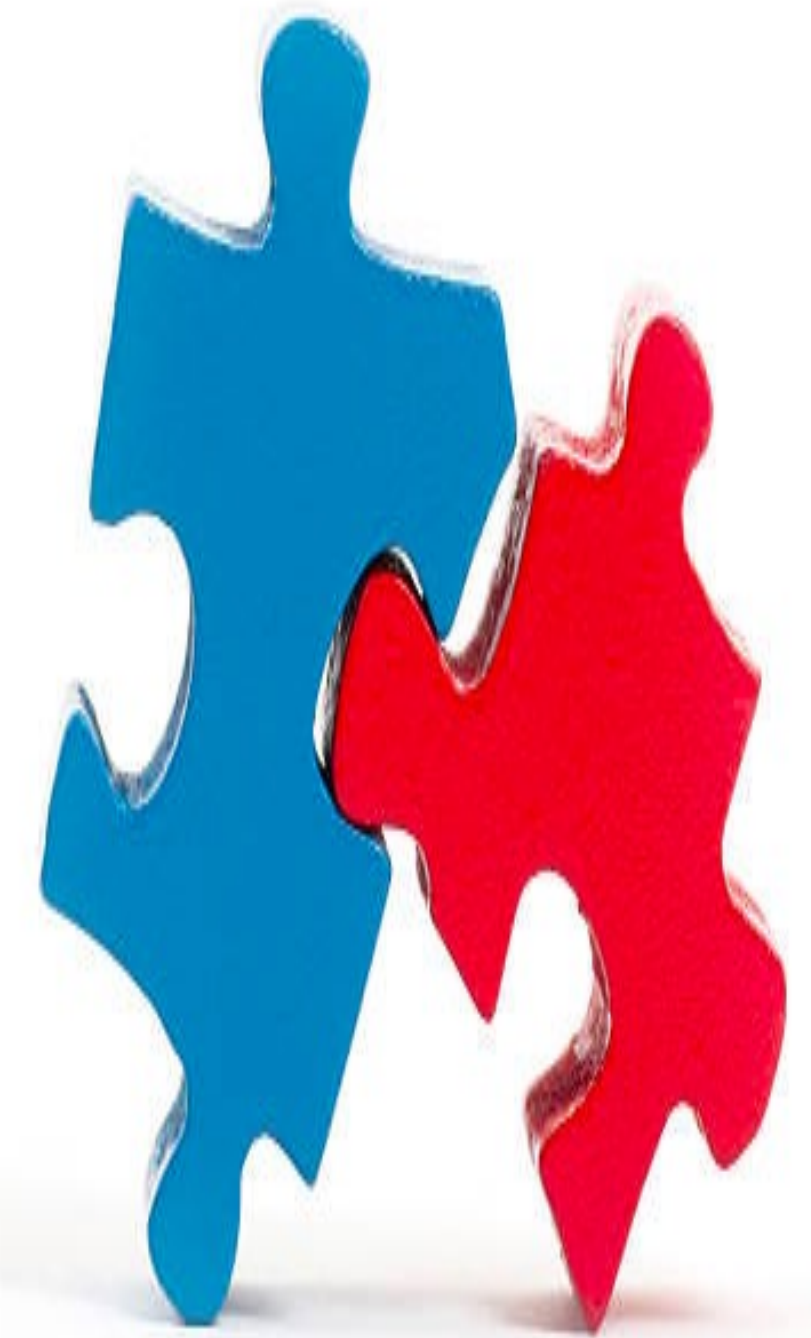
STAGE 2: ASSESSING FEASIBILITY
