Implementation and Adoption of VA's National Contingency Staffing Program:

Results from the Clinical Resource Hub Evaluation

Susan E. Stockdale, Ph.D.; Alicia A. Bergman Ph.D.; Danielle E. Rose, Ph.D., MPH

VA HSR&D PACT cyberseminar
September 21, 2022

VA

U.S. Department of Veterans Affairs
VA Greater Los Angeles Healthcare System

Roadmap for this presentation

- Describe VA's national Clinical Resource Hub initiative
- Describe CRH Directors' experiences with promoting adoption of CRH services
- Summarize PACT primary care leader and CRH frontline perspectives of integrating virtual clinicians into clinic-based teams
- Report results from analyses exploring association between CRH use and PC burnout

Clinical Resource Hubs to Address VA's Continuing Problems with Access

- Shortages of providers and staff contribute to poor access
- Expansion of virtual care modalities
- 2011 - ORH telehealth hub pilots
  - PC and MH
  - Rural areas, geographic areas with provider/staff shortages
- CHOICE, MISSION Act mandated VA improve access
- 2019 - national CRH program launched in response to the MISSION Act
  - Based on the pilot telehealth hubs funded by ORH.

CRH National Program and Evaluation

- National CRH program within the Office of Primary Care (OPC)
  - Oversight by advisory board with 10+ other national program offices
- Evaluation coordinated by Primary Care Analytics Team (PCAT) in Seattle
  - Includes investigators in Seattle, Los Angeles, Iowa City, and Palo Alto
- GLA team - implementation, effectiveness for providers/staff and patient experience.
- Overall design guided by RE-AIM
  - Assessing Reach, Effectiveness, Adoption, Implementation, and Maintenance
  - Our team responsible for A, I, M

What are Clinical Resource Hubs (CRHs)?

- VISN-level entities that provide PC, MH, and specialty staffing to short-staffed clinics.
- Employ providers, staff who work remotely
- Deliver mostly virtual care
  - Capacity to deploy in-person providers and/or staff

Use “hub and spoke” model to deliver care to Veterans

VA Office of Rural Health (ORH) Enterprise-Wide Initiative (EWI)
Veterans Integrated Service Network (VISN) Clinical Resource Hubs (CRH)
Fiscal Year 2020

VISN 20, VISN 21, VISN 22, VISN 19, VISN 23, VISN 12, VISN 15, VISN 17, VISN 16, VISN 10, VISN 09, VISN 07, VISN 08, VISN 06, VISN 05, VISN 04, VISN 02, VISN 01

Alaska V20 · American Samoa V21 · Saipan V21 · Hawaii V21 · Guam V21 · Philippines V21 · Puerto Rico V08 · U.S. Virgin Islands

VA U.S. Department of Veterans Affairs, Veterans Health Administration, Office of Rural Health

CRH Level
- Hub
- Spoke
- VISN Boundary
- U.S. State Boundary

Care delivered via CVT or VVC

- Remote clinicians use Clinical Video Telehealth (CVT) to clinics
  - Requires clinic-based staff
- Care also delivered directly to Veterans' homes using VA Video Connect (VVC)

This Photo by Unknown Author is licensed under CC BY NC ND

Adoption of CRH services by "spoke sites"

Request for CRH services submitted

CRH/regional leaders identify sites with access issues

Clinic with staffing shortage requests help

Request reviewed by CRH

Relative priority determined based on type and length of service requested, clinic staffing, availability of CRH clinicians

Spoke site set-up process

CRH works with clinic to put in place necessary service agreements, get CRH clinician access to EMR, set up telehealth equipment, train clinic staff to use equipment

Assessing CRHs' Efforts to Promote Adoption

- CRHs instructed to ID sites with greatest need, provide remote staffing to clinic-based teams
- Survey fielded to 18 CRH Directors or designees in 2020, 2022
  - Descriptive data from 2022 survey
- 17/18 CRHs responded to 2022 survey

To What Extent Were CRHs Fulfilling Their Mission?

