

IMPLEMENTATION STRATEGIES: SPECIFYING AND REPORTING

Teresa M. Damush, Ph.D.

VA HSR&D PRIS-M QUERI [PReclSion Monitoring
to Transform Care]

VA HSR&D CHIC [Center for Health Information
and Communication] COIN Center

Associate Professor of General Internal Medicine
and Geriatrics, Indiana University

Regenstrief Institute, Indianapolis INDIANA

Poll Question #1

- What is your primary role in VA?
 - Trainee, or fellow
 - Clinician
 - Quality manager or associate
 - Researcher
 - Administrator, manager or policy-maker
 - Other

Poll Question #2

- Which best describes your implementation experience?
 - have not worked on any implementation research or quality improvement projects
 - have not worked on any implementation research but have worked in other research areas
 - have collaborated on implementation research or quality improvement projects
 - have led implementation research or a quality improvement project myself

Poll Question #3

- Have you ever specified an implementation strategy for your research or QI project?
 - Yes
 - No

Need for Better Specification and Reporting of Implementation Strategies

REPORT

Clinical Intervention May Overshadow the Implementation Strategies

Strategies may be “Bundled” or “Packaged” without specifics about each core component

LABEL

**Inconsistencies in labels, poorly described,
Lack of rationale or operational definitions**

COMPLEX

Complex processes, interpersonal and organizational contexts

Core Essential Components vs Modifiable

IMPLEMENTATION STRATEGIES: CORE COMPONENTS

Essential components related to the successful uptake of EBP

CORE ESSENTIAL COMPONENTS

- AUDIT AND FEEDBACK
- REFLECTION AND EVALUATION OF PERFORMANCE by Team
- LEARNING COLLABORATIVE
- SOCIAL MODELING

MODIFIABLE/ADAPTABLE COMPONENTS

- Audit
 - Rely on reports provided by others
 - Generate own data reports
- Feedback format
 - How often received
 - Format – graphics vs text
 - SOCIAL MODELING
 - Within VHA – Another VAMC has set up their processes
 - Outside VHA – State wide initiative

IMPLEMENTATION STRATEGIES REPORTING GUIDELINES (PROCTOR, POWELL, McMILLEN, 2013)

- REPORT STRATEGIES IN SUFFICIENT DETAIL TO REPRODUCE

• NAME

STRATEGY

Use
consistent
language

• DEFINE

STRATEGY

Operationally
define

Discrete
Components

• SPECIFY

STRATEGY

7
domains

SPECIFYING IMPLEMENTATION STRATEGY: 7 SUBDOMAINS (Proctor et al 2013)

SUBDOMAIN	REQUIREMENTS
The ACTOR	Identify who enacts the strategy
The ACTION	Actions, steps or processes that need to be enacted
ACTION TARGET	Specify targets based on models/identify unit of analysis for implementation outcomes.
TEMPORALITY	Specify when the strategy is used
DOSE	Specify dosage of strategy
IMPLEMENTATION OUTCOME AFFECTED	Identify and measure implementation outcomes affected by each strategy
JUSTIFICATION/RATIONALE	Provide empirical, theoretical or pragmatic justification for strategy choice

PReciSion Monitoring to Transform Care: PRIS-M

Program Goal

Implement actionable, personalized, timely monitoring to improve the quality and outcomes of care for Veterans across multiple healthcare settings (Blueprint Strategy 3)

Project 1: National Program Evaluation

Evaluation of the implementation of inpatient stroke eQMs

Setting: Inpatient

PI: Williams

Partners: OABI, IPEC, PCS

Project 2: Implementation Project

Acute telehealth and eCQM intervention to improve timeliness and quality of **TIA** care

Setting: ED-Outpatient

PI: Bravata

Partners: OABI, PCS, Telehealth, VERC

Project 3: De-Implementation Project

Implement electronic monitoring to improve appropriateness of **carotid artery imaging** test ordering

Setting: Primary Care

PI: Keyhani

Partner: OABI, Rad

Project 4: Local QI Project

Remote **obstructive sleep apnea** eCQM monitoring

Setting: Patients' Homes

PI: Bravata

Partners: VISN 11/12, VERC, Telehealth

Implementation strategy: Activating local individuals and groups to use data to transform care

