National Clinical Handover Initiative

Public Report on Pilot Study for

AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

Aged Care Home Transfer-to-Hospital Envelope Trial

NORTH EAST VALLEY DIVISION OF GENERAL PRACTICE (Lead agency)

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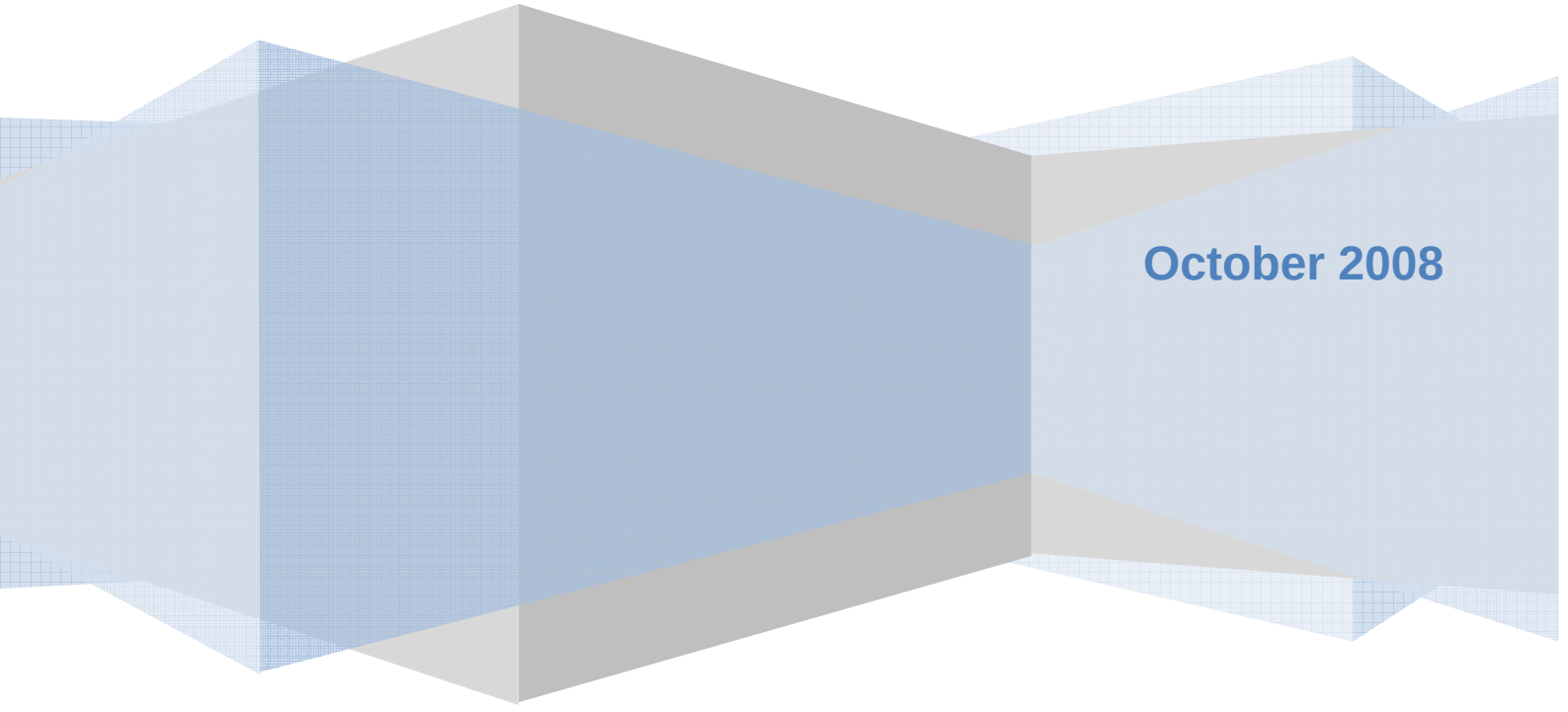

October 2008

Acknowledgements

The Aged Care Home Transfer-to-Hospital Envelope was developed under the DoHA-funded Aged Care GP Panels Initiative (2004-2008) - a project involving Divisions of General Practice, GPs and ACHs - with acknowledgement to Dandenong Casey General Practice Association for the original idea of a dedicated ACH to hospital transfer envelope.

Thanks to our partner Divisions of General Practice: Impetus, Melbourne East General Practice Network, Melbourne General Practice Network, Northern Division of General Practice, Pivot West and Westgate General Practice Network; staff of all Aged Care Homes, Emergency Departments and Ambulance Services involved in the trial; and members of the Reference Group for invaluable input to the project and commitment to improving the care of older people in residential care.

Thanks to Dr Andrew Dent, former Director of the ED at St Vincent's Hospital Melbourne, for the birth of the checklist.

Thanks to all of the interstate Divisions of General Practice, the State Peak Bodies and interstate Aged Care Homes, members of the National Aged Care Alliance, and the Royal College of Nursing Australia who provided feedback on the content of the Envelope in relation to its national applicability.

Finally, we would like to thank Grant Nelson for working with us on the final design of the Envelope.

October 2008

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Disclaimer:

This pilot study was funded by the Australian Commission on Safety and Quality in Health Care (ACSQHC) as part of the National Clinical Handover Initiative. Each study within the Initiative aimed to design transferable improvement tools and solutions for handover that could be localised to different contexts. This Public Report provides a summary of the pilot study undertaken; for additional details please contact the Commission.

ACSQHC acknowledges that the information contained in this one-year study presents initial developments and supports longer-term research and evaluation. The information presented here does not necessarily reflect the views of ACSQHC, nor can its accuracy be guaranteed.

NEVDGP consider a possible bias in the trial in that using the Envelope was itself a prompt to record data in aged care homes (ACHs) or receiving emergency departments (EDs). NEVDGP also acknowledge that many ACHs were familiar with the Envelope prior to the trial.

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Abbreviations

ACGPPI	Aged Care GP Panels Initiative
ACH	Aged Care Home
AIP	Ageing in Place
AO	Ambulance Officer
CMA	Comprehensive Medical Assessment
ED	Emergency Department
GP	General Practitioner
MDS	Medical Deputising Service
NEVDGP	North East Valley Division of General Practice
RN	Registered Nurse
RN Div 1	Registered Nurse Division 1
RN Div 2	Registered Nurse Division 2
SOP	Standard Operating Procedure
The Envelope	Aged Care Home Transfer-to-Hospital Envelope

Abstract

Transfer of residents from Aged Care Homes to hospital is a high risk clinical handover scenario. The transfer involves a number of clinical handovers – between Aged Care Home staff, Ambulance Officers and hospital staff – using a number of communication modalities. These factors contribute to a risk of communication failure and unsafe clinical handover, which in turn can impact directly on the continuity of care and health outcomes for this population.