- 88% (15/17) actively working to identify sites in need of contingency staffing services
- How?
  - Receive direct requests from facility leaders or CBOC leaders (88%, 15/17)
  - Attendance at VISN leadership meetings, discussion with VISN leaders (76%, 13/17)
  - Outreach to sites based on data/metrics (71%, 12/17)

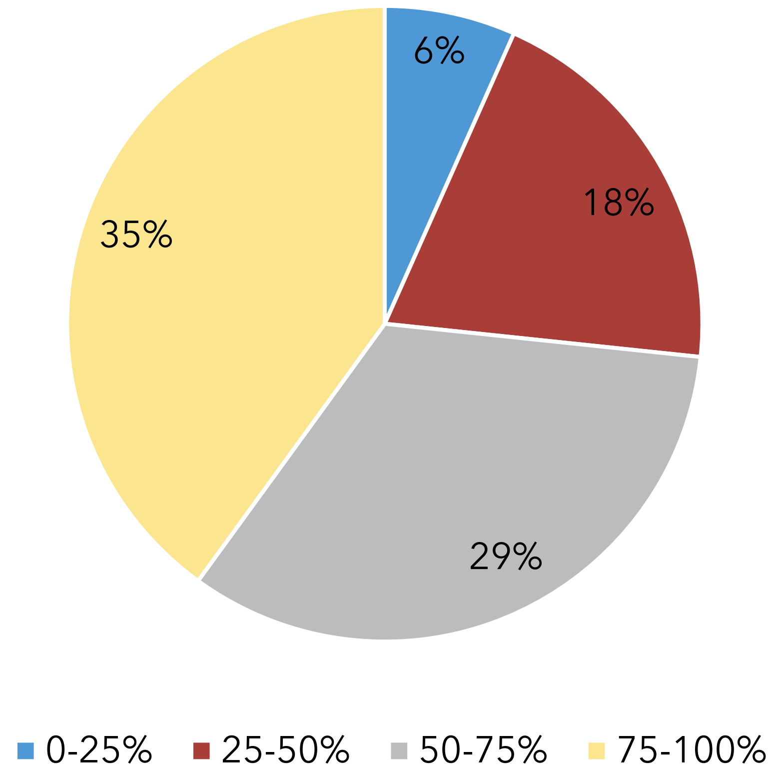
How does CRH decide which sites to provide services to?

Factor	Percent (n=17) reporting "very important"
Willing/able to work through set-up process	76%
CVT tele-presenting staff availability	59%
CVT equipment and space availability	53%
Addressing staffing shortages (e.g., CRH not treated as a permanent solution)	53%
ID'ed as top 20 'underserved' (MISSION Act)	53%
Rurality of site	41%
Has under-paneled providers (e.g., panels not full)	41%
CRH program site scoring tool	35%
"First come, first served"	29%
CRH Governance Board input	29%

0% 50% 100%

Percent (n=17) reporting "very important"

What percentage of requests are CRHs about to provide services for?



What do CRHs do when they can’t fulfill requests?

- Percent reporting “always” or “usually”:
  - Recommend site transfer patients to under-paneled providers w/in site (47%, 8/17)
  - Hire CRH providers/staff (35%, 6/17)
  - Shift CRH providers/staff from another spoke site (18%, 3/17)
  - Recommend site refer patients to community care (6%, 1/17)
  - Recommend site consider using locum tenens (e.g., other short-term temp staffing) (0%)

Summary of Directors' Efforts to find and serve "customers"

- Majority report actively working to identify sites that need help, using VISN connections and data/metrics
- Site need is considered, but clinic resources for set-up, telehealth delivery may be more important criteria for determining who gets CRH help
- Most able to fill at least half of all requests for services, some recommend other actions clinics can take

CSHIIP
Center for the Study of Healthcare Innovation, Implementation & Policy

Lessons Learned: PACT primary care leader and CRH frontline perspectives of integrating virtual clinicians into clinic-based teams

