PRIMARY CARE ANALYTICS TEAM (PCAT): AN OVERVIEW

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PROFESSOR, DIVISION OF GENERAL INTERNAL MEDICINE, UNIVERSITY OF WASHINGTON

OBJECTIVES

Review past VHA primary care operations and evaluations efforts

Outline the development of PCAT and highlight recent work

Discuss challenges and strategies for working with clinical partners

Outline measures of success

PRIMARY CARE IN VHA: CLINICAL OPERATIONS & EVALUATION EFFORTS

Pre - 1990s

- Loosely centralized, mostly Inpatient hospitals; <10% of patients assigned to primary care

Mid - 1990s

- Regional networks (VISN); funding for populations not facilities
- 80% of Veterans assigned to primary care
- Universal Electronic Health Record (EHR)
- Performance and quality improvement system

2000 – present

- Primary Care Mental Health Integration (PC-MHI) (2007)
- 95% of Veterans assigned primary care provider
- Patient Aligned Care Teams (PACT) (2010 - 2018), 6-site evaluation and demonstration lab initiative (PACT DLI)
- Primary Care Analytics Team (PCAT), embedded researchers in the Office of Primary Care (2018 – present)

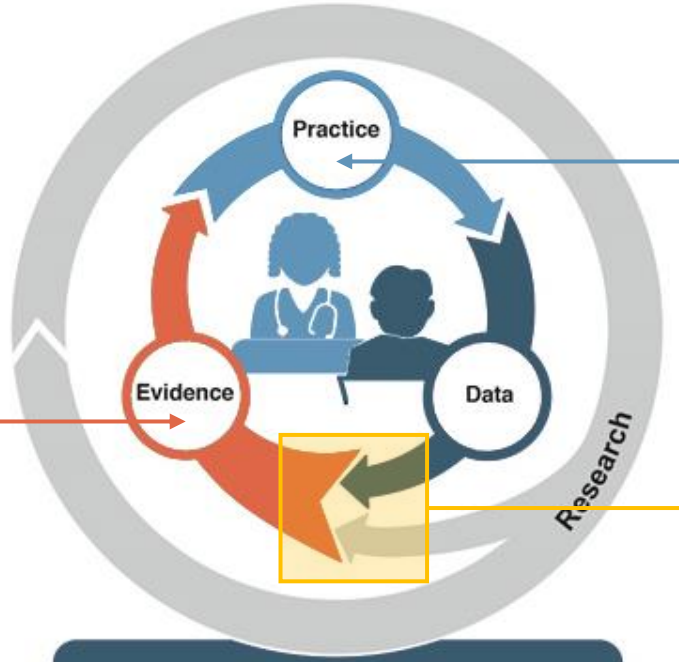
PACT DEMONSTRATION LAB INITIATIVE

The Association of Team-Specific Workload and Staffing with Odds of Burnout Among VA Primary Care Team Members

Christian D. Helfrich, MPH, PhD[1,2], Joseph A. Simonetti, MD, MPH[1,3], Walter L. Clinton, PhD[4], Gordon B. Wood, MS[4], Leslie Taylor, PhD[4], Gordon Schectman, MD[5], Richard Stark, MD[6], Lisa V. Rubenstein, MD[7,8,9], Stephan D. Fihn, MD, MPH[1,3,4], and Karin M. Nelson, MD, MSHS[1,3,4]

2015 VHA HSR&D paper of the year

Learning Health Systems



Data Science

Implementation Science

PCAT: embedded research team

PCAT works with local and national leaders to integrate research and clinical operations

VISION FOR PCAT

- To provide the best evidence to operational leaders with the goal of improving primary care for Veterans
- As embedded researchers, PCAT assembles, analyzes and interprets data
- Office of Primary Care (OPC) feeds back the findings into the system by setting policy and practice guidelines
- PCAT is led by researchers who collaborate with other VHA researchers and provides information on primary care research needs to HSR&D and QUERI

PCAT MISSION

Provide analytic resources to the Office of Primary Care (OPC) for:

1. **Program evaluation** current projects include Clinical Resource Hub (CRH) initiative (5 year) and PACT modernization; team has expertise in outcome assessment (quality; utilization; cost & ROI; provider and staff experience; and patient experience)

2. **Program planning** including data support to primary care sub-councils; provision of evidence for strategic planning

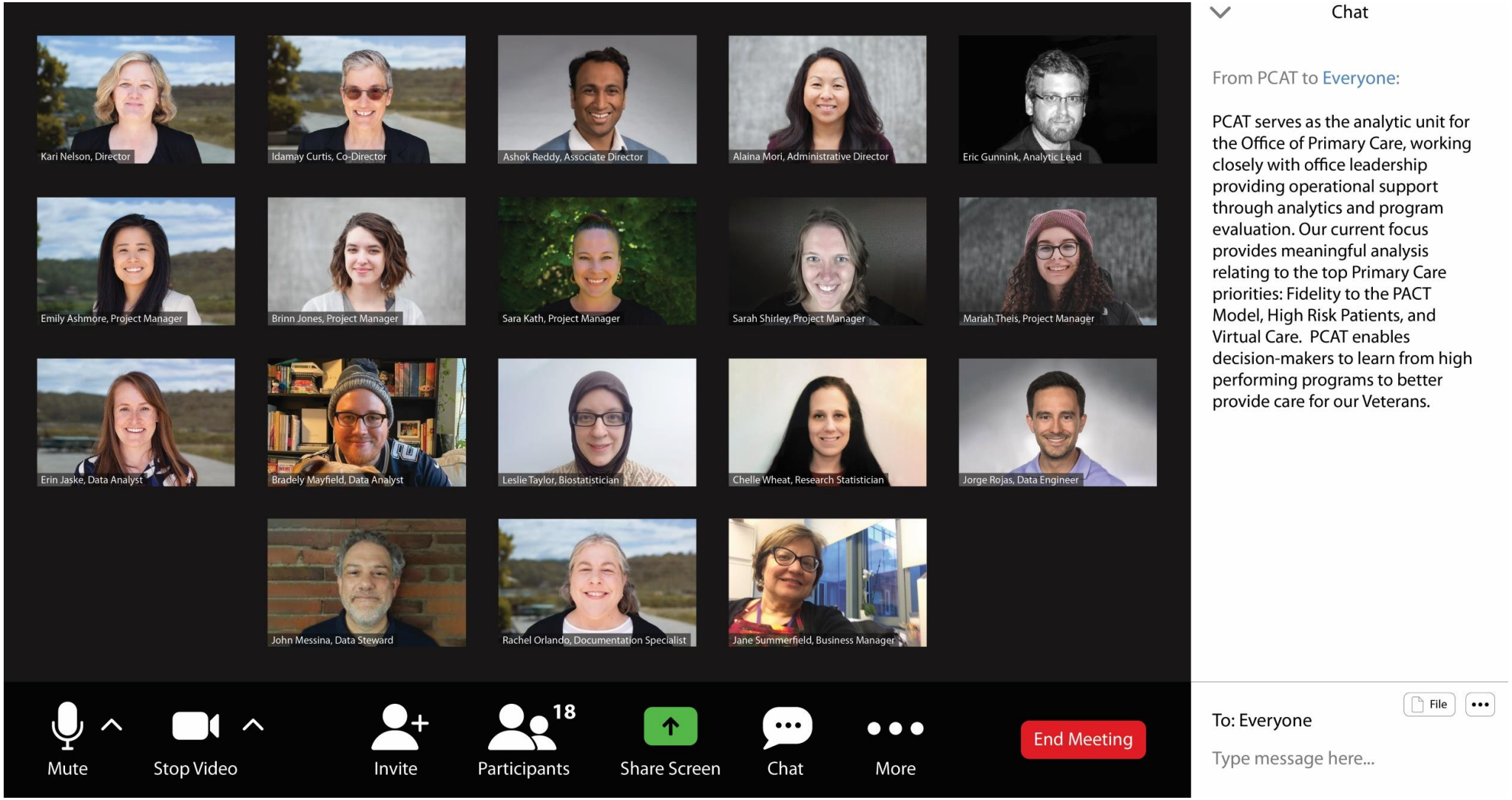
3. **Innovation development** including measures, databases, and statistical methods

