

Requirements for Effective Hospital-to-Home Transitional Care in Low- and Middle-Income Settings: Insights from Iranian Stakeholders

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Abstract

Introduction: Hospital-to-home transitional care can reduce readmissions and improve patient outcomes, but implementation barriers differ across health systems. Understanding system-level requirements in low- and middle-income countries contexts is essential to inform feasible policy and implementation strategies. This qualitative study aimed to identify system-level requirements for effective hospital-to-home transitional care from the perspectives of key healthcare stakeholders in Iran, as an example of a low- and middle-income health system.

Methods: This qualitative study employed conventional qualitative content analysis, following Graneheim and Lundman, and explicitly applied Braun and Clarke's six-phase framework for content analysis to guide coding and theme development. A diverse group of stakeholders, including healthcare managers, physicians, nurses, and health policy officials, was selected using purposive sampling. The data were collected through 15 semi-structured interviews and were subjected to a detailed analysis.

Results: Four key themes were identified in the analysis: process, infrastructure, motivational, and regulatory requirements, encompassing 14 subthemes. Key subthemes included the need for integrated care models, robust health information systems, broader insurance coverage, and effective regulatory mechanisms.

Conclusion: The findings show that a multidimensional approach is necessary to be applied in effective hospital-to-home transitional care in Iran, including holistic policymaking, development of infrastructure, specialized human resources, and intersectoral coordination. These insights can inform future health policy and implementation strategies in similar low- and middle-income countries settings.

Keywords: Transitional care, Hospital to home transition, Patient discharge, Home care services, Iran

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Introduction

Transitional care refers to the transition of patient care from one level to another, which can include medical centers, home, or any other place for continuity of service (1). This includes a complex process of evaluating the patient from the beginning of admission to the hospital, providing education to the patient and family, follow-up after discharge, and eventually reassessing outcomes (2). In many health systems worldwide, transitional care has turned into a key strategy to bring public benefit, raise service quality, and reduce costs (3). Proper implementation can enhance patients' and families' quality of life and improve patient safety (3-5). Nevertheless, modern health systems, with changing family dynamics, population aging, and an increasing prevalence

of chronic diseases along with rapid social, economic, and technological changes, are confronting growing challenges (6, 7). Therefore, hospitals must focus on maintaining care quality and continuity beyond discharge (8).

As hospitalization durations become shorter to optimize limited resources, patients are often discharged once critical treatment stages are complete, allowing those with urgent medical needs earlier access to services (9). Consequently, hospital readmission has become an important indicator of care quality (10). Although national data on hospital readmission rates are not precisely available in Iran, current estimates suggest a range of 20–40%. Readmissions are not only common, but they're expensive and sometimes even a dangerous event associated with gaps in care transfer and



discharge planning (11). Prospective studies have shown that 12% to 75% of these re-admission rates can actually be avoided, just by offering solid patient education, making pre-discharge preparations, and delivering proper care at home (12). In many countries, structured transitional care programs have been developed to address these issues. These programs help patients with complex chronic conditions—often the most vulnerable—to move from one level of care to another or from one type of care to another in a timely and safe manner (13, 14). The studies have identified the failure to implement effective care transitions as the main challenge in improving the quality of care (15, 16).

The ineffective enactment of transitional care and the resulting increase in hospital readmissions are attributed to multiple interrelated factors, including discharge-readiness assessment, fragmented discharge planning, poor communication and information exchange between hospital-based and community healthcare providers, and insufficient post-discharge care and follow-up, or a combination of these issues (17-19). Many factors play a role in the successful care transitions, and these may vary across different healthcare settings. Commonly reported factors include coordination between various levels of care and interdisciplinary teams (i.e., a connection between inpatient and outpatient services), as well as health literacy and sufficient education provided to patients and their caregivers (11, 20).

