8-2017

Providing patient-centered enhanced discharge planning and rural transition support: Conducting a rural transition needs assessment

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PROVIDING PATIENT-CENTERED ENHANCED DISCHARGE PLANNING AND RURAL TRANSITION SUPPORT

Conducting a Rural Transition Needs Assessment

The University of Montana

In Collaboration with

The International Heart Institute of St. Patrick Hospital

Missoula, Montana

This document is a brief practice guide. It describes one component of a comprehensive program of enhanced discharge planning and rural transition supports.[1] As such, it is designed to be used as part of that program but can be used independently by others, as well.

Suggested citation: Seekins, T., Greene, S., Long, R., Wong, J., Eisenreich, B., Boehm, H., Sliter, L., & Smith, A. (2017). *Providing patient-centered enhanced discharge planning and rural transition support: Conducting a rural transition needs assessment.* Missoula, MT: Rural Institute for Inclusive Communities, University of Montana.

Research reported in this work was funded in part through a Patient-Centered Outcomes Research Institute (PCORI) Award (AD 12-11-4788). The views presented in this publication are solely the responsibility of the author(s) and do not necessarily represent the views of the Patient-Centered Outcomes Research Institute (PCORI), its Board of Governors or Methodology Committee.

[1] Seekins, T., Boehm, H., Wong, J., Yearous, L., & Smith, A. (2017). *Providing patient-centered enhanced discharge planning and rural transition support: Building a rural transition network between regional referral and critical access hospitals*. Missoula, MT: Rural Institute for Inclusive Communities, University of Montana.

Researchers have suggested that readmissions following hospital discharge might be reduced by providing additional resources to patients most likely to be re-hospitalized. They have suggested three broad approaches to assessing the likelihood of readmission and prioritizing patients for extra support. These approaches include: (1) medical risk, (2) personal capacity, and (3) environmental. While work on assessing medical risk and personal capacity has been reported, few researchers have explored the role of environmental factors.

We used the third approach, an environmental perspective, to develop and test a Rural Transition Needs Assessment. This process involved patients in assessing their practical needs for recovery at home. Needs included several community factors that may affect a patient's ability to achieve a smooth transition home. For example, a needs assessment might find that a patient who lives outside a small town lacks transportation to get to medical appointments. Identified needs were linked through a tablet computer to a list of applicable local programs and services that addressed the need.[2] Table 1 shows the needs considered.[3] A Local Community Transition Coordinator (LCTC) worked with the patient to secure needed and desired supports.

Table 1: Listing of 18 Rural Transition Needs Assessed

Areas of Rural Transition Needs	
Housing	Counseling and Emotional Support
Groceries and Meals	Medical Bills and Insurance
Medications	Scheduling Follow-Up Appointments
Personal Assistance for Daily Activities	Rehabilitation Appointments
Home Health Care	Transportation
Home Modifications	Recovery Expectations
Performing Daily Chores	Management of Treatment Tasks
Care of Dependents	Medical Contacts for Complications
Income and Finances	Long-Term Lifestyle Changes

Rationale

A medical risk model categorizes individuals into groups with common medical characteristics associated statistically with higher rates of re-hospitalization. The common characteristics are often determined by the data that are available in the medical record (e.g., LACE+). For example, previous hospitalizations have been shown to predict future hospitalizations. A high risk score suggests that providing a patient with added supports at discharge might reduce the likelihood of a readmission. Similarly, a personal capacity perspective uses assessments of a patient's knowledge, skills, and abilities for managing their health to predict the likelihood of being readmitted. These factors are typically assessed by provider judgment or by using a brief questionnaire (e.g., PAM10). For example, a patient

[2] A separate product, *Developing a Local Health and Human Services Resource Bank for Rural Communities*, briefly describes how to organize this process locally. An electronic shell is also available that allows the process to be tailored to different localities on a tablet computer.

[3] After its use in the research project, we recommend removing two items (recovery expectations and management of treatment tasks). These issues are integrated into the Discharge Orders Verification Checklist described in the publication, *Providing Patient-Centered Enhanced Discharge Planning and Rural Transition Support: Building a Rural Transitions Network between Regional Referral and Critical Access Hospitals*, and the brief guide, *Verifying Discharge Orders during Rural Transitions*.

may indicate that he or she has little confidence in being able to follow through on medical treatments at home. This suggests that providing a patient with more information, instruction, or training, might reduce the likelihood of a readmission.

