



CANADIAN STROKE BEST PRACTICE RECOMMENDATIONS

Stroke Systems of Care

7th Edition, Update 2026

Evidence Tables

Stroke Planning, Transitions of Care & Communication

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Published Guidelines

Guideline	Recommendations
<p>National Clinical Guideline for Stroke for the UK and Ireland. London: Intercollegiate Stroke Working Party; 2023 May 4.</p> <p>Available at: www.strokeguideline.org.</p> <p>(selected)</p>	<p>Clinicians should facilitate shared decision making and communicate the likelihood of the individual achieving their goals in an informed, compassionate, and individualised manner. [2023]</p> <p>From an early stage in rehabilitation, clinicians should prepare people with stroke and their carer(s) that discharge from the service will occur and ensure an adequate transition plan is created collaboratively. Discharge information should include how to re-access services if required. [2023]</p> <p>The multidisciplinary team should complete weekly reviews whilst providing rehabilitation in any setting, considering the needs, goals and progress of the person with stroke, and their treatment and discharge plans. The choice of rehabilitation pathway should be regularly reviewed to ensure rehabilitation continues to best meet the person's needs.</p>
<p>Clinical Guidelines for Stroke Management 2025. Melbourne (Australia): National Stroke Foundation.</p> <p>Chapter 7: Discharge Planning & Transitions of Care</p>	<p>Strong Recommendation</p> <p>Comprehensive discharge care plans that address the specific needs of the stroke survivor should be developed in conjunction with the stroke survivor and carer prior to discharge.</p> <p>Consensus-based recommendations</p> <p>A discharge planner may be used to coordinate a comprehensive discharge program for stroke survivors.</p> <p>To ensure a safe discharge process occurs, hospital services should ensure the following steps are completed prior to discharge:</p> <ul style="list-style-type: none"> Stroke survivors and families/carers have the opportunity to identify and discuss their post-discharge needs (physical, emotional, social, recreational, financial and community support) with relevant members of the multidisciplinary team. General practitioners, primary healthcare teams and community services are informed before or at the time of discharge. All medications, equipment and support services necessary for a safe discharge are organised. Any necessary continuing specialist treatment required has been organised. A documented post-discharge care plan is developed in collaboration with the stroke survivor and family and a copy provided to them. This discharge planning process may involve relevant community services, self-management strategies (i.e. information on medications and compliance advice, goals and therapy to continue at home), stroke support services, any further rehabilitation or outpatient appointments, and an appropriate contact number for any post-discharge queries. <p>A locally developed protocol or standardised tool may assist in implementation of a safe and comprehensive discharge process.</p> <p>Prior to hospital discharge, all stroke survivors should be assessed to determine the need for a home visit, which may be carried out to ensure safety and provision of appropriate aids, support and community services.</p>

Guideline	Recommendations
<p>Winstein CJ, Stein J, Arena R, Bates B, Cherney LR, Cramer SC et al; on behalf of the American Heart Association Stroke Council, Council on Cardiovascular and Stroke Nursing, Council on Clinical Cardiology, and Council on Quality of Care and Outcomes Research.</p> <p>Guidelines for adult stroke rehabilitation and recovery: a guideline for healthcare professionals from the American Heart Association/American Stroke Association.</p> <p><i>Stroke</i> 2016;47:e98–e169.</p>	<p>Transitions in Care and Community Rehabilitation</p> <p>It is reasonable to consider individualized discharge planning in the transition from hospital to home. Class IIa; LOE B</p> <p>It is reasonable to consider alternative methods of communication and support (eg, telephone visits, telehealth, or Web-based support), particularly for patients in rural settings. Class IIa; LOE B.</p> <p>ADLs, IADLs, and Disability Measurement</p> <p>It is recommended that all individuals with stroke be provided a formal assessment of their ADLs and IADLs, communication abilities, and functional mobility before discharge from acute care hospitalization and the findings be incorporated into the care transition and the discharge planning process. Class I; LOE B.</p>
<p>Shamji H, Baier RR, Gravenstein S, et al.</p> <p>Improving the quality of care and communication during patient transitions: best practices for urgent care centers.</p> <p><i>Jt Comm J Qual Patient Saf</i> 2014;40:319-24.</p>	<ol style="list-style-type: none"> 1. Ask patients for the name of their Primary Care Physician (PCP). 2. Ask patients for the name of their home care provider. 3. Send summary clinical information to the PCP upon visit completion. 4. Send summary clinical information to the home care provider upon visit completion. 5. Send summary clinical information to the ED physician upon patient referral. 6. Perform modified medication reconciliation upon visit completion. 7. Provide patient with effective education upon visit completion. 8. Provide patient with written discharge instructions upon visit completion.
<p>Snow V, Beck D, Budnitz T, et al.</p> <p>Transitions of Care Consensus Policy Statement American College of Physicians-Society of General Internal Medicine-Society of Hospital Medicine-American Geriatrics Society-American College of Emergency Physicians-</p>	<p>Detailed Recommendations related to:</p> <ul style="list-style-type: none"> • Coordinating Clinicians • Care Plans/Transition Record • Communication Infrastructure • Standard Communication Formats • Transition Responsibility

Guideline	Recommendations
Society of Academic Emergency Medicine. <i>J Gen Intern Med</i> 2009;24:971-76.	<ul style="list-style-type: none">• Timeliness• Community standards• Measurement

Evidence Tables

Continuity of care: Core elements to consider when planning transitions between care environments or providers

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
Haggerty et al. 2003 UK Literature synthesis	NA	583 documents identified from multiple databases assessing elements of continuity of care, including articles focused on primary medical care (39%), mental health care (19%), nursing (13%), and disease specific care (16%). 4% focused only on continuity of care.	The results from an initial review of 314 documents were reviewed by participants of a workshop on continuity of care. Structured feedback was obtained from a discussion paper, problem-based scenarios, and expert presentations. Participants validated the common themes and proposed features of continuity that did not emerge from the literature but are relevant to clinical practice.	Primary outcome: The identification of core elements and domains of continuity.	<p>The main elements of continuity of care within the different health care settings are described.</p> <p>In primary care, the main element of continuity of care is the relationship between physician and patient.</p> <p>In mental health, the main element is the coordination of services and the stability of the patient-provider relationship.</p> <p>In nursing, the focus is on information transfer and coordination of care over time.</p> <p>In disease-specific management, the focus is on the delivery of services by different providers in a coherent fashion.</p> <p>Two distinguishing elements of continuity of care were identified: 1) Continuity of care is how an individual patient experiences integration of services and coordination and 2) care that takes place over time</p> <p>The 3 types of continuity are described.</p> <p>1) Informational continuity: The use of information from previous events and conditions to plan appropriate interventions.</p> <p>2) Management continuity: A consistent and coherent approach to the management of a health condition that is responsive to a patient's changing needs.</p> <p>3) Relational continuity: An ongoing therapeutic relationship between a patient and one or more healthcare providers.</p>
Uijen et al. 2012	NA	34 discussion papers/opinion articles, 20 reviews, 20 original	A historical overview of the definition of continuity of care and 4	Primary outcomes: Definition, themes	The definition of continuity of care has changed over the decades. In the 1950's, the concept was focused on

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The Netherlands Review		quantitative researches, 17 descriptive articles, 9 original qualitative researches, 8 reports, 6 editorials, 5 case studies, 5 articles describing the development and/or validation of a measurement instrument, 5 books, 4 historical articles, 1 comment, 1 lecture and 1 biography, were identified through a literature search that described the concept of continuity of care, or provided definitions.	related concepts including coordination of care, integration of care, patient-centred care and case management, are described.		having a personal care provider. The concepts of chronological continuity, geographical continuity, interdisciplinary continuity, interpersonal continuity, and informational continuity, were introduced later. 3 major themes emerged that appeared to represent core elements of care to patients: personal relationship between patient and care provider, communication between providers and cooperation between providers. Attributes associated with these themes include personal relationships and coordination, and communication.

