

Feasibility of Patient Navigation for Care Planning in Primary Care

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Abstract

Objectives: To help better control chronic conditions we need to address root causes of poor health like unhealthy behaviors, mental health, and social needs. However, addressing these needs in primary care is difficult. One solution may be connecting patients with a navigator for support creating a personal care goal. **Methods:** As part of an RCT to evaluate a feasible approach to care planning, 24 clinicians from 12 practices in the Virginia Ambulatory Care Outcomes Research Network (ACORN) and 87 intervention patients with uncontrolled chronic conditions participated in a care planning intervention. We had a structured process to guide patients, train navigators, and adapt the navigation process to meet the needs of each practice. **Results:** Only 1 practice had bandwidth for staff to serve as a patient navigator, even for extra pay. For the other 11 practices, a research team member needed to provide navigation services. On average, patients wanted 25 weeks of support to complete care plans. The average time patients needed to speak with navigators on the phone was 7 min and 3 s. In exit interviews, patients consistently shared how motivational it was to have a caring person check in on them, offer help, and hold them accountable. **Conclusion:** Patient navigation to address care plans should be feasible. The time commitment is minimal. It does not require intensive training, and primary care is already doing much of this work. Yet, given the burden and competing demands in primary care, this help cannot be offered without additional resources.

Keywords

chronic disease, patient navigation, care planning, primary care, intervention design, community engaged research

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Introduction

The root causes of poorly controlled multiple chronic conditions (MCCs) are unhealthy behaviors, mental health, and social needs.¹ These needs are increasingly more common with the pandemic and recent stresses. Focusing on helping people address these root causes of poor health may do more for controlling chronic conditions than usual medical care.² Most people with MCCs are seen in primary care, which focuses on treating the “whole person,” collectively considering all factors influencing a person’s health and wellbeing. Yet, even in primary care, the tendency is to focus on one issue at a time and care is often more reactive than proactive. One feasible approach to addressing these root causes is for patients to create health related goals, care plans, and receive help from a patient navigator to achieve their goals.³ Previous studies demonstrate that

disease-specific care plans can improve management of conditions and improve quality of life.⁴

Care planning can be difficult for patients to create without guidance and the feasibility of patient navigation for care planning in primary care is not known. This paper reports on an analysis we conducted that describes the feasibility of patient navigation for primary care as part of an enhanced care planning approach to better address root causes of poor health. As part of an RCT to evaluate a feasible approach to

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patient care planning (RO1 HS02622-01A1), we developed and implemented a structured process to provide patient navigation to support patients with uncontrolled chronic conditions.^{2,5} We connected patients with a navigator to help them create and work on a personal goal to be healthier. We supported practices and teams by developing and disseminating a navigator guide, training nurses and care team staff to be navigators, and provided free consultation to patient navigators during the care planning process. In order to evaluate the feasibility of patient navigation, we flexibly adapted the trial to tailor the navigation process to meet the needs of each practice and team.

Methods

We conducted a mixed-methods feasibility analysis that is part of a clinician level randomized control trial to test whether care planning to address root causes of poor health helps to improve uncontrolled chronic conditions more than conventional medical care. Quantitative analysis was used to evaluate implementation metrics of navigator recruitment for practices and clinicians, and the frequency and duration of patient phone calls made by navigators. Qualitative analysis was used to analyze semi-structured phone interviews with patient navigators and patients to evaluate the contextual factors influencing implementation and effectiveness of the patient navigation process. Our study was approved by the university Institutional Review Board (HM20015553).

Study population: We recruited clinicians from the Virginia Ambulatory Care Outcomes Research Network (ACORN) primary care practices located in the Greater Richmond region and Northern Virginia areas. ACORN has academic affiliations with nearly 500 primary care practices, 53 of which are located in the Greater Richmond Region. Practices range in size from 2 to 18 providers and operate under diverse ownership and insurance models. Clinicians were matched by age and sex and randomized to usual care (control condition) or care planning with patient navigation (intervention). From the electronic health record (EHR) and patient survey screener, we identified all patients age 18 and older with 2 or more uncontrolled MCC including cardiovascular disease or risks, diabetes, obesity, hypertension, hyperlipidemia, or depression. From this sample, we randomly selected 10 patients with at least one poorly controlled MCC for study inclusion. Research coordinators contacted patients by phone to obtain informed consent and enroll them in the study.

