

## **Item S1. PATIENT INTERVIEW GUIDE**

**The purpose of this interview is to better understand the needs of people getting dialysis.**

1. I'm going to ask you questions about specific things patients on dialysis may experience. First, I'd like to hear about how things have been for you this past week.
2. On a typical day, what types of activities in your home can you do without help from anyone? What activities will not be done unless you had someone help you?
3. You've mentioned some of this already (say IF Mentioned). Please tell me about the help you receive in your home that you get from your family and from the community that is most helpful? What is not helpful? (PROBE FOR PHARMCEUTICAL, MEALS, CLEANING, PROFESSIONAL CAREGIVERS, TRANSPORTATION, RECREATION)
4. Older adults taking dialysis can develop problems with walking and may benefit from physical therapy. What experience do you have with physical therapy?
  - a. Are you interested in physical therapy at this time? Why or why not?
5. Many dialysis patients end up in the hospital. What are your experiences with being in the hospital?
6. Looking back, what could have been done to help you avoid being hospitalized? (SPECIFIC PROBES?)
7. Many dialysis patients take several medications and that can be hard to manage. Can you tell me about the last time you started a new medication or changed a medication you had been taking? Probe: How do you make sure you are taking the exact doses of your medications? who helps you do this?
8. Have you ever accidentally taken the wrong medication or the wrong dose of a medication? IF SO: Can you tell me more about that? Why do you think it happened?
9. Many dialysis patients have trouble with falling at home. Please tell me about your experience with falls. What happened and what could have been done to help prevent it?
10. If you have a new medical problem, who do you talk to about the problem first? Who is most helpful? (If they only mention family, PROBE for professional person (i.e., doctor, home health aide, nurse, care manager))

11. What has been your experience with seeing a primary care doctor on a regular basis, for example, a check-up every 3 or 6 months? Is this something you do? Why not?
12. IF THE PATIENT DOES NOT SEE PCP REGULARLY: Would you like to see a primary care doctor every 3-6 months? Why or why not?

**I'm interested in your visits with your dialysis doctor.**

13. You see your dialysis doctor regularly while you are here getting dialysis. Please tell me about your visits with your dialysis doctor? (PROBE FOR FREQUENCY, CONTENT, SATISFACTION) What types of things do you discuss with your dialysis doctor?
14. How does your dialysis doctor get information about you from your primary care doctor?
15. What are your thoughts about how your doctors, especially your primary care doctor and your dialysis doctor, communicate with each other about you and your health care needs? how can it be improved?

**We're interested in developing a program to provide better care for dialysis patients. We'd like to get your input on some of the ideas we have for the program.**

16. We would have a nurse and a social worker help manage your health problems and coordinate care with your doctors. They would come to your home to get to know you, review your medications, check in on your ability to do things in your home, check in on your emotions, and check on your thinking ability. If they find anything concerning, they would help you address those problems with a plan specific for you and sharing that plan with your doctors. They would follow-up regularly and you could reach out to them if you had a concern. All of this would be to ensure that you we are addressing your needs to help you continue to live independently.
  - a. What do you like about this program as I've described it?
  - b. What aspects of it could you benefit from right now?
  - c. What things do you not like about it?
  - d. What questions do you have about home visits?
  - e. How often would you like them to come to your home? What would be considered too often?
17. Alternatively, we would have a nurse and a social worker help manage your health problems and coordinate care with your doctors by coming to you at dialysis. They would make visits to dialysis to get to know you, review your medications, check in on your ability to do things in your home, check in on your emotions, and check on your thinking ability. If they find anything concerning, they would help you address those problems with a plan specific for

you and sharing that plan with your doctors. They would follow-up regularly and you could reach out to them if you had a concern. All of this would be to ensure that you we are addressing your needs to help you continue to live independently.

- a. What would be helpful about a visit like this at dialysis?
- b. What are your concerns about a visit during dialysis?
- c. When during your treatment visit do you think it would be best to meet with someone?  
Why?
- d. Which would you prefer and why?

