A Stepped Wedge Cluster Randomized Trial to Implement and Evaluate a Family Caregiver Skills Training Program (iHI-FIVES) in Veterans Affairs Healthcare System (VAHCS): Implementation Outcomes

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ADAPT
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Informal Caregiving: The "Gap"

26.4 million unpaid caregivers in US

Consequences: caregiver burnout and strain

<10% of caregivers report getting the training they need

Implementation Science

If we **know** that expanding evidence-based caregiver trainings within health systems is one promising avenue to increase supports to caregivers, how do we integrate this into **practice**?

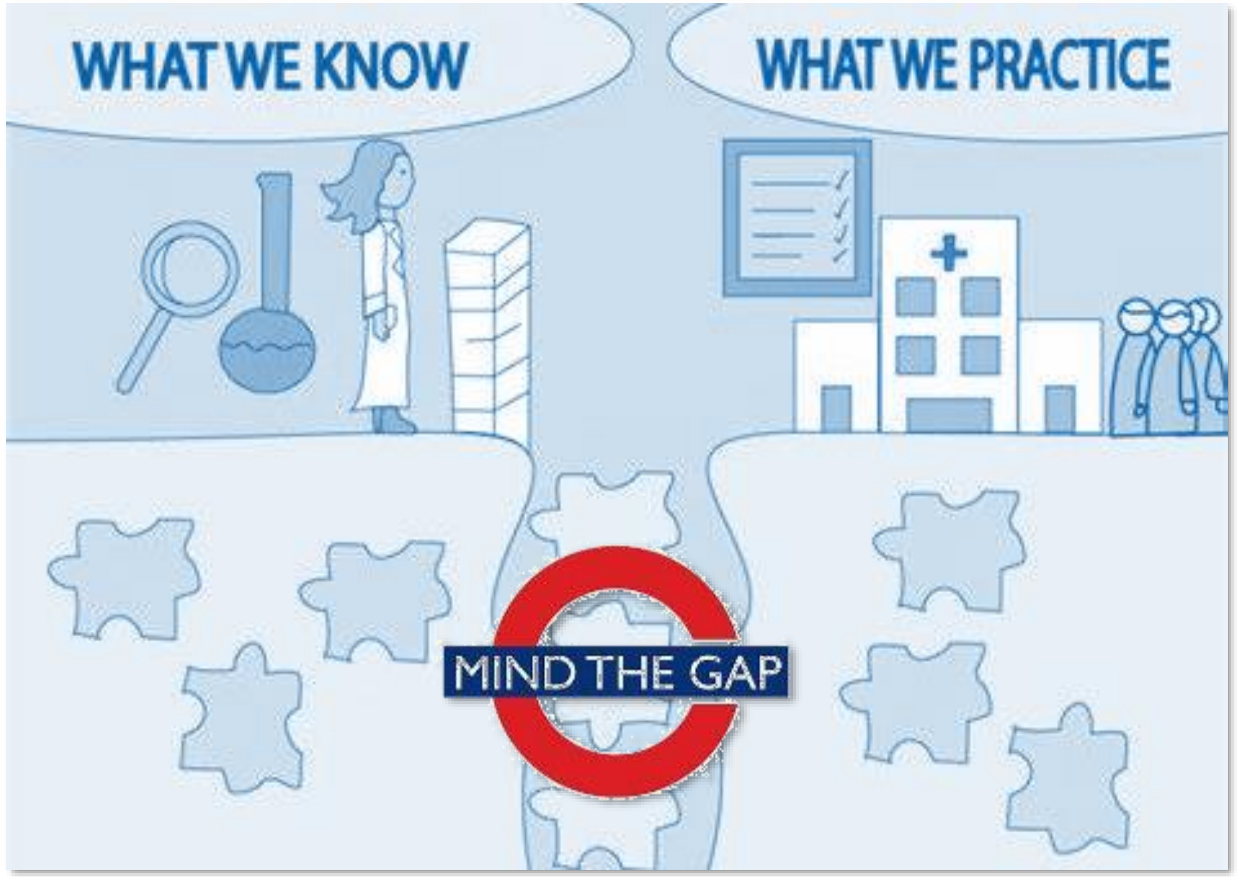
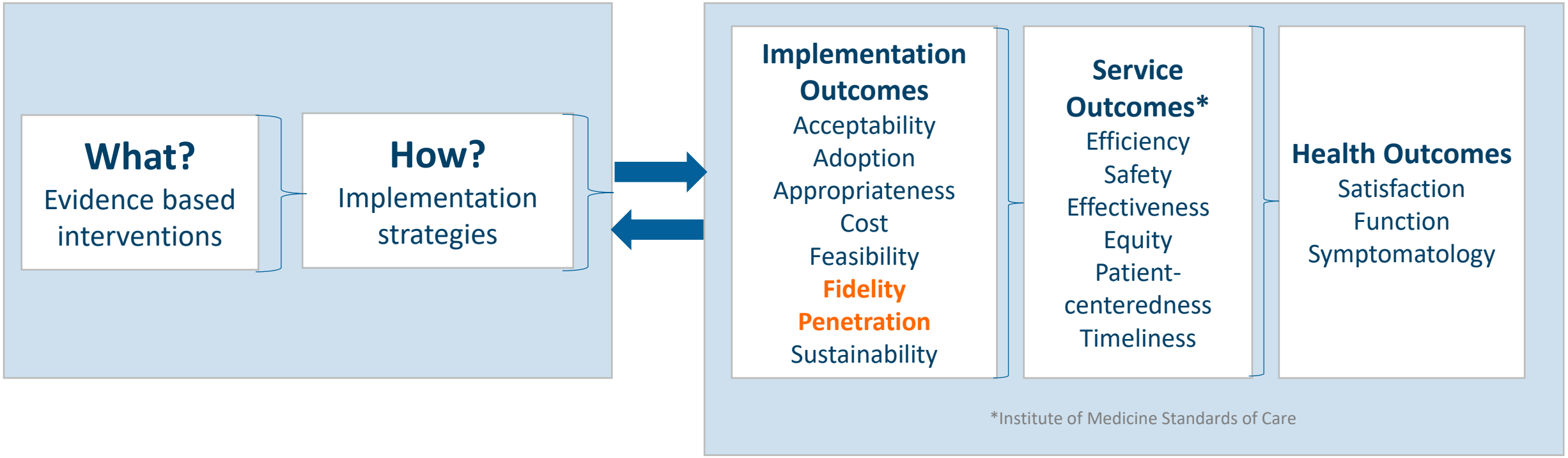


