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Transitional care model: managing the experience of hospital at home

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ABSTRACT

Introduction: Design and use of effective strategies to improve care and achieve better results for patients with chronic diseases, reduce the frequency and cost of hospitalization is necessary for these patients. Transitional care model is a new model that have been effective in meeting the needs of these patients. The aim of this mini review study is investigating and describing the various aspects of transitional care model, benefits and core components.

Design: The present investigation is a mini review study that conducted with library reading for data collecting.

Methods: Scientific database (ISI, Pubmed, Scopus, Sciencedirect) were reviewed for articles related to the transitional care model literature. A total of 80 articles were obtained. Following applying the inclusion criteria (published between 2000 and 2017 in English language among peer-review journals), 5 articles were retained. These articles propose core components of the transitional care model and its benefits.

Results: Transitional care model has some benefits, 8 main elements and 7 core components including: screening, staffing, Maintaining Relationships, Assessing risks and symptoms, Educating, Promoting Continuity, Fostering Coordination.

Keywords: transitional care, chronic disease, hospitalization, nursing

INTRODUCTION

Patients with chronic diseases are faced with increasing social barriers and reduction of physical performance in managing their health needs (1). The number of these patients' visits to the emergency department and their hospital admissions is more than other patients. Studies show that poor management of care needs of patients with chronic diseases plays a significant role in the deterioration of their physical and economic situation (2). Overall, six categories of problems lead to negative outcomes in chronic patients during hospitalization and after discharge at home (3), including the lack of involvement of patients in their care, lack of communication or insufficient communication, the lack of cooperation between the medical team, the limited follow-up and monitoring of the patient, poor continuity of care and a deep gap in providing services to patients, especially after discharge from the hospital. Readmission of this group of patients is unavoidable. In addition, the costs of hospital care will be increasing in older patients (4). The majority of these costs is due to avoidable frequent hospitalization. Accordingly, new care approaches that pursue three main objectives of enhancing the patients' experience, improving community health, and reducing costs are needed (5). In particular, evidence-based transitional care that meets care needs of patient at the time of hospitalization is an accepted approach that is emphasized in the chronically ill and the elderly (6-8). One of the approaches tested in this regard is transitional care model that promotes the health of patients with chronic diseases and has a positive economic effect on the patient and family (9-11). In this care model, nursing care and providing it to patients with chronic diseases during hospitalization and then at home is offered and guided by the nurse. The aim of this study, therefore, is to investigate details of this care approach, its components, elements and dimensions as well as the effect of transitional care approach on the management of patients with chronic diseases at home (9-13).

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Study Design and Methods

In this mini review study data are collected through library reading among scientific database and related studies. Scientific databased (ISI, Pubmed, Scopus, Sciencedirect) were reviewed for articles published between 2000 and 2017 in English language among peer-review journals. A total of 80 articles were obtained. Following applying the inclusion criteria such as being between 2000 and 2017, English language and original research, finally 10 articles were retained. These articles propose core components of the transitional care model and its benefits.

Literature Review in Transitional Care Model

In this caring model, the focus of nursing services is on improvement of care quality, increase of outcomes for patient and family, decrease of hospitalization costs for patients with chronic diseases, and increase of the role and effect of care provided at home (2, 14, 15). During the past two decades, team-based care model guided by a nurse has been designed and tested by health researchers at the University of Pennsylvania of America (2, 4). Transitional Care Model emphasizes identification of patient's goals, design and implementation of care model, and continuity of care between hospital and home. Transitional care is provided by expert nurses as complementary and supportive care in the patient's home and after discharge from the hospital. In this model, providing patient care is done through coordination between professional and skilled nurse with the patient and his family, doctors and other health care team members (2, 4, 16, 17).

