ACU and FNCT Evaluation Findings Report

20.11.18

Contents

1.0 Executive Summary

This evaluation report presents evidence of positive outcomes for people referred to the FNCT, informal carers and for the FNCT staff members. The key insights relating to each of the following 8 evaluation criteria are as follows:-

An Enhanced role for the Community Nursing Staff (both for FNCT and the District Nurse Teams)

- FNCT have demonstrated that they are a flexible resource who are able to support patients and deliver care in a range of different settings; both within a home setting and within Varis Court.

Alternative treatment locations for medical staff to consider in the treatment of frail older people

- The 5 ACU's at Varis Court would provide a sufficient number of beds to support patient flow and a safe level of care and support for people who have the capacity to be re-abled and rehabilitated.

- The FNCT is able through the ACU's or in the community to provide care and support for many of the same type of referrals that would have previously been admitted to Leanchoil Community Hospital. The data also suggests that the FNCT is having a positive impact on emergency admissions and beds days.

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Faster re-ablement and recovery

- The FNCT have managed to ensure that beds at the ACU have not become blocked by facilitating a return back home, or an alternative, when patients are medically well but also holistically ready to make this move. The team has helped reduced blockages in the system while supporting better patient outcomes to be achieved.

- Care for the very frail/ elderly non-ambulant has been identified as a gap in provision from this test site. An additional type of care that meets the needs for the very frail/elderly non-ambulant -who have a limited potential to respond to a re-ablement approach- should be developed to complement the ACU/FNCT model of support.

Improved social interaction and less social isolation

- Feedback from informal carers and people who have accessed the ACU's indicates that the central location of Varis Court in the town centre and the provision of a kitchen and spare bedroom as part of the units supports better social interaction than a traditional hospital ward setting thereby aiding more effective and faster re-ablement.

Improved Informal Carer Experience

- There is evidence that the ACU apartment style accommodation is very much valued by family members as well as the cared for person.

Improved quality of life

- Allowing pets and family members to stay in the ACU'S as well as the importance placed on the continuity of care by FNCT is valued by people staying in the ACU's.

A more rewarding workplace for the FNCT staff

- Empowering nursing staff through a flat organisational structure with minimal beaucracy is an attractive proposition for recruiting and retaining nursing staff.

Best value

- There is evidence that a combination of the impact of the ACU's and the FNCT has reduced the cost of hospital based admissions and length of stay. It is therefore considered that the test of change site points to the potential of significant resource and cost avoidance.

The findings from the evaluation report are considered as being able to provide a valuable underpinning evidence base for the Transformation Plan (Draft) for the Redesign of Health & Social Care Services in the Forres Locality Area.

2.0 Introduction

At the Moray Integrated Joint Board (MIJB) meeting held on 25 August 2016, it was agreed that an evaluation of a 12 month test of change for the 5 Augmented Care Units (ACU's) at Varis Court and the supporting Forres Neighbourhood Care Team (FNCT) would be undertaken.

The agreed focus of the evaluation was to explore if there is an evidence base to support a new model of care that could provide a more sustainable way of delivering health and social care services in the Forres locality area. If there was a positive outcome to the evaluation, it was proposed that the findings could then be used to inform a Transformation Plan for the redesign of health and social care services in the Forres locality area.

In September 2018, while this test of change was being evaluated, operations at Leanchoil Community Hospital were suspended.

The decision to close the local hospital therefore heightened the importance of determining if the ACU and FNCT test of change can be an integral part of the future redesign of health & social care service in the area.

This document is the outcome of this test of change evaluation.

When reading this report it should be noted that the primary source of information is the analysis of data collected in-house. This has been supplemented by the initial findings of independent research carried out by the Faculty of Health Studies, Dundee University, and research conducted by the Improvement Hub (ihub) & Health Care Improvement Scotland (HiS). The initial findings from these independent items of research are attached as appendices A-H at the end of this report.

2.1 Purpose

The specific purpose of this evaluation report is as follows:-

- To undertake a comprehensive evaluation of the ACU and FNCT test of change site that will contribute to a better understanding of how health and social care services can be delivered in a more sustainable way;

- To inform the continuing development of the Forres Locality Multi-Disciplinary Team (MDT) Structure including an exploration of the application of the Buurtzorg principles in relation to the FNCT Team; and

- To provide an underpinning evidence base for the Forres Redesign of Health & Social Care Services Transformation Plan.

Both this Evaluation Report and the related draft Transformation Plan will be circulated to members of the MIJB prior to their meeting on 29 November 2018.

3.0 Evaluation Timeframe

The evaluation report covers a 12 month period from 1 May 2017 to 19 April 2018.

This period covers when the FNCT had been established and were able to support people in the community (April/May 2017) and when the ACU's became operational (July 2017).

The report will also incorporate the findings of the interim evaluation report previously presented to the MIJB on 26 April 2018.

4.0 Background

Hanover (Scotland) Housing Association Ltd was originally commissioned by Health & Social Care Moray to provide affordable accommodation that meets the demand for sheltered and extra care housing for older people with complex care needs in the Forres Locality area.

The relatively large number of units contained within this new build meant that 5 of these apartments could be leased to Health & Social Care Moray on a 12 month trial basis as a test site for the delivery of inpatient care in the Forres locality area.

As part of the rationale for developing this proposal, Health & Social Care colleagues considered that in contrast to a hospital ward setting the provision of 2 bedroomed apartments with kitchen facilities could facilitate in aiding re-ablement, recovery and thereby reduce the risk of institutionalisation.

The location of the units near the centre of Forres could also potentially be beneficial to improving the health and well-being of the people admitted to the ACU's and promoting social inclusion.

4.1 The Forres Neighbourhood Care Team (FNCT)

In terms of staffing, a 24 hour/7 day a week nursing team (later named as the Forres Neighbourhood Care Team -FNCT) was recruited to support the 5 ACU's and to support people in their own homes. The original proposal was to recruit 1wte x band 8a and 10.98 wte X band 5's at a cost of £487,000.

As outlined in the FNCT development timeline, the full 11wte's posts were never successfully recruited to (**See Appendix A**). This was thought to be due to the unavoidable uncertainty of the long term future of the pilot.

Consequently, during the evaluation period, FNCT staffing levels have fluctuated from 5 wte's in April 2017 (when the FNCT became operational) to 7.1 wte's in March 2018 (at

the end of this evaluation period). The lowest number of member of the FNCT was 4 wte's in July 2018. Bank nurses have been utilised to support the FNCT at times of significant demand to provide capacity.

4.2 The Proposed Difference that the FNCT would make?

Before this test of change was established, the Forres locality had the use of 4 beds at Leanchoil Community Hospital, the District Nurse Team, community AHP's and G.P's for Varis and Culbin practices.

One of the main systemic problems experienced by health and social care professionals in the Forres area was that beds at Leanchoil Community Hospital were often full without the necessary flow of patients through the system to release beds for new patents. There was therefore a risk that a patient suitable for step up care to Leanchoil Community Hospital would need to be admitted to an acute hospital service (e.g. Dr Gray's) unnecessarily.

In response to this scenario, the options for the local MDT were limited to:-

- trying to maintain patients at home with community service input (care often not responsive enough and limited);
- emergency respite in care home (which could often be out of area);
  or
- lastly, admission to an acute hospital setting (due to a lack of community resources available in the Forres locality area).

The establishment of the ACU's and the FNCT intends to address this problem by:-

- The FNCT being one team that provides in-patient and community nursing and medical care for acute and chronic conditions including, end of life and respite care;
- Ensuring that continuity of care is improved. This would mean that individuals receiving home care continue to have the same carers throughout their admission to the ACU at Varis Court. Traditionally this would have stopped when an individual was admitted to a community inpatient setting and during longer admissions, would have to be reapplied for often resulting in an increase in bed days;
- Temporary care and assistance provided until care can be sourced to prevent unnecessary admission to an acute service. Care on average can take 4-6 weeks to arrange and this can be longer if two carers are required for each visit;
- Acute care at home can be provided including intravenous treatments which would normally have required a hospital admission.
- The input of FNCT support will result in a decrease in GP clinical support and time for those patients;
- In-patient setting is set up to encourage independence and prevent disabling persons –through a re-ablement and a rehabilitation approach- which traditionally happens in health and social care. For example; The FNCT supports patients to be as independent as possible by replicating a home environment whereby they are involved in the preparation of meals, drinks and management of their medications. The apartment is their space;

- As part of an enabling approach, FNCT can help take patients out to do their shopping and to be engaged in the local community. In addition Varis Court offers lots of alternative spaces including a cinema room, sensory room, outdoor courtyards and breakout space throughout the building to facilitate their wellbeing;
- FNCT also provides support to a large cohort of residents in Varis Court through working in partnership with the Hanover team based there. FNCT are often the first to be called and this will have reduced the call outs for G.P's to attend Varis Court tenants;
- Reactive to patients' needs, FNCT try to tailor a personalised service around the needs and aspirations of the individual.
- Patients and family members can refer directly into service once known to team. This is done through work mobile phones allowing the team to be personable and contactable at all times. For our existing community team, a voice mail is left on a phone in an office and addressed on their return or a message is forwarded through reception / triage at the health centre.
- Staff self-manage their off duty and annual leave;
- Staff are supported to assess and make decisions with patients around their health and social needs.
- Based on the application of the Buurtzorg principles, there is no traditional hierarchy in the team and all team members' opinions are equally valued.
- One team transitions patient from home setting into ACU and back home and continues to provide support as required;
- Support discharge from Accident and Emergency (A&E). This gives a reassurance to A&E staff to discharge a patient when there is a risk of the patient falling or struggling with mobility issues at home.
- Support social work colleagues by providing some respite care. Often the experience is that patients would have to receive care out of the Forres area; and
- Provide temporary care 4-6 weeks to prevent admission to acute service due to crisis at home as there is no other responsive service that can provide this level of support.

5.0 Evaluation Criteria

This Evaluation Report has adopted the following outcomes criteria that the MIJB agreed at the Board Meeting on 25th August 2016. These criteria have also been used as the sub-headings for the following findings section of this report.

The outcomes criteria are:-

- An Enhanced role for the Community Nursing Staff (both for FNCT and the District Nurse Teams);
- Alternative treatment locations for medical staff to consider in the treatment of frail older people;
- Faster re-ablement and recovery;
- A more rewarding workplace for the ACU staff;
- Improved social interaction and less social isolation;
- Improved Informal Carer Experience;
- Improved quality of life; *and*

- Best value

The primary source of data that will be referred to in relation to each of the above outcomes is the 'Evaluation of the Operational Workload of the Forres Neighbourhood Care Team'. This data covers the 12 month evaluation period for this report from April 2017 to May 2018 **(See Appendix B)**.

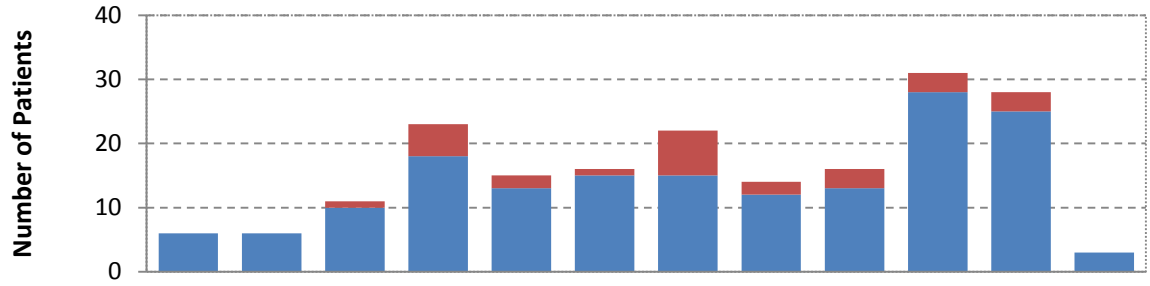
Through making reference to this data, each of these outcomes criteria will now be explored in turn.

6.0 An Enhanced role for the Community Nursing Staff (both for FNCT and the District Nurse Teams)

Although the test site was originally conceived as being based on the premise that the FNCT would provide support solely within the confines of the ACU's, the following chart illustrates that the team have provided to date 86% of all their patients solely support in the home and 14% of support in either a combination of the ACU or in the home environment.

Figure 1 shows the number of referrals per month made to the FNCT team by the location that care was provided.

Figure 1 - Monthly Referral by Location of Care (N = 191)



	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
ACU/Both	0	0	1	5	2	1	7	2	3	3	3	0
Home	6	6	10	18	13	15	15	12	13	28	25	3

Month of Referral

The above data gives an indication that the FNCT can provide continuity of care both within an ACU setting and at home. This is in line with the aspirations of the team as noted in section 4.2 of this report and with the Health & Social Care Moray's commitment to support more people to recover and be cared for in their own home.

The ability of the FNCT to provide care and support for people both within the ACU's and in their own home and to support the transition of one to the other, could also support the development of a new MDT structure where district nursing support can be provided.

Key Insight

One key and clear insight that can be drawn from this data is that the FNCT have demonstrated that they are a flexible resource who are able to support patients and deliver care in a range of different settings; both within a home setting and within Varis Court.

This degree of flexibility to work in a range of different settings is an important point when considering the future role of the local District Nursing Team as part of the redesign of health and social care services for the Forres locality area.

Furthermore, the data also prompts the question if the relatively small number of people being supported in the ACU's/Home is appropriate?

In answering this question, the number of people being supported in the ACU's should be considered in the context of the number of admissions that are made to community hospitals across Moray and to Leanchoil Hospital.

A snap shot of the patient flow of people with a Forres postcode, aged over 40 (including elective and emergency), who were admitted to Dr Gray's Hospital and then transferred to one of the community hospitals in Moray for the period from 1 October 2017 to 31 July 2018, shows that there were 38 admissions involving 33 patients.

On average 4 transfers per month to a community hospital were made. The percentage breakdown of the transfers was 42% to Leanchoil, 18% to Seafield, 16% to Fleming, 13% to Stephen and 11% to Turner Community Hospitals.

During this 6 month period, there have been on average 4 people per month, from the Forres locality area, that would need an alternative resource if a community hospital in the Forres area was not available. For this evaluation period, an average 2.25 people were supported per month in the ACU's.

For the period immediately following the closure of Leanchoil Hospital (1 September to 1 October 2018), there were 8 discharges for patients with a Forres postcode who were not referred to the FNCT and who were subsequently admitted to one of the other community hospitals in Moray.

A brief description of the reason for their transfer and their discharge destination is provided by the Interim Community Hospital Manager in Appendix section at the end of this report **(See Appendix D)**.

Based on the admissions to the ACU's, the number of admissions is slightly higher than the above snap shot for (1 October 2017 to 31 July 2018 data) with 25% (2) people being admitted to the ACU's, 25% (2) people compared to 11% being admitted to

Turner, 25%(2) compared to 13% being admitted to Stephen and 12.5% (1) compared to 13% being admitted to Seafield.

As noted in the descriptions (Appendix D), securing the Service Level Agreement (SLA) for the nursing beds in the residential care homes in addition to further embedding the ACU's as an appropriate discharge destination for a range of health conditions will continue to increase admission rates to the Forres locality area.

It is proposed that securing 5 ACU's is therefore an appropriate number to support patient flow.

Key Insight

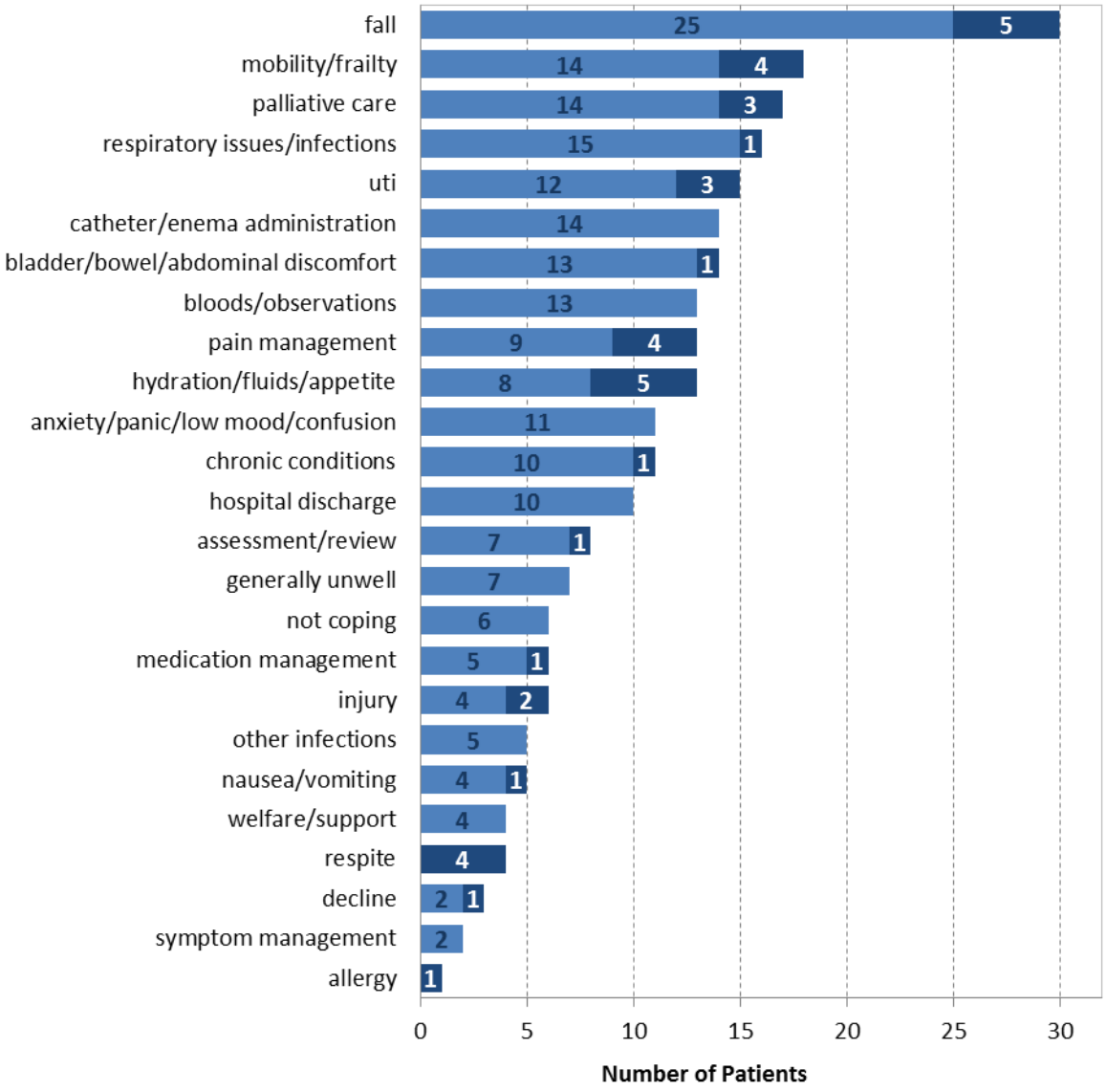
Based on this evidence, the 5 ACU's at Varis Court would provide a sufficient number of beds to support patient flow and a safe level of care and support for people who have the capacity to be re-abled and rehabilitated.