Image: https://activeagingrt.ca/bridging-the-know-do-gap-in-research/

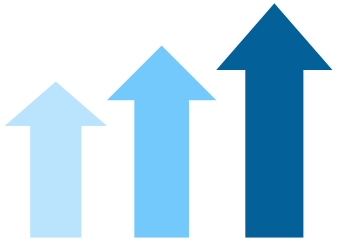
Implementation Science: Research Methods



Proctor EK et al, 2009; Proctor EK et all 2011

The Intervention: iHI-FIVES

- Group training for unpaid caregivers of Veterans of all eras, all conditions:
  - 4 interactive classes and optional training topics delivered by social work clinicians
  - Focuses on psychological (coping), support seeking, and clinical (hands-on) skills
- RCT (Durham, NC; 2013-2016) shown to improve*:



Caregiver's experience of VA care at 6 months and at 12 months and Veteran's experience at 12 months

Caregiver feelings of isolation

Veteran days at home in the community at 12 months (9% more)

* Van Houtven, C.H., Smith, V.A., Lindquist, J. et al. J GEN INTERN MED (2019)

There is little evidence on **implementation outcomes** of caregiver interventions within health care systems

Objectives:

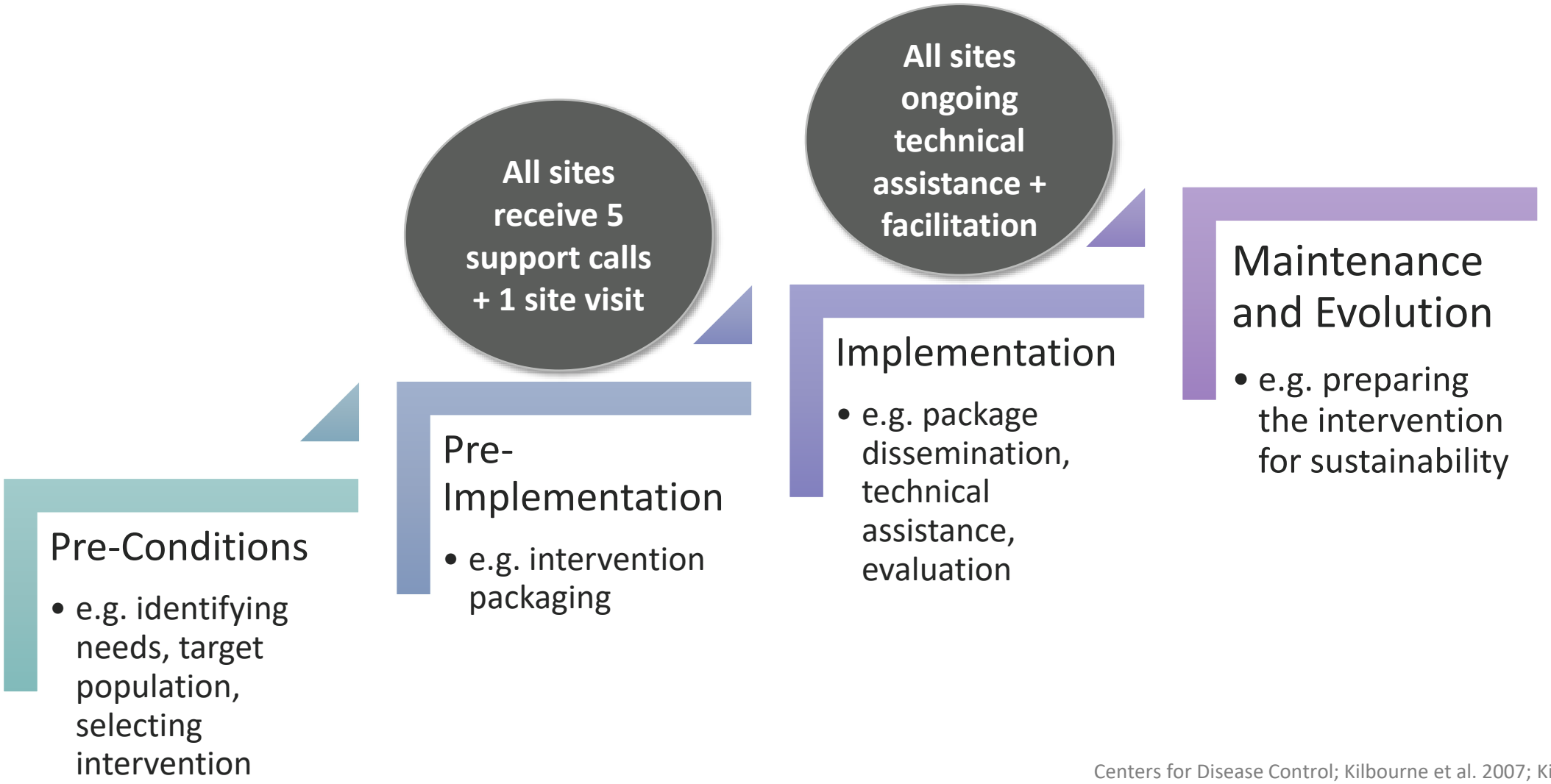
Assess the implementation of iHI-FIVES delivered in 8 Veterans Affairs hospitals (65 clinicians trained in intervention)

Evaluate whether a team collaboration implementation strategy (CONNECT) improves implementation outcomes of penetration and fidelity

Implementation Strategies

Replicating Effective Programs (REP): *All 8 sites*	Balance **fidelity** and **adaptation** Tailor to local condition
CONNECT: *Half randomized*	Promote **team function and readiness for change** Interactive sessions for delivery staff