The Australian Commission on Safety and Quality in Health Care, through the *National Clinical Handover Initiative,* funded a one-year trial to evaluate a range of aspects of use of the Aged Care Home Transfer-to-Hospital Envelope. The Envelope is a tool to support safe clinical handover from the Aged Care Home to hospital. As well as *containing* documents, the back of the Envelope features a checklist of crucial clinical and other handover information to be included when a resident is transferred to hospital.

The trial involved 26 Aged Care Homes, the emergency departments of six major metropolitan public teaching hospitals, and Ambulance Officers involved in transferring residents from Aged Care Homes to hospital across inner city, inner east, north east, northern and western metropolitan Melbourne. Evaluation methods included written surveys and semi-structured face-to-face interviews.

Our results indicate that the Envelope is used for the large majority of residents transferred to an emergency department. It is highly valued, popular and easy to use. In addition, our results indicate that using the Envelope improves clinical handover and has raised awareness of the need for clinical handover between Aged Care Homes and hospitals. Consistent positive findings indicate that the Envelope has the potential for much wider use.

Executive Summary

Summary of aims

To evaluate the use and usefulness of the Aged Care Home Transfer-to-Hospital Envelope (the Envelope) as a tool to support safe clinical handover when a resident of an Aged Care Home (ACH) is transferred to an emergency department (ED).

To raise awareness of the need for clinical handover between Aged Care Homes and emergency departments.

Main outcome measures

- Use, usefulness and ease of use of the Envelope
- Impact of using the Envelope on clinical handover
- Potential for ongoing use and sustainability
- Awareness of the need for clinical handover

Summary of major findings

Findings are based on:

- ACH, ED and Ambulance Victoria data of resident transfers to hospital
- Written surveys (ACH staff 165)
- Semi-structured interviews (ACH staff 19, ED staff 30, Ambulance Officers 11)

Use The Envelope was used for 317/355 (90%, ACH data) 85/101 (84%, ED data) transfers to hospital.

Usefulness 163/165 (98%) of surveyed ACH staff reported that the Envelope is useful.

Ease of use 148/165 (89%) of surveyed ACH staff found the Envelope easy to use.

Impact on clinical handover 128/165 (77%) of surveyed ACH staff, 30/30 (100%) of interviewed ED staff, 7/7 (100%) of interviewed Ambulance Officers familiar with the Envelope, agreed that using the Envelope improves clinical handover from the ACH to ED.

Ongoing use and sustainability 152/165 (92%) reported that the ACH would continue to use the Envelope and 151/165 (91.5%) reported that they would recommend the Envelope if they moved to an ACH which did not already use it.

All interviewees stated they would like to see the Envelope used for all transfers from ACHs to ED.

Awareness of the need for clinical handover All interviewees agreed that the Envelope raised awareness of the need for clinical handover.

1. Introduction

"Handover of care is one of the most perilous procedures in medicine... "

Professor Sir John Lilleyman[1]

The residential aged care sector is often overlooked when patient safety issues are considered. This is reflected in the paucity of literature about clinical handover between ACHs and hospitals.[2-4] Residents of ACHs are usually elderly, and may be frail and have complex care needs. They often need to go to hospital – usually at short notice to an ED and also for planned admissions or appointments. In our experience, the issue of clinical handover between ACHs and hospitals is identified by all stakeholders as a significant one.[5] Various problems are described such as clinical handover information being scant; necessary information not being provided; the 'black hole' into which clinical information disappears during the transfer; and the lack of timely discharge information when a resident is discharged to the ACH.[6]

In addition, the transfer of a resident from an ACH to the acute sector runs a particularly high risk of communication failure because it involves a number of clinical handovers between different health disciplines, between health care workers with different levels of training and skills, and uses different communication modalities.

Clinical handover is required both when a resident is transferred to hospital and when they are discharged from hospital to the ACH. Our Envelope specifically supports clinical handover when a resident is transferred in to hospital. The focus within hospitals is the ED as the most common destination for transfer. Clinical handover from the hospital back to the ACH is a separate process, raises a different range of issues and is included in our recommendations for further study.

1.1 Target population

Residents of ACHs are generally older people, often with multiple co-morbidities and complex health care needs which require access to services in the acute sector. They are usually transferred to hospital unaccompanied. In addition, a significant proportion of residents have dementia or otherwise impaired cognition.[7] Factors such as frailty, sickness, impaired cognition and disorientation may mean that residents are unable to effectively communicate and advocate for themselves, putting this population at grave risk. Not only is good quality clinical handover essential for safety and continuity of care, it may be the only significant 'voice' advocating for the resident.

1.2 Profile and understanding of clinical handover

Clinical handover *can* be managed effectively and safely when a resident is transferred between ACHs and hospitals, however in our experience, there is widely variable understanding of the *need* for clinical handover by both ACH and hospital staff. We commonly had the impression that a resident could be 'sent off' – either transferred to or discharged from hospital – where 'they' will take over care, without a perception of the need for clinical handover.[6] This observation informed one of the key objectives of the trial, which was to raise the profile and understanding of the need for clinical handover.

1.3 Development of the Envelope

The development of the Aged Care Home Transfer-to-Hospital Envelope (the Envelope) was coordinated by NEVDGP as part of the Commonwealth Department of Health and Ageing-funded

Aged Care GP Panels Initiative (ACGPPI)[i]. The Envelope functions as a container for documentation and features a checklist of key clinical and other handover information needed when a resident from an ACH is transferred to hospital.

The Envelope had been promoted through the ACGPPI in the trial region since 2006 and was already being used by many ACHs prior to the trial. The trial provided the resources to evaluate a range of aspects of use of the Envelope and to investigate potential for ongoing and national use. NEVDGP was the lead agency of a consortium of seven Divisions of General Practice across inner city, inner east, north east, northern and western metropolitan Melbourne.

1.4 Relationship between Aged Care Homes and hospitals

The relationship between ACHs and hospitals often involves a lack of detailed knowledge of each others' environment – the constraints operating, different imperatives, and different levels of staffing and care available in each setting. Hospital staff often assume that all ACHs are *nursing homes* and thus 'high care' and staffed by Registered Nurses[ii], which is not necessarily the case. This has the potential to cause problems in understanding the reason for transfer to hospital, when planning discharge and when communicating with the ACH staff.

