Virtual Ward for Early Discharge in Patients Receiving Inpatient Care A Prospective Feasibility Study on Home Monitoring for the Early Discharge of Eligible Hospitalized Patients in an Outpatient Setting

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To assess the feasibility of the Virtual Ward in six pre-defined sub-cohorts of non-elective hospitalized patients within the current Dutch healthcar

Ethical review	Approved WMO
Status	Pending
Health condition type	Other condition
Study type	Interventional

Summary

ID

NL-OMON57355

Source
ToetsingOnline

Brief title
VIP-care

Condition

- Other condition

Synonym
hospital-wide care that cannot be planned

Health condition

meerdere cohorten met niet planbare zorg (denk aan decompensatio cordis, bacteriele

infecties, virale infecties, dehydratie, methylprednison bij transplantnier-afstoting)

Research involving
Human

Sponsors and support

Primary sponsor: Erasmus MC, Universitair Medisch Centrum Rotterdam
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Hospital-At-Home Care, Telemonitoring, Virtual Ward

Outcome measures

Primary outcome

To assess the feasibility of the Virtual Ward across six pre-defined

sub-cohorts of non-elective hospitalized patients by determining the percentage

of

patients who provide informed consent and are successfully transferred to the

Virtual Ward, with a feasibility threshold set at 30% for this pilot phase

(adherence). Feasibility is determined

per sub-cohort

Secondary outcome

1. a. To asses the percentage of suitable patients (who meet in- and exclusion

criteria)

who have been invited to participate in the study by the researchers (reach)

b. To asses the percentage of patients providing informed consent for Virtual

Ward

(reach)

2. To document the time frame from study inclusion to transfer to the Virtual

Ward.

3. To document clinical outcomes which can guide future implementation:

• What type of patient is included (i.e. baseline characteristics as shown in

8.1.3.).

• The generation of notifications during monitoring, including the type and

quantity,

as well as the actions taken after a notification is generated

• Number and time of contact moments between patient and virtual ward

employee/treating physician.

• Length of stay in the hospital ward.

• Length of stay in the Virtual Ward.

• Adverse (safety) events during admission in the Virtual Ward.

• Readmission rate to the hospital.

4. To explore experiences, barriers and facilitators about patients and

healthcare

providers to use the Virtual Ward through structured interviews to guide future

implementation strategies.

Study description

Background summary

Patients undergo extensive diagnostics and treatment adjustments during the early days of their hospitalization, which may become less imperative as their admission progresses. If a patient's vital signs stabilize after the initial hospitalization, and they only necessitate "less urgent" hospital care, an option is to transfer them to the Virtual Ward and thereby creating hospital capacity. This telemedicine-driven model presents an alternative to the

conventional in-patient care approach. In the Virtual Ward, patients continue to receive care under supervision of the hospital physician but from the comfort of their own homes. This means the hospital oversees the monitoring of vital signs, performing diagnostics and treatment in the patient's home environment. A growing body of evidence supports the safety of "Virtual Wards." However, although proven safe, its feasibility remains uncertain.

Study objective

To assess the feasibility of the Virtual Ward in six pre-defined sub-cohorts of non-elective hospitalized patients within the current Dutch healthcar

Study design

This is a single-center prospective cohort trial with 6 sub-cohorts.

Intervention

Intervention (if applicable):Patients will be discharged to the virtual ward with monitoring, diagnostics, and treatment at home.

Study burden and risks

Patients who are admitted to the virtual ward can benefit from recovering in a home environment. Potential risks are that they are not within reach of the treating physicians in case of an adverse event. Patients need to fill in questionnaires and measure their own vital signs. There are no additional invasive interventions patients would need to undergo by participating in this study

Contacts

Public
Erasmus MC, Universitair Medisch Centrum Rotterdam

Dr. Molewaterplein 40
Rotterdam 3015GD
NL
Scientific
Erasmus MC, Universitair Medisch Centrum Rotterdam

Dr. Molewaterplein 40
Rotterdam 3015GD
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)

Inclusion criteria

1. Written informed consent is obtained from the patient
2. The patient is >= 18 years old
3. The patient has a family member or caregiver (over 18 years old) who lives at the same address as the patient.
4. The patient has access to transportation 24 hours a day, with a maximum travel time of 45 minutes to reach the hospital.
5. The patient (or their family member/caregiver) has a mobile phone with data and call-ing capabilities
6. The patient (or their family member/caregiver) possesses sufficient digital skills.

Exclusion criteria

1. The patient is unable to communicate in Dutch
2. The patient has been diagnosed with dementia, psychosis, or another disorder that se-verely impairs their judgment capability.
3. The patient has a Clinical Frailty score (CSF)>6
4. The patient is receiving end of life care.
5. The patient is addicted to drugs or alcohol, excluding smoking.
6. The patient's pain is inadequately treated, requiring intravenous pain medication.
7. The patient has received interventions within the past 24 hours to improve vital pa-rameters and the MEWS score at the time of transfer to the Virtual Ward is >2.
8. The patient is undergoing oxygen therapy at a flow rate > 5 liters per minute
9. Patient complexity or treatment intensity is not feasible in the Virtual Ward; home care, diagnostics, or treatment are not suitable for the Virtual Ward setting due to current or-ganizational constraints.

10. The physician determines that treatment in the Virtual Ward is not safe for the patient for any reason; for example, when the treating physician concludes that the patient is not sufficiently self-reliant in terms of self-care for treatment in the setting of Virtual Ward.
11. The treating physician or the investigator expects that the patient will spend less than 24 hours in the Virtual Ward.

Study design

Design

Study type: Interventional

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Other

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	24-03-2025
Enrollment:	306
Type:	Anticipated

Ethics review

Approved WMO

Date:	17-03-2025
Application type:	First submission
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL85516.078.24