An Evaluation of Fife’s Integrated Community Assessment & Support Service (ICASS)

FINAL REPORT

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Authorship & Acknowledgements

This is the final in a series of reports detailing the findings from the evaluation of Fife’s Integrated Community Assessment and Support Service (ICASS). It summaries findings from previous evaluation reports and reports on new findings from more recent evaluation work.

In terms of the evaluation tasks:

- Mhairi Gilmour was lead investigator for the evaluation and carried out the review of evidence on Hospital at Home models of care, the initial scoping interviews to establish what ICASS is, designed and piloted the electronic surveys of staff and undertook the subsequent analyses of the data and interpretation of the findings. MG also wrote the first and subsequent drafts of previous evaluation reports, with the exception of the report detailing patient and carer experiences of Hospital at Home which was written by Anala Gossai. MG wrote the first and subsequent draft of the final evaluation report.

- Dr Gordon McLaren chaired the ICASS Evaluation Group, provided detailed comments on the evaluation proposal and all subsequent evaluation reports and provided input and support to the work throughout. GMcL also interpreted the findings of the quantitative analysis of the impact of Hospital at Home on acute activity in Fife.

- Bryan Archibald undertook all quantitative analysis around Hospital at Home and contributed to discussions around the interpretation of the findings of the analysis of the impact of Hospital at Home on acute activity in Fife. Stephen Halcrow undertook this role until July 2013.

- Jan Carter undertook the analysis around financial sustainability of Hospital at Home in Fife.

- Dr Angela Wilkinson undertook the audit and case review of a cohort of Hospital at Home patients.

- Anala Gossai & Alice Wright carried out the work around patient and carer experiences of Hospital at Home in Dunfermline & West Fife.

- The ICASS Evaluation Group provided guidance and advice on the evaluation work throughout. This included commenting on the various evaluation reports, including this final report. Membership of the ICASS Evaluation Group (past and present) is as follows:
  
  **Current members**
  - Dr Gordon McLaren (Chair) Consultant in Public Health Medicine, NHS Fife
  - Jan Carter Finance Manager, NHS Fife
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- Ivy Elder, Head of Information Services, NHS Fife (Retired)
- Stuart Fordyce, Project Manager, Home Care Services, Fife Council
- Val Hatch, General Manager, Emergency Care, NHS Fife
- Louise Weymes, Senior Planning & Performance Officer, Fife Council

The author would like to thank all those groups and individuals who contributed to the evaluation work since it began in 2011.

In particular, thanks are given to the patients and carers who gave up their time to be interviewed on their experiences of Hospital at Home.

Thanks are also given to the various staff members who gave up their time to contribute to the evaluation work, in particular those who agreed to be interviewed in order to explain the development and implementation of the various aspects of ICASS; those who gave time to comment on draft versions of the electronic staff surveys and especially those who took time to participate in the electronic surveys to capture experiences of ICASS as a whole and subsequently of the Hospital at Home component of ICASS.

Finally, thanks are given to those who provided comments on previous versions of this final ICASS Evaluation Report.
1. Executive Summary

Introduction

A proportion of Change Fund monies from The Scottish Government’s Reshaping Care for Older People Programme have been used to develop and implement a new Integrated Community Assessment and Support Service (ICASS) in Fife. Anticipated outcomes include:

- Providing an alternative to emergency hospital admissions for older people but will progress to also reduce the number of people requiring long term institutional care.
- A reduction in the length of stay will be facilitated for those who require hospital admission.
- Enable older people who are maintained at home to achieve and sustain their maximum potential.
- Providing care and support that is both financially and practically sustainable.

A programme of evaluation has been ongoing since December 2011 in order to determine whether Fife’s ICASS service is achieving these outcomes. Work has also been undertaken to understand the structure and processes of ICASS in order to establish what ICASS is, how it works and how it compares to previous ways of working.

1) A number of methods have been used in evaluating ICASS, a summary of which are provided below. A review of key documentation along with a series of qualitative interviews with key ICASS stakeholders and attendance at relevant meetings in order to determine how ICASS is structured and how it compares to previous ways of working;

2) An electronic survey to find out what health care staff know and understand about ICASS and whether they feel it is meeting its original anticipated objectives;

3) A review of published and grey literature to identify and provide background knowledge to other Hospital at Home models of care;

4) A series of Case Studies of Hospital at Home patients, involving a review of case notes and qualitative interviews, in order to capture their experience of Hospital at Home and seek their views on the extent to which the objectives of the service are being met;

5) An electronic survey of medical staff to capture their experiences of Hospital at Home and their views on the extent to which the objectives of the service are being met;

6) An audit of a cohort of Hospital at Home cases to determine whether Hospital at Home provides care for patients other than those who would otherwise have been admitted to an acute hospital setting;

7) An analysis of quantitative data recorded at both local patient administration system and national SMR01 level, in order to:
   a. describe the Hospital at Home activity and
b. assess the impact of Hospital at Home on acute hospital activity;

8) A financial evaluation to assess the financial sustainability of Hospital at Home.

This report is the final ICASS Evaluation Report and summarises the findings from previous reports as well as highlighting new areas of learning.

**NB:** Although the original evaluation protocol included ways in which Fife Council's Homecare Reablement Service would be evaluated, these were superseded by a Review of the service, the results of which have not been formally announced.

*As such, this report only identifies the learning from the Intermediate Care and Hospital at Home aspects of ICASS.*
Figure 1: Timeframe of ICASS evaluation work in relation to timeframe of Hospital at Home implementation

- Scoping interviews/attendance at meetings
- DWF H@H service starts
- DWF H@H Case note review
- Initial review of literature
- DWF H@H Patient/Carer Interviews
- Initial Evaluation Findings published
- DWF H@H Patient/Carer Report published
- K&L H@H service starts
- Audit of DWF H@H patient cohort
- Quantitative analysis of impact of H@H
- GNEF H@H service starts
- Healthcare staff survey - perceptions of ICASS
- Report on healthcare staff perceptions of ICASS
- Medical staff survey - perceptions of H@H
- Update of literature review
- Final Evaluation Report
What is ICASS and how does it compare to previous ways of working?

ICASS is the overarching term used to describe a group of services whose aim is to improve the quality of care and outcomes for older people with the intention of allowing them to remain independent within their own homes or communities.

Documentation describes ICASS as comprising three key component parts available in the three geographical areas of Fife: Hospital at Home, Intermediate Care and Homecare Reablement (which was subsequently re-named Home Care following Fife Council’s review). Each locality also has a single point of access where all referrals for Hospital at Home and Intermediate Care Services are routed. Access to Home Care is through a single point of access Contact Centre provided by Fife Council.

In addition to the core ICASS services listed above, each area has local variations such as Community Hospital Inpatient Beds, Intermediate Care Housing and Integrated Services for Dementia & Frailty.

ICASS is different to previous ways of working primarily through:

- Co-location of teams
- Implementing new ways of working
- Implementing new models of care such as Hospital at Home

Examples of new ways of working include the ICASS Assessment Model which identifies and assess older people who, with the right support and rehabilitation, could be discharged at the earliest opportunity and the Discharge Hub at VHK to improve discharge planning and take a proactive approach to complex cases.

As ICASS constitutes new ways of working in relation to caring for older people, one strand of evaluation focused on gathering NHS staff perceptions of ICASS through an electronic survey.

Health staff knowledge, understanding and perceptions of ICASS

Of the 214 staff members who participated in the electronic survey the majority were Nursing or Allied Health Professional staff. The vast majority of respondents were aware of ICASS having either referred to or worked within the service.

The majority of respondents felt ICASS had a positive impact on patients, benefited carers and was meeting the majority of its originally anticipated outcomes although only 33% of respondents agreed that ICASS helps reduce the number of people requiring long term care.

In terms of understanding ICASS, only 25% reported ICASS as including Hospital at Home, Intermediate Care and Home Care whilst other respondents reported District Nursing Services or Fife Falls Response Service being part of ICASS. Some respondents commented on the confusion around roles and responsibilities of different components of ICASS.

The majority of respondents felt ICASS had changed the way health care staff work together although this was not always in a positive way with referral processes and impact on existing services being highlighted as areas of concern.

Only 5% of respondents to the survey were medical staff, leaving a gap in understanding how medical staff, GPs in particular, perceive ICASS. In addition,
Hospital at Home is a new model of care implemented as part of ICASS, representing a significant investment in terms of both money and new ways of working. Taking this into account, subsequent evaluation work focused more specifically on the Hospital at Home aspect of ICASS.

**Hospital at Home in Fife**

The Hospital at Home model of care in Fife is Consultant-led with specialist Nurse Practitioners assessing and admitting, with medical support, patients to the Hospital at Home "Virtual Ward". Referrals are received for Alternative to Admission to an acute setting or Step Down Care following a time in hospital.

Conditions accepted by Fife's Hospital at Home are varied with only a few exclusions (cardiac event, stroke, lower leg fracture, GI bleed, head injury or acute abdominal pain). Whilst the service is aimed primarily at people aged 75 and over, people younger than 75 who are deemed "frail" can be accepted by the service.

Three Hospital at Home teams exist, covering Dunfermline & West Fife, Kirkcaldy & Levenmouth and Glenrothes & North East Fife with the service being implemented incrementally across the three areas.

A total of 1317 patients of all ages have been accepted to the service between April 2012 and end of March 2014. Of these, 1015 (77%) of accepted referrals were for Alternative to Admission and 302 (23%) were for Step Down Care.

Patients accepted to the service were aged between 23 and 102 years with the average age being 79 and the median age being 81. 972 (72.5%) patients accepted to Hospital at Home were aged 75 or over. It should be emphasised that only this activity will impact on acute hospital activity for people aged 75 and over.

Patients stay in the service for an average of 9 days and the majority of conditions cared for are respiratory conditions e.g. asthma, COPD, influenza, pneumonia or problems relating to the circulatory, genitourinary or digestive systems.

**Patients and carer experiences of Hospital at Home**

A series of case studies of a group of Hospital at Home patients and carers were undertaken in order to capture their experiences and establish how the service had met their needs. The work took place in Dunfermline & West Fife where Hospital at Home was implemented first and interviews took place approximately three months after the service started.

A total of five patients and three carers took part in semi-structured, qualitative interviews and key themes were identified.

Patients:

- Valued the opportunity to be in familiar surroundings when ill and believed the home environment provided a better setting for returning back to good health. Being able to maintain daily routines and having more support and social contact with their family and friends were reported as being especially important.

- Reported feeling safe being cared for at home - having Hospital at Home nurses explain what was happening and being available when needed contributed to this.
Repeatedly spoke of their apprehension for being admitted to hospital, especially given the recent centralisation of acute services in Fife which meant visitors would have to travel further. The negative media coverage around the new wing at VHK contributed to this apprehension. However, those patients who had been admitted to VHK praised the service they received.

Had no suggestions on how the Hospital at Home service could be improved.

**Carers:**

- Reported they appreciated their family member receiving hospital level services at home, although this depended on how severe the disease was.
- Reported that being able to maintain their own daily routine was important, especially those with grandchildren.
- Echoed the feelings of the patients in terms of apprehension of admission to hospital, for the same reasons – having to travel further to visit and negative media coverage around the new wing of VHK.
- Only one carer suggested communication could be improved between carers, GP’s and the Hospital at Home service.

In interpreting these findings, it is acknowledged that this work took place in the very early stages of Hospital at Home being implemented in Dunfermline & West Fife and, as with all new services, the Hospital at Home service was still refining processes in identifying patients who would benefit most from such a service.

It is also acknowledged that it is possible that the patients who contributed to this work might be less dependent and less frail than the subsequent patients accepted by Hospital at Home as the service has grown in confidence. It is therefore possible that this cohort of Hospital at Home patients were not all typical of the Hospital at Home target group.

**Medical staff perceptions of Hospital at Home**

Given that Hospital at Home represents a significant investment in terms of both Change Fund monies and also of new ways of working, it was felt to be beneficial to capture the views of medical staff potentially affected by the service being implemented. This was done through an electronic survey of all GPs in Fife and medical staff in NHS Fife’s Operating Division, focusing on knowledge and experience of Hospital at Home and its perceived impact on patients, carers, staff and services.

A total of 49 medical staff took part in the electronic survey and responses were analysed on a Fife-wide level.

The majority of respondents were GPs and all were aware of Hospital at Home with the majority having referred to the service at least once. Respondents covered all three areas of Fife. The remaining respondents were hospital based doctors.

The majority of respondents reported positive experiences of contacting the single point of access to make referrals and felt they (medical staff) were aware of the conditions Hospital at Home could support at home. However, a substantial number of comments related to not receiving enough information on the outcome of referrals or feedback on why referrals were not accepted, especially in areas where the service is still in its infancy.
Respondents reported that information provided on discharge from Hospital at Home was poor in terms of level of detail and format. GPs reported having to follow up with Hospital at Home staff to clarify information in the discharge documentation, thus increasing workload.

Hospital at Home was felt to reduce the need for hospital admissions by the vast majority of respondents although the impact on the length of hospital stay, reducing delayed discharges and especially helping to reduce the number of people requiring long term care was less clear.

Just under half of respondents felt Hospital at Home had adversely impacted on their workload either by them having to query discharge information or, in the case of hospital based staff, answering queries from Hospital at Home staff out of hours.

The vast majority of respondents felt that patients and carers had benefited from Hospital at Home with the service reported to help older people be maintained at home, improve their care experience and enable older people to maintain their independence. Some respondents noted that by admitting a person to hospital, carers might get some reprieve from their caring role.

One respondent queried whether Hospital at Home was caring for patients who might previously have been cared for at home under primary care i.e. does Hospital at Home deal with patients over and above those who would have previously been admitted to hospital? To assess whether this was the case, an audit of a cohort of Hospital at Home referrals was carried out.

**Does Hospital at Home care for patients other than those who would have otherwise been admitted to a hospital setting?**

An audit of 52 consecutive referrals for Alternative to Admission was carried out by the Hospital at Home Consultant in order to identify whether any of these patients could have been cared for by other existing services.

*NB: The audit took place in July 2013 and findings reflect services at this point in time.*

Of the 52 referrals, a total of ten patients were aged under 75. Of these, nine would have been admitted to hospital prior to Hospital at Home being in place, one would have been directed to an urgent Outpatient Department or Assessment at VHK.

Of the remaining referrals included in the audit i.e. those aged 75 or over, ALL would have been admitted to an acute hospital setting prior to Hospital at Home being in place. This was due either to no other appropriate service being in place or to existing services, *at that point in time*, not having the appropriate skill mix/level of training relating to, for example, administering subcutaneous or intravenous therapy to enable that patient to be cared for at home.

Of interest is the anecdotal evidence from Hospital at Home clinicians which suggests that, even though the patients included in this audit would all have been admitted to an acute hospital had Hospital at Home not been in place, there is still a proportion of Hospital at Home patients who *could* be cared for by other existing services.

In order to quantify this proportion, it would be helpful to repeat the audit work.

**Impact of Hospital at Home on acute hospital activity**
In order to estimate the impact of the service on acute activity in Fife, for people aged 75 and over, an analysis of quantitative data was carried out using two methods: Trend Analysis and Point in Time Analysis.

The Trend Analysis followed on from a previous analysis of trends in emergency activity rates for people aged 75 and over and compared acute activity in Dunfermline & West Fife where Hospital at Home was implemented first and K&L where Hospital at Home had not been implemented at that point. This methodology was based on the assumption that trends in emergency activity in these two areas were likely to have mirrored each other and thus expected acute activity (based on K&L data) could be compared to actual activity (based on DWF and Hospital at Home data).

Results from this analysis showed that the trends in the different areas do not mirror each other after 2009/10, with K&L admissions increasing between 2009/10 and 2012/13 whilst DWF admissions remained relatively static.

Based on this analysis results, it was felt the trend analysis method was no longer appropriate to use to estimate the impact of Hospital at Home on acute activity for people aged 75 and over.

The Point in Time analysis calculated the proportion of acute activity attributable to Hospital at Home at a particular point in time. August 2013 was chosen as the point in time as this was the most up to date validated data available.

The proportion of acute activity attributable to Hospital at Home was calculated as the difference in emergency admission and emergency bed day rates per 1,000 people aged 75 and over including and excluding Hospital at Home activity. The analysis focused on the Dunfermline & West Fife area as the Hospital at Home service had been implemented first there and good quality, validated data was not available for the other areas.

NB: Whilst referrals for both Alternative to Admission and Step Down Care contribute to emergency bed day activity, only referrals to Hospital at Home for Alternative to Admission contribute to emergency admission activity.

The analysis showed that in Dunfermline & West Fife:

- Acute activity attributable to Hospital at Home reached ~8% for emergency admissions and ~7.5% for emergency bed days in February 2013 for people aged 75 and over and remained at approximately these levels until August 2013.
- In August 2013, 8.5% of emergency admissions and 8% of emergency bed days for people aged 75 and over were attributable to Hospital at Home.

However, given that anecdotal evidence from Hospital at Home clinicians suggest there is a proportion of activity that could be dealt with by existing services; these figures are likely to be an overestimate. Repeating the audit work would assist in more accurately quantifying the acute activity truly avoided by Hospital at Home.

**Sustainability of Hospital at Home**

In evaluating the financial sustainability of Hospital at Home, the cost per bed day for a patient being cared for in Hospital at Home as opposed to an acute hospital setting was compared. This was calculated based on the cost of running Hospital at Home and the number of people being cared for by the services.
As of March 2014, the service at a Fife level was working at approximately 70% occupancy levels (based on original calculations that the service could care for 60 patients per day).

At a continued occupancy level of 70%, Hospital at Home at a Fife level would deliver 15,330 bed days per annum - equivalent to 1916 patients, using an average length of stay of 8 days - equivalent to an average cost per bed day of £170 in Hospital at Home compared to an average cost per acute bed day of £267.

In these circumstances, Hospital at Home would be £97 (36%) less expensive per bed day than if the patient was being cared for in an acute setting.

Whilst the above analysis recognises the difference in direct costs, it does not take into account the significant overheads associated with caring for a person in a bed in a physical hospital setting. The non direct costs associated with caring for a person in VHK would add 47% to the direct costs mentioned above.

Therefore, investing in providing hospital level care in the community would negate the need to increase Hospital Wards, saving both the difference in direct costs and the additional overheads associated with caring for a person in a hospital ward.

In terms of whether Hospital at Home is sustainable from a practical point of view, staff opinions gathered via the staff surveys were mixed with concerns raised around recruiting lower band staff without enough width and depth of experience to effectively provide hospital level care at home.

**The evidence base for Hospital at Home**

A review of published and grey literature was undertaken to provide background knowledge to the different existing models of Hospital at Home and their relevance to the Fife scenario. The key findings were as follows:

- The Hospital at Home model in Fife is quite unique. Other models of Hospital at Home exist but differ in a variety of ways:
  - Many are targeted at specific conditions such as chronic obstructive pulmonary disease or chronic heart failure
  - Many, such as the Croydon model, identify patients “at risk” of hospital admission and focus community based services on providing care via a “Virtual” or “Community Ward” to prevent these people subsequently being admitted to hospital. Other models identified patients currently in a hospital setting who can continue to receive hospital level care but in their own home.
  - Many include Allied Health Professional and/or Social Care staff

- Evidence on other models of Hospital at Home suggests that Hospital at Home models of care improve patient experience. Other outcomes such as readmission or mortality rates differed according to the model of care and the condition being cared for.

- Availability of care at home, either by informal carers or by home care services, is important to the success of a Hospital at Home episode of care and also impacts on analyses of cost of Hospital at Home models of care.
The model of Hospital at Home most similar to Fife’s reported in the published literature was the ASSET model in Lanarkshire, although only one conference abstract was identified. This abstract reported on the 30 day outcomes of the first 1000 patients finding that, for those maintained at home, 18.7% had been re-admitted once or more and 8.5% of patients had died within 30 days of being discharged.

In terms of “grey literature”, the majority related to the Scottish Government’s Press Release in 2013 stating that models of Hospital at Home similar to the Lanarkshire (ASSET) model detailed above were being rolled out across Scotland with key results from a clinical audit quoted.

No updated information relating to the Torfaen Hospital at Home model of care was identified although further reports on Hospital at Home models in other areas of the UK were found but the information provided was very brief.

Conclusions
In interpreting the findings from the various strands of evaluation, the following conclusions were drawn:

- The Intermediate Care and Hospital at Home components of ICASS have introduced new ways of working which have helped achieve, to an extent, ICASS’s overall aim of allowing older people to remain independent within their own homes or communities.

- This has been achieved by providing an Alternative to Admission to hospital in the case of Hospital at Home and both Intermediate Care and Hospital at Home providing Step Down Care thus helping reduce the length of time an older person remains in hospital. It is acknowledged that ICASS is one part of a larger body of work in changing the way older people are cared for in Fife.

- In the case of Hospital at Home, patients and carers like the service and it accounted for ~8% of acute activity for people aged 75 and over in Fife in August 2013. However, this figure is likely to be an overestimate, based on the anecdotal evidence of Hospital at Home clinicians.

- It should also be noted that, in accepting referrals for people aged under 75, Hospital at Home is not achieving its maximum potential in terms of the impact on acute hospital activity for this age group and also in terms of cost-effectiveness.

- It is too early to estimate the longer term impacts of Hospital at Home. One of the originally anticipated outcomes of the service was to reduce the number of people requiring long term institutional care and only longer term monitoring of care home admission rates or re-admissions to hospital will help quantify whether this has actually happened.

Recommendations
In considering the findings from the various strands of evaluation work, a series of recommendations are presented.
NB: It is acknowledged that the recommendations below are based on the findings of evaluation work undertaken at a specific point in time and that these may already be taken into account in work currently underway around ICASS.

Recommendation 1
To facilitate better understanding of ICASS and its component parts by service providers, both in health and social care, and by service users, all ICASS staff should consistently use the same terminology:

- ICASS is the acronym used to describe a group of services, the key components of which are Hospital at Home, Intermediate Care and Home Care. Interchanging the term ICASS with Intermediate Care has the potential to confuse both service providers and service users.

Recommendation 2
To continue improving the Intermediate Care and Hospital at Home components of ICASS, work to resolve any outstanding perceived issues or barriers to good working partnerships identified through the staff surveys should be considered for inclusion as part of the Community Flow Improvement Group work plan.

Recommendation 3
At a strategic level, the importance of including Home Care Reablement as a component part of ICASS is acknowledged. Evidence on the impact of this service on people aged 75 and over in Fife should continue to be sought by the ICASS Implementation Group.

Recommendation 4
To impact most on reducing the rate of emergency hospital activity for the oldest, frailest members of our community, the acceptance criteria for Hospital at Home should be applied more rigorously, especially with regard to age and level of need. This will also help NHS Fife in achieving the vision of Reshaping Care for Older People which relates to people aged 75 and over.

Recommendation 5
To maximise potential cost savings associated with the Hospital at Home model, consideration should be given to whether the original capacity levels for the service are still valid. Applying the acceptance criteria regarding age more rigorously would also assist with this.

Recommendation 6
To assist in identifying those frail patients who would benefit most from the Hospital at Home service, Hospital at Home should consider ways of quantifying the levels of need of potential patients, at the start and finish of an episode of care. This would and also assist in quantifying any changes as a result of receiving the service.