Transitional Care & Planning

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
Johnson et al. 2024 USA Retrospective study <i>The Transitions of Care Stroke Disparities Study (TCSD-S)</i>	NA	1,239 patients with ischemic or hemorrhagic stroke, recruited from 10 comprehensive stroke centres in Florida between 2018 and 2023 and who were discharged to either home or an inpatient rehabilitation facility. Mean age was 63.7 years, 57.8% were	The association between a composite measure of adequate transition of care (ATOC) score during the first 30 days following discharge and 90-day death or readmission, was examined. The ATOC score was derived from 6 self-reported factors (weekly	Primary outcome: Death or readmission within 90-days post stroke	76.2% of patients were discharged home, and 18.2% to inpatient rehabilitation. 163 (13%) participants experienced the primary outcome (157 were readmitted to hospital, 3 patients died, and 3 were readmitted to hospital and died). In a model adjusted for demographics, stroke risk factors, social determinants of health and insurance, a 25% increase in ATOC score was associated with a significantly decreased risk of the primary outcome (HR=0.80, 95 % CI 0.67–0.97). 869 patients (70%) had an ATOC score of ≥75%.

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		men. Median baseline NIHSS score was 2.5.	exercise, medication adherence, diet modification, attendance of a follow-up medical appointment, attendance or completion of prescribed therapy, and cessation of toxic habits). The ATOC score ranged from 0 to 100%.		Among patients with an ATOC score $\geq 75\%$, the risk of the primary outcome was reduced significantly (adjusted HR=0.65, 95% CI 0.40-0.90) compared with scores <70%.
Dong et al. 2023 USA Retrospective study <i>The Transitions of Care Stroke Disparities Study (TCSD-S)</i>	NA	550 patients with ischemic stroke, recruited from 10 comprehensive stroke centres in Florida between 2018 and 2023 and who were discharged to either home or an inpatient rehabilitation facility, with a discharge modified Rankin Scale score of 0-3. Mean age was 63 years, 56.5% were men. Mean baseline NIHSS was 3.5.	A structured telephone interview at 30-day post discharge was conducted to evaluate components of adequate transition of care including medication adherence, medical appointment attendance, outpatient therapy, exercise, diet modification, toxic habit cessation, and a composite adequate transition of care (ATOC) measure was developed as per Johnson et al. 2024.	Primary outcome: Baseline characteristics associated with 30-day ATOC	474 (86%) patients were discharged directly home, while 76 (14%) went to inpatient rehabilitation. At 30 days, medication adherence was achieved by 89%, medical appointments by 82%, outpatient therapy by 76%, exercise by 71%, diet modification by 68%, and toxic habit cessation by 35%. Overall, 370 patients achieved an adequate ATOC score. In adjusted analysis, the odds of achieving adequate ATOC score were higher in patients who feel close to ≥ 3 individuals (OR=1.86 [1.19–2.92] and lower in those living with children vs spouse (OR=0.48, 95% CI 0.27–0.85), patients with a history of smoking (OR=0.47, 95% CI 0.31–0.74), and those with a history of heart failure (OR=0.27, 95% CI 0.12–0.59).
Markle-Reid et al. 2023 Canada Cluster RCT	CA: <input checked="" type="checkbox"/> Blinding: Patient <input checked="" type="checkbox"/> Assessor <input checked="" type="checkbox"/> ITT: <input checked="" type="checkbox"/>	90 adults, ≥ 55 years, recruited from 2 outpatient rehabilitation programs in Ontario who were discharged from hospital to the community with stroke and multimorbidity (≥ 2 chronic conditions), with	Participants were randomized 1:1 to receive usual care (control group) or usual care plus a Transitional Care Stroke Intervention (TCSI) for 6 months.	Primary outcome: Hospital readmission at 6 months Secondary outcomes: Physical Component Summary Score (PCS) and the Mental Component Summary	11 participants were lost to follow-up. The risk of the primary outcome was not reduced significantly in the TCSI group (3/39 vs. 5/40; RR=0.62, 95% CI 0.16- 2.40). There were significant group differences favouring the TCSI group on the SF-12 Physical Component Summary Score (MD=5.10, 95% CI 1.58–8.62), the Southampton Stroke Self-Management Questionnaire

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		<p>planned discharge back to the community (not to long-term care) and cognitively intact ($\geq 18/22$ on t-MoCA). Mean age was 70 years, 60% were men. The average number of chronic conditions was 7.</p>	<p>The core components of the intervention included: 1) a post-discharge telephone follow-up call within 2 days of hospital discharge by the Care Coordinator, 2) up to 6 virtual visits delivered by phone or videoconference by a member of the interprofessional team, lasting an average of one hour, 3) monthly team conferences in which an individualized patient-centred plan of care was developed and evaluated, 4) ongoing care coordination/system navigation support provided by the Care Coordinator, and 5) an online resource to support self-management and system navigation (My Stroke Recovery Journey website).</p> <p>Usual care typically involved 2–3 outpatient rehabilitation visits per week for a maximum of 3 months.</p>	<p>Score (MCS) from the SF-12 health survey, Centre for Epidemiological Studies Depression Scale 10-item tool (CES-D-10), Southampton Stroke Self-Management Questionnaire, and the Person-Centred Coordinated Care Experience Questionnaire (P3CEQ)</p>	<p>(MD=6.00, 95% CI 0.51–11.5), and the P3CEQ (MD=2.64, 95% CI 0.81- 4.47).</p> <p>There were no significant differences between groups on the SF-12 Mental Component Summary Score or the CES-D-10.</p>
<p>Saragih et al. 2023</p>	<p>Using the Cochrane risk of bias tool, overall,</p>	<p>23 RCTs including 2,966 patients who were transitioning from hospital to home</p>	<p>Trials compared a control condition (usual or standard care) vs. a transitional care</p>	<p>Primary outcomes: Motor performance, walking speed, activities of daily living (ADLs)</p>	<p>TCPs were associated with significantly greater improvement in motor performance (SMD= 0.15, 95% CI 0.01–0.28, 8 trials, n=862. GRADE: Moderate).</p>