6.1 Alternative treatment locations for medical staff to consider in the treatment of frail older people

The reason for the referral to the FNCT in relation to the ACU development, home based support or a combination of both is recorded in **Appendix B.**

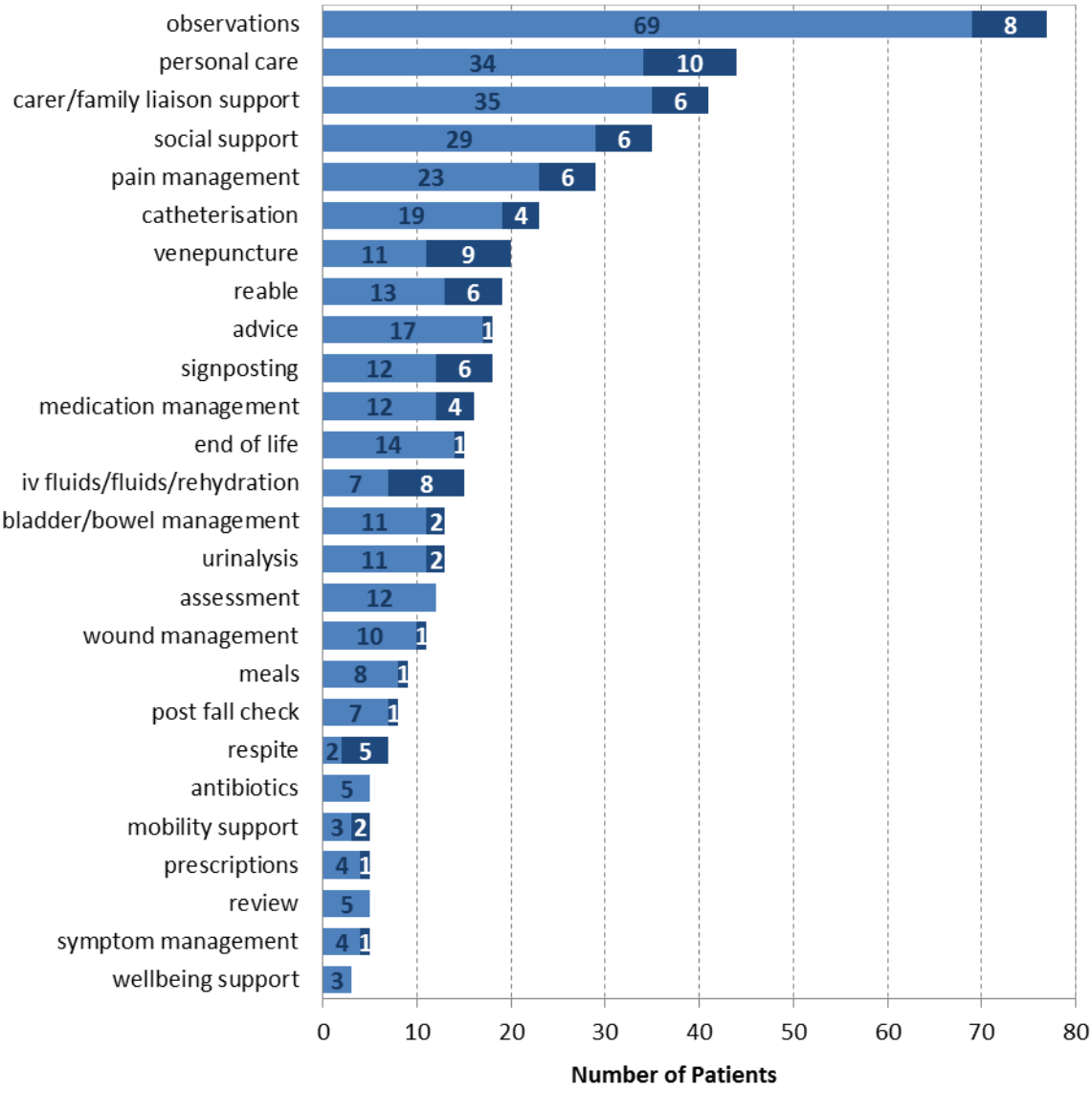
The following table summarizes the reason for the referral to the FNCT and ACU/Both are as follows.

Figure 9(1) - Reasons for Referral to FNCT by Location of Care



Once referred, the type of care provided is noted below.

Figure 11 - FNCT Care Services Provided by Location of Care



The qualitative data gathered also indicates that the support and treatment provided through the ACU's has prevented acute hospital admissions. For example, the FNCT have noted in their records the following case:-

Comment from FNCT Patient Notes

"Off legs, dehydrated, pyrexial, not eating and drinking, nauseated, oral thrush, not tolerating medication. Antibiotics and anti-fungal cream changed with good effect, Required close nursing care, fluids, bloods and NEWS monitoring. Without FNCT support would have been admitted to hospital."

A letter published in the Forres Gazette, also provides an insight of the range of conditions that can be effectively addressed by the FNCT.

Forres Gazette Letter (1.11.18 abridged)

"Health care pilot scheme receives mum's gratitude

Many thanks to the neighbourhood care team in Varis Court for providing treatment for my daughter.

[Name withheld] (19) has Dysautonomia Mastocytosis and Lyme and needed IV saline recently.

The team there were fab, professional, kind a pleasure. Much appreciated.

[Name and address withheld]

The Workload Report also presents the following two case studies which are also based on the FNCT patient records. Names have been changed to protect the patient's identity.

Comment from FNCT Patient Notes

Ethel, Female, aged 75 years old (referral to discharge = 81 days, Care provided at own home)

Ethel had broken her leg following a fall. On discharge she was unable to care for herself independently as she was in great pain. She was unable to bear weight on medical instruction so mobility was very difficult and she was unable to carry out some activities of daily living. She became tired and breathless on exertion, although this improved over the course of the care period. Ethel's son declined to provide personal care. Also her son was not an early riser meaning patient could be left without a drink or breakfast until late in the day. Patient at initial assessment was very like the type of patient readmitted to hospital due to family being unable to cope. FNCT support prevented this, enabling her to regain confidence and a degree of independence.

Comment from FNCT Patient Notes

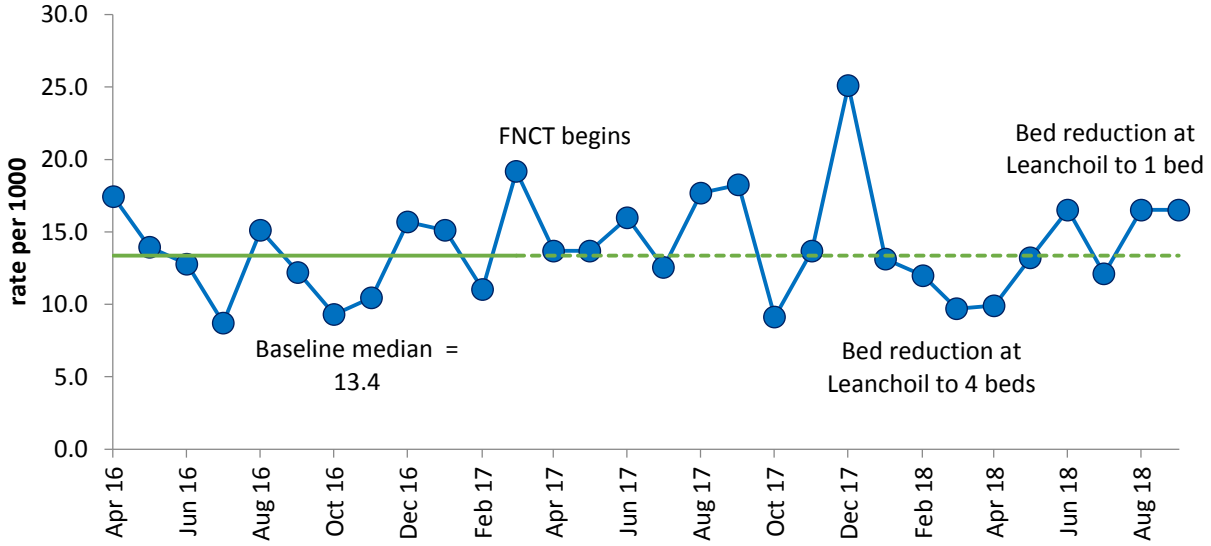
Jim, Male, aged 90 years old (referral to discharge = 6 days, Care provided at both ACU and in own home)

Jim was acutely unwell with a UTI, constipation and was dehydrated on admission to ACU. He was unable to care for himself at home and would certainly have required admission to hospital for rehydration and treatment of UTI. Patient lost a lot of confidence as his illness coincided with his 90th birthday and it concerned him that it was the 'beginning of the end.' Following discharge home FNCT continued to visit twice a day and then reduced this to a daily check, helping him rebuild his confidence.

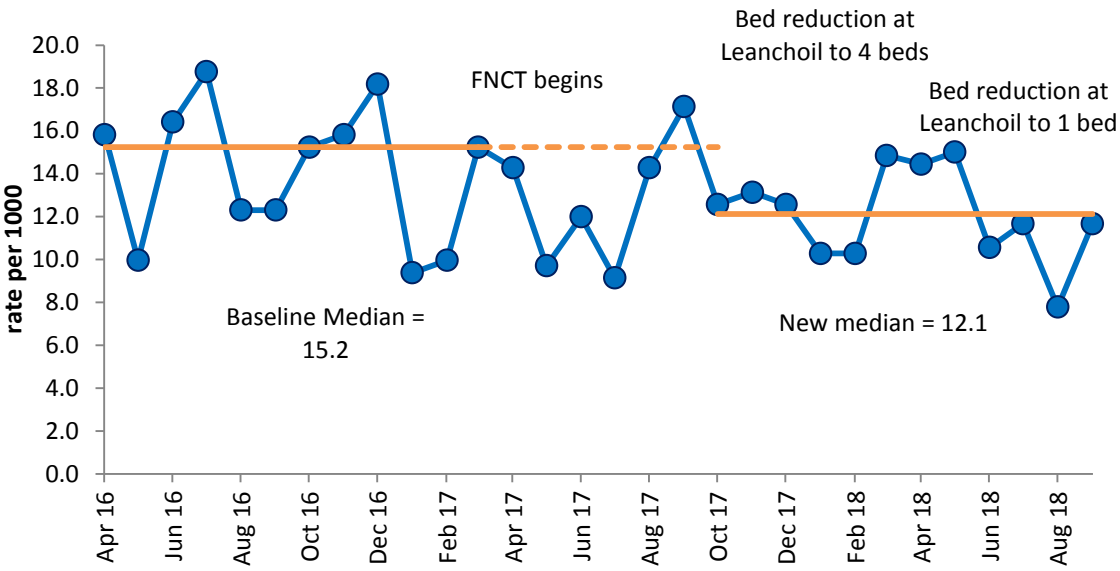
This qualitative data also supports quantitative research prepared by Health Improvement Scotland (HiS) for this evaluation (**see Appendix C**).

An analysis of the emergency admissions data indicates that while there is no change in the trend data for Varis Medical Practice, there is a reduction in emergency admissions for Culbin Medical Practice.

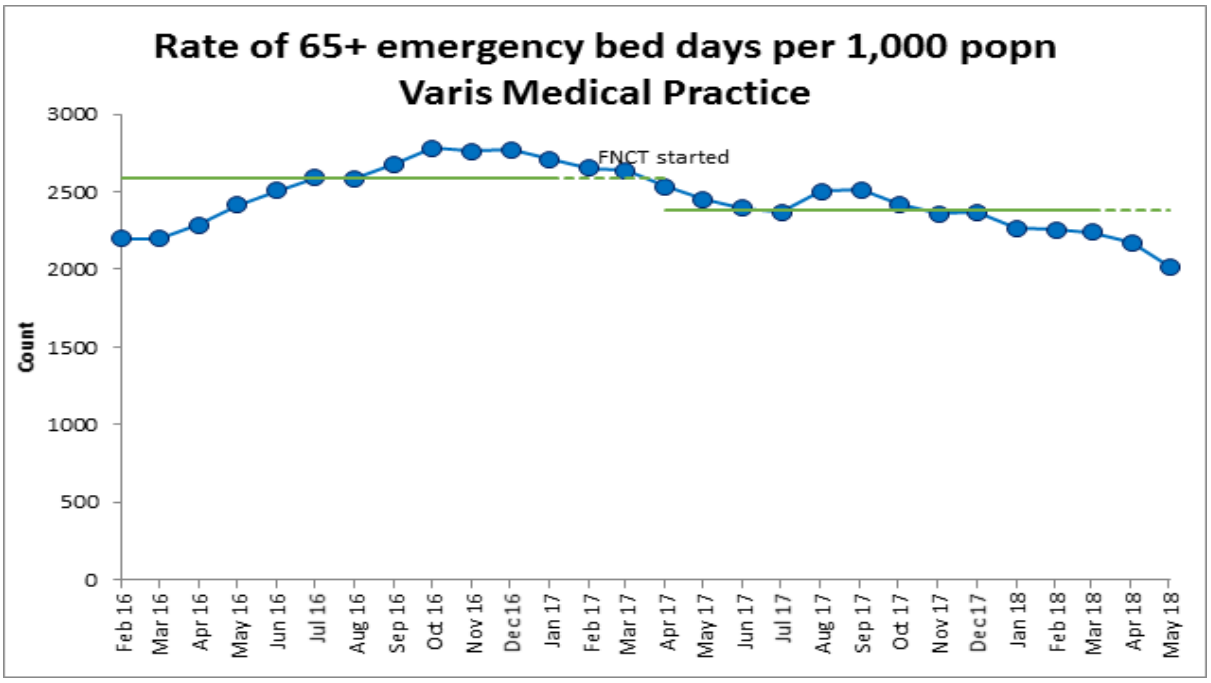
Varis Medical Practice emergency admissions age 65+



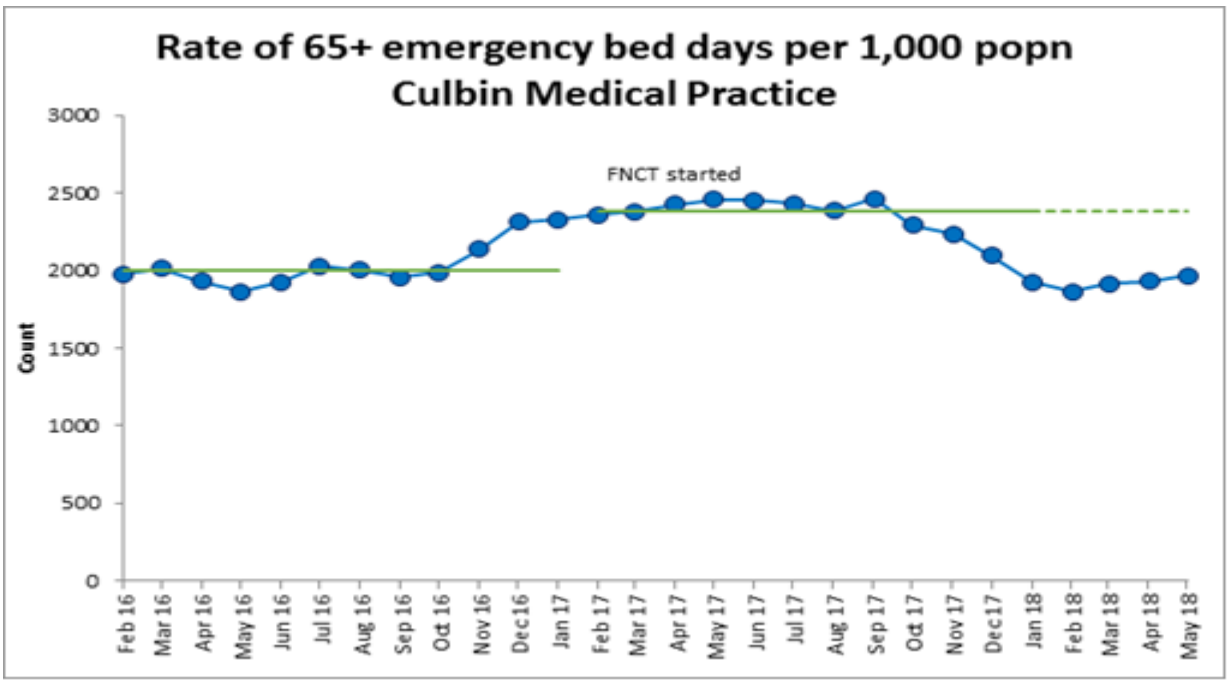
Culbin Medical Practice emergency admissions age 65+



Similarly, in relation to the rate of emergency bed days, the following graphs for Varis and Culbin Practices suggests a trend in the reduction of emergency hospital bed days possibly indicating that patients have a shorter duration of stay in hospital.



Although this is not statistically significant for Culbin, the trend in the reduction of bed days is still evident for the data for both practices. It is perhaps interesting to note that this reduction occurred from 17 August 2017 onwards which correlates with the increase in the trends of referrals to the FNCT (See Figure 1 graph on page 9 of this report).



It should however be noted that it is too early to confirm if this is a definite trend or if FNCT interventions are the only attributing cause in the decrease in emergency admissions and bed days.