Recommendation 7
To ensure Hospital at Home accepts referrals for the most appropriate patients, and does not deal with patients that could/would receive other services, Hospital at Home clinicians should consider undertaking a second audit of a cohort of Hospital at Home cases. This would also help accurately assess the percentage of emergency hospital activity truly avoided by Hospital at Home.

**Recommendation 8**

To identify any longer term changes that could be, at least in part, attributable to Hospital at Home, rates of emergency hospital admissions and readmissions for people aged 75 and over should continue to be monitored.

**Recommendation 9**

To identify any longer term changes in the number of people requiring long term institutional care that could, at least in part, be attributed to Hospital at Home or Intermediate Care, longer term trends of institutional care should be monitored.

**Recommendation 10**

To improve partnership working between services, Hospital at Home should consider how best to provide feedback on both outcome and appropriateness of referrals to referrers, especially in areas where the service is still in its infancy. Hospital at Home should also consider how best to provide information on discharge from the service.

**Recommendation 11**

To facilitate a successful outcome of an episode of Hospital at Home care, the service should continue to consider the circumstances of both patients and their carers.

**Recommendation 12**

To facilitate improved service user satisfaction, Hospital at Home and Intermediate Care services should consider ways of collecting feedback from service users, both patients and carers on an ongoing basis.
1. Background

A proportion of Change Fund monies from The Scottish Government’s Reshaping Care for Older People Programme have been used to develop and implement a new Integrated Community Assessment and Support Service (ICASS) in Fife.

ICASS is the overarching term used to describe a group of services in Fife whose aim is to improve the quality of care and outcomes for older people with the intention of allowing them to remain independent within their own homes or communities.

Although there was no overarching Fife-wide document detailing what ICASS was or was not at the outset of the evaluation work, presentations on ICASS identified three core components that make up ICASS: Hospital at Home, Intermediate Care and Home Care Reablement.

Original documentation stated that the anticipated outcomes of ICASS included:

- Providing an alternative to emergency hospital admissions for older people but will progress to also reduce the number of people requiring long term institutional care.
- A reduction in the length of stay will be facilitated for those who require hospital admission.
- Enable older people who are maintained at home to achieve and sustain their maximum potential.
- Providing care and support that is both financially and practically sustainable.

A proposed programme of evaluation of ICASS\(^1\), using a variety of methods, was presented to and approved by the ICASS Partnership Project Group (PPG) on 12th January 2012 with the following key evaluation questions:

| 1. What is ICASS and how does it compare to other existing models? |
| 2. Has ICASS provided an alternative to emergency hospital admissions? |
| 3. Has ICASS resulted in a reduction in length of stay for those patients who do require emergency hospital admission? |
| 4. Has ICASS reduced the number of people requiring long term institutional care? |
| 5. Does ICASS enable older people who are maintained at home to achieve and sustain their maximum potential? |
| 6. Are the models put in place for ICASS sustainable from a financial and practical point of view? |
| 7. What are staff perceptions of ICASS? |
| 8. What are service user perceptions of Hospital at Home? |

Work has been ongoing since 2011 to answer these evaluation questions using a variety of methods which are summarised below.

A series of reports have been prepared and presented to the ICASS PPG and subsequently the ICASS Implementation Group at various time points since 2011 in order to share any key learning points that might inform future development of ICASS\(^2\).

This report is the final ICASS Evaluation Report and summarises the findings from previous reports as well as highlighting new areas of learning identified through:

- An electronic survey capturing medical staff perceptions of Hospital at Home
- An audit of a cohort of Hospital at Home patients in Dunfermline & West Fife
- An update on available evidence on the Hospital at Home model of care from published and grey literature
- An update on the quantitative analysis assessing the impact of Hospital at Home on acute hospital activity and
- An assessment of the financial sustainability of Hospital at Home.

2. Methodology

A number of methods have been used in evaluating ICASS, a summary of which are provided below.

1) A review of key documentation along with a series of qualitative interviews with key ICASS stakeholders and attendance at relevant meetings in order to determine how ICASS is structured and how it compares to previous ways of working;

2) An electronic survey to find out what health care staff know and understand about ICASS and whether they feel it is meeting its original anticipated objectives;

3) A review of published and grey literature to identify and provide background knowledge to other Hospital at Home models of care;

4) A series of Case Studies of Hospital at Home patients, involving a review of case notes and qualitative interviews, in order to capture their experience of Hospital at Home and seek their views on the extent to which the objectives of the service are being met;

5) An electronic survey of medical staff to capture their experiences of Hospital at Home and their views on the extent to which the objectives of the service are being met;

6) An audit of a cohort of Hospital at Home cases to determine whether Hospital at Home provides care for patients other than those who would otherwise have been admitted to an acute hospital setting;

7) An analysis of quantitative data recorded at both local patient administration system and national SMR01 level, in order to:
   a. describe the Hospital at Home activity and
   b. assess the impact of Hospital at Home on acute hospital activity;

8) A financial evaluation to assess the financial sustainability of Hospital at Home.

NB: 1

NB: The original evaluation protocol included ways in which Fife Council’s Homecare Reablement Service would be evaluated. Subsequently, a review of the service was undertaken by Fife Council and, at the time of writing, a report on the outcomes of the review is awaited and no formal announcements have been made regarding the future of Homecare Reablement. Informally, it has been reported that there will no longer be separate Homecare and Homecare Re-ablement services; instead all services will be called Homecare and have a re-ablement focus. In terms of evaluation, the original plans for evaluating Homecare Reablement as part of the evaluation of ICASS have not progressed due to the ongoing review. As such, this report only identifies the learning from the Intermediate Care and Hospital at Home aspects of ICASS.
Figure 1: Timeframe of ICASS evaluation work in relation to timeframe of Hospital at Home implementation

Scoping interviews/attendance at meetings
DWF H@H service starts
DWF H@H Case note review
Initial review of literature
DWF H@H Patient/Carer Interviews
Initial Evaluation Findings published
DWF H@H Patient/Carer Report published
K&L H@H service starts
Audit of DWF H@H patient cohort
Quantitative analysis of impact of H@H
GNEF H@H service starts
Healthcare staff survey - perceptions of ICASS
Report on healthcare staff perceptions of ICASS
Medical staff survey - perceptions of H@H
Update of literature review
Final Evaluation Report
3. Key Findings

3.1. What is ICASS?

ICASS is the acronym used for Fife’s Integrated Community Assessment and Support Service and is the overarching term used to describe a group of services whose aim is to improve the quality of care and outcomes for older people with the intention of allowing them to remain independent within their own homes or communities.

Although at the outset of the evaluation work, there was no one over-arching document detailing what ICASS was, presentations on ICASS identified three core components: Hospital at Home, Intermediate Care and Home Care Reablement.

A report in November 2013 summarised these three components as below:

**Hospital at Home**
The role of the Hospital at Home team is to treat appropriately identified patients at home or in a care home setting. This service provides an alternative to being admitted to or step down care from hospital and will provide the same level of care that would be expected should you have been admitted to or remained in hospital. The team is lead by a medical consultant and support by General Practitioners and a specialist nursing team.

**Intermediate Care**
The Intermediate Care service consists of a multi-disciplinary team of practitioners who can provide a period of rehabilitation for patients where they live. Intermediate Care can be put in place to prevent admission to an acute hospital or to support a patient following discharge from an acute hospital or Hospital at Home. The length of input required from Intermediate Care will be dependent on the specific needs of the individual; this could be for a few days or a number of weeks.

**Fife Council Homecare Reablement**
The Homecare Reablement service will provide support and assistance to individuals that will enable them to regain independence wherever possible. The team provides a range of services from personal care, help with activities of daily living and other practical tasks for a time limited period of up to six weeks. The approach of Homecare Reablement is to “do with” rather than “do for” and staff will work with individuals to develop the confidence and practical skills to carry out these types of activities themselves.

In addition to the core ICASS services detailed above, each locality also has a single point of access where all referrals for Hospital at Home and Intermediate Care Services are routed. Access to Home Care is through a single point of access Contact Centre provided by Fife Council.

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3 ICASS – The Story So Far, Anne McAlpine & Claire McKee

4 At the time of writing, a report on the outcomes of the Homecare Reablement review. Informally, it has been reported that there will no longer be separate Homecare and Homecare Reablement services; instead all services will be called Homecare and have a re-ablement focus. Taking this into account, the term Home Care will be used from this point on.
3.2. Local Variations in ICASS across Fife Localities

In addition to the core models of care detailed above, each locality in Fife has additional aspects of ICASS which reflect local circumstances. Table 1 details those services listed as being part of ICASS in each of the locality areas of Fife, as taken from relevant local documentation relating to ICASS.

Table 1: Local variations of ICASS across Fife, March 2014

<table>
<thead>
<tr>
<th>Dunfermline &amp; West Fife</th>
<th>Glenrothes &amp; NE Fife</th>
<th>Kirkcaldy &amp; Levenmouth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital at Home</td>
<td>Hospital at Home</td>
<td>Hospital at Home</td>
</tr>
<tr>
<td>Intermediate Care Services</td>
<td>Intermediate Care Services</td>
<td>Intermediate Care Services including Intermediate Care Housing at Lismore Place and Community Rehabilitation Unit (Day Hospital)</td>
</tr>
<tr>
<td>Home Care</td>
<td>Home Care</td>
<td>Home Care</td>
</tr>
<tr>
<td>Community Hospital Inpatient Beds to support alternative to admission to an acute setting and step down care</td>
<td>Community Hospital Inpatient Beds to support alternative to admission to an acute setting and step down care</td>
<td>Integrated Services for Dementia &amp; Frailty</td>
</tr>
</tbody>
</table>

ICASS in Dunfermline & West Fife (DWF), March 2014

In Dunfermline and West Fife, ICASS comprises Hospital at Home, Intermediate Care Services and Home Care. Dunfermline and West Fife were the first locality to implement Hospital at Home with the service going “live” on 16th April, 2012. The early lessons learned around Hospital at Home in this locality were presented in the first evaluation report.

ICASS in Glenrothes & North East Fife, March 2014

In Glenrothes and North East Fife (GNEF), ICASS comprises the three core ICASS services of Hospital at Home, Intermediate Care Services and Homecare. Community hospital inpatient beds are also included in ICASS in GNEF and provide support for alternative to admission to and step down care from an acute setting. Staff from the Intermediate Care Service in Glenrothes & North East Fife provide support to all patients whether in an inpatient or community setting.

In addition to those services detailed above, Fife Council has established Intermediate Care Housing within sheltered housing complexes in both Glenrothes and Cupar. These are available for people who are waiting for adaptations etc on their own home and facilitates people being discharged from hospital and so facilitate hospital beds being used more appropriately.

Two Reablement Units based in care home settings (Alan McLure and Preston House) have also being established by Fife Council and these provide places where people can receive reablement support following discharge from hospital and prior to going home.

A Day Assessment, Treatment and Rehabilitation (DATR) Service has also been proposed as an alternative model of care to the current Day Hospital model in this area.
In Kirkcaldy and Levenmouth (K&L), ICASS again comprises the three core ICASS services of Hospital at Home, Intermediate Care Services (including access to Intermediate Care Housing at Lismore Place and the Community Rehabilitation Unit) and Homecare. Similar to GNEF, community hospital inpatient beds in K&L are also utilised as part of ICASS. K&L also has Integrated Services for Dementia & Frailty as part of the ICASS model, a service unique to this area at this point in time. Details are provided below.

### Integrated Services for Dementia & Frailty in Kirkcaldy/Levenmouth

The community infrastructure in Kirkcaldy and Levenmouth has been enhanced through adding and aligning a range of new roles and relationships, to provide care that is centred on the person and their family, and specifically orientated to the needs of those with dementia and frailty.

The service puts the person first and not the disease(s), it anticipates, responds and empowers to ensure wellness is central to care. Care that is wide ranging and integrated is provided in the persons own home, with hospital avoided or only used for short stay.

The components of the model are:

1. Care Managers and Care Co-ordinators – aligned to Primary Care Teams in each local area in Kirkcaldy & Levenmouth.
2. Clinical Psychologist, part-time – their main role is their clinical caseload for patients with difficult behaviours as well as staff support, education and advice.

### 3.3. How does ICASS compare to previous ways of working?

Data gathered in the earlier stages of evaluation highlighted several ways in which ICASS differs from how services for older people in Fife were provided previously. The main areas of change related to closer working of ICASS services through co-location of some teams; new ways of working such as establishing a timetable to focus solely on assessments at a given time in the working week in order to schedule clinical commitments and assessment commitments better and hence reduce the waiting list for assessments and implementing new models of care such as Hospital at Home.

#### 3.3.1. Hospital at Home

The Hospital at Home service was implemented incrementally across Fife, starting in the Dunfermline & West Fife area in April 2012 before being implemented in the Kirkcaldy & Levenmouth area in April 2013 and the Glenrothes area in August 2013.

As of March 2014, referrals for Step Down Care from Victoria Hospital Kirkcaldy (VHK) are accepted by all Hospital at Home services in Fife whilst referrals for Alternative to Admission to an acute setting are accepted from all GPs in Dunfermline & West Fife, Kirkcaldy & Levenmouth and Glenrothes. Work is underway to extend this to all GPs in North East Fife.

Work has also continued around developing other aspects of the ICASS service through the ICASS Improvement Group (now incorporated into the Community Flow Improvement Group). A report on the areas of work for this group was presented to the ICASS Implementation Group in March 2014 (Appendix 1) and key areas of work have included developing the ICASS Assessment Model and the development of an Integrated Discharge Hub at Victoria Hospital Kirkcaldy (VHK).
3.3.2. ICASS Assessment Model

The implementation of the ICASS assessment model was part of improvement work and involved community nurses and Allied Health Professionals (AHPs) in-reaching into an acute hospital to identify and assess older people who, with the right support and rehabilitation, could be discharged at the earliest opportunity.

The model was developed to address a reduction and delay in referrals to ICASS for patients who could be discharged early from hospital i.e. referrals for Step Down Care. This occurred when acute hospital services were centralised in Fife with the opening of a new acute hospital wing. Patient care was being affected as patients' were being kept in hospital for longer periods, waiting times in Accident & Emergency were increasing, an additional ward had to be opened within the acute hospital to cope with additional patients as well as an increased number of patients that were being placed on waiting lists for downstream beds.

The assessment model involved nurses and AHPs working alongside colleagues in wards in the acute hospital, visiting wards twice each week to identify patients that could be discharged at the earliest opportunity with the right support. Patients' were also identified on a daily basis using the waiting list for a downstream bed. Conversations about an individual's circumstances and steps to discharge then took place between the assessors, hospital based nurses, AHPs, medical staff and the patient, their family and carers. Following this, referrals were made for Step Down Care to ICASS with the assessors monitoring capacity and liaising with ICASS colleagues.

Following implementation of the model, an additional 160 patients were discharged home from hospital as a result of the ICASS assessment model within the acute hospital within a 4 month period.

3.3.3. Integrated Discharge Hub, VHK

The Integrated Discharge Hub in VHK was developed in response to several challenges identified relating to discharge pathways from hospital. These included: multiple discharge routes from hospital, a shotgun approach to onward service referral and delays to discharge. In order to improve discharge planning and take a proactive approach to complex cases, work around developing the Integrated Discharge Hub began.

The vision for the Hub was:

- To improve the patient pathway by placing the patient and their carers at the centre of their care and discharge from hospital.
- To access appropriate and timely treatment and services.
- To facilitate early and effective discharge planning.
- To ensure a PDD (predicted date of discharge) is determined.
- To reduce the patients' length of stay in the acute setting.
- To reduce inappropriate transfers.
- To provide consistent care.
- To increase the level of quality patient information.
- To maintain and have ownership of EDISON⁵, offering a more consistent approach to the management of delayed discharge.
- To co-ordinate transfers to downstream beds.

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⁵ Electronic Discharge Information System Online Nationally: Electronic system for recording delayed discharges
In order to be referred to the Integrated Discharge Hub, the patient must be clinically fit for discharge, have a predicted date of discharge within 48hrs of their “clinically fit” date and require support on discharge i.e. Step Down Care.

In terms of staff involved, the Integrated Discharge Hub has input from a Team Leader, Patient Flow Coordinators, Fife Council Home Care Managers, EDISON Administrator and a Hub Administrator.

For patients deemed medically fit, with a predicted date of discharge within 48hrs and requiring support on discharge, an electronic referral is sent to the Integrated Discharge Hub and a patient flow co-ordinator visits the ward within 4 hours to carry out an assessment of the patient and recommend a discharge pathway and plan.

Discharge options are discussed and agreed with the patient, their family and/or their carer. The discharge plan is then implemented with referrals to appropriate agencies made. The patient is then discharged with appropriate support in place.

Performance data is captured to allow weekly reporting on:

- Number of patients through the hub.
- Referrals received before midday
- 4 hour compliance.
- Discharge destination.
- Discharges within 48 hours.
- Percentage discharges within same week.
- Change of pathway.
- Reasons for delays.

In terms of activity related to ICASS, of the 2116 referrals received by the Discharge Hub between 5th August 2013 and 9th April 2014:

- 309 patients were discharged home with Step Down Care from Intermediate Care
- 23 patients were discharged home with Step Down Care from Hospital at Home.

3.4. What do health staff know and understand about ICASS and whether it is meeting its originally anticipated outcomes?

As ICASS constitutes new ways of working in relation to caring for older people, one strand of evaluation focused on gathering NHS staff perceptions of ICASS through an electronic survey. This work was undertaken in July 2013 and the findings reflect this point in time. The key findings were fed back to the ICASS Implementation Group in January 2014 and are summarised below. Further details of the methodology and full findings are reported in the full report (REF).

Of the 214 respondents who took part in the survey, the vast majority (94%) were aware of ICASS, either by referring to the service (37%) or working within the service (36%). The majority of respondents were either Nursing staff (50%) or Allied Health Professional staff (29%) with only 5% of respondents being Medical staff.

Of the respondents aware of ICASS, the majority (74%) felt that ICASS had a positive impact on patients by improving their care experience, allowing them to be treated in their own home (78%) and by enabling older people to maintain their independence (76%). Comments highlighting both positive and negative impacts included:
They (patients) are so grateful of being able to stay in their own homes, with their own things, and sleep in their own beds. Their mental well being is also improved and in turn allows them to recover better.

○ Avoids admission and promotes independence in own home / self management

○ Increase in administration since the commencement of ICASS which sadly inhibits free time for patient intervention.

The majority of respondents (69%) also felt that ICASS had benefited carers by enabling them to support older people to maintain their independence at home and by caring for their family member at home (71%). Comments highlighting both positive and negative impacts included:

○ Lots of reassurance given to family members, this may reduce a lot of anxiety also for family.

○ Less travelling, care in the home setting but this can be stressful too for carers

○ Valuable for carers as support is more accessible

In relation to whether ICASS was meeting its anticipated objectives, the majority of respondents felt it was doing so by:

- Providing an alternative to emergency hospital admissions for older people (58%)
- Reducing the length of stay for those people who require hospital admission (68%)
- Enabling older people who are maintained at home to achieve and sustain their maximum potential (73%)
- Providing care and support that is practically sustainable (57%).

Only 33% of respondents agreed that ICASS has helped reduce the number of people requiring long term care. Comments relating to whether ICASS was achieving its original objectives included:

○ I think once a pathway is identified and if resources are available then yes – ICASS has helped reduce length of stay

○ Although it (ICASS) may delay hospital admission quite often the patient ends up getting admitted to hospital usually after they have been discharged from ICASS

○ It is once ICASS are no longer involved and referred onto other services I have experience of the system falling short.

○ Unlikely to be able to deal with predicted number of elderly people with current staffing. Requires experienced staff with a wide range of skills to deal with multiple diagnoses and complex social situations. Increasingly recruiting lower band staff who do not have width and depth of experience.

○ (needs to…) utilise people already working in community and access their relevant experience as many members of teams do not have community background and have required a lot of training which is already present in community.
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In relation to the services included within ICASS, only 25% of respondents reported that ICASS consisted of Hospital at Home, Intermediate Care and Home Care. There were 20% of respondents who reported District Nursing Service as being part of ICASS and 31% of respondents reported that Fife Falls Response Service was part of ICASS.

When asked about the purpose of ICASS, only 33% of respondents answered that ICASS provided an Alternative to hospital Admission and Step Down Care, helped reduce the need for long term institutional care and enabled older people who are maintained at home to achieve and sustain their maximum potential.

There was also varied understanding about the roles and responsibilities of ICASS, with several comments highlighting these points:

- ... it could be clearer as to the role of each ICASS team. This would encourage referral rates.
- Can there be a more open forum to better understand the role and remit of the H@H team?
- No-one seems to know exactly what is going on at times, especially with regards to the changes from IRT\(^6\), EHCT\(^7\) to intermediate care.

The majority (66%) of respondents felt that ICASS has changed the way staff within NHS Fife work together whilst 41% of respondents felt that ICASS has changed the way NHS and Fife Council staff work together. Both positives and negatives were highlighted in the comments provided:

**Working within NHS Fife**

- Improved communication between ICASS teams
- Much better communication across acute and primary care. Much more integrated working.
- They need to link in better with ward based therapists - I have found that our assessments are not as valued by some members of ICASS as they should be.
- ICASS needs to consider the impact of their service on ward based therapists; our role appears to have changed since ICASS was created.
- Feel existing community nursing teams are being under used by new systems in terms of staffs years of community experience and skills. Worried current district nursing teams will have less involvement with more complex care patients and will be asked only to participate in basic rather than holistic care of patients.

**Working between NHS and Fife Council staff**

- Not in a positive way though. Lack of trust, delays in receiving services, duplication of assessment.
- Better relationships and understanding of the pressures within each service.
- There was a good rapport between Council and NHS before locally and this is still embraced and mutual respect for each other’s roles.

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\(^{6}\) Integrated Response Team  
\(^{7}\) Enhanced Health Care Team
Although not a specific focus of the questionnaire, referral processes were repeatedly highlighted through the comments provided by respondents as being an area where improvements could be made. Comments included:

- Confusion around referrals, I believe acute staff have been told not to name the team required but then to describe the needs and we can decide where the referral should be routed. In reality this causes lots of confusion and wrongly routed referrals.
- ... hospital staff need clear information about the appropriate referral routes and information needed for ICASS referrals.
- It is a great service to which I refer regularly, but a "Flow chart" of referral guidelines, would be beneficial including appropriate "reasons" for referral to the most "appropriate" team.

In summary, staff who took part in the survey perceived ICASS to be of benefit to patients and carers and also to be meeting most of its original objectives. However, issues around ways of working, referral processes, roles and responsibilities and the impact of ICASS on other services were also raised and it is these areas where lessons could be learned most.

Although the response to the survey was good, only 5% of respondents were medical staff, leaving a gap in understanding how medical staff (GPs in particular) perceive ICASS. In addition, the survey gathered staff perceptions of ICASS as a whole. Hospital at Home is a new model of health care that has been implemented as part of ICASS, and represents a significant investment in terms of not only Change Fund monies but also in new ways of working.