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<p>Taiwan</p> <p>Systematic review & meta-analysis</p>	<p>50% of trials were at low risk of bias in all domains assessed, while 50% were at unclear risk of bias.</p>	<p>following stroke. Mean age ranged from 56 to 77 years. Sex breakdown not reported. Mean time since stroke ranged from 3 days to 12 months but was frequently not reported.</p>	<p>program (TCP) implemented by an interdisciplinary group typically composed of a nurse, physical therapist, occupational therapist, speech therapist, neurologist and physician and included components such as home visits, early identification and treatment of complications, preservation of functional capacity, support for psychological and social adjustment to a new life with stroke related impairment, stroke re-education, motor training, exercise therapy, self-management education, self-care skills development, cognitive behavioural therapy and telephone follow-up. Programs were provided daily to once weekly, for 30 minutes to 2 hours for 4 weeks to 6 months.</p>	<p>and caregiver burden</p>	<p>TCPs were associated with significantly greater improvement in walking speed (SMD= 0.04, 95% CI 0.03–0.05, 4 trials, n=522. GRADE: Moderate).</p> <p>TCPs were associated with significantly greater improvement in ADL performance (SMD= 0.12, 95% CI 0.02–0.22, 14 trials, n=1,803. GRADE: Moderate).</p> <p>TCPs were associated with significantly lower caregiver burden strain (SMD= -0.29, 95% CI -0.58 to -0.01, 3 trials, n=309. GRADE: Low).</p>
<p>Gonçalves-Bradley et al. 2022</p> <p>Portugal</p> <p>Cochrane</p>	<p>One trial was at low risk of bias across all 9 domains assessed.</p>	<p>33 RCTs (n=12,242) that included participants that had been recruited with a medical condition (n=30, mainly heart</p>	<p>Trials compared the outcomes of patients who received formal discharge planning (nurse-led, pharmacist, member of a</p>	<p>Primary Outcomes: Hospital LOS, unscheduled readmission, patient health status, satisfaction of patients,</p>	<p>The use of discharge plans was associated with a significantly reduced LOS: (MD -0.73; 95% CI -1.33 to -0.12). The results from 11 studies were included. GRADE: moderate</p> <p>At 2 weeks to 6 months following discharge, the use of discharge planning was associated with a significant</p>

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review		conditions) or a surgical procedure (n=3). Mean age ranged from 60-84 years. One trial recruited patients following stroke.	<p>multidisciplinary team, discharge planner) vs. usual care, (informal discharge planning).</p> <p>The majority of trials evaluated a discharge planning intervention that aimed to facilitate the co-ordination of post-discharge care and improve communication between the hospital, primary care and community services to aid the transition of patients from hospital to their discharge destination. In all but three trials, the discharge planning intervention included an education component that provided patients with information about their health condition, medicines and post discharge arrangements.</p>	care givers and healthcare professionals	<p>reduction in readmissions (RR= 0.89; 95% CI 0.81 to 0.97). The results from 17 trials were included. GRADE: moderate</p> <p>At 3-9 months following discharge, patients in the control group were no more likely to be dead (OR=1.05, 95% CI 0.85-1.29). Results from 8 trials were included. GRADE: moderate</p> <p>Most studies reported little or no differences between groups for general and disease-specific health-related quality of life.</p> <p>Sex was not explored as a potential moderator variable in subgroup analysis.</p>
O'Callaghan et al. 2022 Ireland Systematic review	All trials were assessed as having a high risk of bias.	17 RCTs including persons returning home after admission to an acute or rehabilitation stroke service. Sample sizes ranged from 33 to 6, 024. participants. Mean age ranged from 60 to 76 years. The proportion of women ranged from 17% to	<p>In all trials, patients were randomized to receive a transitional care program or usual care (control group).</p> <p>Most of the interventions were educational, and delivered in person and via telephone/letters/instant</p>	<p>Primary outcome: Functional status</p> <p>Secondary outcomes: Depression & anxiety (HADS-A), SF-36, hospital readmission</p>	<p>Data from 14 trials were available for pooled analyses.</p> <p>At 3 months, the mean Barthel Index scores were significantly higher in the intervention group (MD=7.87, 95% CI 3.93-11.81; 5 trials included). GRADE: very low</p> <p>At ≥6months, the mean Barthel Index scores were significantly higher in the intervention group (MD=2.91, 95% CI 0.003-5.8; 6 trials included). GRADE: very low</p>

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		63%.	messaging platforms, and directed at the patient and to the caregiver (n=5). Interventions were delivered mainly by nurses or an interdisciplinary team. Interventions were provided up to 6 months post discharge.		At 6-12 months, symptoms of depression were significantly lower in the intervention group (SMD=-0.17, 95% CI -0.29 to -0.05; 4 trials). GRADE: low Within 6 months, symptoms of anxiety were significantly lower in the intervention group (MD=-1.7, 95% CI -1.84 to -0.52; 2 trials). GRADE: very low Within 6 months, SF-36 scores were significantly higher in the intervention group (MD=1.3, 95% CI 0.85-1.76; 3 trials). GRADE: very low The intervention did not increase the risk of hospital readmission (RR=1.04, 95% CI 0.77-1.41; 4 trials included). GRADE: ?
Lin et al. 2020 Australia Systematic review & meta-analysis	Using the Cochrane risk of bias tool, all trials except one were at high risk of bias in ≥1 domain (blinding of participants and outcome assessors, most frequently). Domains where most or all trials were at low risk of bias were randomization procedure and selective reporting	25 RCTs including 4,352 adult stroke survivors (n=15) planning to transition from hospital to home and stroke survivors + caregivers (n=11). Mean/median age ranged from 55 to 79 years. Sex breakdown was not reported.	Trials compared transitional care planning incorporating coaching strategies with usual care (+/- discharge planning services). The intervention group included health education for patients or caregivers in hospital discharge plan and follow-up care, self-management techniques, telephone follow-up or home visit, medication management and complications prevention. Most active interventions were provided by a multidisciplinary team (n=13). Other providers	Primary outcomes: Quality of life (QoL) and readmissions to hospital Secondary outcomes: Activities of daily living (ADLs), depression, mortality and falls	Health coaching strategies added to transitional care plans were associated with a significant improvement in QoL at 3 months (SMD=0.77, 95 %CI 0.55 to 0.999, n=8 trials), but not at 6 months (SMD=0.07, 95 %CI -0.07 to 0.218, n=5 trials) or at 12 months (SMD= 1.92, 95 %CI -1.67 to 5.52, n=4 trials). The risks of hospital readmission and mortality were not reduced significantly with health coaching + transitional care (RR=0.92, 95 % CI 0.73–1.16, n=10 trials and RR=0.86, 95 % CI 0.67–1.11, n=25 trials, respectively). Health coaching strategies added to transitional care plans were associated with a significant improvement in ADL performance at 3 months (SMD= 1.156, 95% CI 0.44–1.87, n=21 trials), but not at 6 or 12 months, and depression (SMD=0.29, 95 % CI 0.12 to 0.47, n=13 trials. Timing of assessment was not stated). Risk of falls at final follow-up was not reduced significantly in the intervention group (RR=0.98, 95% CI 0.75–1.28).

