

SUPPLEMENTAL MATERIAL

Data S1. Final Interview Guide

Over the past six years, there has been an effort to provide support for your patients with advanced heart failure through the HeartFull Collaborative Program. These questions are aimed at understanding your experience of the impact of the support and to drive further improvement.

General questions for all health care providers:

Experiences managing patients before the HeartFull Collaborative:

1. If cardiologist:
 - a. Please describe your experience caring for advanced heart failure patients with palliative care needs before the HeartFull Collaborative started promoting integrated care.
 - i. What were your experiences of end-of-life care and transitions to home-based care before the HeartFull collaborative?
2. If palliative care provider:
 - a. Please describe your experience caring for advanced heart failure patients before the HeartFull Collaborative started promoting integrated care.
 - i. What were the barriers and challenges you faced caring for advanced heart failure patients before the HeartFull Collaborative started?
 - b. Is the experience of managing heart failure patients at home different than your other palliative patients? If so, how?

An attempt was made to integrate care for Sinai Health System patients with cardiology – the HeartFull Collaborative. We would now like to ask you a few questions about this experience.

Experiences with the program:

1. Please describe your experiences and involvement with the HeartFull Collaborative program.
2. What kind of support, if any, did you receive from the program to support patients with advanced heart failure at home?
 - a. Prompt: Connection with cardiology or palliative care (depending on participant)? Any advice on diuresis or other cardiac management? Any ability to send patients back to clinic for reassessment?
3. What has been the impact of HeartFull on your ability to care for this patient population?
 - a. Prompt for palliative care physician: Did your comfort level with adjusting diuresis or other cardiac medication change? Did your relationship with the referring cardiologist change? Did your access to getting questions answered about the cardiac management of the patient change?
 - b. Prompt for cardiologist: How did your relationship with your patient change after referral to HeartFull? Did your relationship with the palliative care team change? Did your comfort level with providing palliative care, referring to palliative care, or engaging in advance care planning discussions change?
4. Were there any challenges you encountered with the HeartFull program?

- a. Prompt for palliative care provider: Did you encounter any barriers or challenges when accepting and seeing patients referred to the program from cardiology?
5. Has participation in HeartFull had any financial impact on your practice? Is this a barrier?
6. Did you feel that there was good integration of care across all settings (home, hospital, clinic)?
7. Other than the palliative care physician, cardiologist, and nurse practitioner, were there other health care providers who seemed integral to this collaborative program?

Outcomes with the program:

8. Do you think the program had an impact on patient's location of death? If so how?
9. Do you think the program had an impact on patient's health utilization (i.e., number of hospitalizations and emergency room visits, length of stay, use of invasive procedures)?
10. What components of the program do you think most contributed to these health outcomes?

Continued care for this patient population:

11. Since the HeartFull Collaborative program started trying to integrate care for heart failure patients, are there any challenges you continue to experience regarding heart failure management with a palliative care approach?
 - a. Prompt: Eg. Accessing palliative care beds? LHIN resources? Communication between the care team?
12. What additional supports would be helpful?
 - a. Prompt: Additional education on advanced heart failure management?
13. Based on your experience, is there anything that you would like to share with other health care providers about providing a palliative approach to advanced heart failure management?
14. Has your experience with caring for patients with HeartFull's integrated approach evolved over time? If so, how?

Questions for cardiologists only:

1. At the beginning, how did it feel letting someone else care for your patient at home? How do you feel about it now?
2. How did you feel about approaching patients about HeartFull? Were you hesitant?
3. Can you describe the contacts that you had with the palliative care physicians?
 - i. Prompt: Did the palliative care physician contact you? Were you asked to provide advice or support? What kinds of information or discussion did you have with the palliative care physicians?
4. For your patients in HeartFull, did you continue to be involved in your patients' care until the end-of-life?
 - i. Prompt if answer is "no": Did you want to be more involved? How?
5. Was the patient's family physician involved? What was their role?

6. Is there anything else you would like to share about your experience?

Questions for palliative care physicians only:

1. At the beginning, how did it feel sharing care with a cardiologist? How do you feel about it now?
2. What was it like to escalate diuretics/other cardiac medications in the home? Did you have experience with it before? If not, do you feel comfortable doing it now?
3. Was there anything in the heart failure management plan that you felt uncomfortable with?
4. Do you feel that you got accessible, timely support from cardiology?
5. Have you provided in-time mentoring or support to cardiologists? If so, did you find providing that support was onerous?
6. For your patients in HeartFull, did the patients' cardiologists continue to be involved in the patients' care until the end-of-life?
7. Was the patient's family physician involved? What was their role?
8. Is there anything else you would like to share about your experience?

