

THE INFLUENCE OF FACILITATION ON CARE COORDINATION IN VA PRIMARY CARE: EVALUATION OF THE CTAC QUALITY IMPROVEMENT PROJECT

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Agenda

- CTAC Project Background
- Coaching (Facilitation) Intervention
- Preliminary Results
 - Qualitative
 - Quantitative
- Discussion
- Questions

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COORDINATION TOOLKIT AND COACHING (CTAC) PROJECT BACKGROUND

Definition: **Care Coordination**

- “...the deliberate organization of patient care activities between two or more participants (including the patient) involved in a patient's care to facilitate the appropriate delivery of health care services.” (AHRQ¹)
- A major priority area for VA

Quality Improvement (QI)

- Requires both technical and interpersonal skills
 - Working effectively in teams
 - Identifying root causes for quality gaps
 - Establishing specific goals for improvement
 - Testing and analyzing effects of potential changes
 - Institutionalizing and spreading improvements
- Local QI projects with a passionate champion are common, but these are rarely sustained and spread without external support

Question...

With the goal of improving care coordination, how can we provide efficient quality improvement support to primary care practices in a national integrated delivery system?

CTAC Project Specific Aims

1. Develop care coordination toolkit and distance coaching manual to improve care for high-risk Veterans
2. Pilot the care coordination toolkit and distance coaching manual at one site and engage participating networks, medical centers, and clinics
3. **Compare the effectiveness of the care coordination toolkit alone to the combination of the toolkit plus distance coaching over a 12-month project period**
 - Cluster-randomized design; randomization at clinic level

CTAC Care Coordination Toolkit

- Action-oriented compilation of related information, resources, or tools (AHRQ²)
- Reviewed 300 tools to arrive at 18 relevant to care coordination in VA primary care
 - Expert review and end-user input
- Available on VA Intranet

Definition: **Facilitation**

“...a multifaceted approach that involves skilled individuals who enable others, through a range of intervention components and approaches, to address the challenges in implementing evidence-based care guidelines within the primary care setting.” (Baskerville et al.³)

Poll Question

1. What types of experiences have you had with coaching or facilitation? (Check all that apply)
 - a) I have facilitated a project
 - b) I have evaluated a facilitation project
 - c) I have been a recipient of facilitation
 - d) I have participated in a facilitation project in other ways
 - e) None of the above

Distance Facilitation

- Practice facilitation concept, but extended to virtual modalities (phone, webinar technology)
- Addresses limited travel budget and scalability issues in the setting of a national organization
- Unclear whether weekly distance facilitation is sufficient to improve quality of primary care

CTAC Implementation Strategies

Toolkit Only

- Priority-setting with leadership to choose tools/project focus
- Access to online Care Coordination Toolkit

Toolkit Plus Distance Coaching

- All “toolkit only” items above plus:
- One in-person site visit at start
 - Weekly coaching by phone/webinar

CTAC Primary Care Clinic Locations

Site	Clinic N	Project Start Date	Project (coached clinics)
A	4	August 2017	Managing walk-ins (2 clinics)
B	2	November 2017	Medication renewal workflow
C	2	May 2018	Walk-ins and nurse/clerk communication
D	2	June 2018	Increasing referral to prediabetes class
E	2	October 2018	Walk-ins/extended hours

- Matched pairs of clinics at each site
- One clinic from each pair receives coaching
- Two coaches, each coaching three clinics

CTAC Data Sources (selected)

Pre-project

- Readiness Interviews
- Patient survey (baseline)
- Site visit

During project

- 6-month stakeholder interviews
- Coaching call notes and coaches' reflections

Post-project

- 12-month stakeholder interviews
- Patient survey (follow-up)
- 18-month stakeholder interviews

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COACHING (FACILITATION) INTERVENTION

Coaching Activities with Clinic Teams

- Support clinic teams in identifying a QI project to improve care coordination in primary care
- Assist clinic teams with completing an action plan with relevant SMART goals and timeframe
- Prepare and conduct weekly coaching phone calls with clinic teams at each site for project duration (12 months)