Some staff in ACHs, on the other hand, have limited understanding of the enormous pressures experienced in hospitals which, for example, may lead to delayed assessment in ED or to poorly-timed discharge, from the ACH perspective. This lack of knowledge and understanding of each other's environments is both a result of and has lead to, a lack of effective communication, resentment and often poor clinical handover. In addition, there is wide variation in information management systems within and between the residential aged care and hospital sectors.[8] These factors can adversely impact on safety, continuity of care and health outcomes for residents.

1.5 Workforce issues impacting on clinical handover

Access to timely, organised primary medical care is vital to the care and wellbeing of older people in residential care. The bulk of primary medical care is provided by General Practitioners (GPs) and Medical Deputising Services (MDS) / locums. Regular access to well-organised medical care - that anticipates needs and includes planning - reduces medical crises, and decreases both the need for after-hours services and transfer to hospital.[6, 9] This model of care (i) minimises the number of new (unnecessary) health care providers and subsequent risk of dis-continuity of care and (ii) is also more likely to generate well organised information that can inform safe clinical handover.

In reality, at times, residents cannot access their own GP, or even *any* timely medical care, in the ACH. This may be the case both in-hours and after-hours. When the ACH is unable to access timely medical care for the resident, the only option may be to call an ambulance for transfer to hospital.

There is a range of factors influencing the stability of the residential aged care workforce. As well as major challenges in recruitment and retention, there is a high turnover of staff in management, senior nursing positions, general nursing and non-nursing care staff. In addition there is a significant use of agency staff in residential aged care.

Within the residential aged care sector there is a lack of agreement about what constitutes an appropriate, affordable and available skill mix. Compared with the acute sector there are fewer Registered Nurses (Division 1), and the bulk of the workforce comprises Enrolled Nurses (Registered Nurse Division 2) and non-nursing care staff.

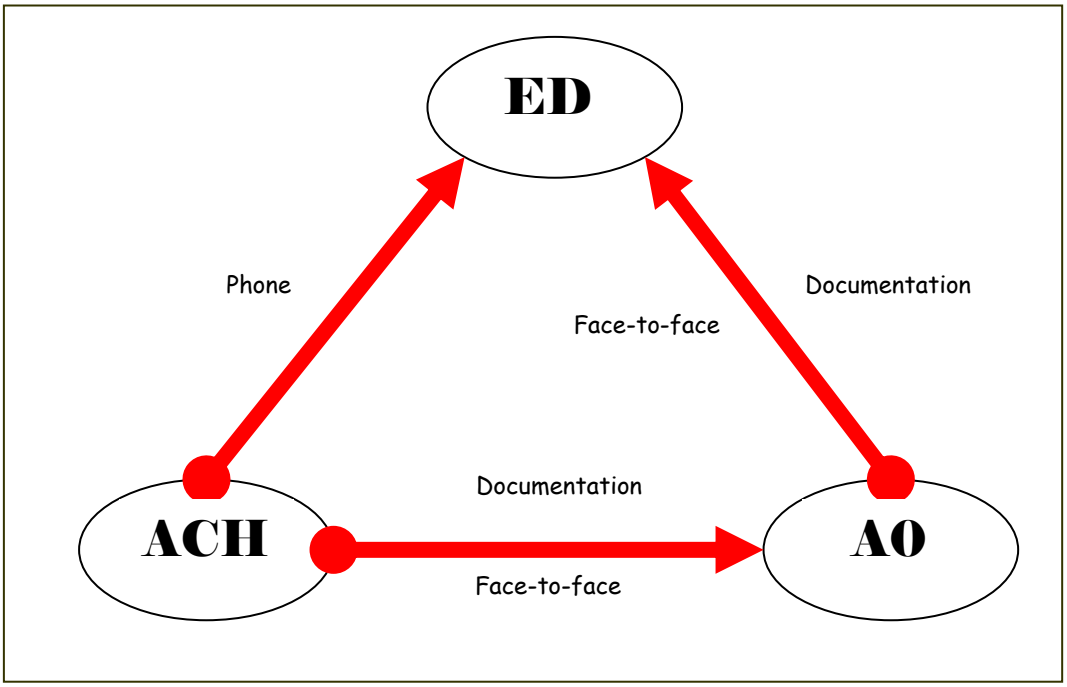
[i] The ACGPPI was funded by the Australian Commonwealth Department of Health and Ageing from 2004-2008. The key objectives were to improve access to and quality of primary medical care for residents of ACHs. Each Division of General Practice was funded to work with all ACHs within their geographical area that were in receipt of Commonwealth funding.

[ii] In Victoria only, Registered Nurses are called Registered Nurse Division 1 and Enrolled Nurses are called Registered Nurse Division 2.

Staffing of public teaching hospitals, including EDs, is characterised by frequent changes in staff. This is the case for shift-to-shift and for junior staff rotations - medical, nursing and allied health.

1.6 Clinical Handover from Aged Care Home to hospital

When a resident is transferred from an ACH to ED there are multiple clinical handovers between different health disciplines and between health care workers with different levels of training and skills. There is also a range of modes of communication which include face-to-face, telephone, documents and (in the future) electronic. This multiplicity of factors generates a high risk of communication failure.



Key: → Clinical Handover; **ED** – Emergency Department; **ACH** – Aged Care Home; **AO** – Ambulance Officers

Figure 1 - Clinical Handovers when a resident is transferred from an ACH to hospital

2. Aims of the ACH Transfer-to-Hospital Envelope trial

- To improve the transfer of clinical information and other handover information when ACH residents are transferred to an ED
- To raise the profile and understanding of the need for clinical handover between ACHs and EDs
- To promote the use of the Envelope in ACHs and EDs
- To evaluate the use of the Envelope as a tool to support clinical handover
- To embed use of the Envelope into everyday practice for ACH and hospital staff when a resident is transferred to hospital
- To investigate the potential for both ongoing and national use of the Envelope
- To promote greater knowledge and understanding between ACHs and hospital EDs

3. Implementation of the trial

3.1 Features of the Aged Care Home Transfer-to-Hospital Envelope

- A container for clinical and other handover information
- A tick box checklist for ACH staff on the back on the Envelope to readily identify clinical and other handover information required when transferring a resident hospital
- The tick box checklist facilitates standardised content of clinical and other handover information going to hospital
- The Envelope flags the patient in the ED as a resident of an ACH
- It informs hospital staff of the level of care of the ACH the resident has come from and will return to
- It provides a brief description for hospital staff of the range of levels of care in ACHs
- It has simple, succinct instructions
- It preserves privacy by having no confidential clinical information on the outside of the envelope
- It is resealable to enable ambulance officers (AOs) and others repeated access to documents
- It is used one-way for transfer in to hospital
- It is a big (C4 i.e. bigger than A4) yellow envelope
- It is low cost (48-65 cents each depending on size of print run)

