

Characteristics of High-Functioning Collaborations Between Primary Care and Podiatry in VHA Patient Aligned Care Teams

Jeffrey M. Robbins, DPM; James S. Wrobel, DPM; Susan Kirsh, MD; and Leonard Pogach, MD

The key to high-functioning PACT/Podiatry teams rests with the quality of the communication between providers.

The patient centered medical home (PCMH) concept was developed in response to the need to improve the overall health care system in the U.S.¹ The episodic/acute care model has not provided high-value health services for the costs incurred. A 2010 Commonwealth Fund report indicated that the U.S. was near the bottom on quality measures of patient safety, care coordination, access, efficiency, overall quality, and healthy life expectancy compared with 6 other western countries.² The U.S. spends an average of \$7,960 per capita, 2.5 times more than the average of the 6 other western countries surveyed, on health care.¹ The core principles that define the PCMH include (1) enhanced access; (2) continuity; (3) comprehensiveness; (4) team-based care; (5) care coordination; (6) a systems-based approach to

quality and safety; and (7) reimbursement structures consistent with the added value of this system.¹

The VHA adapted the PCMH concept to fit its unique integrated health care system. The development and implementation of the patient aligned care teams (PACTs) was designed to advance and expand primary care through increased access, continuity, and coordination of care for veteran patients.³ To accomplish the care coordination component, a set of principals was developed to define its structure, using the PCMH neighbor concept. Recognizing the importance of specialty and subspecialty collaboration with primary care, the American College of Physicians issued a white paper in 2010 to define policies and features of this relationship.⁴ Those characteristics include bidirectional effective communication, coordination, and integration; appropriate

and timely consultations and referrals; efficient, appropriate, and effective information flow; comanagement responsibility; patient-centered care, enhanced care access and high levels of care quality and safety; and whole-person coordination and integration by primary care.⁵

The purpose of this study was to describe the PCMH characteristics within VHA centers that self-identified as centers with good or fair/poor communication between PACTs and Podiatry. The authors' prior work showed that higher levels of coordination were associated with lower rates of diabetes-related lower limb amputations at VA centers.⁶

METHODS

The podiatry service chiefs at 107 VHA hospitals were sent an online survey via e-mail on October 2, 2014. Two follow-up e-mails were sent to centers that did not respond after 1 week and then again after 2 weeks. Respondents were not offered rewards or inducements to participate. Centers were chosen at random and represented the diversity of facility complexity groups. The

Dr. Wrobel is a clinical associate professor of internal medicine at the University of Michigan Medical School in Ann Arbor. **Dr. Kirsh** is an associate professor and **Dr. Robbins** is a clinical assistant professor at Case Western Reserve University School of Medicine in Cleveland, Ohio. **Dr. Pogach** is a professor of preventative medicine and community health at Rutgers University-New Jersey Medical School in Newark. Dr. Robbins is a podiatrist and **Dr. Kirsh** is a physician, both at the Louis Stokes Cleveland VAMC in Ohio. Dr. Pogach is a physician at the VA New Jersey Health Care System in East Orange, New Jersey.

VHA Facility Complexity Model classifies VHA facilities at levels 1a, 1b, 1c, 2, or 3. Level 1a facilities are the most complex and level 3 facilities are the least complex.

The survey was designed to determine the characteristics of high-functioning teams as defined by the joint principles of the PCMH and to assess the operational theories that good functioning teams possess the following characteristics, based on the VHA Handbook 1101.10 PACT Handbook.⁷

1. Good bidirectional communication between PACT and podiatry.
2. A working care coordination agreement (CCA) that defines referral processes, e-consult conversion when appropriate, and successful coordination of care.
3. Face-to-face meetings to discuss and adjust the CCA and other program components.

The audience for the survey was the chiefs of podiatry at 107 medical centers, representing a combination of medical center complexity groups 1, 2, and 3. The survey consisted of questions designed to assess the self-reported relationship between PACT and Podiatry Service at each reporting medical center (Appendix).

Statistical Analysis

A group level analysis was performed between centers identifying themselves by having good or fair/poor communication between PACT and Podiatry. The Fisher exact test (2-sided) was used to assess for associations. Significance was set at $P \leq .05$.