Key Insight

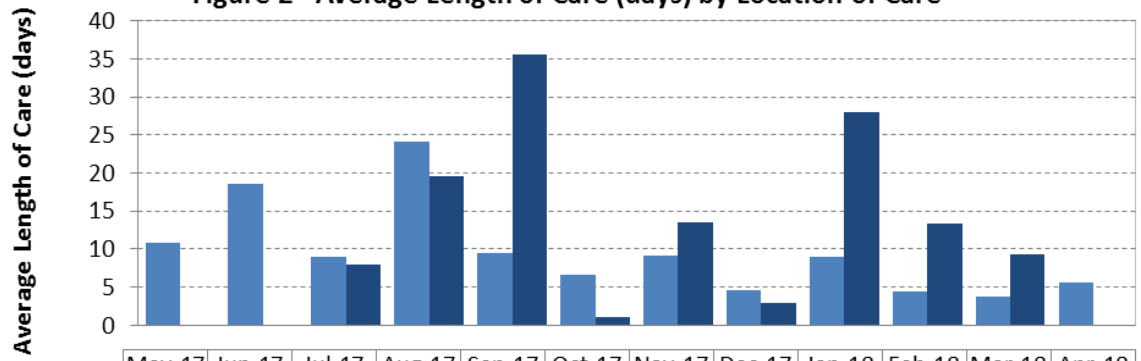
The above data demonstrates that the FNCT is able through the ACU's or in the community to provide care and support for many of the same type of referrals that would have previously been admitted to Leanchoil Community Hospital. The data also suggests that the FNCT is having a positive impact on emergency admissions and beds days.

As outlined in the next section (6.2), provision for people who do not have the same capacity to respond to a re-ablement and recovery approach also needs to be considered.

6.2 Faster Re-ablement & Recovery

Based on the FNCT workload data, the length of stay at the ACU's ranges from 1 day to 36 days and the average length of stay is 11 days.

Figure 2 - Average Length of Care (days) by Location of Care



	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
Home	11	19	9	24	9	7	9	5	9	4	4	6
ACU/Both			8	20	36	1	14	3	28	13	9	

This is in line with what would be considered an appropriate period of time for re-ablement.

Key Insight

The evidence indicates that the FNCT have managed to ensure that beds at the ACU have not become blocked by facilitating a return back home, or an alternative, when patients are medically well but also holistically ready to make this move. The team has helped reduced blockages in the system while supporting better patient outcomes to be achieved.

However, feedback on the interim evaluation report (presented to the MIJ B on 26 April 2018) from the Forres GP's pointed out that the referrals made to the ACU's were based

on patients who had the potential to be re-abled or rehabilitated and not from the very frail/elderly who would receive limited benefit from such an approach to care.

Key Insight

Care for the very frail/ elderly non-ambulant has been identified as a gap in provision from this test site.

An additional type of care that meets the needs for the very frail/elderly non-ambulant -who have a limited potential to respond to a re-ablement approach- should be developed to complement the ACU/FNCT model of support.

6.3 Improved social interaction and less social isolation

In relation to the above outcome, there is also evidence that the location of the ACU's and Varis Court in close proximity to the town centre of Forres is an asset and supports reablement and recovery.

The following comments make reference to the importance of the location of the ACU's at Varis Court in aiding recovery and addressing social isolation.

Comment from FNCT Patient Notes

"Inpatient in ACU 13/7 - 20/7. Her daughters and carers & other daughter who lives locally are struggling to cope. Patient admitted into ACU for one week…This is a new phase of her care as she have previously been reluctant to have carers to look after her at home, preferring her daughters to shower and look after her. She has had previous admissions to Dufftown for respite but much preferred being in Forres. She very much enjoyed going up the town in her wheelchair."

The Case Studies presented at the end of this report also illustrates the differences between a traditional hospital ward and the ACU development from a hospital ward (**Appendix E**). The case reveals the benefit of having a spare room for family members to stay (See Case Study 3) and an opportunity to prepare and share meals with the cared for person.

The following extract from Case Study 5 focuses on the re-abling benefits of allowing pets into the ACU's, the kitchen for food preparation and the central town location for a patient who had recently been discharged after a long period of stay at Dr Gray's Hospital.

Case Study 5

- On admission patient able to have his dog with him which really helped lift his mood and improve his motivation. Initially dog was taken home at night but latterly he stayed in apartment.
- After a few weeks patient started to walk dog out to courtyard.
- FNCT worked on supporting patient to become independent with meal preparation, drinks, medications and stoma care.
- After several weeks was independent with stoma care after changing type of stoma bags and addition of thickening granules to make it more manageable and prevent leakage overnight.
- Family very much involved and would take him out for meals and a change of scenery.
- By week 5 patient had become independent with most activities had gained weight. His mood was much more upbeat, he was more talkative and interactive.
- Discharged from ACU to home with FNCT supporting visiting, 3 times daily for 2 days, then twice daily for 8 days and then daily for 4 days.

There is therefore qualitative evidence to support the proposition that the location of the ACU's within Varis Court and in the centre of Forres and the apartment type set up –with a kitchen and spare bedroom and active encouragement to take pets-facilitates faster recovery through better social interaction.

Key Insight

Feedback from informal carers and people who have accessed the ACU's indicates that the central location of Varis Court in the town centre and the provision of a kitchen and spare bedroom as part of the units supports better social interaction than a traditional hospital ward setting thereby aiding more effective and faster re-ablement.

6.4 Improved Informal Carers Experience

A key feature of the ACU development that was particularly appreciated by informal carers was the opportunity for family members to stay in the spare bedroom, use the living room area and to be able to prepare meals in the kitchen. This has been commented on as part of the Case Studies (**see Appendix D**) and in the following thank you letter from a daughter who had supported her late mother during the last weeks of her life.

Thank you Letter (abridged)

Dear Sir/Madam,

I am writing to express my gratitude for the exemplary palliative and end of life care provided to my late mother by the Forres Nurse Neighbourhood Team, based at the NHS flats, Varis Court, Forres and lead by Mr Matt Offer, Clinical Lead.

The unique opportunity to stay with my mother overnight at Varis Court during her last days of life meant a great deal to me and I know it was immensely comforting to my mother, who sadly passed away, aged 93, on 20th September, 2018. Rather than admission to a busy hospital ward, Mum was able to benefit from Varis Court's more homely environment and its local delivery of service enabled my mother to continue with her daily visits by her carers who attended to her self care needs. This continuity of care was extremely reassuring to both my mother and myself during a stressful time when Mum was coping with her deteriorating health and I was coping with my inevitable loss.

The sincere compassion shown by the nurse neighbourhood team and their expert and responsive nursing care enabled my mother to remain comfortable and pain free at the end of life. I feel extremely fortunate that she was able to benefit from their expertise and their careful management of her condition, so close to home. Their kindness and reassurance was a tremendous source of comfort to me.

Thank you sincerely for the help and opportunities the service provided at such a difficult time, and a special thank you to Matt, to whom I am sending a copy of this letter.
Yours faithfully,

The case studies (**Appendix E**) also point to the benefits of a living room and kitchen area in the ACU's thus providing a more homely environment for grandchildren and other family members to visit their loved one.

Key Insight

There is evidence that the ACU apartment style accommodation is very much valued by family members as well as the cared for person.

6.5 Improved Quality of Life

As mentioned in the previous sections of this report, there are a number of key recurring themes in the case studies, the testimonials from informal carers and from the patient notes that reaffirm the original proposal -as set out in the background section of this report- that emphasize how this test site has supported the improved quality of life for an individual being admitted to the ACU development.

For people who have been referred to the FNCT, these benefits are:-

- The importance placed on the FNCT being able to provide continuity of care within the ACU's or in an individual's home supports trust and relationship building;

- The provision of medical treatments that would otherwise need to be carried out in a hospital aids recovery;
- Family members being able to stay in the spare bedroom and prepare meals supports re-ablement;
- Allowing pets to stay within the ACU aids recovery and increases physical activity;
- The ACU apartments are thought to be less noisy than a hospital ward and this makes for a more restful stay and a faster recovery;
- Creating an environment that enables a patient to be independent and take responsibility for their own care has a positive effect; and
- Varis Court is in the centre of Forres and this supports patients to maintain contact with the local community.

Key Insight

Allowing pets and family members to stay in the ACU'S as well as the importance placed on the continuity of care by FNCT is valued by people staying in the ACU's.

6.6 A More Rewarding Workplace for FNCT Staff

During the evaluation period, a staff questionnaire has been circulated on two occasions to members of the FNCT. The first time was on 15 March 2018 and the second time was on 12 October 2018.

The questionnaire provided members of the team with the opportunity to rate their response to 8 questions.

These questions referred to the level of job satisfaction they had, the degree of their autonomy in relation to decision making and the opportunity to use their skills and abilities to help others. The same questions were asked for each occasion the survey was conducted.

In March the questionnaire was completed by 7 of the 8 team members. In October, the questionnaire was completed by all 6 members of the team. The 2 members of nursing staff from Leanchoil Community were not asked to take part in the survey in October since they had only recently been redeployed.

The results of the survey are presented at the end of this report **(see Appendix F).**

It should be noted that FNCT staff turnover means that the questionnaire was completed by a different set of staff in October. It is still nevertheless interesting to compare the similarity and difference in responses.

While mindful of the above point, the results of the survey in October in general note a higher score.

Questions where all respondents said that they ‘strongly agree or somewhat agree’ (100%) with the statement were to:-

“a) I feel encouraged to come up with new and better ways of doing things”;

“b) My work gives me a feeling of personal accomplishment”;

“f) My job makes good use of skills and abilities”; and

“h) Considering everything, how satisfied are you with your job”

A question where one response noted that they ‘neither agree or disagree’ (83%) but the score was higher than in March was:-

“c) I have the tools and resources to do my job well”;

Questions where respondents gave a slightly lower score in October than in March (83% for ‘strongly/somewhat agree’ compared to 100%) were:-

“d) I understand my role in the teams;”

“e) When a patient, carer or a family member has an issue, I can usually help support them with resolving it” and

“g) How satisfied are you with your involvement in decisions that affect your work”.

The questionnaire also offered the opportunity for FNCT members to comment on their experience of being a member of this test site and many of these comments supported the key insights noted elsewhere in this report.

The comments also provided an insight in relation to why the FNCT has fared better at recruiting and retaining nursing staff, albeit on a secondment basis, than Leanchoil Community Hospital. In particular, the following comments contrast strongly to a traditional nursing approach. In March one FNCT member made the following comment.

Staff survey Comment

“Change of management structure makes me feel empowered to do the 'right thing' for patients and their families. I feel that I have the freedom to choose how I fulfil my role in the best interest of service users. This could be sitting with a dying patient or doing a jigsaw. Very much outwith the traditional 'medical model.” FNCT member

In October, another FNCT member made the following comment.

Staff Survey Comment

"Previous nursing role was on a busy medical ward. A top down autocratic led unit where patients fit into the ward routine as is needed for their safe management. Very much based on a "medical model" – providing person centred care within busy time constraints. FNCT is much more "holistic" providing patient centred care. A democratic "nurse led" unit where nurses are given the opportunity to use aspects of the Buurtzog model. Our clinical lead encourages us to go on "study days." Of the core nursing values, the 6 c's – care, compassion, courage, communication, commitment and competence – the FNCT approach allows "courage" to flourish."

FNCT member

Another FNCT staff also made the distinction of her recent experience as a member of the FNCT compared to working in a hospital ward.

Staff Survey Comment

"In my previous role in Ward 7 at DGH I often felt that I was not able to spend enough time with some of my patients, I can in this role and I feel this means I am able to provide a higher quality of nursing care – more holistic and autonomous. We discharged patients from the ward without a clear idea of how they would manage at home because we never visited their homes, I feel that discharges from FNCT are a lot safer due to the ability to follow up with home visits. I am more involved in decision making about the patients' care, planning and discharge." FNCT member

In light of the national challenge to recruit nursing staff and in the context of the difficulties to recruit safe levels of nursing staff locally, the relative success in recruiting for these temporary FNCT positions, is an important area for further consideration when redesigning health and social care services.

Key Insight

Based on FNCT staff comments, empowering nursing staff through a flat organisational structure with minimal beaucracy is an attractive proposition for recruiting and retaining nursing staff. In light of the difficulties in recruiting sufficient numbers of nurses both locally and nationally, this is an important point to be considered in any future redesign of community based health and social care services.

Due to the importance of the issues raised by evaluating this element of the project, Dundee University have agreed to undertake an independent piece of research in relation to the application of the Buurtzorg principles in developing the FNCT and MDT.

An extract from he interim evaluation report is attached as **Appendix G** at the end of this report and a full research report is intended to be available in the Spring of 2019. The interim evaluation report will also help to inform the ongoing work of the MDT workshops (facilitated by Glasgow School of Art) noted in the implementation section of the draft Transformation Plan.

6.7 Best Value

Health Improvement Scotland (HiS),was requested to prepare report, on behalf of Health & Social Care Moray, focused on the economic impact of the ACU development and the FNCT team.

The report prepared by Dr Owen Moseley, Health Economist (HiS), took a sample of 28 patients who were cared for the FNCT between January to April 2018. All patients had previously had a hospital admission within the March 2016 to July 2018 time frame. The evaluation focused on identifying trends and patterns relating to number of admissions, length of stay and therefore cost admissions. This then provided the basis of making a cost comparison.

The report does identify a decrease in the average time spent in hospital for patients who were previously seen by the FNCT albeit acknowledging a number of limitations in terms of the data sample.

Nevertheless the report makes the following conclusion:-

Research Finding

"The analysis presented is a "snap shot" looking at the number of admissions, length of stay, and cost of admissions for a sample of patients seen by the FNCT in January-April 2018. The analysis has a number of important limitations but prior to entry into the FNCT the estimated cost of admissions was £69,028 (42 admissions) and in the few months after entry into FNCT the cost was down to £5,347 (9 admissions). It appears there may be scope for significant resource/cost avoidance if the FNCT is able to limit the number of admissions these patients have over the coming months".

Report prepared by Dr Owen Moseley, Health Economist, HiS.

It should be noted that the author ensured that the report was peer reviewed by two fellow Health Economists from HiS before the report was published. The full report will be made available to MIJB members.

Key Insight

There is evidence that a combination of the impact of the ACU's and the FNCT has reduced the cost of hospital based admissions and length of stay. It is therefore considered that the test of change site points to the potential significant resource and cost avoidance.

7.0 Appraisal

This evaluation report presents evidence of positive outcomes in relation to each of the 8 outcomes criteria and therefore for people referred to the FNCT, informal carers and for the FNCT staff members.

What emerges from this evaluation is that providing a different type of environment for the recovery from illness, re-ablement and rehabilitation in the form of an apartment – with a spare bedroom, living room and kitchen- combined with a nursing team committed to an innovative and holistic approach to care, in both the community and within the ACU's, is very much valued by informal carers and people who are supported by this service.

The evaluation also demonstrates that a nursing team that is empowered to work in a different and dynamic way can provide support that would otherwise require the input of other health and social care professionals. Sometimes this support would have required an admission to an acute hospital setting if a traditional nursing or medical approach had been followed. As demonstrated by the economic analysis undertaken by ihub, there are 'hidden' financial savings resulting from the FNCT being able to undertake these treatments themselves.

For the FNCT, the workforce survey and the independent research undertaken by Dundee University, points to high levels of job satisfaction and a positive impact from the interpretation and application of the Buurtzorg principles. This is reflected in strong nurse staff retention for the team.

In general, the evidence from this evaluation reaffirms the premise that if positive health and social care outcomes can be delivered then financial savings will follow. Nevertheless, the evaluation points to areas of service delivery that either require further development or additional research.

In particular, during the evaluation period referrals to the FNCT team were primarily made for people who had some capacity to benefit from a re-ablement approach to care.

Consequently, there are people who have not been admitted to the service who would not have the same potential to benefit from such an approach to care. Additional and complementary support would therefore need to be provided if the gap in the support of care left by the closure of Leanchoil Community Hospital is to be filled.

The qualitative research undertaken by Dundee University on the application of the Buurtzorg principles is presented at this stage as the initial findings. A full evaluation report will be published in the Spring of 2019.

7.1 Supporting Evidence Base for the Transformation Plan

The following table identifies how the key insights identified from undertaking this evaluation have helped inform the proposal for the redesign of health & social care services as outlined in the Transformation Plan (Draft).

	Key Insight	Impact on the Transformation Plan
1.	The FNCT has demonstrated that they are a flexible resource who are able to support patients and deliver care in a range of different settings; both within a home setting and within Varis Court.	This insight has helped inform the MDT. Specifically, continuity of care in both the community and within the ACU's.
2.	The 5 ACU's at Varis Court would provide a sufficient number of beds to support patient flow and a safe level of care and support for people who have the capacity to be re-abled and rehabilitated. The data also suggests that the FNCT is having a positive impact on emergency admissions and emergency beds days.	Although the model of support and care outlined in the Transformation Plan will continue to evolve, the analysis undertaken in the evaluation report supports the commissioning of 5 ACU's within Varis Court.
3.	While the FNCT is able through the ACU's or in the community to provide care and support for many of the same type of referrals that would have previously been admitted to Leanchoil Community Hospital there is a need to provide care and support for people, particularly the frail/elderly non-ambulant, who do not have the same potential to benefit from a re-ablement or rehabilitation approach.	This insight was originally gained from the completion of the interim evaluation report and informed the decision to commission 2 nursing beds at Cathay and, eventually, Meadowlark residential care homes.
4.	The ACU's, with its central town location and the provision of a kitchen and spare bedroom is valued by family members and people being supported in the units.	The ACU is a better environment than a hospital ward setting for re-ablement and rehabilitation. Retaining the ACU's is therefore key part of the new model of support and care as outlined in the Transformation Plan.
5.	Allowing pets and family members to stay in the ACU's as well as the importance placed on continuity of FNCT care is valued by people staying in the ACU's.	This is a distinctive and valued feature of the test of change that should be retained as part of the new model of support and care.
6.	Empowering nursing staff through a flat organisational structure with minimal beaucracy is an attractive proposition for recruiting and retaining nursing staff.	Through the adoption of an innovative nurse staff model, the test site has demonstrated that there is potential to improve the recruitment and retention of nursing staff. This was one of the key drivers for transformational change identified in the Plan.
7.	There are financial savings resulting	Through this test of change, there is

	from the efficiencies gained by deploying an alternative nursing model that empowers the FNCT when providing care and support.	evidence that the FNCT and ACU can help improve the overall efficiency of delivering heath and social care services in the Forres locality area.

8.0 Conclusion

The innovative use of the ACU's combined with the dynamic development of the FNCT is consistent with what the King's Fund describes as transformational change.

Namely, *"the emergence of an entirely new state prompted by a shift in what is considered to be possible and necessary which results in a profoundly different structure, culture or level of performance"*.

The key insights from this report are therefore presented as a valid foundation for informing the redesigning of health and social care services in the Forres locality area and the future ongoing basis for a continuous improvement approach.