Given that one of the key health policies of the Ministry of Health and Medical Education in Iran is the national hospital accreditation initiative—particularly its emphasis on continuity of care, follow-up, and sustained patient treatment—the issue of care transition has gained increasing importance. The transition of care is intrinsically connected to several core components of clinical governance, especially patient safety and clinical effectiveness (11, 21). Despite its importance, this concept has a rather short history in Iran (22, 23). Existing Iranian studies have mainly focused on particular aspects of discharge and transfer—for example, discharge planning, intra-hospital transfer of critically ill patients, and the informational needs of families—rather than on comprehensive hospital-to-home transitional care programs (11, 21, 23-25). At the international level, empirical work on transitional care and hospital-at-home models has been conducted predominantly in high-income countries, where health-system structures, financing arrangements, and community-based services differ from those in many low- and middle-income settings (6, 9, 26-29). Taken together, these findings suggest that system-level requirements for effective hospital-to-home care in low- and middle-income contexts, including Iran, remain under-explored and warrant further investigation (11, 24, 25). Given the context-dependent and complex nature of hospital-to-home transitions and the limited empirical evidence in Iran and similar LMIC settings, an inductive qualitative approach was required to capture diverse stakeholder perspectives and generate system-level requirements grounded in real-world practice.

Conventional qualitative content analysis is particularly appropriate in under-researched areas because it enables categories and themes to be derived directly from textual data systematically and transparently, rather than imposing predefined frameworks. In this context, the present study employed a qualitative content-analysis design to explore system-level requirements for effective hospital-to-home care transitions in Iran, as a representative low- and middle-income country (LMIC) health system in which empirical evidence on transitional care is still scarce.

Methods

This qualitative study, grounded in an interpretivist paradigm, was conducted to identify the key requirements for the effective implementation of hospital-to-home transitional care in Iran. In this study, conventional qualitative content analysis was performed using Graneheim and Lundman's approach, explicitly applying Braun and Clarke's six-phase framework for content analysis (familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report) to structure the coding and theme-development process.

Development of the Data Collection Instrument

The interview questions were designed by a consultative team of six professionals in the field of post-discharge care, health management, nursing, and hospital services. Their opinions were used to develop a preliminary version of the interview guide. In the next step, the content validity of the guide was reviewed and refined by three additional experts with academic and clinical experience in transitional care.

To ensure that data reflected participants' lived professional experiences and practice-based accounts rather than purely abstract or general statements, the interviewer consistently used experience-oriented prompts and probes (e.g., "Can you describe a specific recent case?" "What happened next?" "Can you give an example?").

Participants and Sampling Strategy

In this research, purposive maximum-variation sampling was used to select participants with diverse roles, levels of decision-making, and organizational affiliations. The sample was composed of senior officials from the Vice-Chancellor for Clinical Affairs at the Ministry of Health, as well as managers of clinical affairs in medical university settings nationwide, hospital administrators, clinical experts within the broader health system, and personnel from home care service providers. Sampling continued until the theoretical saturation was achieved.

Inclusion criteria for experts included

- A minimum of three or more years of experience in the field of planning, implementing, or supervising the processes of hospital discharge or transitional care processes
- Managerial experience in the Ministry of Health, hospitals, or university-affiliated clinical departments

- Previous research involvement or professional engagement in the field of post-discharge care
- Experts who were unwilling to participate were excluded from the study.

Data Collection Procedure

All the participants provided written informed consent before the interviews and were informed about the voluntary nature of participation, their right to withdraw at any time, and the confidentiality and anonymization of their data. The study protocol was reviewed and approved by the Ethics Committee of blinded for review (Approval ID: blinded for review). All interviews were conducted by the first author, a researcher trained in qualitative health services research. Depending on the participants' availability and preference, interviews were conducted face-to-face in quiet, private meeting rooms at the Ministry of Health, university hospitals, and home care centers, or by telephone with participants affiliated with universities of medical sciences in five major academic cities in Iran (Tehran, Tabriz, Shiraz, Isfahan, and Mashhad). Each interview lasted between 40 and 60 minutes. All the interviews were audio-recorded with the permission of participants and afterward transcribed the same verbatim. Audio recordings and transcripts were stored on password-protected computers and were accessible only to the research team. Data collection and analysis proceeded concurrently. After approximately 13 interviews, no new substantive codes or subthemes emerged; two further interviews (n = 15 in total) were conducted to confirm that theoretical saturation had been reached.