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			<p>were nurses (n=8), and ≥1 allied health professionals.</p> <p>Health coaching strategies were integrated into various stroke transition care programs including patient/caregiver education intervention (n=7), rehabilitation interventions (n=6), behavioural intervention (n=6), post-discharge intervention (n=4), transitional intervention (n=3). Frequency and duration of follow-up varied across trials.</p>		
<p>Duncan et al. 2020 USA RCT (cluster) Comprehensive Post Acute Stroke Services (COMPASS)</p>	<p>CA: <input checked="" type="checkbox"/></p> <p>Blinding: Patient <input checked="" type="checkbox"/></p> <p>Assessor <input checked="" type="checkbox"/></p> <p>ITT: <input checked="" type="checkbox"/></p>	<p>6,024 adult stroke and TIA patients discharged home from 40 hospitals, acutely after stroke. Mean age was 67 years, 49% were women. 58% of patients had sustained an ischemic stroke. Median NIHSS score was 1.</p>	<p>Participants were randomized to receive a comprehensive post-acute stroke transitional care (TC) management program or usual care. The intervention included telephone follow-up within 2 business days of hospital discharge and a clinic visit 7 to 14 days post-discharge.</p> <p>The TC plan in the intervention group was patient-centered and assessed social and functional determinates of health to inform individualized care</p>	<p>Primary outcome: Stroke Impact Scale-16 (functional status) at 90 days</p> <p>Secondary outcomes: Mortality, disability, medication adherence, depression, cognition, self-rated health, fatigue, care satisfaction, home blood pressure monitoring, and falls</p>	<p>Receipt of the intervention per protocol ranged from 6% to 70% across hospitals. 35% of patients at intervention hospitals attended a COMPASS clinic visit.</p> <p>Mean SIS-16 functional status scores were not significantly different between groups (80.6 vs. 79.9).</p> <p>There was no significant difference between groups in 90-day mortality (98% vs. 98.2%, RR=1.04, 95% CI 0.62 to 1.75).</p> <p>Self-reported home blood pressure monitoring was performed significantly more in the TC group (72% vs. 64% (adj OR=1.43, 95% C, 1.21–1.70).</p> <p>There were no significant differences between groups for any of the secondary outcomes.</p> <p>There were no significant treatment interactions across subgroups of age, race, sex, NIHSS score, diagnosis, or insurance status for the primary- and secondary-outcomes.</p>

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<p>Facchinetti et al. 2020 Italy Systematic review & Meta-analysis</p>	<p>Methodological quality was high in 10 trials and moderate in 20, using the Cochrane Risk of Bias tool.</p>	<p>30 RCTs, representing 8,920 patients ≥65 years of age, with ≥1 chronic disease who were discharged from the hospital to home. Chronic heart and obstructive pulmonary diseases were the most common conditions. Mean ages and sex breakdown were not reported.</p>	<p>plans.</p> <p>Trials compared continuity of care interventions with a control group (not described). There were 18 different interventions assessed including home visits, telephone follow-up, self-management, and transitional care models. Most interventions were carried out by nurses with specialized training. Other providers included pharmacists, physiotherapist, respiratory therapist, social worker, and physicians. The number of interventions carried out per study ranged from 1 to 6.</p> <p>Continuity of care interventions were composed of 3 dimensions: informational, relational and management. All components were present in 8 trials.</p>	<p>Primary outcome: Hospital readmission</p>	<p>At 1 month from discharge, the continuity interventions were associated with lower risk of readmission (12.9% vs. 16%; RR=0.84, 95% CI, 0.71-0.99).</p> <p>From 1-3 months from discharge, the continuity interventions were associated with lower risk of readmission (21.9% vs. 29.8%; RR=0.74, 95% CI, 0.65-0.84).</p> <p>From 3-6 months from discharge, the continuity interventions were not associated with lower risk of readmission (38.8% vs. 41.5%; RR=0.91, 95% CI, 0.78-1.06).</p> <p>From 6-12 months from discharge, the continuity interventions were associated with lower risk of readmission (30.5% vs. 36.1%; RR=0.84, 95% CI, 0.74-0.95).</p> <p>The impact of the interventions was greater when all 3 dimensions of continuity of care were present vs. just one.</p>
<p>Andrew et al. 2018 Australia</p>	<p>NA</p>	<p>200 patients from 35 hospitals included in the Australian Stroke Clinical Registry who had been discharged directly home from an</p>	<p>Participants were sent a survey assessing patient-perceived discharge quality including 3 questionnaires:1) the</p>	<p>Primary outcome: Predictors of high discharge quality scores</p>	<p>PREPARED domain quality scores ranged from a mean of 71% for medications to 81% for support structures and information exchange. The mean quality score was 73%.</p> <p>Only 18% of participants received an overall score of</p>

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Retrospective study		acute hospital care following stroke, sustained 3-9 months earlier. Median age was 72 years, 69% were men.	Prescriptions, Ready to re-enter community, Education, Placement, Assurance of safety, Realistic expectations, Empowerment, Directed to appropriate services (PREPARED) questionnaire; 2) Longer-term Unmet Needs after Stroke (LUNS) questionnaire; and 3) a 2-question questionnaire about discharge processes specific to stroke care. Factors associated with higher discharge quality scores were identified.		100% across all 4 domains of PREPARED (support structures and information exchange; medication management; concerns with community management and preparedness to deal with unexpected issues; and control of discharge circumstances. Those with quality scores <80% were significantly more likely to report having pain (49% vs. 35%) or anxiety or depression (49% vs. 29%) at 3 months post stroke. They were also more likely to report having unmet needs in these areas at approximately 6 months post stroke. Independent predictors of higher discharge planning quality scores (>80%) were receiving stroke specific information developed by the local hospital (OR=5.7, 95% CI 2.7-12.4) and referral to a local stroke support group (OR=2.5, 95% CI 1.1- 5.9). PREPARED scores >80% were associated with higher EQ-5D scores and a reduction in the rate of unmet needs reported at 3-9 months post discharge.
Poston et al. 2014 USA Retrospective study	NA	Patients discharged home with self-care from one hospital following acute ischemic stroke	During a 4-month feasibility phase, a nurse navigator ensured that prior to discharge, there was a follow-up appointment made with the patient's primary care physician (PCP), or a PCP was established for those without providers, and ensured that discharge summaries were transmitted to PCPs. In the final months of the intervention, 2 additional components were added- targeted education (self-care,	Primary outcomes: 30-day readmissions and Emergency Department (ED) visits	During the 24-month period prior to the intervention, there were 20.8 ischemic stroke discharges per month. The average 30-day readmission rate during this time was 9.39%. (The average 30-day readmission rate to all state hospitals was 9.80%) During the feasibility phase, an average of 19.3 patients were discharged each month. The average 30-day readmission rate was 2.63%, which was the same as for all state hospitals. During the 4 months after the feasibility phase, an average of 21.3 patients were discharged each month. The average 30-day readmission rate was 3.24%, which was the same as for all state hospitals. Mean ED visits for the pre-intervention, feasibility phase and 4-month period after the feasibility phase were 6.9%, 6.8% and 4.24%, respectively. Mean ED visits for all state hospitals during these same periods were