3.2 Methodology

3.2.1 Phases of the trial

The trial was conducted from September 2007-October 2008 in three phases:

1. ***Engagement and recruitment*** of stakeholders and development of trial tools (September-January).
2. ***Data collection*** by ACHs and EDs on use of the Envelope each time a resident was transferred to hospital (18 weeks, January-May). In addition we used routinely-collected transfer data supplied by Ambulance Victoria.
3. ***Evaluation and reporting*** (May-October). Evaluation methods used were:
   - Written surveys for 165 staff across 26 ACHs
   - Semi-structured, face-to-face targeted interviews with 19 ACH staff
   - Semi-structured, face-to-face targeted interviews with 10 ED staff from 3 EDs
   - Group interviews with 12 ED staff from 2 EDs
   - Discussion group with ED staff each completing interview proforma (1 ED, 8 staff)
   - Semi-structured, face-to-face opportunistic interviews with AOs (11 in total, 7 familiar with the Envelope)
   - Feedback and consultation with Management and Reference Groups

The range of methods reflects the challenges in gaining access to various staff. Some barriers and issues encountered included: high turnover of staff; lack of appreciation of need for clinical handover between ACHs and EDs; lack of understanding what information is required for good quality clinical handover; and pressures on the workforce.

3.2.2 Demographic data

Aged Care Homes

Through the ACGPPI, Divisions of General Practice had already engaged and formed positive working relationships with ACHs which facilitated recruitment of ACHs for the trial. The Aged Care

Program Coordinators from each Division recruited a total of 29 ACHs. The characteristics of the ACHs included:

- Different provider models: private (both corporate and stand alone), not-for-profit and public (linked to public hospitals)
- Cultural diversity including ethno-specificity
- Socioeconomic diversity: of residents, of workforce and of surrounding community
- Geographical diversity: inner urban, suburban and urban fringe
- High care, low care and ageing in place (stand alone and combined)
- Varied size: range 30-138 beds
- Referring to one or more of the participating hospitals

Three ACHs withdrew from the trial. The final number of homes that completed the data collection and evaluation phases of the trial was 26. This represented approximately 11% of the ACHs and 12% of the number of beds in the geographical area.

Hospitals

The EDs of five major public teaching hospitals within the geographical area of the trial were recruited. One of these hospitals had two sites which were treated independently for the purpose of the trial, making a total of six EDs. Each ED reported an average range of 160-200 total presentations per day. Of these 2-4 (1-2%) were residents of ACHs.

3.3 Development and implementation of system to support use of the Envelope at Aged Care Homes

NEVDGP Project Officers formalised participation agreements with participating ACHs. A staff member from each ACH was designated to be responsible for the dissemination of information, staff support and education, data collection and weekly submission of data to the Project Team.

Identify current practices of transfer of information for clinical handover to emergency department

The Project Officers organised an initial meeting at each ACH to identify their current practices of transfer of information for clinical handover when a resident is transferred to an ED. These findings include:

- All ACHs had a Transfer Form or letter that was completed and sent with the resident to hospital. The forms varied in style, content and complexity but had common elements, such as: resident details; name and details of ACH; GP details; medical summary including past medical history; reason for transfer; Medicare number; next of kin details, nationality and languages spoken; and level of pre-morbid function.
- In some cases the Transfer Forms included prompts for the following documents/information: copy of the drug chart and any known allergies; doctor's letter; dose administration aid; advanced care plan / end-of-life wishes; copy of relevant x-rays and pathology results; and Comprehensive Medical Assessment (CMA).
- Transfer information was sent in:
    - The Envelope - 86%
    - A plastic sleeve - 6%
    - A normal envelope - 6%
    - Other - 2%

All residents were transferred to hospital in an ambulance and usually residents were unaccompanied. 50% of ACHs reported that they did not telephone the ED when a resident is transferred to hospital. All ACHs except one reported that there was no change in practice after-hours. This ACH used the Envelope in-hours but not after-hours. All ACHs in the seven Divisions (not only the 26 trial homes) had access to the Envelope. However, 42% of the ACHs did not

have, or staff did not know where to access, documented policy and procedures about transfer of a resident to hospital.

Develop generic procedures and an audit tool for transfers

The Project Team developed a Standard Operating Procedure (SOP) as well as a draft audit tool for data collection for use of the Envelope during the trial. Both the SOP and the audit tool were discussed and reviewed by all members at the Reference and Management Group meetings. Three ACHs piloted the SOP and the audit tool and provided feedback.

The Project Officers identified the need to raise and maintain the profile of the Envelope in ACHs and hospitals. A poster - to be displayed in EDs and ACHs to promote the Envelope - was also designed and presented to the Management Group for feedback

3.4 Mapping of system with hospitals

Project Officers had an initial meeting with the designated contact person(s) at each hospital involved in the trial to identify how EDs currently received clinical handover information from ACHs. These findings were:

- Hospitals vary in intake procedures and handling of clinical handover information
- Clinical handover information received from ACHs (all transfers not only trial homes) was extremely varied in range, relevance and quality
- ED staff reported that some ACHs provide relevant concise information, some provide limited information and some provide none
- ED staff reported some awareness of the Envelope

It was reported that EDs receive clinical handover information from ACHs using different forms of communication such as face-to-face handover from AOs, documentation accompanying the resident and telephone contact from ACH staff. It was common for the ED staff to telephone ACHs either for missing information and/or for more complex clinical handover information and/or to discuss discharge.

Project officers also worked with hospitals to:

- raise the profile/visibility to the hospital ED staff of the clinical handover information accompanying residents from ACHs
- track the receipt and use of the Envelope as a carrier of clinical handover information.
- track whether the necessary clinical handover information is being included with the Envelope

Each hospital developed their own system for collecting data. It was agreed that data would be collected on all transfers from ACHs into hospital, not just from the trial ACHs. The Project Officers then separated the data into trial and non-trial ACHs.

The audit tool included fields about the usefulness of the clinical handover information provided by the ACHs. This issue was explored in the evaluation phase of the trial through the interviews with ED staff. It was agreed that detailed examination of the quality of clinical handover was beyond the scope of the trial.

3.5 Evaluation and dissemination

Surveys and evaluation interviews

After the 18-week data collection phase of the trial was completed, the formal evaluation phase began. The evaluation phase involved written surveys and interviews. Findings were presented to the Reference Group for comment.