Interview Guide Sample Questions

The semi-structured interview guide started with broad, open-ended questions and used follow-up probes to elicit participants' concrete examples and practice-based experiences. The opening questions included:

1. Based on your direct experience with hospital discharge and post-discharge follow-up, what prerequisites and requirements have you observed as critical for effective hospital-to-home transitional care? Please describe one recent example (successful or problematic).
2. In that experience/example, what specific infrastructure needs or gaps (physical, human, information, insurance/financing) affected continuity of care, and how? Please provide concrete examples.
3. Drawing on your lived professional experience, how are the roles of the Ministry of Health, the care team, and the patient/family actually enacted in practice, and where do coordination breakdowns typically occur? Please recall a specific case.

Data Analysis

All the interviews were transcribed verbatim and repeatedly reviewed by the research team to ensure that the research team was well-familiar with the content. To verify the accuracy of interpretation, a summary of each interview was returned to the respective participant to check on

accuracy (member checking).

Data were analyzed using conventional qualitative content analysis, drawing on the six-phase approach described by Braun and Clarke for familiarization, coding, and theme development. This inductive approach was considered appropriate because it allows categories and themes to be developed directly from participants' accounts in an under-researched area, such as system-level requirements for hospital-to-home care in Iran. First, the researchers read and re-read all transcripts to gain an overall understanding of the data. Second, meaning units related to the research question were identified, condensed, and labeled with inductive open codes. Third, similar codes were grouped into subcategories and broader categories (subthemes and themes). Fourth, the preliminary themes were reviewed and refined to ensure internal coherence and distinction from one another. Fifth, the themes were clearly defined and named. Finally, an analytical narrative was produced, supported by illustrative quotations. MAXQDA (version 12) was used to organize the data and manage the coding process. The first transcript was coded by two researchers independently, who reached consensus through comparison and discussion. The first researcher then coded the remaining transcripts, which were fully reviewed by the second researcher; any discrepancies were discussed and resolved collaboratively. Throughout the analysis, the researchers kept reflexive memos to bracket their professional assumptions about transitional care and to enhance confirmability.

Trustworthiness and Rigor

To ensure trustworthiness, in line with Guba and Lincoln's criteria of credibility, dependability, confirmability, and transferability, the following strategies were applied:

- **Member Checking:** To ensure alignment between the meanings intended by participants and the researchers' interpretations, a summary of the main points of each interview was returned to the participants to check and verify the accuracy of the researchers' interpretations.
- **Peer Review:** The three external qualitative researchers who were not members of the research team reviewed the coding schemes and the thematic structures to confirm their accuracy and the relevance of the findings.
- **Audit Trail:** To keep the process transparent and methodologically accountable, a detailed documentation of the whole analytical procedure, from raw codes to the development of the final theme creation, was provided.
- **Maximum Variation Sampling:** Participants were purposefully selected to ensure maximum diversity in terms of expertise, professional experience, organizational roles, and institutional affiliation, enhancing the transferability of the findings.
- **Reflexivity:** The primary researchers maintained reflective journals to document their assumptions, pre-understandings, and methodological decisions throughout the research process, thereby enhancing

confirmability.

Results

To explore the challenges and requirements of hospital-to-home care transition, 15 semi-structured interviews were performed. The participants consisted of 8 male and 7 female participants, with a mean age of 42.93 ± 6.01 years and an average work experience of 17.66 ± 7.17 years. Also, participants included 2 university faculty members, 4 senior officials from the Ministry of Health, 2 from the vice-chancellor's office for clinical Affairs in the medical university, 4 in a public hospital, which included both clinical and administrative personnel, and 3 clinical and administrative personnel from a home care center. Detailed characteristics of the participants are presented in Table 1.