Coaching Activities with Clinic Teams

- Communicate with clinic team members as needed between scheduled coaching calls to maintain accountability and momentum
- Provide clinic teams with support in project management, evaluation methods, data collection and management, and implementation strategies (e.g., usability testing, PDSA cycles)

Coaching Activities with Clinic Teams

- Facilitate teamwork and communication between clinic team members to accomplish project goals
- Facilitate monthly collaborative calls with all active clinic teams to encourage cross-site learning

Lauren Penney, PhD

QUALITATIVE EVALUATION

Qualitative Evaluation Objectives

1. To understand whether and how distance coaching plus online toolkit vs. toolkit only strategy can be effective in supporting the implementation of care coordination improvement projects
2. To explore at the clinic level, the association between contextual factors, coaching strategies, and project success

Data Sources

- For all sites:
 - Semi-structured interviews with system leaders, site champions and frontline staff at 6m (n=33), 12m (n=33), and 18m* (n=11)
- For coached sites:
 - Site visit notes
 - Post-project debriefs with coaches
 - Coaching logs / Coaching reflections
 - Final project reports

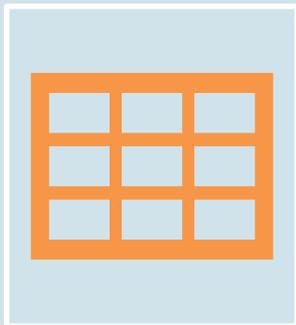
*18m data collection is ongoing

Data Analysis



Coding

Consolidated Framework for
Implementation Research (CFIR)
Facilitation
Outcomes



Matrix Analysis

Themes within domains
Cross site comparisons
Interactions between
domains

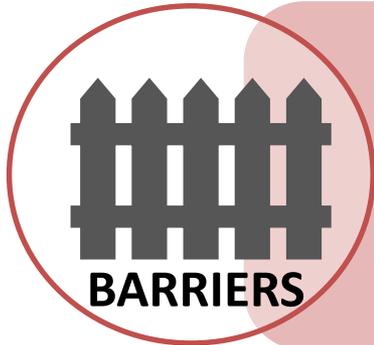
QI Projects

	Coached Sites	Non-coached Sites
Goals	Detailed SMART goals	Usually less well articulated
Complexity	All had: Multiple components Multiple targets	Often: Single component Single target
Toolkit use	Often mediated by coach Limited tool adoption	Half of the sites based projects around a tool from the toolkit, other half did not use

Implementation Processes

	Coached Sites	Non-coached Sites
Planning	Regular, routine meetings	Lack of meetings or organizational structure
Engaging	More formal outreach to staff and patients	Less formal outreach
Champions	1-2 champions, usually a nurse, often displayed champion behaviors	
QI Teams	2-8+ people Often composed of nursing and clerk staff, +/- providers, +/- supervisors	1-4 people Often a nurse champion with assistance from a supervisor
Reflecting and Evaluating	Developed and/or used structured data collection tools Data fed back to refine products and evaluate impacts	Sometimes used administrative reports to track impacts Usually used informal methods to evaluate

Contextual Barriers and Facilitators



Clinic staffing pressures



Competing priorities



Practice silos



Leadership engagement



QI experience



Team turnover



Adept champions



Interdisciplinary collaboration

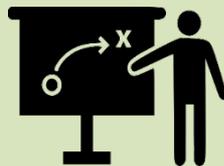
Coaching



Tailored
encouragement
and social support



Accountability



Structured but
flexible planning
and
organizational
support



Ideas and
insight



Mediation

Outcomes

	Coached Sites	Non-coached Sites
Project Penetration at 12 months	More likely to be implemented clinic-wide and to be sustained	Variable
Staff Impacts	QI skill development Better working relationships	Project-specific knowledge or skill development

Preliminary Findings

- Sites chose interventions that did not require specialized skill or complex behavior change, but coached sites:
 - Undertook projects with multiple components and engaged individuals from multiple disciplines and roles
 - Engaged in more implementation processes
 - Were more successful at spreading project throughout their clinics
 - Staff described skill and relational impacts that could further benefit service and patient care
- The more successful non-coached sites:
 - Addressed issues that had been previously worked on in their clinics
 - Gave teams/staff flexibility in terms of uptake and use of interventions