Alicia Bergman, PhD

VA

U.S. Department of Veterans Affairs
VA Greater Los Angeles Healthcare System

Background & Objective

- Integrating the virtual CRH providers/staff into clinic-based teams at spoke sites can present challenges
- E.g., lack of standardized workflows for integrating a virtual provider into a clinic-based team

- Objective: To describe key lessons learned while partnering by comparing experiences of CRH providers/staff and spoke site key stakeholders and providers

Methods

- Semi-structured telephone interviews within 3 VISNs
- 25 PC leaders at spoke sites (facility PC Chiefs and clinic lead PC providers)
- 12 CRH providers and staff (PCPs, registered nurses, medical support assistants, pharmacists, and behavioral health clinicians)
- Interviews were recorded, transcribed, with rapid analysis identifying key lessons learned working as a team to provide PC services

Results Overview

1. Challenges shared by both stakeholder groups
2. Challenges unique to PC clinic leaders
3. Challenges unique to CRH hub providers/staff
4. Facilitators unique to PC clinic leaders
5. Facilitators unique to CRH hub providers/staff

- If time permits, quick overview of most common barriers & facilitators mentioned by PACT frontline staff (hot off the press findings, interviews still in-progress)

Results: Shared Challenges

- **Adequacy of support staff available for CRH providers**
  - Some CRH providers wanted spoke sites to provide more support staff, with more experience
  - In contrast, spoke site clinic PC leaders wanted CRH to provide more CRH support staff (e.g., RNs, MSAs)
    - *"CRH doesn't want to staff a provider on a team that doesn't have the other PACT disciplines. But sometimes, that's the nature of the vacancy. So, you might have a team that doesn't have an MSA or a provider…you can't get a provider for that team unless you take an MSA from an existing team and dedicate them, which is doable but then breaks up another team that's been functioning well."*

Results: Shared Challenges

- **Patient appointment scheduling**
  - Overlapping tasks and roles (e.g., both sides booking appointments leading to double-booking) and complexity
    - CRH providers/staff emphasized the benefits of designating a single scheduler to handle CRH scheduling or limiting the number of individuals scheduling (and not using a call center)

- **Documentation requirements can be cumbersome**
  - From the spoke site/clinic side, a reminder system for CRH primary care mental health integration was noted as cumbersome because of needed on-site support
    - Sometimes day-long troubleshooting at CBOC due to requirements to complete certain actions on the day of the event
  - From the CRH side, e.g., CRH pharmacists having to document two sets of notes (from both hub and spoke side); but starting in 2023 will start documenting only on spoke site side (and then they can pull that encounter) which will be a time saver in terms of fitting in more patients

Unique Challenges

- **Challenge unique to PC clinic leaders:**
  - Desire for more availability of CRH providers and for them to be deployed more quickly
  - Decreased access/less efficient (e.g.,CRH requirement of 1 hour for every visit decreasing visit ability by 50%)

- **Challenge unique to CRH hub providers/staff**
  - Interviewees noted preconceived notions against CRH/telemedicine at spoke sites
    - Occasionally experiencing resistance by some clinic staff
    - E.g., Spoke site MSA resisting supporting a “non-home clinic PCP”
    - Recommendation: clinic leadership clarify with clinic staff a CRH clinician’s role prior to deployment

Results: Unique Challenges

- **Challenge unique to CRH providers/staff (continued)**
  - Communication problems with spoke site providers/staff
    - E.g., physical distance and lack of time can hinder team-building, huddles not always happening consistently
  - Crisis mode/high stress environment of spoke site

Unique Facilitators

- **Facilitators unique to clinic PC leaders**
  - Having monthly meetings with the CRH
  - CRH providers knowing/developing an understanding of local patient issues/context and resources.

