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BRIEF REPORT
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# Challenges and solutions for discharge support of elderly people in the acute care ward: Interviews with community-based integrated care supporters and patients in Tokyo, Japan

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**Abstract:** Japan, which has become the country with the longest-living people in the world due to rapid population aging, has an insurer function for each local government and socialized long-term care under a public system. Japan aims to build a Community-based Integrated Care System (CICS) for each municipality with the goal of integrating medical care and long-term care. However, despite the policy and management studies, the challenges and solutions for discharge support by the parties have not yet been clarified. This study aimed to obtain suggestions on challenges and solutions for discharge support in the acute care wards for the elderly for community-based integrated care support providers and patients in Kita Ward, Tokyo. Semi-structured interviews were conducted, and the obtained data were a priori analyzed by a deductive thematic analysis using a conceptual framework for integrated care based on the integrative functions of primary care. The challenges were found to include: *i*) disparity between medical and lifestyle perspectives, *ii*) competencies of medical and care workers at homes, *iii*) discharge support challenges related to the elderly themselves, *iv*) nursing care dependent on family; and *v*) the impact of payment of medical service in the health insurance system and payment of long-term care services. The solution that can be applied at the local government level was community connection. While aiming to build a CICS for each local government, there was a contradiction in that the challenges and solutions required examination at the national and prefectural levels.

***Keywords*:** community-based integrated care in Japan, elderly people, discharge support, thematic analysis

## Introduction

Japan, 60 years after the spread of universal health insurance, has received international recognition for both the extension of healthy life expectancy and the development of its medical system (*1,2*). However, the demand for care for elderly people living at home is increasing. In particular, the system for providing nursing care and medical care at home for those with illness is still in the trial-and-error stage. Japan is in the process of developing its system based on the concept of integrating medical care and long-term care (*3*). To maintain the dignity of the elderly and support independent living, the Japan Ministry of Health, Labour and Welfare aims to build a system that provides comprehensive support and services in the community so that the elderly can continue to live as long as possible in the community to which they are accustomed (Table 1) (*4*).

Discharge support has been positioned in the healthcare systems of many countries to shorten the length of hospital stay, reduce unplanned readmissions, and improve service coordination after discharge, and its effects have been reported (*5,6*). The main function of discharge support is to foster the ability of patients to smoothly transition to different care settings (*e.g.*, from hospital care to family care). Discharge support is a "series of processes" to help patients, and a "hospital-wide system" is needed to accomplish it (*7*). Financial incentives are generated to provide support by adding to the payment of medical services in the health insurance system. Medical services in the health insurance system are paid for by fees that healthcare institutions and insurance pharmacies receive from insurers as compensation for health and medical services delivered. Most general hospitals in Japan provide discharge support (*8*). Ever since higher remuneration along with the assignment of both nurses and social workers was approved by the central government, staffing in the discharge support department has been enhanced (*9*). The payment of medical services in the health insurance system has been revised repeatedly to reduce medical expenses and encourage a shift towards home care. However, there are no definitive results regarding the effect of discharge support on reducing readmissions in

**Table 1. Five elements of the Community-based Integrated Care System (CICS)**

| Elements | | Commentary |
|---|---|---|
| Five elements of CICS | | "Housing" and "living support/welfare services" are interrelated and from the foundation, and specialized services such as "nursing care", "medical care", and "prevention" support elderly living at home. |
| Non-professional services | 1.Housing | CICS means that the necessary housing has been developed as a basis for living and that a way of living that meets the wishes and financial capabilities of the person is secured. A daily living environment that adequately protects the privacy and dignity of the elderly is necessary. |
| | 2.Livelihood support/welfare services | Livelihood support will be provided so that the elderly can continue to live with dignity even in the face of declining mental and physical abilities, economic reasons, and changes in family relationships. Livelihood support includes a wide range of support, from service-oriented support such as meal preparation to informal support such as talking to and watching over neighbors. It is also provided as a welfare service to the needy. |
| Professional services | 3.Nursing care/rehabilitation<br>4.Medical care/nursing<br>5.Health/prevention | "Nursing care/rehabilitation", "medical care/nursing", and "health/prevention" are provided by professionals and organically provided in an integrated manner. Based on care management, professional support is provided integrally with daily living support as needed. |

Japan (*10,11*).

Japan's the concept of the Community-based Integrated Care System (CICS) is mainly composed of a combination of the two concepts of integrated care and community-based care (*12*). Hospital discharge support at acute care hospitals is the cornerstone of medical and nursing care collaboration in Japan. The movement to integration and incorporation is also an international trend (*13*).