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
			stroke warning signs, prevention) and confirmed the medication plan.		16.36%, 12.11% and 12.08, respectively.
<p>Olson et al. 2011</p> <p>USA</p> <p>Agency for Healthcare Research and Quality Report</p>	NA	<p>62 articles published ≥ the year 2000, representing 44 studies that included adults ≥ 18 years old who were discharged, or were preparing to be discharged from a hospital following acute stroke (ischemic or hemorrhagic) and acute myocardial infarction (MI).</p> <p>Components of transition of care services included:</p> <p>Case management, discharge planning, self-management tools, care pathways, systems for shared access to patient information, referrals to specialty care providers, included as part of the transition of care service and referral back to primary care providers.</p>	<p>Studies examined post-acute hospitalization transition of care services as well as prevention of recurrent stroke or MI.</p>	<p>There were 5 key questions:</p> <p><i>Key Question 1</i> was related to identifying the key components of transition of care services, if they can be grouped in a taxonomy, and if they are based on a particular theory.</p> <p><i>Key Question 2</i> asked if transition of care services improve functional status and quality of life and reduce hospital readmission, morbidity, and mortality up to 1-year post event.</p> <p><i>Key Question 3</i> asked about potential adverse events associated with transition of care services</p> <p><i>Key Question 4</i> asked if transition of care services improve other aspects of care, such as more efficient referrals, more timely appointments, better provider communication, and</p>	<p>KQ1: Transition of care interventions were grouped into four categories: (1) hospital-initiated support for discharge was the initial stage in the transition of care process, (2) patient and family education interventions were started during hospitalization but were continued at the community level, (3) community-based models of support followed hospital discharge, and (4) chronic disease management models of care assumed the responsibility for long-term care.</p> <p>KQ2: There was moderate evidence to support the benefit of early supported discharge for stroke patients. ESD was associated with a reduction in hospital length of stay without negative impact and may also reduce caregiver strain and improve some aspects of quality of life among patients as well as caregivers.</p> <p>KQ3: Insufficient evidence to determine.</p> <p>KQ4: Insufficient evidence to determine.</p> <p>KQ5: No evidence that benefits or harms of transition of care services varied on the basis of patient characteristics, except a greater benefit of services was noted among patients with less severe strokes.</p>

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
				<p>improved coordination among multiple providers.</p> <p><i>Key Question 5</i> asked if the benefits and harms associated with transition of care services varies by subgroup (e.g. disease etiology and severity, comorbidities)</p>	
<p>Shyu et al. 2008 Shyu et al. 2010 (1-year follow-up) Taiwan RCT</p>	<p>CA: ☒ Blinding: Patient☒ Assessor☒ ITT: ☒</p>	<p>201 patient / informal caregiver dyads. Patients ≥65 years with a primary diagnosis of stroke with high-demand discharge needs who were to be discharged home. 12% of those screened were eligible for inclusion.</p> <p>At one year, 158 patient/caregiver dyads remained in the study.</p>	<p>Within 48 hours of admission to an acute-care hospital, patient/caregiver dyads were randomized to one of 4 wards where they received a caregiver-oriented discharge planning program (n=97, 2 wards) or routine discharge planning (n=104, 2 wards). The discharge planning program was conducted by trained research nurses who evaluated caregiver needs during hospitalization and used results to guide individualized interventions, which included both health education and referral services.</p> <p>Once discharged, carers were contacted</p>	<p>Primary outcomes: Nurse Evaluation of Caregiver Preparation Scale, Preparedness for Caregiving Scale (caregiver self-evaluation), Caregiver Discharge Needs Assessment Scale, Perception of Balance Between Competing Needs Scale.</p> <p>Assessments were conducted at admission, discharge, and one month following discharge. (Not all measures were administered at all assessment points).</p> <p>Follow-up study outcomes: Health-related quality of life (HRQo; SF-36), quality of care (Family Caregiving Consequence</p>	<p>From admission to discharge, there were significant improvements in the nurse's evaluation and caregiver's self-evaluation of preparedness among caregivers in the intervention group (p<0.001). Among caregivers in the control group, although the nurses reported significant improvement in preparedness, caregivers did not.</p> <p>Caregivers in both groups reported increased Satisfaction in Caregiver Needs Satisfaction Scale from discharge to the one-month follow-up (p<0.001).</p> <p>Caregivers in the intervention group demonstrated significantly greater caregiver preparedness on both nursing and self-reported evaluations at discharge (both at p<0.01). At the one-month follow-up, those in the intervention group demonstrated significantly greater satisfaction with discharge needs than those in the control group (p<0.001). There were no differences in Perception of Balance Between Competing Needs Scale scores between groups.</p> <p>Dropouts: Intervention group=25 (26%); Control group=18 (17%).</p> <p>Follow-up study: No significant between-group differences in HRQoL scores for patients or carers were reported. Carers in the intervention group reported significantly better</p>

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
			within one week by telephone and two home visits were made (one week, one month) to advise and support caregivers in the home environment.	Inventory), health service utilization (readmission, length of stay, and institutionalization), and self-care ability (Barthel Index). Assessments were conducted at 3, 6 and 12 months after discharge.	quality of care at 6 months (p<0.01) but not at any other assessment point; however, overall quality of care was reported to be significantly superior in the intervention group over the 1-year follow-up period (p<0.05). No significant group differences were reported with respect to self-care ability or hospital readmissions. However, patients in the intervention group were significantly less likely to be institutionalized between 6- and 12-months post-discharge, compared to those in the control group (p<0.05).
Allen et al. 2009 USA RCT	CA: <input checked="" type="checkbox"/> Blinding: Patient <input checked="" type="checkbox"/> Assessor <input checked="" type="checkbox"/> ITT: <input checked="" type="checkbox"/>	380 patients admitted to the stroke unit of an acute care hospital with ischemic stroke, NIHSS score>0, discharged home directly, or within 8 weeks of discharge from hospital following a short stay in a skilled nursing facility	Patients were randomized to receive enhanced post discharge care (n=190) or standard care (n=190). An advanced practice nurse (APN) performed an in-home assessment within 1 week of discharge, the results of which were used by the multidisciplinary team to form a care plan that was provided to the patient's GP. Follow-up by the APN continued for 6 months (including home visits and telephone calls) in collaboration with the GP to ensure that all aspects of care were coordinated and delivered. Patients in the standard care group received	Outcomes: NIHSS, Timed Up & Go test, mortality and institutionalization, QoL, recurrent stroke, blood pressure, depression (CES-D scale), Hgb A _{1c} , cholesterol, self-reported fall, incontinence, stroke knowledge and lifestyle modification (assessed using an investigator-generated questionnaire). All assessments were conducted at baseline and at 6 months	There were no significant differences between groups on any of the outcomes of interest except for significantly increased percentage of patients in the intervention group who could correctly identify stroke symptoms (79% vs. 76%) and risk knowledge (53% vs. 48%). Informal tests for potential interactions revealed that persons with a prior history of stroke, TIA or atrial fibrillation, benefited more from the intervention in terms of improved neuromotor function. Most of the APN time was spent on issues related to self-management and medical management issues.