Replicating Effective Programs



Centers for Disease Control; Kilbourne et al. 2007; Kind et al. 2016

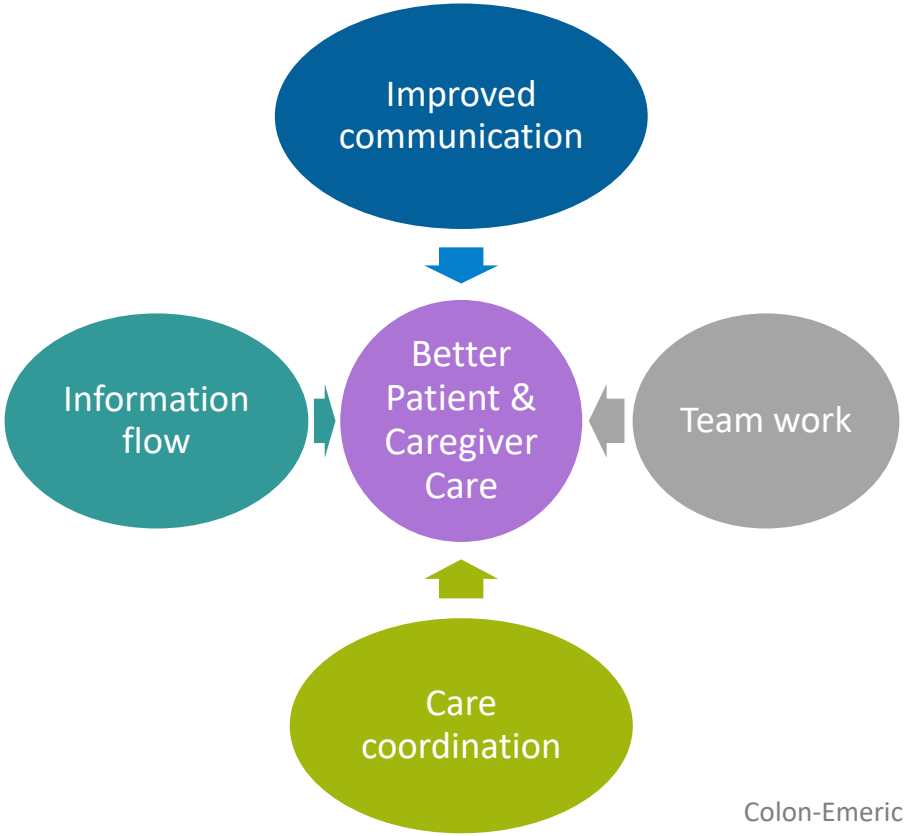
CONNECT Team Strategy

Based on complexity science, intervention designed to improve delivery team