Taking this into consideration, it was felt to be appropriate to focus the remaining evaluation work specifically on Hospital at Home. This was done by looking at the evidence base, patient and carer experiences, capturing the views of medical staff who would potentially be affected by the service being implemented, assessing the impact of Hospital at Home on existing acute hospital activity and assessing whether Hospital at Home is financially sustainable. The remainder of the report focuses on these areas of work.

### 3.5. Hospital at Home in Fife

The Hospital at Home model of care in Fife is Consultant-led with specialist Nurse Practitioners assessing and admitting, with medical support, patients to the Hospital at Home "Virtual Ward". Referrals to Hospital at Home are received from GPs for Alternative to Admission to an acute setting or from acute hospital staff requesting a support package to enable that patient to be discharged from the acute setting earlier (Step Down Care referrals).

Conditions accepted by Fife's Hospital at Home are varied with only a few exclusions (cardiac event, stroke, lower leg fracture, GI bleed, head injury or acute abdominal pain). Whilst the service is aimed primarily at people aged 75 and over, people younger than 75 who are deemed "frail" can be accepted by the service.

The Hospital at Home teams have nursing input provided by a combination of Band 7 Team Leaders, Band 6 Nurse Practitioners and Band 5 nurses, supported by Healthcare Support Workers and administration staff. GPs with a Special Interest also provide medical input to the Hospital at Home service. Three Hospital at Home teams exist, covering Dunfermline & West Fife, Kirkcaldy & Levenmouth and Glenrothes & North East Fife.
3.5.1. Hospital at Home: Descriptive Statistics

In order to describe the Hospital at Home activity, data was extracted from the local Patient Administration System (OASIS) and analysed.

Accepted referrals to Hospital at Home, April 2012 – March 2014

In terms of Hospital at Home referrals, a total of 1317 patients of all ages were accepted between April 2012 and end of March 2014, across all areas. Of these, 1015 (77%) of accepted referrals were for Alternative to Admission and 302 (23%) were for Step Down Care. This activity does not include referrals that were assessed by Hospital at Home and subsequently not accepted to the service. The patterns of accepted referrals for Hospital at Home in each area are provided in Chart 1.

Age profile of patients accepted to Hospital at Home

In terms of the ages of patients Hospital at Home has provided care for, analysis showed that between April 2012 and end of March 2014, the age range was 23 – 102 years with the average age being 79 and the median age being 81.

Chart 2 shows the age profile of Hospital at Home patients, in Fife as a whole, by month whilst Chart 3 shows the age distribution of all Hospital at Home patients in Fife between April 2012 and end of March 2014.

When analysed, the data shows that 972 (72.5%) patients accepted to Hospital at Home were aged 75 or over.

| It should be noted that only this activity will contribute to reducing acute hospital activity for people aged 75 and over. The remaining 27.5% of Hospital at Home activity will have no impact on acute hospital activity for people aged 75 and over. |
Chart 1: Referral patterns to Hospital at Home, by type of referral, for each area

Chart 2: Age profile of all Hospital at Home patients by month, showing minimum, maximum and average age, Fife wide.

Source: OASIS
Chart 3: Age distribution of all Hospital at Home patients, Fife wide

Source: OASIS

Length of stay in Hospital at Home

In terms of average length of stay for Hospital at Home patients, analysis showed that, at a Fife level, patients stayed in the service for an average of 9 days. Details for each of the areas are provided in Table 2 and Chart 4.

It should be noted that Hospital at Home began in Dunfermline & West Fife in April 2012, Kirkcaldy & Levenmouth in April 2013 and Glenrothes & North East Fife in August 2013 and so the data below is not completely comparable in terms of experience of implementation.

Table 2: Length of stay (days) for Hospital at Home patients, April 2012 – March 2014

<table>
<thead>
<tr>
<th>AREA</th>
<th>DWF</th>
<th>GNEF</th>
<th>KLM</th>
<th>Fife</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Maximum</td>
<td>15</td>
<td>14</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Mean</td>
<td>9</td>
<td>10</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Median</td>
<td>9</td>
<td>10</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: OASIS
Conditions cared for by Hospital at Home

In terms of the range of conditions Hospital at Home patients present with, using both the ICD-10\textsuperscript{8} Primary Diagnosis and All Diagnoses as recorded on discharge from Hospital at Home, the data shows there is a high percentage of patients affected by more than one condition. These findings are presented in Table 3.

NB: ICD10 codes have been adapted to allow further explanation of the conditions included in the various headings.

\textsuperscript{8}10\textsuperscript{th} revision of the International Statistical Classification of Diseases
Table 3: Conditions cared for by Hospital at Home – Primary and All Diagnoses (adapted from ICD10 codes), April 2012 – March 2014

<table>
<thead>
<tr>
<th>Primary Diagnosis</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory conditions e.g. asthma, COPD, influenza, pneumonia</td>
<td>21</td>
</tr>
<tr>
<td>Symptoms &amp; signs involving e.g. circulatory, respiratory, digestive systems</td>
<td>14</td>
</tr>
<tr>
<td>Genitourinary conditions e.g. acute renal failure, chronic kidney problems</td>
<td>12</td>
</tr>
<tr>
<td>Circulatory conditions e.g. heart failure, atrial fibrillation, hypotension</td>
<td>11</td>
</tr>
<tr>
<td>Endocrine conditions e.g. metabolic disorders, dehydration</td>
<td>7</td>
</tr>
<tr>
<td>Other conditions (including conditions relating to skin, infections, musculoskeletal problems)</td>
<td>35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>All Diagnoses</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms &amp; signs involving e.g. circulatory, respiratory, digestive systems</td>
<td>19</td>
</tr>
<tr>
<td>Respiratory conditions e.g. asthma, COPD, influenza, pneumonia</td>
<td>15</td>
</tr>
<tr>
<td>Circulatory conditions e.g. heart failure, atrial fibrillation, hypotension</td>
<td>12</td>
</tr>
<tr>
<td>Endocrine conditions e.g. metabolic disorders, dehydration</td>
<td>10</td>
</tr>
<tr>
<td>Genitourinary conditions e.g. acute renal failure, chronic kidney problems</td>
<td>9</td>
</tr>
<tr>
<td>Other conditions (including conditions relating to skin, infections, musculoskeletal problems)</td>
<td>35</td>
</tr>
</tbody>
</table>

Hospital at Home Activity

In terms of Hospital at Home activity, Table 4 below summarises the activity from April 2012 to the end of March 2014 whilst Chart 5 shows the total number of admissions to each Hospital at Home service.

The data shows Hospital at Home activity in each area increasing steadily following implementation of the service.

Hospital at Home: 30 day outcomes for patients

An analysis looking at the outcomes of patients discharged from Hospital at Home was undertaken looking at readmission and mortality within 30 days of discharge from Hospital at Home. **NB: This analysis looks at the 30 day outcomes for all Hospital at Home patients including those aged under 75 with data being analysed at the Fife level.**

Overall: Of 1265 patients admitted to Hospital at Home between April 2012 and March 2014,

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9 Defined as “symptoms, signs, abnormal results of clinical or other investigative procedures, and ill-defined conditions regarding which no diagnosis classifiable elsewhere is recorded.”
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- 188 (14.9%) were admitted to a hospital setting within 30 days of being discharged from Hospital at Home and
- 113 (8.9%) died within 30 days of being discharged from Hospital at Home

Of the 986 patients admitted to Hospital at Home as an alternative to being admitted to a hospital setting:

- 139 (14.1%) were admitted to a hospital setting within 30 days of being discharged from Hospital at Home and
- 95 (9.6%) died within 30 days of being discharged from Hospital at Home.

Of the 279 patients admitted to Hospital at Home for early supported discharge:

- 49 (17.6%) were admitted to a hospital setting within 30 days of being discharged from Hospital at Home
- 18 (6.5%) had died within 30 days of being discharged from Hospital at Home

In considering these outcomes, information from another model of Hospital at Home, the ASSET model in North Lanarkshire, is provided. A report in June 2012 from this service looked at 30 day outcomes for the first 200 patients and found that:

- 18.7% of patients had been readmitted to hospital within 30 days of discharge from the service
- 5.5% of patients maintained at home (equivalent to alternative to admission) died within 30 days of discharge from the service and

Whilst of interest, it would not be appropriate to conclude any findings from this data due to differences between the models and no further details on the case mix of the North Lanarkshire cohort.
## Table 4: Hospital at Home Activity, April 2012 – March 2014, all ages

<table>
<thead>
<tr>
<th></th>
<th>Dunfermline &amp; West Fife</th>
<th>Glenrothes &amp; North East</th>
<th>Kirkcaldy &amp; Levenmouth</th>
<th>FIFE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions</td>
<td>4</td>
<td>18</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Discharges</td>
<td>2</td>
<td>14</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>Occupied Beds</td>
<td>8</td>
<td>96</td>
<td>152</td>
<td>116</td>
</tr>
<tr>
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**Source:** OASIS
3.5.2. Hospital at Home in Fife: Patients and carer experiences

In order to capture the experiences of patients and carers receiving Hospital at Home care, and establish how the service had met the patients’ needs, a series of case studies were undertaken with a group of patients in Dunfermline & West Fife, the findings from which are summarised below.

NB: This summary only reports on the patient and carer experiences of Hospital at Home captured during a larger piece of work that was carried out to understand how ICASS and its component services worked and establish the effectiveness of Talking Points as a patient focussed approach in capturing the experiences of people involved in the Hospital at Home service. The full report detailing all aspects of this work has been circulated previously.\(^{10}\)

It should be noted that interviews were carried out in July 2012 – within the first three months of Hospital at Home began being implemented in Fife.

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\(^{10}\)http://publications.1fife.org.uk/weborgs/nhs/uploadfiles/publications/c64_Hospital_at_Home_PatientCarerExperiencesFINALVERSION26.10.12.pdf
Methodology

A total of five patients and three carers agreed to participate in semi-structured interviews based on the Talking Points\textsuperscript{11} technique in order that their experiences of Hospital at Home could be captured.

Interviews took place either in person or by telephone according to the person’s wishes and patients were interviewed separately from carers. Details of the patient’s journey through Hospital at Home and any issues raised were captured using a structured topic guide and key themes were identified.

A brief description of the patients interviewed are provided in Table 5.

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<th>Patient C</th>
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<td>GP</td>
<td>VHK</td>
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Patient & Carer Experiences: Key findings

In terms of the key themes that emerged from interviews, these are summarised below, illustrated by quotes where appropriate:

Home as a Place of Healing

Receiving hospital care at home was appreciated by all patients interviewed, despite perceived disease severity.

“I think you do get better when you’re in your own atmosphere”

Patients valued the opportunity to be in familiar surroundings when ill and believed the home environment provided a better setting for returning back to good health.

Positive aspects included:

- being able to arrange their day, especially with regard to visits from family and friends,
- the comfort of familiar surroundings such as the garden or pets, and
- being able to continue social activities.

Patients reported feeling safe being cared for at home - having Hospital at Home nurses explain what was happening and being available when needed contributed to this. Patients reported “being happy” when told they would remain at home to be cared for. In the opinions of the patients interviewed, Hospital at Home kept them as well as they could be.

Carers reported they appreciated their family member receiving hospital level services at home, although this depended on how severe the disease was.

Carers generally felt their loved ones were safer and happier at home although the greater responsibility and understanding required in caring for the patient was reported as being stressful in one instance. Any concerns were eased by knowing that the Hospital at Home

\textsuperscript{11} Petch A. ‘We’ve got to talk about outcomes...’: a review of the talking points personal outcomes approach. IRISS; 2012.
team could be contacted to answer queries. Carer’s responsibilities were actually minimal and usually involved ensuring the patient took prescribed medication at the appropriate time, or watching the patient for any decline of health and notifying the nurses.

One carer reported feeling the patient was unsafe at home due to the severity of the illness and was concerned when having to leave the patient to go to work. However, the carer acknowledged the patient would have been unhappy in hospital and as the patient’s condition improved, the carer reported feeling “safer” having the patient cared for at home.

Daily Routine and Support
Patients reported benefiting from maintaining their daily routine and having constant support from their family, friends and Hospital at Home team.

“Family could come at the day anytime, wasn’t stuck at visiting hours”

Patients with existing social or health services liked how remaining home allowed them to continue with this input and patients reported feeling they had more social contact at home than if they had been admitted to hospital.

Patients reported Hospital at Home staff to be friendly and approachable and appreciated the Hospital at Home team’s availability through telephone calls if need be. Patients also reported that the Hospital at Home nurses never appeared to be in a rush.

Carers reported that being able to maintain their own daily routine was important, especially those with grandchildren. One carer who worked during the day appreciated not having to take time off work to visit.

Communication and Explanation
Patients reported enjoying the conversations with Hospital at Home staff and felt secure knowing that they could contact the Hospital at Home team with any concerns. Having frequent communication with medical staff was reported to be less important.

“Someone was always on the other end of the phone, didn’t matter what time of night”

“Anything they did, they explained it to me before they were going to do it”

Having procedures and details of the care and medications explained in non-medical language was valued by the patients. Most patients felt well informed about their condition and care plan.

One patient referred to Hospital at Home for Step Down care reported not fully understanding why she was being sent home when she was, in her opinion, seriously ill, and had to have it explained that she would receive the same level of care but in her own home.

“I didn’t understand ... the doctors told me this would give you extra care – not that you wouldn’t get it here [hospital], but you’ll get a lot more”

Most carers were satisfied with the high level of communication and explanation provided by Hospital at Home. In one instance, however, the carer reported feeling that the communication between Hospital at Home, the carer and the patient’s GP could have been improved, especially with regards to medication.
Patients frequently praised the approach of the Hospital at Home team, their caring nature, kindness, dedication to patient comfort and their attempts to make the patient feel relaxed and listened to.

“Even though it was a wee bit serious, they didn’t show it because they were smiling and joking all the time”

“They gave you affection and were caring”

“Every one was nicer than the other”

**Apprehension for Hospital Admission**

Patients repeatedly talked about their fear of being admitted to hospital and reported being concerned that once in hospital, they would end up with additional hospital-acquired illnesses.

“I was not very keen about going to hospital”

Patients also reported they would prefer to be at home instead of the hospital when ill, although some patients acknowledged that if the illness was serious enough, they would not be opposed to being admitted to hospital. One patient spoke of not wanting to have to sit alone in bed for the rest of the day once the ward round had taken place in the morning.

The recent centralisation of acute services at VHK, along with the poor media coverage surrounding the new VHK wing, were repeatedly mentioned as contributing to patients apprehension of being admitted to hospital.

Some patients spoke of the inconvenience of visitors having to travel further to VHK as opposed to Queen Margaret Hospital along with issues around parking. Patients were worried that travelling to VHK would be “too much of a hassle” for family and friends.

Carers echoed these fears with some carers reporting that had their loved one been admitted to VHK, they would have never seen anyone and been unhappy.

It should be noted that those patients who had experienced the new facilities of VHK reported the care to be “better than they had expected” and reported their experience as being “positive”.

**Potential improvements for Hospital at Home**

Patients were reluctant to suggest ways in which the Hospital at Home service could be improved, reporting that nothing could have been done better by the Hospital at Home team to help them recover.

“Everything was excellent”

One carer reported that Hospital at Home was “too good to be true” whilst one carer reported that communication between the carer, the patient’s GP and the Hospital at Home team could be improved.

The implications of these findings are considered in the Discussion.
3.5.3. Hospital at Home in Fife: Experiences of medical staff

Given the significant investment in terms of not only Change Fund monies but also in new ways of working, the views of medical staff who would potentially be affected by Hospital at Home being implemented were sought.

In order to do this, an electronic survey targeted to all GPs in Fife and medical staff in NHS Fife’s Operating Division was carried out, focusing on their knowledge and experience of Hospital at Home and their perceptions of its impact on patients, carers, staff and services. The key findings from this work are summarised below with full details provided in the full report (Appendix 2).

NB: It should be noted that responses have been analysed on a Fife-wide basis and not categorised according to which of the three different Hospital at Home or single points of access services the respondent had experience of.

Hospital at Home Staff Survey: Key findings

Awareness of Hospital at Home

Of the 49 medical staff who took part in the electronic survey on Hospital at Home, all were aware of Hospital at Home and the majority (86%) had referred to the service at least once.

Experience of contacting the single point of access

The majority (69%) of respondents reported positive experiences of contacting the single point of access to make referrals although there was one instance where the referrer felt the staff receiving the referral were not helpful and could improve how they interacted with referrers.

Knowledge of what kind of patient Hospital at Home was suitable for

Although the majority (60%) of respondents felt their knowledge of knowing which kind of patient Hospital at Home was suitable for, the remainder felt more information would be beneficial to referrers, especially with regards to exclusion criteria.

Experience of receiving feedback

Only 35% of respondents felt their experience of receiving feedback on their referral to Hospital at Home was positive, the remainder felt more or better feedback on the outcome of referrals would be beneficial, especially with regards to whether the referral was accepted or not. In cases where referrals were not accepted due to the patient being unsuitable for Hospital at Home, feedback on the reasons why would help provide guidance on appropriateness of future referrals.

Information on discharge from Hospital at Home

Information provided on discharge from Hospital at Home was reported as being poor in terms of level of detail and format both by GPs and hospital-based medical staff. GPs in particular reported having to follow up with Hospital at Home staff to clarify information in the discharge documentation, thus increasing their workload.

Has Hospital at Home reduced the need for hospital admissions?

Hospital at Home was felt to reduce the need for hospital admissions by the vast majority (83%) of respondents although the impact of Hospital at Home on the length of hospital stay,
reducing delayed discharges and especially helping to reduce the number of people requiring long term care was less clear.

Opinions were mixed as to whether Hospital at Home had improved the way health care staff work together whilst the majority (60%) of respondents were unsure whether Hospital at Home has changed the way health and social care staff work together.

**Has Hospital at Home impacted on medical staff workload?**

Almost half (43%) of respondents felt Hospital at Home had impacted on medical staff workload. The reasons for this related to either having to contact Hospital at Home staff for information relating to the patient or, in the case of hospital based medical staff, answering queries from Hospital at Home staff out of hours.

In one case, patients admitted to Hospital at Home continued to contact their GP with queries instead of contacting the Hospital at Home service. The GP in this instance commented how Hospital at Home was an alternative for some patients for whom a hospital admission was not desirable and commented that some Hospital at Home patients might have previously been cared for at home under primary care. This raised the question as to whether Hospital at Home deals with patients over and above those who would have previously been admitted to hospital.

**Have patients and carers benefited from Hospital at Home?**

The vast majority of respondents felt that patients and carers had benefited from Hospital at Home although there was one instance where this was not felt to be the case. For patients, Hospital at Home was reported to help older people be maintained at home, improve their care experience and enable older people to maintain their independence.

Although Hospital at Home was felt to have had a positive impact on carers by supporting them more, some respondents noted that by admitting a person to hospital, carers might get some reprieve from their caring role.

The implications of these findings are considered further in the Discussion.

**3.5.4. Does Hospital at Home provide care for patients other than those who would have otherwise been admitted to a hospital setting?**

In order to assess whether Hospital at Home provides a true alternative to hospital admission as opposed to providing care that could be provided by another service, of a cohort of Hospital at Home cases from Dunfermline & West Fife (DWF) was undertaken by reviewing a cohort of Hospital at Home clinical records undertaken by the Hospital at Home Consultant.

*NB: The audit took place in July 2013 and findings reflect Hospital at Home and other services at that point in time and should be considered in this context.*

**Audit of Hospital at Home cases: Key findings**

In undertaking an audit of 72 sets of notes for consecutive DWF Hospital at Home admissions, a total of 52 were for alternative to admission whilst 20 were for Step Down Care. As the audit related to Hospital at Home as a model of alternatives to admission, the 20 referrals for Step Down Care were excluded from further analysis.

Of the 52 referrals to DWF Hospital at Home for Alternative to Admission, **51/52 (98%)** would have been sent to VHK by their GP had the Hospital at Home service not been in operation as there were no existing services that could have cared for these patients at that point in time.
Only 1/52 (2%) patient could have been redirected to an urgent Outpatient Department or Assessment at VHK had the referring GP been aware of these services / or the referral was received on an appropriate day of week (i.e. not a Friday afternoon).

On further analysis, 12/52 (23%) of the referrals could have been directed elsewhere if other services were in place, existing services were augmented and/or the skill-base of community or Nursing Home-based staff at that point in time were appropriate for these referrals. Details are provided below:

- 1/52 (2%) patients could have been managed by community nurses/shared care if Nursing Home staff were trained/updated in subcutaneous fluids/drivers/blood culture taking.
- 2/52 (4%) patients could have been managed by an enhanced Heart Failure Team able to administer intravenous therapy in community settings. A shared care approach between Hospital at Home and the existing Heart Failure Team was taken for these referrals.
- 3/52 (6%) patients could have been seen locally in a Rapid Access Clinic if one had been in operation.
- 6/52 (12%) patients could have been managed by a high level, consultant led Outpatient Parenteral Antibiotic Treatment (OPAT) service (i.e. outwith the Programmed Intervention Unit (PIU)). This, however, would have been dependent on whether the patient was able to travel for therapy or community-based nurses were trained to administer intravenous therapy.

The remaining 39 (75%) of referrals would have been admitted to an acute hospital setting had DWF Hospital at Home not been in place as no other alternative service was in place.

These findings suggest that, based on this cohort of Hospital at Home cases, the vast majority (98%) would have been admitted to an acute hospital setting had the Hospital at Home service not been implemented.

It should be noted that a total of ten patients included in this audit were aged under 75. Of these, nine would have been admitted to hospital prior to Hospital at Home being in place, one would not have been – this is the patient detailed above who could have dealt with by existing services (redirected to an urgent Outpatient Department or Assessment at VHK).

For the remaining patients aged under 75: only one did not meet Hospital at Home criteria. This patient would, however, have been admitted to hospital had Hospital at Home not accepted the referral as there was no other existing service that could have cared for this patient at that point in time.

Thus, for the patients aged 75 and over included in this cohort, ALL would have been admitted to an acute hospital setting prior to Hospital at Home being in place, based on the findings from this audit.

3.5.5 Hospital at Home in Fife: Impact on acute activity

The Hospital at Home service in Fife is primarily aimed at providing an Alternative to Admission or Step Down Care for people aged 75 and over. In order to estimate the impact of the service on acute activity in Fife, for people aged 75 and over, an analysis of quantitative data was carried out using the methods detailed below.

Methodology
Trend analysis

The impact of Hospital at Home on acute activity was estimated by looking at the trend of emergency admission and bed day rates for people aged 75 and over in K&L and applying this to DWF to give expected emergency admission rates had Hospital at Home not been implemented. This expected rate was then compared to the actual rate and the difference calculated.

This analysis followed on from a previous analysis of trends in emergency activity for people aged 75 and over which compared acute activity in Dunfermline & West Fife where Hospital at Home was implemented first and K&L where Hospital at Home had not been implemented at that point. This methodology was based on the assumption that trends in emergency activity in these two areas were likely to mirror each other and thus expected acute activity (based on K&L data) could be compared to actual activity (based on DWF and Hospital at Home data).

Point in time analysis

A second analysis to estimate the impact of Hospital at Home on acute activity took a point in time and calculated the percentage of acute activity attributable to Hospital at Home, for people aged 75 and over. This was calculated by looking at emergency admission and emergency bed day rates per 1,000 people aged 75 and over including and excluding Hospital at Home activity. The difference in activity was used to estimate the percentage activity attributable to Hospital at Home.

