

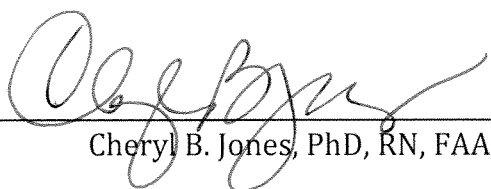
What Transitional Care Interventions are used in the Care of Burn Patients? An Integrative Review

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Abstract

Patients with burn wounds present complex and long-term challenges to healthcare providers. A recent study revealed burn patients experience 30-day readmission rates as high as 25% (Mandell, Pham, & Klein, 2013). Readmission rates represent a costly challenge. In the recent past, transitional care has been offered as a possible solution for high readmission rates, unexpected ED visits, elevated mortality rates, and high costs.

The purpose of this integrative literature review is to identify the potential need for transitional care in patients with burn injuries by pinpointing key elements of seminal works in transitional care and analyzing discharge planning in the burn patient population within this context. Cooper's 5-stage method (1998) was used to systematically search the literature. Search terms included transitional care, discharge planning, home care planning and burn patients/wounds/injuries. After applying exclusion criteria, 10 articles covering 8 transitional care frameworks were selected, revealing 14 common transitional care interventions. Discharge and home care planning articles were also reviewed for studies predating the body of transitional care research. Six discharge/home care planning articles also met study criteria. These works, all descriptive in nature, shared 16 common interventions. The 6 home care and discharge planning articles for burn patients represent a lineage predating the transitional care frameworks currently used in healthcare. Burn units have a strong history of preparing for patient transitions from hospital care. However, the lack of current research examining the implementation of transitional care protocols in burn units combined with high readmission rates indicate a need for further development and investigation.

Keywords: Transitional care, burn patients/wounds/injuries, discharge plan, home care

What Transitional Care Interventions are used in the care of Burn Patients?

An Integrative Review

Introduction

In 2013, approximately 450,000 patients with burn injuries received varying types of medical treatment (American Burn Association, 2013a). About 40,000 of these patients were admitted to hospitals, and 30,000 received treatment in burn centers (American Burn Association, 2013a). Between 2003 and 2012, the American Burn Association (ABA) reported a burn survival rate of 96.6%. If this statistic remained constant in 2013, there would have been roughly 434,700 survivors of burns.

Between 2003 and 2012, the ABA reported that the average hospital stay for burn injuries dropped from ten days to eight (American Burn Association [ABA], 2013b). As treatment and technology has advanced, patients are sent home with unhealed wounds. One study of 4,738 burn patients revealed that 23% (1,103) had “zero onset days,” (Schneider et al., 2013) which means the patients were admitted to a rehabilitation service the same day of their injury. Burn injuries have a higher rate of zero onset days than most other diagnoses. These patients require significant discharge planning and teaching. They also run the risk of complications and subsequent hospital readmissions.

In 2013, the Healthcare Cost and Utilization Project (HCUP) reported that 19% of patients who had a wound debrided, infection or burn were readmitted to the hospital within 30 days of discharge (Agency for Healthcare Research and Quality [AHRQ], 2013). A retrospective analysis of 2,573 burn patient charts revealed that one quarter of 30-day readmissions had burn related diagnoses (Mandell, Pham, & Klein, 2013). Additionally, 45% (1,077) of burn patients discharged had a minimum of one hospital readmission

within two years (Mandell et al., 2013). The rate for hospital readmission also increased with age. More than 50% of patients in the two oldest groups (65 to 74 and 75 and older) were readmitted within 15 months of discharge (Mandell et al., 2013). The most common diagnoses for patient readmissions in these age groups were burn related diagnoses, rehabilitation, respiratory and psychiatric (Mandell et al., 2013). These age groups also had higher mortality rates within two years of the injury (Mandell et al., 2013).

Hospital readmissions and adverse events constitute significant measures of hospital discharge success. The 1970s and 1980s brought about an increased focus on discharge planning and education to address these post-discharge problems, but researchers noticed gaps in care between healthcare settings and home evidenced by readmission rates. To address this gap, the concept of continuity of care evolved. A key element of continuity of care was the “transitional” period between hospital discharge and a second setting, such as another healthcare facility, assisted living facilities, or home. Work focusing on this “transitional” period progressed further in the 1990s into what we know today as “transitional care.”

The purpose of this study is to examine the transitional care of patients with burn injuries by analyzing existing literature. Because studies on the use of transitional care in burn patients, achieving the study’s purpose required: (1) an evaluation of seminal works in transitional care to identify key elements; (2) an analysis of studies about discharge and transitional care of burn patients; and (3) a synthesis and integration of these bodies of work to make recommendations for the use of transitional care in burn patients. The literature was evaluated via an integrative literature review, conducted using Cooper’s (1998) 5-stage method.

Background

Research conducted on transitional care, particularly in patients with chronic conditions and in geriatric populations exploded since the mid-1990s. More literature and systematic reviews surfaced between 2012 and 2014, undoubtedly due to the attention generated by healthcare reform. However, the relative novelty of transitional care means that the full impact of the various care plans, protocols, and interventions have yet to be fully realized.

In a position statement for the American Geriatrics Society Health Care Systems Society, Coleman and Boult defined transitional care as “a set of actions designed to ensure the coordination and continuity of healthcare as patients transfer between different locations or different levels of care within the same location (Coleman & Boult, 2003, p. 556).” Transitional care aims to ameliorate the transfer process of patients from hospitals, improving their continuity of care and reducing hospital readmissions.

One of the earliest transitional care randomized control trials, Rich et al. (1993; 1995) tested a multidisciplinary, discharge intervention for hospital patients with congestive heart failure (CHF). They used patient teaching as a strategy to reduce hospital readmissions and shorten hospital stays (Rich et al., 1993). Findings of this study indicate the discharge techniques reduced 90-day readmission rates and the mean number of hospitalized days. This early transitional care work offered the possibility of a solution.

In the year prior, Mary Naylor et al., completed their randomized trial investigating the impact of a transitional care program for elder patients at elevated risk for hospital readmission (Naylor et al., 1999). The intervention had an advanced practice nurse led discharge plan and follow-up. They reported successful results in the form of reduced

readmissions, delayed first-time readmissions, fewer multiple-readmissions and decreased cost seen in Medicare Reimbursements (Naylor et al., 1999). This framework became the Transitional Care Model (TCM), and Naylor et al. expanded the study in their 2004 work.

Around the same time as TCM's development, Wagner, Austin, and Von Korff (1996) designed the Chronic Care Model (CCM). This approach also advocated improved transitional care of older patients suffering chronic conditions through case coordination, patient education, and care follow-up (Wagner, Austin, & Von Korff, 1996).