Appendix A: FNCT Development Timeline

Date	What Happened
03/04/2017	8a into post still ordering equipment and furniture for flats
10/04/2017	B5 2xWTE start (FNCT)
17/04/2017	**B5 3x WTE total = 5 x WTE (FNCT) (Community work commences)**
15/05/2017	6x B5 WTE (FNCT)
05/06/2017	Reduction in B5 by 1x WTE due to terminal illness total = 5 WTE
01/07/2017	Reduction 1 WTE B5 , Total 4x B5 WTE (FNCT)
01/07/2017	**Beds arrive , ACU available to use " Go Live"**
03/07/2017	Increase 4.5 WTE B5
10/07/2017	Increase 5.8 WTE B5 , 7 staff + 8a
18/07/2017	Increase 6.6 WTE B5 + 1 x terminal illness
20/09/2017	1x early retirement due to ill health
11/10/2017	1 staff increase hours by 0.3 WTE total B5 = 6.9WTE
30/10/2017	Increase 1.0 WTE Total = 7.9 WTE
31/10/2017	Start using Bank staff to support
01/11/2017	1 staff increase hours by 0.2 WTE total B5 = 8.1 WTE
O1/02/2018	Bed reduction at Leanchoil 6 to 4 beds
09/02/2018	Reduction to 7.1 WTE B5
31/03/2018	Secondments extended to 31st July18
28/05/2018	Reduction of staff by 0.4 WTE Total = 6.7 WTE B5
18/06/2018	Reduction of FNCT staff by 1.0 WTE = 5.7 WTE B5
07/2018	Reduction of beds from 4 to 1 at Leanchoil Community Hospital
08/2018	Revised draft admission criteria put in place
27/08/2018	Reduction of FNCT staff by 0.88 WTE total now =4.82 WTE B5
03/09/2018	Leanchoil Community Hospital is 'temporarily' closed. No new admissions
03/09/2018	Some Nursing members of the Leanchoil Community Staff are transferred across to the FNCT team. Reducing the amount of bank staff needed.
04/09/2018	Temporary transfer of Leanchoil staff to FNCT increasing staffing to

Appendix B: FNCT Operational Workload Review

Evaluation of Operational Workload of Forres Neighbourhood Care Team (FNCT) at Varis Court

01 May 2017 to 19 April 2018

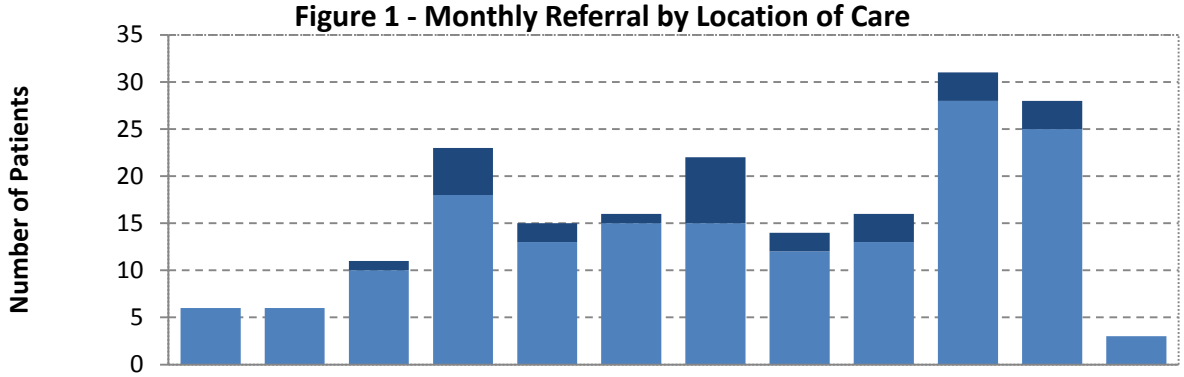
This report covers the period from 01 May 2017 to 19 April 2018. It is understood that the ACU was fully occupied over the festive period however no record audit forms have been received to confirm this.

A total of 194 referrals to FNCT were received in the period but three records do not record the location where care was provided. Of the remaining 191 referrals care was provided at home for 164 patients, solely within the

ACU for 13 patients and as a combined care package for 14 patients.
Given that just 14% of referrals to FNCT in the period involved care at the ACU, the ACU-only and ACU and home care figures have been grouped together for the purposes of analysis and are presented in this report as ACU/Both.

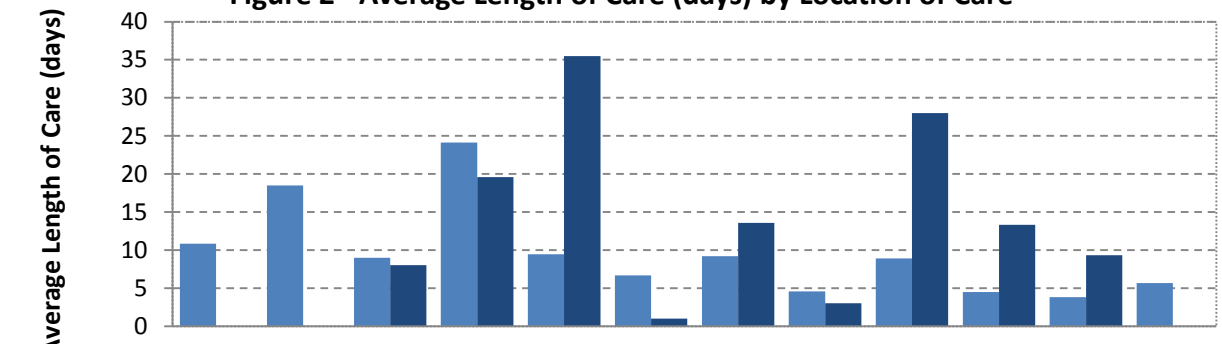
Figure 1 shows the number of referrals per month made to the FNCT team by the location that care was provided.

Figure 1 - Monthly Referral by Location of Care



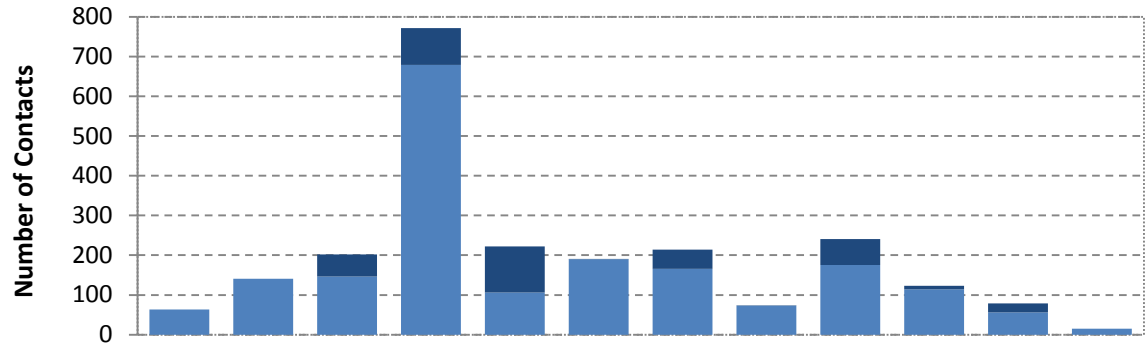
	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
ACU/Both	0	0	1	5	2	1	7	2	3	3	3	0
Home	6	6	10	18	13	15	15	12	13	28	25	3

Figure 2 - Average Length of Care (days) by Location of Care



	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
Home	11	19	9	24	9	7	9	5	9	4	4	6
ACU/Both			8	20	36	1	14	3	28	13	9	

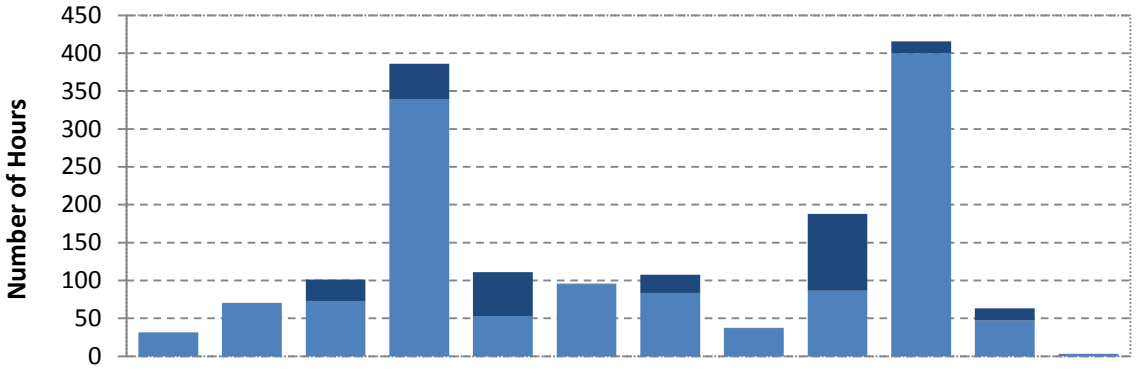
Figure 3 - Number of Contacts per Month by Location of Care



	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
ACU/Both	0	0	56	93	116	1	48	1	66	9	23	0
Home	63	141	146	679	106	190	166	73	175	114	56	15

Contacts are not recorded for the ACU element of any stay, therefore figures for ACU/Both relate only to the home-care element for those patients with combined package of care.

Figure 4 - Estimated Staff Hours per Month by Location of Care

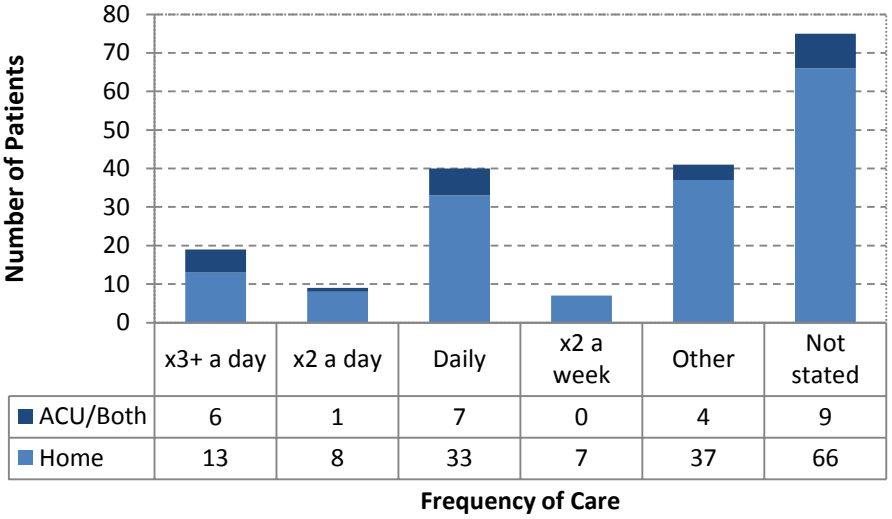


	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
ACU/Both	0	0	28	47	58	1	24	1	102	16	16	0
Home	32	71	73	340	53	95	84	37	86	400	47	3

There is no reliable way of monitoring length of staff time per contact. Figure 4 is based on an estimate of 30 minutes per contact to calculate total staff time however the staff time estimates for 2018 do not tally the number of contacts over the same period shown in Figure 2, so should be viewed with caution.

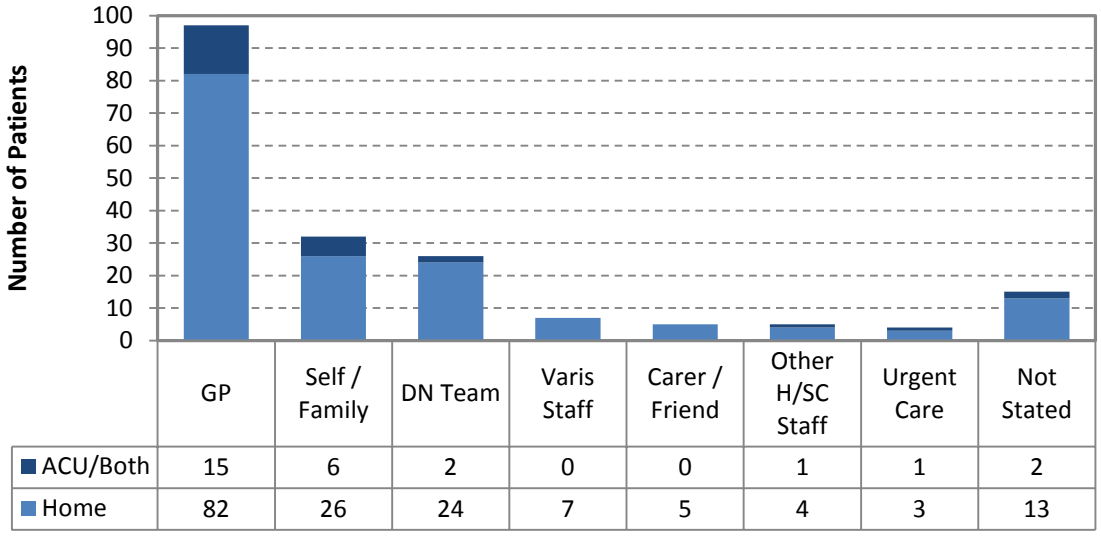
Some patients' care was fixed at specified intervals (once to four times a day or twice a week for instance), however for many the demand for care varied, normally starting with a higher frequency of visits at the initial stages of care and reducing over the period until discharged, these patients are shown under the Other category. For 66 (40%) of the 164 patients who received care at home, frequency of care was not stated. For a third of patients in the ACU/Both category, frequency of care was not stated.

Figure 5 - Frequency of Care by Location of Care



	x3+ a day	x2 a day	Daily	x2 a week	Other	Not stated
ACU/Both	6	1	7	0	4	9
Home	13	8	33	7	37	66

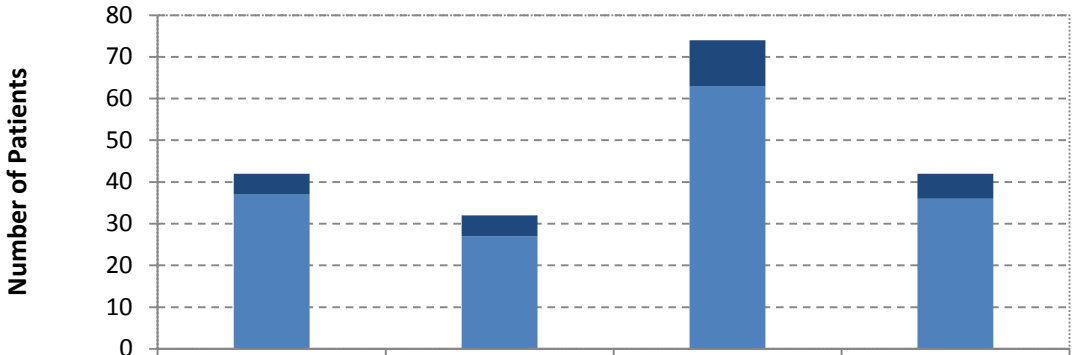
Figure 6 - Referral Source by Location of Care



	GP	Self / Family	DN Team	Varis Staff	Carer / Friend	Other H/SC Staff	Urgent Care	Not Stated
ACU/Both	15	6	2	0	0	1	1	2
Home	82	26	24	7	5	4	3	13

50% of patients who received care entirely at home were referred by their GP. For those who received are at the ACU/Both, 56% (15 patients) were referred by their GP.

Figure 7 - Referrals by Gender, GP Practice and Location of Care



	Culbin Female	Culbin Male	Varis Female	Varis Male
ACU/Both	5	5	11	6
Home	37	27	63	36

Patients registered with the two local GP practices were split roughly 40% from Culbin Medical Practice (74 patients) and 60% from Varis Medical Practice (116 patients); this ratio being maintained by location of care. For one patient no practice was specified. The female to male ratio for each practice was also about the same at 55% females to 45% males, however for patients registered with Varis MP almost twice as many female patients received care at the ACU compare to males.