The findings, after transcription and thematic content analysis, were categorized into 4 major domains and 14 categories. According to the findings presented in Table 2, the requirements associated with hospital-to-home care transition are themed into Process requirements, Infrastructure, Motivational, and regulatory dimensions. A full, detailed description of these findings is presented in Table 2.

Theme I – Process Requirements

Need for a comprehensive and integrated approach design

The transitional care process should accommodate the full spectrum of patients' health needs, including physical and psychological conditions as well as socioeconomic circumstances.

"The care plan should encompass all dimensions of the patient, not just focus on one aspect like nutrition. It must be designed in a way that allows the patient to receive essential services without needing to leave home. Nutrition, mental health, treatment, physiotherapy, safety, insurance, and administrative support should all be integrated into the system." (P7)

Necessity for team-based, integrated, and coordinated care models

The process of transitional care is a complex process that requires good coordination among physicians, nurses, social workers, home caregivers, and other healthcare professionals.

"We have to implement a team-based and integrated approach to be able to make that care transition successfully. This implies that all the members of the care team, including physicians, nurses, social workers, and home-based caregivers, must be coordinated and their responsibilities defined." (P5)

Implementation of the case method care approach

The case-method approach enables patients to benefit from a single designated professional who oversees the entire continuum of care. This fosters greater trust, ensures consistent follow-up, and promotes effective responsiveness to patients' needs.

"The case-method approach is highly important and effective, as it allows a designated individual to monitor the patient's condition throughout the entire care process. This will make sure that the needs of all patients are met coherently and continuously." (P12)

Need to integrate face-to-face and telemedicine approaches

According to the opinions of many experts, it is necessary to include modern technologies in the transitional care process. Communication technologies enable remote patient monitoring, continuous education, and prompt responsiveness throughout the post-discharge phase.

"In-person care is also essential when physical examination or procedures need to be done. Nonetheless, the use of telemedicine to handle routine follow-ups, educate patients, and respond to questions is highly effective. Such a hybrid approach reduces workload for clinical personnel and improves patient accessibility,

Table 1. Demographic and Professional Characteristics of Study Participants

ID	Gender	Age (years)	Role/Position	Experience (years)	Education Level	Affiliation/Residence
P1	Female	40	Head Nurse	18	Master's	Public Hospital
P2	Male	37	Specialist Physician	10	Doctorate	Public Hospital
P3	Female	47	Senior Nursing Administrator	24	Ph. D.	Vice-Chancellor for Clinical Affairs
P4	Male	38	Home Care Center Director	8	Medical Specialty	Home Care Center
P5	Female	38	Faculty Member	12	Ph. D.	University of Medical Sciences
P6	Male	49	Manager	25	Ph. D.	Ministry of Health
P7	Male	48	Specialist Physician	22	Medical Specialty	Ministry of Health
P8	Female	36	Nurse	9	Bachelor's	Home Care Center
P9	Male	39	Physician	14	Doctorate	Home Care Center
P10	Female	33	Faculty Member	7	Ph. D.	University of Medical Sciences
P11	Male	46	Manager	20	Ph. D.	Ministry of Health
P12	Male	52	Coordinator	28	Ph. D.	Ministry of Health
P13	Male	47	Hospital Director	22	Doctorate	Public Hospital
P14	Female	51	Director of Hospital Management and Clinical Service Excellence	27	Ph. D.	Vice-Chancellor for Clinical Affairs
P15	Female	43	Nurse	19	Bachelor's	Public Hospital