The risk approach is efficient because the data are readily available in the medical record but it does not suggest the types of support that might benefit a patient. A personal capacity approach might be considered effective because it builds long-lasting skills but it might be considered somewhat less efficient because new data must be collected and someone must provide more education to the patient. Regardless, both approaches use statistical analyses to predict the outcome. As such, both are subject to Type I and Type II errors. That is, in targeting individual members of a group, they may prioritize an individual for extra services who may not need them (a false positive or Type I error). On the other hand, individuals who do not share the characteristic but who need specific supports may not get them (i.e., a false negative or Type II error).

The third approach, an environmental one, assesses a patient's needs for community supports. A needs model may be somewhat less efficient than the other approaches because each individual's needs must be assessed but it points neatly to solutions in the community. Further, it is less likely to provide services to those who do not need them or to miss providing service to those who do. Such an approach may complement and enhance standard risk and capacity assessments.

Conducting a Rural Transition Needs Assessment

The needs assessment is conducted using a tablet application. Procedurally, a Research Transition Coordinator (RTC; i.e., hospital staff such as a discharge planner) explains the needs assessment process to a patient. Then, the RTC reads a series of questions from the tablet and asks the patient to rate his or her confidence in meeting each need on a scale of "0" to "4," where "0" means not confident and "4" means very confident. A patient may also indicate that an item is not applicable (N/A) to their situation.

If a patient rates an item as "2" or less, the RTC asks, "Can you tell me a bit more about this?" She would record responses as additional information in the tablet program. If a patient rates an item as 3 or higher (or N/A) but that rating seems incongruent with information learned from the file review or discussion with the patient, the RTC can follow up by asking, "Can you tell me more about how you will meet that need?" Again, these explanatory responses are recorded as additional information.

Table 2 below reproduces the Rural Transition Needs Assessment. Each item is structured so that it begins with a brief patient-education statement followed by an opportunity for the patient to rate his or her confidence that he or she can meet the need. Completing the ratings provides the data to begin to focus on the needs a patient may want to address in order to maximize their recovery.

The chart shows specific responses to each item for one patient. In this case, the patient has reported a high degree of confidence (a rating of 3 or 4) in meeting 10 needs. Similarly, she has indicated four needs were not applicable in her situation. On the other hand, she has expressed a lack of confidence (a rating of 2 or less) in meeting four needs. The needs she has less confidence in addressing include: (1) getting someone (e.g., home health) who would perform basic medical treatments so she can recover at home; (2) getting specific home modifications or equipment that would maximize her independence at home; (3) finding someone who would help with chores at home while she recovers; and (4) finding someone who would help care for a dependent she was responsible for supervising.

When the RTC asked the patient to tell her more about these needs, the patient explained that she had only recently moved to town and lived alone. She had yet to make any real friends. She had a pet dog for

which she was responsible. A neighbor was watching the dog while she was in the hospital, but they were leaving town the day the patient expected to get home. She was also worried that the dog, which was young and active, may cause her to fall. The patient added that her nurse told her that she would need help in changing her bandages and she did not know where she could get the help she thought she needed to do this. The nurse also mentioned something about using a walker but she was unsure of how to get one.

Despite the fact that the patient seemed quite anxious about her situation, she reported that she was doing fine emotionally. When the RTC expressed admiration for her strength and asked how she dealt with such pressure by herself, the patient turned her head and stared out the window. This presented the RTC with the opportunity to ask the patient about her emotional supports again. The patient allowed that she might need to address these issues, too.

Once a patient affirms the list of needs, the tablet computer links those needs to a listing of services to address the identified needs in the patient's community. From there, a LCTC can work with the patient to connect with those local providers.