1,287
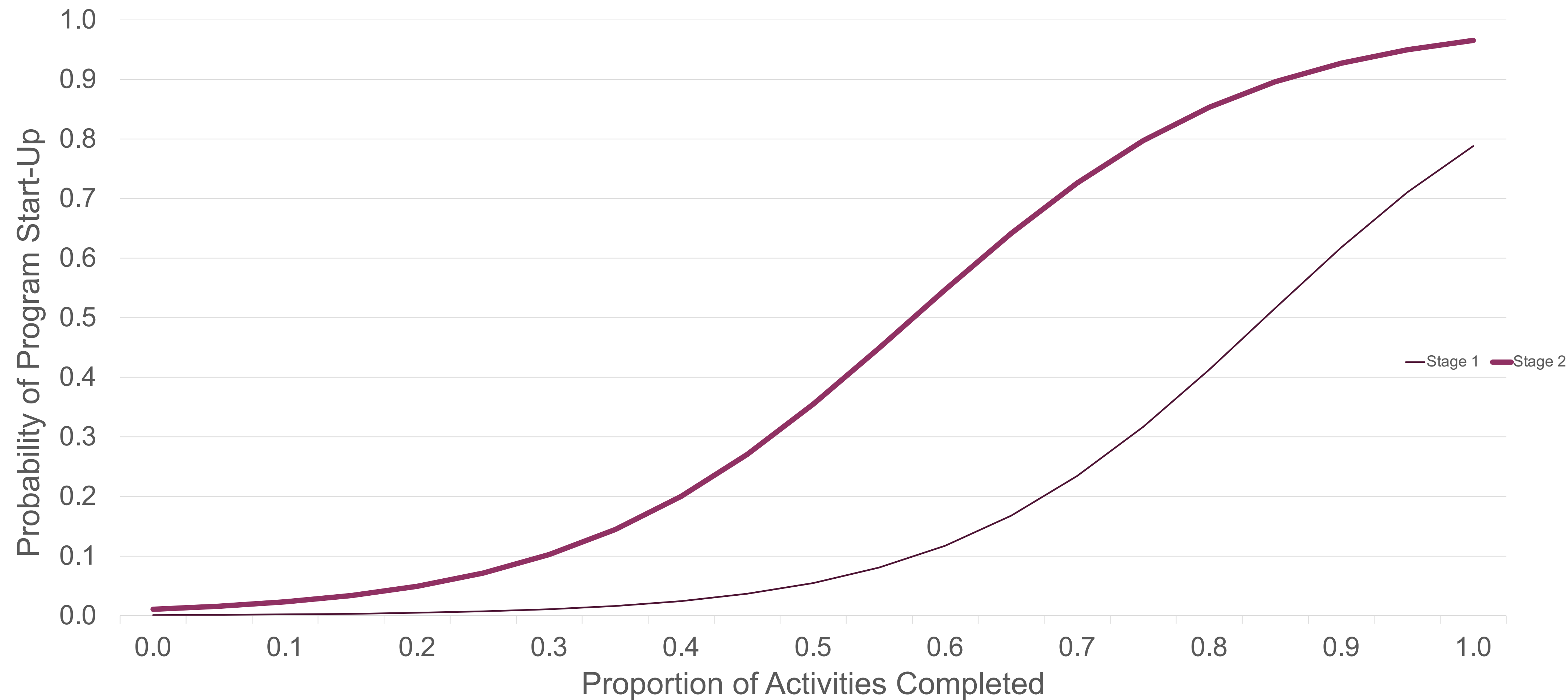
ESTABLISHING READINESS