Surveys were designed and distributed to all participating ACHs. Separate questionnaires for interviews were designed for ACH, ED and AO staff. For each group, semi-structured face-to-face interviews were conducted with senior members involved.

4. Reported findings

4.1 Transfers and use of the Envelope

4.1.1 Aged Care Home data

A total of 259/417 (62%) transfers to hospital came from high care, 95/417 (22%) from low care and 62/417 (16%) from AIP. The Envelope was used in 317/355 (90%) of the transfers to the six EDs.

Transfers to hospital

There was an average of 16 (range 3-33) transfers from each ACH in the 18-week data collection phase. Recorded data indicated a total of 417 residents were transferred from trial ACHs to hospital. Of these:

- 355/417 (83%) went to the 6 trial EDs
- 62/417 (17%) went to out-patient appointments or other hospitals that were not involved in the trial
- The numbers of transfers to ED were greater during the week than on weekends
- There were more transfers on Thursdays than any other day of the week
- The majority of transfers occurred between 8am and 4pm
- 136/417 (32%) ACH staff called the ED to inform of the transfer

4.1.2 Ambulance service data

The Ambulance Service provided data on the number of transfers from the trial ACHs to each of the six EDs. This data included emergency and non-emergency transfers, which hospital, day of the week and time of transfer. Data was not collected on use of the Envelope.

Recorded data indicated a total of 577 residents were transferred by the Ambulance Service from trial ACHs. Of these:

- 497/577 (86%) were transferred to the six trial EDs
- 344/577 (60%) of transfers were by the non-emergency Ambulance Service
- Transfers to ED were greater during the week than on weekends
- There were more transfers on a Thursday than any other day of the week
- The majority of transfers occurred between 8am and 4pm and not after-hours

This data comes from Ambulance Victoria and supports the data collected by the ACHs.

4.1.3 Hospital data

Given that use of the Envelope was wider than the trial ACHs and because of the difficulty for ED staff in identifying trial ACHs, it was agreed that data would be collected on transfers from all ACHs into ED. The Project Officers then separated the data into trial and non-trial ACHs.

Consistent collection of data proved to be challenging for most of the EDs throughout the trial. It worked best where there was the same designated member of staff for the duration of the trial. This was the case in two of the six hospitals. In EDs where there were numerous changes in the designated staff member for the trial, data collection was poor.

A total of 101 residents arrived in EDs from trial ACHs. Recorded data indicated:

- 85/101 (84%) transfers to hospital arrived with the Envelope
- 68/85 (80%) were filled in correctly, 9/85 (10%) were partially filled in and 8/85 (9%) were not filled in at all
- 78/85 (93%) of the Envelopes that arrived in ED contained information i.e. 7 (8%) of the Envelopes arrived in ED empty

- 54/85 (64%) of the Envelopes contained useful information, 5/85 (6%) reported not useful, 26/85 (31%) no response

4.1.4 Key findings

The large majority of Aged Care Home residents transferred to hospital were: transferred with the Envelope; to an Emergency Department; and with useful clinical and other handover information in the Envelope. In addition the majority of transfers were: on weekdays; from high care ACHs; between 8am and 4pm; and by non-emergency ambulance services.

4.2 Evaluation of the Envelope

4.2.1 Aged Care Home survey

260 surveys (10 per ACH) were hand delivered to the 26 trial ACHs and collected by the Project Officers one week later. 165 surveys were completed; an average of 6 (range 2-13) per ACH.

Designation of staff who completed the survey (staff members who were involved in or managed the transfer to hospital process)[iii]: Registered Nurse Division 1 (81); Registered Nurse Division 2 (24); Personal Care Assistants (PCA) (45); and not recorded (11).

Survey responses – use and usefulness of the Envelope

The results of the 165 completed surveys were:

- 140/165 (84%) always use the Envelope when a resident is transferred to hospital
- 163/165 (98%) report the Envelope is useful

Figure 2 below provides a summary of to what extent survey participants 'agreed' or 'strongly agreed' with the useful features of the Envelope:

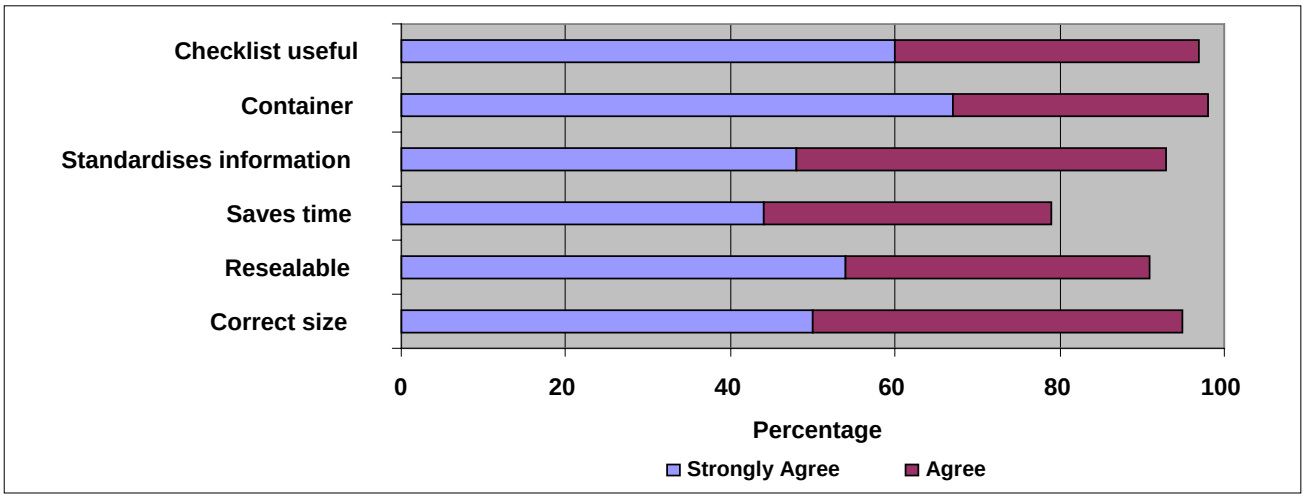


Figure 2 - Summary of evaluation of useful features

Survey Responses – Clinical Handover

- 128/165 (77%) agree that using the Envelope always or usually improves clinical handover from the ACH to ED
- 138/165 (84%) agree that using the Envelope always or usually improves clinical handover from the ACH to Ambulance Officers

[iii] As the trial was conducted solely in Victoria, Victorian nomenclature describing nursing and non-nursing care staff was used in the surveys and is reflected in the reported findings.

