

Outpatient Care Gaps for Patients Hospitalized with Ambulatory Care Sensitive Conditions in Hawai'i: Beyond Access and Continuity of Care

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Abstract

Ambulatory care sensitive conditions (ACSCs) are conditions that can generally be managed in community-based healthcare settings, and, if managed well, should not require hospital admission. A 5-year, mixed methods study was recently concluded that (1) documented disparities in hospitalizations for ACSCs in Hawai'i through quantitative analysis of state-wide hospital discharge data; and (2) identified contributing factors for these hospitalizations through patient interviews. This Public Health Insights article provides deeper context for, and consideration of, a striking study finding: the differences between typical measures of access to care and the quality of patient/provider interactions as reported by study participants. The themes that emerged from the patients' stories of their own potentially preventable hospital admissions shed light on the importance of being heard, trust, communication, and health knowledge in their relationships with their providers. We conclude that improving the quality of the relationship and level of engagement between the patient and community/outpatient providers may help reduce hospitalizations for ACSCs in Hawai'i and beyond. These interpersonal-level goals should be supported by systems-level efforts to improve health care delivery and address health disparities.

Ambulatory Care Sensitive Conditions

Hospital admissions for ambulatory care sensitive conditions (ACSCs) are considered avoidable with access to high-quality outpatient care.¹ Admissions due to ACSCs are tracked by health care systems and hospitals as performance measures.² Reducing ACSC hospitalizations is an important topic as the cost of ACSC hospitalizations was estimated at over \$30.8 billion nationally³ and over \$250 million for the state of Hawai'i specifically.⁴

The majority of ACSC research has focused on information available through administrative data (ie, insurance type) from the hospitalization itself and/or area-level data (ie, supply of primary care physicians).⁵⁻⁷ Qualitative insights regarding patients' experiences before the hospitalization, including those experiences in the outpatient setting, have been limited.⁸⁻¹⁰ Patient-centered insights are critical to understanding fun-

damental factors precipitating these potentially preventable hospitalizations.¹¹⁻¹² Even the terminology of "ambulatory care sensitive conditions" points to the importance of considering the outpatient setting to reduce these hospitalizations. Also, as vulnerable patients rely more heavily on "the physician's competence, skills, and good will" than less vulnerable ones,¹³ primary care may be particularly important for reducing ACSC-related hospitalization disparities.

ACSC hospitalization data on heterogeneous Asian and Pacific Islander populations has been limited.¹⁴⁻¹⁶ With grant support from the National Institutes of Health, we recently concluded a 5-year mixed methods study in the state of Hawai'i that (1) documented significant disparities in ACSC hospitalization rates for some disaggregated Asian and Pacific Islander populations compared to whites in heart disease and diabetes through quantitative analysis of state-wide hospital discharge data;¹⁵⁻²⁰ and (2) identified contributing factors to these hospitalizations using in-person interviews of patients with ACSC hospitalizations at a major medical center.^{9,21-22} Compared to whites, quantitative results demonstrated higher rates of ACSC hospitalizations for Native Hawaiians, Filipinos, and some elderly Asian groups and notably high costs for Native Hawaiians for these hospitalizations.¹⁵⁻²⁰ When asked to share their perspectives about why they were hospitalized with an ACSC, many patients reported psychosocial factors, including homelessness, poverty, mental illness, and substance abuse as critical precipitating factors to these hospitalizations.^{9,21-22}

This Public Health Insights article provides deeper context for, and consideration of, a striking study finding: the differences between typical measures of access to care and the quality of patient/physician interactions as reported by study participants during in-person interviews. We conclude that improving the quality of the relationship and the level of engagement between the patient and community/outpatient providers

may help reduce hospitalizations for ACSCs in Hawai‘i and beyond. These interpersonal-level goals should be supported by systems-level efforts to improve health care delivery and address health disparities.