Readiness Planning
Funding Plan – Short and Long-Term
Staffing – Hiring and Sequencing
Secondary Staffing – Recruitment and Support
Referral Criteria and Recruitment Plan
Communication Plan Finalized
Community Partner and Leadership Meeting
Written Implementation Plan Completed
Service Provider Identified
Contracts, MOUS, DUAs Completed
Site Receives Initial Intervention Materials

STAGE 3: READINESS
1,287

Probability of Program Start-Up

Proportion of Activities Completed

Stage 1   Stage 2
Stage 3

BUT WE KNOW...

IS THIS BRAND SUSTAINABLE OR NOT?
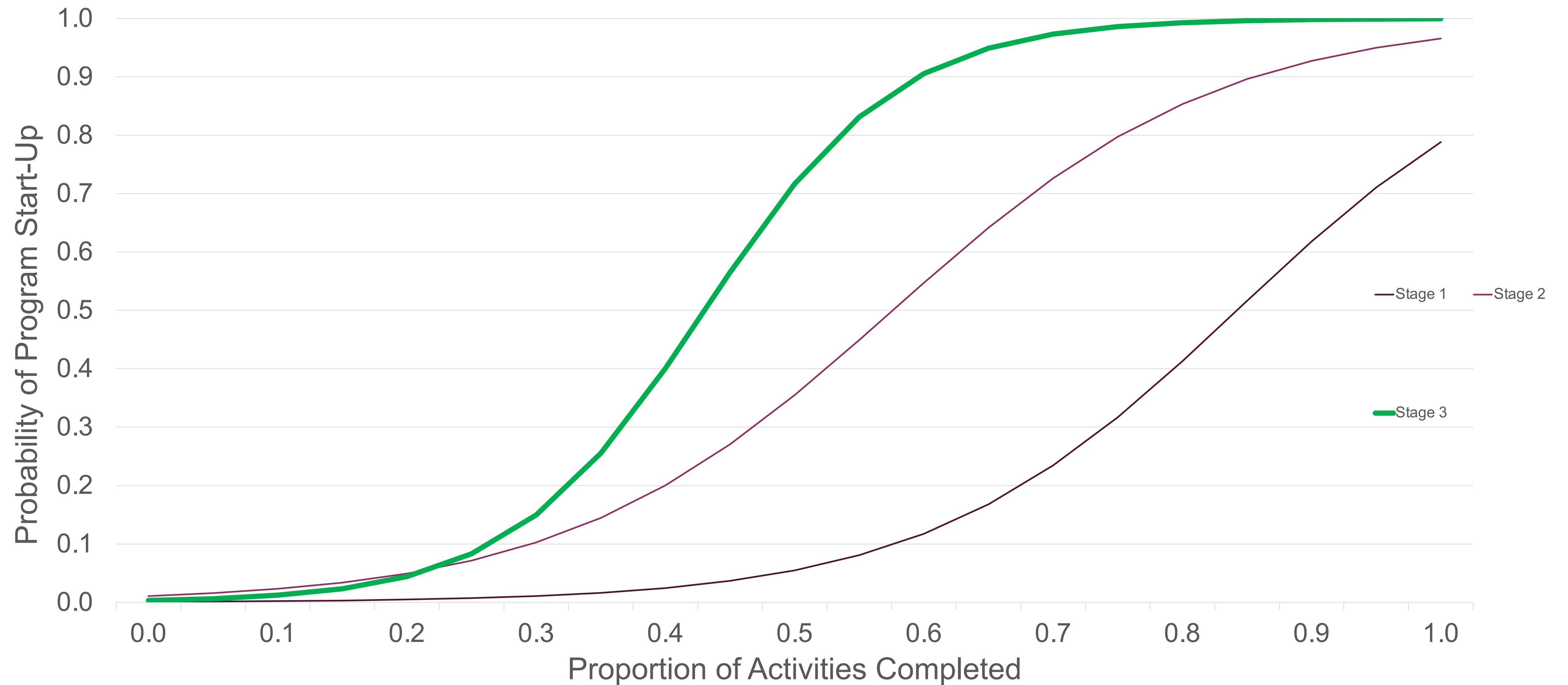
Not All Programs That Launch Sustain