Intervention: The intervention includes 2 components. First, a risk assessment and enhanced care planning tool called *My Own Health Report* (MOHR) screens patients for health behavior, mental health, and social needs. Second, intervention clinicians identify a patient navigator (eg, a nurse, medical student, patient access representative, or

social worker) to help patients prioritize needs, create care plans based on preferences, and make a personal goal he/she would like to achieve to be healthier. Navigators were compensated at \$50 per hour with generous rounding up on time cards. Using field notes documented within MOHR, patients record their care plan progress and needs and navigators document sessions with the patient. Patients and navigators can modify care plans and steps to achieve the care plan. Research team members provide training to practices so nurses and care team staff can be patient navigators and ongoing consultation to patient navigators during the care planning process. Part of the navigation training included providing navigators with a patient navigator guide, a registry on all of the community resources to address the root causes of poor health, and some training in how to connect patients to those resources.

Implementation outcomes: From researcher recruitment field notes, we determined navigator recruitment for practices and clinicians, the number of navigator phone contacts for patients assigned to the care planning condition, and the length of these contacts.

Contextual outcomes: Factors facilitating or hindering success and necessary elements for sustainability were derived from qualitative evaluation of semi-structured interviews with patients and patient navigators external to our research team. Interviews were conducted on the phone, recorded, and transcribed.

Data: We used 3 data sources: (1) research recruitment field notes, (2) patient and navigator field notes about navigation sessions documented in MOHR, and (3) semi-structured interviews with patients and navigators.

Data Elements: We recorded navigator recruitment for practices from researcher recruitment field notes. The following variables from MOHR were used for analysis: (1) number of unique contacts per patient, (2) total length of contact time, (3) average length of time per contact, (4) average contact time per week, and (5) total length of time for patient navigation. We recorded and transcribed semi-structured interviews (Appendix 1 and 2) with patients and navigators to identify common themes facilitating or hindering success in the navigation process.

Statistical Analysis

All practice and patient-level characteristics were summarized as frequencies and percentages. The number of navigator phone contacts for patients assigned to the care planning condition and the length of these contacts were summarized as means, minimums, and maximums. For each navigator and patient in the intervention condition, we aggregated transcripts from semi-structured interviews and used an immersion/crystallization approach to identify common interview themes about the patient navigator experience.

Table 1. Participating Clinician and Practice Characteristics.

	Participating clinicians (n = 24) (%)	Participating practices (n = 12) (%)
Rurality		
Urban	83.3	66.7
Suburban	16.7	33.3
Rural	0	0
Insurance		
Commercial or private	37.4	33.5
Medicaid	29.2	32.6
Medicare	24.5	24.6
Dual medicaid/Medicare	2.1	3.1
Uninsured	4.5	5.1
Race		
White	43.9	42.1
Black or African American	45.9	49.8
Asian or Pacific Islander	8.1	5.9
Native American or Alaska native	0.4	0.3
Other	1.7	1.9
Ethnicity		
Hispanic or latinx	12.6	10.4
Non-hispanic or latinx	87.4	89.6

Results

The overall sample included 24 intervention clinicians whose patients were eligible for navigation from 12 practices, 87 intervention patients, and 6 patient navigators for analyzes (Table 1). Participating clinicians predominately practiced in urban settings (83%) compared to suburban (17%) and a higher percentage of clinicians cared for publicly insured patients (61%) compared to privately insured (37%). The overall racial/ethnic characteristics of clinicians included 45% Black and 43% White adults, whereas 8% were Asian Pacific Islander, 0.4% were Native American and 2% were Other or Unknown.

A higher percentage of practices were in urban areas (67%) compared to suburban (33%) and a higher percentage of practices cared for publicly insured patients (61%) compared to privately insured (34%). The overall racial/ethnic characteristics of the patient population included 49% Black and 42% White adults, whereas 6% were Asian Pacific Islander, 1% were Native American and 2% were Other or Unknown.