Study Methods

From June 2013 to February 2016, we interviewed 102 adults hospitalized for diabetes mellitus (DM) or cardiovascular disease (CVD) within The Queen’s Health Systems²³ on the island of O‘ahu. CVD and DM are responsible for approximately 40% of all ACSC hospitalizations.²⁴ We restricted recruitment to patients who lived in the state of Hawai‘i and self-reported race/ethnicity as Asian, Native Hawaiian, Other Pacific Islander (eg, Samoans, Micronesians), or white, and who were proficient in English. Here we provide brief methodological details to contextualize study findings discussed in this article. More details of the study methods and detailed description of the study population can be found elsewhere.^{9,21-22}

Most participants (73%) were working age (21-65 years) and many had socio-demographic vulnerabilities. Ninety-six percent had less than a college degree; 32% had a family income of less than \$20,000/year. Approximately a quarter were experiencing housing challenges and many were experiencing mental health and/or substance abuse issues.²¹

Following consent, an interviewer administered a semi-structured oral questionnaire. This included standard measures of access to care (ie, self-reported insurance coverage; having a personal doctor) and items from the Parent’s Perceptions of Primary Care (P3C) tool modified to pertain to perception of the respondents’ experience of primary care (rather than a child’s).²⁵ Open-ended questions elicited patient perspectives on their hospitalizations. Additional data were obtained through medical record review. Qualitative analyses of patients’ open-ended responses were guided by the framework approach by two coders.²⁶

The focus on outpatient care experiences was not planned, nor previously reported in detail. The interest in these experiences arose organically as the numerous mentions of challenges became notable in contrast to findings of strong access to care from standard questionnaire items, including long-standing relationships with primary care providers. Thus, we returned to the qualitative data to consider this issue in more detail. Individuals who had specifically mentioned an issue related to outpatient care when asked why they felt they were hospitalized were identified. From their responses, two coders considered relevant outpatient care themes. Individuals were classified as dichotomously (yes or no) mentioning outpatient care themes, and then further classified as saying something positive, negative, neutral, or mixed (both positive and negative) for that theme.

Access and Primary Care Quality

Despite notable social vulnerabilities, most respondents reported having access to care and continuity of care, including having health insurance (89%), a usual source of care (87%), and a personal doctor (83%). On average, individuals had been going to their usual source of care for 10.3 years (SD:9.1) and seeing their personal doctor for 10.5 years (SD:8.5).

Yet many patients experienced limitations in aspects of high-quality primary care. Some respondents felt uncomfortable asking questions to their primary care provider (PCP) (31%), reported the PCP did not explain things to their satisfaction (41%), or reported the PCP did not spend enough time with them (39%). While 64% felt the PCP knew their medical history, only 41% felt they also knew their health values and beliefs.

Qualitative Analysis Related to Outpatient Care

Eighty-two of the 102 respondents (80%) specifically mentioned at least 1 issue related to outpatient care when asked why they felt they were hospitalized. Six themes emerged: communication, trust, respect/care, coordination, access, and knowledge. Responses are considered below and by the nature, positive or negative, of the way in which each issue was raised by the patient (Table 1).

Communication

The most common theme in patient interviews was communication, mentioned by 60 respondents who reported an outpatient care issue; 47 (78%) of these descriptions were negative. For instance, a 42-year-old man said his doctors did not read the notes from other providers. A 39-year-old woman said she needed “better communication with patient and doctor, and not only them diagnosing you with their medical terms.” A 23-year-old woman, who was a new immigrant with a preference for her native language, said it is “easier for me to understand in [my language, but] I never ask for an interpreter, [no one] asked if I needed one.” Others mentioned positive examples of communication, including a 58-year-old woman who called her doctors her “partners” and said, “what I love about them is that they hear me.”

Trust

Trust was identified by 27 respondents; 18 (67%) of these were negative. A 69-year-old woman said her doctor yelled at her, and she had lost trust in this provider. She said her doctor: “just keeps giving me more pills.” She wanted a new provider but also did not want to hurt her physician’s feelings. However, 7 individuals mentioned trust in a positive way. A 74-year-old

man noted specifically that he trusts his providers who come to his house to help him with his diabetes.

Respect/Care

Forty-two respondents mentioned this theme, including 20 (48%) who said they did not feel respect/care from their doctor. A 39-year-old woman said her provider was rushed: “They got no more the time for talk with you or sit and find out ‘cause they get other patients they got to go make money off of.” As a 62-year-old minority woman said: “If you’re going to get a doctor that looks down at you, or not understand our culture, then eventually it’s going to break up.” However, 12 patients noted respectful relationships with providers.

Coordination

The coordination of care across doctors was described by 25 respondents; 15 of these (60%) were negative. Patients reported long wait times or not being able to get an appointment soon enough. Sometimes these challenges resulted in emergency room visits. A 62-year-old woman said: “If you can’t see your doctor, you go to the emergency... because you have no choice.”