Figure 8(1) - FNCT Care at Home

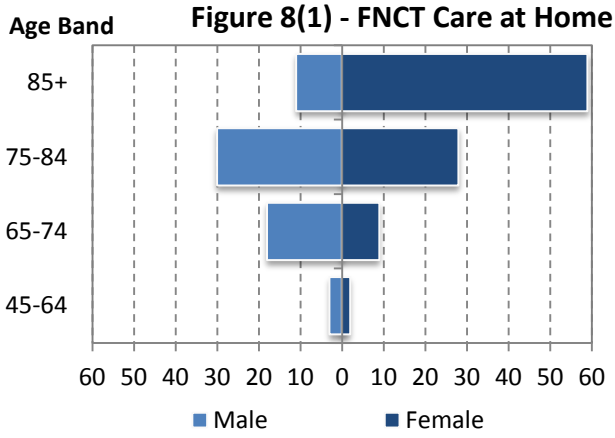
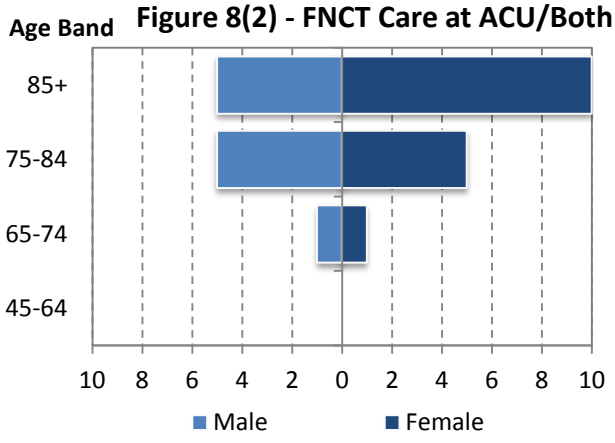
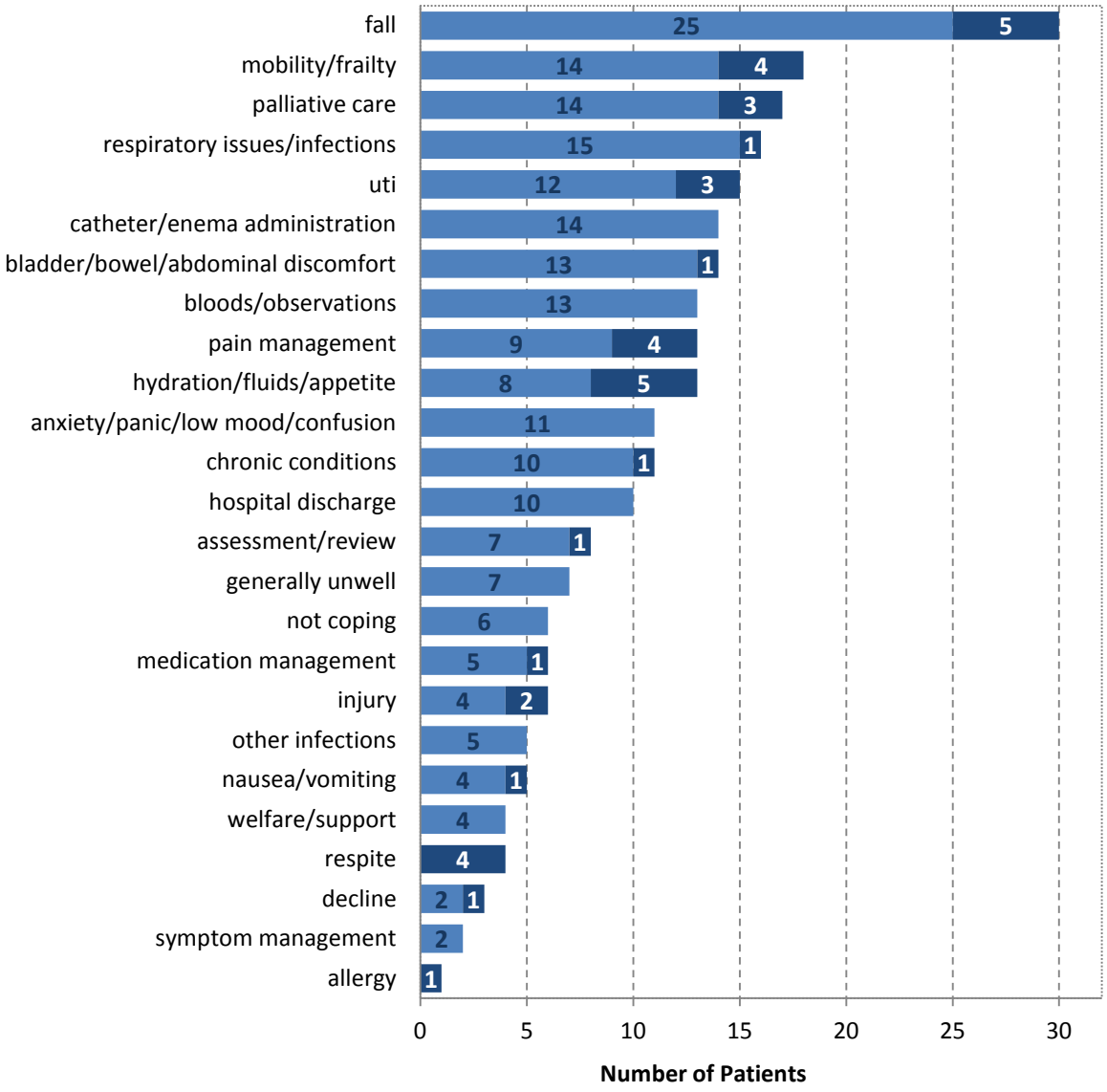


Figure 8(2) - FNCT Care at ACU/Both



For the patients receiving care entirely at home, the female average age is 83 years and the male average age is 77 years. For those whose care included a spell in the ACU, the female average age is 85 years and the male average age is 84 years.

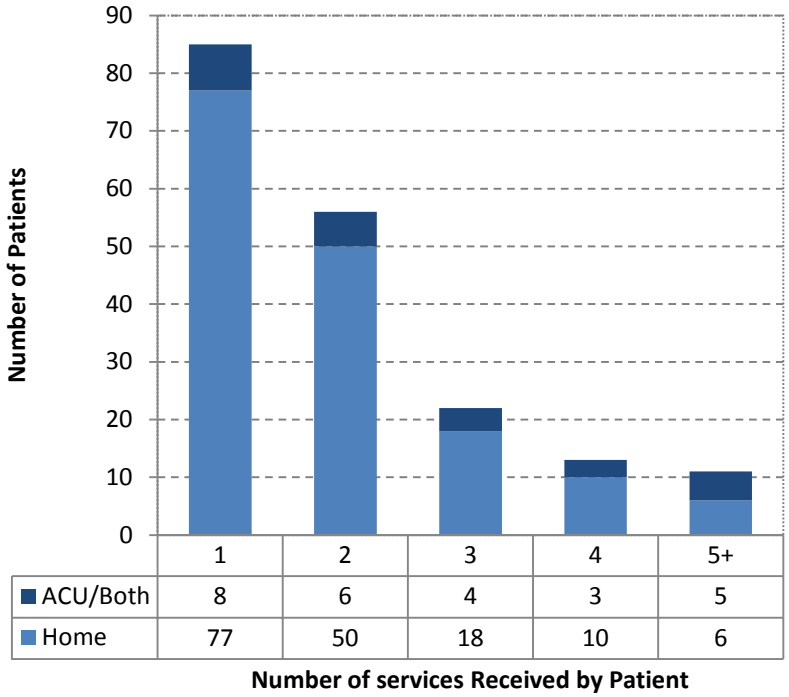
Figure 9(1) - Reasons for Referral to FNCT by Location of Care



The reasons recorded for a patient to be referred to FNCT have been subjectively coded and grouped into categories based on similarity of either symptoms or type of care required. One patient may have multiple reasons given for why a referral to FNCT is deemed necessary.

On their own falls accounted for 16% of patient referrals to FNCT;

Figure 10 - Care Provision by Location of Care



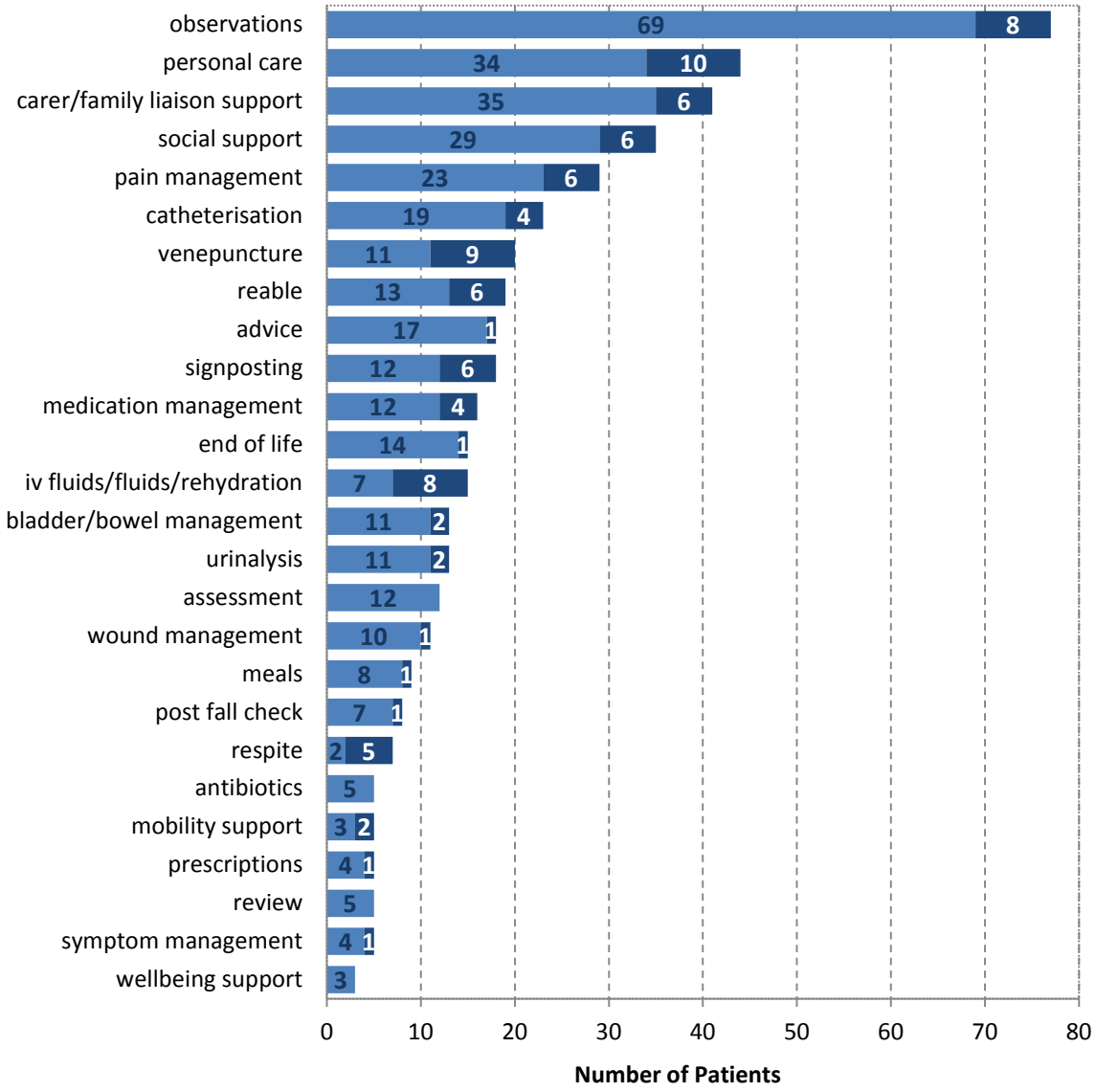
combined with other frailty and mobility issues and the figure is over a quarter. For 22% of patients, Urinary Tract Infections (uti); bladder, bowel and lower abdominal pain and the management of these conditions with catheters and enemas, was given as the reason for referral.

The word-cloud in Figure 9(2) presents the same referral reasons as the chart in Figure 9 but without the sub-category of Location of Care. It is clear that Falls are the top reason for referring patients to the FNCT, followed by wider mobility and frailty issues and palliative care.

Whilst 45% of patients received one type of care from FNCT, the majority received at least two types of care provision.

As with the referral reasons shown in Figure 9, the types of care services provided by FNCT have been coded and grouped for ease of analysis. Figure 11 provides an extensive list of these service groups by the number of patients receiving the service and the location care was provided. The top three services provide a good illustration of the range of services that FNCT provides; medical, social care and family support.

Figure 11 - FNCT Care Services Provided by Location of Care



FNCT also signpost and refer patients on to other local service providers. Figure 12(1) shows the service providers that patients treated in their own home have been referred on to, whilst Figure 12(2) shows referrals for patients treated in ACU/Both.

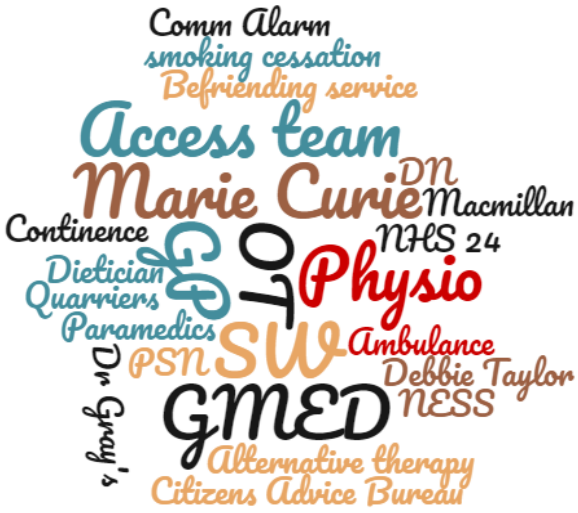


Figure 12(1)

Figure 12(2)

These two patient stories are illustrative of the way that FNCT care has supported people within the community and avoided potentially lengthy stays in hospital.
Some details including names have been changed to protect the identity of the patients.

Ethel, Female, aged 75 years old

(referral to discharge = 81 days, Care provided at own home)

Ethel had broken her leg following a fall. On discharge she was unable to care for herself independently as she was in great pain. She was unable to bear weight on medical instruction so mobility was very difficult and she was unable to carry out some activities of daily living. She became tired and breathless on exertion, although this improved over the course of the care period. Ethel's son declined to provide personal care. Also her son was not an early riser meaning patient could be left without a drink or breakfast until late in the day. Patient at initial assessment was very like the type of patient readmitted to hospital due to family being unable to cope. FNCT support prevented this, enabling her to regain confidence and a degree of independence.

Jim, Male, aged 90 years old

(referral to discharge = 6 days, Care provided at both ACU and in own home)

Jim was acutely unwell with a UTI, constipation and was dehydrated on admission to ACU. He was unable to care for himself at home and would certainly have required admission to hospital for rehydration and treatment of UTI. Patient lost a lot of confidence as his illness coincided with his 90th birthday and it concerned him that it was the 'beginning of the end.' Following discharge home FNCT continued to visit twice a day and then reduced this to a daily check, helping him rebuild his confidence.

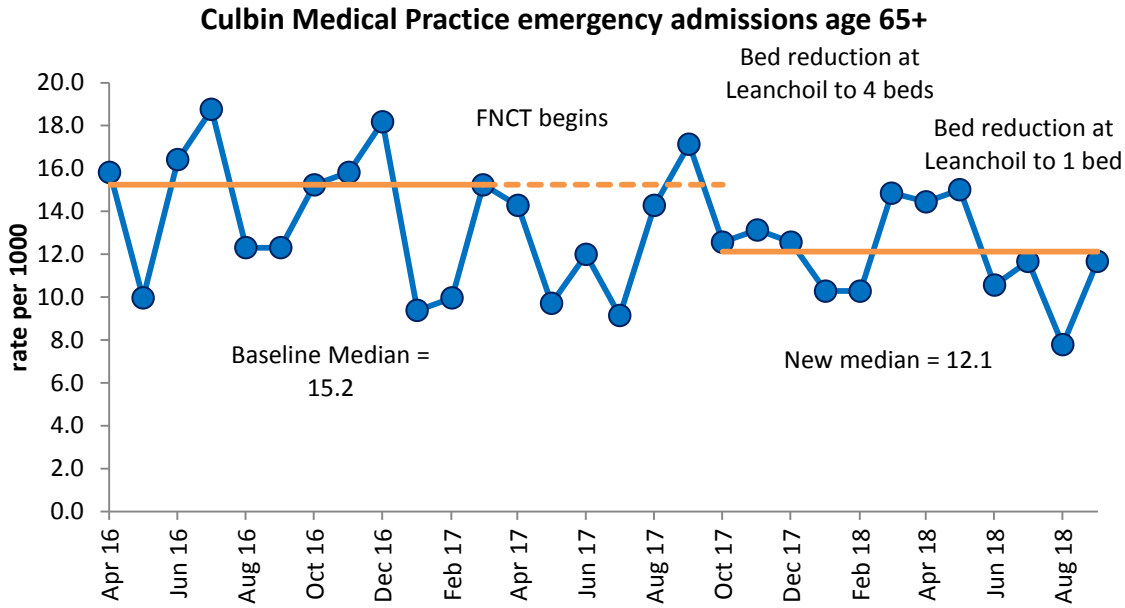
Appendix C: Culbin and Varis Medical Practice Hospital Data (iHub)

Hospital data from Moray HSCP has been put into run charts in order to try and ascertain the impact of the Forres Neighbourhood Care Team (FNCT).

Run charts are simple analytical tools to help us understand changes in data over time.

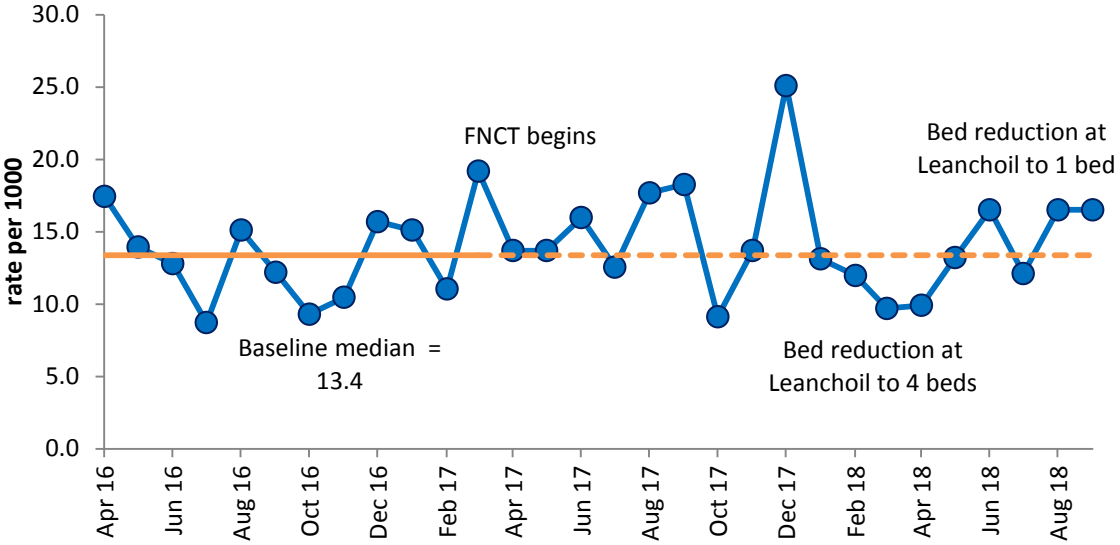
Emergency admissions

The chart below shows emergency admissions for the Culbin Medical Practice for patients aged 65+. There has been a sustained downwards shift in the rate of emergency hospital admissions for these patients. The baseline median reduced from 15.2 emergency admissions per 1,000 population to 12.1, a fall of 20%.



Varis Medical Practice does not show any change in the rate of emergency medical admissions over the same time period (see chart below).