RESULTS

The response rate for this survey was 54% (58/107). The Table describes the frequency of PCMH characteristics in good communicating and fair/

Table. Patient Centered Medical Home Characteristics

Success Characteristics	Good (%) (n = 38)	Fair/Poor (%) (n = 20)	P Value
Communication	61	39	.015
Frequent bidirectional communication	68	10	< .001
Primary care provider readily available by phone	57	40	.27
Primary care provider readily available by page	57	70	.408
Consults answered in timely manner	68	90	.106
Good center having 1-2 good characteristics vs Fair/poor center having 1-2 bad characteristics ^a	47	80	.025
Appropriateness of consults > 75%	69	40	.032
Active coordination of care in most cases	53	5	< .001
Active coordination of care in most or some cases	89	35	< .001
Have care coordination agreements in place	66	65	.999
Referrals tied to care coordination agreements	64	60	.999
Provision to convert to e-consult	55	55	.999
Hold face-to-face meetings	32	30	.999

^aPercentage of compliance determines whether characteristics are good or bad (largely met or largely unmet).

poor communicating centers. Thirty-seven centers self-identified as having good communication between PACT and Podiatry, and 21 reported fair/poor communication ($P = .015$). Frequent bidirectional communication occurred in 68% of good communication centers and 10% in fair/poor communication centers ($P < .001$). There were no differences between good communicating centers and fair/poor communicating centers for having working care coordination agreements. In good communication centers, 69% of consults were appropriate at least 75% of the time compared with 40% of the time for fair/poor communication cen-

ters ($P = .032$). Active care coordination in most cases occurred in 53% of good communication centers vs 5% of fair/poor communication centers ($P < .001$).

In the survey, characteristics supported by the joint principles statement for developing a PCMH were assessed.³ Favorable characteristics included good communication between providers (PACT and Podiatry), a high percentage of consults considered appropriate (> 75%), and high levels of coordination. Unfavorable characteristics included poor communication between providers (PACT and Podiatry), low percentage