The TCM and CCM were not the first models focused on transitional care but they were pivotal. Coleman et al. (2004) published the Care Transitions Intervention (CTI), a discharge plan designed to follow-up with patients over 65 having diagnoses at high risk for readmission. The CTI concentrated on patient empowerment and improved confidence. Studies published by Coleman's team reported positive results in reduced readmissions, longer times before first-readmission, shorter hospital stays, and patient confidence (Coleman et al., 2004).

Although the TCM and CTI are focal works in transitional care, they are by no means the only models. The 2000s experienced an explosion of transitional plans and interventions. Jack et al. (2009) tested the Reengineered Hospital Discharge Program (RED), post-discharge support for patients of all ages designed by Boston University (Jack, 2009). In the RED model, a nurse discharge advocate educated the patients concerning needed discharge and self-care information, arranged appointments and followed-up via telephone (Jack et al., 2009).

Similarly, the Society of Hospitalists created Project BOOST, which offered health sites a "toolkit" to increase Quality Improvement (QI) while advancing discharge practice,

follow-up and reducing hospital readmissions (Hansen et al., 2013). BOOST did not designate specific interventions, but they shared the same goals of most of the transitional care studies: reduce 30-day readmissions, identify high-risk patients, reduce hospital stays, and improve patient satisfaction.

The Enhanced Discharge Planning Program (EDPP), spearheaded by representatives from the University of Illinois and Rush University in Chicago, Illinois, was a phone-based follow-up to help hospital-discharged patients in the path home (Altfeld et al., 2013). The social-work-led study reported no difference in patient and caregiver stress or rehospitalization rates (Altfeld et al., 2013). However, they found improved patient-physician follow-up and fewer patient deaths (Altfeld et al., 2013).

The William S. Middleton Memorial Veterans Hospital developed a transitional care framework to help veterans with cognitive impairment diagnoses in their discharge transition (Gilmore-Bykovskiy, Jensen, & Kind, 2014). Their simple, low-cost approach concentrated on telephone follow-ups, and claimed reduced cost and rehospitalizations (Gilmore-Bykovskiy et al., 2014). They expressed hope in spreading the program to other facilities.

The Interventions to Reduce Acute Care Transfers (INTERACT), created by Ouslander, Bonner, Herdon and Shutes (2014), examined patient transitions using a different approach. INTERACT attempted to recognize changes in nursing home residents to improve transfers of clients to hospitals (Ouslander, Bonner, Herndon, & Shutes, 2014).

The Agency for Integrated Care formed Aged Care Transition (ACTION), targeting older patients with limited support post-discharge (Wee et al., 2014). This approach

primarily focused on cost and rehospitalization outcomes. The intervention group had fewer unexpected or unplanned rehospitalizations post-discharge (Wee et al., 2014).

Transitional care, as a means to reduce readmissions and Medicare penalties, gained momentum after the Affordable Care Act (ACA) established the Hospital Readmissions Reduction Program (effective October 1, 2012) (Centers for Medicare & Medicaid Services, 2013). The ACA also developed the Community-based Care Transitions Program (CCTP) “to improve transitions of beneficiaries from the inpatient hospital setting to other care settings, to improve quality of care, to reduce readmissions for high risk beneficiaries, and to document measurable savings to the Medicare program (Centers for Medicare & Medicaid Services, 2012).”

Logue and Drago (2013) conducted an analysis of a modified Community-based Care Transition Program executed by Sun Health in Arizona. They reported low patient readmission rates, cost savings and increased patient satisfaction and confidence (Logue & Drago, 2013). They considered this study supportive of Community-based Organization (CBO) interventions to help patients transition.

There is some debate as to whether transitional models actually reduce readmission rates. Peikes, Lester, Gilman, and Brown (2013) performed a review of six transitional models—Transitional Care Model (TCM), Care Transitions Intervention (CTI), Re-Engineered Discharge (RED), Enhanced Discharge Planning Program (EDPP), Better Outcomes for Older Adults Through Safe Transitions (BOOST), and Transition Home for Patients with Heart Failure (THPHF)—approved by the CCTP. The study pointed out EDPP did not register fewer 30-day hospital readmissions, and only TCM reported long-term effects (Peikes, Lester, Gilman, & Brown, 2013). The research highlighted key

complications in comparing transitional models: the variety of interventions, the lack of standardization, and the absence of consistency between models. Peikes et al., explained, “systematic comparisons” between the models required more standardizations in order to accurately define their success at reducing readmissions, cost, and adverse events (Peikes et al., 2013).

Peikes et al. (2013) was not alone in recognizing limitations. Rennke et al. (2013) reviewed 47 transitional care studies concentrating on reducing 30-day Emergency Department (ED) readmissions and adverse events (Rennke et al., 2013). Fourteen randomized controlled trials (RCT) found no significant decrease in 30-day hospital readmission rates, and these RCTs were similar to the studies that found a reduction (Rennke et al., 2013). Additionally, they explained that increased readmission rates can be caused by multiple factors, such as better access to care. The study concluded: “we found that only a limited number of bridging interventions...seems to reduce readmissions and ED visits after hospital discharge...Although hospitals are now being penalized for excessive readmission rates, the strategies that an individual hospital can implement to improve transitional care remain largely undefined (Rennke et al., 2013, p.438).”

Method

Study Design

The integrative literature review method was chosen to create a foundation utilizing works of multiple methodologies. Whittemore and Knafl (2005) explained the function of an integrative literature review. “The integrative review,” they wrote, “contributes to the presentation of varied perspectives on a phenomenon of concern (Whittemore & Knafl, 2005, p. 547).” This integrative literature review followed the five-step process designed

by Harris M. Cooper: (1) identify a problem, (2) collect data, (3) evaluate the data, (4) analyze data, (5) and present results (Cooper, 1998). Due to unforeseen challenges in literature availability the first three steps were altered, edited, revised, and repeated multiple times.

The extensive search for peer-reviewed articles and research consisted of two concentrations of study: “transitional care” and “burn patient discharge procedure and care plans.” Four main databases were searched: CINAHL, PubMed, Google Scholar and Web of Science. Further, a health-science librarian was consulted to ensure full coverage of research techniques, terms, and sources. The two topics were approached in different ways, and the recommendations are subsequently drawn from each body of literature.

Searching the Literature: Transitional Care

With regard to transitional care, recommendations for seminal articles and studies by mentors laid the foundation. These articles included reviews of transitional frameworks by Enderlin et al. (2013) and Rennke et al (2013). They also recommended the formative works by Naylor et al. (1999), Coleman et al. (2004) and Jack et al. (2009). The information therein and the references provided were sources for further investigation.