Only 1 of 12 practices was able to complete navigation, even for extra pay. Five additional navigators from 4 practices started the navigation process, but had to drop out due to time and workload constraints. On average, 29 patients wanted 35 weeks or more of support to work on their care plans for health behaviors, mental health, and social needs. There was no evidence of a difference based on MCC in average phone contact length (in minutes) or navigation duration (in weeks). The average time for each patient session was 7 min. As navigation sessions do not occur every week, this is an average total contact time of 158 min or about 4.5 min per week.

Six patient navigators (83% female) external to our research team completed semi-structured interviews. Navigators consisted of nurses (n=3), a doctoral level clinical psychology student (n=1), a medical resident (n=1), and clinical psychologist (n=1). The overall racial/ethnic characteristics of navigators included 83% White and 17% Black adults. Patient navigators reported that contacting patients to support care planning needs required little time, was not burdensome, and the work was flexible (Table 2). Some navigators found it helpful to schedule a mutually agreed upon time to call patients, whereas others preferred communicating with patients through email. One navigator indicated that she could easily check in with up to 6 people an hour equaling a caseload of 30 patients if contacted weekly and considerably more if scheduling check-ins biweekly or monthly. Navigators experienced patients as motivated and goal-oriented in working toward their goals. Much of patient navigation focused on supporting patients in problem-solving challenges or barriers, adapting goals and care plans to evolving needs, and providing encouragement. Patient navigators believe implementing care planning in primary care is feasible and having training in nursing, disposition planning, and care coordination would help further increase feasibility. Although most care plan topics were about diet and exercise, navigators reported not needing advanced content knowledge in these areas in order to support patients' needs. Navigators emphasized the importance of using a patient centered approach consistent with motivational interviewing, including being proactive, empathetic, active listening, and providing encouragement.

Twenty-three patients (56.5% female) completed semi-structured interviews. Patients were selected based on having a range of health behavior, mental health, and social

Table 2. Key Findings From Patient and Navigator Exit Interviews.

Topic	Key findings	Illustrative quotes
Patient navigators		
Effort required	<ul style="list-style-type: none"> Patients largely needed help overcoming obstacles, adapting goals and care plans to changing life circumstances, and receiving regular encouragement 	<ul style="list-style-type: none"> “It didn’t really take much effort, but I think overwhelmingly people liked having the encouragement of another objective person and then someone to bounce ideas off of and get a little help if needed.” “You know, a lot of patients just need that little bit of direction, to let them know that there’s opportunities out there to help them.” “Most people I just helped brainstorm how to get around obstacles they may have encountered.”
Time demands	<ul style="list-style-type: none"> Minimal time required to provide navigation services Navigation duties easily adapted to regular clinical roles 	<ul style="list-style-type: none"> “We see hundreds of people a day in our office. But not everybody needs this kind of follow up. And I don’t know if the time required is measurable enough that it would make a difference in changing how a practice runs.” “It’s not calling with medical issues and testing and stuff like that. I felt like it could be a really quick call with some of these people. And there’s not a ton of documentation, it’s literally just calling and checking on people. I mean, it could be not even 10 minutes a person. I’d say you could do five to six people an hour, probably ten. You could do 25 or 30 cases a week if you only took an hour a day.”
Scheduling strategy	<ul style="list-style-type: none"> Scheduling with patients feasible either by identifying a set time, or mutually convenient time windows, to make phone calls to patients 	<ul style="list-style-type: none"> “For most people I think once a week might be too much, but probably twice a month, depending on what their issues are.” “I think every patient or navigator has approached this differently. What I’ve found works best for me and the patients that I’ve been doing the check-ins with is to have either a set time or window of time. So the patients that I check in with bi weekly, they might just know to expect my call Friday morning or on Fridays. Generally other patients, particularly those that I don’t check in with as often, those I might set appointments with so we have a specific date and a specific time.”
Role requirements	<ul style="list-style-type: none"> Most nurses (LPN or RN) already have the knowledge and skills necessary Advanced knowledge of nutrition, exercise, or other specific healthcare topics not needed Most important skills included proactive, empathetic listening, as a means of establishing a supportive relationship with patients 	<ul style="list-style-type: none"> “I definitely feel like this could be something that an LPN could easily do.” “You kind of take your nursing knowledge, your care planning and all that, and you’re bringing it forward.” “I don’t have a lot of content knowledge about nutrition and exercise. But I would argue that that’s not as important as the process of supporting them and reaching the goals that they probably already had for themselves.”
Challenges	<ul style="list-style-type: none"> Lack of reimbursement from payers could potentially undermine long-term feasibility Some uncertainty regarding delineation between the role of patient navigator and regular clinical role 	<ul style="list-style-type: none"> “The problem is it’s not, I hate to say it, but it’s not a moneymaker. So, it’s very hard for practices to put aside money to pay someone to do this kind of psychosocial thing for people. But I think it is very beneficial.” “It was hard for me to know where to draw the line in terms of giving medical advice.”
Patients		
General benefits	<ul style="list-style-type: none"> Patients valued regular interactions with navigators to build trusting, supportive relationships Patients appreciated being held accountable and focused on care plan goals 	<ul style="list-style-type: none"> “You know, I felt like [the patient navigator] after a period of time became my friend. I would look forward to her interactions with me. You know, so she was my biggest cheerleader over the last year.” “And, of course, we set a goal at the very beginning of the program. So it really helped me. I’m one of the kinds of people that works better if I’m held accountable for something. And with having these weekly updates, it really made me more conscious and aware of where I was going with the program.” “[The patient navigator] kept me focused and grounded.”