COMBINATION OF PROPORTION AND DURATION MATTERS
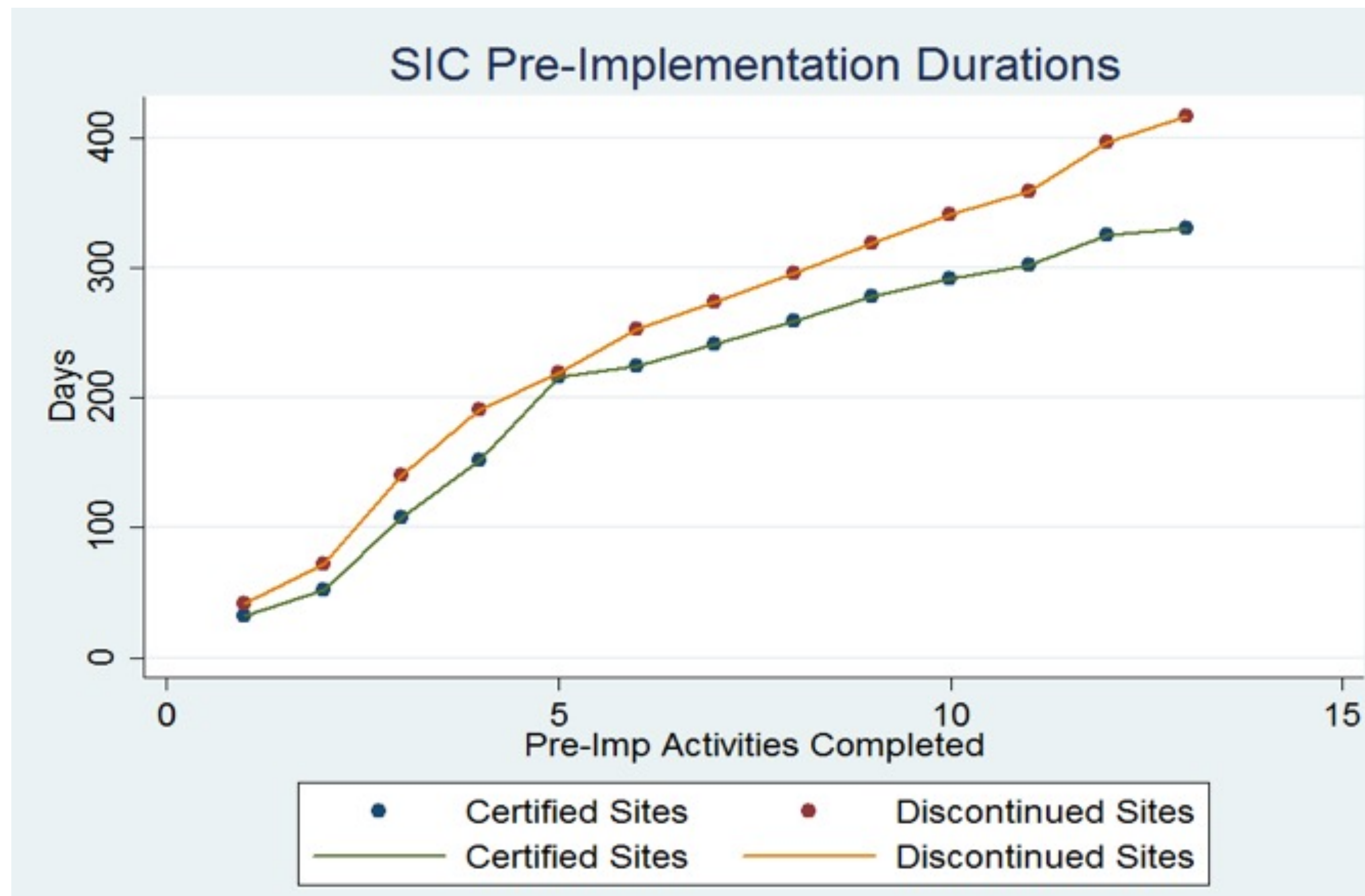
Across 8 EBPs in Different Service Sectors

Certified sites (n=70)

Discontinue (n=214)