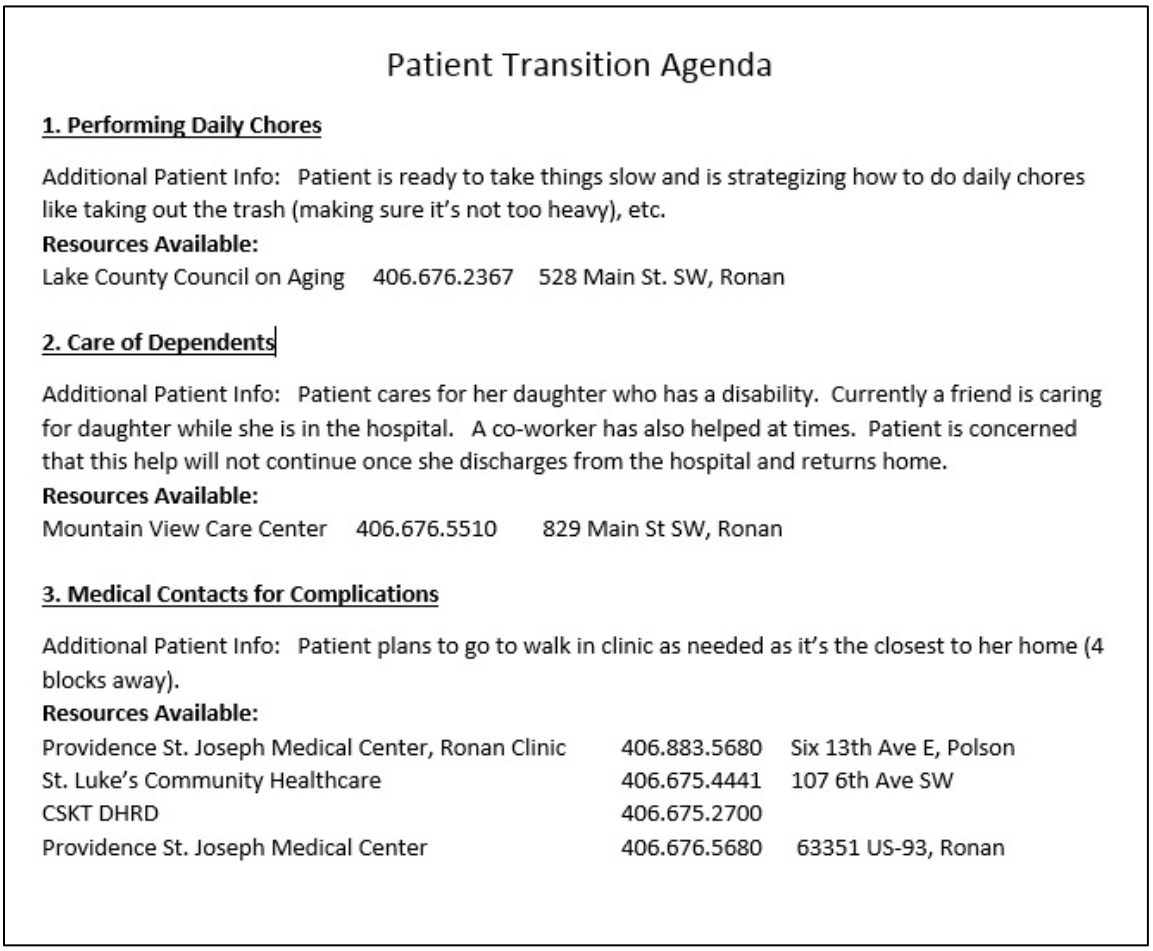
Table 2: Sample Rural Transition Needs Assessment