Figure 1. Statistically Significant Correlations

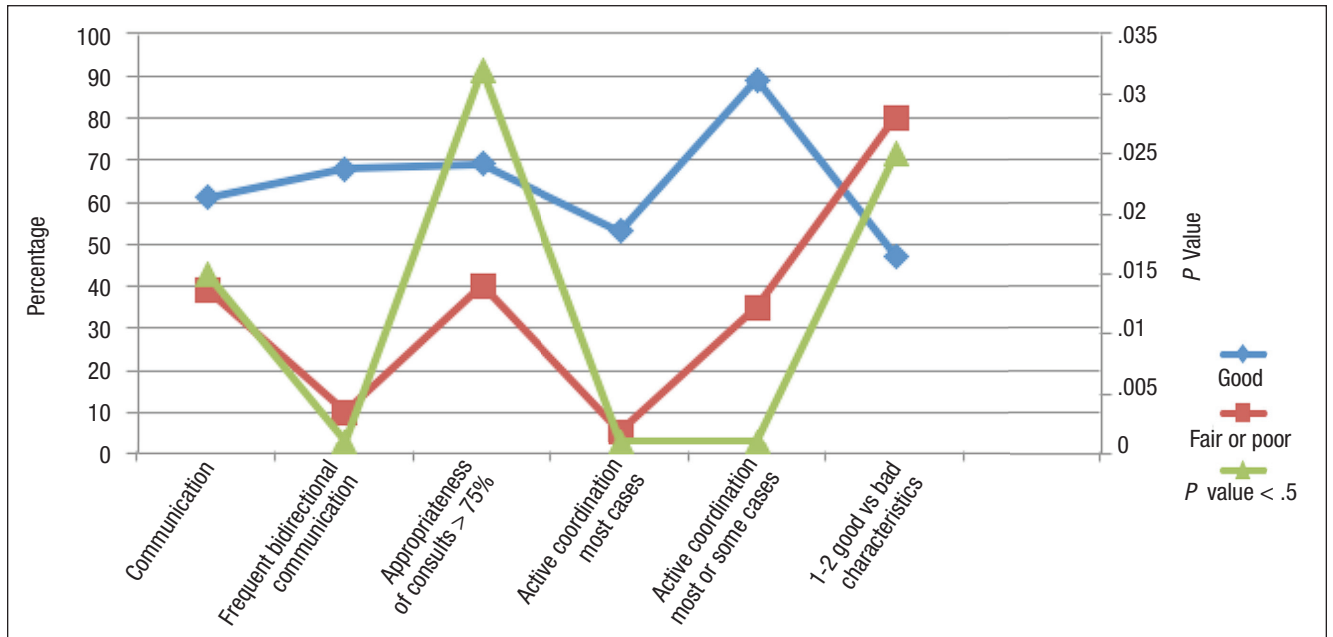
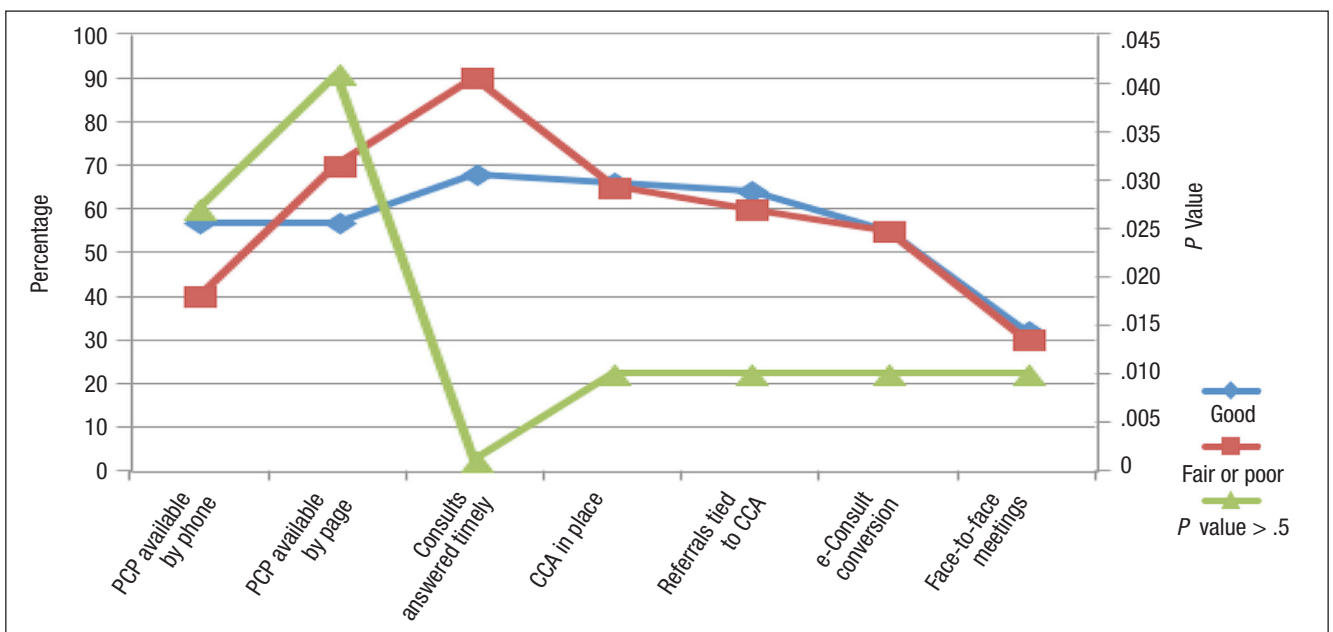


Figure 2. Equivocal Correlations



Abbreviations: CCA, care coordination agreement; PCP, primary care provider.

of consults considered inappropriate (< 75%), and poor levels of communication. In the survey, 47% of good communicating centers had 1 or 2 favorable characteristics for

a PCMH compared with 80% fair/poor communication centers that had 1 or 2 unfavorable characteristics ($P = .025$) (Figure 1).

Figure 2 describes the equivo-

cal correlations that were found between fair or poor self-reported centers and high-functioning PACT/Podiatry services with:

1. Presence of a signed CCA.

2. Multiple positive or negative characteristics.
3. Referrals tied to the CCA.
4. Provision to convert to an e-consult.
5. Face-to-face meetings to review the CCA.