- **Facilitators unique to CRH providers/staff**
  - Having a designated telehealth room at clinics
  - Having clinic-based staff trained as back-up *tele-presenters
  - Having facility leadership provide the CRH with an accurate representation of the level of clinic functioning and workload prior to their deployment

Conclusions

- Common challenges to CRH and clinic-based providers and staff working together as a team included available support staff to assist the CRH (virtual) providers and optimal appointment scheduling practices
- Facilitators revolved around optimizing communication and telehealth-friendly clinic set-ups
- Although scheduling and communication are generally recognized as common challenges, having a virtual provider adds unique layers of complexity to these challenges

Implications for Practice

- Effectively integrating virtual clinicians into clinic-based teams may require more coordination between clinic and CRH leaders to determine best protocols for scheduling and other clinic-based care delivery
  - E.g., operating telehealth equipment, using teamlet staff from other PACTs to check in patients and be present with patient, etc.
- Development of guidelines can also assist with role clarification

PACT Staff - Reported Barriers/Facilitators working with CRH Hub Providers/Staff

- Facilitators
  - **Good communication & teamwork** (e.g., Teams chats/messaging to keep each other in the loop, ability to message CRH providers directly)
  - **CRH providers also serving a teaching role** (becoming more aligned with PACT model)
  - **In-person visits by CRH providers**
  - *"It's appreciated by Veterans and helps staff at spoke site get to know them" [spoke site clinical pharmacist]*

PACT Staff - Reported Barriers/Facilitators working with CRH Hub Providers/Staff

- **Barriers**
  - Technology/equipment challenges
    - E.g., sometimes telehealth equipment not working, slow bandwidth for rural internet services
  - *Patient appointment scheduling challenges
    - Challenge shared by all stakeholder groups

CRH Use and Primary Care Provider and Staff Experience

Danielle Rose, PhD, MPH

Background

- One of the CRH program office evaluation questions focuses on impact of CRH on *primary care clinicians and staff experience*
  - Potentially positive benefit: CRH providers and staff may reduce stress by filling staffing gap(s)
  - Potentially negative impact: challenges integrating virtual staffing into clinic flow may increase stress among in-person primary care providers and staff

Evaluation Questions

- What is the extent of Clinical Resource Hub (CRH) use in early days of national implementation?
- Is CRH use associated with reduced Primary Care Provider and Staff burnout?

Methods

- Study design: cross sectional
- Data Sources and Measures: All Employee Survey (FY 2021): Primary Care Clinician and Staff Characteristics
  - Burnout is Emotional Exhaustion or Depersonalization (Maslach Burnout Index)
  - Age, Gender, Race/Ethnicity, Tenure
  - Role (Clinician, RN, Clinical Associate, Admin Associate)

Healthcare System Level (sta3n) Measures

- All Employee Survey FY 2020: % Reporting Burnout
- Primary Care Analytics Team created CRH Primary Care Penetration (CRH use) measure for FY 2020
  - % of Veterans with at least one CRH visit
- VA Administrative Data
  - % rural / highly rural patients
  - Panel Fullness, % of PACT teams with ideal number of staff available to each Primary Care Provider (registered nurse, licensed nurse, medical support assistant)
  - Facility Complexity (1a= most complex, 1b, 1c, 2 or 3)

Statistical Analysis

- Correlations
  - CRH Primary Care Penetration and Burnout
- Multi-level multivariate models
  - Predicting individual Primary Care Provider or Staff burnout
  - Key predictor: CRH Primary Care Use
  - Controlling for previous % reporting burnout at HCS level, respondent and healthcare system characteristics

Results – Respondent Age, Gender, Race/Ethnicity

Respondent Characteristics	% (n)	Respondent Characteristics	% (n)
Age		Race	
< 30 years	3% (659)	White	57% (11188)
30-39 years	17% (3439)	Black	20% (3883
40-49 years	28% (5420)	Native Amer/ Alaska Native	1% (270)
50-59 years	31% (6187)	Asian	11% (2074)
	16% (3097)	Native Hawaii/ Pacific Islander	1% (201)
Gender		Multiracial	
Male	23% (4462)	Ethnicity	