Access to/Continuity of Care

Twenty-five respondents mentioned issues around access and/or continuity relevant to outpatient care. These included lacking insurance or being afraid to go to the doctor. Of those, 14 respondents mentioned this access as something negative, while 8 said something positive, including the respondent with the “diabetes doctors” who come to his home.

Knowledge

Patient stories revealed gaps in knowledge or management of their disease; 46 patients who mentioned outpatient care

experiences mentioned significant knowledge gaps, as did 10 who did not mention an outpatient care experience. Although many individuals had general knowledge of recommendations (eating right, watching their feet for complications of diabetes), they did not understand why they were doing so (ie, how heart disease worked exactly) or which issues warranted going to the emergency department. Significant gaps in understanding (such as not thinking of insulin as a medication) were noted. For instance, a 62-year-old woman who has had diabetes since age 12 did not think her non-healing wound was serious: “I’m not comprehending that I am so close to being amputated.”

Multiple Aspects

Finally, many patients described multiple aspects of care (trust, respect, care coordination) together. For instance, a 67-year-old man reported a non-mutual doctor-patient relationship: “No one is working with me to develop a plan, just telling me what to do.” He said: “I want a doc who believes in meds, but who also believes in natural foods and health... not just ‘meds, meds.’” This patient was hospitalized because, to be more natural, he stopped taking all medication suddenly without telling his doctor. When he finally sought care for chest pain, he also had a foot infection.

A 60-year-old man mentioned lack of trust between people in his ethnic group and doctors. He also felt doctors did not take him seriously because of his drug use. He wanted better communication with doctors, and for doctors to provide reasons, “Why am I going to listen to you?” He noted a strong relationship with a nurse who called him regularly to check on him.

A 69-year-old woman had 3 doctors who did not seem to communicate with each other, which she blamed on a primary care provider she had seen for many years. She said no one explained her health issues in a way that she could understand. She was hospitalized for an infection, and said: “What does my diabetes have to do with my leg like this?”

Participant Description	Participant Perspective	Time with Personal Doctor	Contextual Notes
Theme: Access to Care/ Continuity of Care (mentioned by 25 respondents: 14 negatively, 8 positively, 3 mixed-positive negative)			
52-year-old man	“The reason I am in hospital because I could not afford health insurance. I didn’t know how serious my condition was. I was shocked to see how much of my toe was removed.”	No usual source of care (USC)	7 years since he last saw a doctor because he had no insurance and it was too expensive
57-year-old man	“Too worried about taking care of myself than trying to see a doc.”	No USC	Homeless, has no money for food, and a substance abuse history
32-year-old woman	“Have better relationship with wound care than my doctor.”	1 year	Was living in Seattle and moved home to Hawai’i a year ago. Doesn’t have a new primary care physician (PCP).
53-year-old man	“Just got to know my PCP within this year. I never had any problems regarding my health. Everything was ok and so I didn’t need to see someone.”	1 year	No regular care, did not go to PCP because did not feel sick

