PACT AND PERCEPTIONS OF ACCESS

COMPONENTS AND INITIATIVES FROM THE PATIENT-CENTERED MEDICAL HOME AND ASSOCIATIONS WITH ACCESS TO CARE

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PACT Cyberseminar Series

Conflicts of Interest: None

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PRIMARY CARE ANALYTICS TEAM

POLL #1

- What is your primary role at the VA?
  - Clinician trainee or other health trainee
  - Independent clinician (MD, ARNP, or PA)
  - Clinical staff other than above
  - Researcher
  - Administrator, manager, or policy-maker
  - Other

OBJECTIVES

- Understand components of the PACT model and factors related to access
- Describe findings from a recent evaluation of perceptions of access related to PACT

ACCESS TO CARE

- Access is critically important
  - Lower mortality
  - Better patient satisfaction
  - Reduced utilization
- Medical home model intended to improve access

Augustine et al., *JGIM,* 2019
O'Malley, *Health Aff,* 2013
Prentice et al., *Am J Med Qual*, 2014

ACCESS TO CARE

Access (IOM):
"The *timely use* of personal health services to achieve the best possible health outcomes"

Access (Fortney):
"Access to care represents the *potential ease* of having virtual or face-to-face interactions with a broad array of healthcare providers including clinicians, caregivers, peers, and computer applications."

- **Actual access** represents those *directly-observable* and *objectively measurable* dimensions of access.
- **Perceived access** represents those *self-reported* and *subjective* dimensions of access.

Fortney et al., *JGIM*, 2011

CONTEMPORARY ACCESS WORK ONGOING AT THE VA

- Wait times:
  - Wait time, new patients
  - Third next available
  - Timely Care
- Patient perceptions
  - SHEP Survey
  - Kiosk
- Primary Care
  - Extended Hour Encounters
  - Staffing Ratio
  - Panel Size Fullness
- Mental Health
  - PCMHI Penetration rate
  - PCMHI same day access
  - Chart Review: Patient Assessments for Call-ins
  - Staffing Ratio
  - Revisit Rate
- Telehealth/Virtual Care
  - Telephone Access
  - Secure Messaging
  - Home Telehealth
- Other
  - VA Community Care Trends
  - E-Consult Utilization
  - Travelling Veteran Coordinators
  - Group Practice Manager

VA Access Evaluation: https://vaww.infoshare.va.gov/sites/primarycare/PCAT-Access/Access/VAC%20Evaluation.aspx
Access cyberseminar (Dec 2019): https://www.hsrd.research.va.gov/for_researchers/cyber_seminars/archives/3746-notes.pdf

PATIENT PERCEPTION OF ACCESS

- Reflects the patient experience more directly
- Individualized to patient
- Changes over time (even when actual access may not)
- Perceptions of access relate to perceived need
- Valid – relates to utilization

Fortney et al., *JGIM*, 2011
Augustine et al., *JGIM*, 2019

PACT AND ACCESS

- Increase capacity
  - Staffing ratios
  - Enhanced digital / telephone encounters
- Specific access techniques
  - Open access
  - Recall scheduling
- Patient perceptions
  - Continuity
  - Communication

GAPS IN KNOWLEDGE

- Specific impact of organizational factors and access strategies from PACT
- Strategies to improve access often studied in isolation
- How does staff perception of access relating to patient perceptions

STUDY DESIGN

- Cross-sectional study, 2016
- Association of patient perception of access as related to staff report of the presence of organizational factors and access-related initiatives at their clinic

PREDICTORS: STAFF SURVEY RESPONSES

- Staff responses from VA National Primary Care Provider and Staff Survey
  - Anonymous survey distributed through email to primary care staff biannually
  - Self report of clinic, demographics
  - Response rate of 18% in 2016

PREDICTORS: ORGANIZATIONAL FACTORS & ACCESS INITIATIVES (N = 4,815)

- 11 organizational factors
- 11 access initiatives

STAFF MEMBER REPORT OF PRESENCE/ABSENCE AT THEIR CLINIC:

Organizational factors

- Staff report moderate or higher burnout
- In past year, PCP changed or left team
- In past year, RN changed or left team
- In past year, LVN/LPN changed or left team
- In past year, MSA changed or left team
- Written role descriptions used for staff
- Team staffed at full ratio of 3:1 support to provider
- Daily huddle at primary care clinic
- Staff report work is well-matched to training
- Team regularly review performance reports
- Leadership maintains medical home model

Access related initiatives

- Clinical pharmacist visits
- Telephone visits
- Nursing visits
- Patient group visits
- Virtual care (telehealth video) visits
- Secure electronic messaging
- No-show reports
- Telephone reminders for appointments
- Future appointments scheduled ≤90 days (recall)
- Carve-out times for same-day appointments
- Open access scheduling

POLL #2

- Which of the following would you predict would be most strongly associated with HIGHER perceived access?

1. Secure messaging
2. Having a fully staffed PACT (ratio 3:1)
3. Open access
4. Recall scheduling for future appointments over 90 days
5. Using carve-outs to hold appointments

PATIENT ACCESS OUTCOMES FROM THE SHEP SURVEY

- Consumer Assessment of Healthcare Providers and Systems (CAHPS) questions from VA Survey of Healthcare Experiences of Patients (SHEP CAHPS-PCMH version)
  - SHEP is a nationally administered survey to a random sample of outpatients, with encounters in the past 1 month.
  - Overall response rate 41.2% for 2016
  - Sampling weights used for non-response, population representation

PERCEPTION OF ACCESS FROM 3 QUESTIONS (N = 241,122)

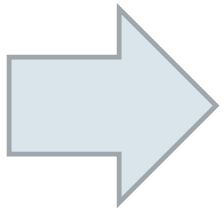
- Three measures of patient access:
  - **SAME-DAY CARE**: How many days did you have to wait for an appointment when you needed care right away?
  - **URGENT CARE**: For care you needed right away, how often did you get an appointment as soon as you needed?
  - **ROUTINE CARE**: When you made an appointment for a check-up or routine care with this provider, how often did you get an appointment as soon as you needed?