4. **Evidence Synthesis** to answer OPC queries

PCAT MISSION

Execute analysis related to VHA Primary Care and respond to the needs of OPC's priorities. Current OPC priorities are:

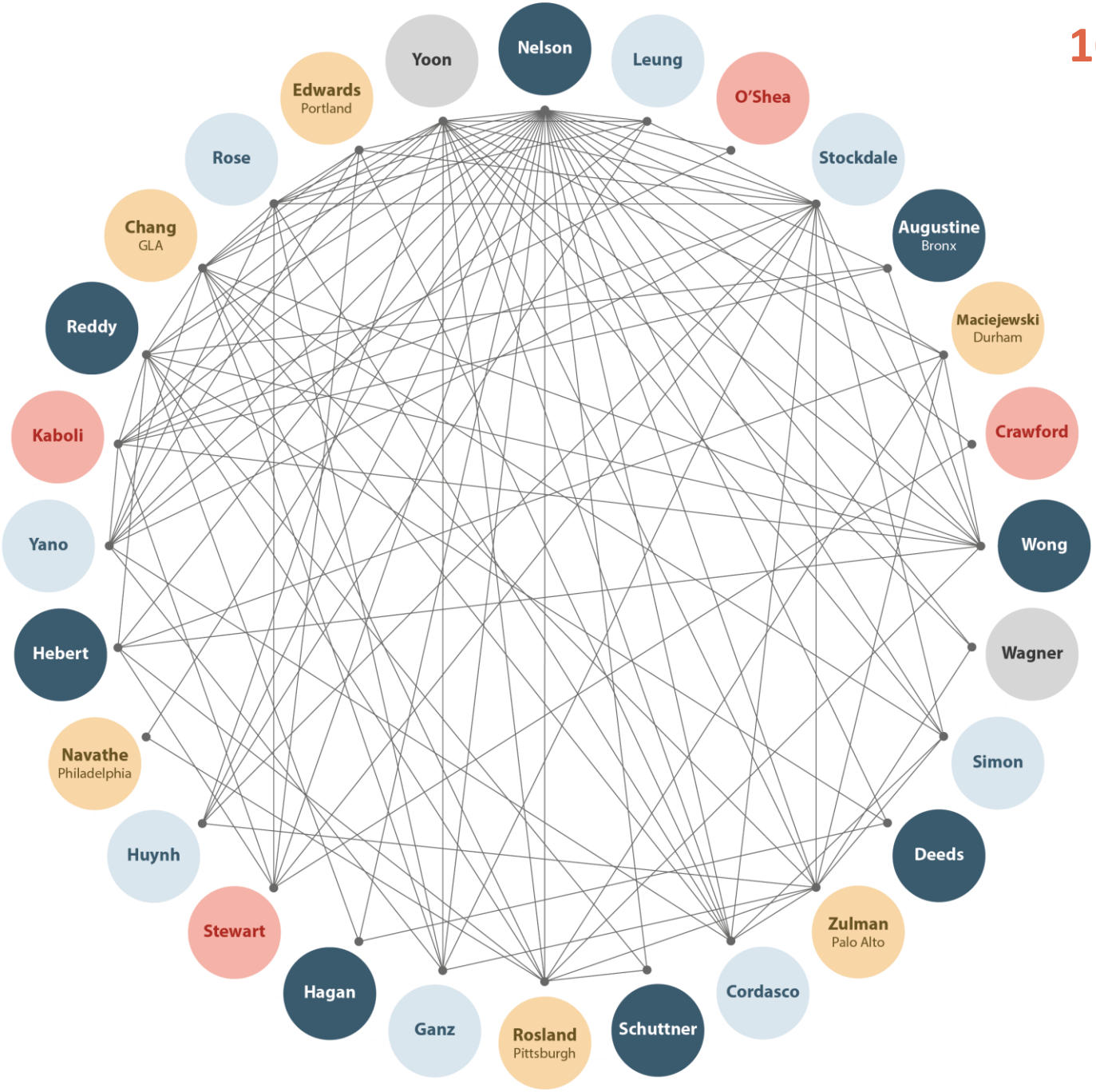
1. **Fidelity to the PACT model** – e.g., panel size, team staffing at the 3:1 ratio; productivity
2. **Care of high-risk patients** – e.g., high risk investigator core, work with RIVET QUERI, high risk sub-group analysis and pilot testing
3. **Virtual care** – e.g., Clinical Resource Hubs, Home Telehealth, Telephone Visits, VA Video Connect, Call centers


Kari Nelson, Director
Idamay Curtis, Co-Director
Ashok Reddy, Associate Director
Alaina Mori, Administrative Director
Eric Gunnink, Analytic Lead
Emily Ashmore, Project Manager
Brinn Jones, Project Manager
Sara Kath, Project Manager
Sarah Shirley, Project Manager
Mariah Theis, Project Manager
Erin Jaske, Data Analyst
Bradely Mayfield, Data Analyst
Leslie Taylor, Biostatistician
Chelle Wheat, Research Statistician
Jorge Rojas, Data Engineer
John Messina, Data Steward
Rachel Orlando, Documentation Specialist
Jane Summerfield, Business Manager
Mute
Stop Video
Invite
Participants
18
Share Screen
Chat
More
End Meeting
Chat
From PCAT to Everyone:
PCAT serves as the analytic unit for the Office of Primary Care, working closely with office leadership providing operational support through analytics and program evaluation. Our current focus provides meaningful analysis relating to the top Primary Care priorities: Fidelity to the PACT Model, High Risk Patients, and Virtual Care. PCAT enables decision-makers to learn from high performing programs to better provide care for our Veterans.
File
To: Everyone
Type message here...

COLLABORATIONS AMONG PCAT INVESTIGATORS

Lines represent collaborative interactions in the past 5 years, including HSR&D research grants, QUERI grants, operations projects and publications

- **High Risk** (Multi-Site)
- **VAIL** (GLA)
- **PCAT** (Seattle)
- **Iowa City VA**
- **Palo Alto VA**



CURRENT AREAS OF FOCUS

PACT Model
Team based
primary care

Care of high-
risk patients

Virtual care

Work with local
clinical leaders

CURRENT PROJECTS

PACT Model	
Primary care productivity	RAND expert panel, work on developing new primary care productivity measure HS&RD IIR (Co-PIs Nelson, Wagner)
New models of team-based care	Pilot evaluation [PACT modernization]
Provider survey	VOICE survey (Stewart) new method and cohort of respondents
Virtual Care	Coordination of 5-year multi-team program evaluation of the Clinical Resource Hub (CRH)
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Local Innovation	Primary Care Innovation Lab (PCIL) (Deeds); randomized QI intervention and testing

RETHINKING PRIMARY CARE PRODUCTIVITY MEASUREMENT: FINDING HOLISTIC APPROACHES

Team: Todd H. Wagner, Lisa V. Rubenstein,
Karin M. Nelson, L. Diem Tran, Steve D. Fihn, Paul W. Shekelle,
Sydne J. Newberry, Rachel M. Orlando, Idamay Curtis, Juliette S. Hong

PRIMARY CARE PRODUCTIVITY

Phase 1:

- Current measure of primary care productivity is panel size
- PCAT worked with the VA HSR&D Evidence Synthesis Program to assess literature on panel sizes and began research on current VA panel size characteristics

2018 systematic review found variable definitions of panels, insufficient evidence linking an optimal panel size with health outcomes *

* Paige NM, et al. What Is the Optimal Primary Care Panel Size?: A Systematic Review. *Ann Intern Med*. 2020

PRIMARY CARE PRODUCTIVITY

Phase 2:

1. Develop a more comprehensive, holistic approach to primary care productivity measurement
2. Test the validity and feasibility of the approach based on VHA data

Integrated project components:

- RAND: rapid evidence review, modified Delphi panel, and interviews with productivity experts and primary care stakeholders on existing measures of primary care productivity
- VA: developing and testing a prototype VHA based primary care productivity measure (VA Palo Alto HERC sub-contract with Drs. Todd Wagner, L. Diem Tran)

1ST SYSTEMATIC REVIEW & STAKEHOLDER PANEL*

Panel included: patients, clinicians, managers, economists*

Resulting 4 principles for an improved primary care productivity measure:

1. Calculated at the primary care practice level (across the practice's clinicians & teams & patients)
2. Accounts for investment in interprofessional clinical teams (as inputs)
3. Incorporates quality of care as part of the product (output)
4. Accounts for context, especially patient population complexity

Hempel et al., 2021, **https://www.rand.org/pubs/research_reports/RRA703 1.html**, summary manuscript submitted.