NB: It should be noted that only referrals to Hospital at Home for Alternative to Admission contribute to emergency admission activity, whilst referrals for both Alternative to Admission and Step Down Care contribute to emergency bed day activity.

Data

The data used for the above analyses was validated data on Fife resident hospital inpatient stay (SMR01), extracted from ACaDMe with Geriatric Long Stay (GLS) data included. Data for Hospital at Home was extracted from OASIS as this is collected but not submitted via the SMR01 system at this point in time.

SMR01 data was processed to give a current picture of hospital use for over 75's in terms of Emergency Admissions and Emergency Bed Days (based on Length of Stay). Hospital at Home data was linked into SMR01 data and predefined ISD Continuous Inpatient Stay (CIS) values were realigned based on Hospital at Home activity.

Hospital at Home episodes can be categorised as either a 'Prevention of Admission' episode or 'Supported Discharge' episode. In the event of an unsuccessful prevention of admission i.e. a patient is not able to be supported at home therefore has to be admitted, the emergency admission is not counted twice but bed days are assigned to each setting. Similarly for a supported discharge episode, the admissions will not be counted twice but bed days assigned to each setting.

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12 Rates per 1,000 people aged 75 and over are used to account for differences in population sizes and population growth.

13 The reason for inclusion of these records is due to recent recoding of GLS facilities in Cameron, Glenrothes and Adamson Hospitals. GLS facilities remain at Lynebank (QMH W7) and Randolph Wemyss Memorial Hospital but not all patients within these wards are true NHS Continuing Healthcare.

14 A CIS is an unbroken period of time that a patient spends as an inpatient. A patient may change consultant, significant facility, speciality and/or hospital during a CIS.
On the occasion of unsuccessful supported discharge i.e. patient discharged from hospital into Hospital at Home but had to be readmitted, each emergency admission will not be counted but defined as 1 CIS, again bed days will be assigned to each setting.

Calculations were based on 6 month rolling data i.e. each month’s figures are based on the sum of the preceding 6 months activity. Six monthly figures were used as it was felt changes in the Hospital at Home service were best captured at this level. All data relates to people aged 75 and over.

At the time of this analysis (March 2014), validated SMR01 data was only available to August 2013. The Dunfermline and West Fife Hospital at Home service was fully implemented at this point in time whilst the Kirkcaldy and Levenmouth Hospital at Home service had been in place for four months. The Glenrothes & North East Fife service only began accepting referrals in August 2013 and so is not included in this analysis.

**Key findings: Trend Analysis**

The trend analysis used to estimate the impact of DWF Hospital at Home on acute activity assumed that the rates of emergency admissions in DWF track the trend in K&L, as was felt to be the case in undertaking a previous analysis in June 2013.

In order to confirm this, emergency admissions rates between 2009/10 and 2012/13, were analysed using validated yearly data from ISD.

Results are shown in Chart 6 and Table 6 and show that there was an inconsistent trend and variation over time with K&L admissions increasing between 2009/10 and 2012/13 whilst DWF admissions remained relatively static.

A further divergence in trends was also found between 2011 and 2012 in further analyses looking at emergency admissions and emergency bed day rates both excluding and including Hospital at Home activity (Appendix 3).

**Based on this analysis, it was concluded that the inconsistent trend and variation over time in total hospital activity data meant it was no longer appropriate to use this method to estimate the impact of Hospital at Home on acute activity for people aged 75 and over.**

**Instead, the Point in Time Analysis is the main method used to estimate the acute activity for people aged 75 and over attributable to Hospital at Home.**
Chart 6: Trends in Emergency Admissions for 75+ Fife residents treated anywhere, 2003/4 – 2012/13

Table 6: Admission rates per 1,000 population of all emergency admissions by financial year and CHP of residence for patients aged 75+.

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Source: ISD Scotland

Key Findings: Point in Time Analysis

The proportion of acute activity attributable to Hospital at Home for people aged 75 and over was calculated as described previously and showed that:

In Dunfermline & West Fife:

a. Acute activity attributable to Hospital at Home reached ~8% for emergency admissions and ~7.5% for emergency bed days in February 2013 for people aged 75 and over and remained at approximately these levels until August 2013.

b. In August 2013, 8.5% of emergency admissions and 8% of emergency bed days for people aged 75 and over were attributable to H@H in August 2013.

In Kirkcaldy & Levenmouth:

a. Acute activity attributable to Hospital at Home reached ~0.7% of emergency admissions and ~0.8% of emergency bed days in August 2013.

Further details are provided in Chart 7 and Table 7.
NB: As validated data is only available for the first four months of the Kirkcaldy & Levenmouth service, the analysis covers a time when Hospital at Home in this area had only recently been implemented and was not fully established. Thus, these results do not reflect a fully functioning service.

However, it is assumed that all Hospital at Home services, once fully established, would work at the same levels and so, based on this assumption, the discussion around the impact of Hospital at Home on acute activity in Dunfermline & West Fife can be applied to the other areas.

Chart 7: Acute activity for people aged 75 and over attributable to Hospital at Home, April 2012 – August 2013

Source: SMR01, Oasis
### Table 7: Acute activity for people aged 75 and over attributable to Hospital at Home, April 2012 – August 2013

#### Dunfermline & West Fife

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#### Kirkcaldy & Levenmouth

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Source: SMR01, OASIS
Impact of Hospital at Home on acute activity: Other contributing factors

In estimating the impact of Hospital at Home activity on acute activity for people aged 75 and over, the results above for Dunfermline & West Fife suggest that approximately 8% of activity can be attributed to Hospital at Home.

However, consideration should be given to whether 8% attributable activity is equivalent to 8% avoided activity i.e. has Hospital at Home avoided 8% of emergency admissions and 8% of emergency bed days?

The descriptive statistics in Section 3.5.1 show that approximately 27.5% of Hospital at Home activity is focused on people aged under 75 and this activity will not impact on acute hospital activity for people aged 75 and over. However, the analysis presented in this section focuses only on activity for people aged 75 and over and so takes this into consideration.

What hasn’t been taken into consideration in these calculations is the anecdotal evidence that the service cares for people who would not previously have been admitted to hospital. Thus the implication is that only a proportion of Hospital at Home activity is truly avoiding acute hospital activity for people aged 75 and over, both in terms of emergency admissions and emergency bed days. If this is indeed the case, the analysis above would overestimate the acute activity truly avoided by Hospital at Home.

In attempting to quantify the proportion of Hospital at Home activity that is truly avoiding acute activity, the findings from the audit should be considered along with anecdotal evidence from staff.

The findings from the audit suggested that 100% of people aged 75 and over in that particular cohort of Hospital at Home cases would have been admitted to an acute hospital setting prior to the service being in place as there were no existing services in place that could have cared for them.

Anecdotal evidence from Hospital at Home clinicians suggest there is a proportion of activity that could be dealt with by existing services but quantifying the level of such activity would be challenging without doing further audit work.

Thus, in the absence of further audit work at this point in time, it is estimated that in August 2013 Hospital at Home in Dunfermline and West Fife avoided in the region of:

| 8.5% of emergency admissions for people aged 75 and over |
| 8% of emergency bed days for people aged 75 and over |

These figures are likely to be an overestimate and they do not account for the anecdotal evidence of Hospital at Home clinicians.

3.5.6 Hospital at Home in Fife: Financial evaluation

In terms of financial investment in Hospital at Home, the following summarises the calculations used to estimate the cost of caring for a person in Hospital at Home compared to caring for a person in an acute hospital setting.

Calculations are based on the number of occupied bed days for all Hospital at Home patients i.e. for all ages.

- The recurrent cost of fully implementing Hospital at Home in Fife is £2,200,000 whilst the additional cost of funding enhanced Intermediate Care Teams is £400,000, combining to give a total of £2,600,000 per annum (at May 2014).
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- Funds allocated via the Change Fund have funded a total of 60 Hospital at Home beds per day, equivalent to 21,900 bed days per year.

- If Hospital at Home, at Fife level, is working at 100% occupancy levels, i.e. using all 60 available bed days per day, this would equate to a Hospital at Home bed day being equal to £119 (Cost of funding Hospital at Home per year divided by available Hospital at Home bed days per year – all ages).

- Using an average length of stay of 8 days, and working at 100% occupancy levels, this would equate to 2,738 patients per annum.

- The average Direct Cost per bed day of a patient aged 75 and over admitted to an acute hospital is £267 (as per 2012/13 NHS Fife cost book). This figure is used as a comparator figure.

**Therefore, if working at 100% expected capacity, Hospital at Home would be £148 (56%) less expensive per bed than if that patient was being cared for in hospital.**

**Actual occupancy levels, March 2014**

In terms of actual occupancy levels, figures at March 2014 show that Hospital at Home in Fife as a whole was working at approximately 70% occupancy, with each area working at the following occupancy levels, based on 60 bed days available per day:

- Dunfermline & West Fife: 76%
- Kirkcaldy & Levenmouth: 63%
- Glenrothes: 73%

**At a continued occupancy level of 70%, Hospital at Home at a Fife level would deliver 15,330 bed days per annum - equivalent to 1916 patients, using an average length of stay of 8 days - equivalent to an average cost per bed day of £170 in Hospital at Home.**

**In these circumstances, Hospital at Home would be £97 (36%) less expensive per bed day than if the patient was being cared for in an acute setting.**

Whilst the above analysis recognises the difference in direct costs, it does not take into account the significant overheads associated with caring for a person in a bed in a physical hospital setting. The non direct costs associated with caring for a person in VHK would add 47% to the direct costs mentioned above.

Therefore, investing in providing hospital level care in the community would negate the need to increase Hospital Wards, saving both the difference in direct costs and the additional overheads associated with caring for a person in a hospital ward.

The implications of these findings are considered further in the discussion.
3.5.7  Hospital at Home in Fife: The evidence base

A review of published and grey literature was undertaken in April 2013 to provide background knowledge to the different existing models of Hospital at Home and their relevance to the Fife scenario. A report detailing the findings of this review was presented to the Fife ICASS Implementation Group in July 2013.\footnote{http://www.nhsfife.org/weborgs/nhs/uploadfiles/publications/c64_ICASSLiteratureReview22.4.13.pdf}

An "auto-alert" to identify any further relevant published articles was put in place and relevant abstracts were reviewed and, where appropriate, full text articles were obtained and assessed for new evidence around Hospital at Home models of care.

To identify any new “grey literature" relevant to Hospital at Home, an internet search using the Google search engine was carried out in February 2014, using the term “Hospital at Home”.

A summary of key findings from the search of both published and grey literature is provided below. More detailed findings are provided in Appendix 4.

Evidence on Hospital at Home as a model of care

In assessing the evidence base for Hospital at Home as a model of care, the key findings were as follows:

- The Hospital at Home model in Fife is quite unique. Other models of Hospital at Home exist but differ in a variety of ways - many are targeted at specific conditions such as chronic obstructive pulmonary disease or chronic heart failure.

- The main published evidence on the various models of Hospital at Home comes from a number of Cochrane Reviews by Shepperd and colleagues.
  - In 2005, Shepperd and Iliffe highlighted the lack of good quality evidence to suggest any differences between Hospital at Home and acute inpatient care, stressing that future evaluation work should focus on gathering good quality evidence.
  - In 2008, Shepperd and colleagues found a non-significant reduction in mortality at three months, reaching significance at six months, for admission avoidance Hospital at Home compared to inpatient care. They reported few differences between the models with regards to functional ability, quality of life or cognitive ability. Of the trials that undertook full economic analysis, admission avoidance hospital at home cost less than admission to hospital when cost of informal care was excluded. The authors concluded that there was "no evidence to suggest admission avoidance Hospital at Home leads to outcomes that differ from inpatient hospital care".
  - In 2009, Shepperd and colleagues undertook a systematic review and meta-analysis of available evidence regarding effectiveness and cost of managing patients with early discharge Hospital at Home compared to inpatient hospital care. The authors found that:
    "For patients recovering from a stroke and elderly patients with a mix of conditions there was insufficient evidence of a difference in mortality between groups"
    "Readmission rates were significantly increased for elderly patients with a mix of conditions allocated to hospital at home".
"For patients recovering from a stroke and elderly patients with a mix of conditions respectively, significantly fewer people allocated to hospital at home were in residential care at follow up" and "Patients reported increased satisfaction with early discharge hospital at home".

- Evidence on cost savings was mixed and the authors concluded that there was, at that point in time, insufficient evidence of Hospital at Home models being more cost-effective or having improved outcomes than admission to an acute hospital setting. This review was updated in 2011 but there were no changes to the conclusions recorded in 2009.

- Also in 2009, a paper by Young discussed the various aspects of Intermediate Care stating "of which Hospital at Home is one". Whilst not offering any new information from the Shepperd Cochrane Reviews, it did comment on promoting Hospital at Home services on the basis they may reduce health-care costs by reducing the demand for acute hospital care. The author urged "caution" stating "The proportion of older people for whom Hospital at Home is suitable might be too small for genuine economies to be realized" "The service may simply respond to a proportion of patients with hitherto unmet needs"

- Of all the published evidence since April 2013, only one conference abstract identified a model of Hospital at Home similar to that in Fife. This reported on the work in Lanarkshire by Ellis and colleagues on the Age Specialist Service Emergency Team (ASSET).

  The authors reported on the first 1000 patients and in particular, the immediate and 30 day outcomes with 18.8% of referrals subsequently being admitted to hospital whilst 78.9% were able to be cared for at home. At 30 days, the overall mortality rate was 9.7%, the mortality rate for those admitted to hospital equal was 14% and for those maintained at home, 8.5%.

  These rates were calculated as being significantly different and reported as being a result of case mix differences. In terms of readmissions within 30 days post-discharge from ASSET, 18.7% had been admitted once or more whilst 66.6% had remained at home and had not been admitted to hospital.

- The vast majority of other published evidence related to Hospital at Home models of care that were different to the model in Fife. The main impact reported was improved patient experience. Other outcomes such as readmission or mortality rates differed according to the model of care and the condition being cared for. Availability of care at home, either by informal carers or by home care services, was also important to the success of a Hospital at Home episode of care.

**Update on grey literature – March 2014**

In undertaking an internet search using Google search engine and searching for the terms "Hospital at Home", a total of 1,150,000 results were returned. In reviewing the first few results pages, very few actually related to actual models of Hospital at Home.
Amongst those that did, the most recent referred to a four month pilot of a new Hospital at Home model being implemented by NHS Western Isles\textsuperscript{16} covering the Broadbay area of Lewis. Details are provided below.

**Hospital at Home, NHS Western Isles**

*This project involves the creation of a community-based ‘rapid response team’ of experienced healthcare professionals which will provide limited periods of nursing care and treatment in patients’ own homes, for certain conditions that could have otherwise resulted in an admission to hospital. Referrals will only be made to the rapid response team by GPs and the Medical Assessment Unit at Western Isles Hospital.*

*The team will be made up of Unscheduled Care Nurses (skilled nurses who have undertaken advanced training), supported by Healthcare Assistants. To ensure continuity of care and close collaboration, the project will also involve close working with GPs, Allied Health Professionals, the Community Equipment Service, the Reablement Team, hospital staff (including consultants) and the Home Care service.*

The Press Release\textsuperscript{17} by the Scottish Government in March 2013 stating that models of Hospital at Home similar to the Lanarkshire model detailed above were being rolled out across Scotland was reported in the vast majority of subsequent results with key results from a clinical audit quoted:

\begin{quote}
"The results of the pilot showed the mortality rate was 5.5% for patients treated at home, compared to 9.7% for those who were admitted to hospital. Research shows that adverse health events can disproportionately affect the elderly. However, studies have shown they are more likely to recover in a familiar environment. Almost 80% of the 200 patients in the pilot were able to be treated successfully at home, with some 23% admitted to hospital."
\end{quote}

The resources page on the website for NHS Education for Scotland’s Knowledge Network Community Hospitals an Intermediate Care Network was also searched and returned information on several models of care which play a role in preventing hospital admission for older people but the majority of these differ from Fife’s Hospital at Home model in that they either use a prediction tool such as SPARRA to identify people at risk of hospital admission or “step-up” care is provided in a specialised facility i.e. not the patient’s own home. These included the Step Up Care Unit in Glasgow, the Community Ward model of care in Ayrshire & Arran and the COMPASS model of care in Lothian. Only one model was similar to Fife’s – the Lanarkshire ASSET model detailed above.

In searching for information on known Hospital at Home models such as those in place in Torfaen and Croydon, it became apparent that Hospital at Home models are not always known by that name - in Croydon, the model is called the “Virtual Ward” and differs to the Fife model in that a risk prediction score is used to identify patients who may benefit from being admitted to the Virtual Ward.

In the case of the Torfaen model, a search of grey literature in April 2013 found the most recent information relating to this model published on the Gwent Frailty website\textsuperscript{18} in 2011. This search was repeated in February 2014 using the search term “Gwent Frailty Programme”

\textsuperscript{16} http://hebridestoday.com/2014/01/hospital-at-home-developing-a-community-based-rapid-response-team/
\textsuperscript{17} http://www.scotland.gov.uk/News/Releases/2013/03/hospital-at-home05032013
\textsuperscript{18} http://www.gwentfrailty.torfaen.gov.uk
and found the most up to date information was reported in July 2013 by way of the Annual Report of the Director of Social Services for Blaenau Gwent August 2013\textsuperscript{18} which stated:

\begin{quote}
"We have continued to integrate and embed the services provided by the Frailty/Community Resource Team (CRT) in partnership with Aneurin Bevan Health Board.

The Team aims to promote independence with a view to keeping people in their own homes without the need for formal support and can provide rapid medical intervention to prevent the need for a hospital admission.

During the year the Team received 3,341 referrals of which 2,617 were for the reablement service."
\end{quote}

In addition to this, an Annual Service Improvement Plan, 2013 – 2014 for Adult Services for Caerphilly Count Borough Council\textsuperscript{20} refers to the Community Resource Teams which feature in the Torfaen model and notes:

\begin{quote}
"Year 2 of the Gwent Frailty programme has been implemented. This has seen the Community Resource Team increase capacity and function by recruitment of a falls coordinator initially to focus on work with care home to reduce number of fallers thus prevent hospital admission.

The team continues to work on prevention of admission to hospital and or emergency respite placement, activity of Emergency Care at Home has increased following recruitment of additional staff as identified in local commissioning plan.

Reablement arm has significant input to assessment beds at Ty Clyde which has been pivotal in achieving positive outcomes for individuals."
\end{quote}

No formal evaluation reports of the Gwent Frailty Programme or the Torfaen Hospital at Home model of care were identified.

Further reports on Hospital at Home models in other areas of the UK were found but the information provided was very brief. One Hospital at Home model of care (Recovery at Home) was provided by an Independent Provider and used by several NHS Trusts in England including North Staffordshire, University Hospital Southampton NHSFT, Royal Free London NHSFT, Good Hope Hospital (part of Heart of England NHSFT) in Birmingham. Details of this and the various other models are provided in Appendix 4.

**Summary of evidence base for Hospital at Home as a model of care**

In summary, evidence that could be applied to the Fife Hospital at Home model of care remains scarce. Where evidence on Hospital at Home does exist, it relates to models that are different to Fife.

Examples are where the model:

- Predicts when a patient may be at risk of admission to hospital, based on previous admissions, and focuses resources to help prevent that person being subsequently admitted
- Focuses on one specific condition
- Have integrated health and social care teams, including allied health professional staff and home care workers
- Do not provide care for the patient in their own home but in a specialised facility

Where attempts have been made to systematically review the evidence of the various models of Hospital at Home, the variation in models and in methodology used to evaluate the models have added to the challenge.

This has resulted in a lack of good quality evidence to suggest any differences between caring for a patient in a Hospital at Home setting and a hospital setting. The exception to this was improved patient experience.

However, having care at home, either by informal carers or by home care services, was important to the success of a Hospital at Home episode of care, regardless of the specific model.
4. Discussion

In focusing the discussion, the original evaluation questions are considered. These were based on potential outcomes of ICASS identified from existing documentation at the outset of implementing ICASS.

4.1. What is ICASS and how does it compare to previous ways of working?

Documentation describes ICASS as the acronym used for Fife’s Integrated Community Assessment and Support Service, the three core components of which are Hospital at Home, Intermediate Care and Home Care.

ICASS differs from previous ways of working in that it provides services that focus on allowing frail, older people to remain independent within their own homes or communities. Two new models of care have been implemented via ICASS: Hospital at Home and Home Care (Reablement).

Interestingly, the way that some staff use the term “ICASS” has changed over time. In some instances, “ICASS” is no longer used as an overarching term to describe the three core services but instead, as a term used when talking about the Intermediate Care services. The term “Hospital at Home” is often used alongside the term “ICASS” as opposed to being a core component of ICASS.

According to original documentation, ICASS is the acronym used to describe a group of services, the key components of which are Hospital at Home, Intermediate Care and Home Care. Interchanging the term ICASS with Intermediate Care has the potential to confuse both service providers and service users.

**Recommendation**

*In order to facilitate full understanding of ICASS and its component parts by service providers, both in health and social care, and by service users, all ICASS staff should consistently use the same terminology.*

4.2. Has ICASS provided an alternative to emergency hospital admissions?

Evidence from the quantitative analysis and from staff surveys indicate that the Hospital at Home component of ICASS has certainly provided an alternative to emergency hospital admission.

The quantitative analysis estimated that, in August 2013, approximately 8% of acute activity (emergency admissions and emergency bed days) for people aged 75 and over in the Dunfermline & West Fife area could be attributed to the Hospital at Home service in that area.

However, two factors should be considered in relation to this:

a. Based on anecdotal evidence, it is likely that a proportion of the patients admitted to Hospital at Home would not previously have been admitted to an acute hospital setting before the service was in place. The challenge is in quantifying the proportion of activity that is truly avoiding emergency hospital admissions.

Although the audit of a cohort of Hospital at Home cases estimated that 100% of these patients would have been admitted to hospital prior to the service being in place, anecdotal evidence from Hospital at Home suggests there are a proportion of patients admitted to the service that would not previously have been admitted to an acute setting. In accepting such referrals, the impact of Hospital at Home on reducing emergency activity...
for frail people aged 75 and over is diluted. The challenge is how to quantify this proportion.

**Recommendation**

*It would be useful to repeat the audit of a cohort Hospital at Home cases in order to accurately assess the percentage of emergency hospital admissions truly avoided by Hospital at Home.*

b. A second factor to be considered is the age of patients being accepted to Hospital at Home. Whilst Hospital at Home in Fife is aimed primarily at people aged 75 and over, the service will accept referrals for patients under 75, if they are deemed frail enough. Since the service began, patients aged under 75 have accounted for 27.5% of activity.

In accepting such referrals i.e. for people aged under 75, the impact of Hospital at Home on acute activity for people aged 75 and over is being diluted

In addition to this, accepting referrals for people aged under 75 will not help achieve the vision of the Reshaping Care for Older People programme, through which Hospital at Home is funded. One of the key over-arching messages which support this vision is:

We are adding healthy years to life – we need to push back our concept of older age, with less of a focus on “over 65” years and more on “over 75”.