OUTCOMES: THE % OF PATIENTS IN A CLINIC REPORTING "BEST"

"How often did you get care… "
(1) ***Always…***

OR

"How many days did you have to wait…"
(1) ***Same day…***
(2) ***<1 day…***



% of patients reporting in the "top" or "top 2" best categories for access per clinic

STATISTICAL ANALYSIS

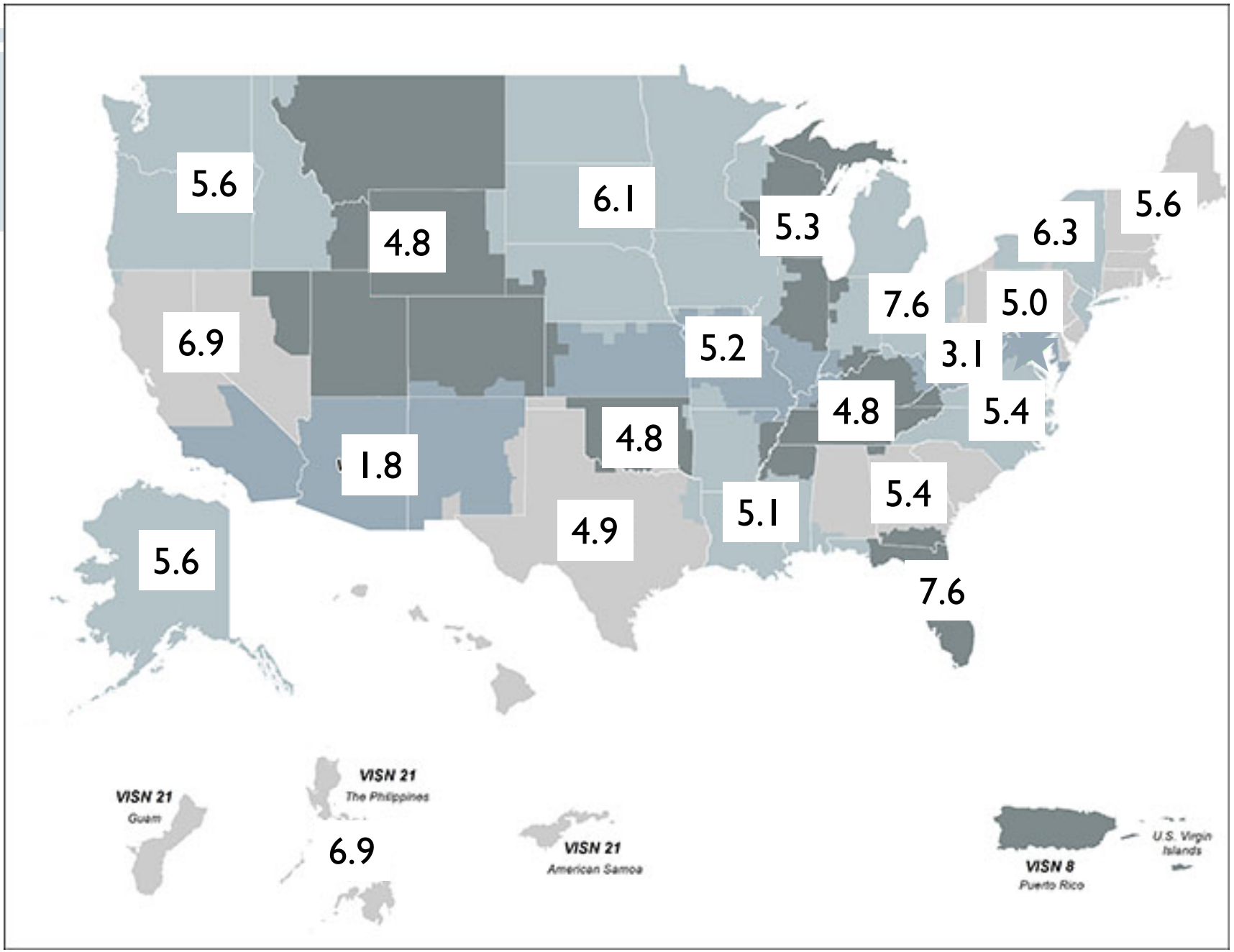
- Total of 6 models
  - 2 sets of predictors
  - 3 outcomes
- GEE (identity link, independent covariance
- Heteroskedastic robust SE
- Secondary analysis by staff role
- Multiple imputation for missing responses
- Survey weighting for non-response (SHEP)
- Covariates, averaged by clinic:
  - Patient age
  - Patient sex (binary, if clinic >10% female)
  - Elixhauser comorbidity (ICD-10, diagnosis based)
  - CBOC/VAMC

DEMOGRAPHICS OF STAFF RESPONDENTS (N = 4,815)

Years of experience at VA, mean (SD)	4.7 (1.9)
Years with PACT team, mean (SD)	3.4 (1.0)
Female, %	75.3
Age in years	
≤ 39	19.2
40-59	64.0
≥ 60	16.8
Role	
PCP	31.3
RN	30.8
LVN/LPN	23.5
MSA	14.4

DEMOGRAPHICS OF PATIENTS

N = 241,122
Age 67.2 (SD 12.1)
Female 5.8%



CLINICS DESCRIPTIONS

	Clinic n = 713
Age of patients in years, mean (SD)	62.8 (3.9)
Female patients, %	7.2
Elixhauser of patients, mean (SD)	1.5 (0.3)
CBOC, %	78.0
Best access urgent care, %	49.7
Best access same-day care, %	38.2
Best access routine care, %	58.9
Patient panel per PCP, mean (SD)	936.2 (224.1)