Participant Description	Participant Perspective	Time with Personal Doctor	Contextual Notes
Theme: Trust (mentioned by 27 respondents: 18 negatively, 7 positively, 3 mixed positive-negative)			
76-year-old man	"I can feel if true or just trying to make money...You can feel that concern they have for the individual. They want to help."	30 years	
69-year-old woman	"She just keeps giving me more pills."	7 years	Used to trust her doctor but not getting better so really doesn't trust doctor now and wants a new one, but doesn't want to hurt PCP's feelings.
48-year-old woman	"I don't trust in-house docs. No listen to me. I feel like I'm a guinea pig to them."	6 years	
68-year-old man	He has a lot of doctors, but they "don't know sh** about anything" and they give him the "run around...Don't trust people, after Vietnam came back to no one appreciating me. I'm an angry kind of guy."	10 years	A very heavy drinker, 10-12 drinks a day, 7 days a week and living in a place not suitable for habitation.
Theme: Respect/Care (mentioned by 42 respondents: 20 negatively, 12 positively, 3 neutrally and 7 mixed positive-negative)			
73-year-old man	Doctors sometimes dismiss his problems with "Well, we take care of you tomorrow"	20 years	Mostly has a good relationship with doctors, likes them and jokes around.
57-year-old man	"Don't think PCP takes me seriously"	12 years	Has pain and cannot get pain meds because of history of drug use.
75-year-old man	"My PCP and I don't get along."	10 years	Doctor told him he had to switch doctors because not listening to the doctor.
50-year-old woman	Doctor wanted to amputate her whole foot so she "wouldn't have to come back here anymore"	2 years	She walks a lot so if she lost her toe, she would no longer be self-sufficient.
59-year-old woman	"Sometimes if I don't understand doc, I don't do what I am told. I never think about asking him to repeat. It's part of my culture not to ask or question. B/c he is not from my culture and sometimes does not understand my needs."	10 years	
Theme: Coordination (mentioned by 25 respondents: 15 negatively, 4 positively, 5 neutrally, and 1 mixed positive-negative)			
51-year-old man	"I never like to go to doctors...I no like go doctor"	<1 year	He got his heart disease diagnosis and was seeing many doctors over many weeks to get results, get new tests, learn more, but got worse during this time so cut off medication during this time because he was feeling worse.
56-year-old man	"It became a labored experience. It's very troublesome"	<1 year	Last doctor had seen him for 30 years, but lost insurance and had to get a new doctor. It took him 6 months to get insurance and a new doctor. Has a heart doctor and PCP and needs to schedule three doctors—hard to schedule them.
Theme: Communication (mentioned by 60 respondents; 47 negatively, 6 positively, 3 neutrally, and 4 mixed positive-negative)			
58-year-old woman	"What I love about them is they hear me."	20 years	Works well with doctors and calls them "my partners."
65-year-old man	"I cannot read...I cannot understand the words doc uses."	2 years	
65-year-old man	Doctor didn't teach about disease. He just "talk fast and go"	28 years	
73-year-old woman	"Sometimes I don't understand what the doctor says, but I don't tell him I don't understand...Or I forget and cannot remember...Sometimes I feel it's hard to let the doc know how I'm feeling. I don't know the questions to ask."	12 years	

Participant Description	Participant Perspective	Time with Personal Doctor	Contextual Notes
57-year-old man	"They don't take time to explain things... I don't get the care I think I should get."	27 years	Active substance abuse may complicate communication
61-year-old man	"They didn't ask. I had no reason to tell them. I didn't want to add to their problems because they cannot help me..."	2 years	Cannot read because of diabetes complications and did not go to the eye doctor because of concern about cost. Did not tell doctors about his financial worries.
23-year-old woman	"I'm shy, scared and don't know how to ask or tell them what I need..."Easier for me to understand in [my language, but] I never ask for an interpreter, nor has anyone asked if I needed one."	6 years	Documented as "noncompliant" in records.
39-year-old woman	"They just tell me the normal things. You've got to take your meds, your insulin...but to be in pain and to be at home taking kids and to do all of that ain't so easy."	8 years	
51-year-old man	"Ask plenty questions b/c you know you go on google and you think you have medical degree. It's really just about communicating with doc."	<1 year	
50-year-old man	"Difficult to be physically ill and not able to use the right words to express myself. "	1 year	Notes a good relationship with doctor.
41-year-old man	Did not tell doctor about mental health or substance use because "didn't feel like I should talk to doctor about personal problems."	5 years	Good relationship with doctor in general, notes that he feels comfortable. Yet still not sharing relevant information.
Theme: Knowledge Gaps (mentioned by 56 respondents)			
42-year-old man	Says he has probably gotten patient education before but "wasn't paying attention"	29 years	Has been with the doctor for a long time. Was thinking problem would heal on its own as this has happened before and got better. Knew he had an appointment so was just waiting for that, did not know the problem was so acute that he should have gotten immediate care.
80-year-old woman	"Talking to docs was just fine but didn't follow what doc said"	20 years	Didn't think a little salt would hurt her health.

Considerations

Quality outpatient, primary care is a public health issue and plays a critical role in reducing ACSC hospitalizations. Most participants in the current study reported good access to primary care and long-term continuity of care, yet their stories revealed limitations in timely access to high-quality outpatient care, the depth of the patient-provider relationship, and patient-provider communication. Despite relationships of many years, some patients reported their providers did not know their beliefs and values. Efforts to address these problems may demand skills such as cultural competency and health communication that may not be sufficiently taught during provider training.²⁷⁻²⁸ There is motivation to focus on these issues, including the fact that the acute care for these patients is expensive.