Survey responses – communication from ED to ACH

Although the focus of our trial was on clinical handover **from the ACH to hospital** we included questions about possible impact of the Envelope on communication **from the ED to the ACH.** Survey responses on verbal and written communication from ED to ACH are shown in Figures 3 and 4. Over half of the respondents (52%) 'agreed' or 'strongly agreed' that verbal communication from the ED to ACHs had improved, while 44% believed that written communication had improved:

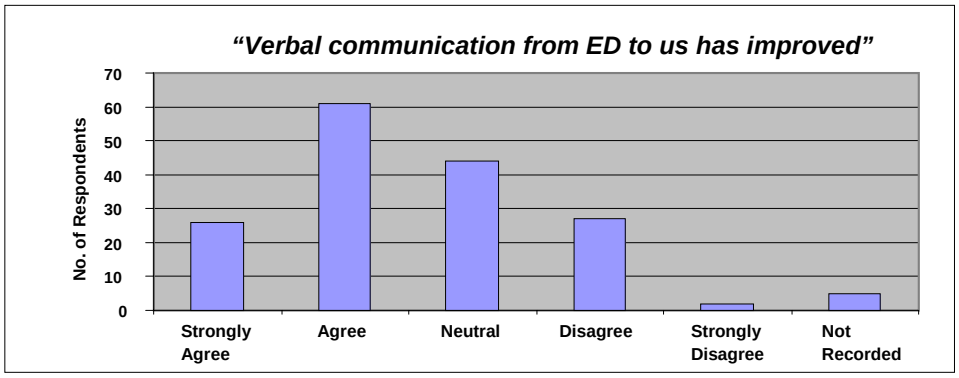


Figure 3 - Verbal communication from the ED to ACH

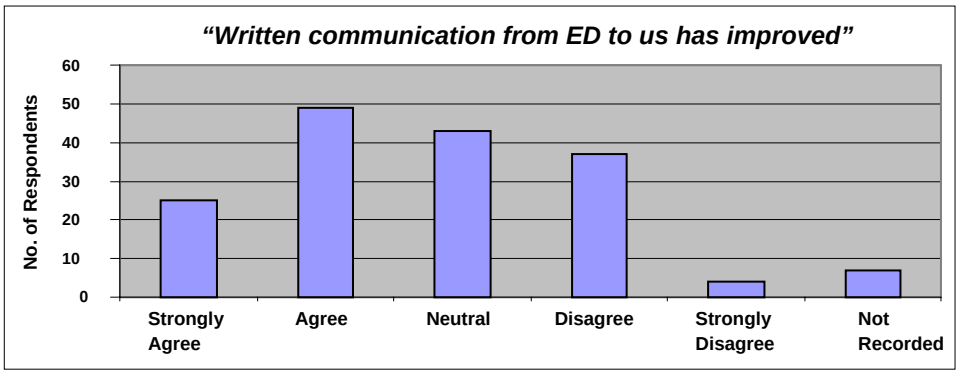


Figure 4 - Written communication from the ED to ACH

Survey responses – sustainability and transferability

- 152/165 (92%) report that the ACH would continue to use the Envelope, 2/165 (1%) would not continue to use it, 11/165 (7%) did not record an answer
- 151/165 (91.5%) report that they would recommend the Envelope if they moved to an ACH which did not use it, 5/165 (3%) would not recommend it, 9/165 (5.5%) did not record an answer

4.2.2 Key summary of Aged Care Home staff evaluation

The Envelope is: widely used in the trial ACHs; highly valued; easy to use; useful**;** believed to improve clinical handover; will continue to be used and would be recommended by ACH staff if they moved to another ACH which did not already use it.

4.3 Interviews

4.3.1 Aged Care Homes

The nineteen interviewees in six ACHs included: Care Coordinators (2); Directors of Nursing (3); Managers (4); Registered Nurse Division 1 (9) and a Unit Manager (1).

The Envelope
All interviewees (19/19) stated that the Envelope was a useful tool. Comments included: *it saves time; all information is in one container; the checklist is a reminder; easy to use, set out well; same information sent each time to hospital; very systematic and it demonstrates to other health professionals that the ACH is organised*.

16/19 believed using the Envelope reduced stress for staff and the same number of respondents believed that the ED staff have a better understanding of their type of facility and the level of care provided since using the Envelope. 10/19 stated they do not believe most staff understand the term "Scope of Practice" and they rarely completed this section.

Clinical Handover
All interviewees (19/19) agreed:

- Information sent with a resident to hospital has an influence on their care and outcomes
- Using the Envelope has raised awareness of the importance of clinical handover
- Using the Envelope has improved clinical handover

Verbal and written communication between ACHs and EDs
16/19 believed that communication has improved since using the Envelope.

18/19 reported that there has been a change in the type of telephone calls they are now receiving from the ED. Interviewees reported telephone calls from the ED to the ACH are no longer *"condescending"* or *"putting staff down".* ED staff are calling to clarify or seek more detailed information rather than calling for information that the ACH has already provided eg. the drug chart. These telephone calls still occur but have become less frequent.

Most telephone calls are now related to:

- Events leading up to transfer to hospital
- Resident care rather than "what was not sent"
- Discharge planning
- Time of last medication administration

10/19 believed written communication had not improved from EDs to ACHs when a resident is discharged from hospital; this correlates with the data collected through the ACH surveys.

Communication between ACH and Ambulance Officers
16/19 reported the Envelope had improved clinical handover with AOs.

Feedback included:

- AOs are asking for the Envelope when they arrive at the ACH
- Decreased turn around time for the AOs
- AOs feel "more confident" about handover information when the Envelope is used

ACH transfer procedure and sustainability
All interviewees (19/19) stated staff in charge of transferring a resident from their ACH to hospital were aware of the Envelope and new staff are informed of the Envelope through orientation and staff meetings. ACHs used a variety of strategies to promote the Envelope. The most successful were staff in-service training and poster display.

Although 8/19 reported the SOP developed for the trial was useful, the general impression was that staff did not rely on the SOP for use of the Envelope. 10/19 of ACHs had incorporated the Envelope into their transfer-to-hospital procedure documentation and some reported they would incorporate it if their Provider agreed.

19/19 believe the Envelope is embedded in their ACHs transfer process and that their ACH would continue to use the Envelope after the trial finishes. 13/19 thought their ACH would be willing to purchase the Envelope although not all interviewees (4/19) were in a position to talk about financial management.