connection, communication, and interactive problem solving

4 randomly selected sites received:

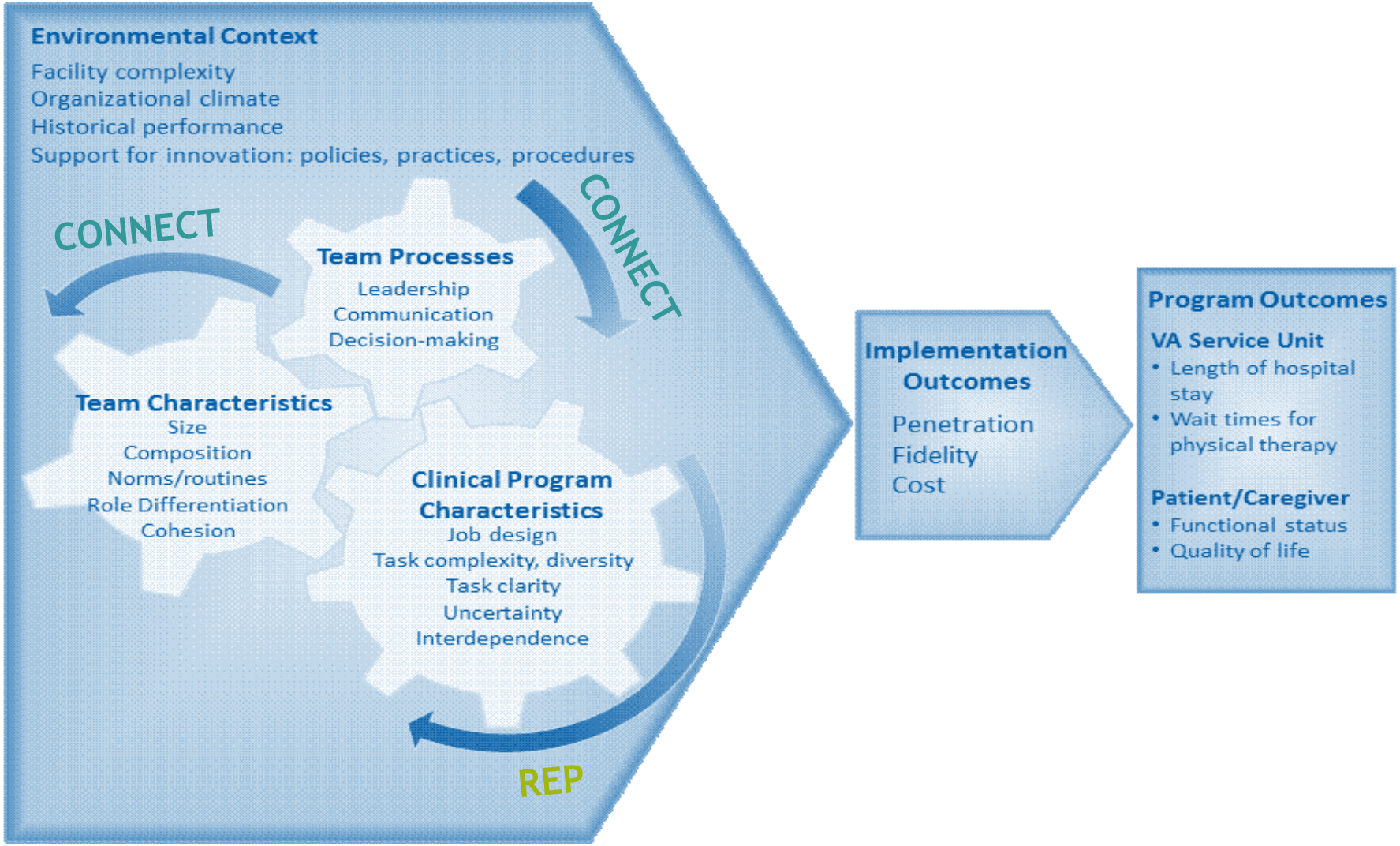
- **CONNECT session (2 hrs):**
  Facilitated in-person:
  - CONNECT & Learn training
  - Relationship mapping (individual and groups)