The current study holds lessons for new care models, including accountable care organizations and their providers. For instance, although poor health outcomes are often attributed to lack of access or health insurance, most participants in the current study had insurance and reported good access to care. Other factors are clearly important and need to be addressed. This could occur during a hospitalization for an ACSC, in primary care, and/or in health systems-focused efforts to improve quality and outcomes in health care delivery.

Options to support patient needs during an ACSC hospitalization could be to provide in-hospital case managers, arrange follow-up visits with physicians, and ensure a review of medications for omissions, duplications, dosing errors, and/or interactions. Culturally-relevant patient navigators can bridge acute care with

supports that connect patients to outpatient care and address their psychosocial needs following discharge.²⁹⁻³⁰ Providers should strive to build trusting, culturally-sensitive relationships and provide continuity of care from the inpatient to outpatient setting and across outpatient providers.

Communication is critical. Previous research has found that, in people with diabetes, doctor-patient communication is associated with better self-management.²¹⁻³⁴ Studies have found that although patients report that their doctors communicate well in general, this is not always the case around diabetes-specific matters.²¹⁻³⁴ Previous studies have also found that many patients have poor understanding of their chronic condition(s), especially among those with low health literacy and those with limited English proficiency.³⁵⁻³⁶

Such factors are likely relevant to the communication gaps described by patients in this study. Fortunately, effective models exist for improving physician communication.³⁷ Gaps in patient knowledge around disease-specific topics, in particular, could be a focus for patient education, including culturally-relevant nutrition information.³⁸⁻³⁹ However, the responsibility to address these gaps cannot fall only on providers who have many competing demands and time pressures. Health care organizations should integrate strategies to ensure patient and caregiver health literacy in typical workflows.⁴⁰⁻⁴¹ Time to deliver patient education, understand patient needs, and build trust should be understood as necessary and adequately compensated. These are important not just for high quality health care, but also to address health disparities.

Native Hawaiians, Asians, and Other Pacific Islanders identified trust as an important issue in this study. Research suggests trust in components of our health care system differs by race, as does the quality of patient-physician interactions.⁴²⁻⁴⁴ Minority individuals report less empathetic responses from physicians, less rapport, and less participation in decision making.⁴²⁻⁴⁴ Although it can be challenging to separate the roles of cultural preferences, health care professional biases, and health care system biases, our study confirms that trust in providers is an important issue to this patient population in Hawai'i.

Collaborative care management (CCM) reduces racial/ethnic disparities.⁴⁵⁻⁴⁷ Patient-centered medical homes are potential solutions to some of these issues.⁴⁸ Patient navigators and community health workers may also provide solutions to these care gaps.^{29-30;49-50} They can provide culturally-appropriate education, link patients to help when the doctor is busy, and facilitate rapport and building trust.^{29-30;49-50} We also note the background social and psychological factors precipitating these hospitalizations for ACSC are not typically captured in administrative data, but are increasingly included in electronic medical records and health system workflows generally and specifically in the state of Hawai'i.⁵¹⁻⁵²

In this project, we considered the patient perspective, but the provider perspective could also identify potential pathways to improved outcomes. We also focused on individuals hospitalized with an ACSC. Further work should prospectively study a population with similar clinical and social vulnerabilities who are not yet hospitalized to determine the factors that predict hospitalization. Only participants who could speak English were included. Because communication and trust may be exacerbated in patients with limited English proficiency, our results may underestimate problems in these areas. Another limitation is that many of our metrics are based on self-report. Finally, we did not ask specifically for thoughts on outpatient care in the open-ended question portion of the interview, so this is not a comprehensive assessment of all participants' perspectives on this topic.

Conclusions

This article highlights key issues around ACSC hospitalizations in Hawai'i from a public health perspective. We considered provider/patient-focused factors that arose in patients' stories of why they believed they were hospitalized with an ACSC. Despite long-term relationships with providers, patients reported issues related to patient-doctor relationships and poor patient-provider communication. These shed light on the importance of being heard, trust, communication, and health knowledge in relationships with the provider. Improving the quality of the relationship and level of engagement between the patient and community/outpatient providers may help reduce hospitalizations for ACSCs in Hawai'i and beyond. These interpersonal-level goals should be supported by systems-level efforts to improve health care delivery and address health disparities. It is time to reconfigure health care so it supports the critically important relationships between patients and providers.

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