Once those sources were thoroughly examined, the databases listed above were searched. Search terms were developed by using phrases referenced in foundational articles and searching MeSH terms. The search terms included transitional care, transition*, transitional care interventions, continuum, continuum of care, continuity of care, home care, continuity/continuum with patient care, transition* with care and review, Transitional Care Model, Care Transitions Intervention, Chronic Care Model, Community-based Care Transitions Program, Better Outcomes for Older adults through Safe

Transitions, Aged Care Transition, Coordinated-Transitional Care Program, Enhanced Discharge Planning Program, Re-Engineered Discharge and Transition Home for Patients with Heart Failure. Various combinations of the above search terms were tried.

A search for “transitional care” resulted in 2,365 results in PubMed and 419 in CINAHL; “transitional care interventions” produced 181 results in PubMed and 14 in CINAHL; and “continuum of care” yielded 21,012 articles in PubMed and 1,728 in CINAHL. These are only a few representative searches of the above terms. The various combinations listed above narrowed some of the searches, but all of the searches produced massive quantities of articles and studies. Not all of the articles were pertinent to this study. Inclusion and exclusion criteria were necessary to narrow the scope.

Inclusion and Exclusion Criteria of Transitional Care Articles

The transitional care articles were included based on their historical significance, references by other transitional studies, the use of a randomized clinical trial design, their potential application in the care of burn patients and whether they clearly listed their study design and interventions.

The transitional care articles included in this review are by no means a complete collection. Most notably, this study excluded the Chronic Care Model (CCM) by Wagner et al. (1996). This is primarily because the CCM was a clarion call for system change, and did not outline a specific intervention protocol. For similar reasons, this review excluded the BOOST model. The BOOST articles and related website did not identify its protocols or interventions (Hansen et al., 2013; Society for Hospital Medicine, 2008). This review concentrated on specific interventions.

Additionally, the study excluded the Interventions to Reduce Acute Care Transfers (INTERACT) model, which emphasized efficient identification of status changes in assisted living residents (Ouslander et al., 2014). INTERACT's focus directs action in the opposite direction from hospital discharges of burn patients.

There are many studies and variations on the models mentioned. For the sake of brevity, only the original models were addressed. Furthermore, the development of transitional care is extensive and lengthy—this work could not include its full lineage. Instead, it focused on seminal works in transitional care and their interventions. For a more complete analysis of transitional frameworks, Enderlin et al. (2013), Rennke et al. (2013), and Peikes et al. (2013), provide excellent examinations.

After inclusion and exclusion criteria were applied to the complete search results, eleven works remained. Of those articles, the two Rich et al. articles (1993; 1995) addressed the same framework. Also, Parry, Coleman, Smith, Frank, and Kramer (2003) provided more detail on the Coleman et al. (2004) CTI study. These works overlapped, but they were listed separately to provide all detailed interventions listed. As a result, nine main transitional frameworks were analyzed from eleven articles.

Searching the Literature: Burn Patient Discharge Procedure and Care Plans

Searching for material on transitional care of burn patients proved difficult. The above databases were initially searched for any combination of transitional care, transition* and burn*, burn patient, burn wound and burn injury. These searches did not produce any usable studies. Searching various combinations of the above terms yielded approximately 20 results in PubMed and about 12 in CINAHL. None of the articles were applicable—applying transitional interventions to help patients post-discharge.

As a result, the search was expanded to include discharge, discharge plan*, discharge education, discharge teaching, burn patient, burn injury, burn wound and care plan in varied combinations. These searches produced more results. Searching “discharg* and burn patient or burn injury or burn wound” in PubMed revealed more than 3000 articles and about 142 in CINAHL. A search combining patient education and burn patient, injury, or wound found 714 results in PubMed and 42 in CINAHL. Looking for discharge education or teaching in combination with burn patient, injury or wound located about 371 in PubMed and 10 studies in CINAHL.

After applicable articles were chosen, the references of each article were checked for relevant publications and information. The referenced articles were found and analyzed. The applicable publications were also searched in Web of Science for more references. Inclusion and exclusion criteria for the burn articles were needed to narrow the scope.

Inclusion and Exclusion Criteria of Burn Patient Discharge Procedure and Care Plans

The original articles listed above, while plenty in number, did not fit the needs of this analysis. Most of the articles addressed detailed physical rehabilitation issues and techniques. While important concerns in the burn population, this emphasis was excluded because it concentrated on one aspect of care and recovery. Although these matters are included in discharge planning, they are only one aspect, and require specialized knowledge. As a result, nearly all of the findings were excluded based on their titles, abstracts, and initial reading.

This analysis focused on discharge techniques and protocols applied to burn patients. There were very few results. Due to the limited amount of articles, the inclusion

criteria were broad and numerous. The dates were expanded to encompass anything from 1970 to the present. It included any intervention, outcome or target population as long as the article discussed discharge practice or protocols. Also, the design requirements were relaxed in this second review, such that articles did not have to use a randomized control trial or apply any strict standard of research. The publications could address adult or pediatric issues.

Articles were excluded if they did not address anything pertaining to discharge practice, method, protocol, or any post-discharge practice or intervention. Even with these forgiving criteria, there were very few useable works. The criteria yielded six articles pertaining to burn patient discharge protocol and care plan.

Results

Transitional Care Interventions and Outcomes

Transitional care frameworks were divided into fourteen common categories (See Table 1): (1) Written Discharge Plan, (2) Homecare Planning, (3) Patient/Caretaker Discharge Education, (4) Patient/Caretaker Illness Education, (5) Transition Coach/Guide/Case Manager, (6) Social Services Consultation, (7) In-Hospital Visits, (8) Home Visit Follow-up, (9) Phone Follow-up, (10) Post-Discharge Appointments, (11) Psychosocial support, (12) Decision support, (13) Medication Inventory/Education and (14) Complication/Emergency Planning/Rehearsing “Red Flag.” The results for the transitional care interventions are seen in Table 1, *Transitional Framework Interventions*. The list of interventions outlined in the tables was not a complete list of all actions taken during the transitional care studies. For example, some of the studies included patient

assessments for risk of readmission. The list used in this evaluation focused on thematic interventions repeated in most of the studies and applied directly to the patients.

If a study did not explicitly list or describe the intervention, it was left unchecked in the table. Although the trial might have included the intervention, it was not counted for this analysis. The reader probably noticed this with regard to both Naylor et al articles. The Naylor articles employed the same method—Transitional Care Model (TCM)—but slight variations in interventions were noted on the table. The interventions were only checked if explicitly listed by the individual articles. This occurred again in the Coleman et al. (2004) and Parry et al. (2003) articles. Coleman et al. (2004) referenced the Parry et al. (2003) article for a more in-depth description of the interventions employed. For the following discussion, the Parry et al. (2003) and Coleman et al. (2004) will be discussed together. Both articles were included in Tables 1, 2 and 3. Whether an intervention was checked was subject to the author’s interpretation of the articles.