AVERAGES AT CLINIC

Organizational Factors (%)	
Leadership	85
Written role descriptions	77
Reviews performance reports	67
Any staff turnover in past year	65
PCP	*24*
RN	*30*
Clinical associate (CA)	*24*
MSA	*27*
PACT daily huddles	64
Fully staffed 3:1	64
Work well-matched to training	60
Burnout reported by staff	40

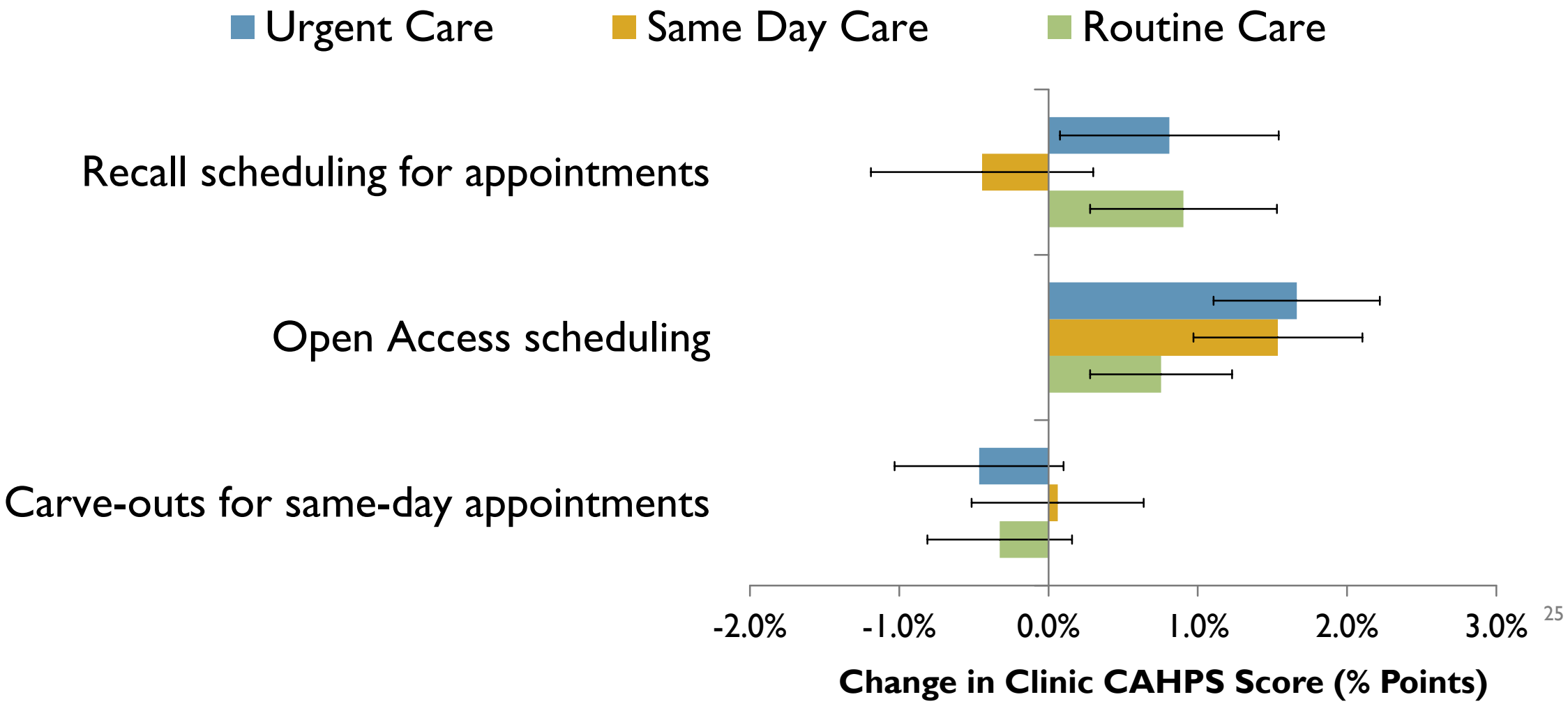
Access initiatives (%)	
Secure electronic messaging	94
Nursing visits	91
Telephone visits	86
Recall scheduling	83
Phone reminders	67
Clinical pharmacy visits	57
Virtual care (telehealth) visits	51
No-show reports	50
Open access scheduling	49
Carve out slots to hold times	36
Patient group visits	22

CORE DIFFERENCES BY CLINICS IN QUINTILES (ROUTINE ACCESS)