2ND SYSTEMATIC REVIEW* & PANEL

Identified Data Envelopment Analysis (DEA) as most promising to:

- Reflect team investment (inputs) and multidimensional products (outputs)
- Reflect user choices for relative weighting of output dimensions
- Display impacts from each separate contributing input on the final output

Preliminarily tested on over 900 VA primary care sites with promising results

- Recently presented at a workshop and oral abstract at national SGIM meeting
- Next steps: **Assess validity, feasibility, and user acceptability among VA clinical leaders, measurement experts, and potential users**

* Newberry et. al, submitted scoping review of potential measures

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LISTENING TO THE PRIMARY CARE TEAM: NEW SURVEY METHODS TO CREATE ACTIONABLE CHANGES

VOICE

VOICES OF INFLUENTIAL CARE EMPLOYEES

Team: Greg Stewart, Daniel Newton, William Iverson, Brinn Jones, Erin Jaske, Monica Paez, Samantha Solimeo, Annie Odom, Christopher Richards

VOICE SURVEY: A PANEL APPROACH

Survey Administration:

- Sample of 150 randomly selected sites, stratified by Region, Urban/Rural, and Size
- Short (3-10 questions) survey fielded every other month
- Item flexibility – items can repeat annually, but we will be able to rapidly include areas of operational and respondent interest

Providing Feedback to Field:

- Disseminate short info-graphic style reports summarizing responses and showing that responses are acknowledged by leadership

INFOGRAPHIC SENT TO PRIMARY CARE STAFF

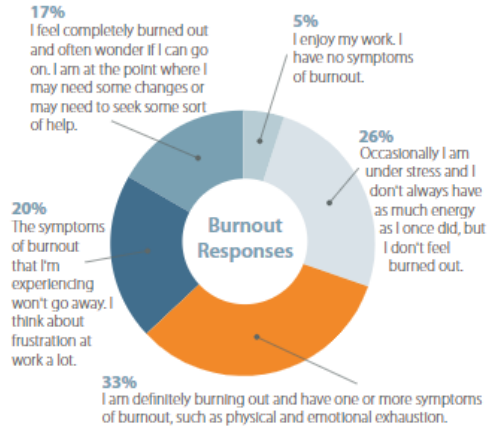
VOICE
VOICES OF INFLUENTIAL CARE EMPLOYEES

We Hear You!

Summary of responses from November 2021

A panel approach to voice: rapid communication of results to leadership and the field

"Thank you to all the PC employees participating in the VOICE survey series. Your direct feedback is an asset to our office, and helps us understand your struggles and successes at the frontline, such as those elucidated here: speaking up and burnout. We hope that this forum will truly help to give you a voice in the Office of Primary Care, as it has already begun to do so. With the demands and fatigue of the pandemic, we both hear and feel your exhaustion. We understand first-hand how telework can mitigate this burden. As a program office we strongly support offering telework in an appropriate manner for several days a pay period, in the context of local factors. As for challenges with staffing, we are continuing to advocate at a program office level with VA senior leadership to strongly support staffing of the full PACT model. We know this is critical to our success in caring for Veterans and reducing stress at the frontline. Know that you and your work are greatly appreciated and wish you a very warm holiday season and new year!" - **Angie Denietolis, Executive Director**



We asked participants about their ability to speak up at their place of work. Here are the responses:

Respondent quotes: Burnout

"Extremely over worked with additional work duties keep adding on. No support from nursing leadership. Nursing managers will ask [us] to do 2-3 people's job when short staff, putting veterans safety at risk and increasing chance of making error for a nurse."

"We spend so much energy on busywork that there is no energy left to care for patients. It's almost comical, it's so depressing"

Respondent quotes: Addressing Burnout

"I love my work with veterans, but the expectations of productivity, leave policy limitations, professional development limitations and systems-level issues that conflict with my values about patient-care make it hard to see myself staying in this position for the long term."

"Would be nice to see actual change from the FLT when these issues are addressed. Don't need another jean day or cookout, looking for change."

"Programs focused on self-care are insufficient to address burnout and just take more time when stretched so thin. Need programmatic and systemic changes."

Respondent quotes: Speaking Up

"I think one of the challenges is that we're very aware of the problems, and many are systemic in nature - unrealistic workload expectations for the PACT teams, for example. Yet when we speak up about them, the solutions proposed are too often individual level ones - i.e., stress management classes or similar wellness activities that burned out staff rarely have the time to participate in."

The analyses reported in this summary were performed at the request of the Office of Primary Care. For questions or additional information, please contact VOICE@va.gov.

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CLINICAL RESOURCE HUB (CRH)

VA implemented CRH across all VISNs in October 2019; Regional telemedicine program

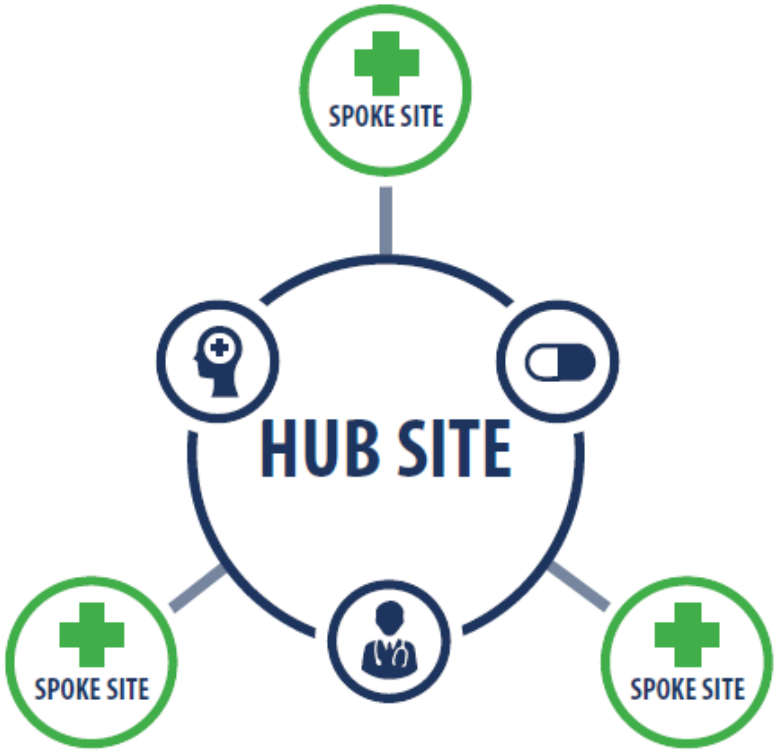
- Focused on rural/under-resourced clinics

Used "hub and spoke" model to address contingency staffing needs

- Provided primary care, mental health, and other specialty services
- Offered virtual (phone, video) and in-person care options

Telehealth Care: Clinical Resource Hubs provide primary care, mental health and specialty care services in VA facilities or in Veterans' homes via video or telephone

In-Person Visits: When needed, mobile deployment teams can provide face-to-face care for rural Veterans at local VA health care facilities



CRH EVALUATION TEAMS

Domains

Cost

Implementation

Veteran Experience

Workforce Experience

Access & Utilization

Quality

CRH EVALUATION

1. National assessment of early implementation of CRH core elements

2. Development of methods and measures for assessing cost and effectiveness of the program over the succeeding five years

3. Aims for Years 1-2 centered on gathering qualitative and quantitative data on:

    - Achievement of congressionally mandated milestones for CRH implementation
    - Identification of barriers and facilitators to program implementation