Results – Respondent Role and Tenure

Respondent Characteristics	n(%)	Respondent Characteristics	n(%)
Role		Tenure	
Primary care clinician	25% (4961)	Less than 1 year	12% (2340)
Registered nurse	33% (6587)	1-2 years	10% (2028)
Licensed nurse (LPN/LVN)	29% (5668)	2-10 years	45% (8771)
Medical Support Assistant	13% (2492)	10-20 years	22% (4401)
		More than 20 years	8% (1601)

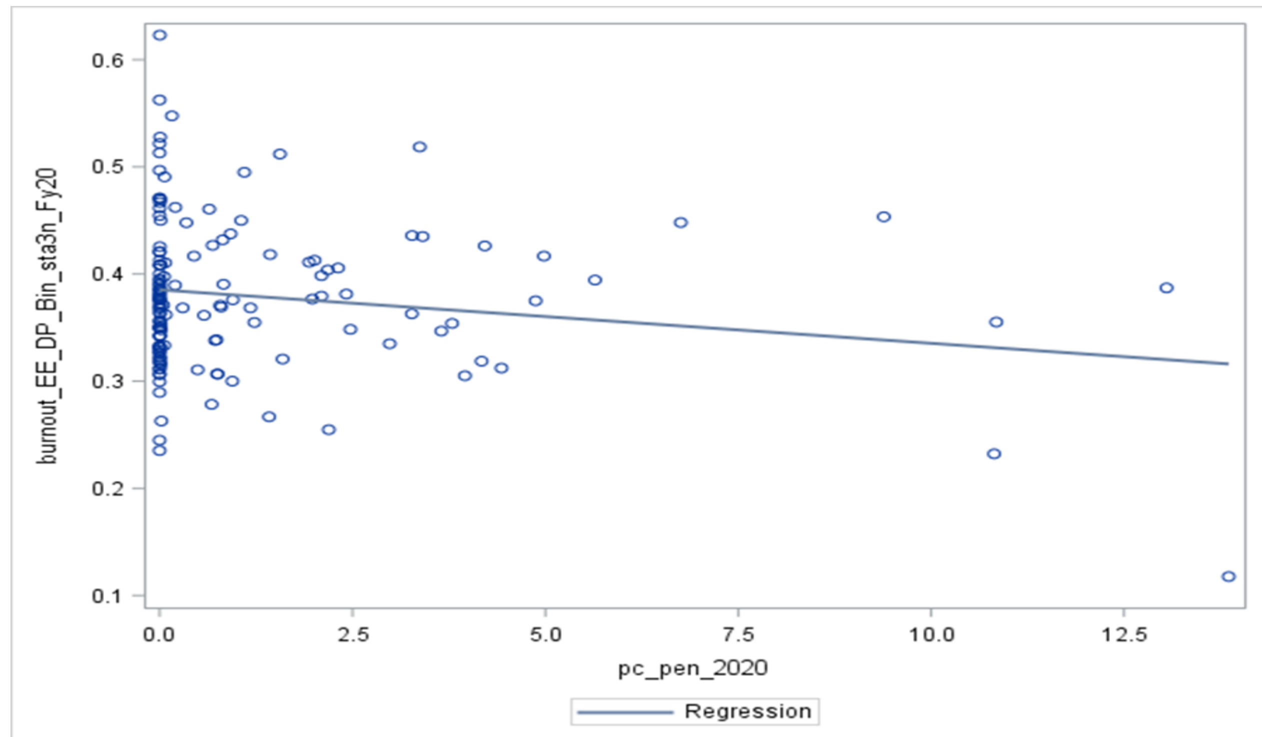
Results – Healthcare System Characteristics

Healthcare System Characteristics	Mean percent
CRH Use	1.0%
% reporting burnout in previous year (FY 2020)	36%
% Highly rural/Rural	30%
Panel fullness (1200 for PCPs, 900 for NPs or PAs)	91%
% PACT Teams with Staff Ratio >=3	43%
Facility Complexity	
1a (most complex)	45%
1b/1c	30%
2/3 (least complex)	25%