Table 2. Identified themes and Subthemes

Main theme	Subtheme	Illustrative open codes
Process Requirements	Need for comprehensive and integrated approach design	"Care plan covers all patient dimensions (physical, psychological, socioeconomic)"; "Integration of nutrition, mental health, treatment, physiotherapy, safety, insurance, administrative support"; "Providing essential services at home without needing to leave home"
	Necessity for team-based, integrated, and coordinated care models	"Coordination among physicians, nurses, social workers, home caregivers"; "Defined responsibilities within the care team"; "Integrated teamwork to ensure successful transition"
	Implementation of case method care approach	"One designated person monitors the patient throughout the continuum"; "Single point of oversight ensures coherent follow-up"; "Continuous monitoring to meet needs consistently"
	Need to integrate face-to-face and telemedicine approaches	"Hybrid follow-up: in-person when procedures/exam are needed"; "Telemedicine for routine follow-ups, education, and Q&A"; "Telemedicine reduces staff workload and improves access for remote patients"
	Active involvement of patients and families in care planning and decision-making	"Explaining transition process improves acceptance/cooperation"; "Active participation of patient/family in decision-making"; "Aligning care plan with family's real needs and circumstances"
Infrastructure Requirements	Human resources with expertise and post-discharge care experience	"Need for trained/specialized professionals familiar with transitional care"; "Clinical+communication skills for needs identification"; "Prompt intervention based on patient needs"
	Establishment of dedicated post-discharge care units	"Hospital responsibility does not end at discharge"; "Dedicated unit to systematically follow patients after discharge"; "Evaluating needs, communicating with families, coordinating across departments"
	Development of harmonized and integrated health information infrastructure	"Information sharing among patients, specialists, and care units"; "Data exchange supports clinical decision-making"; "Reducing redundancy and improving continuity across the transition"; "Self-care apps to educate and engage patients/families"
	Need for portable care equipment	"Portable devices enable continuous home care (BP monitor, pulse oximeter)"; "Portable equipment reduces unnecessary facility visits"; "Home-based monitoring improves quality without frequent travel"
	Expansion of insurance coverage for post-discharge care	"Home care is costly; many patients cannot afford it"; "Patients forgo services due to financial limitations"; "Expanding insurance coverage reduces economic burden and improves access"
Motivational Requirements	Incentive mechanisms for healthcare facilities	"Hospitals need financial support/resources to implement transitional care"; "Recognition/reward within audit and accreditation systems"; "Special recognition for hospitals implementing transitional care programs"
	Incentive mechanisms for care transition staff	"Financial bonuses to motivate thorough follow-up"; "Career advancement opportunities"; "Appreciation of excellent performance to sustain motivation"
Regulatory Requirements	Strong monitoring systems to ensure quality and safety of post-discharge care	"Continuous supervision identifies and resolves problems faster"; "Monitoring system traces transition process and detects issues promptly"; "Oversight at hospital level and higher regulatory bodies for safety/quality assurance"
	Development of performance-based evaluation mechanisms	"Standard indicators for quality of post-discharge services"; "Performance-based evaluation preserves and improves care quality"; "Evaluation linked to incentives for hospitals and staff"

especially in distant locales or to those who cannot travel to health centers frequently." (P11)

Active involvement of patients and families in care planning and decision-making

No transitional care program can be really successful without the active engagement of patients and their families. Experts emphasize that patients and their caregivers must be involved in making decisions related to the care process to improve acceptance and collaboration.

"When the process of transitioning the patients and their families is explained to them, and they actively participate during the decision-making process, their acceptance and cooperation rates significantly improve. Such an engagement will assist in aligning the care plan to their real needs and circumstances and will reduce the possible problems during the transition of the care." (P9)

Theme II – Infrastructure Requirements

Human resources with expertise and post-discharge care experience

Lack of skilled and trained personnel is a critical issue in the process of care transition. Effective healthcare personnel who possess strong clinical and communication skills are essential in identifying the needs of a patient and providing prompt interventions.