Preliminary Broader Lessons Learned

- Toolkit rarely used
- Coaching provided space, organization, and structure, as well as tailored support and accountability that non-coached site champions struggled to create in their projects
- Coaches' guidance differed by site, responding to site-specific contextual issues and team dynamics
- Site Readiness
 - Challenging even with extra coaching support
 - Leadership buy-in and enthusiasm did not always translate to the clinic

Polly Hitchcock Noël, PhD

QUANTITATIVE EVALUATION

Quantitative Evaluation Objective

- Did patient experience improve at the clinic level more at the coached clinics than non-coached clinics from baseline to follow-up?

Quantitative Data Sources & Methods

- Patient Survey
 - Patient experience questionnaire
 - Use of VA only vs. VA and non-VA care
 - Self-rated health
 - Demographics
- Serial cross-sections of patients
 - Measured at baseline and 12 months' follow-up

Quantitative Data Sources & Methods

- Survey sample / data collection
 - Patients with at least four visits to designated clinic in the past 12 months (identified from Corporate Data Warehouse)
 - Sampling frame = 5,095
 - randomly selected 480 patients each from 10 larger clinics
 - all patients at 2 smaller women’s clinics
 - Collected prior to start of clinic intervention activities
 - Mixed mode of administration
 - Mailed survey with option to complete online version
 - Phone calls to non-responders of two mailouts

Health Care Systems Hassles Scale⁴

- Primary CTAC outcome assessed with Hassles Scale
 - 16-item patient experience measure of care coordination assesses problems with general health care such as *“poor communication between different healthcare providers”*
- Response options – 5-point scale ranging from “0” *Not a problem at all* to “4” *A very big problem*
- Ratings dichotomized (0 = no problem at all vs. 1 = any problem), yielding total Hassles count (0-16)
- Missing values imputed if $\geq 80\%$ items completed

Health Care Systems Hassles Scale

Baseline Patient Survey

- 2,444 of 5,095 Veterans (48%) returned eligible surveys
- Demographics
 - Male (85%), ≥ 65 years of age (60%), non-Hispanic white (57%)
- Reported Hassles
 - 79% reported ≥ 1 hassles
 - Range 0 to 16; median = 4 (IQR 1-8)
- Imbalance – non-coached vs. coached clinics
 - (5.2 vs. 4.6 hassles; $p < 0.001$)

(Noël et al., 2019 HSR&D National Meeting)

Health Care Systems Hassles Scale

Top Five Hassles Items	(%)
Having to wait a long time to get specialty appointments	(56%)
Poor communication between different providers	(44%)
Lack of information about which treatment options are best for your medical conditions	(41%)
Lack of information about your medical conditions	(40%)
Difficulty getting questions answered or getting medical advice between scheduled appointments	(40%)



Health Care Systems Hassles Scale

Follow-Up Patient Survey

- 2,447 of 5,136 Veterans (48%) returned eligible surveys
- ~10% overlap with baseline sample
- Differences in baseline & follow-up respondents:
 - Married/partnered: 63% baseline vs. 66% follow-up; $p=0.005$
 - Self-rated mental health rated excellent, very good, or good: 69% baseline vs. 65% follow-up; $p=0.01$

Analytic Plan

- Given excess zeroes in Hassles count data, used zero-inflated negative binomial regression to define Difference-in-Difference (DiD) impact estimates
- DiD often used in quasi-experimental designs; useful given imbalance in baseline hassles
- Primary outcome of interest – difference between coached & non-coached clinics in the change from baseline to follow-up in patient-reported hassles

Preliminary Findings: Difference in Difference

	Hassles Count Baseline	Hassles Count Follow-up	Difference (post-pre)	Difference in difference (coached - non-coached)
Full Model*	Mean (CI)	Mean (CI)	Mean (CI)	Mean (CI)
Non-Coached	5.20 (4.9, 5.5)	4.78 (4.5, 5.0)	-0.42 (-0.76, -0.08)	
Coached	4.71 (4.5, 5.0)	4.30 (4.0, 4.6)	-0.40 (-0.75, -0.06)	
				0.02 (-0.5, 0.5)