Data S2. Provider Demographic Form

1. **Participant ID:** _____
2. **What is your age:** _____
3. **What is your gender:** _____
 - Female
 - Intersex
 - Male
 - Trans – Female to Male
 - Trans – Male to Female
 - Other (please specify): _____
 - Prefer not to answer
 -
4. **Education level**
 - High school
 - College certificate or diploma
 - Bachelor's degree
 - Above bachelor's degree
 - Prefer not to answer
5. **Which of the following best describes your racial or ethnic group? Check ONE only.**
 - Asian – East (e.g., Chinese, Japanese, Korean)
 - Asian – South (e.g., Indian, Pakistani, Sri Lankan)
 - Asian – South East (e.g., Malaysian, Filipino, Vietnamese)
 - Black – African (e.g., Ghanaian, Kenyan, Somali)
 - Black – Caribbean (e.g., Barbadian, Jamaican)
 - Black – North American (e.g., Canadian, American)
 - First Nations
 - Indian – Caribbean (e.g., Guyanese with origins in India)
 - Indigenous/Aboriginal – *not included elsewhere*
 - Inuit
 - Latin American (e.g., Argentinean, Chilean, Salvadoran)
 - Métis
 - Middle Eastern (e.g., Egyptian, Iranian, Lebanese)
 - White – European (e.g., English, Italian, Portuguese, Russian)
 - Mixed heritage (e.g., Black – African and White – North American) (Please specify): _____
 - Other(s) (Please specify): _____
 - Prefer not to answer
 - Do not know
6. **What is your religious or spiritual affiliation? Check ONE only.**
 - I do not have a religious or spiritual affiliation
 - Animism or Shamanism
 - Native Spirituality
 - Pagan

- Atheism
- Baha'i Faith
- Buddhism
- Christian – *not included elsewhere*
- Christian Orthodox
- Confucianism
- Hinduism
- Jainism
- Jehovah's Witnesses
- Judaism
- Islam
- Protestant
- Rastafarianism
- Roman Catholic
- Sikhism
- Spiritual
- Unitarianism
- Zoroastrianism
- Other (Please specify):
- Prefer not to answer
- Do not know

7. **What is your healthcare provider role (select all that are applicable)?**

- Physician
- Physician Assistant
- Nurse
- Trainee
- Admin coordinator
- Care coordinator
- Other (please specify): _____

8. Number of years working healthcare: _____

9. Number of years in your current role: _____

10. Specialization of work (eg. cardiology, palliative care, family practice):

11. Describe your main responsibilities & tasks:

E.g. Leadership role, Coordinating role

Data S3. Researcher Characteristics and Reflexivity

C.G. is a general internist and palliative care fellow in an accredited Canadian palliative care training program. She has previously provided care for patients within the collaborative model of care both in the inpatient and home setting and interacts regularly with cardiology and palliative care physician participants. During the time of data collection, C.G. was a resident who regularly interacted with several of the cardiology and palliative care HCP participants through her post-graduate medical education with the Department of Medicine at the University of Toronto.

R.S. is an emergency medicine resident at the University of Alberta and completed a geriatric emergency medicine clinical fellowship at the University of Toronto. At the time of data collection, she did not have any prior relationships with any participants.

S.R.I. is a health services researcher at the Bruyère Research Institute and an Assistant Professor in the Department of Medicine at the University of Ottawa. During the time of data collection, S.R.I. was working collaboratively with several of the palliative care physician participants through her prior affiliation with the Temmy Latner Centre for Palliative Care (TLCPC) at Sinai Health.

K.L.Q. is a general internist and palliative care physician at Sinai Health System, and Clinician-Scientist in the Department of Medicine at the University of Toronto. He provides care for patients within the collaborative care model in the acute inpatient and palliative care unit setting, and interacts regularly with cardiology and palliative care physician participants.

S.M. is a heart failure specialist and director of the Anna Prosserman Heart Function Clinic as well as director of the Harold and Esther Mecklinger and Poslund Family Cardiac Catheterization Research Laboratory at SHS. Together with L.S. she developed and implemented the HeartFull Collaborative. She provides care for patients within the collaborative model of care

in the acute inpatient and outpatient clinic settings, and interacts regularly with cardiology and palliative care physician participants.

L.S. is a palliative care physician at TLCPC and SHS. Together with S.M. she developed and implemented the HeartFull Collaborative at SHS. She provides care for patients within the collaborative model of care in the acute inpatient setting, and interacts regularly with cardiology and palliative care physician participants.

S.H.B. is a palliative care physician at Bruyère Continuing Care, Investigator at the Bruyère Research Institute and an Associate Professor in the Department of Medicine at the University of Ottawa, Ottawa, Ontario. She provides care to patients with end-stage heart failure on the inpatient Bruyère palliative care unit, and has international experience looking after patients with AHF in hospital consultation service and community settings.

T.K. is a registered nurse and postdoctoral health research fellow at The Hospital for Sick Children in Toronto, Canada. Her research focuses on improving the experiences of Canadian patients with advanced chronic illness, and their family members, by researching ways to align healthcare treatment with people's personal values and preferences.

D.K. is a health services researcher and Associate Professor of Medicine within the Division of Palliative Medicine at Emory University (Atlanta, GA, USA). His research focuses on the development and evaluation of models of palliative care delivery in chronic illness, including heart failure.