In this regard, clinical trial results show that transitional care results enhance patient's outcomes including reduction of hospitalization times, reduction of care costs and enhancement of living quality. In the clinical trial, transitional care and duration of treatment is adjusted depending on the needs of patients. For example, a clinical trial was carried out by Dr. Naylor (2006) on elderly patients with heart failure who were admitted to hospital and after receiving treatment and care services had returned home. In this study, the first visit and readmission in hospital among patients who had received transitional care had significantly decreased compared with the control group ($p = .026$). In this method, compared to standard methods of care, the number of hospital readmission after discharge and after one year of monitoring patients was reduced ($p = .047$) (2, 4). In this study, quality of life of all patients who had received transitional care was higher than patients who had experienced other forms of care. In fact, it can be said that the transitional care model is a set of services and treatments that is complementary to primary care (1, 17, 18). This care model aims to ensure continuity of care and prevention of negative outcomes of patients at risk during the transition from hospital to home and it is among medical staff and caregivers. Among the patients who need to be under this care model are:

- Patients who have high care needs that are not met
- Patients who are dissatisfied with the current method of care
- Patients who are hospitalized due to recurrent disease
- Patients who have suffered a lot of overhead costs (6, 12, 19).

RESULTS

Benefits of Transitional Care Model

- Increased time of re-hospitalization and increased lifetime
- Enhanced physical performance and quality of life
- Increased patient satisfaction
- Reduced repeated visits to hospital
- Reduced health care costs (20).

Transitional care model is planning comprehensive care for the chronically ill patients in the hospital and its continuation at home. For thousands of patients with chronic diseases or who have complex treatment regimens, transitional care model with managed care approach and with emphasis on continuity of care, prevention and avoiding complications of the disease and actively involving patient and family in the care coordinated with physicians plays an important role in improving and promoting chronic patients' health (7, 11, 21).

The Main elements of Transitional Care Model

1. Transitional care nurse is the first care coordinator to ensure the integrity of care provision from the beginning of the program.

Table 1: *Core Components of Transitional Care Model*

Components	Definition
Screening	Patients with chronic diseases transitioning from hospital to home who are at high risk for poor outcomes.
Staffing	Nurses who have responsibility for care management throughout primary stages.
Maintaining Relationships	Establishment and development of relationship with trust with the patient and family
Assessing/ Managing Risks and Symptoms	Identifying and addressing priority risk factors and symptoms and trying to overcome them.
Educating/ Promoting Self-Management	Preparing patient and family to identify and respond quickly to worsening symptoms.
Promoting Continuity	Preventing breakdowns in care from hospital to home and continuing it.
Fostering Coordination	Promoting connections between hospital healthcare centers in the community.

2. The regular visit of patient by the nurse at home or through phone call at least 2 months after discharge from the hospital.
3. Medical treatment at home is continued through home visits of transitional care nurse.
4. Focus on comprehensive needs of the patient and trying to fix them based on evidences.
5. Active involvement of patient and family in care services, including training and supportive treatment.
6. Emphasis is on rapid identification of disease and responding health risks and their symptoms to achieve positive results and prevent unwanted and negative events that cause re-hospitalization of patient.
7. It is a team approach including: patient, family, caregivers, doctors and nurses.
8. Establishment of communication between patient, family and health care team and other professional groups (4, 13).

Core Components of Transitional Care

The results of evaluation of care provided in transitional care model and investigation of its components led to the discovery of 8 core components in the model. The main components include: screening, staffing, maintaining relationships, engaging patients and family caregivers, assessing and managing risks and symptoms, educating and promoting self-management, collaborating, promoting continuity, and fostering coordination. It should be noted that all these components are in constant communication with each other and are essential components of comprehensive care process. Each of the core components of transitional care model is defined in the **Table 1** (2, 4, 10).