For more detail concerning the transitional care models (discussion to follow) reference Tables 1, 2 and 3. Table 1 compiled the transitional care articles and their interventions. Table 2 listed the articles’ target populations, and Table 3 had the outcome measurements of each study.

Four of the frameworks—Rich et al. (1993; 1995), TCM (Naylor et al., 1999; Naylor et al., 2004), CTI (Parry et al., 2003; Coleman et al., 2004), and a modified CCTP (Logue & Drago, 2013)—utilized ten or more of the fourteen interventions. These studies reported varying results measured according to different outcomes.

The Rich et al. (1993; 1995) design included twelve of the fourteen interventions listed in Table 1. They only excluded “Post-Discharge Appointments” and “Decision

Support.” This study targeted patients seventy years old and older with diagnoses of congestive heart failure combined with a risk for readmission (see Table 2) (Rich et al., 1993). Rich et al. (1993) subdivided the intervention group into moderate risk and high risk. They revealed the intervention group had 27.1% fewer hospital readmissions, but this was not a significant difference (Rich et al., 1993). They calculated the absolute hospital readmission reduction as 20%. The interventions did not make a statistically significant difference in the time to readmission, and in some cases the high-risk group was readmitted sooner than the control (Rich et al., 1993). Once readmitted, patients in the intervention group spent less time on average in the hospital, but, again, the results did not constitute significant. The cost savings was calculated by multiplying the estimated readmissions prevented by the average charge of a CHF hospitalization. The authors estimated a charge reduction of \$181.6 million. They also calculated the cost according to the daily cost of an average hospital stay, which resulted in a \$262.5 million savings (Rich et al., 1993).

The TCM utilized ten and eleven of the interventions in the Naylor et al. studies published in 1999 and 2004 respectively (see Table 1). The 1999 report did not use the “Patient/Caretaker Illness Education,” “Social Services Consultation,” “Decision Support,” or the “Complication/Emergency Planning/Rehearsing ‘Red Flag’” interventions. The 2004 study reported the same interventions, but added the “Complication/Emergency Planning/Rehearsing ‘Red Flag’” measure. Both programs targeted patients sixty-five years old or older with cardiac conditions and at risk for readmission or poor outcomes (see Table 2).

TCM interventions in the 1999 article saw a significant reduction in hospital readmissions among the intervention group—less than half the readmissions of the control group (Naylor et al., 1999). Once admitted to the hospital, the intervention group had lower mean lengths of stay. The intervention group also had a significantly longer time before their first readmission. Naylor et al. (1999) calculated cost savings according to the difference in the control and intervention groups' DRG reimbursements compared to the cost of the program, resulting in a savings of nearly half.

The TCM study published in 2004 reported different results, but was conducted over a longer time frame. The rehospitalization rate was lower in the intervention group, and they had a longer time before their first readmission or death. Patients in the intervention group also had shorter hospital stays. The 2004 study figured the cost at \$7,636 per intervention patient versus \$12,481 per control patient (Naylor et al., 2004).

The CTI study, outlined by the Parry et al. (2003) and Coleman et al. (2004) reports, utilized eleven and ten of the interventions respectively (see Table 1). The Coleman et al description of the CTI protocol included most of the common transitional interventions except for “Homecare Planning,” “Patient/Caretaker Discharge Education,” “Patient/Caretaker Illness Education,” and “Social Services Consultation (Coleman et al., 2004).” Parry et al. (2003) outlined the same protocol, but included the “Patient/Caretaker Discharge Education” component. The researchers applied the CTI protocol to patients sixty-five years old and older and admitted for one of nine to eleven common chronic conditions (see Table 2). Only the Coleman et al publication reported outcomes. The CTI article reported the intervention group had fewer rehospitalizations at 30, 90 and 180 days, and longer periods of time prior to their first hospital readmission (but about the

same time until first ED visit) (Coleman et al., 2004). However, the significance values for the results were very low. Coleman et al. (2004) performed an informal cost analysis, and determined the cost of the program to be about \$47,133 for about twenty patients.

The Sun Health protocol, analyzed by Logue and Drago, applied eleven of the fourteen interventions from Table 1 (Logue & Drago, 2013). They excluded the “Patient/Caretaker Illness Education,” “Social Services Consultation,” and “Decision Support.” As Table 2 indicates, their patient population was Medicare beneficiaries (65 years old and older), diagnosed with at least one of 8 possible illnesses and discharged home (Logue & Drago, 2013). This study was a retrospective examination and did not compare the intervention to a control group. Of the 149 patients evaluated, 6% were readmitted within 30 days. The nurses found 300 medication discrepancies, and more than half of the participants reported satisfaction (Logue & Drago, 2013).

Of the remaining articles, the RED and EDPP studies used nine of the fourteen possible interventions (see Table 1). Each used different combinations. Jack et al applied the RED protocol, and used many of the interventions except “Homecare Planning,” “Social Services Consultation,” “Home Visit Follow-up,” “Psychosocial Support,” and “Decision Support.” They applied the program to anyone over eighteen years old, with access to a telephone, understand English and discharged to a community in the United States (see Table 2) (Jack et al., 2009). The intervention group had fewer “hospital utilizations” than the control. This included readmissions and ED visits (Jack et al., 2009). More patients in the intervention group knew their discharge diagnosis, followed up with their primary care provider and felt more prepared for discharge (patient satisfaction) (Jack et al., 2009). Jack et al analyzed the cost savings by comparing the ED and hospital visits and primary care

provider office visit costs between the two groups, and found the intervention group spent 33.9% less (Jack et al., 2009).

Altfeld et al. (2013) applied the EDPP by using a majority of the fourteen interventions except the “Written Discharge Plan,” “Patient/Caretaker Discharge Education,” “Patient/Caretaker Illness Education,” “Home Visit Follow-up” and “Decision Support” (see Table 1). Their patients were sixty-five years old and older, admitted to a hospital, had seven or more medications, discharged home, comprehend English and were categorized as at-risk (see Table 2) (Altfeld et al., 2013). The focus of this study was slightly different from the others. The primary concentration was coping ability, stress and ability to relate to home health services of the patient and caregiver. Most of the outcomes addressed in other studies (e.g., hospital readmission and mortality) were considered secondary. Altfeld et al. (2013) reported that patients in the intervention group had better follow-up rates with the primary physicians. They did not find a difference between the groups with regard to readmission rates at 30 days post-discharge (Altfeld et al., 2013). The “usual care group” had more deaths during the intervention than the intervention group.