18. From your perspective, what else is important for us to know about being a dialysis patient?

19. Are there any issues that patients like yourself commonly face that you wish could be improved upon?

## **Item S2. PERSONNEL INTERVIEW GUIDE**

**As I said, we are interested in hearing your perspective on the needs of dialysis patients.**

20. From your perspective, what are the biggest threats to the well-being of older dialysis patients? Think of your typical older patient who comes in with a cane or a walker? (write down the list. Probe for ADL difficulty, falls, transportation to dialysis, medication management, care coordination, medical problems, etc.
21. Now that we have a full list of concerns, I'd like to spend some time to identify the most important things on this list. Each of you has 5 dot stickers. If you could come up and place a dot near the 5 issues you think are the most important. **PROCESS THE EXERCISE WITH THE GROUP. IDENTIFY AND DISCUSS FIVE ISSUES WITH THE MOST DOTS. IDENTIFY ISSUES WITH JUST ONE DOT. PROBE TO SEE WHY PEOPLE SELECTED THE 5 THEY SELECTED.**

**Next, I'd like to ask about questions about some specific issues that your patients may be dealing with.**

22. From your experience, what clinical or social factors describe the older dialysis patient who is most likely to be hospitalized or have declining health in the 6 months? (probe: vital signs, symptoms, specific medical problems, level of independence, walking ability, mood)
23. How do you determine if a patient like that needs support services such as physical therapy, home health, or other support services at home? How do you request those types of services for a patient?
24. Older dialysis patients can vary greatly in their ability to take care of themselves? In your experience, what are the biggest challenges to self-management for older dialysis patients? **PROBE:** adhering to diet or fluid restrictions? taking medications? Getting to appointments?
25. When a dialysis patient returns to your dialysis unit after a hospitalization, how do you gain sufficient information about what happened during the hospital stay? How could that process be improved?
26. When a dialysis patient sees other healthcare professionals in other settings, such as primary care or another specialist, how do you receive information about those clinical encounters? What information is important for you to know? How could that process be improved?
27. How do you coordinate care with other healthcare professionals?

28. Several older dialysis patients have caregivers (either family/friends or home health agency), how do you typically communicate with them? What do you typically discuss with them?

**We're interested in developing a program to provide better care for older dialysis patients. The goal of the program is to help them maintain their independence and avoid hospitalizations. It will provide two elements: 1) care targeting geriatric problems and 2) care coordination. For the geriatric care, we currently envision three steps: 1) identification of geriatric problems, 2) development of an individualized treatment plan, and 3) ongoing follow-up care.**

**We'd like to get your input on some of the ideas we have for the program.**

29. To start, here is a description of the initial geriatric assessment. We would have a nurse and a social worker come to the home to get to know the patient, review medications, check in on their ability to do things in your home, check in on their emotions, and check on their thinking ability. If they find anything concerning, they would help the patient address those problems with a plan specific for them and will share that plan with the patient's doctors.

- a. What questions do you have about this description?
- b. What do you see to be the value to the patients?
- c. What would make this valuable to your clinical practice? (Probes: elements of the intervention that could positively impact what you do? Time spent rounding? Patient adherence?)
- d. What clinical outcomes would you like to see improved by a program like this? (or any program in general?)

11. We have a few decision points before finalizing our pilot study. We would like your input on the following:

a. As the nephrologist for the patient, how much involvement would you like to have in approval of the patient's individualized geriatric care plan? Do you want to know our plan and ongoing changes to it? How would you like to receive that information? What if we need information about their dialysis care or seek your feedback on the care plan?

b. Next, we'd like you input on staffing for this new clinical program. Does the level of education of the care team matter to you? What else matters?

c. The visits could occur at the patient's home or while they are at dialysis. Where do you think it would be best to have the visits and why? PROBES: What are your concerns about a visit during dialysis? When during the dialysis treatment do you think it would be best for this visit to happen? Why? What changes would need to be done to facilitate these visits at dialysis?