**Recommendation**

*In order to maximise the impact the Hospital at Home service in Fife has on more frail patients aged 75 and over, acceptance criteria for the service should focus on this group.*

4.3. Has ICASS resulted in a reduction in length of stay for those patients who do require emergency hospital admission?

Two components of ICASS accept referrals for Step Down Care from hospital – Hospital at Home and Intermediate Care so in essence, these referrals, when accepted, will have reduced the length of stay for those patients.

In terms of Intermediate Care, analysis of data from the Discharge Hub at VHK showed that 309 patients were discharged home with Intermediate Care support between 5th August 2013 and 9th April 2014, with 241 of these patients being aged 75 and over. However, the data does not show which of these patients were admitted as an emergency in the first place and so the proportion of patients aged 75 and over admitted as an emergency, whose length of stay was reduced by the Intermediate Care component of ICASS is difficult to estimate.

NB: It should be noted that Intermediate Care Services across Fife are not only aimed at providing care for people aged 75 and over.

In terms of the Hospital at Home component of ICASS, a total of 302 referrals between April 2012 and March 2014 were for Step Down Care. Of these, 199 were for patients aged 75 and over. However, the issue regarding whether all Hospital at Home activity is truly avoiding acute hospital activity comes into play once more given the anecdotal evidence from clinicians that some Hospital at Home patients would not have been admitted to a hospital setting prior to the service being in place.
Recommendation

To help reduce the length of stay for frail people aged 75 and over who are admitted to acute hospital as an emergency, the Hospital at Home component of ICASS should focus most on accepting referrals for this group of patients i.e. those aged 75 and over who would have remained in the acute hospital setting had Hospital at Home not been established.

It should be acknowledged here that other areas of work having been ongoing in Fife in order to manage patient flow more effectively and these areas of work will also have impacted in length of stay for people who are admitted to hospital.

Current areas of work are being progressed through the Community Flow Improvement Group, details of which are included in the group’s work plan (see Section 3.3).

4.4. Has ICASS reduced the number of people requiring long term institutional care?

Original documentation suggested that one consequence of ICASS would be a reduction in the number of people requiring long term institutional care by caring for people at home thereby maintaining or improving independence, function and wellbeing. This question was therefore included in the original evaluation proposal with the assumption that data showing whether this was actually the case would be available from colleagues in Fife Council, alongside qualitative evidence gathered through staff surveys.

Unfortunately, data on care home placements has been difficult to obtain as the data has not been updated since May 2013. Data sharing is expected to commence soon but, for the purposes of this report, quantitative data is not available to evaluate whether ICASS has reduced the number of people requiring long term institutional care.

The qualitative evidence gathered via the two staff survey suggests that Hospital at Home has not been implemented long enough to see any impact on the number of people requiring long term institutional care. The qualitative evidence also suggested that factors other than input from Hospital at Home would impact on whether a person required long term institutional care and as such, the impact of Hospital at Home would be hard to quantify.

Recommendation

Taking these points into consideration, the longer term trends in the number of people requiring long term institutional care should be monitored, whilst acknowledging the challenge in attributing any changes in these trends solely to ICASS or its component parts.

4.5. Does ICASS enable older people who are maintained at home to achieve and sustain their maximum potential?

Evidence on whether ICASS enables older people who are maintained at home to achieve and sustain their maximum potential was gathered by way of the two staff surveys and patient and carer interviews.

Findings from these areas of work strongly suggest that ICASS does indeed impact in a positive way on helping people achieve and sustain their maximum potential. Two recurring themes relating specifically to Hospital at Home arose from the different surveys and interviews:
Being able to maintain daily routines in familiar settings greatly assisted in achieving a successful episode of care

Carers played an important role in helping Hospital at Home episodes of care to be successful

In considering the first theme, it should be asked whether this is an indication of Hospital at Home caring for people who might not have been frail or dependent enough to be admitted to an acute setting as an emergency prior to Hospital at Home being implemented. It could be argued that, if the patient is frail or dependent enough, they would not be able to maintain daily routines.

**Recommendation**

Some sort of measurement of the patient's level of need might be helpful here, both in terms of identifying those patients who would benefit most from the Hospital at Home service and also in terms of attempting to quantify any changes as a result of receiving the service.

In considering the second theme, it would suggest that carers play an important role in helping people be maintained at home – this echoes the published evidence which highlights the importance of having carers at home, either paid or “informal”. However, this leaves a question as to what would happen if a person did not have a carer at home to assist? Would that person not be able to access the Hospital at Home service? This point is discussed further in Section 3.12.8.

Even taking both of these points into consideration, the full impact on a frail, older person of being cared for in their own home might not be evident at the point of that particular episode of care. It might be that being able to remain in their own home for longer might result in remaining independent for longer, leading to reduced emergency hospital admissions and re-admissions in the longer term.

**Recommendation**

Consideration should be given to continue monitoring of rates of emergency hospital admissions and readmissions in order to identifying any longer term changes that could be, at least in part, attributable to Hospital at Home.

4.6. Are the models put in place for ICASS sustainable from a financial and practical point of view?

In terms of financial sustainability, the financial evaluation showed that, when working at 70% occupancy levels (as was the case in March 2014), the estimated cost of caring for a patient in Hospital at Home is £170 per bed day compared to £267 when caring for a patient in an acute hospital. This is equivalent to being 36% less expensive than caring for that person in an acute hospital.

Whilst the above analysis recognises the difference in direct costs, it does not take into account the significant overheads associated with caring for a person in a bed in a physical hospital setting. The non direct costs associated with caring for a person in VHK would add 47% to the direct costs mentioned above.

Therefore, investing in providing hospital level care in the community would negate the need to increase Hospital Wards, saving both the difference in direct costs and the additional overheads associated with caring for a person in a hospital ward.
The calculations used in assessing the financial sustainability of Hospital at Home use the assumption that the service, when working at a Fife level, can provide care to 60 “Virtual patients” each day.

By working at 70% of originally anticipated capacity, Hospital at Home is costing more than originally anticipated, although less than an acute setting.

In considering the financial sustainability of Hospital at Home, it should be considered whether the capacity levels originally estimated are still valid. Anecdotal evidence from staff suggests that the service is working at full capacity. If this is the case, capacity levels should be revised in order to accurately reflect this.

**Recommendation**

*Consideration should be given as to whether the original capacity levels are still felt to be valid. In doing so, a more accurate analysis of financial sustainability of Hospital at Home can be undertaken.*

The age criteria for Hospital at Home should also be considered – is the service aimed only at people aged 75 and over? Quantitative and financial analyses in this evaluation have been based on the impact of Hospital at Home on acute activity for people aged 75 and over as this was the target group identified in original documentation as the group who would benefit most from the service.

In accepting referrals for people aged under 75, Hospital at Home is not maximising the potential cost savings for its original target group – those frail people aged 75 and over.

**Recommendation**

*In order to maximise the potential cost savings of the Hospital at Home model, consideration should be given to focussing only on frail people aged 75 and over.*

It should also be noted that the cost calculations only look at the cost of the Hospital at Home service itself – the cost of care provided by informal carers are not taken into consideration. This is a key challenge in undertaking service evaluations such as this – how can the cost of informal care be factored in?

Several other studies, as detailed in the review of literature, highlighted this as being a challenge and suggested that, when the cost of care provided by informal carers is included, Hospital at Home models of care are less cost effective than admitting a person to an acute hospital setting.

In terms of Hospital at Home being practically sustainable, evidence to answer this evaluation question was gathered from the first staff survey in July 2013 and showed that the majority (57%) of respondents felt ICASS was sustainable from a practical point of view.

Some barriers to ICASS being sustainable from a practical point of view were highlighted and included the following:

- Needing better links between ward based therapists and ICASS based therapists (relating to Intermediate Care)
- Not have the correct skill mix - insufficient AHPs in the teams and not having the full range of clinical skills required e.g. Mental Health (relating to Hospital at Home)
- Increasing demand on the service, increased complexity of patients (relating to Hospital at Home)
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- Access to social work and homecare managers (relating to Hospital at Home)

**Recommendation**

*Consideration should be given to ways of addressing these perceived barriers in order to address such concerns and further improve ICASS.*

4.7. What are staff perceptions of ICASS?

Staff perceptions about ICASS were gathered through two staff surveys; one aimed at all health staff asking about perceptions of ICASS as a whole, the second targeted at medical staff potentially impacted by Hospital at Home service.

In terms of staff perceptions of ICASS as a whole, the findings suggested there could be more understanding about what ICASS is and what it does. The fact that some staff now use the term ICASS when talking about Intermediate Care is an example of this.

Health care staff are likely to understand ICASS and its component parts better as these become further embedded in routine ways of working. The work being progressed through the Community Flow Improvement Group will assist with this.

Although ICASS documentation talks about Home Care being a core component of ICASS, the staff survey indicated that this has never really been seen by staff to be the case. Fife Council’s Home Care and Home Care Reablement services have undergone review in the time since ICASS was implemented and staff appear confused about exactly where things stand regarding the Home Care service.

Staff who took part in the survey perceived ICASS to be of benefit to patients and carers and also to be meeting most of its original objectives. However, issues around referral processes, roles and responsibilities and the impact of ICASS on other services were also raised.

**Recommendation**

*In order to continue improving the Intermediate Care and Hospital at Home components of ICASS, the issues identified through the staff survey should be considered for inclusion as part of the Community Flow Improvement Group work plan.*

In terms of medical staff perceptions of Hospital at Home, the service was felt to be benefiting both patients and carers and also meeting its objective of reducing the need for hospital admissions by the vast majority of respondents. However, the impact of the service on reducing the length of hospital stays, reducing delayed discharges and especially helping to reduce the number of people requiring long term care was less clear.

Two key areas for improvement were identified through this targeted survey of medical staff:

- Given that Hospital at Home is a new model of care, it would be helpful for the service to provide feedback on the outcome of referrals or feedback on why referrals were not accepted, especially in the areas where referrers are still getting used to the service and the patients/conditions it can cater for.

- Consideration should be given to how to improve the information provided on discharge from Hospital at Home, both in terms of level of detail and format. This would help alleviate concerns that referring to the service has increased medical staff workload.

**Recommendation**
The Hospital at Home service in Fife should consider how best to provide feedback to referrers on both outcome and appropriateness of referrals, especially in areas where the service is still in its infancy.

Hospital at Home should also consider how best to provide information on discharge from the service.

4.8. What are service user perceptions of Hospital at Home?

Evidence from both the patient interviews and from the staff surveys suggest that the vast majority of patients prefer to be cared for in their own home, maintaining their independence - when their condition allows this. It should be noted that these findings are based on the experiences of patients and carers who received the service at the outset of its implementation and it is acknowledged that they may not have been as frail as later Hospital at Home patients. Nonetheless, these findings, along with anecdotal evidence from staff, echoes the evidence from the published literature.

There was one occasion where a patient voiced concerns that they were too poorly to be cared for at home but this anxiety abated as their Hospital at Home episode of care progressed. Such initial anxiety might have been expected given the move away from hospital based care to home based care. Indeed, as time has progressed, and the Hospital at Home service is more established, the anecdotal evidence from staff suggest that such anxiety is no longer an issue.

In terms of carers, there was one instance where the carer voiced some concern of around whether the Hospital at Home service could provide hospital level care in a home setting and whether it was more appropriate for the patient in question to remain in hospital. As this person’s care progressed, these concerns were alleviated although the carer suggested that improved communication between all relevant parties would have helped reduce anxiety.

It should be noted that this interview took place at the start of Hospital at Home being implemented and at a point when GPs were still being contacted by families with queries regarding the Hospital at Home service as opposed to contacting the service direct. Also of interest is that this particular carer was not a spouse and did not live with the person being cared for.

The remaining carers who were interviewed (both spouses) reported they liked the service and felt it allowed both them and their loved one to maintain routines and also their independence. This evidence echoes the published literature that having a loved one cared for at home might increase workload but not necessarily increase stress or anxiety.

The different experiences of the carers who were spouses compared to the carer who was a relative and not living with the person being cared for raised the question as to whether the impact of having someone cared for at home is different for spouses versus other relatives.

In the case of the carer being a spouse, having health care staff visit on a daily basis to care for a loved one might have less impact as there would be no need to travel to hospital to visit. If the carer is another family member, for example a son who lives a short distance away, works full time and has children, the impact might be more, trying to manage their own family responsibilities as well as having a loved one being cared for at home.

Recommendation
In considering which patients would benefit most from a Hospital at Home intervention, the service should continue to consider the circumstances of both the patient and the carer.

The context in which these interviews were carried out is also of interest. Patients and carers were interviewed in the Dunfermline & West Fife area as this was the first area to implement Hospital at Home.

The interviews took place in June 2012 – just after the Hospital at Home service had been implemented and approximately six months after acute services in Fife had been centralised to VHK. In centralising acute services to VHK, Accident & Emergency services were no longer available at Queen Margaret Hospital, Dunfermline – the hospital local to those patients and carers interviewed.

The media coverage that followed the centralisation of acute services to VHK was very negative and negative stories of issues with accessing good care and parking problems at VHK were relayed repeatedly during interviews. It has to be considered whether such negative media coverage meant that patients and carers who were interviewed were biased towards not being admitted to VHK and so were more positive towards the Hospital at Home service.

Recommendation

Hospital at Home should consider ways of collecting feedback from both patients and carers to assist in monitoring whether service users feel they have benefited from the service.

5. Conclusions

In interpreting the findings from the various strands of evaluation, the following conclusions can be drawn:

- The Intermediate Care and Hospital at Home components of ICASS have introduced new ways of working which have helped achieve, to an extent, ICASS’s overall aim of allowing older people to remain independent within their own homes or communities.

- This has been achieved by providing an Alternative to Admission to hospital in the case of Hospital at Home and both Intermediate Care and Hospital at Home providing Step Down Care thus helping reduce the length of time an older person remains in hospital. It is acknowledged that ICASS is one part of a larger body of work in changing the way older people are cared for in Fife.

- In the case of Hospital at Home, patients and carers like the service and it accounted for ~8% of acute activity for people aged 75 and over in Fife in August 2013. However, this figure is likely to be an overestimate, based on the anecdotal evidence of Hospital at Home clinicians.

- It should also be noted that, in accepting referrals for people aged under 75, Hospital at Home is not achieving its maximum potential in terms of the impact on acute hospital activity for this age group and also in terms of cost-effectiveness.

- It is too early to estimate the longer term impacts of Hospital at Home. One of the originally anticipated outcomes of the service was to reduce the number of people requiring long term institutional care and only longer term monitoring of care home
admission rates or re-admissions to hospital will help quantify this longer term impact.
6. Recommendations

In considering the findings detailed above, the recommendations from the evaluation of ICASS are given below.

NB: It is acknowledged that the recommendations below are based on the findings of evaluation work undertaken at a specific point in time and that these may already be taken into account in work currently underway around ICASS.

Recommendation 1

To facilitate better understanding of ICASS and its component parts by service providers, both in health and social care, and by service users, all ICASS staff should consistently use the same terminology:

- ICASS is the acronym used to describe a group of services, the key components of which are Hospital at Home, Intermediate Care and Home Care. Interchanging the term ICASS with Intermediate Care has the potential to confuse both service providers and service users.

Recommendation 2

To continue improving the Intermediate Care and Hospital at Home components of ICASS, work to resolve any outstanding perceived issues or barriers to good working partnerships identified through the staff surveys should be considered for inclusion as part of the Community Flow Improvement Group work plan.

Recommendation 3

At a strategic level, the importance of including Home Care Reablement as a component part of ICASS is acknowledged. Evidence on the impact of this service on people aged 75 and over in Fife should continue to be sought by the ICASS Implementation Group.

Recommendation 4

To impact most on reducing the rate of emergency hospital activity for the oldest, frailest members of our community, the acceptance criteria for Hospital at Home should be applied more rigorously, especially with regard to age and level of need. This will help NHS Fife achieving the vision of Reshaping Care for Older People which relates to people aged 75 and over.

Recommendation 5

To maximise potential cost savings associated with the Hospital at Home model, consideration should be given to whether the original capacity levels for the service are still valid. Applying the acceptance criteria regarding age more rigorously would also assist with this.

Recommendation 6

To assist in identifying those frail patients who would benefit most from the Hospital at Home service, Hospital at Home should consider ways of quantifying the levels of need of potential patients, at the start and finish of an episode of care. This would and also assist in quantifying any changes as a result of receiving the service.

Recommendation 7
To ensure Hospital at Home accepts referrals for the most appropriate patients, and does not deal with patients that could/would receive other services, Hospital at Home clinicians should consider undertaking a second audit of a cohort of Hospital at Home cases. This would also help accurately assess the percentage of emergency hospital activity truly avoided by Hospital at Home.

**Recommendation 8**

To identify any longer term changes that could be, at least in part, attributable to Hospital at Home, rates of emergency hospital admissions and readmissions for people aged 75 and over should continue to be monitored.

**Recommendation 9**

To identify any longer terms changes in the number of people requiring long term institutional care that could, at least in part, be attributed to Hospital at Home or Intermediate Care, longer term trends of institutional care should be monitored.

**Recommendation 10**

To improve partnership working between services, Hospital at Home should consider how best to provide feedback on both outcome and appropriateness of referrals to referrers, especially in areas where the service is still in its infancy. Hospital at Home should also consider how best to provide information on discharge from the service.

**Recommendation 11**

To facilitate a successful outcome of an episode of Hospital at Home care, the service should continue to consider the circumstances of both patients and their carers.

**Recommendation 12**

To facilitate improved service user satisfaction, both Hospital at Home and Intermediate Care services should consider ways of collecting feedback from service users, both patients and carers on an ongoing basis.
Appendix 1: Community Flow Improvement Group Work Plan

COMMUNITY FLOW IMPROVEMENT GROUP (Feb 2014)

AIMS

- Develop and implement ICASS across Fife to provide an integrated model of care for Hospital @ Home, Intermediate Care and Re-ablement Services
- Reduce Harm, waste and variation to improve patient flow, reduce LOS and improve discharge and ensure best use of available resources.

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>PRIORITIES</th>
<th>Leads</th>
<th>Update on Progress</th>
</tr>
</thead>
</table>
| 1. Implement H@H element of ICASS ensuring consistency of model and equity of access across each LMG area. | a) Articulate Day Intervention model to support H@H e.g. rapid access clinics, day hospital | F Mackenzie | Initial Development in GNEF  
Need consistent approach for ICASS across Fife. A Fife-wide SLWG needs to be established to take this work forward and to look at challenges, eg. Day Hospital transport.  
Was discussed at ICASS Implementation Group in October and Fiona Mackenzie agreed to take this work forward |
| 2. Deliver a robust and comprehensive intermediate care element of ICASS in each LMG area to ensure patients receive treatment in the right place by the right person. | a) Development and implementation of Discharge Hub to include ICASS in-reach etc | C Dobson | A Discharge Hub Design group was established to take forward this action. An operational group was established to ensure appropriate staffing to support the hub.  
The Hub is now permanently situated within the Trauma Theatre area (old A&E department). A data gathering and monitoring process is in place.  
A pathway was developed to facilitate linked processes and systems around Community Bed Management, eg. Central Bed Management System. This will be commenced when an additional member of admin staff is in post – post currently being advertised. |
| | b) Establish acute process for frailty assessment at front door | Brenda McFall | The aim of the Frailty at the Front Door Group is to enable initial assessment within 4 hours of admission (in hours) and 14 hours (out of hours) Actions included:  
- Review of a draft hybrid Assessment Tool and Nursing documentation to address duplication in the current system;  
- Develop a draft screening tool for Frailty Syndromes  
The Frailty Screening Tool and Frailty Assessment Tool have been tested in AU1 and issues arising from the initial test re the tools and the |
### ICASS Evaluation: Final Report

<table>
<thead>
<tr>
<th>Action</th>
<th>Responsible Party</th>
<th>Status/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triage process were addressed and a second test is currently underway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in AU1. Education for nursing staff on frailty screening tool and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training sessions between RAD and ACE teams is underway during the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>test period. Ongoing conversations re e-health solutions for the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>longer term.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Patient pathway decisions made early in the patient journey</td>
<td>C Dobson</td>
<td>Being developed as part of the referral and assessment process for discharge hub. Need to link to patient goal planning improvement work under 6(b).</td>
</tr>
<tr>
<td>through personal outcome focussed conversations as part of the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>assessment process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Development of Indicator of Relative Need (IORN) tool</td>
<td>A McAlpine</td>
<td>The IORN tool has been re-vamped. A pilot has been planned for November 2013 around the intermediate care element of ICASS to evaluate the use of the tool and its’ use as an outcome measure.</td>
</tr>
</tbody>
</table>

3. Develop processes to ensure that Re-ablement and other home care     |                    |                                                                                                                                             |
| services work effectively and efficiently as part of the ICASS model  |                    |                                                                                                                                             |
| a) Process map current pathway to identify improvement work e.g. fast  | C Dobson           | Work to be undertaken to look at direct access via the Discharge Hub. This work should be progressed/supported with Home Care Assessors working within the Discharge Hub. |
| track assessments for H@H and access to home care                     |                    |                                                                                                                                             |
| b) Understand outcome around Home Care                               | Social Care Rep     | Awaiting outcome of Home Care Review                                                                                                          |
| Review to connect to ICASS.                                           |                    |                                                                                                                                             |
| c) HSC OT service integration                                         | J Dow/ A McAlpine  | This work is being taken forward via a Fife AHP Group and any updates will be reported via the Improvement Group. Following a mapping exercise of OT services across Fife, Carolyn MacDonald is taking a paper to Health & Social Care Integration Workforce Group. |
| d) Establish social care representation at improvement groups.        | tbc                | Still have not managed to secure a rep will escalate again to ICASS Implementation Group.                                                     |

4. Establish ICASS Single Point of Access in each LMG area and develop   |                    |                                                                                                                                             |
| links to council services and signposting to voluntary sector support  |                    |                                                                                                                                             |
| a) Where appropriate, ensure consistency across Fife SPOAs e.g.       | SPOA Managers      | Mostly complete. There is a small group meeting with both NHS Fife and NHS Tayside staff to look at the current documentation. This will be linked into the discharge hub development. Meeting in November to finalise. |
| criteria, referral information, services accessed via SPOA.            |                    |                                                                                                                                             |
| b) Establish home care/re-ablement referral pathway to Contact Centre | SPOA Managers      | This is will be taken forward following the development of the discharge hub. GPs feedback – SPOAs well received but still have to refer home care to separate contact centre – Need for simplified referral pathway. |
| via SPOA                                                              |                    |                                                                                                                                             |
### Proposed Neurorehabilitation Pathway
SPOA Managers

SPOA Managers have agreed in principle to the existing Points of Access being utilised to support the new model. Further detail will need to be discussed before going live.

### Develop fully integrated Access Point(s)
SPOA Managers

Taken forward as an improvement action from LUCAP (Community Flow)

### Update/Review ICASS information posters/leaflets
Anne McAlpine

Leaflets and posters are being reviewed to reflect developments in ICASS. Different posters will be needed for Acute Wards (Discharge Hub flow) and for Community Hospitals/GPs. Timing for re-printing needs to reflect the implementation of Hospital @ Home.