Items	Not Confident				Very Confident	N/A
1. A safe and comfortable place to live contributes to your healing and recovery from treatment. How confident are you that you have a safe and comfortable place to live when you leave the hospital?	0	1	2	3	(4)	N/A
2. You need to eat a healthy diet to provide the nutrients your body needs to heal. You may need someone to help you get groceries or prepare meals for a while. How confident are you that you have someone you can count on to help you get groceries and prepare meals when you get home?	0	1	2	3	(4)	N/A
3. Your physician has prescribed one or more medicines that are intended to help you recover and maintain your health. How confident are you that you can get the medications you need at your local pharmacy at an affordable cost?	0	1	2	3	(4)	N/A
4. There are several basic self-care tasks that you will need to perform such as toileting, hygiene, and dressing that may require someone's assistance for a while. How confident are you that you can get someone who will help you with those tasks?	0	1	2	(3)	4	N/A
5. Your medical team may give you one or more treatment tasks you will need to preform when you arrive home, such as changing your bandages, that may require assistance. How confident are you that you can get someone who will help perform those basic medical treatments so you can recover at home?	0	1	(2)	3	4	N/A
6. Specific home modification or equipment, such as grab bars, scooters, or ramps, may help maximize your independence at home. How confident are you that your home is organized or that you have equipment that will maximize independence at home?	0	1	(2)	3	4	N/A
7. You may have chores or responsibilities at home, such as cooking or lawn mowing that others count on you to do but that you may not be able to do for a while. It is important that you give yourself time to heal and recover from treatment. How confident are you that you have someone who will help you do those chores or take care of them while you recover?	0	(1)	2	3	4	N/A
8. Some people are responsible for caring for someone else at home, such as a child, a parent, a spouse, or even a pet. How confident are you that there is someone who will watch a dependent who you are responsible for supervising?	0	(1)	2	3	4	N/A
9. The cost of the treatment you received can put a dent in anyone's finances. For example, recovering from treatment may take you or a family member away from work. This may reduce your income and make it difficult to afford healthy meals or pay utility bills. How confident are you that you will have sufficient income from work, savings, social security or other sources to pay for basic necessities while you recover?	0	1	2	(3)	4	N/A
10. The type of treatment you received can be somewhat traumatic, may create anxiety, and even lead to depression. These conditions can interfere with your recovery. Talking with a counselor or a friend can help you deal with such issues. How confident are you that you have enough support to address any emotional issues that you might face due to your treatment and recovery?	0	1	2	3	(4)	N/A
11. Medical costs can be surprising. If you lack insurance or have a high deductible, you may worry about how you will cover those costs. That stress can interfere with your recovery. How confident are you that you will be able to cover the costs of your treatment or that you understand how to get assistance to pay your medical bills?	0	1	2	3	4	(N/A)
12. It may be important for you to see a local physician to follow up on the course of your recovery. How confident are you that you can get an appointment with your local family physician within a reasonable time?	0	1	2	3	(4)	N/A

Items	Not Confident				Very Confident	N/A
13. Your physician may recommend specific rehabilitation treatments such as physical or speech therapy to help you recover. How confident are you that you can get an appointment for rehabilitation and other healthcare services you need within a reasonable time after you get home?	0	1	2	3	4	(N/A)
14. Your physician may recommend that you not drive for a while or you may not have your own car. How confident are you that you can easily get a ride to your medical appointments and back home?	0	1	2	3	4	(N/A)
15. It is important that you give yourself time to heal and recover from treatment. How confident are you that you understand the course of your recovery and when you can begin to return to routine activities?	0	1	2	3	(4)	N/A
16. Your medical team counts on you to manage many basic self-care tasks related to your treatment. For example, your physician may want you to take certain medications on a strict schedule or want you to avoid strenuous activity. How confident are you that you understand what you need to do and how to care for yourself as you recover?	0	1	2	3	(4)	N/A
17. As you recover at home, you may experience unexpected delays in recovery or complications, such as pain or difficulty sleeping. This may raise questions about the course of your recovery or how you should address such issues. How confident are you that you know who you can contact and how to reach them about such questions?	0	1	2	3	(4)	N/A
18. Some conditions may require you to make significant change in your life style over time a long term. How confident are you that you can make such changes, if they are needed?	0	1	2	3	4	(N/A)

Linking Needs to Local Resources

The tablet program also houses a Community Transition Resource Bank, a file that contains a list of service and support programs in each participating county.[4] This list is organized around the service provided to address patient needs. For example, the Beaverhead County Resource Bank lists six (public and private) agencies that provide housing support and assistance. Figure 1 below shows an example of the resources listed for another patient who identified needs under Performing Daily Chores, Care of Dependents, and Medical Contacts for Complications.



Patient Transition Agenda

1. Performing Daily Chores

Additional Patient Info: Patient is ready to take things slow and is strategizing how to do daily chores like taking out the trash (making sure it's not too heavy), etc.

Resources Available:

Lake County Council on Aging 406.676.2367 528 Main St. SW, Ronan

2. Care of Dependents

Additional Patient Info: Patient cares for her daughter who has a disability. Currently a friend is caring for daughter while she is in the hospital. A co-worker has also helped at times. Patient is concerned that this help will not continue once she discharges from the hospital and returns home.

Resources Available:

Mountain View Care Center 406.676.5510 829 Main St SW, Ronan

3. Medical Contacts for Complications

Additional Patient Info: Patient plans to go to walk in clinic as needed as it's the closest to her home (4 blocks away).