4. Products include data for a congressionally mandated report, 5 publications and 13 conference abstracts.

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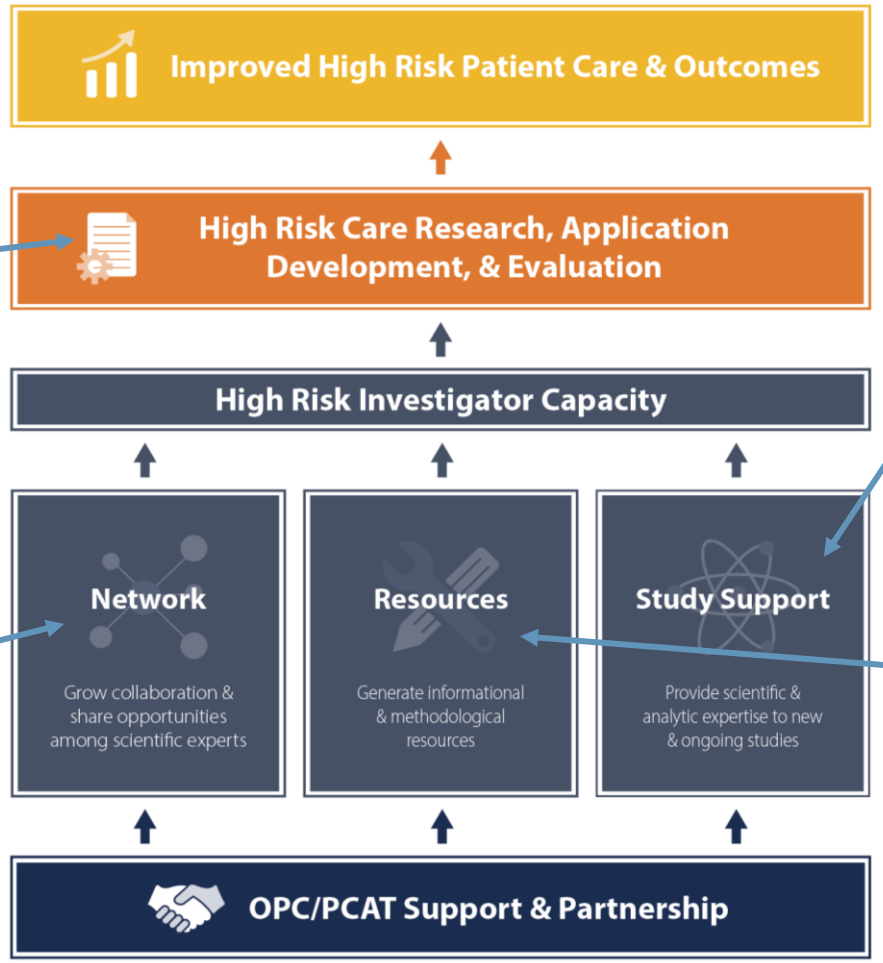
HIGH RISK INVESTIGATOR NETWORK

Team: Ann-Marie Rosland, Karin Daniels, Sophia Garvin

PCAT HIGH RISK CORE CAPABILITIES

HR Dissemination Products
Journal Publications
Conference Abstracts
Evidence Briefs

Network
15 Core, 24 Affiliate Members
Newsletters
Monthly Meetings



Operations/Study Support
Operations Rapid Requests
Operations Initiatives
Research Studies
Partnered Evaluation

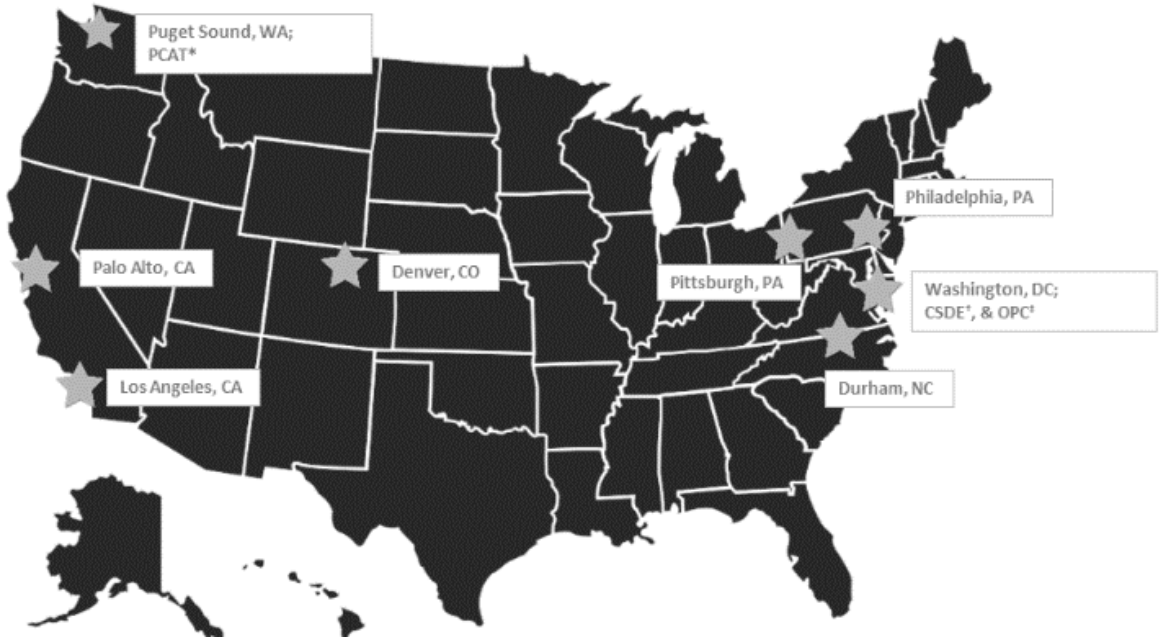
HR Study Resources
Data Definitions
Curated Data Sets
Best Practices
Evidence Database

PCAT HIGH RISK CORE INVESTIGATORS

[VA Primary Care High Risk Investigator Network - External Site]

[High Risk Investigator Network & Analytic Core - Internal VA Sharepoint]

Funded by the VHA Office of Primary Care with support from the Primary Care Analytics Team (PCAT)



PCAT = Primary Care Analytics Team
CART = Clinical Assessment Reporting and Tracking Program
OPC = Office of Primary Care

RIVET QUERI
CARE MANAGEMENT TOOL EVALUATION

Preventive Health Inventory (PHI) Evaluation*

Higher PHI uptake associated with clinics that had

- Racial/ethnic diversity
- Larger, urban clinic sites (VAMCs)

Overall positive changes in 12-month quality outcomes for diabetes and blood pressure control post PHI implementation

- Greater at sites with high adoption

Findings demonstrate that a proactive care management intervention in primary care can improve the quality of chronic disease care disrupted by the pandemic

* Presented at HSR&D national meeting, highlighted in a brief to senior VHA leadership

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PRIMARY CARE INNOVATION LAB

Team: Stefanie Deeds, Ashok Reddy, Kari Nelson, Idamay Curtis, Eric Gunnink, Chelle Wheat, Jorge Rojas, Leslie Taylor, Alaina Mori, Brinn Jones, Emily Ashmore

PRIMARY CARE INNOVATIONS LAB (PCIL)

The Primary Care Analytics team (PCAT) created the PCIL at VA Puget Sound to partner with local operational teams to support pragmatic randomized QI projects, through design and evaluation, to improve primary care delivery for Veterans by:

1. Develop partnership between PCAT, HSR&D and VA Puget Sound General Medicine Service; launched 2020

    Director: Stefanie Deeds, MD

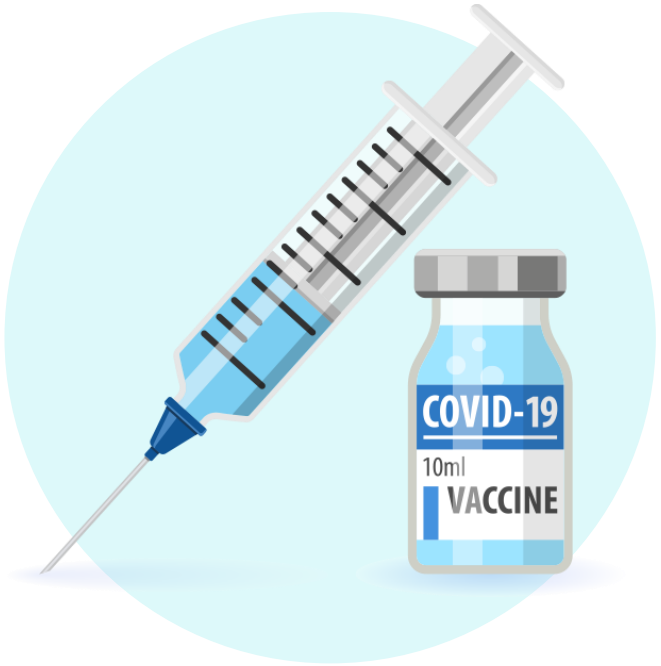
    Scientific Lead: Ashok Reddy, MD, MS

    Funding, program and analytic support provided by PCAT

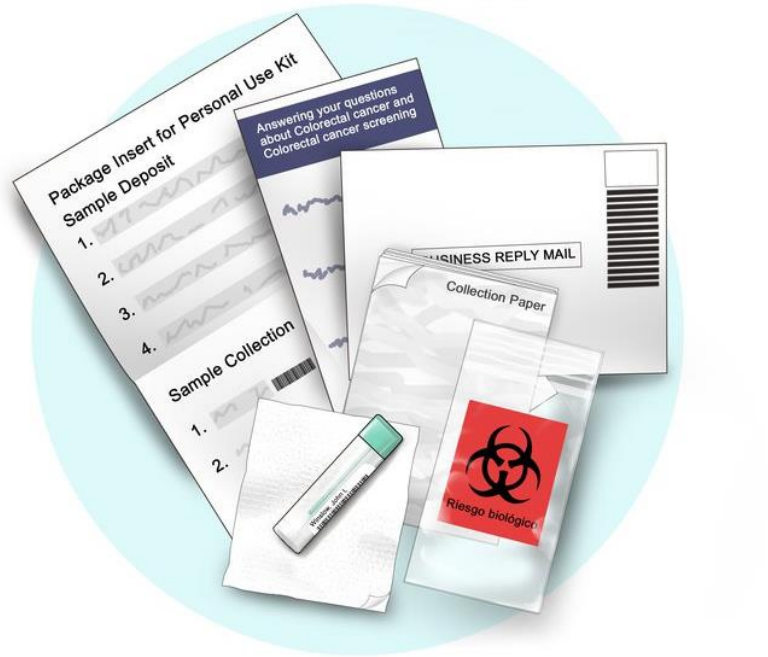
    Operational partners in General Medicine Service: Drs. Anders Chen, Lauren Beste, Chris Vanderwarker, John Geyer

2. Rigorously evaluate operational and quality improvement interventions in primary care

PCIL FOCUS ON HIGH PRIORITY LOCAL OPERATIONAL & QI WORK



COVID-19 Vaccine Appointment Scheduling



Mailed FIT Program & Reminders

PHONE & TEXT REMINDERS FOR MAILED FITS

VEText and automated telephone reminders resulted in a **10% increase** in colon cancer screening among average risk Veterans

Randomized Group	FIT Return Rate 90 Days	FIT Return Rate 180 Days
Control (N=886[1])	250 (28%)	283 (32%)
Automated Call (N=886[1])	345 (39%)	371 (42%)
VEText (N=908[1])	344 (38%)	363 (40%)
[1] n/N (%) [2] Pearson's Chi-squared test	**p <0.001[2]**	**p <0.001[2]**

	OR[1]	95% CI[1]	P-value
Group			<0.001
Control	-	-	
Arm 2 - Audiocare	1.68	1.37, 2.08	
Arm 3 - VEText	1.61	1.30, 1.98	
OR[1] = Odds Ratio, CI = Confidence Interval			

Deeds SA, et al Implementation of a mailed faecal immunochemical test programme for colorectal cancer screening among Veterans. *BMJ Open Quality* 2022

CHALLENGES IN WORKING WITH CLINICAL OPERATIONS PARTNERS

Timelines are **very different** than research

Level of evidence required is different than research

Framing the problem into a **question that can be answered**

VHA is a publicly funded system in a polarized political environment

Pressure for fast results; multiple levels of influence

Develop a trusting relationship **takes time**

STRATEGIES FOR WORKING WITH ORGANIZATIONAL LEADERS

Ongoing, frequent bi-directional contact between our team and operational leaders (monthly OPC leadership huddle)

- Integration of our team into national primary care governance structure
- Integration of our team into development of primary care initiatives, both local and national

Shared governance accountability between our analytics team and primary care clinical leaders

- Scientific Advisory Group; oversees how we work and ensures alignment to operational priorities, includes senior VHA leaders from research and clinical operations; meets twice a year

Osuji TA, Frantsve Hawley J, Jolles MP, Kitzman, et al. Methods to identify and prioritize research projects and perform embedded research in learning healthcare systems. Healthc (Amst), December 2020; 8(4):100476.

STRATEGIES FOR WORKING WITH ORGANIZATIONAL LEADERS

Develop mechanism to share results

Develop narratives (qualitative research)

In the face of funding uncertainties, capitalize on opportunities to show value to the organization

Delineate scope of work (primary care overlaps with a lot of other program offices)

EXAMPLE EVIDENCE BRIEFS

PRIMARY CARE ANALYTICS TEAM

Workload and Burnout among VHA Primary Care Team Members from 2014 Provider Survey

Christian Helfrich, Joseph Simonetti, Walter Clinton, Gordon Wood, Leslie Taylor, Gordon Schectman, Richard Stark, Lisa Rubenstein, Stephan Fihn, Karin Nelson

FINDINGS:

Primary care employees report high burnout, which is accentuated when 1) the patient panel is over capacity, 2) the team is understaffed, and 3) team membership is unstable.

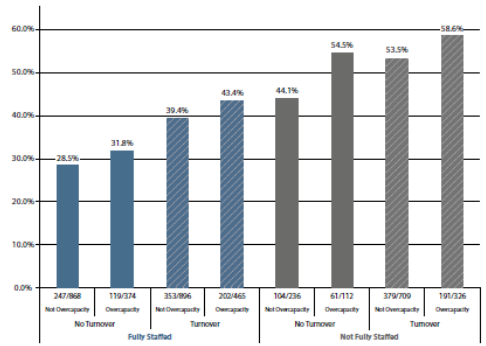
EVIDENCE:

2014 sample of 4,610 primary care providers, nurse care managers, clinical associates and administrative associates working in primary care completed a survey assessing burnout, teamlet staffing (having a fully staffed team, serving on multiple teams, and turnover on the teamlet), workload (working extended hours). Administrative data provided patient panel size and patient comorbidity . After accounting for cumulative effects and factors such as duration of VA tenure and type of facility (VAMC vs CBOC), significant relationships were not detected for burnout and 1) team members working on multiple teams, 2) working extended hours, or 3) average patient comorbidity. Relationships with burnout included the following:

RESULTS:

- 41% screened positive for workplace burnout, ranging from 32% of clinical associates to 49% of primary care providers.
- 65% reported teamlet staffing at the recommended ratio (3:1), 61% reported change in teamlet membership during the past year, 32% of panels exceeded recommended capacity.
- Burnout was lower with fully staffed teams (35% vs 52%), teams without turnover (33% vs 45%), and teams with panel size within recommendation (40% vs 44%).
- Burnout predictors were additive: members of fully staffed teams without turnover and within panel size recommendations reported 29% burnout, whereas members of understaffed teams with turnover and overcapacity panels reported 59% burnout.