- **Follow-up activities (1 hr):**
  - Mentoring call



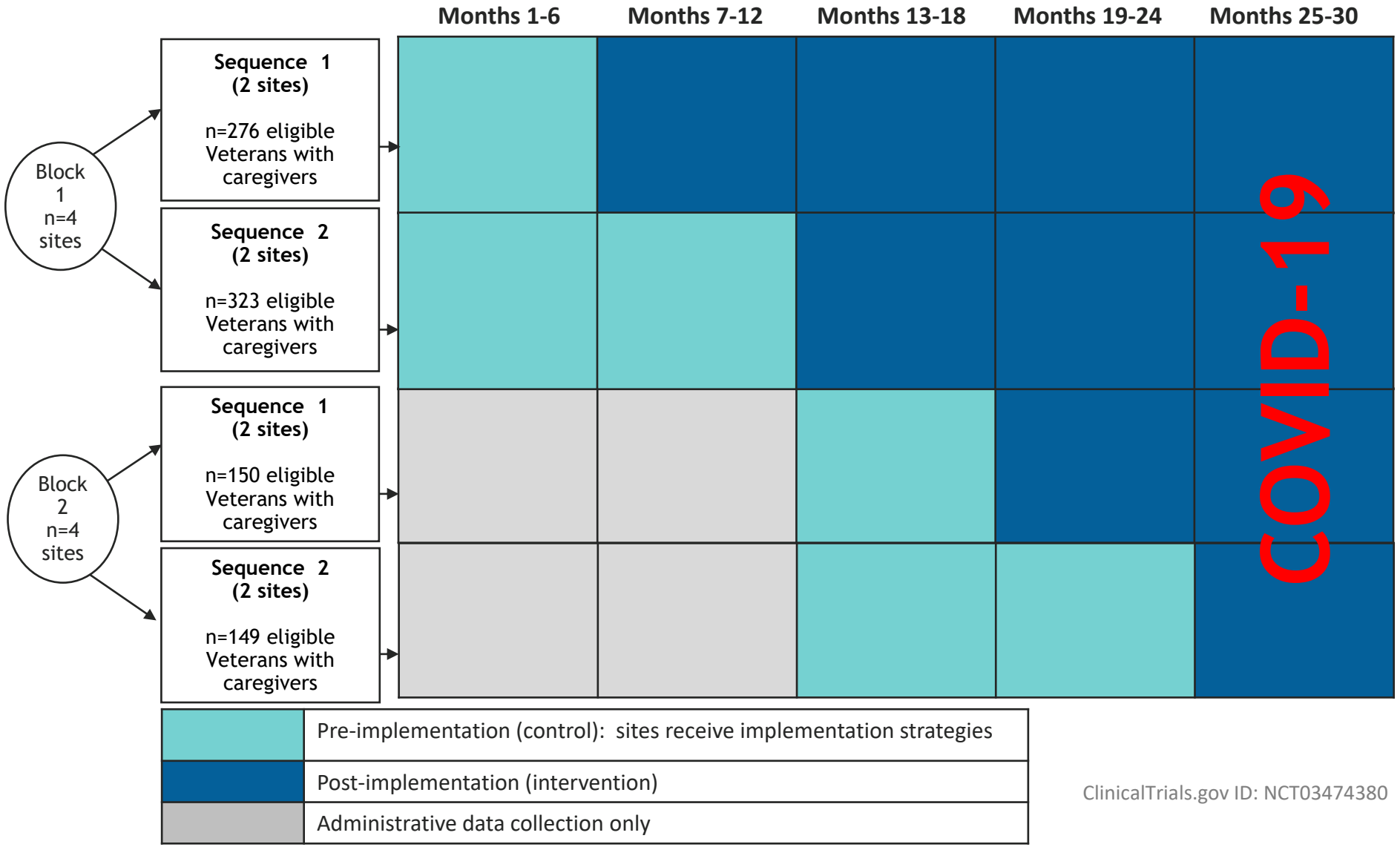
Colon-Emeric et al, 2013

Implementation Framework



Wang et al., 2018

Study Design (April 2018-Oct 2020)



ClinicalTrials.gov ID: NCT03474380

Eligible Veterans with Unpaid Caregivers

Baseline Characteristics	Total (n=898)
Male Gender, %	855, 95%
Age, mean (SD)	76.5, (11.9)
Marital status, %	
Married	511, 62.9%
Never married	44, 5.4%
Divorced/separated	158, 19.4%
Widowed	98, 12.1%
Unknown	2, 0.2%
Race, %	
White	649, 76.2%
Black	161, 18.9%
Multiple Races/Other	42, 4.9%
Unknown	46, 5.1%
Ethnicity, %	
Hispanic/Latino(a)	25, 3.1%
Unknown	23, 2.8%
Rural resident	296, 36.4%
NOSOS score, median [IQR]	2.05 [0.91, 3.87]

Implementation Outcomes

- % of eligible caregivers enrolled in training out of those Veterans referred to home health services confirmed to have an caregiver