PRE-IMPLEMENTATION AND IMPLEMENTATION BEHAVIOR PREDICTING COMPETENCE FOR SUSTAINMENT
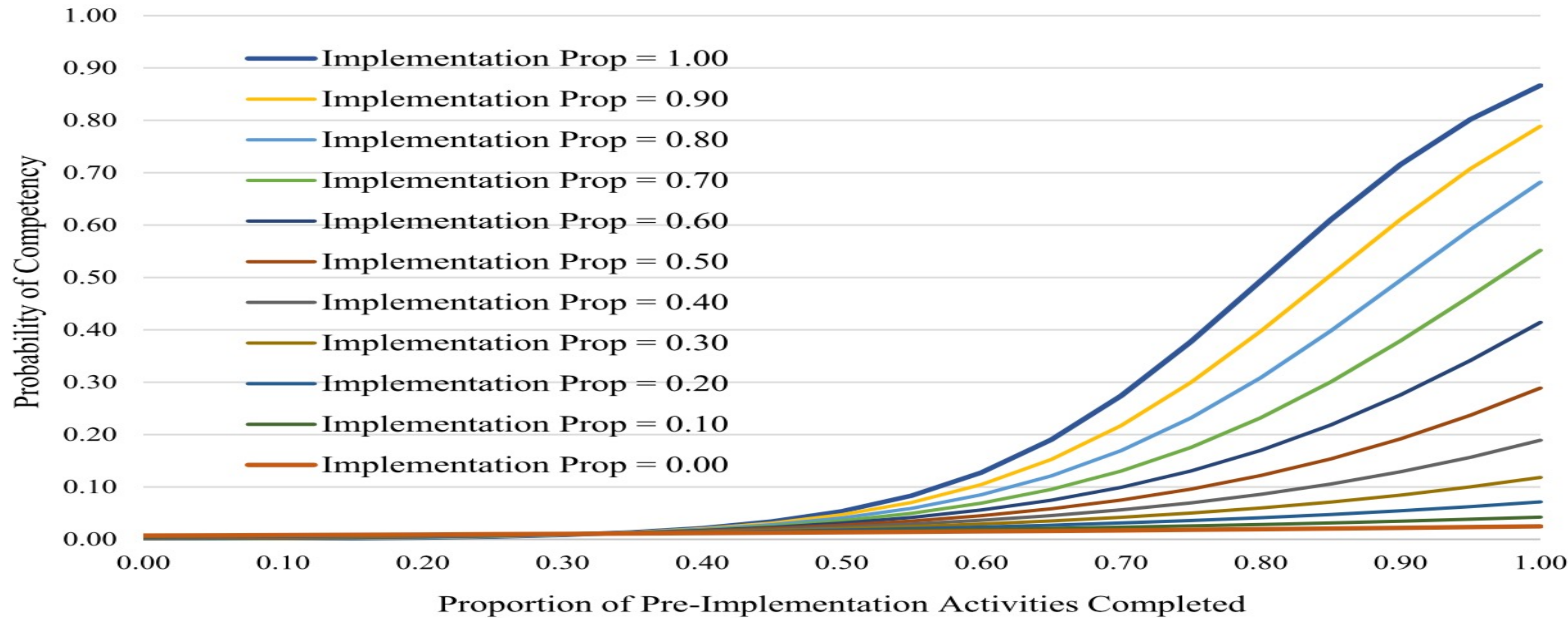
Predicting Program Start-Up
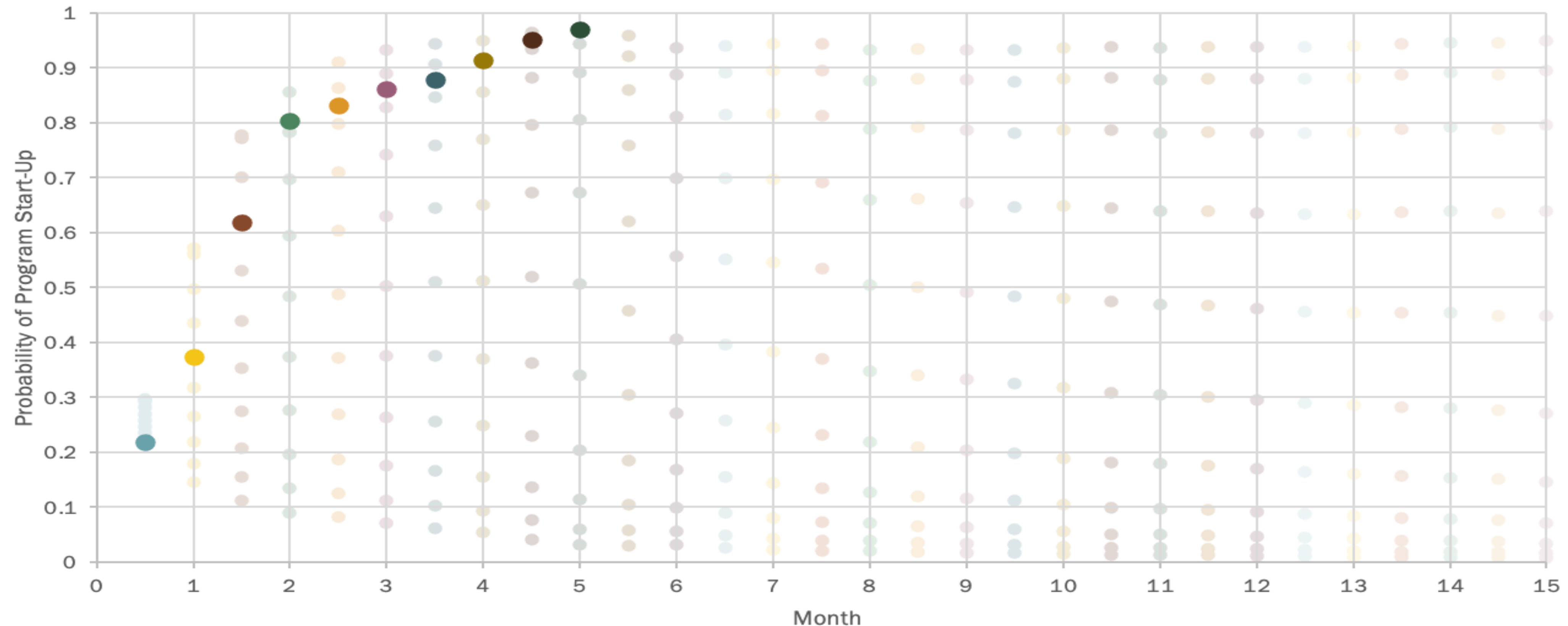
Example of a site that hits 80% by 2 months and continues at a steady pace