"To maintain quality, trained and specialized professionals who are familiar with care transition processes are required. With clinical and communication skills, these professionals can suitably diagnose the needs of the patients and intervene promptly." (P1)

Establishment of dedicated post-discharge care units

Some specialists emphasize the need to establish dedicated units in hospitals responsible for coordinating and following up on patient transfers and maintaining continuous communication with them. This unit may be of crucial importance for assessing the quality of post-discharge care, identifying the needs patients have, and facilitating structured collaboration among various departments.

"Our responsibility should not end when the patient is being discharged. To better control the post-discharge care, we require a special department within the hospital that would effectively follow the patient care systematically, including the evaluation of the patient's needs, interaction with the families, and other departments." (P13)

Development of a harmonized and integrated health information infrastructure

An integrated information system, which allows the sharing of information among patients and different specialists and care units, and effective communication, is a vital need to

ensure the successful transition of care.

“Creating harmonized and integrated structures that exchange data, facilitate clinical decision-making, and minimize work redundancy will increase the quality of care significantly along the transition process.” (P14)

Additionally, self-care apps can provide patient and family education to enhance their interest and engagement in the implementation of the transitional care plan.

Need for portable care equipment

The availability of portable medical devices, including portable radiology units, blood pressure, and pulse oximeters, can potentially impact the process of transitioning care positively, reducing the necessity of unnecessary visits to health facilities.

“The availability of portable gadgets, including blood pressure monitors and pulse oximeters, among other compact medical gadgets, enables continuous and high-quality home care without the necessity of frequent visits to medical establishments.” (P8)

Expansion of insurance coverage for post-discharge care

Home care services can be very costly, and most patients cannot afford them. Thus, the provision of widespread insurance coverage and the funding of post-discharge services are the necessary conditions of successful care transitions.

“Many patients forgo post-discharge care services because of financial limitations. Reducing economic burden may be achieved by expanding the insurance coverage and facilitating access to home-based care.” (P4)

Theme III – Motivational Requirements

Incentive mechanisms for healthcare facilities

Effective transitional care requires well-designed incentive policies for healthcare facilities and the personnel involved. Creation of a dedicated care transition and follow-up of post-discharged patients requires financial and human resources. Hence, hospitals must be granted rewards or financial support from governing bodies in exchange for implementing such programs.

“Audit and accreditation authorities of hospitals should recognize the effectiveness of transitional care. There should be special recognition for those hospitals that use these programs.” (P6)

Incentive mechanisms for care transition staff

In addition to institutional rewards, frontline personnel involved in the care transition process need targeted motivational strategies to deliver high-quality care and ensure diligent follow-up with patients.

“The implementation of adequate incentive mechanisms, such as financial bonuses, career advancement opportunities, and appreciation of excellent performance, can motivate staff to provide better care and more thorough follow-up of patients after discharge.” (P2)

Theme III – Regulatory Requirements

Strong monitoring systems to ensure the quality and safety

of post-discharge care

The transitional care process requires continual monitoring and evaluation based on performance to ensure patient safety and quality of the services. Experts emphasize the necessity of an effective monitoring system that will be able to trace the care transition process and recognize problems promptly. Such supervision should be implemented both at the hospital level and by higher regulatory bodies to ensure comprehensive quality assurance and protection of patient safety.

“Continuous supervision enables the identification and solving of problems more quickly.” (P3)

Development of performance-based evaluation mechanisms

Quality assessment of post-discharge services should be based on the actual performance of care providers. Implementing standardized indicators of care quality, patient satisfaction, and effective care transition will be able to stimulate the improvement of services and provide an incentive to both hospitals and staff.