SCREENING PATIENTS

Considering the specific population of patients at high risk for negative outcomes is the first essential component of transitional care model. These patients may include patients with chronic diseases with a history of frequent hospitalization or visit to emergency department in the past 30 days; e.g. patients with heart failure or pneumonia. Risk factors that are monitored and supported by transitional care model include:

1. Chronic health conditions
2. Recent fall
3. Reduction of basic daily activities
4. Dementia or poor cognitive performance
5. Mental or emotional health problems such as depression or anxiety
6. Hospitalization in the past 30 days or two or more hospitalizations within the past six months
7. Age of older than 80
8. Lack of health literacy
9. Speech and language difficulties
10. Lack of support system.

STAFFING

Transitional care model is a model tested to be applied by nurses maintaining responsibility for providing care for patients with chronic diseases. Transitional care nurses provide daily care needs of patients and their family comprehensively and holistically and according to the cultural and ethical values of the society. Prior to the application of this model, nurses are prepared to use the model. They complete a four week training course that includes preparation of nurses for assessing and screening patients and conducting interviews with patients and family. In addition, the training course includes patient engagement strategies, learning how to present cases to the medical care team, and

participating in clinical rounds focusing on experiences related to patients' care. For example, heart failure, diabetes, chronic obstructive pulmonary disease, end-of-life care, and home care.

MAINTAINING RELATIONSHIPS

One of the key features of transitional care model is establishing and maintaining trusting relationships with patients and family. Caregivers establish relationships based on patients and their families' needs through in-person visits and phone calls. Availability of caregivers seven days per week strengthens and develops these relationships. In addition, caregivers provide necessary recommendations regarding the first visit following the discharge and the how of communicating with social centers in order to meet current and future needs for patients going to be discharged. This multidisciplinary approach to patient care is an appropriate method to meet the needs of patients and their family.

ASSESSING AND MANAGING RISKS AND SYMPTOMS

During the first meeting between the patient and nurse, a complete assessment of the symptoms and problems, e.g., pain, shortness of breath, fatigue, experienced by the patient is conducted. Factors such as functional status, cognitive status, mental health, physical status, life quality, family needs and health are also assessed (2, 5, 10).

Overall, a set of evidence-based decisions to deal with patients with similar status is given to the caregiver (2).

EDUCATING AND PROMOTING SELF-MANAGEMENT

Transitional care nurses train the patient and their family on worsening symptoms as well as early symptoms and factors affecting exacerbations of chronic diseases. In this regard, patients are trained based on individual needs, learning styles, and training preferences. Various teaching strategies and tools are used for patients' training. It is necessary to develop plans of patient and family training in collaboration with the care team, integrate it into the care plan, and implement and assess during several encounters. A care plan for urgent and emergent situations is developed for patient and his family, which includes contact information of people who can help in such a situation. Recording patients' specifications and updating them is another measure that must be taken by the health care team. Promoting health behaviors is another measure taken in the care plan, which include strategies to increase health status and exercise by patient, appropriate feeding, and preventive care such as vaccination. Medication management is one of the components of care plan. It is necessary to effectively manage appropriate administration of medication and patients' behavior change in this regard. Patients and their families are trained on the dosage of medication by the transitional care nurse. Promoting mental and emotional status of patients is necessary and essential for changing their behavior. In this regard, nurses' collaboration with social organizations of counterpart groups, families, and friends (2, 22, 24).

COLLABORATING

Using Information technology such as electronic health records facilitates collaboration among the team members. Care plan of patients can be electronically shared among patients, families, and care team (such as physician, nurse, and social workers).

PROMOTING CONTINUITY

Nurses contact patients through telephone calls and are available seven days a week. Transitional care model prevents breakdowns in care provided to patients in the hospital and at home. In this care model, nurses asses and provide care for patients form the time of admission and hospitalization and care and relationship with the patient and his family is continues during hospitalization and after discharge at home. The intervention throughout the entire care episode. Each APRN begins to work with the patient, family caregivers, and care team at hospital admission; the same APRN implements the plan of care in the skilled nursing facility (SNF), if referred, or in the patient home, substituting for traditional skilled care provided by nurses. APRNs visit their patients within 24 hours of hospitalization, daily throughout the hospitalization, within 24 hours following hospital discharge to SNF or patient home, and at least weekly throughout the first month. Subsequently, the nurse may be required to visit the patient in-person during the first week after discharge from hospital and subsequently, patients' status is monitored through phone calls (1, 2, 15).