4.3.2 Ambulance Officers

In total 11 AOs were interviewed: Mobile Intensive Care Ambulance paramedics (MICA) (2); non-emergency transport officers (4); and general paramedics (5).

The Envelope
7/11 AOs interviewed had seen the Envelope in their day-to-day work and they all thought that the Envelope is/would be useful for the transfer-to-hospital process of an ACH resident. The non-emergency AOs were more likely to be aware of the Envelope and to have seen it regularly than emergency and MICA AOs.

All AOs familiar with the Envelope (7/7) interviewed found the Envelope useful and valued the following features: *the checklist – they can easily see what is inside the envelope; it saves time; everything is kept together; it is usually ready on their arrival at the ACH; and it is a useful container to carry clinical handover documentation.*

Clinical Handover
11/11 AOs reported that the information sent to hospital with an ACH resident influences their care and outcomes. 7/7 AOs who had been in contact with the Envelope reported that using the Envelope improves clinical handover, and that the Envelope has raised the awareness of the importance of clinical handover in ACH staff.

One interviewee stated that at one ACH when he asked for a verbal handover the staff member said, *"It's inside the envelope", without* a willingness to also give a verbal handover.

Transferability
11/11 AOs would support the use of the Envelope in all ACH transfers to hospital. Some suggested amendments were to include allergies and pension number in the Envelope checklist.

4.3.3 Hospitals

At each of the six hospitals involved the person/s who was overseeing the data collection for the trial was interviewed as well as a range of other staff members across disciplines. Trial EDs estimate that the number of presentations from ACHs is 1-2% of the total presentations per day. It is likely that these numbers are too small for individual staff members to interpret the impact of the Envelope on safe clinical handover. Sometimes, it was not apparent to ED staff whether residents came from trial or non-trial ACHs. Because of the challenges in gaining access to ED staff we also adapted our evaluation methods. For these reasons we will report limited quantitative data and will outline the important themes from the 30 interviews.

The Envelope
There is wide variation in how both the Envelope *and* the clinical handover information inside are processed in different EDs and by individuals in each ED. Trajectories included:

- The Envelope and its contents staying with the patient[iv] (bedside)
- The Envelope is discarded and the clinical handover information is kept with the patient record
- The Envelope is kept with the patient, so it can be sent back to the ACH when the patient is discharged, and the clinical handover information is kept with the patient record

The "Qualifications/ Scope of Practice of staff who will be caring for this resident on return" section was not useful. A specific suggestion was that Advance Care Planning / End-of-life wishes be on the front of the Envelope. Only one interviewee (RN Div 1) reported any value in the sticker discharge prompt.

[iv] ACH residents are called patients when they are in hospital.

Clinical Handover
Clinical and other handover information is often incomplete. Examples of missing information included:

- The street address of the ACH. The head office address may be supplied but not the geographical address
- Events leading up to transfer. There is often a 'diagnosis' on the Transfer Form with no history of the preceding events
- Next-of-kin contact details and if they have been contacted
- Time of last medications
- Advance care plan / End-of-life wishes
- Pre-morbid status

All interviewees stated that: information sent in with a resident to hospital has an influence on care and outcomes; clinical handover is better when the Envelope is used and that using the Envelope has raised awareness of the importance of clinical handover.

Other themes regarding 'good' clinical handover, which interviewees linked to use of the Envelope, included: *"it makes the triage process more streamlined and saves time"* and *"it makes discharge easier to plan".*

Communication
6/30 reported some improvement in communication from ACHs using the Envelope and 24/30 reported no change. We do not have meaningful findings on the impact of using the Envelope on communication between ED staff and AOs.

Knowledge of the residential aged care sector
Staff interviewed understood the difference between high care and low care ACHs and the levels of staffing at these. All interviewees reported that the "Guide to Aged Care Home level of care" was useful for background knowledge and discharge planning.

Transferability
All interviewees reported that they would like to see the Envelope used for all transfers from ACHs to ED. The ED staff support the use of a discharge envelope with a separate checklist to be sent with the patient to their ACH. There were a range of opinions over whether the discharge envelope should be a separate envelope developed by the ED or if the current Envelope should include a discharge checklist. All interviewees agreed that the Envelope would rarely follow the patient to the ward if they were admitted from the ED.

4.4 Key Findings of interviews – ACH, AOs and ED

The Envelope is highly valued and its use is embedded in the transfer process of ACHs. Clinical handover is better when the Envelope is used and it has raised awareness of the importance of clinical handover. All interviewees would like to see the Aged Care Home Transfer-to-Hospital Envelope used for all transfers from ACHs to ED.

5. Discussion

The results of the trial indicate that using the Envelope is effective in improving clinical handover from the ACH to EDs. All stakeholders – ACH staff, AOs and ED staff – report that clinical handover is better when the Envelope is used. The trial and using the Envelope have raised the awareness of the need for clinical handover in this scenario. The Envelope has applicability for all residents across general and special needs populations. Furthermore, use of the Envelope is embedded into the everyday practice of ACHs involved in the trial.

5.1 Revision of the Envelope

Various stakeholders expressed their desire for clinical handover information to contain specific details to be organised in a particular way to suit their needs. We consistently promoted the idea of a single collection of well-organised clinical handover information where individual health professionals could readily access the particular information they required.

The changes on the Envelope have been informed by both the results of the trial and by an extensive consultation process with the stakeholders. These changes include:

1. Three sections removed altogether from the envelope: *Qualifications/Scope of Practice of staff who will be caring for this resident on return* field; *discharge prompt sticker* and *copy of documents faxed to hospital* and *Hospital UR number* fields. These sections were either seldom completed, not fully understood or not valued as a useful prompt.

2. The *Guide to Aged Care Homes* has been moved from the back to the front. The guide was highly valued by hospital staff and has helped to increase the knowledge and understanding of the different levels of care available at ACHs. ED staff also reported that it helped with discharge planning.

3. *Advance care plan / End-of-life wishes* is now included in large font on the front of the Envelope, as well as in the checklist so it is immediately obvious to AOs and hospital staff.

4. The *Checklist* is now grouped with a sub-field for the *Transfer Form.* This field includes a minimum information set that we are recommending should be included on all ACH Transfer Forms. A number of additions have been made to the revised *Checklist*, such as pension number, Pharmacist contact details and allergies.

5. There is a range of nomenclature across Australian States and Territories describing who has legal power to make medical decisions on another person's behalf. *Name of next-of-kin &/or Medical Enduring Power of Attorney or equivalent & contact details* is sufficiently recognisable to maintain national applicability. Similarly, a range of nomenclature describing nursing and non-nursing care staff has been included for national applicability, such as *Registered Nurse* and *Enrolled Nurse* outside of the state of Victoria.