“The performance-based evaluation contributes to the preservation and improvement of the quality of care.” (P10)

Discussion

The findings of this study indicate that the effective implementation of hospital-to-home care transition in Iran depends on four interrelated domains: Process-related, infrastructural, motivational, and regulatory. Weaknesses in integrated, team-based care models—including limited use of telemedicine—together with gaps in insurance coverage, health information infrastructure, and skilled human resources, represent major barriers to effective hospital-to-home transitions. In addition, appropriate incentive mechanisms, regulatory frameworks, and performance evaluation systems are needed to sustain high-quality care. Overall, our findings are consistent with international literature emphasizing the importance of integrated, multidisciplinary transitional-care models, timely discharge planning, and strong family involvement (26-29). At the same time, this study extends previous work by providing a system-level perspective that organizes process-related, infrastructural, motivational, and regulatory requirements and highlights how these domains intersect in a low- and middle-income health system such as Iran, where constraints in digital infrastructure, insurance coverage, and workforce capacity create unique challenges for hospital-to-home care.

Participants described hospital-to-home transition as a complex and sensitive process requiring a comprehensive, multidisciplinary approach; similarly, prior studies also emphasize that discharge decisions should be based on holistic medical, functional, and psychosocial assessments rather than clinical stability alone (26, 30). Smith et al. (2022) reported that poor coordination and inadequate communication between hospital-based services, social care, and home care providers contribute to patient dissatisfaction, care inefficiencies, and increased readmission risk (26). Therefore, the establishment of integrated, team-based care with clearly

defined coordination roles across sectors is essential (27, 31). Evidence shows that well-managed multidisciplinary teams, supported by infrastructure investment and workforce training, can significantly improve the quality of care and mitigate safety risks—particularly for patients with complex and chronic conditions (32, 33). Participants further identified the case method care approach—where a dedicated care manager supervises the transition process—as an effective strategy, which is also supported by previous studies in complex transitional care settings (26).

Our findings indicate that sustained patient and family involvement is essential to successful hospital-to-home transitions. Evidence shows that adequately trained and empowered families experience greater discharge confidence (30), whereas limited involvement may increase anxiety, compromise care quality, and elevate rehospitalization risk (34). Ongoing family engagement, supported by effective communication with care teams, can also reduce caregiver burden and promote continuity of home-based care (35).

The availability of specialized, well-trained, and experienced human resources emerged as a key requirement for effective hospital-to-home transitional care. Consistent with the findings reported by Sørstrøm et al. (2025) and Patel and West (2021), the shortages of qualified personnel and increasing workload and burnout among transitional care staff represent major barriers to high-quality, continuous care (28, 35). Ellis and Taylor (2025) emphasized the need for continuous education and advanced skill development among home care nurses, noting that the high level of autonomy required in home-based decision-making necessitates ongoing professional training (36). On another note, Nysæter et al. (2022) found that personal attributes such as empathy and effective communication among care providers play a significant role in enhancing patients' sense of safety and satisfaction (37).

According to the opinions of participants in the present study, the establishment of dedicated post-discharge follow-up units within hospitals is a key organizational requirement. In parallel, integrated health information systems that enable data sharing across care levels, combined with hybrid in-person and telemedicine models, are critical to ensuring continuity and efficiency of care. Currently, existing evidence indicates that, while relatively functional communication chains exist among healthcare providers within hospital settings, these networks often break down once the patient transitions to home care or upon discharge (32). Meanwhile, recent technological achievements, especially in portable medical equipment, have created new opportunities to improve the quality of home-based care (28). However, inadequate digital infrastructure, especially in rural areas, continues to hinder the full utilization of these technologies (29).

Participants highlighted the financial burden of home-based care and insufficient insurance coverage as major barriers to equitable access and sustainable development of home care models. In this regard, Smith et al. (2022)

reported that the anxiety and confusion experienced by families were largely attributed to a lack of financial support (26). Moreover, several studies have identified the lack of well-defined repayment mechanisms from insurance companies as a major barrier to the development of home care models (28, 29, 38). For example, insurance coverage of Hospital-at-Home services in Australia has reduced hospital strain and supported broader adoption of home-based care models (38).