Audit and Feedback; External Facilitation; Identify & Prepare Champions

Partners: OABI, IPEC, Specialty Care (Neuro, ED), PCS (PC), Telehealth, VERC



PRIS-M QUERI: SPECIFY STRATEGY: NAME IT

ERIC STRATEGIES

(POWELL ET AL 2015)

- Audit and Provide Feedback
- Facilitate Relay of Clinical Data to Providers
- Identify and Prepare Champions
- External Facilitation
- Create a Learning Collaborative
- Model the change

BEHAVIOR CHANGE TAXONOMY

(MICHIE ET AL 2011 2013)

- Modelling: *Providing an example for people to aspire to or imitate*
- Goal Setting (behavior/ outcomes)
- Planning
- Self-Monitoring of behaviors and outcomes
- Vicarious Learning
- Social comparison (QI Report Cards)
- Problem Solving

Powell B et al, Implementation Science, 2015; 10:21

Michie S et al., [Ann Behav Med.](#) 2013 Aug;46(1):81-95. doi: 10.1007/s12160-013-9486-6.

BEHAVIOR CHANGE TECHNIQUE TAXONOMY (Michie et al 2013)

- **CONSORT guidelines call for precise reporting of behavior change interventions:** we need rigorous methods of characterizing active content of interventions with precision and specificity.
- **METHODS:**
- In a Delphi-type exercise, 14 experts rated labels and definitions of 124 BCTs from six published classification systems. Another 18 experts grouped BCTs according to similarity of active ingredients in an open-sort task. Inter-rater agreement amongst six researchers coding 85 intervention descriptions by BCTs was assessed.
- **RESULTS:**
- This resulted in 93 BCTs clustered into 16 groups. Of the 26 BCTs occurring at least five times, 23 had adjusted kappas of 0.60 or above.
- **CONCLUSIONS:**
- "BCT taxonomy v1," an extensive taxonomy of 93 consensually agreed, distinct BCTs, offers a step change as a method for specifying interventions, but we anticipate further development and evaluation based on international, interdisciplinary consensus.

PRIS-M QUERI: SPECIFY STRATEGY: DEFINE IT

STRATEGY

- Audit and Feedback
- Facilitation
- Identify and Prepare Champions

DEFINITION

- Remote and local electronic extraction of local quality performance and provide feedback reports; Quality performance tool to review local site vs Regional and National performance
- External RN Quality Management expert provides virtual support to the local team implementation through scheduled and ad hoc meetings
- Identify intrinsic site champions and build skills in team quality improvement activities ; Prepare Champions using key CFIR constructs in Implementation Process and Inner Setting Domains: Reflection and Evaluation; Planning; Executing; Goal Setting; Tension for Change

PRIS-M QUERI: SPECIFY STRATEGY: SPECIFY IT

- **THE ACTORS** [Each of the projects has targeted actors for whom the strategy applies]
- Acute TIA – Clinical Staff (MD/RN/ANP) in the ED, Radiology, Neurology, Pharmacy, Hospitalists, Primary Care and Telehealth Services
- TeleStroke – Hub clinicians (Stroke Neurologists) in Urban VAMCs and Spoke (ED MDs/RNs) clinicians and staff in Rural VAMCs

PRIS-M QUERI: SPECIFY STRATEGY: THE ACTION

- **ACTION:** Active Verb Statements to Specify the Specific Actions, Steps or Processes that need to be Enacted.
- **Activated Team:** Local Staff Team to meet on a scheduled frequency to review and evaluate their audited feedback, identify processes for improvement, set goals, make an implementation plan to reach goals.

PRIS-M QUERI: SPECIFY STRATEGY: ACTION TARGET

- Often Multilevel Targets
- Clinical Staff Knowledge of TIA Guideline Care
- Team based data feedback
- Targets can be based upon Conceptual Framework
 - Inner Setting of the Local Facility: Tension for Change, Learning Climate

PRIS-M QUERI: SPECIFY STRATEGY: TEMPORALITY

- SUGGEST SEQUENCE
- 1. Facilitation begins with a site kick off meeting
- First Virtual Facilitation is scheduled 2 weeks after kick off meeting
- Learning Collaborative is scheduled in the month after first virtual facilitation meeting
- 2. Hub and Spoke staff training - initial
- Spoke champion skill building-initial and ongoing
- Learning Collaborative -monthly

PRIS-M QUERI: SPECIFY STRATEGY: DOSE

- Dose and Intensity
- External facilitation – local teams receive a minimum of 2 virtual meetings per month plus technical assistance as needed during 12 months.
 - Use of Team score functioning to allocate facilitation resources defined as <8 then facilitation = x,y,z
- Learning Collaborative – held monthly for 12 months
- Audit and Feedback – Monthly frequency for 12 months; Local sites will have access to tool to generate audits –tracking of audit frequency.