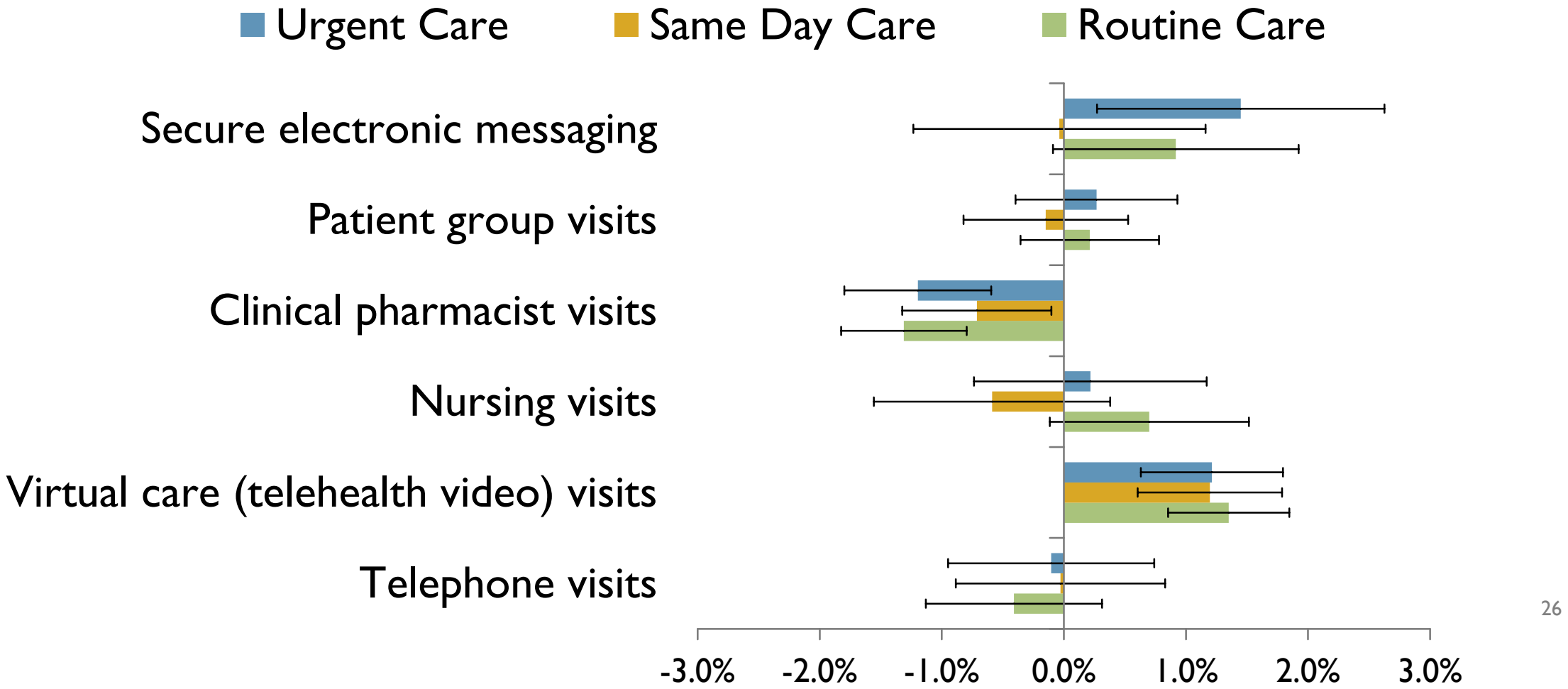
	Top 10%	Bottom 10%	P
Age, mean (SD)	65.1 (2.8)	59.2 (4.1)	<0.001
Female, %	4.8	11.0	<0.001
Elixhauser, mean (SD)	1.4 (0.3)	1.4 (0.3)	0.42
CBOC, %	94.4	80.3	<0.01
Patients per PCP, mean (SD)†	931.7 (227.6)	998.1 (226.4)	0.09
Burnout reported by staff	33.5	44.4	0.06
Any staff turnover	52.7	72.0	<0.01
Fully staffed 3:1	64.4	55.2	0.23
Team reviews reports	76.4	56.7	<0.01
Clinical pharmacy visits	39.5	57.4	<0.01
Virtual care (telehealth) visits	65.2	40.3	<0.001
Recall scheduling	88.7	78.7	0.02
Open access scheduling	59.3	34.4	<0.001