Despite the necessity of continuous implementation, the issues that the parties involved in discharge support face (including the patients themselves) and the solutions that they have found remain unclear. Therefore, in this study, we aimed to clarify the challenges of and solutions for discharge support in acute care wards for the elderly through qualitative research.

## Materials and Methods

### *Study site and participants*

Interviews for this study were conducted from April to August 2021 in Kita Ward, Tokyo. Among the 23 wards of Tokyo, Kita Ward has the highest percentage of people aged 65 and over, with 24.7% in 2021, whereas the average for the whole of Tokyo prefecture is 22.7%, and that for Japan is 28.6% (*14*). In the medical service coverage area that includes Kita Ward, 68.5% of patients are received medical care in the hospital with acute care facilities, and when the adjacent areas of Tokyo are included that rate rises to 91.9%, the highest rate in Tokyo. As there are two university hospitals in the suburbs of Kita Ward that provide advanced medical care, there is easy access to hospitals with acute medical care (*15*).

The interviewees were six elderly care support providers and a patient and family member. The support providers were staff members of a department specializing in acute hospital discharge support, as well as visiting nurses, long-term care support specialists, and clinic doctors. The interview contents addressed the role of support promoting the discharge of elderly patients through discharge support and the role of providing support after discharge. The interviewees were recruited from a workshop on elderly care in Kita Ward. Supporters were required to have sufficient experience in CICS, and all those who responded to recruitment matched this requirement. Personal interviews were conducted face-to-face by the researcher, with the patient and the family at home, and the support providers in the consultation room of the service office. The interview time was approximately 30-50 minutes and was recorded with an IC recorder with the consent of the participants as obtained by handwritten signature on a consent form.

**Table 2. List of research participants**

| ID | Sex | Affiliation | Occupation |
|---|---|---|---|
| 1 | Male | Clinic | Doctor |
| 2 | Female | Home-visit nursing office | Nurse |
| 3 | Male | Home-visit nursing office | Care manager |
| 4 | Female | Hospital (Discharge collaboration office) | Nurse |
| 5 | Male | Hospital (Discharge collaboration office) | Social worker |
| 6 | Female | Home-visit nursing office | Nurse |
| 7 | Male | Patient | – |
| 8 | Female | Patient family | – |

After analyzing the interviews of the research participants identified as ID 1-5 and 7, 8, it was determined that theoretical saturation had been reached through the analysis of ID 6. The participants comprised 4 males and 4 females, and they are listed in Table 2.

### *Data analysis*

This study was a thematic analysis of face-to-face individual interviews using a semi-structured questionnaire. The conceptual framework used for the deductive analysis was the Conceptual Framework for Integrated Care based on the integrative functions of

**Table 3. Five themes of challenges and details**

| Theme | Reference remarks |
|---|---|
| *Disparity between medical and lifestyle perspectives*<br>In the theme of (I) Disparity between medical and lifestyle perspectives, information was subdivided into "I-i Difficulties in grasping and sharing information", "I-ii Different ways of thinking about hospitals and home care", and "I-iii Information asymmetry in medical care". | ID3 "*Especially when it comes to discharge support, (omitted) there is discharge support that brings the hospital system to your home and creates a small hospital room*".<br>ID2 "The perspectives of hospitals and homes are completely different, so I wonder if it is necessary to reconcile them". |
| *Competencies of medical and care workers at homes*<br>In the theme of (II) Competencies of medical and nursing care workers at home, regarding each occupation, the subdivisions were "II-i Characteristics of care managers", "II-ii Challenge of home visiting nurses supply system in the community", and "II-iii Improving the quality of helper work". | ID2 "*There are strengths and weaknesses of care managers. There are people who are good at nursing care, but who don't understand medical care*". |
| *Challenges-related to discharge support for the elderly themselves*<br>In the theme of (III) Challenges-related to discharge support for the elderly themselves, intrinsic problems of the elderly were subdivided into "III-i Powerless elderly", "III-ii Difficulty in confirming intentions of the elderly", and "III-iii Necessity of intervention for the elderly who need medical treatment". | ID4 "*There are many elderly people who live alone, so I think they definitely need support for those who need support at home or who cannot manage their finances*". |
| *Nursing care system dependent on the family*<br>In the theme of (IV) Nursing care system dependent on family, challenges related to family-related discharge support were subdivided into "IV-i Insufficient nursing care capabilities of the family", "IV-ii Difficulty in leaving the hospital at home due to the burden of nursing care", and "IV-iii Sorry about family cooperation". | ID5 "*When it was time to leave the hospital, they actually told me that they couldn't discharge because of the situation at home*". |
| *Impact of payment of medical service in the health insurance system and payment of long-term care services*<br>In the theme of (V) Impact of medical and long-term care fees, challenges related to hospital discharge coordination related to the system were subdivided into "V-i Insufficient medical/nursing fees" and "V-ii Acceptance of patients according to hospital functions". | ID6 "*Even if we send a nursing summary, the medical fee will not be added*". |