The large C4 size is valuable as A4 size documents can be transported flat making them easier to read and file, and it also accommodates a large number of documents. Although the resealable feature of the Envelope adds to the cost, it is fundamental in maintaining the integrity of the Envelope and resident privacy for the repeated access needed throughout the clinical handover process. Various suggestions were considered and rejected because of the potential to add to the cost, such as the use of a non-standard envelope (eg. fluoro-coloured) and multicoloured printing

5.2 Aged Care Home Transfer Form

Hospital staff frequently express the wish that all ACHs use the same Transfer Form. In practice, however, each provider uses its own. Within the trial, a minimum information set to be included on all Transfer Forms was developed. This was informed by the content of Transfer Forms collected from trial ACHs and refined through consultation. The Transfer Form minimum information set is included as a sub-set of the transfer checklist on the Envelope.

5.3 Aged Care Home *self descriptor* information sheet

The idea of a *self descriptor* arose from the observation that at times there is a mismatch between the care required by a resident discharged from hospital and the capacity of the ACH to provide this care. Examples of significant changes in care are changes in medications, decreased mobility, complex dressings, increased frailty and the need for palliative care.

Hospital staff need to know the capacity of the ACH to provide for specific care needs. This is fundamental to safe discharge planning and to avoid readmission (bounce-back). We are therefore recommending that ACHs develop a self descriptor which would include information such as complexity of care available, medication packaging arrangements and criteria for accepting a resident back following discharge from hospital. This would be included with the transfer documents.

5.4 Relationship between Aged Care Homes and hospitals

Our results show that the understanding of the residential aged care sector by staff in EDs has improved. The Envelope is probably only one of several contributing factors. We believe there is broader cultural change happening where acute health services are recognising the need to better accommodate the population of older people from residential care.

One of the interesting results of the trial was the reported change in telephone calls from ED to ACHs. Previously telephone calls were more likely to be made seeking basic clinical handover information such as reason for transfer and current medication list. With the Envelope supporting clinical handover, telephone calls are now more likely to be made for:

- Clarification of events leading up to the transfer and pre-morbid function
- Informing the ACH of the status of the patient
- Time of last medications
- Discharge planning and clarification of staffing levels at the ACH to see if it is appropriate to send the patient back to the ACH

There is an ongoing reluctance by ACH staff to telephone EDs to discuss transfers to hospital. In addition, there is a sense that some of the resistance stems from values and attitudes about the appropriateness of older frail people accessing acute hospital services. Despite these barriers, we encourage ACH staff to call the ED and have included this as a field on the Envelope.

5.6 Ongoing use of the Envelope and discharge processes

Trial EDs estimate that the number of presentations from ACHs is 1-2% of the total presentations per day. This small proportion makes it unlikely that individual ED staff members could fully appraise the impact of the Envelope on safe clinical handover. Despite this, there was overwhelming support for continued use of the Envelope *in all ACHs for all transfers to hospital*.

Transfers in and out of hospital are reciprocal but separate processes. Although our trial focused on the transfer of a resident in to hospital, the need for better discharge clinical handover was repeatedly raised by ACH staff, ED staff and the Reference Group. Suggested possible solutions included a discharge checklist with a dedicated discharge envelope or a two-way envelope with relevant checklists.

6. Recommendations

Based on our findings and experience we recommend:

1. National use of the Aged Care Home Transfer-to-Hospital Envelope to support safe clinical handover when a resident is transferred from an Aged Care Home to hospital.

2. Regular coordinated review to ensure currency and national applicability of the Aged Care Home Transfer-to-Hospital Envelope.

3. Use of the Standard Operating Procedure to support the Aged Care Home Transfer-to-Hospital Envelope.

4. All Aged Care Homes use a *Transfer Form* when a resident is transferred to hospital which includes the recommended minimum information set.

5. All Aged Care Homes develop a *self descriptor* information sheet, which includes information such as complexity of care available, required medication packaging arrangements and requirements for accepting a resident after discharge from hospital, to be included with the transfer documents when a resident is transferred to hospital.

6. Supply of the Aged Care Home Transfer-to-Hospital Envelope should be straightforward and the cost not prohibitive.

7. Hospital emergency departments appoint dedicated staff to liaise with Aged Care Homes and oversee safe clinical handover between Aged Care Homes, Ambulance Officers and emergency departments.

8. Hospital emergency department staff in-service and orientation programs include education and training about:
- safe clinical handover of residents of Aged Care Homes
- the range of residential aged care settings

9. Residents of Aged Care Homes should have access to Medical Deputising Services/locum during the in-hours period.

10. The Australian Commission on Safety and Quality in Health Care:

10.1 Write to all Residential Aged Care Providers, Aged Care Provider peak bodies and all Aged Care Home managers to:
- Promote the need for clinical handover between Aged Care Homes and hospitals
- Promote inclusion of education and training about clinical handover in staff in-service and orientation programs
- Promote the use of the Aged Care Home Transfer-to-Hospital Envelope
- Provide a sample Aged Care Home Transfer-to-Hospital Envelope, the Standard Operating Procedure and information about where to get the Aged Care Home Transfer-to-Hospital Envelope
- Recommend *Transfer Forms* are revised to include the suggested minimum information set
- Promote a *self descriptor* information sheet
- Alert providers and managers to the need for the actual street address of the Aged Care Home to be obvious on transfer documentation eg letterhead, Transfer Form

10.2 Communicate with State and Territory ambulance services to:
- Promote the need for clinical handover between Aged Care Homes, ambulance officers and hospitals
- Promote the use and raise awareness of the Aged Care Home Transfer-to-Hospital Envelope

- Ask them to inform ambulance officers of the Aged Care Home Transfer-to-Hospital Envelope and its purpose
- Provide a sample Aged Care Home Transfer–to-Hospital Envelope and the Standard Operating Procedure

10.3 Communicate with the Commonwealth, State and Territory health departments, including Safety and Quality Councils to:

- Promote the need for clinical handover between Aged Care Homes, ambulance officers and hospitals
- Promote the use of the Aged Care Home Transfer-to-Hospital Envelope
- Provide a sample Aged Care Home Transfer-to-Hospital Envelope and the Standard Operating Procedure
- Discuss Aged Care Home Transfer-to-Hospital Envelope supply and access issues
- Discuss strategies for national roll-out of the Aged Care Home Transfer-to-Hospital Envelope

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