PRIS-M QUERI: SPECIFY STRATEGY: IMPLEMENTATION OUTCOME AFFECTED

- Reach of the total proportion of clinicians/staff educated on the Acute TIA protocol.
- The proportion of the QI team and proportion of services who attend the monthly audit and feedback meetings.
- The adoption of the TIA templates.
- The acceptability of the strategy by the local clinicians.

PRIS-M QUERI: SPECIFY STRATEGY: JUSTIFICATION

INSPIRE: **I**ntervention for **S**troke **P**erformance **I**mprovement using **R**edesign **E**ngineering

A Clustered Randomized Trial of Systems Engineering vs. Audit and Feedback to Improve Inpatient Stroke Quality Indicators

Williams, LS, Daggett V, Sager D, Slaven J, Yu Z, Woodward-Hagg H, Bissadie B, and Damush TM

BMJ Quality and Safety: 2016;25(6)..

Facilitation plus Audit and Feedback demonstrated better Quality Performance than Audit and Feedback alone at 6 months.



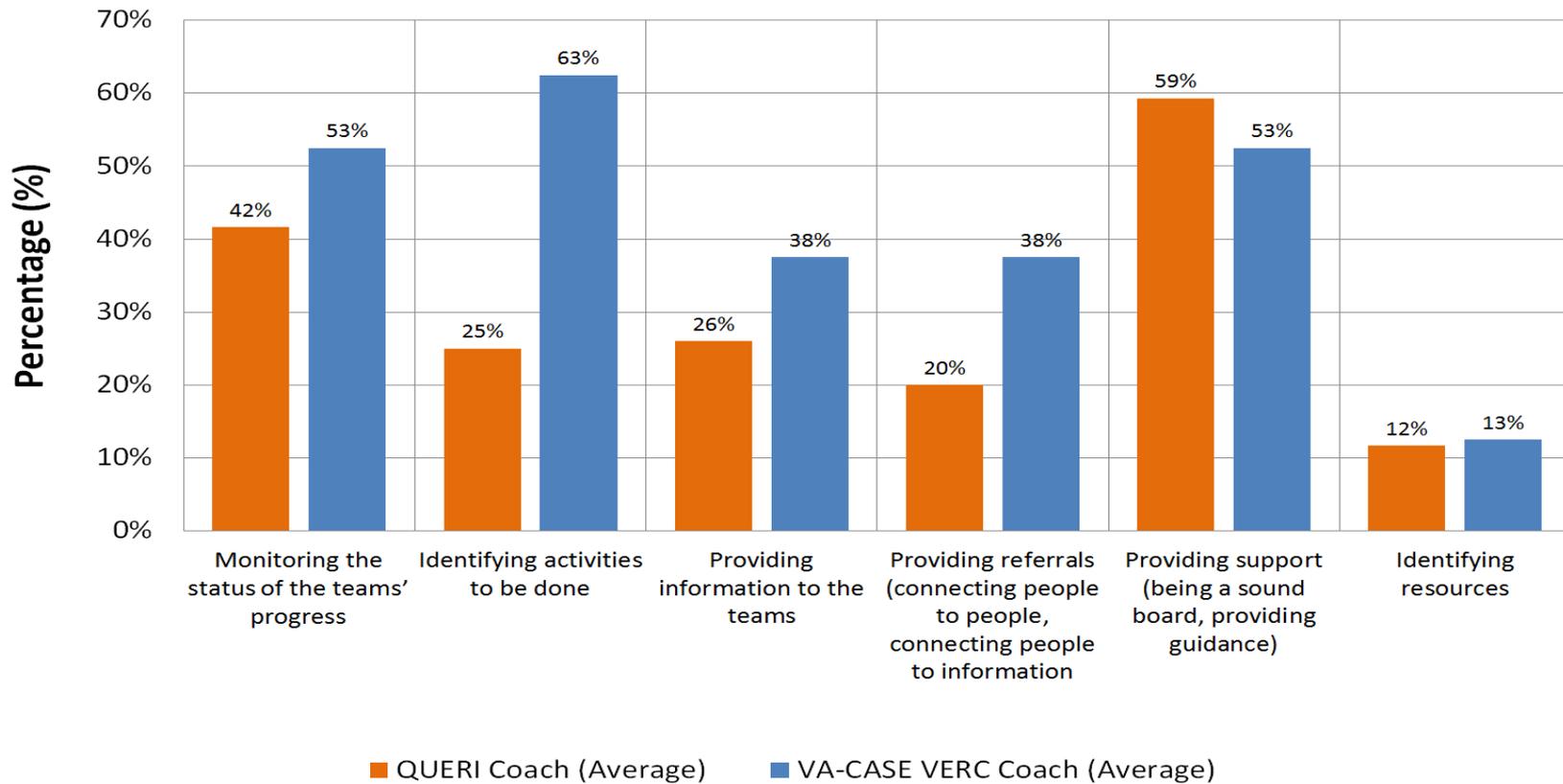
VA HEALTH CARE | Defining **EXCELLENCE** In the 21st Century