ACCESS INITIATIVES

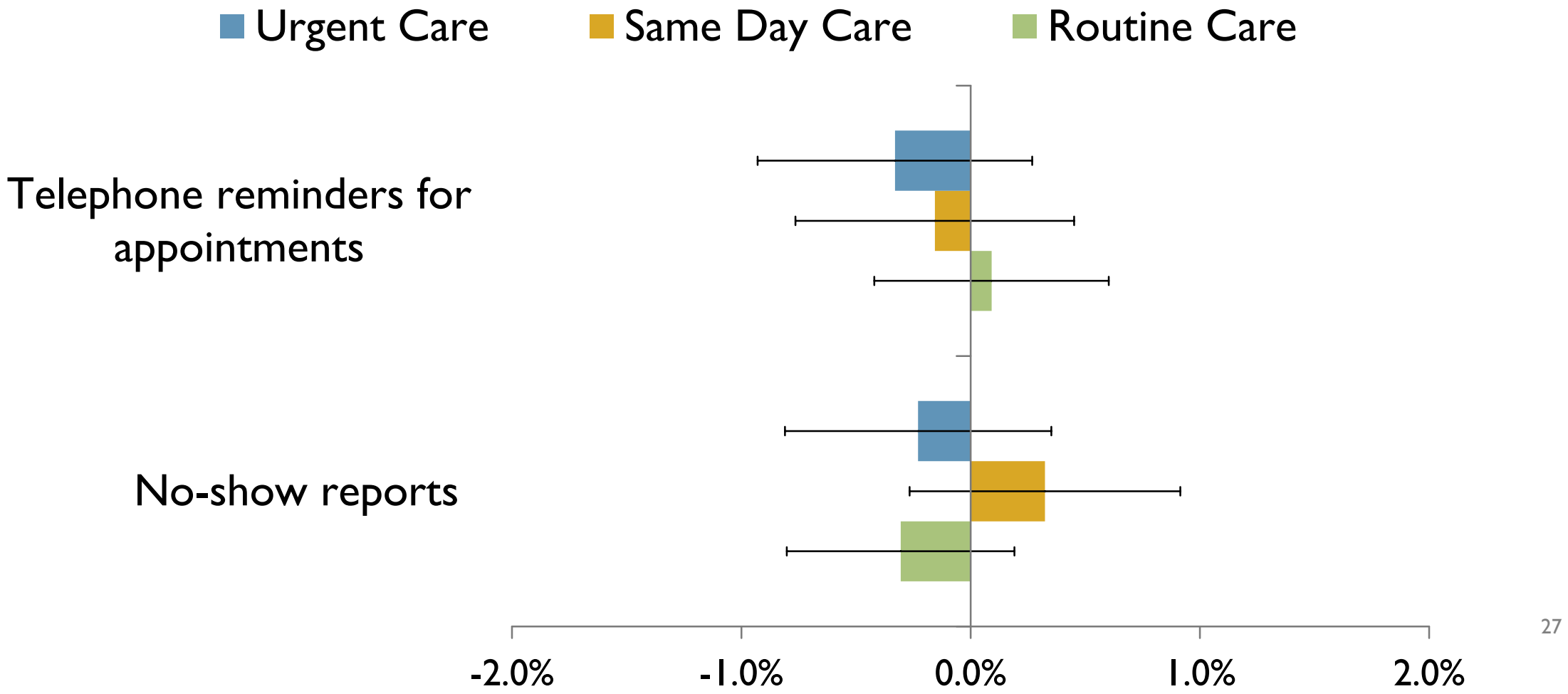
SCHEDULING STRATEGIES



DIFFERENT VISIT FORMATS

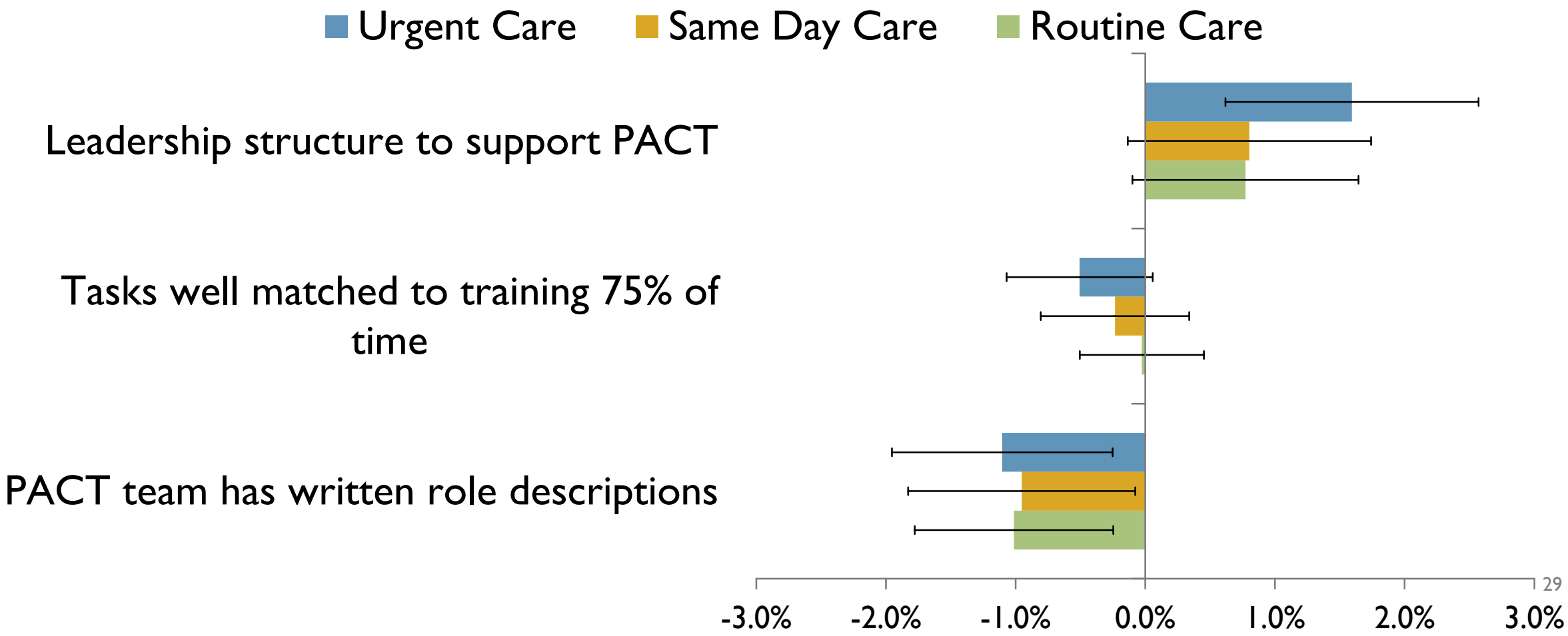


NO SHOW STRATEGIES

