GLOBAL CARDIOVASCULAR HEALTH
UNIVERSITY of WASHINGTON

Rural PRO-CARE
Health Equity Research Network

Cardiologist Insight Tool

This tool is designed to evaluate cardiologists' experiences in providing care to patients with heart failure in rural areas. Please adapt as necessary.

*What encompasses the role of a **rural-serving cardiologist**? What barriers do they encounter to providing effective patient care and what interventions might mitigate those challenges?*

Demographic Questions

- What is your age?
- What is your gender?
- What is your highest level of education?
- What is your race/ethnicity?
- What is your relationship with the patient? How long have you known the patient?
- Do you have your own medical condition(s) that also require care?
- Self-described household income
- Would you say your family/household: struggles to get by, barely get by, lives comfortably, or lives very comfortably?

Patient Profile

- We're specifically interested in exploring the experience of providing and receiving heart failure care in the rural context. Roughly what share of your patients would you estimate live in rural areas?
- Can you paint me a picture of a "typical" heart failure patient you care for? What are some common characteristics?
    - Do you think these characteristics are unique to the rural setting, or pretty common across heart failure patients in general?
- Do you feel like your heart failure patients have a good understanding of their condition? Are you generally able to educate them sufficiently, to where they know what actions they need to take and *why*?
- And how well do these patients typically adhere to the advice/recommendations that you and their cardiologist provide?

Patient-Level Barriers + Facilitators

- What barriers impede your heart failure patients from taking the best possible care of their heart health?
- Are there particular supports or resources that help certain patients take better care of themselves and their heart?
    - If you think of a patient who is doing a particularly great job managing their heart failure diagnosis, what resources/supports are they drawing on?

Context of Providing Care: Patient Logistics

- Do you usually lead care for rural heart failure patients, or co-manage their primary care physician? What does that coordination/relationship look like?
    - How often do you communicate and via what mode; what is the patient flow of when they come to you vs. primary care physician?
    - Is there anything about this relationship with your heart failure patients' primary care physicians that you wish could be different, or changes that might improve patient care?
- What happens when a patient is discharged from the hospital and is then supposed to follow up with you?
    - Are appointments made in a timely manner? Is there communication from the hospital provider? Are medications filled at the pharmacy?
- Thinking about the rural context of your practice—do you think the scope of care that your heart failure patients' primary care physicians provide is different than if they were seeking care in Boise?
- Are primary care physicians expected (required) to provide higher or more complex levels of heart failure care than in other settings?
    - Does this impact your own practice, or the scope of care you provide?
    - And what about treatment approaches to heart failure that you employ—do you think your patients receive different forms of heart failure treatment than what they might in a more urban setting?

Patient-level barriers + facilitators

- Do you see any gaps in the care that your heart failure patients receive—either because of their own actions/inactions or more structurally, as far as the care you're able to provide to them?
- Do you have any ideas about interventions, or additional support/resources, that might facilitate your being able to provide even better care to these patients?

Current communication practices

- Are your heart failure patients typically instructed to track things like their blood pressure weight, and medication adherence?
    - If so, how do they report this information to you, and when? (at appointments or in-between)
    - Do they generally follow instructions and keep you well-apprised by that information?
        - If not, what do you think keeps them from reaching out?
- What additional information would be helpful to receive from patients in-between appointments?
- Do you use any technologies to facilitate communication or even remote monitoring of patients?
- When a heart failure patient reaches out to your office in-between appointments, what are they typically reporting?
- What is the clinic workflow for dealing with that communication? Who fields the call/chart message and how/when does it get to you?
    - How well does this approach work? Do you feel like relevant information makes it way to you in a timely manner?
    - Do you have any ideas about how this patient communication workflow could be improved?

Exploring Telehealth Usability + Feasibility

Our research team is exploring the use of a smartphone app designed to facilitate the management of heart conditions between patients and their doctors. We want to know whether this app would be easy to use and whether the functions would be useful for patients and their care team.

- Thinking about your heart failure patient population, how realistic is it to think that they could manage a smartphone app that collected heart-related information daily—some via self-report (such as how they're feeling and whether they took their medications) and some via Bluetooth-enabled blood pressure cuffs and scales?
    - Do they have smartphones, do they have cell service or WIFI at home, are they tech-savvy enough (or have caretakers who are)?
    - Do you ever do telehealth visits with your heart failure patients? How well do they manage these logistics?
- And even if they (or a caretaker/support person) could manage the app *logistically*, do you think something like this would be *beneficial* to patients?
    - Would it make it easier to do what they're already doing?

    - Might it influence behaviors that support their overall heart health
- And what about for you, as their doctor—would it be useful/beneficial to receive health-related information from your heart failure patients in this manner?
- Do you have any experience with any remote patient monitoring systems or technologies?
    - *(If yes)* Have you used remote patient monitoring for heart failure?
    - What other conditions have you used it for?
    - What works well and what doesn't work well with remote patient monitoring?
- If you or your clinic implemented an app like this, what challenges would you anticipate?
- What would be the best-case scenario of how this app could be implemented?
    - Info downloaded automatically to the patient's medical record; patient coordinator role?
    - Is there anything else we should be considering as we design and begin implementing this app—especially to ensure that it meets the needs of patients and providers in the rural context?