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
			care by their MD.		
Mayo et al. 2008 Canada RCT	CA: <input checked="" type="checkbox"/> Blinding: Patient <input checked="" type="checkbox"/> Assessor <input checked="" type="checkbox"/> ITT: <input checked="" type="checkbox"/>	190 stroke patients discharged home from 1 of 5 acute care hospitals who were identified as having a specific need for health care supervision following discharge, such as living alone or having a medical comorbidity. 65% of those screened for eligibility were randomized.	Participants were randomized to receive either a case management intervention (n=96) or care as usual (n=94). The intervention involved coordination with the patient's personal physician through telephone contact and home visits with the patient over 6 weeks. Persons in the usual care group were instructed to make an appointment with the patient's personal physician as soon as possible.	Primary Outcome: The Physical Component Summary of the Short-Form-36 (SF-36). Secondary Outcome: Health Care Utilization, the Medical Component of the SF-36, the EuroQuol EQ-5D, the Preference-Based Stroke Index, the Reintegration to Normal Living Index, the Barthel Index, the Geriatric Depression Scale, Gait Speed, and the Timed Up and Go Test, healthcare utilization. Assessments were conducted at discharge, following the intervention, and 6-months post stroke.	The mean number of nurse visits was 4.8 and the mean number of telephone contacts was 7.4. 60% of the patients had suffered moderately disabling strokes. Patients were discharged home an average of 12 days following admission. There were no significant differences between groups on any of the primary or secondary outcomes at any of the assessment points. From the 6-week to 6-month follow-up, patients in case management group had attended fewer mean specialist outpatient visits (2.2 vs. 3.4, p<0.01). Lost to Follow-up: Intervention group=15 (16%); Control group=18 (19%).
Torp et al. 2006 Denmark RCT	CA: <input checked="" type="checkbox"/> Blinding: Patient <input checked="" type="checkbox"/> Therapist <input checked="" type="checkbox"/> Assessor <input checked="" type="checkbox"/> ITT: <input checked="" type="checkbox"/>	189 patients admitted acutely to hospital following a stroke, with functional impairments that required a hospital stay of >1 week beyond their acute stay	Patients were randomized to a control group that received standard treatment (n=188) or an intervention group (n=185) who received additional care from a multidisciplinary team through home visits following discharge for up to 30 days and whose home-based care with local home	Primary outcome: LOS Secondary outcomes: Barthel Index (BI), Frenchay Activities Index (FAI), MMSE, Geriatric Depression Scale, SF-36 Assessments were conducted at baseline, discharge, 6 months and 1 year.	There was no significant difference between groups in mean LOS (35.2 days, intervention vs. 39.8 days, control). There were no significant differences between groups in readmissions, GP visits, outpatient visits, or contacts with primary healthcare providers. There were no differences between groups in any of the secondary outcomes at either 6 months, or 1 year. Therapists spent an average of 6.5 hours on home visits and 3.3 hours on transportation per patient.

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
			care services was also coordinated by one of the team members.		At 12 months 89 patients remained in the intervention group and 87 in the control group.
<p>Grasel et al. 2005</p> <p>Grasel et al. 2006 (long-term follow-up)</p> <p>Germany</p> <p>Controlled Study</p>	<p>CA: <input checked="" type="checkbox"/></p> <p>Blinding: Patient <input checked="" type="checkbox"/></p> <p>Assessor <input checked="" type="checkbox"/></p> <p>ITT: <input checked="" type="checkbox"/></p>	71 patients who had suffered an ischemic or hemorrhagic stroke and required rehabilitation following the acute admission and their carers	<p>Patients were assigned to a standard transition group (control) or an intensified transition group. Patients (and carers) in this group participated in a single psycho-educational seminar (education related to caregiving and resource availability), 3 sessions (45-60 minutes each) dedicated to skills training for the carer, and a weekend leave of absence which was supervised by an outpatient care service provider. A 3-month telephone counselling session was also provided.</p>	<p>Patient outcomes: Barthel Index (BI), FIM, Frenchay Arm Test, Ashworth Scale, SF-36, Timed Up & Go (TUG), evidence of paresis (upper and lower), gait disturbance (none, mild, major)</p> <p>Carer outcomes: Giessen Symptom List (GSL-24), Zerssen Depression Scale, Burden Scale for Family Caregivers</p> <p>Assessments were conducted at baseline (discharge), and 6 months</p> <p>Follow-up study outcomes: Family carers were contacted by telephone an average of 31 months following inclusion of the first patient in the study to enquire whether the patient was still alive, and if so if they were still residing at home, or in a nursing home</p>	<p>At 6 months there were no significant differences (in change scores) between groups for any of the patient outcomes, expect that more patients in the intervention group could complete the TUG (94% vs. 76%, p=0.04).</p> <p>At 6 months there were no significant differences (in change scores) between groups for any of the carer outcomes.</p> <p>4 weeks after discharge, patients in the intervention group had developed significantly fewer new illness (6% vs. 24%, p=0.044). By 6 months, there were no longer significant differences between groups (15% vs. 21%).</p> <p>Readmission rates and deterioration in general health were similar between groups at 4 weeks (9% vs. 7%) and 6 months (28% in both groups).</p> <p>31-month follow-up:</p> <p>Significantly more patients in the intervention group were alive and living at home (83% vs. 54%) and fewer patients were living in nursing homes (6% vs. 14%).</p> <p>Participation in the intervention group was an independent predictor of remaining at home.</p>
Sulch et al. 2000, 2002a),	<p>CA: <input checked="" type="checkbox"/></p> <p>Blinding: <input type="checkbox"/></p>	152 patients with persistent deficits	Participants were randomized to the	Primary outcome: LOS	72-76% of patients were continent, able to dress independently and were mobile, prior to stroke.

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
2002b) UK RCT	Patient <input checked="" type="checkbox"/> Assessor <input checked="" type="checkbox"/> ITT: <input checked="" type="checkbox"/>	requiring inpatient rehabilitation, who had experienced a stroke within the previous 2 weeks.	<p>Integrated Care Pathway group (ICP; n=76) or the conventional care group (n=76).</p> <p>The ICP intervention was developed by members of the multidisciplinary team using an evidenced-based approach to identify therapeutic activities associated with best practices, key short-term goals and the time needed to achieve them.</p> <p>The progress of patients in the conventional care group was reviewed in weekly meetings, where short-term goals were set based on progress made to date (i.e. not defined in advance).</p>	<p>Secondary outcomes: Mortality, institutionalization, Length of stay, Barthel Index (BI), Hospital Depression and Anxiety Scale (HADS), Rankin, and EuroQol Quality of Life Scale.</p> <p>Assessments were conducted at baseline, 1, 4, 12, and 26 weeks (not all measures were assessed at the 1- and 4-week follow-up).</p> <p>2002a) outcomes: Proportion of patients receiving recommended interventions</p> <p>2002b) outcomes: EuroQol, caregiver strain, patient and carer satisfaction, all assessed at 6 months</p>	<p>There was no significant difference in mean LOS between groups (50 vs. 45 days, p=ns).</p> <p>There were no significant differences between groups in 6-month mortality (13% vs. 8%) or institutionalization (13% vs. 21)</p> <p>Median BI, Rankin scores and HADS scores were similar between groups at all assessment points.</p> <p>Patients in both groups received similar amounts of occupational and physical therapy.</p> <p>2002a) A higher number of caregivers in the conventional care group had their needs assessed separately and their need for skills training assessed (65% vs. 44%, p=0.021). Patient's GPs were notified within 24 hours of discharge more often in the ICP group (80% vs. 45%, p<0.001). Follow-up arrangements were made more often among patients in the ICP group (89% vs. 70%, p=0.024).</p> <p>2002b): Data for 82% (ICP) and 78% (conventional care) were available.</p> <p>Median total EuroQol scores were significantly higher in the conventional care group (72 vs. 63, p<0.005). Patients in the conventional group scored significantly higher on the social functioning domain, while those in the ICP group scored significantly higher on the self-care domain. There were no significant differences between groups on the 3 remaining domains.</p> <p>There were no significant differences between groups in caregiver or patient satisfaction with care. Median caregiver strain index score was non-significantly higher in the ICP group (5.9 vs. 4.6, p=0.054).</p>