Specifying External Facilitation: Key Components of External Facilitation in an Acute Stroke Quality Improvement in the VHA – Bidassie B et al, 2015

- **PREIMPLEMENTATION: Two group calls with homework**
 - Introduce SR
 - Project charter
 - Local baseline data review
- **TRAINING AND PLANNING: In-person Stroke Teams Collaborative**
 - Systems Redesign Engineering Tools
- **IMPLEMENTATION: Post-collaborative facilitation for 6 months:**
 - 1-2 site visits
 - Biweekly conference calls
 - Ad hoc communication by telephone, email
- **Facilitation:** Prior to the in –person collaborative, a Stroke QUERI implementation coach and a VA CASE coach were assigned to each of the 5 stroke teams to provide external facilitation during the collaborative and for an additional six months.
- **[NAME IT – Originally used “Coaching”]**

External Facilitation Tasks during Virtual Coaching (by telephone, n=5)

**% Effort Spent on Facilitation Tasks
(Virtual Coaching: On the Phone)**



PRIS-M QUERI: SPECIFY STRATEGY: JUSTIFICATION

Results from Clustered RCT - (Williams et al 2016) Facilitation plus Audit and Feedback demonstrated better Quality Performance than Audit and Feedback alone at 6 months.

Results from REINSPIRE (MIECH et al 2015)

Well Developed Organized Groups of Quality Improvement Teams had clinical champions who activated team quality improvement.

Ex: Brought individuals together in a local organization, reflected upon data

PRIS-M QUERI: SPECIFY STRATEGY: JUSTIFICATION (Continued)

Results from Systematic Review on Clinical Champions: (Miech EJ et al 2016, Under Review).

- Almost no specificity in the literature (1980-2014) on Clinical Champions as an implementation strategy
- Rarely used as a single strategy
- Necessary core component of a Multifaceted Implementation Strategy

Pragmatic - New Electronic Quality Measures (Stroke; TIA) that were not mandated

- **Stakeholder Perceptions** – Helpful to see a successful site within the same healthcare system. It gave staff vicarious learning and gave them confidence that they could overcome their barriers in a similar system. [MODELS]
- **Stakeholder Perceptions** – Manual chart review of quality performance was often reported as barrier to stroke QI; Teams and individuals rarely knew local performance and repeatedly stated no reported performance or problems = **all is OK**

PRIS-M: Implementation Strategies

Audit and Feedback - eQM

Audit and Feedback – Activate clinical teams to use quality data to transform care

Virtual External Facilitation

SPECIFY AND REPORTING IMPLEMENTATION STRATEGIES – SIMILAR TO BEHAVIORAL INTERVENTIONS

- Sufficient Information for Replication – Will your colleagues be able to apply in another application?
- Build Evidence Base for Strategy – similar language/labels
- Components of a Package – what are Core and Essential?
- Capture over Time – Changes and Modifications by the local organization
- How does the strategy interact with the local context?
- What strategies are more appropriate fit based on the local context?
 - Evaluation methods to best capture

Contact Information

- **Thank you for attending.**
- **Email: Teresa.Damush@va.gov**