FOSTERING COORDINATION

Care nurses are the best interface between hospital, social services, and patients' home. They identify and determine services required by patients during hospitalization and then their continuity at home. Nurses are responsible for referrals of patients to health service centers available in the community, as well as monitoring their status to assure that patients receive services with high quality in the proper time. Patients may identify and find centers that can provide other services to patients, such as palliative or hospice care centers, in collaboration with patients, family members, and other care team members.

THE EFFECT OF TRANSITIONAL CARE MODEL ON PATIENTS' HEALTH

Most of the people who use this model just, in practice, employ some of the components of the model based on their needs. Measurement of changes of patients' health status after the use of this model shows the success of model in enhancing health. Measuring changes over time such as patient symptoms, functional status (e.g., cognitive, physical, emotional status), and quality of life suggests the effect of this model on the improvement of patients' status. Assessing care tem and patients' families' perspectives about the continuity of care in this model is another dimension of the role of transitional care model in enhancing patients' health. Changes in the time of first re-hospitalization, total number of hospitalizations, and number of days hospitalized after the use of this model are other reasons for this model's benefits and the necessity of investment for widespread use of this model (4, 8, 24).

CONCLUSION

Transitional care model is a type of managed intervention by nursing that aims to meet the needs of care for patients with chronic diseases in the transfer process of care from admission to discharge and then continue home care.with regard to the effect of transitional care model, the role of nurse, the results of interventional studies, also the points enumerated as benefits of transitional care model, its potential and values to add it to other care models such as patient-centered medial home and palliative care are evaluated. Research on the development of transitional care model from chronic diseases to other diseases is being followed and enhanced.

REFERENCES

1. Jones CE, Hollis RH, Wahl TS, Oriel BS, Itani KMF, Morris MS, et al. Transitional care interventions and hospital readmissions in surgical populations: a systematic review. The American Journal of Surgery. 2016;212(2):327-35. https://doi.org/10.1016/j.amjsurg.2016.04.004
2. Hirschman KB, Shaid E, McCauley K, Pauly MV, Naylor MD. Continuity of Care: The Transitional Care Model. Online J Issues Nurs. 2015;20(3):1.
3. Alhurani AS, Dekker RL, Abed MA. The association of co-morbid symptoms of depression and anxiety with all-cause mortality and cardiac rehospitalization in patients with heart failure. Psychosomatics. 2015;3(3):678-80. https://doi.org/10.1016/j.psym.2014.05.022
4. Naylor M, Brooten D, Campell R, Maislin G, McCauley K, Schwartz J. Transitional care of older adults hospitalized with heart failure: a randomized, controlled trial. J Am Geriatr Soc. 2004;52. https://doi.org/10.1111/j.1532-5415.2004.52202.x
5. Huber DL, Joseph ML, Halbmaier KA, Carlson M, Crill S, Krieger K, et al. Leadership for Transitions of Care: An Active Learning Innovation. J Contin Educ Nurs. 2016;47(2):82-8. https://doi.org/10.3928/00220124-20160120-09
6. Deniger A, Troller P, Kennelty KA. Geriatric Transitional Care and Readmissions Review. The Journal for Nurse Practitioners. 2015;11(2):248-52. https://doi.org/10.1016/j.nurpra.2014.08.014
7. Kim H, Helmer DA, Zhao Z, Boockvar K. Potentially preventable hospitalizations among older adults with diabetes. American Journal on Managed Care. 2011;17(11):419-26.
8. Rao A, Walsh J. Impact of specialist care in patients with newly diagnosed heart failure: A randomised controlled study. Int J Cardiol. 2007;115(2):196–202. https://doi.org/10.1016/j.ijcard.2006.03.010
9. Boult C, Reider L, Leff B, Frick KD. The effect of guided care teams on the use of health care services: Results from a cluster-randomized controlled trial. Archives of Internal Medicine. 2011;171(5):460-6. https://doi.org/10.1001/archinternmed.2010.540