Figure 1: Prevalence of burnout under various teamlet staffing and workload conditions



Publication: *Helfrich, C. D., Simonetti, J. A., Clinton, W. L., Wood, G. B., Taylor, L., Schectman, G., Stark, R. Rubenstein, L. V., Fihn, S. D., Nelson, K. M. (2017). The Association of Team-Specific Workload and Staffing with Odds of Burnout Among VA Primary Care Team Members. Journal of General Internal Medicine, 32(7):760-766.*
Contact: *PACT-MyVAS upport@va.gov*

PRIMARY CARE ANALYTICS TEAM

Clinical Quality and the Patient-Centered Medical Home

Karin Nelson, Phillip W. Sylling, Leslie Taylor, Danielle Rose, Alaina Mori, Stephan D. Fihn

FINDINGS:

- The PACT domains with the largest association with better clinical quality were care coordination, continuity, access and communication. For example, 69% (33 out of 46) of quality indicators were more likely to be met at sites with high care coordination. Better clinical quality for at least some indicators was associated with greater implementation on all PACT domains. ***(Figure 1)***
- When extrapolated to the entire VHA primary care population of 5.4 million patients, 310,468 additional services would be provided if all clinics performed at the same level of clinics with the highest care coordination. ***(Figure 2)***

EVIDENCE:

Study used External Peer Review Program (EPRP) data from 422,125 Veterans who received care from FY2012-2014 comparing clinics in the highest quartile of scores on the eight PACT characteristics to clinics in the lowest quartile:

Figure 1: % of Quality Indicators Would Be Better if PACT Domain Was Among the Highest Quartile

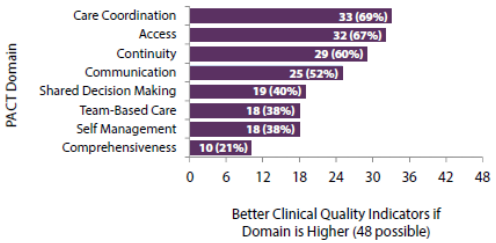
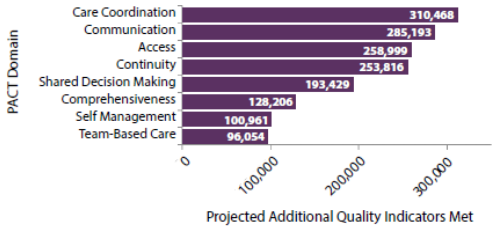


Figure 2: Population Estimates of Additional Quality Indicators Met if All Facilities Were High Performing



Publication: *Nelson, K., Sylling, P., Taylor, L., Rose, D., Mori, A., Fihn, S. (2017). Clinical Quality and the Patient-Centered Medical Home. JAMA Internal Medicine. 2017;177(7):1042–1044.*
Contact: *PACT-MyVAS upport@va.gov*

HOW DO WE MEASURE SUCCESS?

Influence policy and guide practice with a focus on improving primary care delivery to Veterans

Provide value through program evaluation

Publish in peer reviewed journals to share knowledge and enhance organizational reputation

Train and advance of junior faculty and investigators

Influence policy and guide practice with a focus on improving primary care delivery to Veterans

Policy work: productivity

Improving clinical quality: assessment of care management intervention developed by OPC - PHI work (with RIVET QUERI)

Provide value through program evaluation

CRH program evaluation

PACT Modernization: Pilot of new team-based care models

Publish in peer reviewed journals to share knowledge and enhance organizational reputation

SUMMATIVE PCAT ACCOMPLISHMENTS (2018-2023)

- Journal Publications: **133**
- Conference Presentations (Podium): **36**
- Conference Presentations (Poster): **100**
- Cyberseminars: **37**
- Rapid Responses to OPC: **147**
- Junior faculty and fellow mentorship and projects: 13 [45 total with affiliated investigators]

NEED MORE INFORMATION?

Nelson KM, Reddy A, Stockdale S, Rose D, Fihn S, Rosland AM, Stewart G, Denietolis A, Curtis I, Mori A, Rubenstein L. *The Primary Care Analytics Team: integrating research and clinical care within the Veterans Health Administration Office of Primary Care*. Healthcare. 8 (2021) Jun;8 Suppl 1:100491

PCAT Data Support: PCAT@va.gov

Primary Care Analytics Team (PCAT) (sharepoint.com)

High Risk Investigator Network & Analytic Core - Internal VA Sharepoint

THANK YOU!

QUESTIONS?

KARIN.NELSON@VA.GOV

EXTRA SLIDES

PCAT AND AFFILIATED INVESTIGATORS MENTORS 45 JUNIOR FACULTY & FELLOWS

Nelson & Reddy

- Stefanie Deeds, MD
- Scott Hagan, MD
- Anders Chen, MD, MHS
- John Geyer, MD
- Terrence Liu, MD
- Leah Marcotte, MD, MS
- Lee Eschronder, MD
- Charlie Wray, DO, MS (UCSF)
- Rebecca Tisdale, MD, MPA
- Seppo Rinne, MD, PhD
- Mayuree Rao, MD, MS
- Jonathan Staloff, MD, MSc

Kaboli

- Amy O'Shea, PhD, MS
- Matt Augustine, MD

Stewart

- Eean Crawford, PhD
- Daniel Newton, PhD, MBA, MA
- Samantha Solimeo, PhD, MPH, MA
- Heather Davila, PhD, MPA
- Amany Farag, PhD, MSN, RN

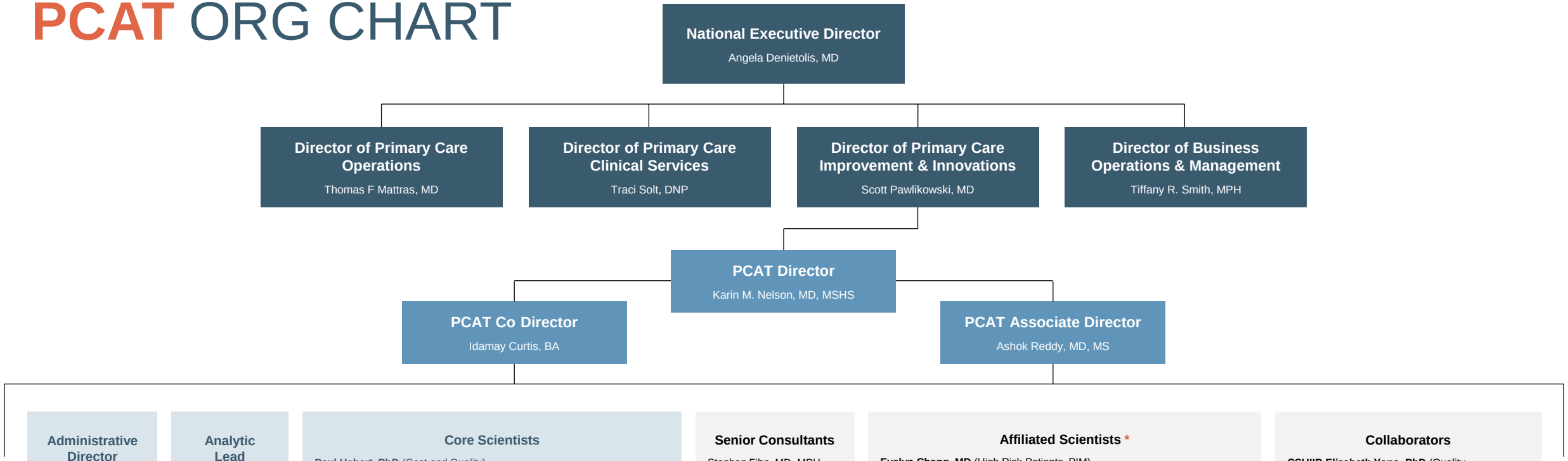
Rosland

- Tim Bober, MD
- Franya Hutchins, PhD
- Lucinda Leung, MD
- Rachel Bachrach, PhD, MS
- Daniel Blalock, PhD
- Jacqueline Ferguson, PhD, MHS
- Hayley Germack, PhD MHS, RN
- Margaret Zupa, MD, MS
- Jonathan Arnold, MD
- Michele Wong, PhD

Stockdale & Rose

- Melissa Medich, PhD, MPH, MA
- Shay Cannedy, PhD, MA
- Alicia Bergman, PhD
- Eric Apaydin, PhD, MPP, MS
- Eleni Skaperdas, MA
- Neetu Chawla, PhD, MPH
- Jane Wang, MD
- Amy Bonilla, PhD, MPA
- Alexis Huynh, PhD, MPH
- Karleen Giannitrapani, PhD, MPH, MA
- Linda Kim, PhD, MSN, RN
- Claire O'Hanlon, PhD, MPP
- Caroline Yoo, MPH
- Cynthia Hou, PhD
- Emmeline Chuang, PhD
- Taona Haderlein, PhD, MA
- Audrey Jones, PhD