(continued)

Table 2. (continued)

Topic	Key findings	Illustrative quotes
Value of being connected to resources and services	<ul style="list-style-type: none"> • Navigators able to provide life changing interventions by connecting patients to external services and resources 	<ul style="list-style-type: none"> • “There was a time when I didn’t have a place to live. And I actually thought I was going to lose it because of the amount of responsibilities that was placed on me and [the patient navigator] was very instrumental and guided me to places that could offer me some assistance.” • “[The patient navigator] asked me what else I could benefit from. And I told her that I desperately loved to have psychotherapy, if that was possible. And she says ‘I think I can arrange that.’ And the next thing I knew I was paired up with [a psychotherapist]. And we got the ball rolling and yeah, like life changing. Literally.”
Effective navigator characteristics and qualities	<ul style="list-style-type: none"> • Ability to personally connect with patients during phone calls highly valued • Patients appreciated being directly held accountable to their goals 	<ul style="list-style-type: none"> • “It was nice to have people who had a good demeanor on the phone, and were personable even though you weren’t sitting there in the same spot with them they had that personable personality.” • “Last week, she called me on Saturday and that wasn’t a typical call. So she just went really out of her way.” • “It’s like someone else set goals for me, helped me set goals for myself. And then be fair enough with me to say ‘Yeah, you either stand or not, what do you want to do about it?’”

needs and a range of care plan topics for a total of 36 care plans (25% physical activity, 22.2% nutrition, 16.7% weight loss, 16.6% unhealthy behaviors, 8.4% social, and 5.6% mental health). Of the 87 intervention patients, 40% (n=35) of patients had a mental health risk identified on the MOHR risk assessment. Yet, only 5.6% of patients decided to create a care plan on mental health. Patients consistently shared how they valued having regular calls with navigators, found it helpful and motivational to have a caring person check in on them every 1 to 2 weeks, offer support and encouragement, and help keep them accountable (Table 2). Patients reported value in navigators helping get them connected to housing resources and therapy services. Characteristics of navigators that patients found to be most helpful included being empathic, curious, and patient-centered (eg, calling patients in the evening or on weekends).

Integrating navigators into primary care is not without challenges. Several navigators indicated some difficulty delineating their role as navigator with their profession in nursing, particularly in relation to providing medical advice. Additionally, despite expressing enthusiasm for the potential program benefits associated with implementing navigation in primary care settings, some navigators were concerned about the long-term feasibility due to the lack of reimbursement from payers.

Discussion

In our analysis, only 8.3% of clinicians could provide a team member to serve as a patient navigator, despite extra pay. The one practice that could provide a staff member cared for more affluent and White patient populations.