### 5. Improve patient flow across acute and community hospitals

<table>
<thead>
<tr>
<th>a)</th>
<th>Safe Patient Transfer Checklist developed, tested and implemented.</th>
<th>A McArthur</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Checklist and guidance rolled out to all acute and a community downstream wards in December 2013.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>It has been agreed to monitor compliance regarding sending and completing the checklist in conjunction with Day of Care Audit on 18th March.</td>
<td></td>
</tr>
</tbody>
</table>

| b) | Develop a greater knowledge and understanding of colleagues roles and responsibilities within the system. | SCNs / A McAlpine |
|    | Nurse shadowing exercise between acute and community staff ongoing. Staff names have been identified in some wards. Look at progressing this when staffing levels allow. SCNs will arrange. |          |
|    | AHP Shadowing - this work is currently being taken forward via a Fife AHP Group and any update is reported via the Improvement Group. See attached flash report from AMcA. |          |

### 6. Reduce LOS and improve discharge

<table>
<thead>
<tr>
<th>a)</th>
<th>Community Day of Care Audit undertaken and report prepared.</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A Community Day of Care Audit was undertaken in March 2013. The recommendations from the report have informed future improvement work. It is planned to undertake a further audit on 18th March 2014. Those staff who took part last year have been contacted for availability etc.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b)</th>
<th>Improvement area to reduce LOS</th>
<th>B McFall / A McArthur</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Community wards in Kirkcaldy &amp; Levenmouth are to be used as an improvement area to undertake tests of change with an aim to reduce ALOS by 10 days by the end of March 2014. Driver Diagram and white boards are now in place in all wards. Board rounds are taking place 5 days a week on the 4 test wards and issues noted and acted upon. Work is currently underway in one ward creating a timeline to evidence referral to discharge via the social care system and will be looking to produce patient stories. The Driver Diagram and learning from the tests of change are being shared with GNEF CHP.</td>
<td></td>
</tr>
</tbody>
</table>
### Patient Goal Planning

Patient Goal Planning is currently being tested in Letham Ward, Cameron.

**c) Ensure consistent admission criteria for all Community Hospitals.**

Comm SCNs

- Looking at admission criteria developed for the Community Day of Care Audit. Also look at bed types within hospital sites. This information will be shared with Discharge hub and appropriate staff. Dennis will collate info from QMH, Carole for GNEF and Marian for K&L for next meeting.

**d) Community Hospital Criteria Led Discharge Policy**

All

- Criteria led discharge is being explored by this group and will begin by looking at documentation developed in acute services division. It was suggested that a sub-group may be needed to take forward this action. To be discussed at next meeting.

**e) PDD on whiteboards reliably and consistently used in Community Hospitals.**

All

- Whiteboards have been installed in all community hospital wards. PPDs are currently being set for patients. Group looking at how we ensure PPDs are consistently and appropriately used through education, consistency of layout etc. It was agreed that key information should be included in all boards.

**f) Evaluate Patient discharge Leaflet for use across NHS Fife**

Marion Sapcote

- Patient discharge leaflet has been developed and will be trialled for a period of 2 months (Feb-March) in GNEF and Acute Service Division. Evaluation tool developed and MS will collate returns.

**g) Develop patient checklist**

All

- Build on work previously done in Acute.

**h) Ensure consistency of processes around AWI**

F Mackenzie

- A short life working group has been established to take this work forward. An initial meeting has taken place. It was agreed that AWI is a core filed on whiteboards. The SGHD are currently looking at AWI.

### 7. Best use of resources

**a) Availability of key equipment**

M Sapcote

- Audit of key equipment to be undertaken and information shared with Discharge hub and appropriate staff. MS will bring to next meeting.

---

### PRIORITIES TAKEN FORWARD VIA FIFE ICASS IMPLEMENTATION GROUP

**ICASS (Integrated Community Assessment and Support Service)**

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>PRIORITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-ordinated Fife wide work (Group)</td>
<td>Update on Progress</td>
</tr>
</tbody>
</table>

ICASS Evaluation Final Report Approved 28.8.14
<table>
<thead>
<tr>
<th>1. Implement H@H element of ICASS ensuring consistency of model and equity of access across each LMG area.</th>
<th>a) Process map and develop linear processes to ensure we minimise any risk relating to medicines management in H@H</th>
<th>ICASS Impl Grp H@H Meds sub grp</th>
<th>Mapping of current pathway has been undertaken and action plan will be taken forward by the H@H Medicines Management Group.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b) Sustainable medical model to be identified for roll out across Fife</td>
<td>ICASS Impl Grp VH/SP</td>
<td>SP/VH</td>
</tr>
<tr>
<td></td>
<td>c) Implementation Plan for roll out of H@H in line with skills/capacity of H@H staff</td>
<td>ICASS Impl Grp VH/MT/NC</td>
<td>VH/NC/MT</td>
</tr>
<tr>
<td></td>
<td>e) Communication with stakeholders and other Boards</td>
<td>ICASS Impl Grp VH/MT/NC</td>
<td>VH/NC/MT</td>
</tr>
<tr>
<td></td>
<td>f) Ensure ehealth systems in place to support H@H and an integrated ICASS model</td>
<td>ICASS Impl Grp e-health sub grp</td>
<td>RM</td>
</tr>
<tr>
<td>2. Deliver a robust and comprehensive intermediate care element of ICASS in each LMG area to ensure patients receive treatment in the right place by the right person.</td>
<td>a) Weekend working for intermediate care staff.</td>
<td>ICASS Impl Grp</td>
<td>Currently being implemented.</td>
</tr>
<tr>
<td></td>
<td>b) Co-location of ICASS staff in each LMG area</td>
<td>ICASS Impl Grp</td>
<td>Health care staff complete. Social Care staff ongoing.</td>
</tr>
<tr>
<td>5. Develop a disinvestment plan in line with the work of the Community Hospital Facilities and configuration of inpatient services across Fife.</td>
<td>a) Improvement priorities will be informed following the expected outcomes of the CHIF work.</td>
<td>CHIF Group</td>
<td>The community bed modelling component is now being taken forward in the overall Bed Capacity Modelling Exercise which is being overseen by the Director of Acute Services. It is planned that the CHIF group will continue to take forward specific pieces of work in the future as determined by the programme.</td>
</tr>
<tr>
<td><strong>Improve patient flow across acute and community hospitals</strong></td>
<td>b) Increased transfers to Community Hospitals at weekends and Public Holidays to ensure appropriate rehab</td>
<td>RCOP Leads Grp</td>
<td></td>
</tr>
</tbody>
</table>
# ICASS Evaluation: Final Report

## Best use of resources

<table>
<thead>
<tr>
<th>a)</th>
<th>Identify nursing skill mix and competences (audit of staff clinical skills and key equipment)</th>
<th>(MT)</th>
<th>The nursing skill mix work is being taken forward on a Fife wide basis by Associate Directors of Nursing and will be reported via Reshaping Care Group.</th>
<th>Carolyn MacDonald is looking at the skill mix for AHPs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>b)</td>
<td>Key staff available at weekends in Community Hospitals</td>
<td>ICASS Imp Group</td>
<td>It was agreed that this should be taken forward within overall ICASS Staffing planning and sit with the Fife ICASS Implementation Group</td>
<td></td>
</tr>
</tbody>
</table>

### COMPLETED ACTIONS

| 2. Reduce los and improve discharge | h) Reduction in nos and appropriateness of patients on community list and identify process to transfer Community List to be held in CHP areas | C Dobson | Significant numbers have been consistently removed from list. Community List will now be managed by the discharge hub. No patient will go on list until they have been seen by a Patient Flow Co-ordinator via the Discharge Hub. | |

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Appendix 2: Hospital at Home in Fife: Perceptions of medical staff

Hospital at Home in Fife: Perceptions of medical staff

Mhairi Gilmour
Public Health Research & Development Officer (Older People)
Public Health

28th February 2014
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Executive Summary

Introduction

A programme of evaluation of Fife’s ICASS service has been ongoing since December 2011 and has included an electronic survey of NHS staff to capture perceptions on whether ICASS was achieving its anticipated outcomes.

Although the response to the survey was good, only 5% of respondents were medical staff, leaving a gap in understanding how medical staff (GPs in particular) perceive ICASS. In addition, the survey gathered staff perceptions of ICASS as a whole. Hospital at Home is a new model of health care that has been implemented as part of ICASS and represents a significant investment in terms of not only Change Fund monies but also of new ways of working. It was therefore felt to be beneficial to capturing the views of medical staff who would potentially be affected by the service being implemented.

In order to do this, an electronic survey of medical staff was undertaken, focusing on their knowledge and experience of Hospital at Home and its impact on patients, carers, staff and services. The key findings from this work are summarised below.

NB: It should be noted that responses have been analysed on a Fife-wide basis and not categorised according to which of the three different Hospital at Home or single points of access teams the respondent had experience of.

Key findings

Of the 49 medical staff who took part in the electronic survey on Hospital at Home, all were aware of Hospital at Home and the majority (86%) had referred to the service at least once.

The majority (69%) of respondents reported positive experiences of contacting the single point of access to make referrals although there was one instance where the referrer felt the staff receiving the referral were not helpful and could improve how they interacted with referrers.

Although the majority (60%) of respondents felt their knowledge of knowing which kind of patient Hospital at Home was suitable for, the remainder felt more information would be beneficial to referrers, especially with regards to exclusion criteria.

Only 35% of respondents felt their experience of receiving feedback on their referral to Hospital at Home was positive, the remainder felt more or better feedback on the outcome of referrals would be beneficial, especially with regards to whether the referral was accepted or not. In cases where referrals were not accepted due to the patient being unsuitable for Hospital at Home, feedback on the reasons why would help provide guidance on appropriateness of future referrals.

Information provided on discharge from Hospital at Home was reported as being poor in terms of level of detail and format both by GPs and hospital-based medical staff. GPs in particular reported having to follow up with Hospital at Home staff to clarify information in the discharge documentation, thus increasing their workload.

Hospital at Home was felt to reduce the need for hospital admissions by the vast majority (83%) of respondents although the impact of Hospital at Home on the length of hospital stay, reducing
delayed discharges and especially helping to reduce the number of people requiring long term care was less clear.

Opinions were mixed as to whether Hospital at Home had improved the way health care staff work together whilst the majority (60%) of respondents were unsure whether Hospital at Home has changed the way health and social care staff work together.

In terms of the impact of Hospital at Home on medical staff workload, the majority (57%) of respondents felt it had not. Of those who felt Hospital at Home had increased their workload, the reasons related to either having to contact Hospital at Home staff for information relating to the patient or, in the case of hospital based medical staff, answering queries from Hospital at Home staff out of hours.

In one case, patients admitted to Hospital at Home continued to contact their GP with queries instead of contacting the Hospital at Home service. The GP in this instance commented how Hospital at Home was an alternative for patients for whom a hospital admission was not desirable and commented that some Hospital at Home patients might previously been cared for at home under primary care. This raises the question as to whether Hospital at Home is dealing with patients over and above those who would have previously been admitted to hospital.

The vast majority of respondents felt that patients and carers had benefited from Hospital at Home although there was one instance where this was not felt to be the case. For patients, Hospital at Home was reported to help older people be maintained at home, improve their care experience and enable older people to maintain their independence.

For carers, although Hospital at Home was felt to have had a positive impact by supporting carers more, some respondents noted that by admitting a person to hospital, carers might get some reprieve from their caring role.

Conclusion

From the key findings highlighted above, it is clear that Hospital at Home is perceived to be of benefit to the vast majority of patients who receive the service. However, it was also clear from the responses that medical staff feel it would beneficial to consider how the discharge documentation used by Hospital at Home can be improved and also consider how best to feed back to referrers on the appropriateness of referrals. In doing so, the Hospital at Home service in Fife can continue to improve and help reduce the need for older people to be admitted to hospital and keep maintaining their ability to live independently in their community.

The Hospital at Home service in Fife also should consider whether it is dealing only with patients who would previously have been admitted to a hospital or whether it is providing a service to meet the unmet needs of patients who would not have been admitted to hospital thus potentially reducing the impact it could have on acute hospital activity.
Hospital at Home in Fife: Perceptions of medical staff

Introduction

A proportion of Change Fund monies from The Scottish Government’s Reshaping Care for Older People Programme have been used to develop and implement a new Integrated Community Assessment and Support Service (ICASS) in Fife.

ICASS consists of three core components - Hospital at Home, Re-ablement and Intermediate Care Services and aims to improve the quality of care and outcomes for older people whilst allowing them to remain independent within their own homes or communities.

Anticipated outcomes include:

- Providing an alternative to emergency hospital admissions for older people but will progress to also reduce the number of people requiring long term institutional care.
- A reduction in the length of stay will be facilitated for those who require hospital admission.
- Enable older people who are maintained at home to achieve and sustain their maximum potential.
- Providing care and support that is both financially and practically sustainable.

In order to determine the extent to which Fife’s ICASS service is achieving the outcomes that were originally anticipated, a programme of evaluation, using a variety of methods, has been ongoing since December 2011, most recently focussing on a survey of NHS staff to capture perceptions on whether ICASS was achieving its anticipated outcomes.

Although the response to the survey was good, only 5% of respondents were medical staff, leaving a gap in understanding how medical staff (GPs in particular) perceive ICASS. In addition, the survey gathered staff perceptions of ICASS as a whole. Hospital at Home is a new model of health care that has been implemented as part of ICASS and represents a significant investment in terms of not only Change Fund monies but also of new ways of working. It was therefore felt to be beneficial to capturing the views of medical staff who would potentially be affected by the service being implemented. In order to do this, an electronic survey of GPs and medical staff working in NHS Fife’s Operational Division was undertaken, the results of which are presented in this paper.

Methodology

An electronic survey was designed to capture feedback from medical staff on the following:

- Awareness of Hospital at Home
- Experience of referring to Hospital at Home
- Perceived impact of Hospital at Home on:
  - Services
  - Staff
  - Patients
  - Carers
Additional questions were included in order to characterise the overall group of staff who took part in the survey. These questions included staff grouping and area of work of the respondent.

A first draft of the survey was piloted with three doctors in order to confirm the relevance and appropriateness of the questions asked. Once finalised, an e-mail invitation to participate in the survey was sent to medical staff in NHS Fife’s Operational Division and all GPs in Fife. The survey ran from 5th February 2014 until 21st February 2014.

Data from the survey was transferred to Microsoft Excel to allow categorisation and analysis of quantitative data. Qualitative data captured in the survey was analysed to identify key emergent themes and results are presented below.

**Key Findings**

**Respondents**

A total of 51 people started the survey. Of these, two people were non-medical staff. Given that the survey was intended to capture medical staff perceptions of Hospital at Home, these two responses were excluded from further analysis.

Of the 49 remaining responses, 9 medical staff worked in NHS Fife’s Operational Division whilst the remainder worked in General Practice (19), Dunfermline & West Fife area (10), Kirkcaldy & Levenmouth area (9) or Glenrothes & North East Fife area (2). Details of respondents’ area of work are provided in Chart 1.

![Chart 1: Respondents area of work](chart1.png)

The majority of respondents were GPs (38) with one respondent working both in General Practice and in a hospital setting. The remainder of respondents were either Consultants (9) or Career Grade medical staff (1). Details of the staff grouping of respondents are provided in Chart 2.
Awareness of Hospital at Home

Of the 49 respondents, **42 (86%)** were aware of and had referred to Hospital at Home whilst **7 (14%)** were aware of but had not referred to Hospital at Home. Of the 7 respondents who had not referred to Hospital at Home, 4 answered the questions relating to perceived impact of Hospital at Home (although did not answer questions relating to experience of referring to Hospital at Home).

In relation to why respondents had not referred to Hospital at Home, the following reasons were given:

- "I haven’t admitted any patients to hospital since we were visited by H @H team a month or so ago."
- "Not had a patient under my care requiring it"
- "No clinically appropriate situation encountered"
- "The vast majority of my patients are not suitable (myocardial ischaemia, decompensated heart failure requiring frusemide by continuous IV infusion, arrhythmias etc)"
- "It is not running in our area yet - why not I ask myself"
Experience of referring to Hospital at Home

Accessing the single point of access

Referrals to Hospital at Home are routed via the appropriate “point of access” for each CHP area (Point of Access for Community Teams (PACT) in Dunfermline & West Fife, Single Point of Access in both Kirkcaldy & Levenmouth and Glenrothes & North East Fife).

In terms of the experience of medical staff when contacting the single points of access to refer to the relevant Hospital at Home service, the majority felt the experience was “Good” (36%) or “Very Good” (33%) whilst 21% felt the experience was “Average” and 5% felt the experience was “Poor”. Two respondents did not answer this question. Full details of the experience of medical staff when contacting the single points of access to refer to Hospital at Home service are provided in Chart 3. N.B. It should be noted that further information on which particular point of access respondents referred to were not collected.

In terms of qualitative feedback on the experience of contacting the single points of access to refer a patient to a Hospital at Home service, both positives and challenges were reported.

Of the positive experiences, ease of contacting the point of access was reported most whilst one comment related to the helpfulness of the staff.

Of the challenges, one comment related to the way staff receiving the referral spoke to the referrer whilst other more common themes related to:

- Switchboard being unaware of correct contact number
- Staff at points of access appearing to be “learning” how to accept referrals
- Having to provide lots of data/information manually for referral to be considered

Chart 3: Experience of contacting the single point of access to refer to Hospital at Home
Knowing which patients Hospital at Home accepts

In terms of knowing what kind of patients Hospital at Home services in Fife accept, 18 (43%) respondents reported this as being “Good” with 7 (17%) respondents reporting this as being “Very Good”. Of the remaining answers, 14 (33%) respondents reported their experience of knowing what kind of patients Hospital at Home accept as being “Average” whilst one respondent reported their experience as being “Poor” with one answering “Very Poor”. Details of these responses are provided in Chart 4.

In terms of the comments provided for this question, again both positives and challenges were highlighted.

The positives were mainly about clear guidance on what kinds of patients Hospital at Home services accept being provided, with one comment highlighting that when in doubt, the Hospital at Home clinician was able to discuss and advise regarding appropriateness of referral.

![Chart 4: Experience of knowing what kind of patients Hospital at Home accepts](chart)

In terms of the challenges in knowing what kind of patients Hospital at Home services accept, comments related to guidance not being circulated soon enough and acceptance criteria not being clear. One comment referred to acceptance criteria not being consistent across Hospital at Home services in Fife.

Examples of comments included:

“Clear guidance has been issued. Where I have had doubts/queries I have been able to have a discussion with one of the H@H clinical team who have given appropriate advice re referral”

“Have been disappointed once when problem transferring from bed to commode herself debarred H@H use”
Receiving feedback on referral outcome

In terms of receiving feedback on the outcome of a Hospital at Home referral, less than half of respondents felt their experience was “Good” (33%) or “Very Good” (2%). 16 (38%) respondents reported their experience as being “Average”, 8 (19%) as being “Poor” and 2 (5%) as being “Very Poor”. Further details are provided in Chart 5.

In terms of the comments received regarding the experience of medical staff in receiving feedback on the outcome of their referral to Hospital at Home, the positives related to prompt feedback on the acceptance of the referral or “excellent” feedback helping to guide future referrals.

Of the challenges mentioned, two key areas were highlighted: not being advised whether the referral was accepted by Hospital at Home and the paperwork relating to a patient’s discharge from Hospital at Home being unsuitable.

Examples of comments included:

“Excellent feedback which has guided future referrals”

“Feedback was only received on patient discharge-it would have been helpful to know after assessment whether patient was accepted or not”

“Never had any (feedback)”

“The discharge paperwork is DREADFUL. It is very unclear to tell whether or not the patient has been discharged. Trying to read through the drug list is a nightmare - ordinary paper discharge flimsies are much better (and they aren’t that great).”

“It is not very clear what treatment the person has had, what follow up they will receive etc. It feels like the paperwork is getting filled in by a non doctor & who doesn’t realise what info GP’s need to know”
Impact of Hospital at Home

Reducing the need for hospital admission

In terms of whether Hospital at Home has reduced the need for a hospital admission, the vast majority of respondents (83%) felt it had done so 9 (20%) a lot, 19 (41%) some and 10 (22%) a little. Further details are provided in Chart 6.

Of the comments provided, the majority highlighted the positive impact of Hospital at Home in reducing the need to admit a patient to a hospital. The challenges related to the service not being available overnight or being able to refer at weekends – both of which had meant a patient had to be admitted to hospital.

![Chart 6: Perceived impact of Hospital at Home on Hospital Admissions](image)

The comments provided included:

“Still early days but a high percentage of my patients have been managed at home”

“I used it to get a hospital in-patient in Glenrothes Hospital IV drugs so I suppose it prevented a transfer to the Vic”

“Would be good if it reliably ran at weekends. Sometimes they don’t have capacity for new referrals.”

“Could have been managed longer at home had the service run overnight.”
Reducing the length of hospital stay

In terms of whether Hospital at Home had helped reduce the length of stay for those people who were admitted to Hospital, opinion was split evenly between respondents who felt Hospital at Home had impacted on the length of stay (3 (7%) a lot, 11 (24%) some, 7 (15%) a little) and those who didn’t know (21 (46%)). Further details are provided in Chart 7.

![Chart 7: Perceived impact of Hospital at Home on length of hospital stay](chart)

In terms of the comments received two respondents had experienced patients receiving Hospital at Home input which had resulted in their length of hospital stay being reduced. The remaining comments either reflected the respondent was unsure of the impact of Hospital at Home on the length of hospital stay or had not experienced any impact of Hospital at Home on length of hospital stay.

Comments included:

“I am aware of earlier discharges occurring”

“I think it's been used in this way for a few of my patients”

“I am not aware of patients being discharged to the H@H team”

“Not used it in this way”

“Not sure how it has affected the length of stay for people admitted to hospital”
Reducing the number of people requiring long term care

In terms of whether Hospital at Home had helped reduce the number of people requiring long term care, the majority (59%) of respondents were unsure whether this was the case. Only 13% of respondents felt Hospital at Home had helped reduce the number of people requiring long term care whilst 26% felt Hospital at Home had not helped reduce the number of people requiring long term care. Further details are provided in Chart 8.

Chart 9: Perceived impact of Hospital at Home on reducing the number of people requiring long term care

In terms of the comments provided, the majority related to either the Hospital at Home service not being implemented long enough to see any impact it may have on numbers of people requiring long term care or to the complexity around the factors leading to a person requiring long term care.

Comments included:

“It prevents hospital admission - long term care needs are often to do with reaching a tipping point in their decline, particularly dementia related which H@H can have little impact - more likely it will unearth unmet needs.”

“More circumstances than presence of H@H determine whether (patient) needs Long term care”

“At this stage am not sure that it has but would be useful to see any data/evidence on this”

“Can't think of any examples in my caseload”
Reducing delayed discharges from hospital care

In terms of whether Hospital at Home has helped reduce the numbers of delayed discharges from hospital care, the majority (57%) of respondents were unsure whether this was the case.

Only 1 (2%) of respondents felt Hospital at Home had impacted a lot on reducing the number of delayed discharges from hospital care whilst 7 (15%) felt it had “some” impact and 6 (13%) of respondents felt it had “a little” impact. 5 (11%) of respondents felt Hospital at Home had not helped reduce the number of delayed discharges from hospital care. Further details are provided in Chart 10.