Note: No sites hit 80% probability prior to 2 months. This is the "fastest" successful pace available

Predicting Program Start-Up
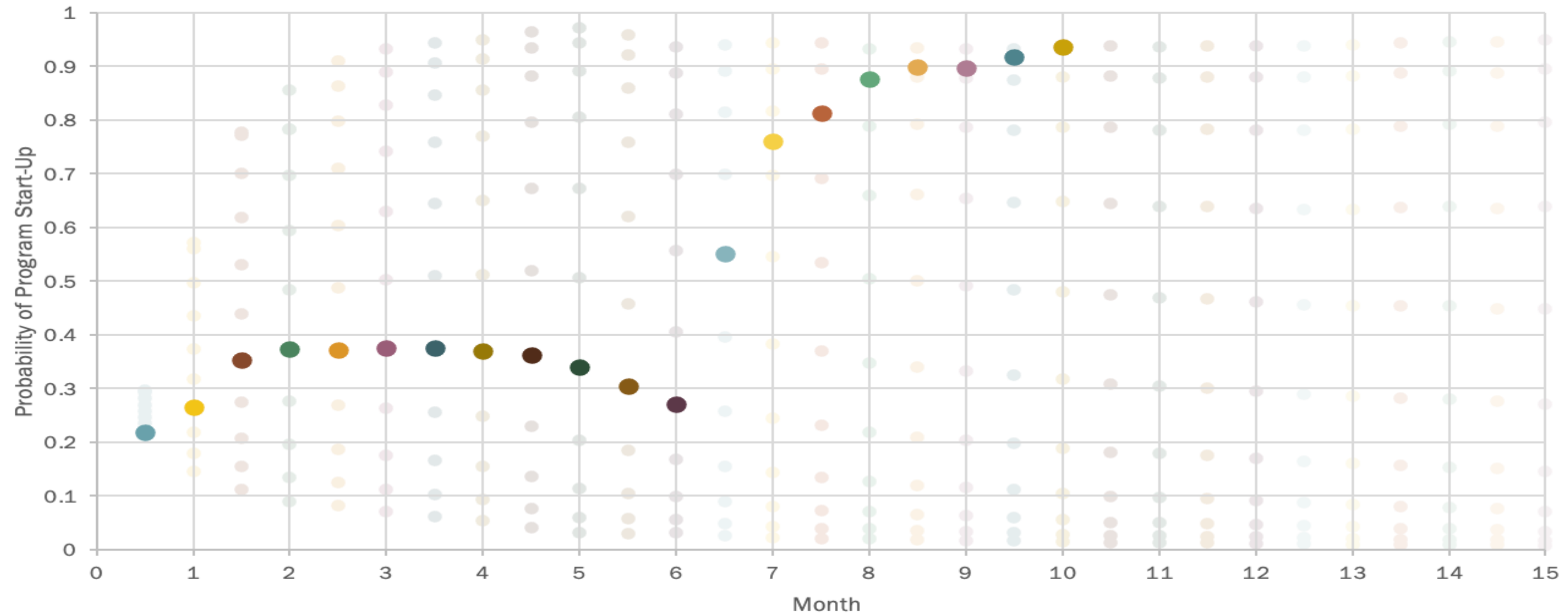
Example of a site that hits 40% by 2 months, then stalls out.