primary care (*16*), and the terms indicating the Strength of Integration referred to the definitions by Leutz (*17*).

The first author was in charge of the interview and transcription, and after the first careful reading of the transcription verbatim, with attention to the overall context of the transcribed text, the authors gave five themes after checking by other two researchers. To examine the validity of the results of the analysis, member-checking was obtained from two consenting participants, who agreed to interpret the results. The analysis was performed using the MaxQDA2020 software program (VEBRI GmbH, Berlin/Germany).

*Ethical consideration*

This study was approved by the Teikyo University School of Medicine Ethics Review Committee (No. 20-144-2).

## Results and Discussion

The thematic analysis identified 49 codes, 31 categories, and five themes of challenges, namely: *i*) disparity between medical and lifestyle perspectives, *ii*) competencies of medical and nursing care workers at homes, *iii*) challenges related to discharge support for the elderly themselves, *iv*) Nursing care system dependent on the family, and *v*) impact of payment of medical service in health insurance system and payment of long-term care services, and five themes of solutions, namely: *i*) community connection, *ii*) improved collaboration through financial incentives by payment of medical service in the health insurance system, *iii*) expectations of doctors, *iv*) role of the discharge collaboration office, and *v*) the active role of nurses. The details of the themes are shown in Table 3. The relation between the themes based on these considerations is shown in Figure 1.

*Disparity between medical and lifestyle perspectives*

Regarding information, the theme of (I) Disparity between medical and lifestyle perspectives included "Difficulties in grasping and sharing information", "Different ways of thinking about hospitals and home care", and "Information asymmetry in medical care". We found a difference in the value and priority of information between the viewpoint of medical care at a hospital for treatment and the viewpoint of living daily life. We hypothesized that this difference was the root of the divergence in value and priority between medical care and daily living.

This theme suggested that the value and priority of information differed within hospitals, between local support offices, and between hospital and community