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**Chart 10: Perceived impact of Hospital at Home on reducing delayed discharges from hospital care**

In terms of the comments provided, the majority related to Hospital at Home not being implemented long enough for any impact on delayed discharges to be evident. One comment related to the challenges of social work care packages stopping if a patient has been in hospital longer than two weeks.

Comments included:

“It has the potential to do this if it can get people out of hospital within the 2 week golden window of social work – the point at which they......stop all care packages and mainly if it stops them going in - it won't get them out once their care package is lost.”

“Not sure - cannot think of any examples in my practice”

“Not enough experience yet”
Helping older people be maintained at home

In terms of whether Hospital at Home has helped older people to be maintained at home, the vast majority of respondents felt this was the case with 12 (26%) responding “a lot”, 15 (33%) responding “some” and 13 (28%) responding “a little”. Further details are provided in Chart 11.

![Chart 11: Perceived impact of Hospital at Home on helping older people to be maintained at home](image)

In terms of the comments provided, three related to positive experiences of older people being able to be maintained at home whilst the other to Hospital at Home not being implemented long enough to see what impact it had on helping older people to be maintained at home.

Comments included:

“I am aware of a number of concrete examples”

“This would seem the case from what I have seen in my practice”

“It has been very useful for family partly where the patient has dementia it has been great enabling them to stay in their own familiar surroundings”

“Not enough experience yet”
Impact of Hospital at Home on other services

In terms of whether Hospital at Home has impacted on other services, 23 (50%) of respondents were unsure, 11 (24%) felt it had impacted on other services and 11 (24%) felt it had not impacted on other services. Further details are provided in Chart 12.

![Chart 12: Perceived impact of Hospital at Home on other services](chart.png)

Of the comments provided, the positive impacts of Hospital at Home on other services related primarily to reducing hospital admissions. Some of the challenges highlighted related to Hospital at Home patients contacting GPs with queries when they were under Hospital at Home care and increased work for out of hours clinicians having to respond to queries.

Comments included:

“Has reduced my referrals for medical admission”

“Reduced hospital admissions, helping general practice to look after patients in the community”

“We've had a few patients call for advice to the practice while officially under H@H. Not sure how it has impacted on GP and DN out of hours services, but I suspect may have increased demand”

“Relatively frequent phone calls when I have been medical consultant on call at the weekend, but these patients would have been inpatients, so I may still have had calls about them”

“Uses a lot of resource - extra work for on call consultant physicians to cover out of hours enquiries”
Workload of medical staff

In terms of whether Hospital at Home has impacted on the workload of medical staff, the majority of respondents (57%) felt it had no impact whilst 11 (24%) felt it had impacted on their workload “a little” and 8 (17%) felt it had impacted on their workload “some”. Further details are provided in Chart 13.

![Chart 13: Impact of Hospital at Home on workload of medical staff](image)

In terms of the comments provided, a few related to Hospital at Home decreasing medical staffs’ workload but the majority related to an increased workload. Of these, some related to the effort required to read the discharge documentation and having to follow up with phone calls to obtain information missing from the discharge documentation. Other comments related to challenges associated with patients either being admitted to a hospital setting from Hospital at Home (lack of documentation) or trying to discharge a patient to Hospital at Home from a hospital setting.

Comments included:

- “Few queries from patient, however I think this has been counterbalanced by having the option of H@H for those patients where admission is not desirable - often when the patient does not wish to be admitted. Some of these patients may have previously stayed at home under primary care and been difficult to manage safely”
- “I would think some decrease to workload”
- “Patients referred in to hospital from H@H never have any records of what has happened and never discussed with docs in hosp”
- “Reading the discharge paperwork increases our workload as it is so unclear & we have had to phone up with queries about it. If it was a decently prepared & set out document it would avoid these queries”
- “OOH GP responsible for patients in the evenings/ weekends”
- “Sometimes more work to achieve H@H discharge than keeping pt in”
How health care staff work together

When asked whether Hospital at Home had impacted on how health care staff in Fife work together, the majority (52%) of respondents said it had – 1 (2%) “a lot”, 10 (22%) “some” and 13 (28%) “a little”. 14 (30%) of respondents were unsure and 7 (15%) of respondents felt Hospital at Home had not impacted on how health care staff in Fife work together. Further details are provided in Chart 14.

![Chart 14: Perceived impact of Hospital at Home on the way health staff work together](image)

Only three comments were provided for this answer – these are detailed below.

“Positive increase in team working between primary and secondary care”

“It has the potential to do this - but I don't know if I've seen that yet”

“A little too early to tell, but have a hopeful outlook on this”
How health and social care staff in work together

In terms of the impact of Hospital at Home on how health and social care staff in Fife work together, the majority (60%) of respondents said they didn’t know/were unsure. 11 (24%) of respondents felt Hospital at Home had impacted on how health and social care staff worked together with 7 (15%) answering “some” and 4 (9%) answering “a little”. 7 (15%) of respondents answered that Hospital at Home had not impacted on how health and social care staff in Fife work together. Further details are provided in Chart 15.

![Chart 15: Perceived impact of Hospital at Home on how health and social care staff work together](chart.png)

Of the comments provided, most related to the challenges of health and social care staff working together in Fife. The following comments were provided:

- “Still a frustrating disconnect”
- “No – but it would be good if it could”
- “We are still having to chase up social work/home care support once H@H have pulled out”
- “Not something I have seen or been aware of but certainly has this potential”
- “Would love that to be the case - I just don’t know yet”
Impact of Hospital at Home on patients

Improving the care experience

In responding to whether Hospital at Home has benefited patients by improving their care experience, the overwhelming majority (80%) responded positively with 13 (28%) of respondents answering “a lot”, 12 (26%) answering “some” and 12 (26%) answering “a little”. Further details are provided in Chart 16.

![Chart 16: Impact of Hospital at Home on patients by improving the care experience](image)

Of the comments provided, only one was negative with the remainder highlighting how patients had liked that Hospital at Home allowed them to remain at home. Comments provided included:

“A lot of patients have been very positive about the experience, in particular about being able to stay at home”

“I have generally had very positive feedback from patients that I have referred with a few adamant they would only wish to be referred to the H@H team in future rather than admission”

“Patients give very encouraging feedback”

“Positive feedback from patients that have used the service so far”

“The one patient within the practice that has been treated by H@H seems to have been poorly served by them and this has very much put off GPs referring to them due to a lack of confidence in their care”
Allowing older people to be treated at home

When asked whether Hospital at Home had benefited older people by allowing them to be treated at home, again, the overwhelming response was that it had. 17 (37%) of respondents felt older people had benefited older people “a lot”, 12 (26%) “some” and 12 (26%) “a little”. Further details are provided in Chart 17.

The comments received for this question were on the whole positive although one comment questioned the cost effectiveness of Hospital at Home. Comments provided included:

“Patients much prefer it - especially now admission is to the VHK”
“A selected cohort benefit - but at what cost (£) per patient seen?”
“An essential development - we will need MORE H@H - and less in the way of inpatient care - time to move on from the dinosaur model of hospital first - ask questions later. Should in time think of how to spend less on hospital and much, much more in the community where the need is.”
Maintaining independence

In relation to whether Hospital at Home has enabled older people to maintain their independence, the majority (78%) felt that was the case with 8 (17%) respondents answering “a lot”, 21 (46%) answering “some” and 7 (15%) answering “a little”. Further details are provided in Chart 18.

![Chart 18: Impact of Hospital at Home on enabling older people to maintain their independence](image)

Only one comment was provided for this question:

"By preventing the institutionalisation of hospitalisation and loss of normal life routines then certainly independence has been maintained. Beware though - one could unwittingly "institutionalise" someone in their own home."
Other impact of Hospital at Home on patients

When asked whether Hospital at Home had impacted on older people in other ways, the majority (72%) were unsure with 6 (13%) respondents answering that Hospital at Home had impacted on older people in other ways and the same number of respondents answering that Hospital at Home had not impacted on older people in other ways.

In the comments provided, only positive aspects of the impact of Hospital at Home on patients (and carers/family in two instances) were highlighted:

“Overall a positive experience”
“Potentially less confusion, easier for relatives”
“Very positive feedback from patient”
“Useful for care home patients”
“Impact on family /carers - taken the pressure off them - not having to try and get up to hospital for daily visits, allowed them to remain involved/ part of care for patient”
“Communities are beginning to hear of it and are keen to know they too could access it. No bad press thus far from the patient.”
Impact of Hospital at Home on carers

Enabling carers to support older people in maintaining their independence at home

When asked whether Hospital at Home enabled carers to support older people in maintaining their independence at home, the majority of respondents (65%) felt it did with 3 (7%) answering “a lot”, 19 (41%) answering “some” and 8 (17%) answering “a little”. 14 (30%) of respondents were unsure whether Hospital at Home enabled carers to support older people in maintaining their independence at home. Further details are provided in Chart 19.

![Chart 19: Impact of Hospital at Home on enabling carers to support older people in maintaining their independence at home](image)

In providing comments on whether Hospital at Home enables carers to support older people in maintaining their independence at home, both positive and challenging aspects of this were highlighted:

“Carers more confident to continue in their role as the increased medical needs are met by those with the skills to do so.”

“Social work need to get their act together and respond more quickly otherwise we end up admitting people after H@H have pulled out and we wait for home care packages to start”

“Might increase their anxiety that their unwell relative has not actually been admitted to hospital. Still keeps some of the responsibility on them rather than secondary care?”
Benefit of having a family member cared for at home

In considering whether Hospital at Home benefited carers by caring for their family member at home, just over half of respondents (53%) felt it had. Of these, 6 (13%) felt carers benefited “a lot”, 15 (33%) “some” and 5 (11%) “a little”. Just under half (41%) of respondents were unsure whether carers had benefited from Hospital at Home caring for their family member at home. Further details are provided in Chart 20.

Chart 20: Impact of Hospital at Home in benefiting carers by having their family member treated at home

As for the previous question on the benefit of Hospital at Home to carers, opinion was split as to whether carers did actually benefit from their family member being treated at home or not:

“Carer’s don’t lose time travelling to hospitals - at times convenient to the hospital rather than their own daily routine. Moreover, they can continue their contribution of care - only issue might be if Carer is badly requiring respite - flip side is that this may provide a degree of respite.”

“Sometimes I wonder if some carers would prefer an admission so they can get a bit more of a break”
Other impact of Hospital at Home on carers

In considering whether Hospital at Home had impacted on carers in ways other than those above, the majority of respondents (76%) were unsure whilst 11% either thought Hospital at Home had impacted on carers or had not impacted on carers in other ways.

Comments provided included:

“Created a more positive caring experience”
“Feel more supported”
“Increase workload”
“Increased load”

Other key themes

Respondents to the survey were given the opportunity to provide further comments if they so desired and 23 respondents did so.

In analysing the comments provided, several key themes emerged and are listed below with examples of comments included. All comments are provided in Appendix A.

Positive experience of referring to Hospital at Home

“I am generally really happy with the service I have found the team to be helpful when making initial referral.”
“I do see a place for this kind of care and hope it will prove cost-effective.”
“I think it is a long overdue service. It is still early days in my patch but without exception, patients who are aware of it are very positive about it.”
“I'd like it to become the first port of call for the vast majority of residential home patients and all those who don't require acute invasive intervention.”
“I think this is an excellent service that is only in its infancy”
“Hospital at Home stands out as one new initiative which genuinely seems to have brought a great deal of benefit to those often most in need.”
“Only used the service directly once (patient came to us from Hospital at Home) and was a positive outcome for the patient and the ward. Suspect we will explore using them more in the future.”
“It would be good to repeat this survey again later for those of us who only recently have had the service.”

Communication issues

“There had been altered medication - GP and pharmacy were not informed and Nomad was not set up correctly - this caused great confusion between patient and GP - almost resulted in an acute admission as a result.”
“Feedback on unsuitable referrals would be useful for future referral decisions.”
“It isn't clear at the moment when the patient is discharged back to our care. A h/w note similar to current hospital discharge letters might be good.”
“I have experienced delay in receiving discharge summaries and had to phone patient to find out what was happening”

“We have had a couple of patients who were still trying to contact us whilst being hospital at home patients - also it is not very clear when someone is formally discharged so it hard to know when we need to get involved again”

“We haven’t received any feedback from Hospital at Home regarding the difficulties experienced by our patient accessing timely care, other than from the patient and other healthcare professionals outwith the Hospital at Home who seem to have been very disappointed with the service”

Discharge Information Needs Improving

“The discharge summaries are difficult to negotiate and the vital info; i.e. diagnosis medication and follow-up arrangements do not stand out. I would recommend a look at Dr Francis’s letters as being an exemplary form of communication.”

“Discharge information was poor in my experience - delayed and not communicated to GP on the day of discharge from hosp at home.”

“Discharge letters are hard to get the "jist" from. Rather typical of such forms. Would rather a short descriptive letter summarising care and diagnoses while under H@H care and plans for follow up or otherwise. Plain English”

“I would like to see some improvement in the discharge letters - it would almost be easier if they were the same as the immediate d/c letters from hospital”

Out of hours access

“I have had several patients that I have admitted to hospital that I felt would have been suitable for H@H and if I had been able to refer to H@H out of hours than admission could have been prevented, I hope that the H@H team will expand to cover OOH.”

“Hope there is funding to allow expansion of this to include bank holidays/out of hours service of this very useful resource”

Cost effectiveness of Hospital at Home

“A lot of money has been invested without much obvious benefit on the "frontline". I think we are supporting people who previously would have been managed by their GPs not in hospital?”

“I would be very interested in how much money NHS Fife has spent on H@H in terms of cost per patient so that it can be evaluated compared to hospital admission”

“We under utilise community hospital beds and should focus our attention on appropriate step down and intermediate care here before having all singing all dancing care for the minority at home.”

Acceptance criteria

“Many times when Hospital at Home would be appropriate, the care needed to address functional decline associated is not available real time, thereby necessitating admission. Therefore Hospital at Home often restricted to those with willing/able families - this seems inequitable”
Other comments

“Home care was not in place before hosp at home left - we as GPs ended up chasing social work and home care - no different than before hospital at home were in place”

“If there was an improvement in accessing carers more promptly I am sure this would avoid further admissions for those people who have none”

“Need to have easier access for step down referrals - need consistency across Fife. Need consistent approach to nursing home inreach”

“...do not have the service yet...you should ... at least know whether a service is implemented across the board ... it is a shame you do not have a clue what is actually happening in your own area”

Summary of findings

Of the 49 medical staff who took part in the electronic survey on Hospital at Home, all were aware of Hospital at Home and the majority (86%) had referred to the service at least once.

The majority (69%) of respondents reported positive experiences of contacting the single point of access to make referrals although there was one instance where the referrer felt the staff receiving the referral were not helpful and could improve how they interacted with referrers.

Although the majority (60%) of respondents felt their knowledge of knowing which kind of patient Hospital at Home was suitable for, the remainder felt more information would be beneficial to referrers, especially with regards to exclusion criteria.

Only 35% of respondents felt their experience of receiving feedback on their referral to Hospital at Home was positive, the remainder felt more or better feedback on the outcome of referrals would be beneficial, especially with regards to whether the referral was accepted or not. In cases where referrals were not accepted due to the patient being unsuitable for Hospital at Home, feedback on the reasons why would help provide guidance on appropriateness of future referrals.

Information provided on discharge from Hospital at Home was reported as being poor in terms of level of detail and format both by GPs and hospital-based medical staff. GPs in particular reported having to follow up with Hospital at Home staff to clarify information in the discharge documentation, thus increasing their workload.

Hospital at Home was felt to reduce the need for hospital admissions by the vast majority (83%) of respondents although the impact of Hospital at Home on the length of hospital stay, reducing delayed discharges and especially helping to reduce the number of people requiring long term care was less clear.

Opinions were mixed as to whether Hospital at Home had improved the way health care staff work together whilst the majority (60%) of respondents were unsure whether Hospital at Home has changed the way health and social care staff work together.

In terms of the impact of Hospital at Home on medical staff workload, the majority (57%) of respondents felt it had not. Of those who felt Hospital at Home had increased their workload, the reasons related to either having to contact Hospital at Home staff for information relating to
the patient or, in the case of hospital based medical staff, answering queries from Hospital at Home staff out of hours.

The vast majority of respondents felt that patients and carers had benefited from Hospital at Home although there was one instance where this was not felt to be the case. For patients, Hospital at Home was reported to help older people be maintained at home, improve their care experience and enable older people to maintain their independence.

For carers, although Hospital at Home was felt to have had a positive impact by supporting carers more, some respondents noted that by admitting a person to hospital, carers might get some reprieve from their caring role.

**Conclusion**

From the key findings highlighted above, it is clear that Hospital at Home is perceived to be of benefit to the vast majority of patients who receive the service. However, it was also clear from the responses that medical staff feel it would beneficial to consider how the discharge documentation used by Hospital at Home can be improved and also consider how best to feed back to referrers on the appropriateness of referrals. In doing so, the Hospital at Home service in Fife can continue to improve and help reduce the need for older people to be admitted to hospital and keep maintaining their ability to live independently in their community.
Appendix A:
Qualitative responses to experience of contacting single point of access

- Positives
  - Easier
  - Easy to get through to H@H on phone.
  - On all occasions I have been able to get through quickly to PACT office or the team themselves.
  - Once switchboard knew who H@H were, it has been easy.
  - Very helpful staff

- Challenges
  - Can be difficult to get through sometimes and one occasion I was passed back and forward to different staff to make referral.
  - Can be frustratingly lengthy
  - Data collection took far too long on a busy morning. I would like the system to take the patient’s CHI No and populate the info from there. I don’t have time to be spelling out every word!
  - I referred at a point when we hadn’t received any info regarding phone numbers of who to contact etc & switchboard didn’t seem to be sure what they were doing – I’m presuming things have improved
  - I’ve referred a couple of times to Kirkcaldy area. I think mainly as the service is still new it took some time for me to be put through the correct person via switchboard
  - My referral was a little complicated – spoke to 2 doctors and the admin staff to achieve admission – time consuming for me.
  - Remembering your direct number has been a challenge when out on a house call
  - Still no dedicated line for Kirkcaldy hospital at home. Switchboard not aware of this
  - The person I spoke to was polite and helpful, but understandably it seemed a new process to them. The overall referral process felt a bit clunky-with SPOA letter, summary in the house (or fax) and phone call to non-clinical person, however it is new to me too and so that might just come once I’ve used it a few times.
  - Unfriendly, challenging, snooty, demanding

- Neutral
  - I have tended to delegate this!

Responses to acceptance criteria for Hospital at Home

- Positive
  - Clear guidance has been issued. Where I have had doubts/queries I have been able to have a discussion with one of the H@H clinical team who have given appropriate advice re referral
  - Clear protocols to help
  - Fairly clear guidelines
  - I am reasonably clear

- Challenges
  - Have been disappointed once when problem transferring from bed to commode herself debarred H@H use
ICASS Evaluation: Final Report

- Mainly because it's new. Might be helpful to have some examples of suitable and less suitable patients—though if I can discuss the patients with a clinical person then I will learn.
- Only just received a document stating who is or isn't suitable - it would have been helpful to have this prior to the project going live
- Not consistent across Fife
- Patients are not always accepted, criteria not clear

**Experience of referring to Hospital at Home – receiving feedback on outcome of referral**

- **Positive**
  - Acknowledged acceptance was received quickly
  - Excellent feedback which has guided future referrals
  - I have felt that all my patients have been managed appropriately.
- **Challenges**
  - Where I think the service could improve is the length of time to send through discharge information
  - Feedback on patients not accepted to hospital at home after referral would be useful e.g. why they were not considered suitable and referred to hospital.
  - Feedback was only received on patient discharge—it would have been helpful to know after assessment whether patient was accepted or not
  - Initial acceptance form gives no details - the discharge form is a disaster
  - Never had any (feedback)
  - None
  - Not great, the early paperwork has not been easy to read (spread over several pages and not very clear)
  - Nothing yet although I know that the patient was subsequently transferred to Glenrothes Hospital having spoken to a relative
  - The discharge letters are a bit of mixed bag of quality/promptness and this is worsened if a patient is subsequently admitted e.g. to QMH and is discharged from there - no one seemed to want to take responsibility for the discharge and this caused significant problems with medication
  - The discharge paperwork is DREADFUL. It is very unclear to tell whether or not the patient has been discharged. Trying to read through the drug list is a nightmare - ordinary paper discharge flimsies are much better (and they aren't that great). It is not very clear what treatment the person has had, what follow up they will receive etc. It feels like the paperwork is getting filled in by a non doctor & who doesn't realise what info GP's need to know
  - Unwieldy discharge letters (particularly the medication part) and possibly a little too slow - a call or fax on day of discharge might be helpful?
  - The patient was admitted to hospital the next day!!
- **Neutral**
  - I have yet to receive a discharge-so not able to comment.
  - Other than initial acceptance and discharge summary you hear no feedback in between. However, this is of course the same during standard inpatient hospital admissions.
  - Only referred one patient so far.
Appendix 3: Trend analysis of impact of Hospital at Home on Acute Activity for People aged 75 and over

Chart 8: Trends in emergency admissions for people aged 75 and over, DWF & KLM, June 2010 August 2013

Source: SMR01, OASIS
Chart 9: Trends in emergency bed days for people aged 75 and over, DWF & KLM, June 2010 August 2013

Source: SMR01, OASIS
Appendix 4: Hospital at Home in Fife: The evidence base

The Hospital at Home model of care in Fife is Consultant-led with specialist nurse practitioners assessing and admitting, with medical support, patients to the Hospital at Home "Virtual Ward". Referrals to Hospital at Home are received mainly from GPs or from acute hospital staff requesting a support package to enable that patient to be discharged from the acute setting earlier. Conditions accepted by Fife's Hospital at Home are varied with only a few exclusions (cardiac event, stroke, lower leg fracture, GI bleed, head injury or acute abdominal pain. Whilst the service is aimed primarily at people aged 75 and over, this is not a strict criteria and people deemed "frail" are accepted to the service, even if they are younger than 75.

The Hospital at Home teams have nursing input provided by a combination of Band 7 Team Leaders, Band 6 Nurse Practitioners and Band 5 nurses, supported by Healthcare Support Workers and administration staff. GPs with a Special Interest also provide medical input to the Hospital at Home service. Three Hospital at Home teams exist, covering three localities. Hospital at Home in Fife receives referrals for both alternative to admission and early supported discharge.

A review of published and grey literature was undertaken to provide background knowledge to the different existing models of Hospital at Home and their relevance to the Fife scenario. The methods used are detailed in Appendix 1.

A report detailing the findings of the review of published and grey literature was presented in April 2013, the key findings of which were:

- The Hospital at Home model in Fife is quite unique. Other models of Hospital at Home exist but differ in a variety of ways - many are targeted at specific conditions such as chronic obstructive pulmonary disease or chronic heart failure.

- The main published evidence on the various models of Hospital at Home comes from a number of Cochrane Reviews by Shepperd and colleagues.
  
  - In 2005, Shepperd and Iliffe looked at the evidence around Hospital at Home versus acute inpatient care and highlighted the lack of good quality evidence to suggest any differences between the two models of care, stressing that future evaluation work should focus on gathering good quality evidence.