The number of interventions dropped off significantly for the last two studies reported here. The C-TraC Program, developed by the William S. Middleton Memorial Veterans Hospital, only utilized six of the interventions listed in Table 1:

“Patient/Caretaker Discharge Education,” “Transition Coach/Guide/Case Manager,” “In-Hospital Visit,” “Phone Follow-up,” “Medication Inventory/Education” and

“Complication/Emergency Planning/Rehearsing ‘Red Flag.’” Their target patient population was veterans, sixty-five years old and older, living alone or hospitalized in the

past year, with access to a telephone upon discharge, and a diagnosis of some kind of cognitive impairment (see Table 2) (Gilmore-Bykovskyi et al., 2014). C-TraC only had two outcome measurements: cost and 30-day readmissions. They reported that the patients in the intervention group had fewer rehospitalizations by one third, and calculated a net cost savings of \$740,000 (Gilmore-Bykovskyi et al., 2014).

Finally, Wee et al. (2014) tested the ACTION program on behalf of the Agency for Integrated Care. ACTION implemented only five of the fourteen original transitional care interventions: “Homecare Planning,” “Transition Coach/Guide/Case Manager,” “In-Hospital Visits,” “Home Follow-up” and “Phone Follow-up” (see Table 1). Their patients were sixty-five years old or older and had three or more diagnoses upon admission (including chronic conditions) combined with designated at-risk factors (see Table 2) (Wee et al., 2014). The intervention group had significantly fewer hospital readmissions at 15, 30, and 180 days post-discharge (Wee et al., 2014). However, more of the intervention group died during the investigation. Concerning cost, Wee et al. (2014) calculated the cost of the six month program to be \$1.94 million, but did not determine comparative cost. The analysis included a patient satisfaction survey, which they considered largely positive.

Of the fourteen interventions examined in this investigation, only three were implemented by all of the studies (see Table 1). They were the “Transition Coach/Guide/Case Manager,” “In-Hospital Visits” and “Phone Follow-up.” The transition coach/guide/case manager varied according to the protocol design. They included nurses, social workers, advanced-practice nurses and “care coordinators” or “transition coach” of undefined profession. The number of phone call follow-ups depended on the design of the study, the needs of the patients and the length of the experiment.

The “Medication Inventory/Education” intervention was performed in all but one of the studies (ACTION). All but two of the studies (TCM in 1999 and ACTION) enacted the “Complication/Emergency Planning/Rehearsing ‘Red Flag’” intervention. All but three of the studies—RED, EDPP and C-TraC—made home-visits to the patients. Seven of the studies (differing for each intervention) utilized the “Written Discharge Plan,” “Patient/Caregiver Discharge Education,” “Post-Discharge Appointments.” These constituted the most popular of the transitional care interventions. The remainder of the interventions varied in program participation from two to six studies.

Burn Patient Discharge Procedure and Care Plan

Six articles from 1979 and the 1980s addressed the need for discharge and home care plans to help burn patient transitions from hospitals to home. All six articles described recommended approaches and protocols, there were no randomized controlled trials, surveys, or any type of systematic research reported. Reference Tables 4, 5 and 6 for more details concerning the following discussion of discharge procedure for burn patients. Table 4 provided a brief outline of the six articles. Table 5 listed each articles’ discharge practices and interventions, and Table 6 compiled that information into a single chart.

The discharge plans described were divided into sixteen repeated themes (see Table 4): (1) Perform Assessment, (2) Establish Goals-Care and Rehab, (3) Written Discharge Plan/Instruction, (4) Care Coordinator, (5) Schedule and Plan Follow-up Care and Appointments, (6) Educate Patient/Caregiver – Discharge, (7) Educate Community, (8) Provide Contact Information and Instruction in Case of Emergency or Problem, (9) Patient/Caregiver Education – Wound Management, (10) Patient/Caregiver Education – Scars & Reconstruction, (11) Pain Management/Medications, (12) Exercise, (13)

Psychosocial/Emotional Support, (14) In-Hospital Visits, (15) Home Visits Follow-ups and (16) Caregiver Support.

While the categories are similar to the transitional care interventions (Table 1), there were enough differences to warrant different classifications. Any overlap between the transitional care interventions and the discharge plan categories should not be confused or equated—the different articles frequently described very different model components.

The list of interventions outlined in the table is not a complete list of all categories, but instead repeats various recommendations. The six articles list broad, sweeping suggestions, which are condensed in the table as single categories (Table 6). For example, different articles advocated varying types of assessments (e.g., life prior to the burn, current abilities, wounds, resources at home, support systems), but the table only lists one class—“Perform Assessment.”

None of the plans included all sixteen measures. Only two of the practices were used by all six articles: “Perform Assessment” and “In-hospital Visits.” A “Care Coordinator” was encouraged or implied (instructing nurses to serve the function) by all but one of the articles, “Discharge Planning for Burn Patients,” which used multidisciplinary individuals for different tasks (Neville, Walker, Brown, Bowens & Dimick, 1988). For more detailed breakdown of the suggested discharge plans see Table 6.

“Multidisciplinary Discharge and Rehabilitation Planning for Burn Patients,” used the least variety of the discharge plan categories (Granite, 1979). This work recommended five: Perform Assessment, Establish Goals – Care and rehab, Care Coordinator, Schedule and Plan Follow-up Care and Appointments and In-hospital Visits. It was the earliest and

simplest design seen here, and concentrated on the psychosocial impact of the burns and multiple types of assessments and goals (see Table 5). Granite's (1979) work included recommendations for evaluation of outcomes (she said evaluation criteria for burn care were not yet in place) included analysis of the assessments, available resources and goal achievement.

Gordon (1980) focused on the outpatient-clinic nurse as the care coordinator in the burn team preparing the patient for discharge. She suggested seven of the interventions: Perform Assessment, Establish Goals – Care and Rehab, Care Coordinator, Educate Patient/Caregiver – Discharge, Educate Community, Patient/Caregiver Education – Scars & Reconstruction and In-hospital Visits (see Table 6). Gordon (1980) proposed a unique approach to education by including outreach programs to hospitals and healthcare professionals outside the burn unit and a phone “consultation line” for other healthcare facilities. The outreach programs would prepare other sites for outpatient burn victims, increase their resource, and improve the transition. Gordon (1980) also suggested having a communication system between hospitals concerning the progress of the patients. This was designed to foster positive relationships with the referring physicians. However, this concept might be restricted by HIPAA (passed in 1996). This article did not recommend any outcome measurements.

Marvin (1983), one of the most frequently cited sources during this era, encouraged use of eleven of the interventions (see Table 6). Her design focused on home care plans, but she states the plan must be in place upon discharge. She focuses on five major areas of responsibility: wound management, pain relief, exercise therapy, scar maturation, and emotional support (see Table 5) (Marvin, 1983). The interventions were similar for major

and minor burns, only varying in details and extent. Marvin (1983) did not mention a means of outcome evaluation.