Enhancing the Family-centered Nature of Continuity of Care Interventions Through Transitional Care & Planning

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
<p>Kokorelias et al. 2019</p> <p>Canada</p> <p>Scoping review</p>		<p>55 articles that explored the development, implementation or evaluation of models of family centered care, regardless of patient population or healthcare field.</p>	<p>Data synthesis</p>	<p>Primary outcome: Not applicable</p>	<p>40 of the articles focused on the pediatric population. The most common conditions included cancer, HIV/AIDS, motor dysfunction and obesity.</p> <p>Care models crossed settings from acute care to the community and involved a variety of health professionals.</p> <p>All models supported the development of family-centered care plans with specific short and long-term outcomes.</p> <p>Overarching themes related to care plan development and implementation included the key involvement of patients, families and healthcare providers, who contribute to the clarification and the implementation of the care plan with clarification of the goals.</p> <p>Key components of models to facilitate family-centered care include collaboration between family members and health care providers, communication, among patients, family and healthcare providers, education, supporting families, consideration of the family context recognizing those that provide care as well as those who do not, identifying and enhancing family member strengths, recognizing cultural values, and implementing dedicated policies and procedures to support the family.</p>

Transitions of Care for Stroke Patients: Opportunities to Improve Outcomes

Study/Type	
<p>Broderick & Abir 2015</p> <p>USA</p> <p>Policy Commentary</p>	<p>Transition From Place of Stroke Onset to Acute Hospital There are unique challenges when triaging a patient with a potential stroke after EMS arrival.</p> <p>The importance of identifying patients with severe stroke so they can be transported directly to a comprehensive stroke center is highlighted.</p> <p>The limitations of using stroke severity scales are discussed.</p> <p>The use of ambulances equipped with brain imaging and assessment by a stroke physician in person or by telemedicine may improve the triage process.</p> <p>The need for regional approaches to triage may be preferable.</p> <p>Transitions From Acute Care Hospital to Other Medical Care Facilities and Home The importance of full assessment prior to transfer to the next level of care is determined by functional impairment, medical comorbidities and medical insurance coverage.</p> <p>Coordination of care is usually the responsibility of the primary care physician, who may not receive all necessary information from other providers.</p> <p>There is great variability in the United States in post transitional care, as demonstrated by the results of several surveys of participating hospitals. Some institutions have a stroke transitions of care program, while others do not. Of those facilities that do, they vary in their content, and care components.</p> <p>Patients may have difficulty accessing follow-up care due to stroke-related impairments. The difficulties are greater for indigent patients. The use of telemedicine may help to fill the gap.</p> <p>Call to Action and Opportunity to Improve Outcomes After Stroke One in 8 readmissions to hospital post stroke may be preventable.</p>

Interprofessional Communication or Collaboration

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
<p>Bouton et al. 2023</p> <p>France</p> <p>Systematic review</p>	NA	<p>65 studies evaluating 61 interventions conducted in the primary care setting, involving primary care providers and patients with chronic disease (cardiovascular risk, n=28; elderly</p>	<p>The effects of interprofessional collaboration (IPC) on patient health outcomes were evaluated and the results summarized descriptively.</p> <p>The most common interventions were</p>	<p>Primary outcome: Patient outcome (positive)</p>	<p>In 28 studies, IPC involved a general practitioner (GP) + 1 other healthcare provider (pharmacist, nurse, assistant, or psychologist). In 41 studies IPC involved a GP +≥2 other healthcare providers (as above + dietician social worker, medical specialist, physiotherapist, podiatrist or occupational therapist).</p> <p>Positive outcomes were reported for: 23/28 studies examining cardiovascular risk; 8/18 studies of elderly or poly pathological patients; and 11/12 studies of patients</p>

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
		and/or poly pathological patients, n=18; and patients with symptoms of mental or physical distress, n=12).	associated with diabetes and hypertension (cardiovascular risk); collaborative care, nursing assessment and multidisciplinary care (elderly or multimorbidity) and collaborative, or multidisciplinary care (mental/physical distress) Duration of the interventions was typically 12-24 months.		with mental or physical disorders.
Gleeson et al. 2023 Ireland Systematic review	The 21-item Critical Appraisal Skills Programme checklist for qualitative research (CASP), was used.	18 qualitative studies examining interprofessional communication in a hospital setting. Study participants included doctors, nurses, surgeons, pharmacists, other allied healthcare professionals and non-clinical healthcare staff	Thematic analysis was used to synthesize the evidence regarding healthcare providers' perceptions of interprofessional communication in the hospital setting. Data collection methods included interviews, focus groups, and a mixed methods survey	Primary outcome: Barriers to, and facilitators of, communication	<i>Facilitators to communication</i> Having a mutually positive and respectful relationship between colleagues Comprehending the particular skills and role of that person. Trusting in the knowledge and skills possessed by a member of another profession. Having a good pre-existing personal relationship Being approachable, respectful and level-headed during stressful situations Mutual respect <i>Barriers to communication</i> A negative or stressful healthcare environment Stressful situations with time limitations A hierarchal environment, where some professions felt it was not their place to speak up, particularly with senior staff/MDs.

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
					Insufficient understanding of a colleague's role. This barrier was identified for those who were perceived to be at the top of the hierarchy.
Kattel et al. 2020 USA Systematic review	NA	19 studies describing hospital discharge (D/C) communication between hospital-based providers and primary care physicians (PCPs), or studies describing interventions to improve communication at hospital-discharge between hospitals and PCPs.	Data are presented descriptively.	Primary outcomes: Timeliness of completion, availability, contents of discharge summaries, and the effectiveness of interventions aimed at improving timeliness, availability, content, or readability	<i>Timeliness and content of D/C summaries</i> A median of 55.1% of hospital D/C communications were transferred to the PCP within 48 hours, while a median of 67.4% of hospital physicians had completed D/C summaries within 48 hours. 8.5% of discharge summaries never reached the PCP. Information that was absent from discharge summaries included diagnostic test results (61%), pending tests at discharge (25%), and follow-up plans (41%). PCP received notification of D/C in 23% of cases. <i>Interventions to improve delivery of hospital D/C summaries to PCP</i> Email use was associated with faster delivery of D/C summaries to PCP. Electronic D/C summaries and quality improvement initiatives were effective methods to ensure summaries were completed in a timely manner. <i>Interventions to improve the quality of the D/C summary</i> Quality improvement initiatives helped to improve the quality of D/C summaries. <i>Interventions to improve discharge readiness and communication with PCPs</i> The use of D/C software resulted in improved patient perception of discharge preparedness in one trial. Audit-feedback and financial incentives resulted in improved documentation of communication with PCPs in one trial.
Mitchell 2015 USA	NA	Data were collected from 3,248 hospitals	The association between MD/nurse communication with the	Primary outcome: 30-day medical readmissions	A mean of 84% of patients reported receiving discharge instructions. Hospitals that had smaller bed numbers, were non-profit and located in non-urban areas were