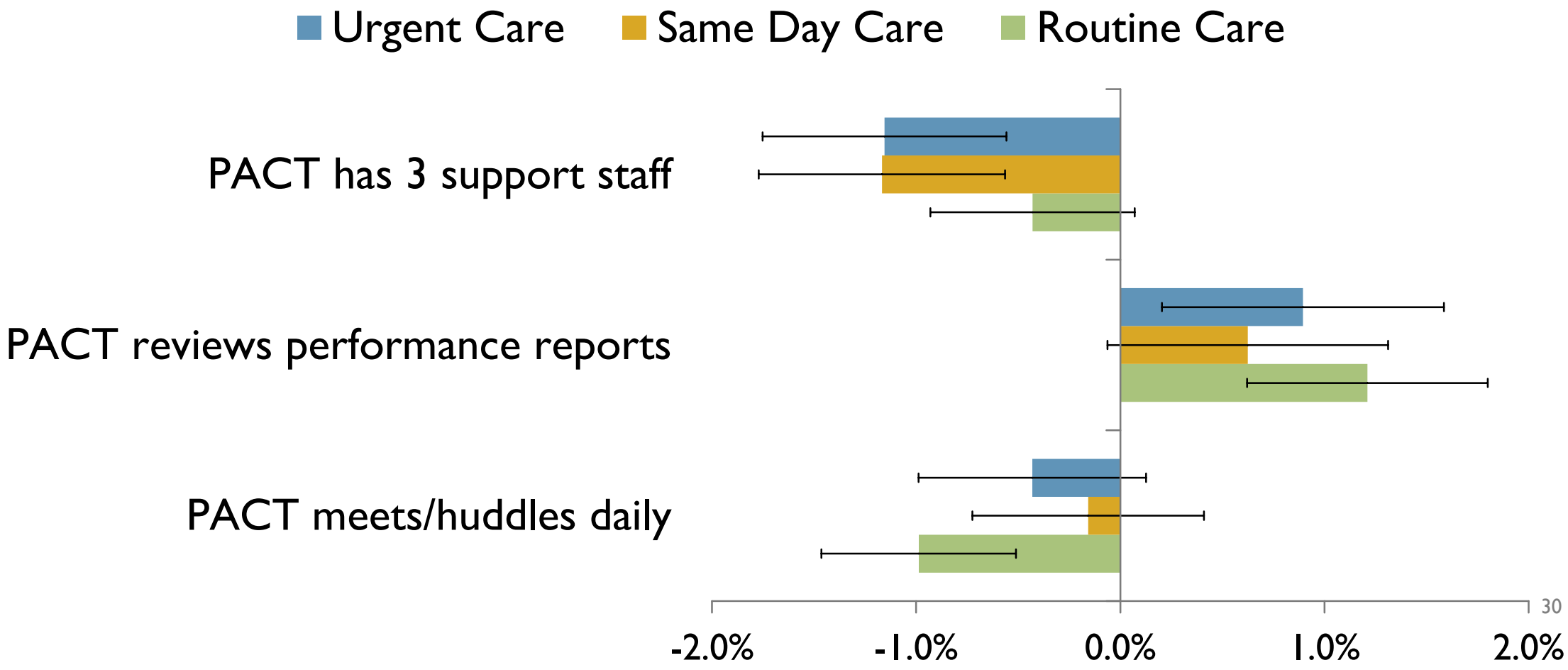


ORGANIZATIONAL FACTORS

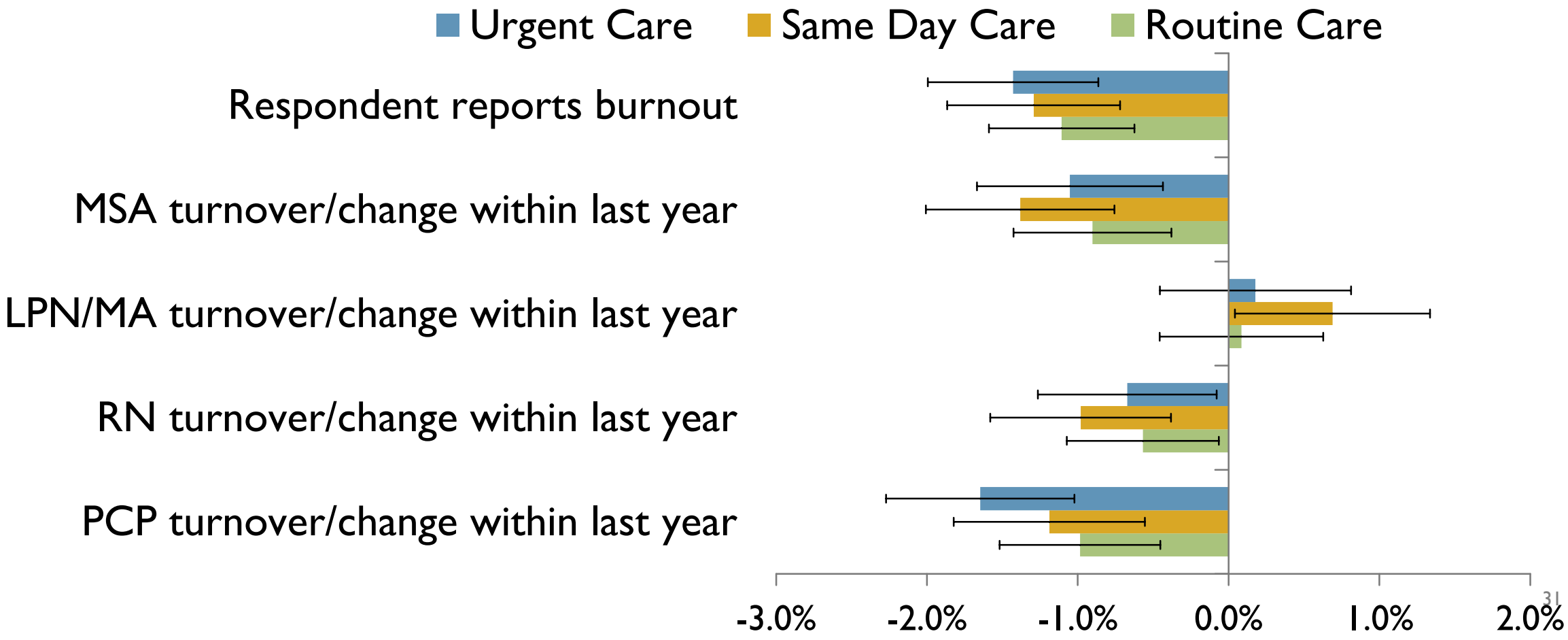
LEADERSHIP IMPORTANT FOR URGENT CARE, ROLE DESCRIPTIONS ASSOCIATED WITH WORSE ACCESS…