“Home Care for the Burn Victim,” by Parsons (1983) has a similar approach to Marvin (1983). She focused more on the home care plan and execution of the plan. Parsons (1983) utilized nine of the care plan measures (see Table 6). She did not stress as much patient and caregiver education, pain management, medication management or exercise. However, Parsons (1983) was unique because she advocated caregiver support measures. No outcome measurements were mentioned.

Manger and Speed (1986) had a completely different approach to burn patient discharge. First, their article targeted pediatric burn patients. Second, they designed a comparatively detailed step-by-step procedure in helping pediatric patients build confidence to eventually transition to home and school. Their concentration was more psychosocial preparation. Their interventions fit within the categories outlined in Table 6. They utilized nine of the options. This design was the only one to advocate a home visit follow-up. They also had a school visit follow-up in which they encouraged creating an educational presentation. Manger and Speed (1986) did not address much of the physiological needs or planning. The essence of this plan was the psychosocial health of the child. Manger and Speed (1986) did not propose outcomes or evaluation measures. However, they mentioned cost as a possible restriction (Manger & Speed, 1986).

The final article, “Discharge Planning for Burn Patients,” presented the 1988 discharge practices at the University of Alabama Burn/Trauma Center (Neville et al., 1988). Their technique demonstrated seven of the common measures outlined in Table 6. The crux of the discharge relied on a slide/tape presentation used for discharge education

(Neville et al., 1988). The tape provided most of the education. They also helped with other discharge services such as setting follow-up appointments, providing contact information and emergency preparation, and thorough patient assessments. Neville et al., 1988 did not have outcome measurements or analysis.

Discussion

Transitional care frameworks present structured protocols for patient discharge and transition. However, based on the studies reviewed, no single model addressed the needs of all patients and healthcare settings. Hospital readmission rates represent an expensive challenge, and these rates are used by reimbursement entities to motivate hospitals to develop better patient transitions post-discharge. Most of the studies outlined in this work claim some level of readmission and cost reduction. However, due to the lack of standardized outcome measurements and interventions, there is no single “proven” method. Still, hospitals continue to apply various aspects of transitional care with the hope of success.

The transitional care intervention and burn care discharge planning articles shared several interventions. Both groups of articles called for written discharge instructions, patient education, post-discharge follow-up appointments, education for emergency care and contacts for problems, medication and pain management, psychosocial support, in-hospital visits and home visit follow-ups. Nearly all of the articles in both eras and concentrations advocated having a transition coach or care coordinator. This person could be from a variety of professions: nurse, social worker, doctor, advanced-practice nurse, or undefined profession. A transition guide helped the patient and caregiver navigate the system and maximize their health potential.

The 30-day readmission rates for burn patients represent a point of challenge. This work sought to find transitional care applications in burn units. Unfortunately, this review failed to find any literature demonstrating the use of transitional frameworks. However, there was a proliferation of articles in the 1980s, advocating discharge and home care plans which outline most of the interventions exercised by the transitional care plans discussed above. These articles represent an early predecessor to today's transitional works. These practices and plans are applied to varying degree in burn units across the United States, but there are no definitive experiments testing the measures on burn patient populations and reporting the outcomes. A structured transitional care protocol might reduce burn patient readmissions and cost while improving patient satisfaction and healing.

Implications for Further Research

This investigation originally set out to find transitional care and discharge practices in burn care. While there was no current publications of transitional care applications in burn units, there was a rich history of the concepts and practices. There are many studies on burn patient outcomes and predictors. They include, but are not limited to, surveys of patients and caregivers assessing their health and psychosocial status, extensive chart reviews and retrospective analysis of burn patient outcomes seen in mortality, quality of life and psychosocial impact. An integrative literature review of this material has uncovered key elements that can be used to inform the development of a customized transitional care protocol for burn units to be tested in the future.

Limitations

There are limitations in this study and the search for articles. Relevant articles could be missed due to differences in key terms between databases. The limited number of

databases searched might have contributed to the meager number of burn articles. The search was further complicated by the lack of articles in recent past involving burn patients and transitional care. Transitional care is a very new area of study, and hasn't been applied to most areas of healthcare.

Additionally, most of the works referenced in the transitional section are studies of transitional care for patients over 65 years old with various chronic conditions (see Table 2). While the target populations in these studies are not specific to burn patients, burn injuries require long-term, complex care further complicated by chronic conditions such as diabetes. Also, senior patients with burn wounds represent challenging healing problems and higher mortality rates.

The measured outcomes utilized by each study varied greatly (see Table 3). There was no common measure used across studies. There is even variety of approaches within the generalized categories. For example, the cost component of the outcomes measurements could include the cost of the intervention, the average cost of rehospitalization, and/or the value saved. This was measured in a variety of ways including direct cost calculations or Medicare reimbursements. The lack of standardized outcome approach makes it difficult to evaluate and compare the studies.

Finally, there are larger concepts of care undergirding transitions, which this study does not address, such as patient-centered care, self-advocacy, health literacy, and psychosocial support. These topics, while relevant, were beyond the scope of this study.

Conclusion

The high cost of hospital readmissions and related complications demands a solution, which transitional care claims to ameliorate. Burn patients, in particular,

experience high rates of readmissions. Discharge planning and home care for burn patients have long recognized the value of patient education, a care coordinator, goal setting, personalized care, setting appointments, and patient follow-ups in the smooth transition of patient care. However, a lack of standardization in protocols and outcome measures combined with extensive research trial demands further investigation. Transitional care practices share many similar interventions and techniques with the early burn patient discharge and home care plans including a transitional guide or care coordinator, patient education, appointment follow-up, in-hospital visits and patient follow-up visits. Perhaps a structured and standardized transitional care framework promises a solution for burn patient hospital discharges.

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Table 1

Transitional Framework Interventions

	Complication/Emergency Planning/Rehearsing "Red Flags"	Medication Inventory/Education	Decision Support	Psychosocial Support	Post-discharge appointments	Phone Follow-up	Home Visit Follow-up	In-hospital Visits	Social Services Consultation	Transition Coach/Guide/Case Manager	Patient/Caregiver Illness Education	Patient/Caregiver Discharge Education	Homecare Planning	Written Discharge Plan	Transitional Model/Article (Author, Year, & Model)
Rich et al., 1993; 1995	X	X		X		X	X	X	X	X	X	X	X	X	
Naylor et al., 1999 (TCM)		X		X	X	X	X	X		X		X	X	X	
Parry et al., 2003 (CTI)		X	X	X	X	X	X	X		X		X	X*	X	
Naylor et al., 2004 (TCM)		X			X	X	X	X		X	X	X	X	X	
Coleman et al., 2004 (CTI)		X	X	X	X	X	X	X		X				X	
Jack et al., 2009 (RED)		X			X	X		X		X	X	X	X	X	
Logue & Drago, 2013 (Modified CCTP)		X		X	X	X	X	X		X		X	X	X	
Altfeld et al., 2013 (EDPP)		X		X	X	X		X	X	X			X		
Gilmore-Bykovskiy et al., 2014 (C-TraC)		X				X		X		X	X	X			
Wee et al., 2014 (ACTION)						X	X	X		X			X		

*Parry et al and the CTI model utilized a "Personal Health Record," which is checked here as a discharge plan.