CSHIIP
Center for the Study of Healthcare Innovation, Implementation & Policy

Results: Correlations between Burnout and Primary Care CRH Use

% PCPs and Staff reporting Burnout in FY 2020



PC CRH Use – Percent of Patients with a CRH Visit in FY 2020

U.S. Department of Veterans Affairs
VA Greater Los Angeles Healthcare System

Results: Odds of High Burnout

Healthcare System and Respondent Characteristics	Adjusted OR	95% CI
CRH Penetration = % of Veterans with CRH Use		
Respondent in HCS with no PC CRH use	**Reference**	
Respondent in HCS with PC CRH use	**1.11**	**1.03-1.20**
% PCPs/Staff w/High Burnout, FY 2020 AES	**8.00**	**4.73-13.5**
Respondent Role		
Primary Care Provider	**Reference**	
Registered Nurse	**0.49**	**0.54-0.64**
Licensed Practical/Vocational Nurse	**0.47**	**0.43-0.52**
Medical Support Assistant	**0.63**	**0.57-0.71**

Results: Multi-level Multivariate Predicting Odds of Burnout

- Older age, Black and Asian race associated with lower likelihood of burnout
- No differences for:
  - Gender
  - Ethnicity (Hispanic/Not Hispanic)
  - Percent Rural/Highly Rural
  - Percent Team Core Staffing Ratio GE 3
  - Panel Fullness

Limitations

- Cross sectional analyses
- We lack data on primary care provider staffing gaps
- Healthcare system level may be ecological predictor to individual experience (e.g., CRH use at HCS may not capture impact on small CBOC)
- May not be correct to include healthcare systems with no CRH use in analysis

Conclusions - 1

- On average, CRH penetration was quite low (1%), although in some clinics as high as 14%
- Primary Care CRH use was associated with higher likelihood of burnout
- Older age, Black and Asian race associated with lower likelihood of burnout respondents
- Staff (compared to clinicians) had lower likelihood of burnout

Conclusions - 2

- Respondents in primary care clinics with higher burnout in FY 2020, had a higher likelihood of reporting burnout in FY 2021

Why is Primary Care CRH Use Associated with Greater Burnout?

- Are we measuring CRH use or clinician turnover? Even with replacement staff, turnover in a clinic is stressful.
  - While CRH use might decrease that stress, it might not eliminate it (other providers may still have to see additional patients in person, may be more walk-ins)
- Early implementation is almost always chaotic
  - CRH was in early stages of implementation. Perhaps start-up issues contributed to primary care clinician and staff burnout?
  - Is chaos a “bug” of CRH program? How does CRH transition new and virtual clinicians into clinics with minimal impacts on frontline staff?

Next Steps

- One of the CRH evaluation teams has developed a provider gap measure
- We plan on assessing association between provider gap measure and primary care provider and staff burnout over time
- By looking at impact of provider gap, then the addition of CRH we might disentangle effects of provider gap and CRH use on primary care provider and staff burnout
- Can VA and primary care leaders address current provider and staff burnout to reduce likelihood of future burnout?

Thanks to our fabulous evaluation team leaders and members, GLA CSHIIP, and funders!

Additional Evaluation Team Members

Amy G. Bonilla, PhD

Shay Cannedy, Ph.D.

Melissa Medich, PhD

Mike McGowan, MA

Lisa Edwards, BFN

Alexis Huynh, Ph.D.

Rong Guo, MPH

Taylor Sherrell, MPH

Neetu Chawla, PhD, MPH

This work was undertaken as part of the VHA Primary Care Analytics Team (PCAT), funded by the VA Office of Primary Care.

The views expressed are those of the authors and do not necessarily reflect the position or policy of the Department of Veterans Affairs.

Questions?

Contact:

Susan.Stockdale@va.gov

Alicia.Bergman@va.gov

Danielle.Rose@va.gov