Varis Medical Practice emergency admissions age 65+

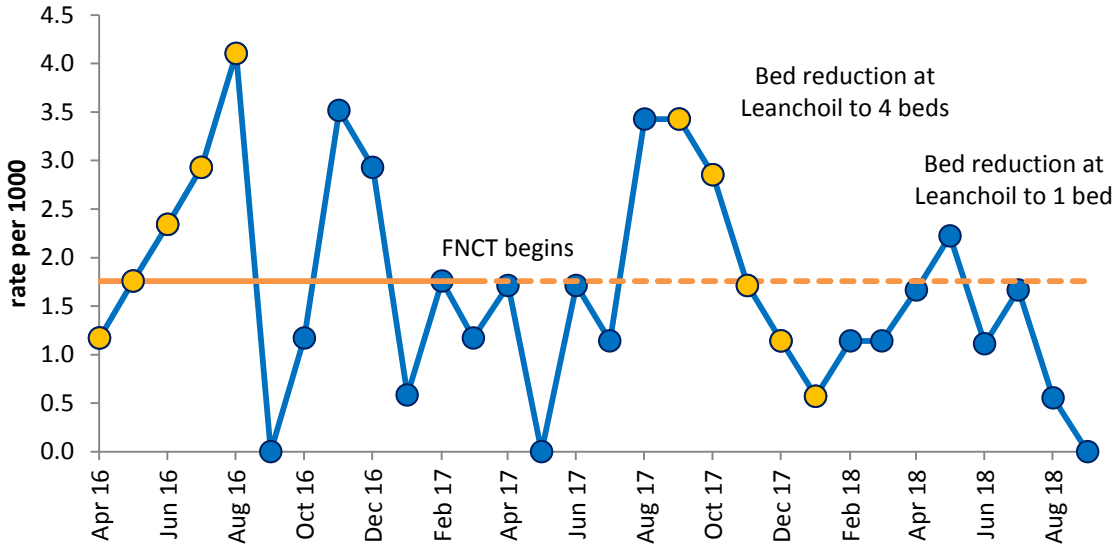


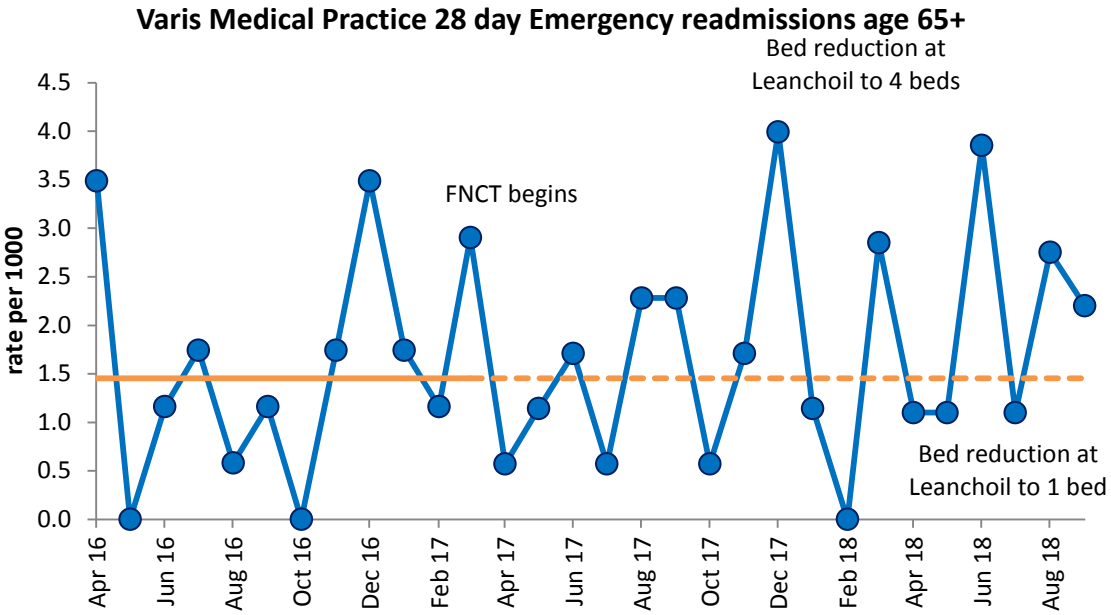
Emergency 28 day readmissions

The following two charts show emergency 28 day readmissions. The highlighted yellow points on the chart for Culbin Medical practice show that there was an increasing trend within the baseline period. There was also a decreasing trend following the baseline period.

Varis Medical Practice did not show any significant variation over time in terms of their 28 day emergency readmissions.

Culbin Medical Practice 28 day Emergency readmissions age 65+

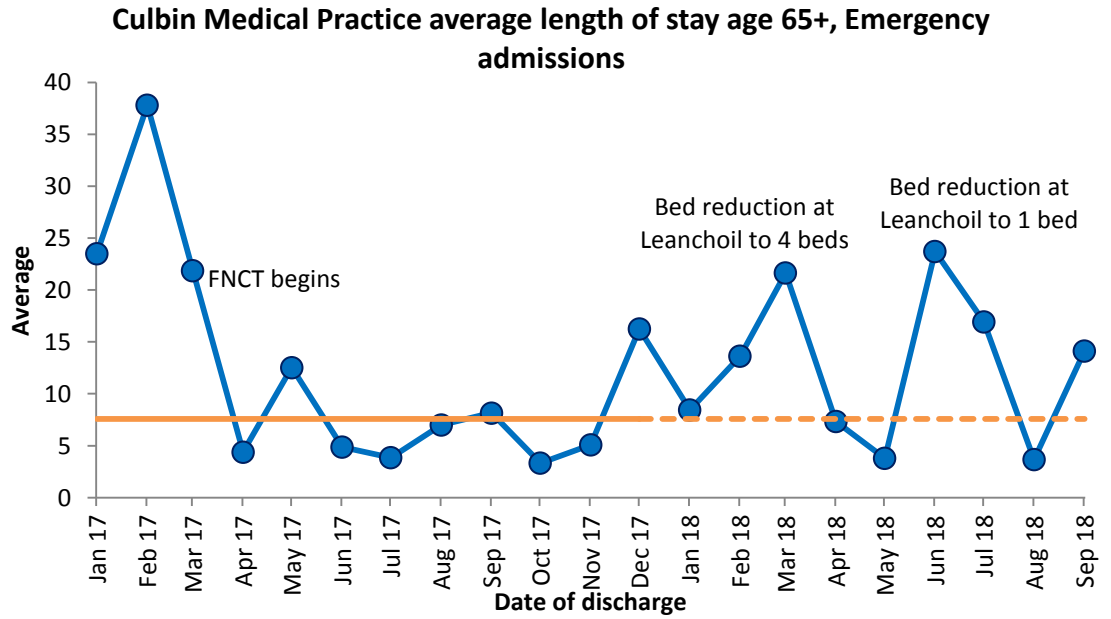


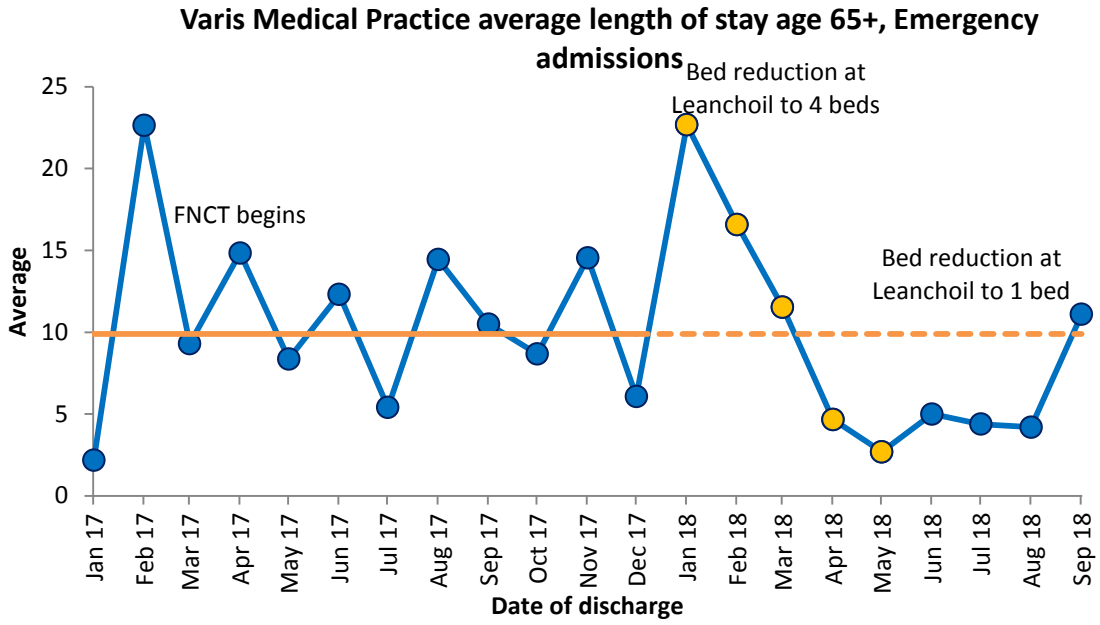


Length of stay

The hospital length of stay data for emergency admissions only represents a subset of patients; those whose admissions were potentially preventable by the FNCT, and only includes admissions to Dr Gray's Hospital and Aberdeen Royal Infirmary. The data is also presented for a shorter time period, allowing less opportunity to assess changes. Please note this data is provisional.

The length of stay data for Culbin Medical Practice doesn't show any change. The data for Varis Medical Practice shows a downward trend in length of stay.





Appendix D: Forres Patient Discharge Destinations which were not the ACU/FNCT Team

For the period immediately following the closure of Leanchoil Hospital (1 September to 1 October 2018), there were 8 discharges for patients with a Forres postcode who were note referred to the FNCT and who were admitted to one of the other community hospitals in Moray.

The 8 discharges should be considered in the context of X admissions to the ACU's and Y admissions for support by the FNCT to recover at home during this same period.

Prepared by the Interim Service Manager Adults & Allied Health Professionals, the following is a brief description of the reason for their transfer and their destination location.

Turner Hospital – 3 patients

Patient A was transferred to Turner prior to the temporary closure of Leanchoil Hospital due to a lack of safe staffing levels and beds at Leanchoil. She required a longer period of time for further rehab and for a social work assessment. She would not meet the criteria for ACU as had been assessed for long term care and was unable to return home. At the time of transfer, the SLA was not in place for the local care homes in Forres to be considered. Not suitable for ACU as awaiting long term care.

Patient B was transferred to Turner for further rehab and social work assessment as deemed to be requiring care package to go home. Not suitable for ACU as awaiting home care package and at the time of transfer there were was not the dedicated rehab in situ in the ACU's.

Patient C was transferred to Turner to await long term care. This lady was a delayed discharge in Dr Grays and would not be suitable for ACU support. The SLA was also not in place at this time to offer care at Cathay Nursing Home. Not suitable for ACU as awaiting long term care

Stephen Hospital – 2 patients

Patient D was transferred to Stephen Hospital for further slow stream rehab and to await care package to return home. She had previously been in Stephen Hospital and was keen to return to Stephen. Appropriate return to Stephen as it was determined at last discharge that she would most likely require a care package to return home. She is currently awaiting care package. Not Suitable for ACU as awaiting home care package

Patient E was transferred to Stephen Hospital after several attempts to secure bed in Cathay but advised to be unsuitable. Following day deemed suitable for transfer to Cathay but will remain in Stephen Hospital for further assessment as was previously in Stephen and now to assess whether rehab will progress or will require long term care (92years) Suitable for Cathay Nursing Home Bed

Seafield – 3 patients

Patient F was transferred to Seafield for further rehab. Deemed not suitable for ACU due to dementia and requiring further social work assessment to determine options for the future. After discussions and some time in Seafield, it was agreed to transfer to ACU as she was going to be going home. On day of transfer, became medically unwell and was transferred to Dr Grays. Medics in Seafield advised she should not return to Seafield and was transferred to ACU. She remains in ACU awaiting equipment to return home. Suitable for ACU

Patient G was transferred to Seafield for assessment. Bariatric patient. Deemed unsuitable for ACU due to need for bariatric equipment. Patient very happy with Seafield Hospital and wished to remain. Became unwell and transferred to Dr Grays. When medically fit to leave acute, discussions re Cathay placement as final destination would be home to be nursed in bed. Patient currently in Cathay with FNCT supporting with visits in preparation for discharge home. Should have transferred to Cathay Nursing Home in the first instance but commissioning process was not complete therefore Community Hospital transfer was appropriate.

Patient H was transferred to Seafield for further assessment to determine care package to return home. Not suitable for ACU as awaiting home care package.

Appendix E: FNCT Case Studies

Case study 1

Situation

- Male patient had a cerebral event and wished to be at home for his care. Forres Neighbourhood Care Team (FNCT) contacted by District Nurse (DN) lead to assist this gentleman as already at home. Two persons four times daily for care were needed and no other service had capacity to supply at the time within Forres.

Background

- No previous care as the patient was independent. Lived with wife who was very hands on with care.

Assessment

- Ongoing assessment throughout care interventions allowing team to interact early when patient went into retention (this was out of hours so would have gone through to G-med traditionally). Patient had chest and urinary infections on different occasions and treatment was commenced early.
- Daily assessment of skin integrity, nutrition and hydration.
- There does not appear to be a reduction in the amount of contacts from G.P's or DN team when FNCT were providing care compared to when care provided by the council service. It could be suggested that this was due to a lack of confidence in the service as only in its infancy at the time.
- FNCT were used out of hours 8 times from the 14/10/17 -25/11/17 with mainly catheter related problems and care issues. Our response time is significantly less than going through NHS 24 service and was approximately 20 minutes due to patient location and service capacity, allowing a quick response.
- At a later date the patient was admitted to the Augmented Care Unit(ACU) after the wife had called the team during out of hours. FNCT made decision to admit for end of life care as wife struggling at home. Patient and family were supported through end of life in the ACU.

Recommendation

- Direct access to the team via mobile phones allows support and advice 24/7 for our patients.
- Offering a responsive service that could be there quickly gives reassurance to families and patients by knowing who will arrive and when.
- We are able to assist out of hours when there are no other teams easily available on demand although we are not an emergency service and this made clear from the outset.
- The service is designed around the patient and family. Other care providers are not able to offer the same flexible service to meet individual needs or ad-hoc demand.

- This case has shown that we directly reduced some out of hours call outs to other services and this has been replicated in other cases.
- Utilising qualified nurses with training in clinical assessments has allowed us to independently manage issues as they emerged rather than either the relative or carer having to contact health centre for further review.
- Without qualified staff the out of hour's assessments would likely result in an increased workload for another service.
- Being involved in the patient's care are at home led to admission to ACU at the appropriate time otherwise would have been Dr Gray's Hospital (DGH).
- There needs to be improved communication and links with other out of hour's services to support the Forres locality. For example this would include ambulance, G-med, Marie Curie, Pitgaveney team and duty social work team (this is not an exhaustive list).

Case study 2

Situation

- Contacted directly by the Hanover care team within Varis court as a resident was 'confused and not her normal self'.

Background

- On assessment by FNCT she had a probable urinary infection with dehydration, confusion, nausea, reduced appetite and reduced mobility.
- Carers struggling as patient cared for in divan style bed.
- Patient wished to be treated at home, did not want to be in hospital.
- Decision made with patient to transfer down to the ACU for treatment.

Assessment

- Given her confusion it was decided that she was not suitable to be managed in her own apartment and patient agreed to be treated in the ACU.
- Patient received antibiotics, blood investigations, intravenous fluids and ongoing monitoring.
- Admitted for 20 days for this admission
- Slow to rehabilitate back to baseline function to regain mobility with zimmer frame and some degree of independence with self-care.
- Clinically and biochemically dry on admission (urea 16.1, creat 155 and eGfr 27 (Patients normal eGfr 35-39)).
- Continuity of personal care as care provider continued to see patient in the ACU.
- Nursed in a hospital bed enabling positional changes and reducing risk of injury to care team.
- Patient readmitted 4 months later for end of life care.

Recommendations

- Ability to offer short term acute medical treatments that traditionally would have only been in a hospital is a benefit to the Forres locality.
- To allow on-going assessment and review of bloods means that we utilise the laboratories at DGH. Bloods are normally taxied to Aberdeen Monday –Friday from health centre which delays results being available for this service.
- Direct access to FNCT reduced the need for G.P visit and their time to organise treatment.
- Had patient been seen by out of hours prior to ACU availability it is likely that she would have been admitted to hospital despite her wishes due to issues relating to patient safety.
- Without treatment patient unlikely to have survived for another 4 month during which time she had a good quality of life.

Case study 3

Situation

- End of Life Care required for patient discharge from Dr Grays hospital

Background

- Contacted directly by ward at DGH to discharge a patient for end of life care. (PPS 20-30%)
- Patient had requested to die at home in Forres.
- Pitgaveney team unable to offer support as no capacity at this time.
- FNCT had no capacity for community based patient care but with rearranging cover for shifts, enabled admission to ACU.
- Discussed with patient and family who agreed with discharge to ACU.
- Admitted late on a Friday afternoon the FNCT nursing team liaised with community MDT to arrange medications, syringe driver and prescriptions.
- Multiple family members were able to comfortably stay in the apartment.
- When patient died family had a meal with the patient present and were able to stay until undertaker arrived (several hours later) and the patients' sons were able to assist carrying out their father with the undertaker.
- Death verified by FNCT

Assessment

- Family and patient were in control and able to determine care.
- The apartment was very much the patients and family's space. They were able to make full use of the facility with no restrictions on visiting times or the quantity of visitors allowed in.
- Not disturbed by other patients or night time noises of a traditional in-patient facility.
- Patient had reassurance that assistance could be summoned with alarm system, if required.

- After discussion, the family opted to use our Aroma stream which provides lighting and an aroma using essential oils to promote relaxation. On this occasion lavender and frankincense were used which known for their calming effect which the family appreciated and found useful.
- Through the use of the ACU the Forres Neighbourhood Care Team nurses enabled a good death for the patient and family. The team were able to be on hand as and when needed with no delay to providing symptom management.
- The family greatly appreciated the support received and kindly donated over £300 raised by the mourners at the funeral for the Forres Neighbourhood Care Team.
- Although the Clinical lead nurse was on leave, FNCT staff were empowered to; assess and admit the patient, could book bank staff and rearrange shifts including any additional hours for FNCT Staff. They liaised well with MDT to arrange medications and equipment.

Recommendations:

- Giving support that is person centred and holistic whilst remaining unobtrusive enabling the families to feel at ease and in control is core to the case and for future patients.
- ACU's offer a home from home environment which for this family was an enhanced alternative compared with a hospital or a nursing home away from Forres.
- Forres needs a local facility for end of life care including respite to allow patients to be closer to family and friends. The environment needs to be homely and central to the town for ease of access for all.
- Having a self-managing team without the traditional hierarchy allowed the team members on duty to make decisions that ensured a safe, appropriate and effective admission to the ACU's.
- Alternative therapies or non-medical approaches have their uses and may not be for everyone but having the option can often make a positive difference in end of life and palliative care.

