

# Improving the safety and continuity of medicines management at care transitions

<b>Submission date</b> 12/03/2018	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 11/04/2018	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 27/02/2025	<b>Condition category</b> Circulatory System	<input type="checkbox"/> Individual participant data <input checked="" type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

When a patient moves (e.g. from hospital to home), medicine problems are common and planned changes are not always followed through. Patients particularly at risk are those with long-term illnesses taking several medicines – especially when medicines have been started or changed in hospital. This study is the final stage in a programme of four work packages, which has been developed to help the way patients are supported with their medicines, and also aims to improve the way medical professionals work together to offer good standards of care to patients when they transition from hospital to home. The study will involve patients with heart failure – chosen because they need a number of medicines. Also, some of these medicines need careful monitoring.

### Who can participate?

Patients aged 18 years and over with heart failure

### What does the study involve?

Participating NHS centres are randomly allocated to either receive the Medicines at Transition Intervention (MaTI) or continue with treatment as usual. The MaTI includes online training about discharge management, patient held information, enhanced communication between hospital and the patients' community pharmacists, and increased engagement of community pharmacists with patient care after discharge. Data is collected using patient-completed questionnaires (at four timepoints over 12 months), and from routine data providers (this includes NHS Digital, GP records, Office for National Statistics, and the National Heart Failure Audit). All-cause mortality (death) and heart failure rehospitalisation are measured after 12 months.

### What are the possible benefits and risks of participating?

This research is an opportunity to enhance patient care through providing additional information and support about medicines. Patients who participate may benefit in the long term through the improvement of medicines management systems that supplies and helps them use their medicines. They will also have the opportunity to share their experiences of their healthcare. There will be few risks for participants in this research project owing to the study aims and design.

Where is the study run from?  
University of Leeds (UK)

When is the study starting and how long is it expected to run for?  
January 2017 to March 2021

Who is funding the study?  
National Institute for Health Research (NIHR) (UK)

Who is the main contact?  
Mrs Florence Day  
iscomat@leeds.ac.uk

**Study website**  
<https://www.bradford.ac.uk/iscomat/>

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Mrs Florence Day

**ORCID ID**  
<http://orcid.org/0000-0003-0306-5558>

**Contact details**  
Clinical Trials Research Unit  
University of Leeds  
Leeds  
United Kingdom  
LS2 9JT  
+44 (0)113 343 1672  
iscomat@leeds.ac.uk

## Additional identifiers

**EudraCT/CTIS number**  
Nil known

**IRAS number**

**ClinicalTrials.gov number**  
Nil known

**Secondary identifying numbers**  
CPMS 37060

## Study information

**Scientific Title**

Improving the safety and continuity of medicines management at care transitions

**Acronym**

ISCOMAT

**Study objectives**

When a patient moves (e.g. from hospital to home), medicine problems are common and planned changes are not always followed through. Patients particularly at risk are those with long-term illnesses taking several medicines – especially when medicines have been started or changed in hospital.

This cluster randomised controlled trial is the final stage in a programme of four work packages, which has been developed to help the way patients are supported with their medicines, and also aims to improve the way medical professionals work together to offer good standards of care to patients when they transition from hospital to home. The study will involve patients with heart failure – chosen because they need a number of medicines. Also, some of these medicines need careful monitoring.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

HRA REC - Yorkshire and the Humber – Bradford Leeds, 01/03/2018, ref: 18/YH/0017

**Study design**

Randomized; Interventional; Design type: Prevention, Process of Care, Education or Self-Management, Complex Intervention

**Primary study design**

Interventional

**Secondary study design**

Cluster randomised trial

**Study setting(s)**

Hospital

**Study type(s)**

Treatment

**Participant information sheet**

Not available in web format, please use the contact details to request a patient information sheet

**Health condition(s) or problem(s) studied**

Heart failure

**Interventions**

The aim is to recruit 2100 participants across 42 'clusters', who will be randomised using an automated randomisation service on a 1:1 allocation to either implement the Medicines at Transition Intervention (MaTI), or continue with treatment as usual (TAU).

The MATI consists of the following inputs:

1. Online training to secondary care cardiology, Community Pharmacy and primary care staff about discharge management
2. Patient held information
3. Enhanced communication between hospital and the patients' community pharmacists
4. Increased engagement of community pharmacists with patient care after discharge

Since this is a cluster randomised controlled trial, consent to deliver the intervention is given by the NHS Trust, and patients will be asked for their consent for data collection purposes only. Data collection will be in the form of patient-completed questionnaires (at four timepoints over 12-months post-registration), and data collection from routine data providers (this includes NHS Digital, GP records, Office for National Statistics, and the National Heart Failure Audit).