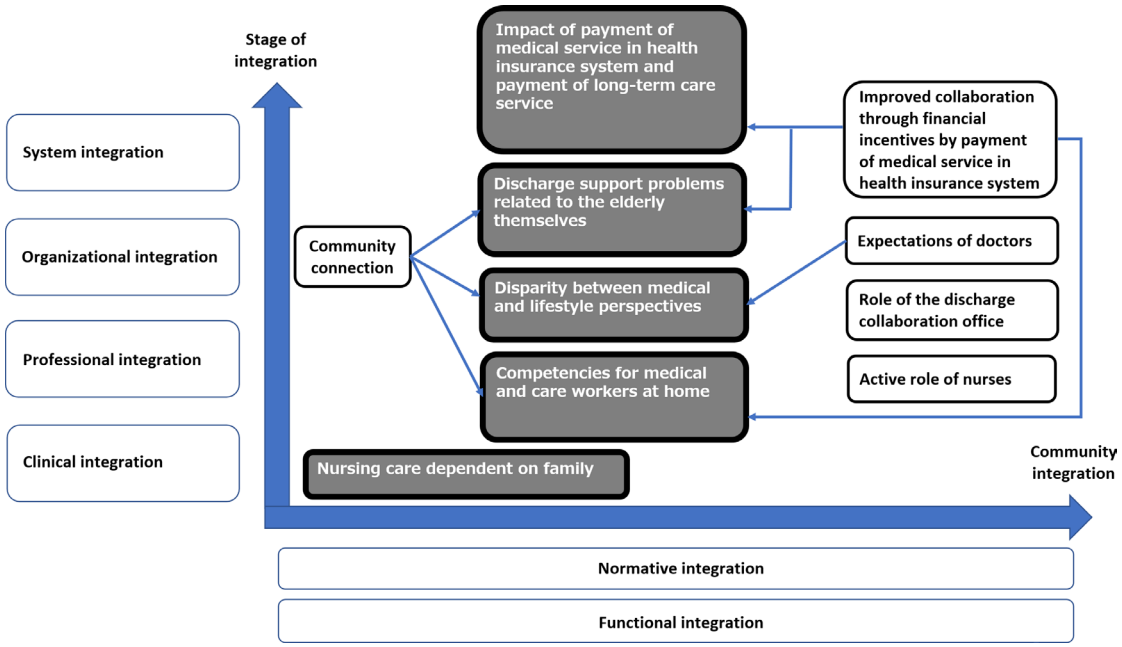


**Figure 1. Solutions for each of the challenges by the conceptual framework of integrated care.** The vertical axis is the stage of integration, which is indicated by arrows pointing from challenges to solutions for each theme arranged at the same height. The horizontal axis shows community integration, which is organized under normative and functional integration.

partnerships. We considered that the discharge collaboration office, which is responsible for discharge support and which requires cooperation among various occupations, corporations, and offices, is expected to play a role in bridging the gap between medical care and daily living support. According to the survey research project report on support for discharge collaboration offices, following the revision of payment of medical services after 2000, more than 70% of hospitals are promoting the establishment of discharge collaboration offices to support discharge (*18*). The current installation rate is high (98.0%). A high percentage (80–90%) of the respondents answered that they faced the following challenges in providing smooth discharge support: in-hospital work (*e.g.*, document preparation, communication, overtime, the scope of work), skill improvement, in-hospital cooperation, and information sharing. We considered that the challenges associated with discharge support that were identified in this study corresponded to the challenges described in the qualitative content of these reports, without contradiction.

CICS is described as a form of system that embodies the concept of integrated care (*3*). It refers to effective integration of collaboration between healthcare professionals and organizations. The determination of its success depends on how service providers better coordinate care and how professional groups work together in teams around people in need (*19*). The theme of a proposed solution, [Community connection] is an ongoing activity. "Smooth cooperation in building a support system" contained in this theme corresponds to "Benefits of home care", "case sharing", and "practice of Advance care planning (ACP)", and we considered these elements to promote [Community connection].

One of the reasons for the [Disparity between medical and lifestyle perspectives] is that the Japanese long-term care system has been influenced by the medical system (*20*). We considered that the transition to long-term care was set based on hospital standards as medical care was used for elderly people who did not require treatment.

*Competencies of medical and care workers at homes*

Regarding each occupation, the theme of (II) Competencies of medical and nursing care workers at home, included "Characteristics of care managers", "Challenge of home visiting nurses supply system in the community", and "Improving the quality of helper work". Competency was defined as "the latent characteristics of an individual that are responsible for effective or superior performance in a particular job performance situation or task situation, according to some criteria" (*21*). The occupation of care manager, which plays a central role in managing medical care and nursing care in the homes of the elderly, was created in line with the enforcement of the Long-Term Care Insurance Law. It has been pointed out that the competency of long-term care support specialists depends on whether their basic qualifications are medical or non-medical, and how they cooperate with their attending physicians differs (*22*). In the background of the extraction of challenges related to medical and nursing care workers at home, we considered that the interviewees had a variety of opportunities to come into contact with medical and nursing care workers at home in their daily work. From the remarks of the research participant who was a care manager (ID3), it was shown

that the common competency of medical and nursing care workers at home is collaboration. The skills and knowledge of helpers, home-visit nurses, and clinic nurses who support care in daily living were also pointed out as other competencies.

Because elderly people requiring nursing care frequently use home-visit nursing care after being discharged from the hospital, home helpers are required to have high skills and knowledge. In particular, improving the competency of helpers leads to the smooth acceptance of elderly people at home and may affect hospital admission and discharge support.

*Challenges-related to discharge support for the elderly themselves*

Regarding intrinsic problems of the elderly, the theme of (III) Challenges related to discharge support for the elderly themselves included "Powerless elderly", "Difficulty in confirming intentions of the elderly", and "Necessity of intervention for elderly who require medical treatment".

The content included in this theme was almost the same as the screening items used to calculate payment of medical services in the health insurance system. Screening items were based on the results of studies (*23,24*) identifying patients at high risk for re-hospitalization and long-term hospitalization, and they matched the actual requirements of patients requiring discharge support. However, even if discharge support was provided to a patient who needed it, there were cases of maladaptation, depending on the timing and procedure used for discharge support. In hospital discharge support in acute wards, patients are required to make various decisions in a short period during the process of returning to daily living from the non-daily living environment of hospitalization. The difficulty of making decisions in daily living after discharge is considered to be the essence of the problem of discharge support caused by the elderly patients themselves.