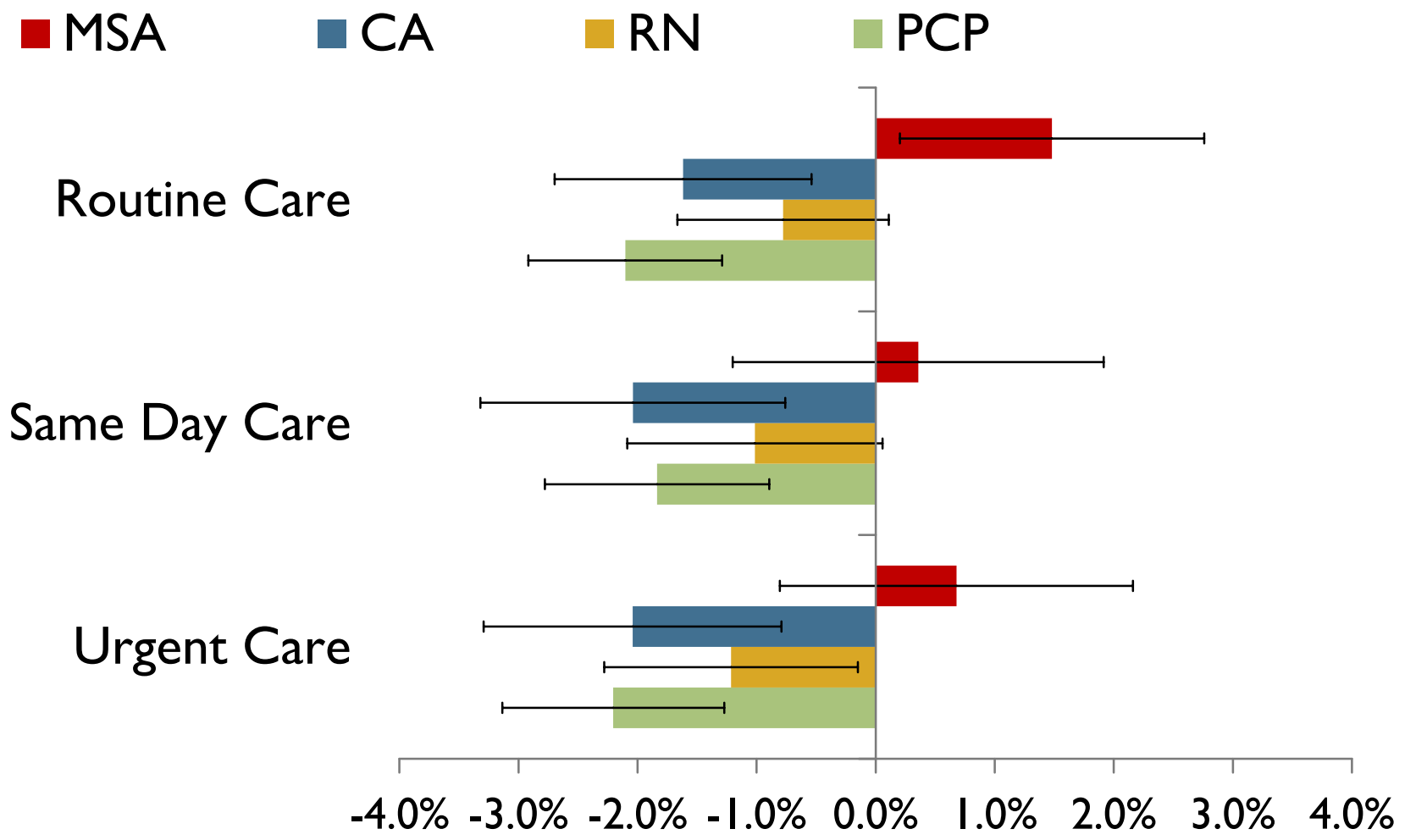
FULLY STAFFED → WORSE, WHILE REPORT REVIEW → BETTER