PCAT ORG CHART



Administrative Director
Alaina Mori, BA

Project Management
Emily Ashmore, BS
Brinn Jones, BS
Sara Kath, MPA
Sarah Shirley, BA
Mariah Theis, MPH
Rachel Orlando, MS
Jane Summerfield, BS

Analytic Lead
Eric Gunnink, MS

Analytic Team
Erin Jaske, MPH
Leslie Taylor, PhD
Chelle Wheat, PhD
Jorge Rojas Jr., MS
Brad Mayfield, MS
John Messina, BA

Core Scientists
Paul Hebert, PhD (Cost and Quality)
Edwin Wong, PhD (Cost and Quality)
Stefanie Deeds, MD (Care Delivery, Clinical Outcomes)
Susan Stockdale, PhD (Methods, Implementation, QI, Team-Based Care)
Danielle Rose, PhD, MPH (Qualitative, survey EBQI)
Greg Stewart, PhD (Team-based Care, Organizational Health)
Ann Marie Rosland, MD (High Risk Patients)

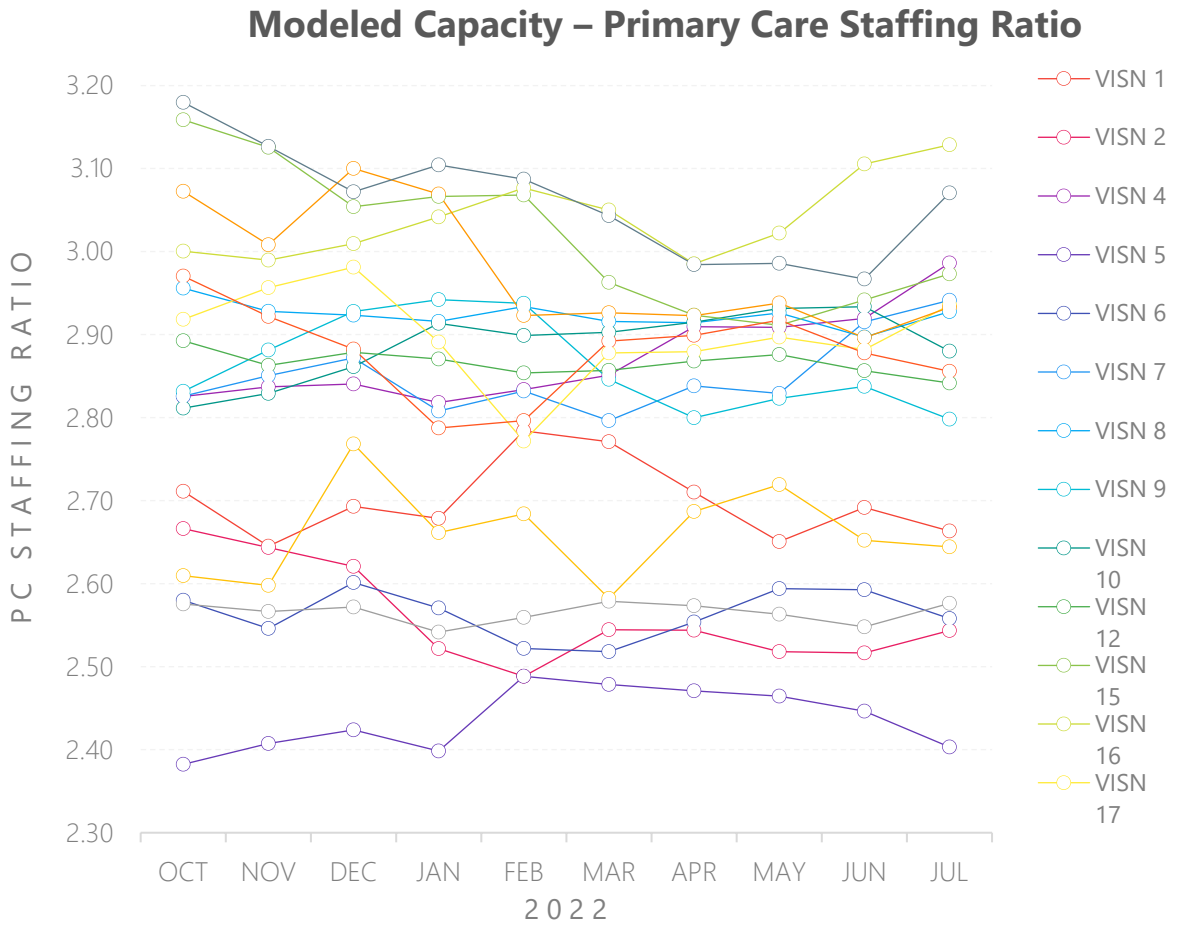
Senior Consultants
Stephan Fihn, MD, MPH
Lisa Rubenstein, MD, MSPH

Affiliated Scientists *
Evelyn Chang, MD (High Risk Patients, PIM)
Matthew Maciejewski, PhD (High Risk Patients, Social Determinates of Health)
Donna Zulman, MD (High Risk Patients, Social Determinates of Health)
Lucinda Leung, MD PhD (PCMHI, Telemental Health)
Bradford Felker, MD (Mental Health)
Linnaea Schuttner, MD (Clinical Outcomes)
Scott Hagan, MD (Care Delivery, Clinical Outcomes)
Eric Apaydin, PhD (Workforce)
Neetu Chawla, PhD (Quality Improvement)
Matt Augustine, MD, MPH (Access to Care, Panel)
Peter Kaboli, MD (Access, Virtual Care)
Todd Wagner, PhD (Cost)
Jean Yoon, PhD (Cost)

Collaborators
CSHIIP Elizabeth Yano, PhD (Quality Improvement)
CSDE Tami Box, PhD (CSDE Operations)
VSSC Betsy Lancaster (Data Management)

* PCAT core budget may cover affiliated scientist or collaborators via MOU or contracts

2022: PACT TEAMS ARE **NOT** FULLY STAFFED



VISN	Proportion of Teams with RN Vacancy	Proportion of Teams with MSA Vacancy
VISN 01	0.39	0.58
VISN 02	0.21	0.30
VISN 04	0.25	0.49
VISN 05	0.43	0.41
VISN 06	0.25	0.57
VISN 07	0.23	0.39
VISN 08	0.09	0.25
VISN 09	0.36	0.32
VISN 10	0.23	0.39
VISN 12	0.20	0.43
VISN 15	0.14	0.20
VISN 16	0.11	0.22
VISN 17	0.12	0.30
VISN 19	0.45	0.63
VISN 20	0.20	0.48
VISN 21	0.49	0.64
VISN 22	0.33	0.63
VISN 23	0.19	0.44