  - In 2008, Shepperd and colleagues compared evidence for admission avoidance Hospital at Home with inpatient care, finding a non-significant reduction in mortality at three months for Hospital at Home, reaching significance at six months. They reported few differences between the models with regards to functional ability, quality of life or cognitive ability. Of the trials that undertook full economic analysis, admission avoidance hospital at home cost less than admission to hospital when cost of informal care was excluded. The authors concluded that there was "no evidence to suggest admission avoidance Hospital at Home leads to outcomes that differ from inpatient hospital care".

  - In 2009, Shepperd and colleagues looked at evidence for early supported discharge Hospital at Home models, undertaking a systematic review and meta-analysis of available evidence regarding effectiveness and cost of managing patients with early discharge Hospital at Home compared to inpatient hospital care. The authors found that:
"For patients recovering from a stroke and elderly patients with a mix of conditions there was insufficient evidence of a difference in mortality between groups"

"Readmission rates were significantly increased for elderly patients with a mix of conditions allocated to hospital at home".

"For patients recovering from a stroke and elderly patients with a mix of conditions respectively, significantly fewer people allocated to hospital at home were in residential care at follow up" and

"Patients reported increased satisfaction with early discharge hospital at home".

- Evidence on cost savings was mixed and the authors concluded that there was, at that point in time, insufficient evidence of Hospital at Home models being more cost-effective or having improved outcomes than admission to an acute hospital setting. This review was updated in 2011 but there were no changes to the conclusions recorded in 2009.

- Also in 2009, a paper by Young discussed the various aspects of Intermediate Care stating "of which Hospital at Home is one". Whilst not offering any new information from the Shepperd Cochrane Reviews, it did comment on promoting Hospital at Home services on the basis they may reduce health-care costs by reducing the demand for acute hospital care. The author urged "caution" stating

  "The proportion of older people for whom Hospital at Home is suitable might be too small for genuine economies to be realized"

  "The service may simply respond to a proportion of patients with hitherto unmet needs"

**Update of published evidence – February 2014**

An "auto-alert" to identify relevant published articles was put in place and relevant abstracts were reviewed and, where appropriate, full text articles were obtained and assessed for new evidence around Hospital at Home models of care.

Findings are detailed below but the key points from the papers reviewed are:

- The Fife model of Hospital at Home remains quite unique in that it cares for a variety of conditions as opposed to being specific to one condition

- The model of Hospital at Home most similar to Fife’s reported in the published literature was the ASSET model in Lanarkshire

- In the other models of Hospital at Home (significantly different in design to Fife), outcomes do not differ significantly between inpatient and Hospital at Home care

- The main impact of Hospital at Home reported was improved patient experience. Other outcomes such as readmission or mortality rates differed according to the model of care and the condition being cared for.

- Availability of care at home, either by informal carers or by home care services, is important to the success of a Hospital at Home episode of care

Of all the published evidence since April 2013, only one conference abstract identified a model of Hospital at Home similar to that in Fife. This reported on the work in Lanarkshire by Ellis and colleagues on the Age Specialist Service Emergency Team (ASSET). The
authors reported on the first 1000 patients and in particular, the immediate and 30 day outcomes with 18.8% of referrals subsequently being admitted to hospital whilst 78.9% were able to be cared for at home. At 30 days, the overall mortality rate was 9.7%, the mortality rate for those admitted to hospital equal was 14% and for those maintained at home, 8.5%. These rates were calculated as being significantly different and reported as being a result of case mix differences. In terms of readmissions within 30 days post-discharge from ASSET, 18.7% had been admitted once or more whilst 66.6% had remained at home and had not been admitted to hospital.

The vast majority of other published evidence related to Hospital at Home models of care that were different to the model in Fife.

Only one other UK-based scheme was identified in searching published literature (Bertfield et al, 2013). The “HomeFirst” model is based in Hertsmere which integrates health and social care services in order to avoid admissions to hospital. The authors mention “rapid response” assessments or “long-term management and optimisation of disease state by means of a “virtual ward”” but do not define these further. The most common reasons for referral are falls and reduced mobility, breakdown in social care, respiratory and urinary symptoms and approximately 85% of people are able to be maintained at home.

Several reports of Hospital at Home models of care from other countries were identified but none of these are similar to the Fife Hospital at Home model.

Several were disease-specific Hospital at Home models caring for people suffering from acute exacerbations of chronic obstructive pulmonary disease (COPD) or chronic heart failure. One model cared for people affected by neuromuscular disease whilst another focused on people affected by uncomplicated diverticulitis. A summary of the findings are reported below but **it should be re-emphasised that none of these models are similar to the Fife Hospital at Home model.**

**Condition-specific Hospital at Home models**

Several papers reported on Hospital at Home models of care for **acute exacerbations of COPD**. A Cochrane Review of the evidence for Hospital at Home models of care for acute exacerbations of COPD was undertaken in 2012 by Jeppesen and colleagues (and found that there was a **reduced risk of readmission** for hospital at home models of care that was statistically significant and a trend towards reduced mortality that was not statistically significant.

A second review of evidence was published in 2012 by McCurdy and compared hospital at home care with inpatient hospital care for patients affected by acute exacerbations of COPD who present to the emergency department and found that hospital at home was associated with non-significant reduction in the risk of mortality and hospital readmissions at 2 and 6 months post discharge. Patient and caregiver satisfaction was high for both hospital at home and inpatient care. However, the author found the evidence was of low to very low quality and recommended the **conclusions be treated with caution.**

Utens et al published a series of papers reporting the outcomes from a randomised control trial in the Netherlands comparing Hospital at Home to inpatient care for acute exacerbations of COPD. The trial involved patients who were admitted to hospital being assigned to either receive care in hospital (with discharge at day 7) or being discharged at day 4 with nursing care provided by community based staff (intervention ends at day 7).

The key findings from the work were that there is **no real difference** between the cost, effectiveness and patient outcomes for this hospital at home model of care versus hospital-based care and that “choice for treatment place should be based on patients’ and informal caregivers’ preferences.”
In terms of health status, readmissions or mortality, there were no differences between the two groups. There was however a significant difference in the health related quality of life, favouring usual hospital care at day 7 but this had disappeared by three months. The authors considered whether patients discharged home were faced more with trying to get back to "normality" compared with those still receiving care in a hospital. The authors also postulated that patients being discharged early don’t see themselves as still receiving hospital-level care, albeit in the home, and this might be contributing to their perceived lower health related quality of life.

In terms of cost-effectiveness, no significant differences were found between the groups.

In terms of patient experience, no difference in overall satisfaction was found between the groups. The early supported discharge group were, however, less satisfied with the care at night and felt less able to resume normal daily activities at the end of the intervention – both significantly different from the group who received usual hospital care. These differences disappeared at 90 days post-intervention.

In terms of informal caregivers, no difference was found between the two randomised groups in relation to caregiver strain both at 7 days and 90 days. The authors reported that if caregivers could choose the majority of those who received the Hospital at Home model of care would prefer to receive this treatment whilst the majority of caregivers whose loved one received hospital-based care would prefer to receive that care.

The authors also discussed possible overburdening of home-based caregivers and reported that this does not necessarily lead to increased strain – just that there is more to be done at home. Previous work (Brouwer, 2005) showed that those people caring for loved ones at home might feel benefit from participating the informal caregiver process i.e. looking after their loved one. There is also the lessened impact of having to travel to hospital which has been raised in the Fife work.

Uten and colleagues also discussed the role hospital staff have to play in considering whether a carer would be overburdened by the patient receiving hospital at home and recommends this be taken into consideration. Although there were no statistical differences between the two groups of carers, there were reports of carers at home feeling frightened when unsupervised with their loved one who then might suffer a bout of breathlessness. Also due to this being a RCT, only certain variables were included. There was therefore the potential miss out other impacting factors such as anxiety and or depression in the patient and or carer. Suggests that more research should be done looking at carers perceptions of hospital at home models of care.

A paper by Wang and colleagues reported on the patients experiences of a hospital at home model of COPD care versus an inpatient model of COPD care in Norway. Hospital at Home patients felt safe receiving the care at home and reported that they felt the specialist nursing staff were able to answer queries more related to practical aspects of everyday living with their condition – inpatients experiences of information exchanged was more around results of tests or investigations. Patients cared for at home felt the information and advice they received was specific to their own circumstances. It should, however, be noted that the authors reported patients receiving in-hospital care provided no negative comments on their care. It should also be noted that interviews with hospital at home patients averaged 90 minutes whilst those with hospital-based patients averaged around 30 minutes - even though interviews for both groups were undertaken at the same time point post-discharge.

Rodriguez and colleagues reported on a Spanish Hospital at Home model of care and the outcomes for people affected by either acute decompensation of chronic heart failure or acute exacerbation of chronic obstructive pulmonary disease. For patients affected by
chronic heart failure, the authors found that the requirement of home oxygen therapy prior to being admitted to Hospital at Home was a risk factor for subsequent readmission once discharged from Hospital at Home and concluded that the model was a good alternative to hospital admission for patients affected by this condition.

For the patients affected by COPD, the authors found that this model of Hospital at Home was a good alternative to hospital admission and that readmission following discharge from the service was associated with co-morbidity and previous hospital admission and not influenced by whether the patient received hospital based care or Hospital at Home care.

A small Italian randomised control trial (comprising 52 patients) by Tibaldi and colleagues assigned patients affected by severe heart failure to either being treated in hospital or discharged with Hospital at Home input within 120 hours of admission to acute setting. The study found that there were no differences between the groups in terms of severity of condition, co-morbidities or outcomes (mortality or readmission to hospital) but there was a difference in terms of improved patient mood in the group who were treated at home. The authors concluded that Hospital at Home services could be used for people affected by severe heart failure based on experience of this small pilot study.

Rodriguez-Cerrillo and colleagues reported on a Spanish Hospital at Home model caring for patients affected with uncomplicated diverticulitis. Patients were admitted to the Hospital at Home service following 24hrs observation in a hospital setting to ensure no complications arose. The authors found the outcomes for Hospital at Home patients to be similar to those cared for in hospital and also a reduced cost. However, to be eligible for admission to the Hospital at Home service, there had to be a caregiver present with the patient 24 hours a day.

Vianello and colleagues reported the findings from a randomised control trial of patients affected by neuromuscular disease (NMD) with respiratory tract infections who were either treated in a hospital setting or treated at home. The numbers of patients included were small (53 in total) but the authors found no significant differences in treatment failure, time to recovery or mortality at three months between the two groups. The study did find that hospital at home failure was independently correlated with the type of NMD with an OR of 17.3 (95% CI: 2.1 to infinity) for those patients affected by amyotrophic lateral sclerosis. Based on this, the authors stressed that certain patients are not suitable to be cared for at home and that criteria for accepting patients for such interventions should be clear on which conditions or patients are and are not suitable for hospital at home services.

The authors also reported that hospital at home costs, total and daily direct costs, were significantly lower for those treated at home. This was, however, a result of the high level of specialised input provided by family caregivers for these patients. Had these carers not been present, these patients would have been admitted to hospital as the risk of remaining at home without such extensive input is deemed to be far too high.

Generic Hospital at Home model

Two conference abstracts by Gregerson et al in 2013 described a generic i.e. not a condition-specific model of Hospital at Home in Denmark where the intervention happens following discharge from the acute setting. A multidisciplinary geriatric team follows the patient up for 30 days post-discharge and provides input such as subcutaneous fluid therapy, intravenous antibiotic treatment and blood transfusions as required. Outcomes for a cohort of these patients were compared to outcomes from a control group of patients who had received care one year previously when the Hospital at Home service was not in place. Findings included a reduced length of stay and a reduced mortality at 30 days post-discharge for the Hospital at Home cohort. The abstract did not provide details as to how a reduced length of stay would occur but this could possibly be due to increased confidence
in discharging a patient home with this Hospital at Home model of care in place as opposed to not having this in place. A reduction in avoidable readmissions to hospital was also found but this was not significant.

Kinosian, Mann and colleagues also presented at a conference on a Hospital at Home model of care similar to but adapted from the Johns Hopkins Hospital at Home model of care which is characterised by daily physician visits and continuous nursing input of up to eight hours a day. The model of care reported by Mann et al used a combination of hospital staff and community health agency employees and hospital home care providers as opposed to hospital staff input only. Outcomes from the adapted model of Hospital at Home were found to be similar to those of the traditional model. Additionally, the authors reported this model of care being simpler to implement as well as potentially providing additional cost saving.

One final paper (Pericas et al, 2013) reviewed the evidence on a number of models which provide alternatives to hospital admissions (day centres, quick diagnosis units, hospital at home). Of the hospital at home models, the author focused on those specifically aimed at COPD, CHF, Ischemic Stroke and Deep Vein Thrombosis which have been shown through randomised controlled trials to potentially lead to earlier hospital discharges, improved outcomes and reduced costs. The author concluded that, given the current financial climate and an ageing population, such hospital at home models of care have a role to play.

**Update on grey literature – March 2014**

In undertaking an internet search using Google search engine and searching for the terms “Hospital at Home” and “Scotland”, 1,150,000 results were returned. In reviewing the first few results pages, very few actually related to actual models of Hospital at Home in Scotland.

Amongst those that did, the most recent referred to a four month pilot of a new Hospital at Home model being implemented by NHS Western Isles covering the Broadbay area of Lewis. Details are provided below.

**Hospital at Home, NHS Western Isles**

This project involves the creation of a community-based ‘rapid response team’ of experienced healthcare professionals which will provide limited periods of nursing care and treatment in patients’ own homes, for certain conditions that could have otherwise resulted in an admission to hospital. Referrals will only be made to the rapid response team by GPs and the Medical Assessment Unit at Western Isles Hospital.

The team will be made up of Unscheduled Care Nurses (skilled nurses who have undertaken advanced training), supported by Healthcare Assistants. To ensure continuity of care and close collaboration, the project will also involve close working with GPs, Allied Health Professionals, the Community Equipment Service, the Reablement Team, hospital staff (including consultants) and the Home Care service.

The Press Release by the Scottish Government in March 2013 stating that models of Hospital at Home similar to the Lanarkshire model detailed above were being rolled out across Scotland was reported in the vast majority of subsequent results with key results from a clinical audit quoted:

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22 [http://www.scotland.gov.uk/News/Releases/2013/03/hospital-at-home05032013](http://www.scotland.gov.uk/News/Releases/2013/03/hospital-at-home05032013)
"The results of the pilot showed the mortality rate was 5.5% for patients treated at home, compared to 9.7% for those who were admitted to hospital.

Research shows that adverse health events can disproportionately affect the elderly. However, studies have shown they are more likely to recover in a familiar environment.

Almost 80% of the 200 patients in the pilot were able to be treated successfully at home, with some 23% admitted to hospital."

The resources page on the website for NHS Education for Scotland’s Knowledge Network Community Hospitals an Intermediate Care Network was also searched and returned information on several models of care which play a role in preventing hospital admission for older people but the majority of these differ from Fife’s Hospital at Home model in that they either use a prediction tool such as SPARRA to identify people at risk of hospital admission or “step-up” care is provided in a specialised facility i.e. not the patient’s own home. These included the Step Up Care Unit in Glasgow, the Community Ward model of care in Ayrshire & Arran and the COMPASS model of care in Lothian. Only one model was similar to Fife’s – the Lanarkshire ASSET model detailed above.

In searching for information on known Hospital at Home models such as those in place in Torfaen and Croydon, it became apparent that Hospital at Home models are not always known by that name - in Croydon, the model is called the "Virtual Ward" and differs to the Fife model in that a risk prediction score is used to identify patients who may benefit from being admitted to the Virtual Ward.

In the case of the Torfaen model, a search of grey literature in April 2013 found the most recent information relating to this model published on the Gwent Frailty website in 2011. This search was repeated in February 2014 using the search term “Gwent Frailty Programme” and found the most up to date information was reported in July 2013 by way of the Annual Report of the Director of Social Services for Blaenau Gwent August 2013 which stated:

“We have continued to integrate and embed the services provided by the Frailty/Community Resource Team (CRT) in partnership with Aneurin Bevan Health Board.

The Team aims to promote independence with a view to keeping people in their own homes without the need for formal support and can provide rapid medical intervention to prevent the need for a hospital admission.

During the year the Team received 3,341 referrals of which 2,617 were for the reablement service.”

In addition to this, an Annual Service Improvement Plan, 2013 – 2014 for Adult Services for Caerphilly Count Borough Council refers to the Community Resource Teams which feature in the Torfaen model and notes:

“We have continued to embed the services provided by the Frailty/Community Resource Team (CRT) in partnership with Aneurin Bevan Health Board.

The Team aims to promote independence with a view to keeping people in their own homes without the need for formal support and can provide rapid medical intervention to prevent the need for a hospital admission.

During the year the Team received 3,341 referrals of which 2,617 were for the reablement service.”

23 http://www.gwentfrailty.torfaen.gov.uk
Reablement arm has significant input to assessment beds at Ty Clyde which has been pivotal in achieving positive outcomes for individuals.”

No formal evaluation reports of the Gwent Frailty Programme or the Torfaen Hospital at Home model of care were identified.

Further reports on Hospital at Home models in other areas of the UK were found but the information provided was very brief. One Hospital at Home model of care (Recovery at Home) was provided by an Independent Provider and used by several NHS Trusts in England including North Staffordshire, University Hospital Southampton NHSFT, Royal Free London NHSFT, Good Hope Hospital (part of Heart of England NHSFT) in Birmingham. Details of this and the various other models are provided in Appendix 2.
Appendix 1: Literature Review Methodology

Methodology for search of published and grey literature around Hospital at Home models of care

A search of Ovid, Embase and Health Management Information Consortium (HMIC) bibliographic databases for the phrases “Hospital at Home” in either the title or abstract was carried out on 4th May 2012. The search covered the years 1992 – 4th May 2012 and returned a total of 141 abstracts.

Following review of these abstracts, 34 were potentially relevant and discussed general models of Hospital at Home whilst others focussed on Hospital at Home models for specific conditions (28 on chronic obstructive pulmonary disease, 4 on chronic heart failure, 1 on diverticulitis, 2 on infective carditis, 1 on transfusion and 1 on pulmonary embolism.

The remaining abstracts focussed on Hospital at Home models specifically for children or palliative care whilst the remainder were duplicates records.

An "auto-alert" was set up to identify any new publications with Hospital at Home in the title or abstract from May 2012 - February 2014 and any relevant publications were reviewed.

The internet was also used to identify sources of grey literature i.e. published non-academic reports around models of Hospital at Home by using the Google search engine using the search terms “Hospital at Home”.
## Appendix 2: Models of Hospital at Home identified through grey literature

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Further Details</th>
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| Hospital at Home, NHS Western Isles      | Four-month pilot of ‘Hospital at Home’ project. Involves the creation of a community-based ‘rapid response team’ of experienced healthcare professionals. The team will provide limited periods of nursing care and treatment in patients’ own homes, for certain conditions that could have otherwise resulted in an admission to hospital. Referrals will only be made to the rapid response team by GPs and the Medical Assessment Unit at Western Isles Hospital.  
  The rapid response team will be made up of Unscheduled Care Nurses (skilled nurses who have undertaken advanced training), supported by Healthcare Assistants. To ensure continuity of care and close collaboration, the project will also involve close working with GPs, Allied Health Professionals, the Community Equipment Service, the Reablement Team, hospital staff (including consultants) and the Home Care service. | [http://hebridestoday.com/2014/01/hospital-at-home-developing-a-community-based-rapid-response-team/](http://hebridestoday.com/2014/01/hospital-at-home-developing-a-community-based-rapid-response-team/) |
| HomeFirst, East and North East Hertfordshire | A new health and social care project, being trialed in the Lower Lea Valley. Patients are cared for as if they were in hospital, with health and social care professionals visiting them at home. The service brings together expertise from community health services and social care to ensure patients get the right care and support to stay at home where possible.  
  Patients are referred to the service by their GP or other health and social care professional. Home First’s highly experienced team includes nurses, social workers, matrons, therapists and home care staff who have years of experience of caring for patients with long term health problems. | [http://www.enhertsccg.nhs.uk/homefirst/](http://www.enhertsccg.nhs.uk/homefirst/) |
| Hospital at Home, Wigan                  | Offers community therapy support and nursing care with the backup of specialist hospital medical and nursing staff. This means that patients receive the same level of care they would receive in hospital – but all within the comfort and convenience of their own home. Will also ensure access to a social worker if needed.  
  Care provided by a team of experienced community healthcare professionals. | [https://www.wwl.nhs.uk/Library/All_New_PI_Docs/Audio_Leaflets/Hospital_Home/Hospital_at_Home.pdf](https://www.wwl.nhs.uk/Library/All_New_PI_Docs/Audio_Leaflets/Hospital_Home/Hospital_at_Home.pdf) |
<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
<th>Website</th>
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<tr>
<td>East Devon’s Hospital at Home</td>
<td>Provides health and social care support for patients, with nurses, physiotherapists, occupational therapists and social care workers visiting people in their own homes. Provided by integrated health and social care teams from the Northern Devon Healthcare NHS Trust and the county council, with close input from Royal Devon and Exeter Hospital (RD&amp;E). Care can range from daily visits by the clinical team to more intensive input and overnight support. Patients are either referred directly by their GP or are transferred from RD&amp;E or a community hospital following screening by the care of the elderly consultant who oversees the team. Patients who might otherwise need hospital admission are assessed at home within two hours of referral. Patients coming out of hospital are assessed within four hours. Care is provided within a virtual ward using an electronic whiteboard and daily ‘ward rounds’, with weekly multi-disciplinary team meetings led by the geriatrician. The age range of patients has been from 57 to 101. The average age of patients is 84. Average admission rate of 5.95 patients per week. The average length of stay is 14 days. Around 80% of patients remain in their own home at the end of their treatment.</td>
<td></td>
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<tr>
<td>Hospital at Home, Medway &amp; Swale</td>
<td>Allows patients who need hospital care for certain conditions to be treated in their own home, rather than on a ward. Patients who are stable but still need some form of treatment such as oxygen, blood monitoring or medication can receive the inpatient care they need from nurses and physiotherapists at home. The service runs seven days a week, from 8am to 6pm. Outside of those hours patients can call and speak to a member of staff who can offer medical advice or re-admit them if necessary.</td>
<td><a href="http://www.medway.nhs.uk/news-and-events/latest-news/medway-extends-hospital-at-home-to-swale-patients/">http://www.medway.nhs.uk/news-and-events/latest-news/medway-extends-hospital-at-home-to-swale-patients/</a></td>
</tr>
<tr>
<td>Recovery at Home, Healthcare at Home Ltd</td>
<td>Private healthcare provider. Used in North Staffordshire, University Hospital Southampton NHSFT, Royal Free London NHSFT, Good Hope</td>
<td><a href="http://www.hah.co.uk/sites/default/files/upload/files/Recovery%20">http://www.hah.co.uk/sites/default/files/upload/files/Recovery%20</a></td>
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<td>Hospital (part of Heart of England NHSFT) in Birmingham. Provides complex clinical support to patients in their own home, enabling them to leave hospital earlier than might otherwise be the case, while remaining under the care of the NHS trust where they had their treatment or surgery</td>
<td>at%20Home%20Report%20-%20209505.pdf</td>
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