Table 2

Transitional Models and Target Populations

Transitional Model/Article	Target Population
Rich et al., 1993; 1995	Age ≥ 70 Admitted to medical ward CHF diagnosis + a risk factor for readmission (history of CHF, 4 or more hospitalizations in past 5 years, congestive heart failure caused by myocardial infarction or hypertension)
Naylor et al., 1999 (TCM)	Age ≥ 65 Admitted to hospital for cardiac/cardiovascular conditions (congestive heart failure, angina, myocardial infarction, respiratory tract infection, coronary artery bypass graft cardiac valve replacement major small and large bowel procedure, and orthopedic procedures of lower extremities) Poor postdischarge outcomes: Age ≥ 80 , poor support system, multiple chronic health conditions, depression, functional impairment, multiple hospitalizations within 6 months or past 30 days, fair or poor self health rating, or nonadherence. Alert and oriented upon admission English speaking Live in service area Have access to telephone
Parry et al., 2003 (CTI)	Age ≥ 65 Admitted to hospital Possible diagnosis: Congestive heart failure, chronic obstructive pulmonary disease, coronary artery disease, diabetes mellitus, stroke, medical and surgical back conditions, hip fracture, peripheral vascular disease, cardiac arrhythmias, Pulmonary embolism, deep vein thrombosis. Do not live in long-term care facility
Naylor et al., 2004 (TCM)	Age ≥ 65 Admitted to hospital for heart failure No end-stage renal disease Alert and oriented upon admission English speaking Live within 60 miles of the admitting hospital Have access to telephone
Coleman et al., 2004 (CTI)	Age ≥ 65 Admitted to hospital Possible diagnosis: Congestive heart failure, chronic obstructive pulmonary disease, coronary artery disease, diabetes mellitus, stroke, medical and surgical back conditions, hip fracture, peripheral vascular disease, cardiac arrhythmias. Live in community before and after hospitalization Do not live in long-term care facility

Transitional Model/Article	Target Population
Jack et al., 2009 (RED)	Age ≥18 Admitted to hospital Have access to telephone English comprehension Discharged to U.S. community
Logue & Drago, 2013 (Modified CCTP)	Medicare FFS beneficiaries Diagnosis undefined—“top 8 categories” Discharged hospital to home—no advanced home care
Altfeld et al., 2013 (EDPP)	Age ≥65 Admitted to hospital Discharged home—not a care facility 7 or more medications At-risk: live alone, no support, falls risk, hospitalization within 12 months, no emotional support, or “psycho-social need.” English comprehension & communication
Gilmore-Bykovskyi et al., 2014 (C-TraC)	Age ≥65 Veterans Live alone or hospitalized in past year Admitted to medical-surgical wards Access to telephone Diagnosis: Dementia, delirium, or cognitive impairment
Wee et al., 2014 (ACTION)	Age ≥65 Admitted to hospital 3 or more diagnoses Diagnosis: Diabetes mellitus, hypertension, hyperlipidemia, dementia, chronic obstructive pulmonary disease, stroke, or schizophrenia More than one hospitalization within 180 days of study admission “Significant functional decline, complex medical problems, home caregiver with difficulty coping, confusion or cognitive impairment, or elderly adult living alone with no caregiver (Wee, 2014, p. 2)”

Table 3

Transitional Frameworks Outcome Measurements

Transitional Model/Article (Author, Year, & Model)	Cost	Medication Discrepancies	Time to First Readmission	Readmissions- 15 days	Readmissions - 30 days	Readmissions - 60 days	Readmissions - 90 days	Readmissions- Greater than 90 days	Number of Days hospitalized during follow-up	Mean Readmission Length of Stay	Unscheduled Care Visits during follow-up	Psychosocial Issues (Depression, Anxiety, etc.)	Mortality	Patient Functionality	Patient Satisfaction	Rate of Primary Care Follow-up	Diagnosis Understanding
Rich et al., 1993; 1995	X		X	X	X	X		X									
Naylor et al., 1999 (TCM)	X		X					X	X	X	X	X		X	X		
Parry et al., 2003 (CTI)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naylor et al., 2004 (TCM)	X		X	X	X	X	X	X	X	X	X		X	X	X		
Coleman et al., 2004 (CTI)	X			X	X	X	X	X									
Jack et al., 2009 (RED)	X			X	X										X	X	X
Logue & Drago, 2013 (Modified CCTP)		X		X											X		
Altfeld et al., 2013 (EDPP)				X								X	X			X	

Transitional Model/Article (Author, Year, & Model)	Cost	Medication Discrepancies	Time to First Readmission	Readmissions- 15 days	Readmissions - 30 days	Readmissions - 60 days	Readmissions - 90 days	Readmissions- Greater than 90 days	Number of Days hospitalized during follow-up	Mean Readmission Length of Stay	Unscheduled Care Visits during follow-up	Psychosocial Issues (Depression, Anxiety, etc.)	Mortality	Patient Functionality	Patient Satisfaction	Rate of Primary Care Follow-up	Diagnosis Understanding
Gilmore-Bykovskiy et al., 2014 (C-TraC)	X				X												
Wee et al., 2014 (ACTION)	X			X	X			X					X		X		

Table 4

Description of Discharge Planning for Burn Patients Articles

Author/ Date	Research Question(s)/Hypotheses	Methodology	Analysis & Results	Conclusions
Granite, 1979	Thorough discharge planning must be multidisciplinary and begin immediately	Provides recommendations for patient discharge process/resources	None	The team must consider the individual to maximize rehabilitation/discharge. The process must be multidisciplinary and begin upon admission.
Gordon, 1980	Discharge planning is performed by each key member of the burn team (including the outpatient-clinic nurse) and consists of 5 responsibilities.	Outlines the five responsibilities of discharge planning.	None	The outpatient-clinic nurse should work with the burn care team to create a comprehensive discharge plan while performing their duties (coordination, collaboration, education, and research) by fulfilling their five responsibilities.
Marvin, 1983	A home care plan will help a burn patient in their transition home	Describes the needed steps of creating a home care plan for burn patients.	None	The home care plan can impact the patient's discharge and transition experience.
Parsons, 1983	Burn Center nurses must create a home care plan to help the patient have a smooth transition home.	Provides recommendations for discharge planning and home care planning.	None	A home care plan created by the burn center nurses and carried out by the community health nurses can help the patients with a smoother transition and better rehabilitation.
Manger, 1986	A 14-step social reimmersion program will help pediatric burn patients have a smooth transition.	Outlines the 14 steps.	None	This 14-step protocol will help pediatric burn patients in their transition home.
Neville et al., 1988	A slide/tape presentation given to patients for discharge is an effective means of preparation combined with their typical discharge practices.	Outlines the main information given to patients during discharge and protocol leading up to and on the day of discharge.	None	This method is an effective discharge preparation.