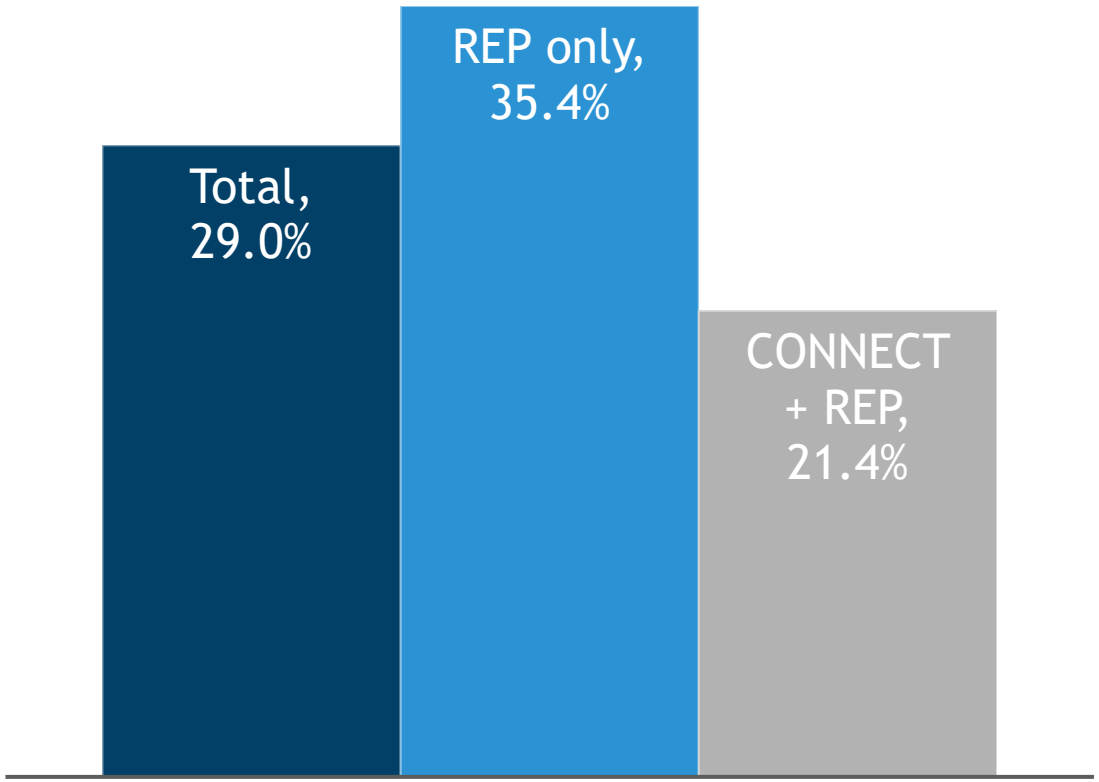
Penetration

- % of training rounds in which sites delivered the full training curriculum (all 4 classes) out of training rounds expected (2 per 6-month interval)