10. Bradway C, Trotta R, Bixby M. A qualitative analysis of an advanced practice nurse-directed transitional care model intervention. Gerontologist. 2012;52(3):394-407. https://doi.org/10.1093/geront/gnr078
11. Breneol S, Belliveau J, Cassidy C, Curran JA. Strategies to support transitions from hospital to home for children with medical complexity: A scoping review. International Journal of Nursing Studies. 2017;72:91-104. https://doi.org/10.1016/j.ijnurstu.2017.04.011
12. Wang S-Y, Zhao Y, Zang X-Y. Continuing care for older patients during the transitional period. Chinese Nursing Research. 2014;1:5-13. https://doi.org/10.1016/j.cnre.2014.11.001
13. Ye Z-J, Liu M-L, Cai R-Q, Zhong M-X, Huang H, Liang M-Z, et al. Development of the Transitional Care Model for nursing care in Mainland China: A literature review. International Journal of Nursing Sciences. 2016;3(1):113-30. https://doi.org/10.1016/j.ijnss.2016.01.003
14. Coleman EA, Smith JD, Frank JC. Preparing patients and caregivers to participate in care delivered across settings: The care transitions intervention. Journal of the American Geriatric Society. 2004;52:1817-25. https://doi.org/10.1111/j.1532-5415.2004.52504.x
15. Rezapour Nasrabad R. Introducing a new nursing care model for patients with chronic conditions. Ephysician J. 2017;9(2):3794-6. https://doi.org/10.19082/3794
16. Chow CM, Donovan L, Johansen H. Canadian Cardiovascular Outcomes Research Team. Can J Cardiol. 2005;21(14):1265–71.
17. Coffey A, Mulcahy H, Savage E, Fitzgerald S, Bradley C, Benefield L, et al. Transitional care interventions: Relevance for nursing in the community. Public Health Nurs. 2017. https://doi.org/10.1111/phn.12324
18. Centeno MM, Kahveci KL. Transitional Care Models: Preventing Readmissions for High-Risk Patient Populations. Critical Care Nursing Clinics of North America. 2014;26(4):589-97. https://doi.org/10.1016/j.ccell.2014.08.009
19. Houweling S, Kleefstra N, Van Hateren K. Can diabetes management be safely transferred to practice nurses in a primary care setting? a randomised controlled trial. J Clin Nursing. 2011;20(9):1264–72. https://doi.org/10.1111/j.1365-2702.2010.03562.x
20. Gu L, Rosenberg MW, Zeng J. Changing caregiving relationships for older home-based Chinese people in a transitional stage: Trends, factors and policy implications. Archives of Gerontology and Geriatrics. 2017;70:219-29. https://doi.org/10.1016/j.archger.2017.02.002
21. Boutwell AE, Johnson MB, Watkins R. Analysis of a Social Work–Based Model of Transitional Care to Reduce Hospital Readmissions: Preliminary Data. Journal of the American Geriatrics Society. 2016;64(5):1104-7. https://doi.org/10.1111/jgs.14086
22. Morrison J, Palumbo MV, Rambur B. Reducing Preventable Hospitalizations with Two Models of Transitional Care. Journal of Nursing Scholarship. 2016;48(3):322-9. https://doi.org/10.1111/jnu.12210
23. Coffey A, Mulcahy H, Savage E, Fitzgerald S, Bradley C, Benefield L, et al. Transitional care interventions: Relevance for nursing in the community. Public Health Nursing. 2017. https://doi.org/10.1111/phn.12324
24. Krumholz HM. Post-hospital syndrome--An acquired, transient condition of generalized risk. New England Journal of Medicine. 2013;368(2):100-2. https://doi.org/10.1056/NEJMp1212324

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