Resources Available:

Providence St. Joseph Medical Center, Ronan Clinic	406.883.5680	Six 13th Ave E, Polson
St. Luke's Community Healthcare	406.675.4441	107 6th Ave SW
CSKT DHRD	406.675.2700	
Providence St. Joseph Medical Center	406.676.5680	63351 US-93, Ronan

Figure 1: Screenshot of a patient's Transition Agenda posted in their Epic® Episode of Care.

Creating the Episode of Care in Epic®

Together, the Rural Transition Needs Assessment and resources form a tentative patient Transition Agenda. This agenda is posted in an electronic Episode of Care in Epic®. The RTC then notifies the LCTC in the patient's hometown where the patient will soon be discharged home and has

[4] A companion guide, *A Systematic Approach to Developing a Local Health and Human Services Resource Bank for Rural Communities*, is available from the Rural Institute on Community Inclusion at the University of Montana.

requested assistance in making that transition. This early notification allows the LCTC to be prepared to schedule a meeting with the patient shortly after she returns home.

Evaluation of Rural Transition Needs Assessment

Figure 2 presents the distribution of needs identified by patients. Data from the 50 patients enrolled in the Enhanced Discharge Planning and Rural Transition Support program show that patients, on average, identified 2.9 needs—1.8 before discharge and 1.1 after they returned home. Initial analysis suggests that, as we suspected, there is no correlation between patients' LACE+ score and their number of needs, as these measures tap into very different constructs. There is a modest correlation between patients' PAM10 score and their number of needs (r = - .489 p < .000). More data are needed to assess the relationship between need and outcome.

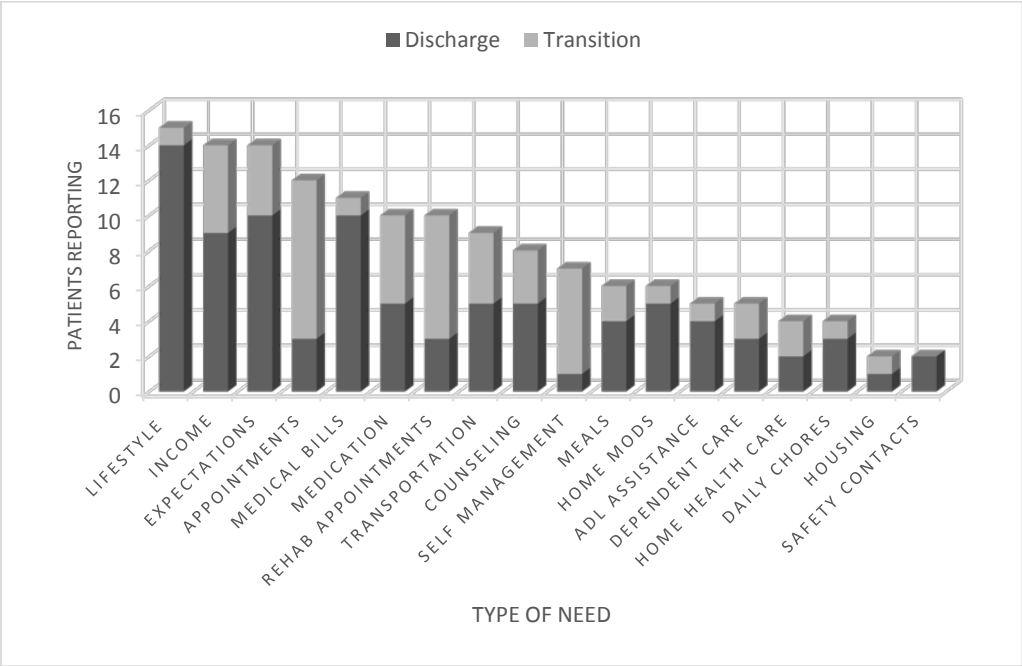


Figure 2: The number of patients identifying across categories.

We also noted that patients identified many needs after they returned home (55 additional needs). In addition, patients dropped several needs (10) they had identified as needs before discharge as they no longer saw them as relevant. For this and other reasons, we recommend that the RTC (i.e., hospital staff) take on the task of preparing the Discharge Orders Verification Checklist[5] and that the LCTC take on the task of conducting the Rural Transition Needs Assessment.

[5] The Discharge Orders Verification Checklist is described in the publication, *Providing Patient-centered Enhanced Discharge Planning and Rural Transition Support: Building a Rural Transitions Network between Regional Referral and Critical Access Hospitals*, and the brief guide, *Verifying Discharge Orders during Rural Transitions*.