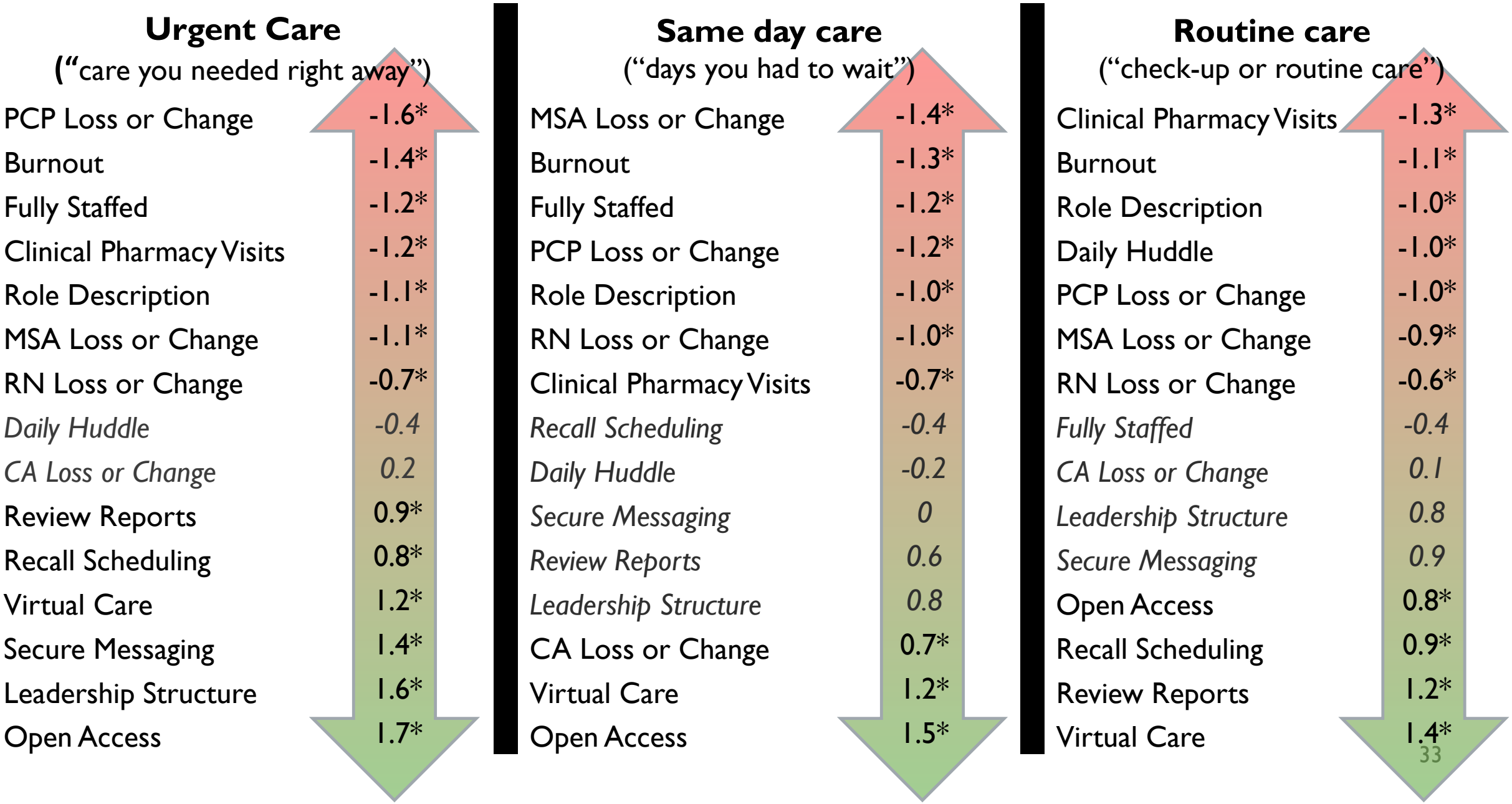


BURNOUT AND TEAM MEMBER LOSS → WORSE ACCESS



RESULTS BY ROLE GENERALLY SIMILAR, NOTING BURNOUT




Urgent Care
("care you needed right away")
PCP Loss or Change -1.6*
Burnout -1.4*
Fully Staffed -1.2*
Clinical Pharmacy Visits -1.2*
Role Description -1.1*
MSA Loss or Change -1.1*
RN Loss or Change -0.7*
Daily Huddle -0.4
CA Loss or Change 0.2
Review Reports 0.9*
Recall Scheduling 0.8*
Virtual Care 1.2*
Secure Messaging 1.4*
Leadership Structure 1.6*
Open Access 1.7*
Same day care
("days you had to wait")
MSA Loss or Change -1.4*
Burnout -1.3*
Fully Staffed -1.2*
PCP Loss or Change -1.2*
Role Description -1.0*
RN Loss or Change -1.0*
Clinical Pharmacy Visits -0.7*
Recall Scheduling -0.4
Daily Huddle -0.2
Secure Messaging 0
Review Reports 0.6
Leadership Structure 0.8
CA Loss or Change 0.7*
Virtual Care 1.2*
Open Access 1.5*
Routine care
("check-up or routine care")
Clinical Pharmacy Visits -1.3*
Burnout -1.1*
Role Description -1.0*
Daily Huddle -1.0*
PCP Loss or Change -1.0*
MSA Loss or Change -0.9*
RN Loss or Change -0.6*
Fully Staffed -0.4
CA Loss or Change 0.1
Leadership Structure 0.8
Secure Messaging 0.9
Open Access 0.8*
Recall Scheduling 0.9*
Review Reports 1.2*
Virtual Care 1.4*

* P<0.05

NOT SIGNIFICANT FOR PATIENT PERCEPTIONS

- Work report as being matched to training
- Use of carve-out slots to hold clinic appointments
- Telephone visits
- Phone reminders for appointments
- Use of no-show reports at clinic
- Patient group visits
- Nursing visits

POLL #3

- In your opinion, which of the following results are most unexpected or would warrant further investigation?

1. Positive access perception with use of open access
2. Negative access perception from a fully staffed PACT
3. Differences in burnout and access depending on staff role
4. No association between access perception and carve-out slots

LIMITATIONS OF OUR EVALUATION

- Cross-sectional data from 2016 only
- Survey data, low response rates for staff survey
- Potential unobserved confounding

OVERALL FINDINGS CONSISTENT WITH MEDICAL HOME

- Fits with overall national findings on patient-centered medical home
  - Higher capacity in theory
  - Importance of burnout and turnover

TURNOVER AND BURNOUT

- Turnover affects access
  - Related to continuity
  - Relationship between staff turnover & burnout
  - MSA burnout unique?

  - PACT PCP turnover roughly stable (around 3% per quarter)

Sylling, Med Care 2014

THE CONTRIBUTION OF OPEN ACCESS

- Open access
  - Related to leadership, performance review, staffing
  - Implementation related to variance in wait times
  - Role of continuity
    - Compared to carve-outs, pay offs greater for open access?

True, JGIM, 2012
Lukas, 2004

UNEXPECTED FINDINGS?

- Worse access with written role descriptions
  - Related to clinic culture/type?
- Worse access with fully staffed PACT
  - Geography – related to location, demand, workforce?

IMPLICATIONS FOR THE VA

- Patient perception of access matters
- Results capture simultaneous evaluation of access initiatives and organizational factors
- Retention of core staff, value of some access initiatives (e.g. Open Access)
- Unique contribution of MSA role / workload
- Patient perceptions align with staff perceptions on "good" or "bad" access

Components associated with access

Components not associated in our study

Work reported as being matched to training
Use of carve-out slots to hold clinic appointments
Telephone visits
Phone reminders for appointments
Use of no-show reports at clinic
Patient group visits
Nursing visits

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QUESTIONS?

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MULTIPLE IMPUTATION

- SAS Enterprise Guide 7.15 PROC MI.
- Fully Conditional Specification (FCS)
- 50 imputed datasets were created with a burn in of 10 iterations
- Missingness:
  - Has Role Descriptions (18.73%)
  - Site Leadership Structure (16.32%)
  - Reviews Performance Reports (15.10%)
  - Fully Staffed PACT (8.20%)
  - PCP Loss Or Change, RN Loss Or Change, CA Loss Or Change, and MSA Loss Or Change (all 3.09%)
  - Work Matched To Training (2.68%)
  - Daily huddle (1.47%)
- Of 4,815, a complete case analysis would have eliminated 2,002 records (41.58%).

SHEP RESPONDENTS 2016

	Contacted	Responded	Percent
18-24	4924	245	5%
25-34	56552	4355	8%
35-44	57556	7682	13%
45-54	96472	22098	23%
55-64	160157	57585	36%
65-74	261020	134337	51%
75.0	161501	94318	58%
Total	798182	320620	40%