*Full model (n=4696) adjusts for clinic fixed effects & clustering of survey responses, as well as patient characteristics: age, gender, race, education, marital status, self-rated physical health, & use of VA providers only vs. VA & non-VA providers

Limitations

- Selection effects due to recruiting matched clinics in pairs, which slowed recruitment and meant participating clinics were not representative of clinics approached
- Low number of clusters (N=12) contributed to baseline imbalances in primary outcome (e.g., Hassles score) and low power
- Hassles Scale may not be sensitive to improvements resulting from diverse projects at coached sites
 - Future analyses will examine top three hassles that coached sites thought would be affected by their projects

Key Findings (quantitative)

- Coaching did not improve patient experience beyond favorable secular trends
 - Hassles scale measures improvements in patient experience at health system level (not restricted to primary care)
 - Alternative interpretation is that non-coached sites' projects were as effective as coached sites' projects, resulting in equal improvement, but this is unlikely given qualitative data

Post-hoc analysis of supplemental questions tailored to coached clinic projects

Site	Process Question	Non-Coached	Coached	<i>p</i>
1	Received brochure about how to refill or renew medications	25.1%	22.1%	0.47
2	Received brochure with clinic information	18.0%	37.4%	0.02
3	Received brochure about how to refill or renew medications	37.1%	37.3%	0.97
4	Received brochure with clinic information and how to refill or renew medications	47.2%	42.2%	0.29
5	Received information about diabetes-related classes	65.8%	61.1%	0.47
6	Received brochure with clinic information and how to refill or renew medications	30.8%	46.6%	<0.001

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DISCUSSION

Summary

- Clinics randomly assigned to an online toolkit plus facilitation undertook projects of greater reach and complexity than clinics assigned to the toolkit only
- Staff at clinics receiving facilitation developed their quality improvement skills and internal team relationships
- Patients noted receiving brochures more commonly at two of five coached clinics that distributed a brochure
- Patients' experience of care improved similarly in clinics that did and did not receive facilitation

Implications for Future Implementation

- Although CTAC sought leadership buy-in, projects were essentially driven by frontline staff, with clinic staff choosing projects that were feasible to complete on their own
 - The more challenging care coordination problems (e.g., across settings) were not tackled
 - These problems would have required higher-level leadership buy-in to engage more stakeholders
 - Even the chosen projects needed substantial internal leadership engagement in order to be successful
- Sites' interest in managing walk-in patients was an emerging theme that cut across very different local contexts

Implications for Future Evaluations

- We envisioned a friendlier recruitment environment than the one we encountered
 - For some prospective sites, cluster randomization to coaching was a drawback, because not all sites would be coached
 - For other prospective sites, having weekly coaching calls was too high an intensity to contemplate given competing demands (didn't end up being a problem for participating sites)
- In response, we allowed sites more flexibility in choosing their projects to improve recruitment

Implications for Future Evaluations

- Given increased project flexibility, we also increased resources for the qualitative component of evaluation to capture details of projects as they unfolded
 - Interviewed more stakeholders than originally planned
 - Coaches had dedicated time for written reflections after each call, noting successes and challenges
- Future evaluations could be more naturalistic to allow better fit between implementation and evaluation efforts

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CTAC Publications

- Development of a web-based toolkit to support improvement of care coordination in primary care
<https://academic.oup.com/tbm/article/8/3/492/5001928>
- Staff perspectives on primary care teams as de facto “hubs” for care coordination in VA: a qualitative study
<https://link.springer.com/article/10.1007/s11606-019-04967-y>
- Sustaining effective quality improvement: building capacity for resilience in the practice facilitator workforce
<https://qualitysafety.bmj.com/content/28/12/1016.abstract>
- Care Coordination Toolkit
<https://vaww.visn10.portal.va.gov/sites/Toolkits/toolkit/Pages/Home.aspx>
- Patient experience of healthcare system hassles: dual system vs. single system users (*HSR in press*)

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QUESTIONS