We found that patients needed up to 6 months of support from navigators, so addressing these root causes of poor health cannot be done with simple episodic care like the current model of trying to do this during an office visit. Rather, this type of work requires a commitment to helping people on a fairly regular basis over an extended time period. Overall, the weekly communication and total amount of navigation work is not substantial and could be feasible in primary care. Although in the current models of care and with practices facing complex payment issues, this represents one more task—and an unfunded task at that. If this is something primary care values, then we need to fund it and make it a core responsibility in practices.

We incorporated several important methodological features in this analysis. First, our sample of practices, clinicians, and navigators is diverse both in terms of geography and the range of populations served. This diversity gives us some confidence that our findings would extend to a range of settings. Second, we found consistent and reinforcing findings in the quantitative and qualitative analyses, reinforcing the validity of the findings.

A limitation of this analysis is that our study occurred after the pandemic started so clinicians and practices may be experiencing more stress and have less capacity for new tasks than prior to the pandemic. However, this state of stress and even the persistence of the pandemic are likely the new realities. We focused more on being able to conduct our study than try to encourage clinicians to identify and recruit a practice navigator. This means that we quickly offered the option of our research time providing navigation. We may have been able to recruit more navigators with more engagement and encouragement during the

recruitment process. Although we did offer substantially higher pay added to their existing salary than any potential navigator makes currently.

Conclusion

Helping patients create care plans and connecting them with a patient navigator for the short-term may have long-term benefits for patients and care teams. Although patients value this service and it requires little time, many practices and clinicians are concerned that patient navigation as part of an enhanced care planning process is too burdensome to implement. Our findings indicate there may be a disconnect between what primary care practices do to care for patients with MCCs and what is feasible. A 4 min weekly phone call from a caring person connected to a patient's primary care needs really matters to patients and can help healthcare teams better address health behaviors, mental health, and social needs.

Appendices

Appendix 1. Patient Navigator Exit Interview Guide

1. What was it like to help patients complete the health risk assessment and create care plans?
 - a. What helped this process go well?
 - b. What things made this process hard?
2. Tell me about your experience checking-in with patients on their care plans, assessing their needs, and helping them update their progress and confidence.
 - a. What seemed to help this process go well for you? For patients?
 - b. What things made this process challenging for you? For patients?
3. If you had it to do again, would you be a patient navigator? Why or why not?
4. What specific things helped you the most as in this role?
 - a. How helpful was the MOHR website? Research team? Community health worker? Community programs?
5. What did you not get that would have helped you more?
6. How did doing this work change how you interact with patients about their health?
7. How confident are you that you can keep up any changes you made?
8. What did you learn about health behavior, mental health, and social needs from doing this work? In what ways was this information helpful or unhelpful?
9. The purpose of this study was to put together a system to help doctors help patients improve health behaviors, address mental health, and meet social needs. What do you think healthcare teams should be doing to help patients with their health behaviors? Mental health? Social needs?
10. Will you continue to function as a patient navigator for your group in some fashion? Can you describe the future role and plans?
11. Is there anything else you would like to share with our team about helping patients meet goals or this study?

Appendix 2. Intervention Patient Exit Interview Guide

1. You made a care plan about [topic patient addressed]. What specific needs did you have?
2. Do you feel like your health has gotten better or worse? How so and why?
3. Why did you pick this need to address and not another need on your risk assessment?
4. What was your goal? Can you tell us about the progress you made reaching your goal?
 - a. What helped you most with feeling confident in achieving your goal?
 - b. What things made it hard to reach your goal?
5. If you had it to do again, would you work on this goal again? Why or why not?
6. Did you regularly login to the My Own Health Report website? If so, was it easy to use? Was it helpful? If not: Why not? What barriers did you have to using MOHR?
7. What specific things helped you make progress on your goal?
 - a. How helpful was the website? Patient navigator? Community health worker? Community programs?
 - b. If you got help from a community program, what help did you get? Was it the help you wanted?
8. What did you not get that would have helped you with your goal?
9. How confident are you that you can keep up any changes you made?
10. How did doing this work change your self-confidence managing your healthcare?
11. What did you learn about your health as you worked on your goal?
12. The purpose of this study was to put together a system to help doctors help patients improve health behaviors, address mental health, and meet social needs. What do you think healthcare teams should be doing to help patients with their health behaviors? Mental health? Social needs?

13. Is there anything else you would like to share with our team about helping patients meet goals or this study?

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