Without appropriate incentive and support mechanisms, healthcare professionals may lack sufficient motivation to implement coordinated and effective transitional care. Klein (2022) highlighted that without the structures of reimbursements or incentive plans provided by regulatory bodies or insurance companies, hospitals lack acceptable motivation to implement such programs (38). Other studies have echoed this concern, noting that under traditional fee-for-service models, there is little incentive to reduce hospital admissions or promote home-based care, as this would directly reduce hospital revenues. Consequently, innovative models such as hospital-at-home are only likely to be adopted when financial rewards, fair reimbursement policies, and structured incentive systems are designed for each patient transitioned to home care (28, 39). Beyond financial incentives, recognition, career advancement pathways, and involving staff (and acknowledging family caregivers' contributions) may strengthen commitment and sustain quality (34).

Our findings highlight the critical role of multi-level regulatory frameworks in ensuring the safety and quality of hospital-to-home transitions. Consistent with evidence reported by Patel and West (2021), inadequate monitoring systems may contribute to preventable post-discharge adverse events, including medication errors, infections, and falls (28). Similarly, Sørstrøm et al. (2025) emphasized that clinical instability, premature discharge, and insufficient pre-discharge assessment can undermine post-discharge care quality (35). To address these risks, Klein (2022) proposed that standardized performance monitoring and accreditation mechanisms can strengthen insurer confidence and facilitate the sustainable expansion of home-based care models (38).

This study contributes to the transitional care literature by presenting a system-level, stakeholder-informed framework that identifies four interrelated domains shaping hospital-to-home transitions in a low- and middle-income country. In contrast to evidence largely derived from high-income settings, it demonstrates how constraints in digital infrastructure, insurance coverage, and workforce capacity jointly influence the feasibility of transitional care in Iran.

These findings should be interpreted with consideration of certain contextual and methodological aspects. First, the qualitative design and reliance on system-level stakeholders may limit the transferability of findings to other contexts or to patient- and family-level experiences. In addition, the focus on a single national health system may constrain the generalizability of results to other low- and middle-income settings with different institutional arrangements.

Implications for policy, practice, and future research

The findings of this study have important implications for policy, practice, and future research. Policy-makers should prioritize the development of integrated hospital-to-home care pathways, invest in interoperable health information systems, expand insurance coverage for post-discharge services, and implement incentive and accreditation mechanisms that explicitly support effective transitional care. Future research should employ mixed-methods designs to evaluate the effectiveness and feasibility of interventions informed by this framework, undertake comparative studies across low- and middle-income countries, and incorporate patient- and family-centered qualitative perspectives to further refine context-specific and transferable transitional care models.

Conclusion

This study highlights that the successful implementation of hospital-to-home transitional care in Iran requires a multidimensional strategy that encompasses process optimization, infrastructure development, motivational support, and robust regulatory mechanisms. The findings indicate that the transition toward home-based care in Iran is not only feasible but has also become a strategic necessity due to current pressures on hospital capacity, an aging population, and the growing burden of chronic diseases. A review of international evidence demonstrates that countries with well-established legal frameworks and supportive infrastructures for home-based care have successfully reduced healthcare costs, enhanced patient satisfaction, and ensured care safety. Therefore, the safe, effective, and sustainable integration of transitional care models in Iran depends on developing and implementing context-specific, evidence-informed policies and cross-sectoral coordination. It should be noted that, as this research was conducted within a single national context and relied on qualitative interviews, the findings should be interpreted within these contextual boundaries. While the study provides valuable insights into system-level requirements, future research using mixed-method or comparative approaches across different LMICs is recommended to validate and expand these results.

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Competing Interests

The authors declare that there is no conflict of interest.

Ethical Approval

This study was approved by the Ethics Committee of Tabriz University of Medical Sciences (Ethical Approval code: IR.TBZMED.REC.1398.610) and conducted in accordance with the International Declaration of Helsinki. Participants were informed about the purpose of completing the questionnaires. Written consent forms were obtained from all participants. They were also reassured about the confidentiality and anonymity of all the data. Additionally, they were allowed to withdraw at any time, despite their initial agreement to participate.

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