DISCUSSION

The key to high-functioning PACT/Podiatry teams rests with the quality of the communication between providers. Without this basic tenet, CCAs cannot be effective. This tenet supports the authors’ prior work that found programming coordination was associated with lower rates of lower extremity amputations in patients with diabetes.⁸ Programming coordination consists of electronic medical records, policies, reminders, protocols, and educational seminars.⁸ In the present study, it seemed that

Strategies

1. Ensure that each provider in both primary care PACT and Podiatry have an opportunity to review and discuss the care coordination agreement before it is implemented (eg, stakeholder review).
2. Schedule both formal and informal meetings of providers from both services to improve personal relationships, networking, and collaboration, making it easier to know who to call when an issue arises; this also should include resident staff if any.
3. Develop a rapid-action process to address care coordination agreement issues as they arise so that the agreement can be amended if and when necessary.
4. Develop a culture of quick response to requests for “curbside” or telephone consultation.
 - (a) Stations that do not have a full-time Podiatry Service should address access to podiatrists for emergent problems; where full-time providers are 24/7, part-time providers have a defined tour and would need to be compensated for additional call; one option may be to use VISN resources (full-time podiatrists at other medical centers) to fill the gap.
5. Facilitate care of high-risk patients (diabetic foot infections, ulcerations, etc).

the appropriateness of referrals were more important than having care coordination agreements. This concept also is supported in the authors’ prior work of developing a microsystem of foot care: Appropriateness of referrals was

a “must do” associated with lower rates of major amputation.⁹ Developing good interdisciplinary communication requires the support of leadership, at least yearly face-to-face meetings between providers, buy-in for the components of the CCA, and

Appendix. Survey Questions

Communication

1. How would you characterize the communication flow between Podiatry Service and PACT?
 - a. Good
 - b. Fair
 - c. Poor
2. If you characterized communication as good, please indicate the reasons for that assessment? Check all that apply.
 - a. Frequent bidirectional communication with PACT
 - b. PCPs are easy to reach by phone
 - c. PCPs are easy to reach by page
 - d. Consults are answered in a timely manner
3. If you characterized communication as fair or poor, please indicate the reasons for that assessment. Check all that apply.
 - a. Infrequent bidirectional communication with PACT
 - b. PCPs are not easy to reach by phone
 - c. PCPs are not easy to reach by page

d. Consults are not answered in a timely manner

Care Coordination Agreement

4. Do you have a signed care coordination agreement between PACT and Podiatry Service?
 - a. Yes
 - b. No
5. If yes, is the referral process tied to the consult template (eg, are the criteria for referral eligibility also expected in the consult template)?
 - a. Yes
 - b. No
6. If yes, what percentage of consults are considered appropriate (eg, meet the CCA criteria for eligibility, etc)?
 - a. ≥ 90%
 - b. 75%-89%
 - c. 50%-74%
 - d. ≤ 49%
 - e. N/A

7. Do you have a provision for conversion to an e-consult for conditions that do not require a face-to-face visit?
 - a. Yes
 - b. No
8. How would you describe the level of coordination of care provided by PACT for patients they refer to Podiatry Service?
 - a. Active in most cases
 - b. Active in some cases
 - c. Rarely participates
9. Do you hold face-to-face meetings to discuss and adjust the CCA and other program components?
 - a. Yes
 - b. No
10. If yes, how often do you hold face-to-face meetings?
 - a. Once yearly
 - b. Ad hoc
 - c. More than once yearly

Abbreviations: CAA, care coordination agreement; PACT, patient aligned care team; PCP, primary care provider.

a sustained relationship of patient-centered cooperation.

CONCLUSION

Self-reporting high-functioning PACT/Podiatry teams depend more on the relationships between providers, the ease of bidirectional communication and coordination of care, and a seamless consult and less on the formal care coordination documents and e-consults that reduce the direct exchanges between providers. Effective communication that is responsive to dynamic changes will outperform dogmatic and static policy documents. ●

Author disclosures

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