30. If this was an existing program, what benefits would you need to see that would make you want to refer new patients to it?
  
31. Thinking ahead, what challenges would we face in trying to get this program to exist permanently?

### **Item S3. Initial Coding Framework**

Here is list of our initial codes and how we defined them for this study.

1. Needs = Activities of daily living that patient needs assistance with
2. Self-management = routine activities that patient does or receives assistance with for their health, including medication management and adherence to other provider recommendations
3. Caregiver support = type and extent of support from family/friends or paid caregivers
4. Community support = use or access to community services (such as meals on wheels, senior center)
5. Care management = any description of care management services the patient receives
6. Geriatric syndromes = experiences with falls, medication problems, difficulty walking
7. Nephrologist- PCP Communication = process by which nephrologist and PCP communicate with eachother (from patient's perspective)
8. Nephrologist-PCP Roles = distinguishing types of conversations and services are addressed by the nephrologist compared to the PCP.
9. In-home medical services = patients' experiences and opinions regarding value of physical therapy, home health
10. Hospitalization Factors = system or patient factors that contribute to experiencing hospitalization
11. Feelings towards Hospitalization = perceived effect of hospitalization on their lives
12. Medication management problems = description of problems in handling medications that contribute to errors, discrepancy, or other adverse event
13. Seeking Medical Help = system, process, and people involved when or if a new problem develops.
14. Program Concerns = patient concerns about the effect of the program
15. Program Preferences = patient preferences about frequency and location of program
16. Program Benefits = patient perceived benefits of the program

**Table S1. Consolidated Criteria for Reporting Qualitative Research (COREQ) Checklist**

Supplemental Table. COREQ Checklist	
<b>Domain 1: Research team and reflexivity</b>	
<b>Personal Characteristics</b>	
1. Interviewer/facilitator	Jeanette Rutledge (JR); Laura Fish (LF)
2. Credentials	JR- RN; LF- PhD
3. Occupation	JR- clinical nurse research coordinator; LF- qualitative research scientist
4. Gender	female
5. Experience and training	JR- supervised training and feedback by LF and RH for this study; LF- >20 years of experience
<b>Relationship with Participants</b>	
6. Relationship established	No
7. Participant knowledge of the interviewer	Only information described in informed consent process
8. Interviewer characteristics	None reported
<b>Domain 2: Study Design</b>	
<b>Theoretical Framework</b>	
9. Methodological orientation and theory	Content analysis
<b>Participant Selection</b>	
10. Sampling	Purposive sampling (patients); Convenience sampling (personnel)
11. Method of approach	Letters; face-to-face (detailed in Methods)
12. Sample size	Table 1
13. Non-participation	We did not track non-participation
<b>Setting</b>	
14. Setting of data collection	Dialysis unit, office space (detailed in Methods)
15. Presence of non-participants	No
16. Description of sample	Table 1
<b>Data Collection</b>	
17. Interview guide	Yes; see supplement for guide
18. Repeat Interviews	No
19. Audio/visual recording	Audio
20. Field notes	Yes
21. Duration	Up to an hour
22. Data saturation	Assessed; (detailed in Methods)
23. Transcripts returned	No
<b>Domain 3: Analysis and Findings</b>	
<b>Data Analysis</b>	
24. Number of Data coders	Two
25. Description of the coding tree	Details of the coding framework in Methods
26. Derivation of Themes	Derived from the data



27. Software	NVivo 12
28. Participant Checking	Yes
<b>Reporting</b>	
29. Quotations presented	Table 2 shows quotes and identifier of participant role and/or characteristics
30. Data and findings consistent	Yes; Detailed in results section
31. Clarity of major themes	Results; Figure 1
32. Clarity of minor themes	Results; Figure 1