Table 5

Recommended Burn Patient Discharge Care Plans

Article	Timing of Recommended Actions	Recommended Discharge Practices/Interventions
Granite, 1979	During hospitalization	Evaluation of psychosocial and mental characteristics Evaluation of life prior to and after burn—work, preexisting conditions, etc. Perform needs assessment Multidisciplinary assessment of patient Create post-discharge and rehabilitation goals Assign a care coordinator—psychiatrist, nurse, physical therapist, occupational therapist, social worker Determine needed support and follow-up care after discharge Create rehabilitation plans Arrange support needs for patient to follow-up—transportation, homecare, etc. Provides Resource lists
Gordon, 1980	During hospitalization – first time and readmission	Discharge planning performed by burn team, each acting as a link in a chain Outpatient-clinic nurse is a key member in the process Coordinate the rehabilitation team and acute care team early in the process Create patient planning conferences Early assessment – made during rounds with the acute care team Team defines patient’s plan of care Define short- and long-term goals Provide discharge education Examine the center’s follow-up and compliance statistics Create outreach programs for local hospital and healthcare professional education Create a “telephone-consultation line” for other healthcare facilities

Article	Timing of Recommended Actions	Recommended Discharge Practices/Interventions
Marvin, 1983	During hospitalization	<p>Create a home care plan:</p> <ol style="list-style-type: none"> 1. Interview patient to determine resources and ability—whether they live alone, have support, have means of financial support? 2. Make a plan based on 5 major areas: wound management, pain relief, exercise therapy, scar maturation, and emotional support. 3. Provide written instructions for wound care – especially graft care if needed. 4. Provide phone name and phone number of care providers in case of problems. 5. Walk the patient through the wound care with verbal instructions 6. Provide written instructions for medications. 7. Give medication instructions/education – verbal and written – for short- and long-term needs. 8. Explain to the patient expected pain, itching, and sleep. 9. Supply written and verbal instructions concerning exercise therapy. 10. Talk to patient about scarring and allow him/her to voice concerns. 11. Educate patient as to pressure garments and masks, scar reduction, and reconstructive surgery 12. Provide emotional support and refer patient to a mental health professional. 13. Help patient make follow-up appointments. 14. Talk to the patient about vocational counseling
Parsons, 1983	Created during hospitalization and reevaluated and changed post-discharge	<p>Home care plan created by burn center nurses and carried out by community health nurses. Obtain referral from physician to local care provider for follow-ups if patient lives distance from burn center Create plan for follow-up with burn center Create continuity of care for confidence and security of patient and caregivers Assess patient’s resources for home care Assess patient’s access to care Support the patient’s plan and needs Help patient and family reduce stress Support the caregiver Mobilize resources Create plan custom to the patient—patient must be able to carry out plan Include patient and family in planning Educate as to compliance importance Detailed written instructions Determine need for long-term care and rehabilitation Determine goals of rehabilitation in relationship to previous ability Find relief support for the caregiver Frequently reevaluate the care plan</p>

Article	Timing of Recommended Actions	Recommended Discharge Practices/Interventions
Manger, 1986	During hospitalization	<p>Conduct an assessment and classify the patient as having minor or major burns.</p> <p>Conduct steps during hospitalization to prepare patient for discharge:</p> <ol style="list-style-type: none"> 1. Involve the family as much as possible and encourage them to emotionally and physically support their child as much as possible. 2. Enroll the child in school conducted in the hospital with homework 3. Encourage the physical, social and emotional independence 4. Allow the child as much free activity and socialization within the unit. 5. Arrange visits to other departments, such as the school, gym and recreation areas. 6. Accompany the child (without their family) to meals in the cafeteria 7. When the child is ready for general activities in the hospital prepare the family and child for discharge. 8. Facilitate walks outside the hospital. 9. Accompany the child to a restaurant. 10. Issue a day pass for the child. 11. Issue an overnight pass for the child – including physical and wound care instructions. 12. Execute discharge 13. Provide detailed, written discharge instruction. 14. Supply the doctor's office and burn unit phone numbers and instructions to call in case of problems. 15. Plan a home visit (for major burns) about 3 weeks after discharge – check progress, refresh teaching, identify problems, give support, make needed referrals. 16. Schedule and perform a school visit (for major burns) – provide teaching to the other students, meet their teachers and school nurse.
Neville et al., 1988	During hospitalization – as patient approaches discharge	<p>Prior to discharge provide patient with a presentation (slides/tape) concerning four central areas:</p> <ol style="list-style-type: none"> 1. Dressing changes 2. Skin care 3. Scar prevention methods 4. General self-care <p>Give patient discharge booklet with presentation summary and phone number of burn unit.</p> <p>Explain patient's rehabilitation routine and exercises.</p> <p>On the day of discharge:</p> <ol style="list-style-type: none"> 1. Arrange a burn clinic appointment 2. Provide patient with a map 3. Burn team performs assessment 4. Answer any questions patient may have 5. Tell patient to contact burn unit if they have any problems before their appointment with the clinic.

Table 6

Recommended Burn Patient Discharge Care Plans Compiled

Article (Author & Year)	Perform Assessment	Establish Goals - Care and rehab	Written Discharge Plan/Instructions	Care Coordinator	Schedule and Plan Follow-up Care and Appointments	Educate Patient/Caregiver - Discharge	Educate Community	Provide Contact Information and Instruction in Case of Emergency or Problem	Patient/Caregiver Education - wound management	Patient/Caregiver Education - Scars & Reconstruction	Pain management/ Medications	Exercise	Psychosocial/Emotional Support	In-hospital Visits	Home Visit Follow-up	Caregiver Support
Granite, 1979	X	X		X	X									X		
Gordon, 1980	X	X		X		X	X			X				X		
Marvin, 1983	X		X	X	X			X	X	X	X	X	X	X		
Parsons, 1983	X	X	X	X	X	X							X	X		X
Manger, 1986	X		X	X			X	X				X	X	X	X	
Neville et al., 1988	X				X			X	X	X		X		X		