

Effect of discharge planning rooted in the integrated care for older people concept on the maintenance of intrinsic capacity in elderly adults

Submission date 16/07/2026	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 17/07/2026	Overall study status Completed	☐ Statistical analysis plan ☐ Results
Last Edited 16/07/2026	Condition category Other	☐ Individual participant data ☒ Record updated in last year

Plain English summary of protocol

Background and study aims

China is the country with the largest elderly population and the fastest aging growth rate in the world. The problem of internal capacity decline in the elderly population is very common. The lack of continuity of routine post-discharge care is likely to increase the risk of functional decline in elderly patients. The purpose of this study is to verify whether the discharge planning service based on the World Health Organization's integrated elderly care concept can better delay the decline of the internal ability of elderly inpatients after discharge compared with the traditional routine discharge guidance, and provide a scientific and feasible practical plan for the continuous nursing of the elderly during the transitional period.

Who can participate?

All elderly patients over 65 years of age, hospitalized in the geriatric department, with normal communication skills, expected survival time of more than 6 months, and voluntarily signed written informed consent can apply to participate in this study.

What does the study involve?

Eligible elderly patients were randomly assigned to one of two groups: the control group received routine inpatient care, basic disease-related guidance before discharge, a telephone follow-up one week after discharge, and returned to the outpatient department for review three months after discharge. On the basis of routine nursing, the experimental group received the whole-process discharge planning service provided by an interdisciplinary team composed of geriatricians, specialist nurses, rehabilitators, nutritionists and pharmacists. After admission, a comprehensive assessment of the five dimensions of internal ability was completed. According to the evaluation results, the medical team developed individualized intervention programs such as exercise, nutrition, cognitive training, and psychological support that were fully adapted to the patient's personal situation. Before discharge, standardized guidance and a full set of intervention resources were provided to patients and primary caregivers. Join the exclusive discharge planning WeChat group to obtain real-time medical Q & A and dynamic follow-up, and

receive targeted intervention supervision every two weeks until 3 months after discharge. The two groups finally returned to the geriatric specialist nursing clinic to complete the review of all functional status at 3 months after discharge.

What are the possible benefits and risks of participating?

Patients participating in this study can obtain more systematic and individualized rehabilitation guidance after discharge, and receive continuous health support from interdisciplinary medical teams, which can better maintain their physical, cognitive and nutritional status and reduce the risk of rapid functional decline after discharge. During the study period, no intervention-related or serious adverse events were reported in the two groups, only daily care and rehabilitation guidance, and the safety risk was extremely low.

Where is the study run from?

The First Affiliated Hospital of Ningbo University, China

When is the study starting and how long is it expected to run for?

This study started the first subject enrollment in December 2023, and the completion of enrollment and follow-up took about 10 months, and completed all data collection on September 2024.

Who is funding the study?

The First Affiliated Hospital of Ningbo University, China.

Who is the main contact?

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Study information

Scientific Title

Effect of discharge planning rooted in the integrated care for older people concept on the maintenance of intrinsic capacity in elderly adults

Study objectives

Ethics approval required

Ethics approval required

Ethics approval(s)

Approved 07/12/2023, Ethics Committee of the First Affiliated Hospital of Ningbo University (No. 59 Liuting Street, Haishu District, Ningbo, Zhejiang, 315000, China; +86 574 87085233; sychenjy@163.com), ref: L2023YNo.193A

Primary study design

Interventional

Allocation

Randomized controlled trial

Masking

Blinded (masking used)

Control

Active

Assignment

Parallel

Purpose

Treatment

Study type(s)

Health condition(s) or problem(s) studied

Intervention and maintenance research on intrinsic capacity decline of elderly geriatric inpatients

Interventions

This study is a prospective randomized controlled trial. 112 elderly inpatients were randomly assigned through the SAS 9.4 software. The sealed and opaque envelopes were used to conceal the results of group allocation. The patients were divided into the control group and the experimental group in a 1:1 ratio, with 56 patients in each group. The control group received routine care: an electronic health record was established upon admission, routine specialized nursing intervention and health education were implemented during hospitalization, disease-related nursing guidance was provided before discharge, and a phone follow-up was conducted by the responsible nurse one week after discharge. The experimental group received the routine intervention of the control group in addition to a discharge planning service that fully matched the 5 dimensions of the WHO integrated geriatric care guidelines: a multidisciplinary discharge planning team consisting of 2 geriatricians, 4 nurses, 1 nutritionist, 1 rehabilitation therapist, and 1 pharmacist was established, with all members having more than 5 years of clinical experience and completing 2 months of pre-job specialized training. Baseline assessment results of the 5 dimensions of intrinsic ability were used to develop individualized intervention plans for patients with a mobility score of ≤ 8 points, regular dietary guidance from a nutritionist for

patients with a nutritional score of ≤ 11 points, symptomatic support and functional guidance for patients with visual or auditory impairments, weekly in-hospital group cognitive stimulation therapy combined with twice-daily home cognitive training for patients with cognitive impairment, and music therapy, reminiscence therapy, and other psychological social interventions for patients with depressive emotions. Before discharge, the discharge planning manual was distributed to the patients and their primary caregivers, an exclusive discharge planning WeChat group was established for real-time dynamic monitoring of intervention compliance, and the patient data and intervention plans were synchronized with the receiving lower-level medical institutions to establish a collaborative link. A phone follow-up was conducted one week after discharge, and then a follow-up was conducted every two weeks until 3 months after discharge. The entire process achieved closed-loop management.

Intervention Type

Behavioural

Primary outcome(s)

1. Total intrinsic capacity score at 3 months after discharge measured using a five-point comprehensive scoring system, based on the five internal capability dimensions of the WHO (the higher the total score of internal capabilities, the more severe the degree of decline), at baseline and 3 months after discharge

Key secondary outcome(s)

Completion date

30/09/2024

Eligibility

Key inclusion criteria

1. Age ≥ 65 years
2. Hospitalised in the department of geriatrics
3. Adequate communication abilities to cooperate with surveys and related assessments
4. Provision of written informed consent and voluntary participation
5. Expected survival time >6 months

Healthy volunteers allowed

No

Age group

Senior

Lower age limit

65 Years

Upper age limit

88 Years

Sex

All

Total final enrolment

112

Key exclusion criteria

1. End-stage disease with an expected survival time ≤ 6 months
2. Acute and critical conditions
3. Severe dementia or severe disability precluding completion of the assessments

Date of first enrolment

01/12/2023

Date of final enrolment

30/06/2024

Locations**Countries of recruitment**

China

Sponsor information**Organisation**

Ningbo University Affiliated Hospital

ROR

<https://ror.org/045rymn14>

Funder(s)**Funder type****Funder Name**

First Affiliated Hospital of Ningbo University

Results and Publications**Individual participant data (IPD) sharing plan**

The datasets generated during and/or analysed during the current study will be available upon request from Min Zhao, minzhao46_zm@163.com

IPD sharing plan summary

Available on request