Case study 4:

Situation

- Referral from G.P as current presentation very similar to previous which resulted in 10 day admission to DGH.
- Obese bedbound patient with signs of dehydration and urinary tract infection

Background

- Lives with wife who's registered blind
- Has large care package to support him at home
- Would rather not go to hospital unless absolutely necessary

Assessment

- Plan was to manage at home. FNCT would be in addition to existing package of care therefore more effective then admitting to ACU.
- Patient given intravenous fluids at home and monitored by nursing team.
- Bloods samples taken and reviewed to support treatment plan
- Medications review and temporary changes put in place to prevent further dehydration and complications.

Recommendations

- Total time for intervention 3 days with follow up bloods at day 3 and 12 post treatment
- FNCT are reactive and commenced treatment within 2 hours of referral. Patient showed signs of improvement within a few hours of treatment starting.
- Managing patients in their own homes can be labour intensive but reduce the risk of infection, admission costs, transport, and potential to lose care and allows patient to remain in familiar surroundings.
- If clinical assessment and practical skills training was delivered to community nursing teams the capacity to deliver this model of care would be greatly enhanced.

Case study 5

Situation

- Patient discharged to ACU from (DGH) following a 120 day admission.

Background

- Handover from the ward detailed that the patient was not able to manage independently and required assistance on the ward with stoma care, mobility and lacked motivation.
- Awaiting 4 times daily care on discharge for assistance with meals, personal care including showering.
- Also awaiting completion of new house as old property not suitable.
- Not seen his pet dog since admission to DGH
- In-patient in ACU for 5weeks and 4 days with tapered support at home from FNCT for a following 14 days.

Assessment

- On admission patient able to have his dog with him which really helped lift his mood and improve his motivation. Initially dog was taken home at night but latterly he stayed in apartment.
- After a few weeks patient started to walk dog out to courtyard.

- FNCT worked on supporting patient to become independent with meal preparation, drinks, medications and stoma care.
- After several weeks was independent with stoma care after changing type of stoma bags and addition of thickening granules to make it more manageable and prevent leakage overnight.
- Family very much involved and would take him out for meals and a change of scenery.
- By week 5 patient had become independent with most activities had gained weight. His mood was much more upbeat, he was more talkative and interactive.
- Discharged from ACU to home with FNCT supporting visiting, 3 times daily for 2 days, then twice daily for 8 days and then daily for 4 days.

Recommendations

- Creating an environment that enables a patient to be independent and take responsibility for their own care had a positive effect.
- Traditional care settings remove the ability to be independent and cause patients to become institutionalised for example, serving food and drinks to patients at their bed space, washing at the bed space and all at a time set by the staff due to their routine.
- Whilst labour intensive, the outcome for this patient was that he no longer requires any care and had regained his independence and confidence.
- It's the little things that matter to patients and having his dog present made a huge impact on his mental wellbeing.
- Family were able to visit easily including grandchildren as they could walk to the unit.
- To change how we deliver health and social care so that it becomes less task orientated requires having time to work with patients which is where long term gains will be made. This patient continues to remain independent. Without the ACU and FNCT approach to social and healthcare he would have now been in receipt of care in excess of 5 months.

Appendix F: FNCT Workforce Survey

The first staff questionnaire was completed by 7 of the 8 FNCT members during the week of 19-23 March 2018. The second was completed by 6 FNCT members in the week ending 29 October 2018.

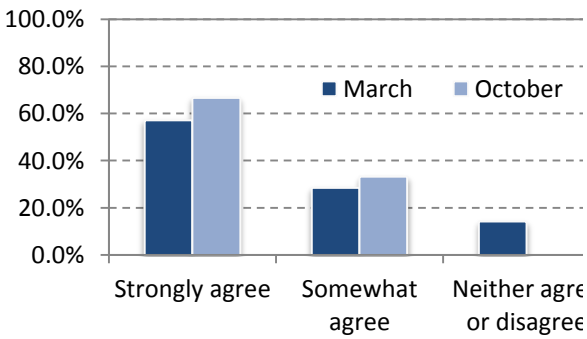
The results are as follows:

1. Employee Job Satisfaction

Staff were asked to tell us about their job and their experience as a FNCT member. The possible answers were; 'Strongly disagree', 'Somewhat disagree', 'Neither agree or disagree', 'Somewhat agree' or 'Strongly
agree'.

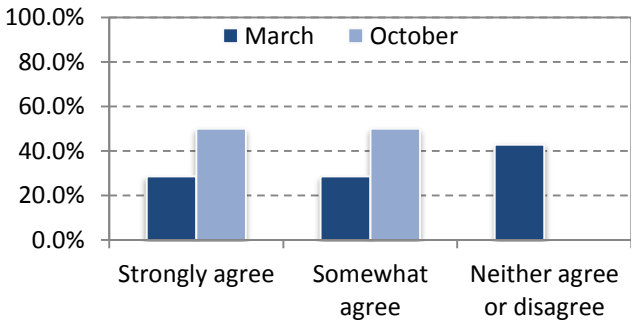
a) I feel encouraged to come up with new and better ways of doing things

	March		October	
Answer	**No.**	**%**	**No.**	**%**
Strongly agree	4	57.1 %	4	66.7%
Somewhat agree	2	28.6 %	2	33.3%
Neither agree or disagree	1	14.3 %	0	0.0%



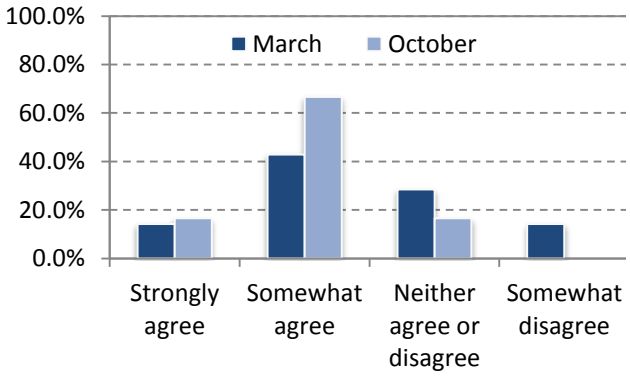
b) My work gives me a feeling of personal accomplishment

	March		October	
Answer	**No.**	**%**	**No.**	**%**
Strongly agree	2	28.6 %	3	50.0 %
Somewhat agree	2	28.6 %	3	50.0 %
Neither agree or disagree	3	42.9 %	0	0.0%



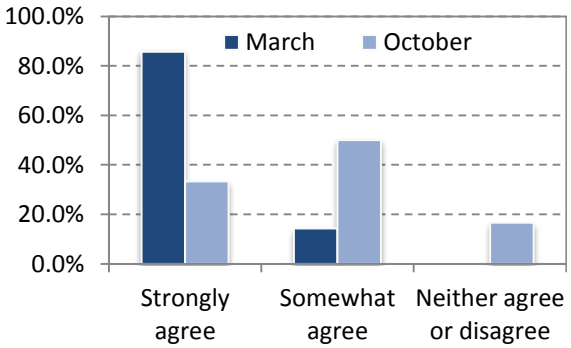
c) I have the tools and resources to do my job well

	March		October	
Answer	**No.**	**%**	**No.**	**%**
Strongly agree	1	14.3 %	1	16.7 %
Somewhat agree	3	42.9 %	4	66.7 %
Neither agree or disagree	2	28.6 %	1	16.7 %
Somewhat disagree	1	14.3 %	0	0.0%



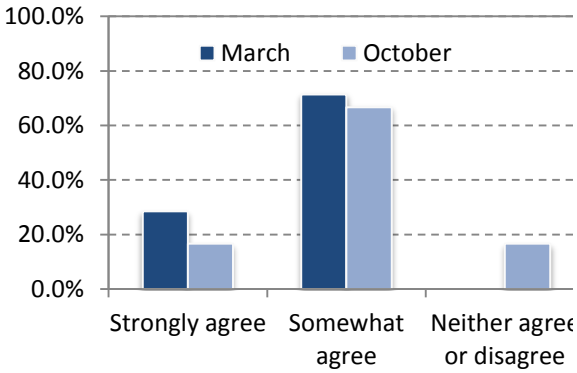
d) I understand my role in the teams

	March		October	
Answer	**No.**	**%**	**No.**	**%**
Strongly agree	6	85.7 %	2	33.3%
Somewhat agree	1	14.3 %	3	50.0%
Neither agree or disagree	0	0.0%	1	16.7%



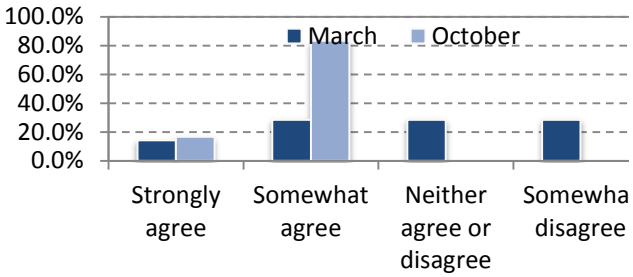
e) When a patient, carer or a family member has an issue, I can usually help support them with resolving it

	March		October	
Answer	**No.**	**%**	**No.**	**%**
Strongly agree	2	28.6 %	1	16.7%
Somewhat agree	5	71.4 %	4	66.7%
Neither agree or disagree	0	0.0%	1	16.7%



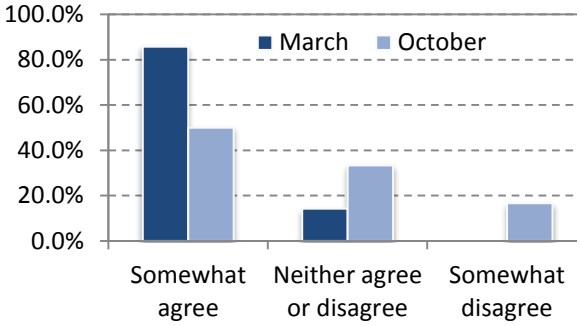
f) My job makes good use of my skills and abilities

	March		October	
Answer	**No.**	**%**	**No.**	**%**
Strongly agree	1	14.3 %	1	16.7 %
Somewhat agree	2	28.6 %	5	83.3 %
Neither agree or disagree	2	28.6 %	0	0.0%
Somewhat disagree	2	28.6 %	0	0.0%



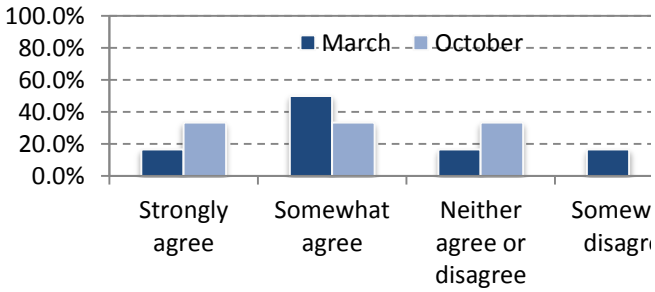
g) How satisfied are you with your involvement in decisions that affect your work?

	March		October	
Answer	**No.**	**%**	**No.**	**%**
Somewhat agree	6	85.7 %	3	50.0%
Neither agree or disagree	1	14.3 %	2	33.3%
Somewhat disagree	0	0.0%	1	16.7%



h) Considering everything, how satisfied are you with your job?

	March		October	
Answer	**No.**	**%**	**No.**	**%**
Strongly agree	1	16.7 %	2	33.3 %
Somewhat agree	3	50.0 %	2	33.3 %
Neither agree or disagree	1	16.7 %	2	33.3 %
Somewhat disagree	1	16.7 %	0	0.0%



There were 4 anonymous replies and 3 named replies to the March questionnaire and 6 anonymous replies to the October survey.

2. What is different about being a member of the FNCT compared to your previous nursing role?	
March	Nursing in community. Being involved in patient assessments
March	Very different, I'm not entirely sure if I know what my role is. In many ways I love the flexibility to be able to respond quickly to situations. Eg referrals or a change in a patients condition. However, I do worry and I an very concerned that there are times that our lack of formal care plan is highlighted when different members of the team dont seem to know what we are doing for our patients
March	In my last post I was in management as well as hands on in the ward and daily encountered challenges. With FNCT I have found that I have done more caring than nursing. This side of nursing is all part of the Buurtzog model of care, but I feel some aspects people involved in primary care in Forres have not been sure of our role but are slowly starting to change and are referring more nursing patients.
March	Feel like the nursing being carried out in current positions with FCNT is very basic. Have had time to 'learn' from Matthew Offer in means of assessments/ chests, etc. lone working out of hours – no real safety net for self safety not having some equipment at hand like previous jobs – iNR, bladder scanner, general stock having to be sourced from other areas – which isn't always easy to get and some local teams (nursing) doesn't always appear to be on board with the project – wanting social parts to the patients covered by FNCT but not wanting nursing (ie medications, syringe drivers) to be done by us?
March	First post since qualifying so cannot compare
March	More interaction with patients; better understanding of each individual patient and his/her circumstances. Less stressful; more family friendly; more responsibility. I also feel more comfortable and encouraged to ask questions
March	Much less paperwork and audits. I feel as thought I have time to get to know the patients and their families. I miss the ease of referral to MDT/Medics that was available in my last job. Encouraged my new role to 'learn and develop' and to think more. Change of management structure makes me feel empowered to do the 'right thing' for patients and their families. I feel that I have the freedom to choose how I fulfil my role in the best interest of service users. This could be sitting with a dying patient or doing a jigsaw. Very much outwith the traditional 'medical model.'
October	Previous nursing role was on a busy medical ward. A top down autocratic led unit where patients fit into the ward routine as is needed for their safe management. Very much based on a "medical model" – providing person centred care within busy time constraints. FNCT is much more "holistic" providing patient centred care. A democratic "nurse led" unit where nurses are given the opportunity to use aspects of the Buurtzog model. Our clinical lead encourages us to go on "study days." Of the core nursing values, the 6 c's – care, compassion, courage, communication, commitment and competence – the FNCT approach allows "courage" to flourish.
October	A completely different way of working, more patient focussed.
October	More autonomy and responsibility working with FNCT and less stress and a much more pleasant working environment.

2. What is different about being a member of the FNCT compared to your previous nursing role?	
October	All decisions made within the Team are discussed before decisions made. No managers so staff work well together. Staff feel well supported by each other and sickness levels are low.
October	In my previous role in Ward 7 at DGH I often felt that I was not able to spend enough time with some of my patients, I can in this role and I feel this means I am able to provide a higher quality of nursing care – more holistic and autonomous. We discharged patients from the ward without a clear idea of how they would manage at home because we never visited their homes, I feel that discharges from FNCT are a lot safer due to the ability to follow up with home visits. I am more involved in decision making about the patients care, planning and discharge.
October	Having a greater degree of autonomy. Staff support each other well, great Team to work with despite lack of staff, 5 FTE rather than 11 FTE, sickness is minimal. Staff do their best to accommodate duty shift changes for other Team members. Variety of work – changing demands. Staff think outside the box when considering solutions to patient needs.

3. What do you think are the benefits to the people who you have supported which perhaps might not have been realised through an orthodox nursing approach?	
March	When patients in Varis Court get to know them well holistically and this helps us prepare for discharge. Seeing patients at home and spending long periods of time with them helps to better understand their needs
March	Our ability to respond to their changing needs. Our holistic approach and the fact we can spend time with them and really get to know them
March	With patients being looked after by the FCNT, I feel the benefits are that we offer a more personal holistic approach, without rushing us in the care in a hospital. Also, most patients prefer to stay in their own environment with familiar surroundings and continue to be looked after by the carers that they know, and with it being a small team can build a good relationship and trust
March	Enabling people to stay at home rather than admitted to hospital admitted to flat its like a home setting – partners can stay, visitors anytime etc
March	Enabling patients, empowering them to do as much for themselves as possible and enabling them to stay at home/in flats rather than being admitted to hospital
March	Some have been supported in the comfort of their own home with their family around which reduced any extra stress or anxiety they may have felt if they had been in a clinical hospital environment. Those that have been supported as in patients in the flats were able to recover and rehabilitate in an environment as close to their own home as possible. Also feel patients receive mores holistic and person centred care with FNCT in comparison to more orthodox nursing approaches

3. What do you think are the benefits to the people who you have supported which perhaps might not have been realised through an orthodox nursing approach?	
March	People have benefited from 24 hour nursing care and being able to be supported in their own community. By developing therapeutic relationships and looking at the 'whole picture' – social, physical, spiritual, psychological, and emotional needs - have been able to inspire hope and confidence. Allowing people and their families to feel truly listened to and respected. Some people I have supported have benefited from being signposted to clinical nurse specialists in order to address their concerns. They have benefited from being signposted to services that may help them.
October	One of the emerging overriding strengths of our project is the provision of a "half way house" close to home providing palliative end of life care. This has been very much appreciated by the families involved. Being able to die in a "home from home" is so much better than dying on a hospital ward, here relatives can stay in an environment that they can control. All the FNCT original staff have benefited from a 2 day palliative care course at Roxburgh House and this shows in the careful management of our patients. We have been encouraged to think "outside the box" using aspects of the Burtzog model to support our patients – very different to the medical model which is the basis of orthodox nursing. Patients have benefited from this approach giving nurses the "courage" to do what is in their best interests. Whether this be a trip up the town in a wheelchair for example or taking someone home from the flats who was clearly very unsettled to be there.
October	Increased flexibility particularly with palliative patients and their relatives. The Team can be both proactive and reactive.
October	We are able to support out patients better/more fully by supporting the family of the patients as well as especially in palliative cases. Our patients also tend to be more comfortable and relaxed as they are either in their own home or a home like environment if an "in patient" in the unit.
October	More holistic approach. Can spend time with patients and families and find out what their needs are.
October	For palliative patients a more peaceful setting with less background noise and personal space for their relatives. Having a room where relatives can stay, make meals, tea, coffee and come and go as they please. These benefits apply to all patients. Following the patient home after admission helps to prevent readmissions and failed discharges. Being able to spend more time with patients and families and tailor support specifically to them. The set up with the flats is a more appropriate environment for re-enabling and rehabilitation. The check visits we have carried out for GP's at weekends have prevented a lot of hospital admissions.

3. What do you think are the benefits to the people who you have supported which perhaps might not have been realised through an orthodox nursing approach?	
October	Flats – care in the community but with 24 hour nursing presence in same building enabling rapid responses to needs. End of life care – plenty of room in flat for relatives to stay. Patient/family led care, minimal intervention needed from other Teams needed as able to manage the whole by FNCT. Community – more holistic by being able to spend focussed time on the individual's needs of their specific circumstances. Nurses are able to be more effective so efficient and are patient benefits from focused time to resolve their issues. We can signpost and refer to number of agencies and spend time following up. The Team focus on reablement and encouraging independence by patients at home and in the flats.