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
Controlled study			patient regarding discharge instructions and readmission was explored		<p>more likely to provide discharge instructions.</p> <p>Patients reported that, on average, nurses and doctors communicated well with them 78% and 82% of the time.</p> <p>Controlling for other factors, increasing frequency of communication surrounding discharge instructions was associated with significantly lower number of hospital admissions (-5.5).</p>
Kripalani et al. 2007 USA Systematic Review	NA	73 studies examining communication deficits between hospitals and primary care providers (n=55) and interventions to improve communication during this transition (n=18, 3 RCTs)	<p>Narrative synthesis</p> <p>Interventions varied across studies. The most common were hand delivery of D/C letter by patient to GP vs. mailed delivery (n=2); Database or computer-generated D/C summary vs. dictated D/C summary (n=7); standardized format for D/C summary vs. narrative D/C summary (n=2)</p>	<p>Studies examining communication deficits: Timeliness and type of information missing from a discharge letter or summary arriving to a primary care physician for a patient discharged from hospital.</p> <p>Intervention studies to improve communication: Not stated <i>a priori</i></p>	<p>Timeliness of discharge letter or summary: A median of 53% of discharge letters (range 30%-94%) were received by the primary care physician from hospital within 1 week; 14.5% (range 9% to 20%) of discharge summaries were received within 1 week. Median of 82% (range 77% to 85%) of discharge letters were available in the hospital medical record; 85% (range 82% to 93%) of discharge summaries.</p> <p>Prevalence of Missing Information:</p> <p>Main Diagnoses: A median of 13% (range 2% to 31%) of discharge letters; 17.5% (range 10% to 39%) of discharge summaries were missing main diagnoses.</p> <p>In Hospital Treatment Details: A median of 29.5% (range 22% to 45%) of discharge letters; 14.5% (range 7% to 22%) of discharge summaries were missing treatment details.</p> <p>Medications at Discharge: A median of 25% (range 7% to 48%) of discharge letters; 21% (range 2% to 40%) of discharge summaries were missing medication details.</p> <p>Plans for Follow-up: A median of 30% (range 23% to 48%) of discharge letters; 14 (range 2% to 43%) of discharge summaries were missing details of a follow-up plan.</p> <p>Patient or family counseling: A median of 92% (range 92% to 97%) of discharge letters; 91% (range 90% to 92%) of discharge summaries were missing notes on any patient or family counseling.</p>

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
					<p>Statistically significant results reported in Intervention Studies:</p> <p>i) RCTs: A higher percentage of D/C summaries that were hand delivered were received by week 4 following discharge (80% vs. 57%, $p<0.001$). GPs that received D/C plans from institutions with enhanced D/C planning group had a better understanding of hospital management (96% vs. 62%, $p=0.005$) and a higher percentage of the GPs rated the quality of the D/C summaries as good or extremely good (96% vs. 48%, $p<0.001$).</p> <p>ii) Non RCTs with concurrent controls: D/C summaries that were hand-delivered were received by the GP sooner (median 2.5 vs. 7.5 days, $p<0.001$) and a higher percentage of computer-generated D/C summaries were easier to read and perceived to be of higher quality.</p> <p>iii) Non RCTs with pre-post designs: The overall quality of the D/C summaries was perceived to be higher and the summaries were longer when computer generated, using a standard template, and were received by the GP sooner.</p>
<p>Halasyamani et al. 2006 USA Checklist development</p>	NA	NA	<p>A discharge checklist designed to identify the critical components in the process when discharging elderly patients from hospital was developed by a Hospital Quality & Safety committee.</p> <p>The process included a literature review, development of a draft checklist by an expert committee, peer review and ratification of final</p>	NA	<p>32 studies were identified that were specific to discharge elements, including adverse events and the use of standardized tools to assemble pertinent information at the time of discharge. Most of the studies were related to medication-associated adverse events.</p> <p>The final checklist includes 3 types of discharge documents: the discharge summary, patient instruction and communication on the day of discharge to the receiving care provider.</p> <p>Data elements included on the final checklist were:</p> <p>Problem that precipitated hospitalization, key findings and test results, final primary and secondary diagnoses, condition at discharge (functional and cognitive), discharge destination, discharge medications, follow-up</p>

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
			checklist		appointments, list of pending lab results and person to whom results will be sent, recommendations of sub-specialty consultants, documentation of patient education and understanding, identification of atypical problems and suggested interventions, 24/7 call-back number, identification of referring and receiving providers, resuscitation status.

Multidisciplinary Meetings

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
Tyson et al. 2014 UK Qualitative study	NA	18 multidisciplinary rehabilitation staff members including one psychologist, one social worker; 4 nurses; 4 physiotherapists 4 occupational therapists, 2 speech-language therapists, one stroke coordinator and one stroke ward manager.	12 multi-disciplinary team meetings were observed by one of the study authors and staff members of 8 in-patient stroke rehabilitation units, were interviewed. Thematic content analysis was used to summarize the results.	Primary outcomes: Not applicable	4 elements of effective meetings were identified. and included 1) the overall context in which the meeting operated; 2) inputs (personal attributes of the staff, and format and structure of the meetings); 3) the processes which mediated the inputs (team climate and leadership/chairing); and 4) desired outputs; in terms of clinical decisions and the attributes of successful meetings identified by staff members. 1) Context. This element involved the frequency of the multidisciplinary meeting (e.g, weekly), composition of the team (e.g, not all teams had a full complement of disciplines represented), and the appropriateness of the venue, which could be a barrier to an effective meeting (e.g, meeting rooms with inadequate space). 2) Inputs. Components that contributed to an effective meeting included the degree of staff engagement, staff preparedness, and staff familiarity with the patient being discussed. 3) Process. A standardized meeting process including the use of standardized assessment tools (e.g., Barthel Index), in which all team members stayed on topic were highlighted as important features of an effective meeting. An effective team leader helped guide

Study/Type	Quality Rating	Sample Description	Method	Outcomes	Key Findings and Recommendations
					<p>discussions efficiently.</p> <p>4) Outputs. The main outputs identified by staff were plans to guide the patients' treatment and discharge, which was achieved through a clear structure, punctuality, efficient running, clear decision-making, and relevant discussion. Some limitations were also discussed, as the balance between meetings vs. patient care was highlighted. Meetings lasted an average of 66 minutes, which was insufficient to cover all patients in some cases. Between 9 and 28 patients were reviewed.</p> <p>Successful meetings tended to feature a set agenda, structured documentation; formal use of measurement tools; pre-meeting preparation and skilled chairing. These features were often absent in meetings perceived to be ineffective.</p>

Abbreviations

CA: concealed allocation	CI: confidence interval	HR: hazard ratio
ITT: intention-to-treat	LOS: length of stay	MD: mean difference
NA: not assessed/not applicable	NIHSS: National Institutes of Stroke Scale	OR: odds ratio
RCT: randomized controlled trial	RR: relative risk	SF-36: Short Form Health Survey
SMD: standardized mean difference		

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