Regarding the decision-making ability of the elderly, Silveira *et al.* reported that about 70% of the terminally ill elderly show a decline in decision-making ability (*25*). The Ministry of Health, Labour, and Welfare has presented several guidelines on decision-making support for the elderly. The guidelines do not recommend making fixed assumptions about decision-making capacity. As the decision-making ability of the elderly changes depending on their medical condition, symptoms, and behavior, it is recommended that their decision-making ability be respected according to the current situation (*26*). One research participant made the statement, "Basically, I think everyone needs discharge support". This remark supports the idea that all elderly people need discharge support if it leads to decision-making support, even if it does not fall under the criteria for calculating payment of medical services in the health insurance system. People who provide decision-making support in relation to discharge are not limited to specialists who provide care or administrative staff; rather, this support is provided by a wide range of people who have contact with the patient and know him or her well. In the provision of decision-making support for the elderly according to the situation as well as sharing their expressed intentions, rather than making a judgment based on a single assessment, involving a variety of people will lead to solving the challenges associated with discharge support that are faced by elderly individuals themselves.

*Nursing care system dependent on family*

Regarding discharge support for elderly, the theme of (IV) Nursing care system dependent on the family included "Insufficient nursing care capabilities of the family", "Difficulty in leaving the hospital at home due to the burden of nursing care", and "Sorry about family cooperation".

Family caregivers who care for elderly individuals are known to experience physical, mental, and economic burdens. In particular, dementia or terminal illness (of the care recipient) are believed to be associated with a sense of caregiving burden (*27*). With the development of the long-term care insurance system in Japan, families who care for the elderly at home have various options for public service support. However, such support has limited effect in reducing the burden of caregiving on families (*28*).

We suggest that there is still a need for family care at the time of discharge, even though service options have increased. The structural factors of the family's ability to provide nursing care that are related to the sense of burden of nursing care include the ability to practice nursing care and negative emotional expression toward nursing care (*29*). Access to public service support is unlikely to resolve hospital discharge support related to family caregiving burdens. No solution was found in this study to ensure a care system that would allow the family to accept discharge.

*Impact of payment of medical service in the health insurance system and payment of long-term care services*

The theme of (V) Impact of payment of medical service in the health insurance system and payment of long-term care services included "Insufficient medical/nursing fees" and "Acceptance of patients according to hospital functions" regarding hospital discharge coordination related to the system.

The review of payment of medical services in health insurance system points has been politically induced as an opportunity to solve medical problems. Regarding the impact of payment of medical services in health insurance system revisions on discharge support, one interviewee commented, "*I wonder if the addition is*

*significant. It's clearly different from 10 years ago*". It is thought that the effect of policy guidance has permeated the field in terms of payment of medical services in the health insurance system. "Improved hospital discharge support" was extracted as the solution theme [cooperation improved by addition]. Furthermore, [conferences before discharge are used] and [use of contact points for cooperation between patients and residents] were cited as specific examples of operation.

Nursing staff pointed out the low remuneration for cooperation. ID2 noted that, "*Even if the patient's pre-hospital information is sent to the hospital as material for discharge support, there is no additional point for payment of medical services in the health insurance system*".

In the 2022 revision of payment of medical services in the health insurance system, the facility standards, which are the requirements for calculating the hospital admission and discharge support addition, were reviewed. One solution to this challenge is improved collaboration through financial incentives by payment of medical services in the health insurance system. We suggest that the theme of [Impact of payment of medical service in the health insurance system and payment of long-term care services] is a continuous solution, and the results thus far indicate that it has had some effect.

While CICS aims to establish a system for each municipality, medical services in the health insurance system require consideration of challenges and solutions at the national and prefectural levels, and contradictions in the integration of medical and long-term care were extracted.

*Limitations of the research*

Based on the conceptual framework of integrated care, which is the theoretical background of the CICS, this research aimed to address the issues and solutions of discharge support in the acute ward for the elderly. The results were obtained from interviews with support providers involved in the CICS and patients and families in Kita Ward, Tokyo. However, these results were obtained from a limited area, and they should not be generalized to other areas. In addition, there was a bias in the types of occupations of the interviewees. Even so, this study was significant in that it clarified the issues associated with discharge support and reflected the circumstances of a specific region and the solutions considered by the parties concerned.

## Conclusion

Challenges include [Disparity between medical and lifestyle perspectives] and themes related to integration between support providers. As solutions, we extracted themes that show the cooperation of residents and professionals [Community connections] and the work of support providers involved in discharge support.

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