Eventually probability of successful launch starts to decrease. To correct for this, must jump-start -- must have high proportion and consistent movement through completion of pre-implementation

Resources

What is the SIC?

The Stages of Implementation Completion® (SIC) is an eight stage tool of implementation proc... implementation, and initiation of sustainment. SIC scores have predicted variations in impleme...

Pre-Implementation Phase Stages 1-3

1 Engagement Learn and Decide

2 Feasibility Review expectations and capacity

3 Readiness Planning Collaborate and Prepare

4 Staff Hired and Trained Support

Implementation Phase Stages 4-7

5 Fidelity Monitoring Feedback

6 Consultation Launch Critical Components

7 Ongoing Services Support and Monitor

8 Compete...

Infographic recreated from SAMHSA's National Registry of Evidence-Based Programs and Practices, 2018.

User Guides

Missing Data
Practice Frequencies Report
Proportion and Duration Report
Staff Turnover Tracking
Outer Context Primer
Outer Context Purveyor Handout
Outer Context User Guide
SIC Website User Guide
Call Guide Instructions
Cost of Implementing New Strategies (COINS)
SIC Validation Resource
SIC Progress Indicator Resource

Pre-Implementation and Implementation Progress Indicators

These indicators, located on the Teams List (or widget) page, can help gauge your team's (or site's) implementation progress.

Progress Indicators

Filter: All | Pre Competent | Competent | Not Discontinued | Discontinued | Pre Program Start-Up | Progra...

Name	Activities	Pre-Implementation Proportion	Pre-Implementation Duration	Implementation Proportion	Implementation Duration
Team A	1 2 3 4 5 / 6 7 8 / Post	100%	334 days	82%	629 days

The Progress Indicators offer two types of information:

1) <u>At-a-glance</u> proportion and duration values.
2) <u>Color progress indicators</u> of how this implementation compares to other implementation efforts that reached competency (SIC Stage 8) when those efforts were at a similar point in their implementation.

The color indicators answer the following questions:

Proportion: "Compared to sites of a similar age (i.e., duration) and reached competency, <u>how many activities has this site completed</u>?"

- 🔴 Too little completed
- 🟡 Somewhat too little *or* too much completed
- 🟢 Proportion is about right!

Duration: "Compared to sites that completed a similar number of activities (i.e., proportion) and reached competency, <u>what is the pace of activity completion for this site</u>?"

- 🔴 Too slow *or* too fast
- 🟡 Somewhat too slow *or* too fast
- 🟢 Duration is about right!

THE IMPLEMENTATION PATH CHOSEN IMPACTS RESOURCES

COMMON PRE-IMPLEMENTATION COSTS

- Engagement phone calls with purveyor/developer

- Community Partner meeting (person hours and travel)

- Identifying Program Champion

- Establishing program feasibility (securing funding; determining billing) and associated documentation

- Organizational readiness process (Agency buy-in across levels; Leadership established) and associated documentation

- Establishing Referral Connections and Developing Referral/Screening Protocols

COMMON IMPLEMENTATION COSTS

- Staff Hiring

- Training (not provided by EBP)

- Fidelity Monitoring Systems (e.g., IT tools– computers, video, audio; Service subscriptions– call centers, web-based systems)

- Clinical Supply Costs (e.g., incentives, supplies)

- Travel Costs (both for trainings and for intervention)

- New Additional Overhead Costs

- Increased Organizational Support (e.g., IT, Reception)