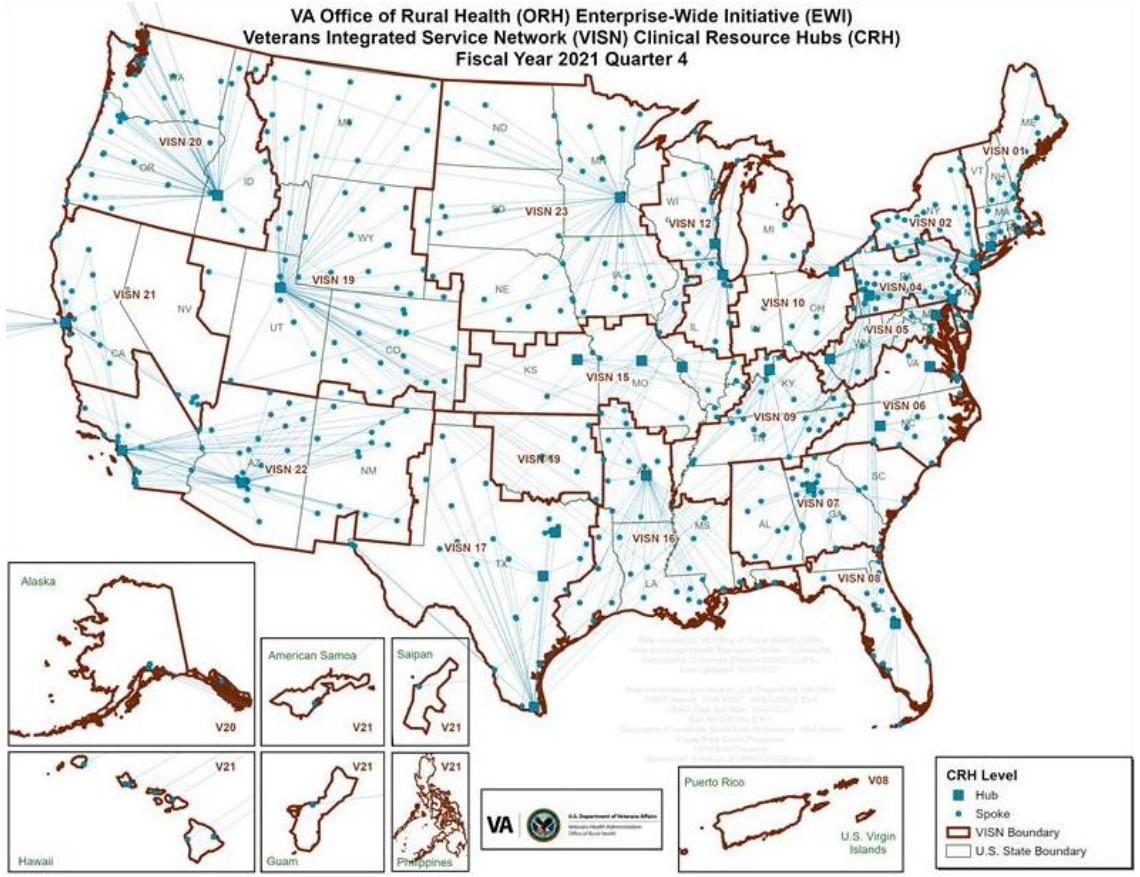
PCIL PROJECT LIFECYCLE KEY STEPS

1. **Identify Opportunities:** Open project call to staff and leadership, vet projects and review performance and prior field work
2. **Plan:** Operational committee review, selection, define intervention, work with stakeholders
3. **Design:** Further refine intervention design, rigorous evaluation planning
4. **Test & Iterate:** Prepare and launch intervention, monitor, and analyze results
5. **Disseminate:** Share results, lessons learned, and best practices

CRH BACKGROUND

The CRH initiative began in fiscal year (FY) 2020 (October 1, 2019 – September 2020). The Primary Care Analytics Team (PCAT) started planning of the evaluation in August 2019. Evaluation Year 1 is FY 2020 (10/2019 - 9/2020) and **Evaluation Year 2 is FY 2021 (10/2020 - 9/2021).**

PCAT coordinates five geographically disparate teams whose efforts are represented in this presentation, which summarizes aims, methods and key findings of work completed in evaluation year 2.



PAST YEAR **PROJECTS**

PACT Model	
Primary care productivity	RAND expert panel, work on developing new primary care productivity metric HS&RD IIR (Co-PIs Nelson, Wagner)
New models of team-based care	Pilot evaluation [PACT modernization]
Provider survey	VOICE survey (Stewart) new method and cohort of respondents
Virtual Care	Coordination of 5-year multi-team program evaluation of the Clinical Resource Hub (CRH)
High Risk Patients	RIVET QUERI (M-PIs Reddy, Rosland, Chang) Ongoing support of High-Risk Investigator Network (Rosland)
Local Innovation	Primary Care Innovation Lab (PCIL) (Deeds); randomized QI intervention and testing

CONCLUSIONS

1. A Learning Healthcare System is promising model, with several challenges in the actual implementation

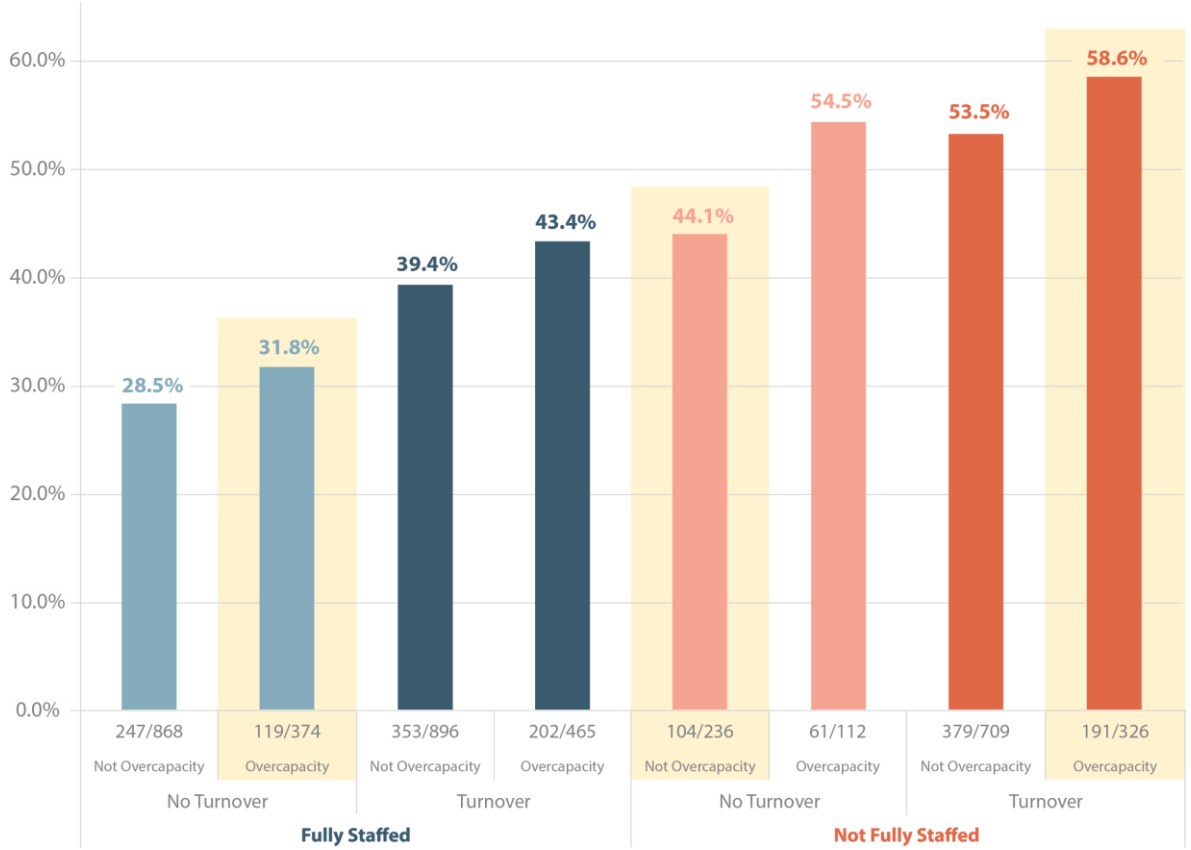
2. Keys to Success in a Learning Health System - Improve Chances That Research Will Be Relevant and Actionable

   - Leadership engagement
   - Development of trust between research and care delivery leaders
   - Use of methods that are both rigorous and rapid
   - Integrate clinical leaders into health care delivery research

2022 PCAT ACCOMPLISHMENTS

- Journal Publications: **17**
- Conference Presentations (Podium): **5**
- Conference Presentations (Poster): **12**
- Cyberseminars: **6**
- Rapid Responses to OPC: **23**
- HSR&D/QEURI Funding for PCAT related work
  - HSR&D IIR Nelson/Wagner Primary Care Productivity
  - QUERI Chang/Reddy/Rosland/Stockdale High Risk RIVET QUERI

HIGHER BURNOUT ON PACT TEAMS THAT WERE NOT FULLY STAFFED (3:1), HAD STAFF TURNOVER, & WERE OVERCAPACITY



Helfrich et al., 2017, Journal of General Internal Medicine