## **Intervention Type**

Other

## **Primary outcome measure**

All-cause mortality and heart failure rehospitalisation; Timepoint(s): 12 months from discharge

## **Secondary outcome measures**

Key secondary endpoint:

Still being prescribed at least one of the medications in each of the following three groups at 12 months:

1. ACE Inhibitor (ACEI); Angiotensin II Receptor Blocker (ARB); Sacubitril/Valsartan
2. Beta blocker; Ivabradine
3. Mineralocorticoid Receptor Antagonist (MRA)

\*For patients with contraindications to any of the three groups, the endpoint will be derived with respect to the groups that are indicated (e.g. a patient prescribed an ACEI and a beta blocker, but not an MRA, at 12 months will have achieved the endpoint if MRAs are contraindicated).

Other secondary endpoints:

1. The individual components of the primary endpoint, regarded as time-to-event endpoints, namely:
  - 1.1. Time to all-cause mortality
  - 1.2. Time to heart-failure-related rehospitalisation
2. Length of time on guideline recommended (and indicated as above\*) cardiovascular medications
3. Patient understanding of their medicines, measured by a 10-point Likert scale in the Patient Experience Survey at 2 and 6 weeks and 12 months post-registration
4. Patient satisfaction with medicines related care, measured by a 10-point Likert scale in the Patient Experience Survey at 2 and 6 weeks and 12 months post-registration
5. Quality-adjusted life years, measured by the EQ-5D-3L at baseline, 3 months and 12 months
6. Days alive and out of hospital, defined as the number of days in the year (365 days) beginning the day after registration that the patient spends alive and not in hospital

7. Time to all-cause hospitalisation and time to CV-related hospitalisation in the 12 months from registration

8. Cause-specific deaths

**Overall study start date**

01/01/2017

**Completion date**

19/03/2021

## **Eligibility**

**Key inclusion criteria**

1. Admitted or transferred to a ward participating in the ISCOMAT trial
2. Heart failure with evidence of at least moderate left ventricular systolic dysfunction confirmed (via echocardiogram) within the last 5 years
3. Aged 18 years or over at time of admission to hospital
4. Planned discharged from recruiting hospital to their home (defined by usual place of residence) or a care home
5. Planned discharge to within geographical area of that cluster
6. Capacity to provide Informed Consent
7. Provide informed consent

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

Planned Sample Size: 2100; UK Sample Size: 2100

**Total final enrolment**

1641

**Key exclusion criteria**

NHS Trusts meeting any of the following exclusion criteria will not be eligible for inclusion:

1. Already providing medicines management deemed to be sufficiently similar to the MaTI intervention

Patients meeting any of the following exclusion criteria will not be eligible for inclusion:

1. Patients in a terminal phase of illness / end of life care pathway who are not expected to

survive beyond 6 weeks from date of discharge

2. Patients who are already participating in the ISCOMAT study (for example, patients who have been re-admitted)

**Date of first enrolment**

01/05/2018

**Date of final enrolment**

28/07/2020

## **Locations**

**Countries of recruitment**

England

United Kingdom

**Study participating centre**

**University of Leeds**

Leeds

United Kingdom

LS2 9JT

## **Sponsor information**

**Organisation**

Bradford Teaching Hospitals NHS Foundation Trust

**Sponsor details**

Research Management & Support Office

Bradford Institute for Health Research

BRADFORD

England

United Kingdom

BD9 6RJ

+44 (0)1274 38 2575

jane.dennison@bthft.nhs.uk

**Sponsor type**

Hospital/treatment centre

**ROR**

<https://ror.org/05gekvn04>

# Funder(s)

## Funder type

Government

## Funder Name

NIHR Central Commissioning Facility (CCF); Grant Codes: RP-PG-0514-20009

# Results and Publications

## Publication and dissemination plan

The researchers will publish their work in high quality academic and professional journals. Longstanding and ongoing engagement with stakeholders will provide a direct pathway to impact for the outputs of this research. The Patient-Led Steering Group will inform the dissemination strategy and its members will play an active role in the format and content of academic papers (specifically patient implications) and will present at local, regional and national conferences and meetings.

## Intention to publish date

01/07/2025

## Individual participant data (IPD) sharing plan

The researchers are committed to ensuring that publically-funded research data are made available for further legitimate compatible purposes. In order to apply email [ctrudataaccess@leeds.ac.uk](mailto:ctrudataaccess@leeds.ac.uk).

Organisations are able to apply for permission to access clinical trial or research project datasets for secondary purposes from the Clinical Trials Research Unit (CTRU), University of Leeds. The data requester must be an employee, contractor or agent of the organisation responsible for data use and security.

Data will only be shared if fully justified and robust security measures to protect the data and minimise the risk of unauthorised disclosure are in place. Anonymised data may be released on the basis of valid participant consent

For approved applications, data will be provided as a SAS dataset (unless otherwise agreed) with an accompanying data pack detailing derivations of composite endpoints as specified in the Statistical Analysis Plan and a description of each field name with relevant coding.

## IPD sharing plan summary

Available on request

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol article</a>	Process evaluation	29/04/2022	12/08/2022	Yes	No
<a href="#">HRA research summary</a>			28/06/2023	No	No
<a href="#">Other publications</a>		09/10/2024	10/10/2024	Yes	No