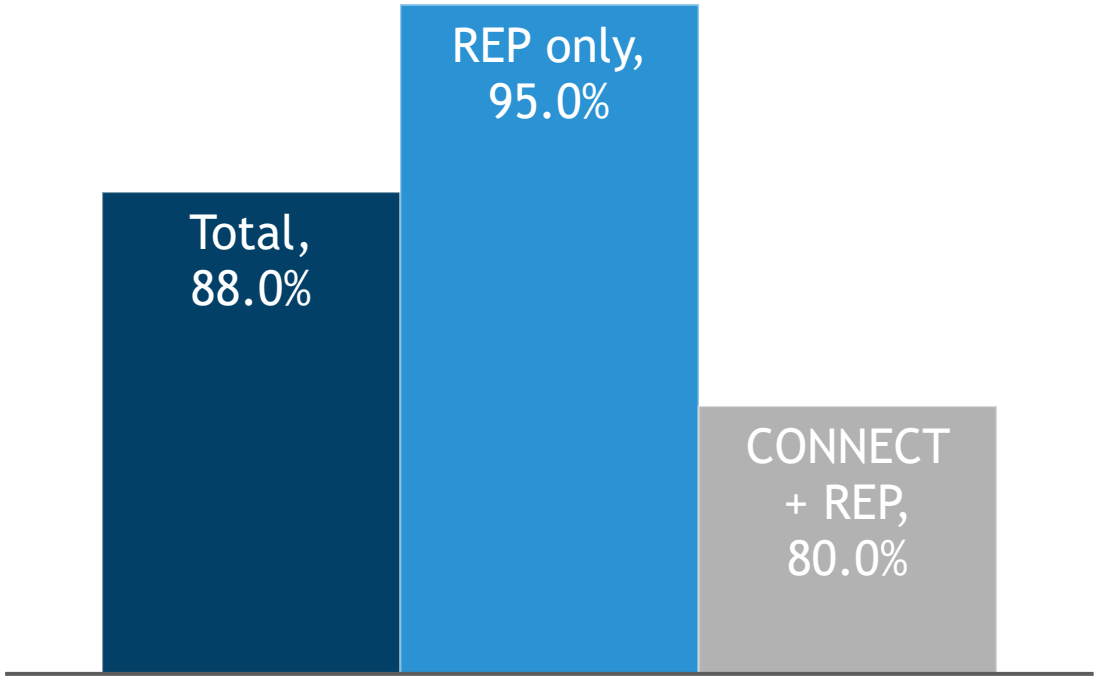
Fidelity

Results

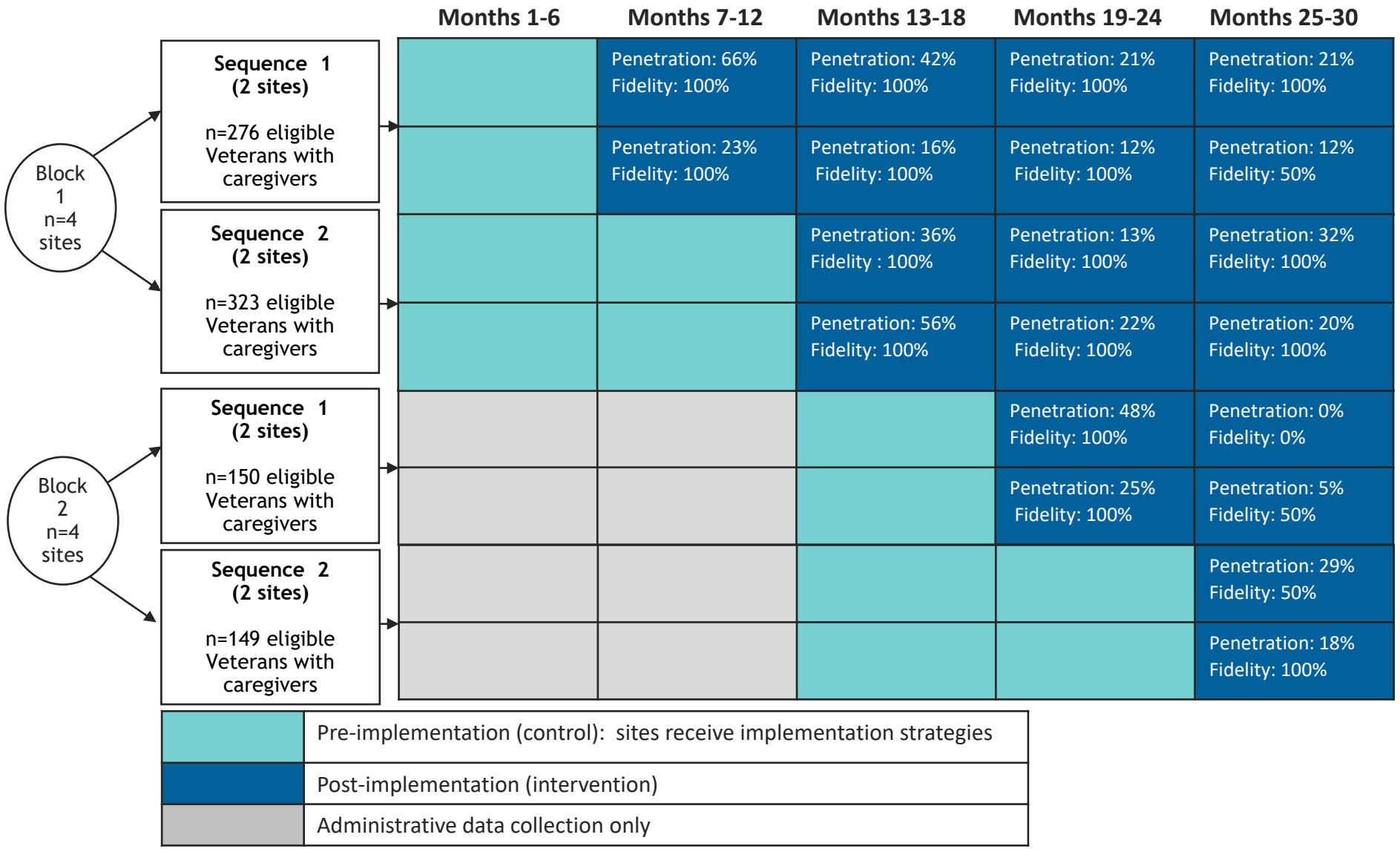
Penetration - % eligible caregivers enrolled in training



Fidelity - % training rounds in which sites delivered full curriculum



Results by Stepped Wedge Design



CONNECT Did Not Enhance Implementation Outcomes

1. Fidelity was generally high with all sites delivering at least one round of training.

2. Penetration varied over time and by site. Qualitative data may help explain reasons for variation in penetration across all intervals.

Captain Obvious

Implementation Science can insure systematic scaling of programs and increases ability to evaluate effects.

In our case adding CONNECT did not lead to better implementation outcomes and was costly, though sites liked the training. Now we know!

Future Directions

- Evaluating iHI-FIVES impact on Veteran days at home (8 sites)
- Collaborating with operational partners to expand training nationally to all 150 VA hospitals (so far, 97 total hospitals implementing)

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Thank You!

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