COMMON SUSTAINMENT COSTS

- Ongoing and Recursive Implementation Costs
  - Community Partner Meetings
  - Referral Refreshers
- Booster Trainings or Consultation
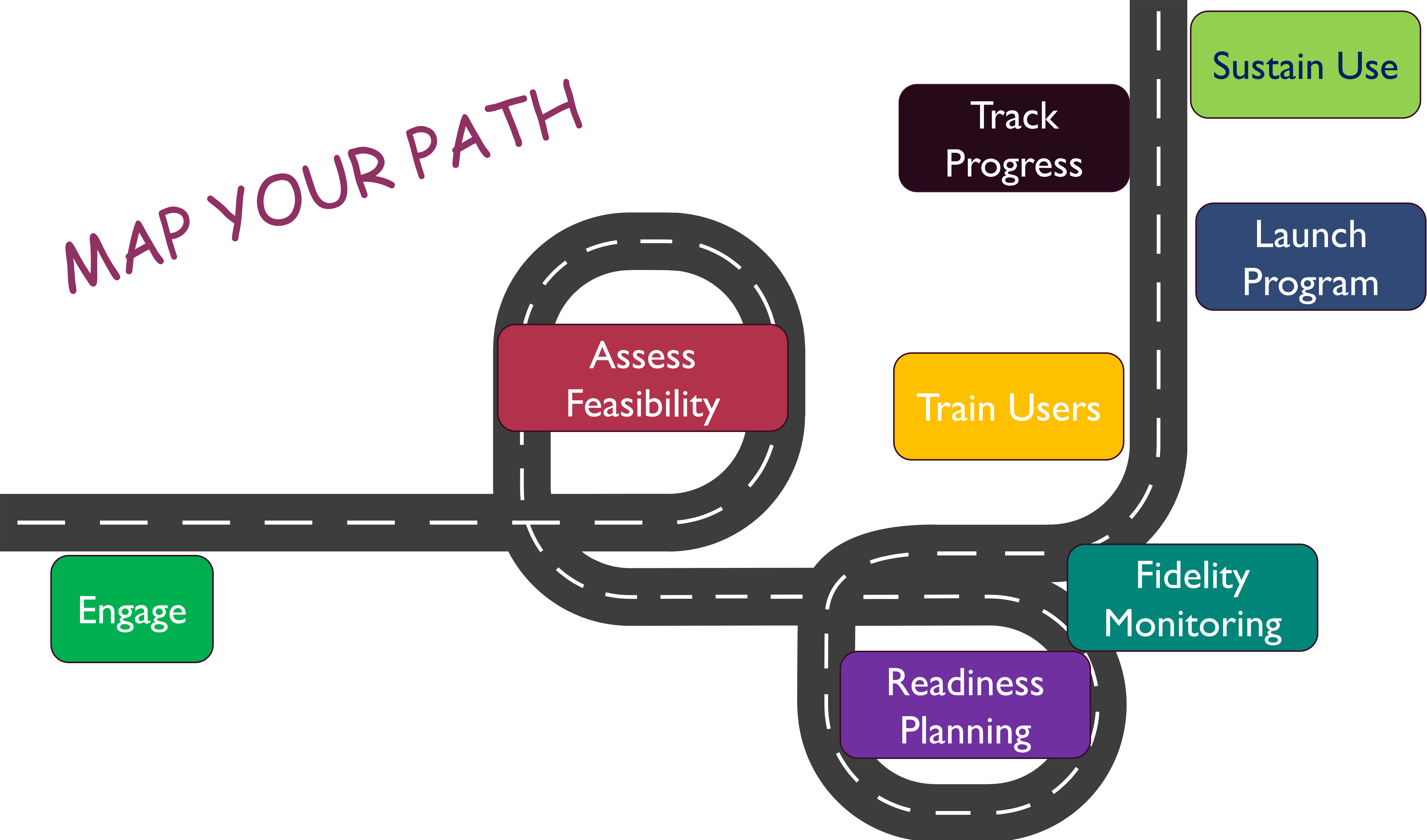- Turnover Costs
- Re-training, Re-engagement

CONCLUSIONS AND NEXT STEPS

- The SIC is a measure of implementation fidelity across the full implementation process.

- Strong implementation fidelity considers "what" you do and "how" you do it.

- Facilitating strong implementation fidelity within new contexts and under unique environments, such as those targeted to address underserved populations, has the potential to facilitate implementation success and increase equitable access to EBPs.

- Purposeful selection and timing of implementation activities/strategies can help support an efficient and expected process, increasing the chance for a resource-intentional implementation.

MAP YOUR PATH

Engage

Assess Feasibility

Readiness Planning

Train Users

Track Progress

Fidelity Monitoring

Launch Program

Sustain Use

THANK YOU

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