4. What suggestions do you have for the improvement of FCNT?	
March	More ANP so we have cover at the weekends and night. Allow Band 5 ANP training. Have Band 2/3 to assist
March	More regular staff meetings to improve communication. Have formal teaching. Better feedback from management (what's happening in the wider MDT). Some sort of basic care planning so we can prove we are providing our patients with the very best care. Also a clear set of aims and objectives when a patient is accepted so that staff, ex patients and relatives know the general plan. Where does the FNT fit in? Are the Gps happy with the service we provide? Are Dns happy with the service we provide?
March	Closer ties with the Dns with shared knowledge and skills being utilised. More nursing based referrals rather than care. Regular in house training sessions. Named nurses with individual patients to oversee – access, OT, physio, referrals and discharges instigated from the first contact. Weekly meetings to discuss patients, workloads and support eachother in keeping on track.
March	More time to learn. Stone and Pecos access. Extra support. Regular team meetings.
March	The ability to order own supplies/ equipment. Better communication with the MDT. More staff
March	Skill mix – About 50% of work could be done by Band 2/3 and think they should be introduced to the team as I feel some members of staff resent doing a lot of personal care but I think this is very beneficial to the service users. Stock – FNCT need to get their act together. We are constantly trying to 'source' stuff. Need to do a weekly stock check and order and stay on top of this. Monthly meetings – Not sure these are valued as they have stopped but these are good for 'team building' and ironing out problems. OT/Physio – Could it be that we have our own OT/Physio to work with us as part of our team? Like Debbie Taylor does for SW. Medical input – Sometimes the day shift it is difficult to know whether to contact yourself or Duty Dr. Would be good to know when you are not available. Community Nursing Team – would be good if both FNCT and DN team had a more collaborative relationship
October	I think we have to look at the way we use our additional staff from Leanchoil. Sadly only 2 of the 6 HCA's from Leanchoil can drive, this has an impact on how they are deployed within the Team in what is also a "community based project." If all of them could drive our service could be greatly enhanced, providing much needed social support in the community.

4. What suggestions do you have for the improvement of FCNT?	
October	Improved working relationships with wider MDT (Physio/OT/SW/DN).
October	More teaching/training; more regular staff meetings.
October	There needs to be more structure with clear guidelines and procedures.The chance to be trained up to ANP level for assessments.
October	At the moment due to the recent closure of Leanchoil Hospital, staff/managers from peripheral hospitals – DGH/Raigmore seem to be trying to admit more patients who are not appropriate admissions to FNCT flats, seeing Varis Court as a replacement for Leanchoil which would completely change the aim of the project. Closer working relationships with Physio/OT/DN's, this has improved over the last year, but would help with rehabilitation. I think OT's sill be coming regularly on Monday/Tuesday but this hasn't happened yet.
October	Make permanent so staff will be attracted to fill vacant posts. Working more effectively with DN's to provide a better service – not being territorial.Matt to have freed up time to enable him to spend time developing Team's assessment skills – great when he's able to do so – learn a lot.If not some further formal courses to develop these assessment skills, eg – ANP modules.

5. Do you have any other additional comments you would like to make?	
March	Work like to work more alongside DNs and Community Nurses
March	I think we have an excellent team and I whole heartedly believe in the concept of buurtzog. But I worry that the Band 5 nursing staff are still searching to identify what is expected of them and dont know have to drive the project forwards. It feels like we are drifting along a bit. I think that by this stage we should have a clearer idea of how the project should be evolving for the better. How can we expect the Gps to know what our role is when the team seems confused and are not in agreement about what our role is?
March	If the project is to continue to either have adaptions done to these premises, ie wider doors, our own space etc, or possibly move somewhere more suitable ie the premises beside cameron court
March	Integrate DN and FCNT?
March	Not a suitable post for a newly qualified nurse as the team is not established enough to support a NQN. The team is still learning the skills needed for the role. Not enough support re education and training/ learning new skills.
March	I can honestly say I love my job working in FNCT. I feel we are provided a much needed service for the community. We all work really well together as a team. I do think we would benefit from more regular team meetings, however, to help improve communication. I would appreciate more clinical training and education as well. Matt is a good teacher but it would be nice if he had more time available to share his knowledge and experience
March	Not sure that the flats really work – would be a lot better with a better buzzer system to give patients and their families confidence that someone is there to assure it. Think that patients are very lonely in the flats. Have felt overwhelmed at times by some of the requests I have had – feeling 'out of my depth'. Also I have found it difficult to feel competent in the 'new skills' I have learned. Have found some aspects of this job deeply rewarding – these are when I have got to know patients and their families well and we have been on a journey and I have felt I have been able to truly support them

5. Do you have any other additional comments you would like to make?	
October	I have some concerns that the original Burtzog ethos of this pilot project is being lost. We were originally a “nurse led unit” with support from our clinical lead. Are senior management trying to make us the “new” Leanchoil?It all seems to be getting very political!I appreciate the support given to us by the Pitgaveny Team.My thinking is that the project is of benefit to the people of Forres.
October	I do enjoy being a member of FNCT and feel we provide a much needed service to the community.
October	At the moment due to the closure of Leanchoil the project seems to be changed, I feel that it would be a shame if FNCT became a replacement for Leanchoil as this was not the original purpose of the ACU and it is not set up to be a community hospital – long term patients/care home beds/hospital staff disabling rather than re-enabling patients. It would also be beneficial if all members of staff drive so that they could carry out community visits in surrounding areas. I realise that staff from Leanchoil had to be placed somewhere until a final decision has been made on hospital closure, but staff skill set does not really meet the needs of the FNCT and some staff member do not appear to want to adapt to a different way of working.
October	Since the closure of Leanchoil, I have found many referrals being made by Raigmore/DGH and peripheral hospitals who want FNCT to take patients because they are from Forres. They are very insistent and appear to be trying to make FNCT Leanchoil Hopsital because we have some beds but if we do just that we can’t do the community work which would be a big loss for the Forres community, but will also change the nature of the nurse role to a less interesting and varied one so I think less likely to attract staff in the future.

Appendix G: Interim Report Extract Application of the Buurtzorg Principles Evaluation (Dundee University)

Nic Beech, Stacey Bushfield, Brian Howieson and Graeme Martin

The School of Business
The University of Dundee

Analysis Summary

In general, there is understanding of the principles of Health and Social Care Integration (H&SCI) and the associated political agenda. Moreover, there is a great deal of investment from stakeholders with most expressing a desire to see this project work, especially given the current temporary closure of Leanchoil. Nevertheless, the interviews reflect different professional logics, career knowledge and how 'close' they were to the project (e.g. sequential models v. integrated models of care; direct involvement v more peripheral involvement; early v late involvement; and 'winners' v 'losers' from the change).

The pilot project was generally thought to be working (relatively) well, in that it provided a much-needed step-up and step-down facility for local service users and patients. The FNCT are engaged and working effectively across the community. Most interviewees agreed that patient care and safety as well as the wider patient experience were key measures of success. However, there was some uncertainty around what good outcomes 'look like' with some suggesting that outcomes (such as hospital admission rates) can be interpreted in many ways. To date, the benefits appear to be largely providing extended social care at the margins, beyond what is already provided. However, with the (potential) closure of Leanchoil, it is expected that the Varis Court accommodation and FNCT could potentially provide a more central care role within community care going forward.

The new arrangements/co-location had been extremely beneficial in integrating social care and raising their profile and voice. We suggest that this cohort may be more positive. There was, however, a feeling that allied health professionals (AHPs) (such as physiotherapists and occupational therapists) could be better integrated into the operational planning. There are also resource constraints here as these professionals are often stretched across wider community care and sometimes acute care.

A big challenge facing the Varis Court model is around communication with both GPs and Hospital Consultants around understanding the model, what is provided and what care the units can safely provide. Some caution was expressed around feeling confident to refer patients into this model. There was also a sense that it (Varis Court) had changed the way GPs worked in the area and they missed the certainty and autonomy they (GPs) had (previously) at Leanchoil and the benefits of a single site for planning.

There was also a suggestion by some that the model has not been tested to the full as it has until recently worked alongside Leanchoil and has been operating on a smaller scale and with a smaller number of trained nurses that was originally envisioned. Yet, others made a case for Varis Court to be no longer a 'pilot' study and for it to become fully embedded in the wider community care provision as this would provide more

certainty in terms of long-term planning and, of note, in helping with recruiting and maintaining their nurse cohort.

The suggestion the Varis Court model could be applied at multiple sites received mixed responses and was a concern for some participants with regard to the implications in terms of nurse resourcing and the workload planning of GPs and AHPs.

The sustainability of financing beds and supporting patients with appropriately trained staff was raised by several interviewees. This suggests that there is perhaps a need for a more holistic approach to costing for the initiative that takes into account both the economic and social costs and benefits provided.

Recommendations

- More extensive involvement of the clinical community.
- Greater thought be given to the criteria for evaluation — quantitative and qualitative — and how these criteria may change over time.
- Inter: develop further team working between all stakeholders (focusing on identity management and inter-professional working).
- Intra: further development of Buurtzorg and understanding if this less-medicalised model may enable a quicker flow through the integration of health and social care.
- Further thought will be required on next stage research — clarity will be required on operational objectives of this new approach and establishing what metrics are indicators of change.
- In terms of the health and social care system in Moray, this learning could then be beneficial in terms of continuous learning and the future redesign of services.

Appendix H: Snapshot analysis of admissions, length of stay and cost of admission

Key Points

- The Forres Neighbourhood Care Team (FNCT) is a team that provides in-patient and community nursing and medical care for acute and chronic conditions including end of life and respite, in the Forres locality area.
- Hospital admission data were available from March 2016 to July 2018 for 28 patients who were cared for by the FNCT between January 2018 and April 2018. All 28 patients had a hospital admission within the March 2016 – July 2018 time period.
- These data were analysed to explore any trends or patterns in the available data related to: number of admissions, length of stay, and therefore cost of admissions, before and after the introduction of the FNCT.
- The analysis indicated there were 42 admissions at a cost of £69,028 for the 28 patients included in the data set before introduction of the FNCT. There were 9 admissions at a cost of £5,357 in the data set after the introduction of the FNCT.
- Average length of stay for the 28 patients was 19 days before the introduction of the FNCT, and 7 days after the introduction of the FNCT.
- These data and analyses are subject to a number of important limitations including (but not limited to): unequal data collection length pre and post entry into the FNCT; data were collected from a sample of patients seen by the FNCT rather than all FNCT patients; the sample and data analysis was opportunistic and not part of a pre-defined analysis plan; and crucially, establishing causality with a before and after study design is difficult.
- Due to the data collection issues noted above, it is not possible to definitively conclude the FNCT has reduced admissions (and cost) from 42 admissions (£69,028) to 9 admissions (£5,327) or conclude length of stay has become shorter.
- However it does appear the 28 patients included in the opportunistic sample were associated with a material resource burden before entry into the FNCT (£69,028), and for the same group of patients the cost of admissions is now down to £5,327 for the period up to July 2018. Therefore, there is scope for resource/cost avoidance if the FNCT is able to limit the number of admissions these patients have over the coming months. Anecdotally, from the limited data available, there is also a suggestion that length of stay has decreased for these patients when considering length of stay after the introduction of the FNCT.
- While the analysis shows the potential for reduced resource use associated with the service, it should be borne in mind that there are costs associated with running the FNCT and these have not been factored into this analysis.

Introduction

The FNCT is a team that provides in-patient and community nursing and medical care for acute and chronic conditions including end of life and respite, in the Forres locality area. In terms of staffing, the FNCT is primarily made up of nursing staff who provide a 24 hour and 7 days a week service.

The FNCT aims to impact on patient care and experience through a number of channels including reducing hospital admissions, associated length of stay and therefore cost of admissions.

The purpose of this document is to explore any trends or patterns in the available data related to: number of admissions, cost, and length of stay, before and after the introduction of the FNCT in the Forres locality.

Patient population and data set

Patient records were available for a sample of 28 patients who were cared for by the FNCT between January 2018 and April 2018. The patient records included community health index (CHI) numbers which made it possible to obtain admission data (such as number of admissions and length of stay) for each patient, for the following time period: March 2016 to July 2018. The FNCT patient records also provided the date the patient was referred to FNCT, as well as the date the patient was discharged from the FNCT. The patient- specific referral date was used to separate the March 2016-July 2018 admission data into “before” and “after” entry into the FNCT.

It should be noted additional patient records were available for patients who entered into the FNCT between January 2018 and April 2018; however these patients were not included in the hospital admission analysis as they did not have a hospital admission in the March 2016 to July 2018 time period. In addition, the FNCT programme started receiving and discharging patients from around April 2017 and is currently still active. Therefore the patients included in the data set are very much a selected sample; for example they represent a selection of patients seen by the FNCT from January 2018 and April 2018 who had a hospital admission between March 2016 to July 2018 and therefore patterns in this group may not be representative of the broader group treated by FNCT.

Methods

To determine number of admissions in the sample of patients noted above, simple counts were undertaken of all admissions in the data set classified as “before FNCT”, and “after FNCT”. Similarly, average length of stay was calculated by determining the mean length of hospital admissions for those classified as “before FNCT” and “after FNCT”.

The cost of admissions was assessed by multiplying the length of a particular admission by the appropriate bed day cost. Using the same classification system as above, it was then possible to sum the cost of admission for all admissions categorised as “before FNCT”, and “after FNCT”.

In terms of the bed day costs, costs were taken from the ISD Scotland cost book reflecting 2016/17 prices and were specific to each hospital included in the data set (Dr Gray’s Hospital, Flemming Cottage Hospital, Stephen Cottage Hospital, and Leonchoil Hospital)[1]. A general medicine inpatient cost was applied to the Dr Gray’s admissions, however general medicine costs for the other hospitals were not available and therefore an all specialty cost relevant for each hospital was used instead. Emergency admissions to Dr Gray’s were costed on a cost per case basis as opposed to a cost per bed day due to the short length of stay associated with an emergency admission.

All costs were based on direct costs which included items such as medical and dental, nursing, pharmacy, Allied Health Professional (AHP), other direct care, and laboratory costs. Therefore costs associated with overheads (such as building costs) were omitted in order to generate more conservative cost estimates which may be seen as more representative of the economic value of changes in resource use where it is unlikely that, for example, an entire ward or facility could be closed as a result of an intervention .

Some admissions included in the data set recorded a length of stay of 0; however the analysis assumed a length of stay of 1 day in these instances under the assumption that some health care resource would be associated with the admission. In addition there were only 4 cases of this issue arising in the data set with 3 of these admissions being classified as emergency admissions.

Results

The key results are presented in the table below

Table 1: number, length of stay, and cost of admissions

Analysis	Before FNCT	After FNCT	Difference
Number of admissions	42	9	33
Average length of stay (days)	19	7	12
Cost of admissions (£)	69,028	5,347	63,681

Limitations

There are a number of important limitations with the analysis which are listed below

- The admission, length of stay and therefore cost data were based on a sample of patients who were discharged by the FNCT over a limited time period (January 2018 and April 2018). Therefore the analysis did not include all patients who would have entered the FNCT since the programme started around April 2017.
- The data sample and subsequent analysis is opportunistic as it was based on data available, and not a pre-defined analysis plan.
- Any interpretation of the data is limited by the small sample size of 28 patients.
- The data set included limited data for the after FNCT period. At most there was 7 months of data from January 2018 to July 2018.
- Some patients who were referred to FNCT in April 2018 will only have a few months of admission data until July 2018.
- Therefore the data set is significantly "skewed" against the before FNCT time period, due to the long data collection period (from March 2016 until January-April 2018 depending on when the patient was admitted to the FNCT), and relatively short after FNCT time period.
- The before and after FNCT periods are not directly comparable due to the different data collection length.
- Attributing the effect of any change in admissions, length of stay or cost to the FNCT is difficult due to the before and after study design. Patients may receive additional or new services/treatments outside the FNCT, within the "after FNCT" time period which may affect the results.
- The analysis may be considered a "snapshot" of admissions, length of stay and cost, as opposed to a comprehensive study from which definitive conclusions can be drawn about the resource use changes brought about by the introduction of the service.
- The analysis has only considered the possible resource changes arising from the introduction of this model of care and has not considered the cost to the NHS of providing the FNCT. As such, this is a limited type of economic analysis.
- By focusing only the patterns of admission as a possible benefit of FNCT, this analysis does not address other important aspects of service introduction such as quality of care or patient preference and satisfaction.

Discussion

Despite the limitations expressed above the analysis does highlight a material resource burden associated with the sample of patients who were seen by the FNCT (42 admissions at a cost of £69,028 before entry into the FNCT). For the same group of patients, the number and cost of cost of admissions is now down to 9 admissions and £5,347 respectively, for the period up to July 2018. Therefore, it appears there may be scope for significant resource/cost avoidance if the FNCT is able to limit the number of admissions these patients have over the coming months.

Further to this, the costs above are based on a sample of patients and not the "full FNCT" cohort, therefore costs associated with patients before entry into the FNCT could

be significantly larger if analysing data for all FNCT patients. This again supports a potential for cost avoidance if the FNCT can reduce admission or length of stay consistently across patients who enter the programme.

In terms of length of stay, the data does support a decrease in the average time spent in hospital for patients who were previously seen by the FNCT. However, it should be noted the length of stay data for the “after FNCT” period is based on only 9 admissions. In addition, it may be difficult to attribute the shortened length of stay directly to the FNCT (i.e. the service is facilitating earlier hospital discharge) as some of these patients may have been described as discharged from the FNCT by the time of their post FNCT admission.

Anecdotally, there was a suggestion from the data of a spike in admissions in the few months prior to entry in the FNCT, with the number of admissions reducing in the period following referral to the FNCT programme. However further data collection and analysis is required to establish this trend.

Conclusion

The analysis presented is a “snap shot” looking at the number of admissions, length of stay, and cost of admissions for a sample of patients seen by the FNCT in January-April 2018. The analysis has a number of important limitations but prior to entry into the FNCT the estimated cost of admissions was £69,028 (42 admissions) and in the few months after entry into FNCT the cost was down to £5,347 (9 admissions). It appears there may be scope for significant resource/cost avoidance if the FNCT is able to limit the number of admissions these patients have over the coming months.

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References

1. ISD Scotland National Statistics (2017) “Costs_RO40_2017” http://www.isdscotland.org/Health-Topics/Finance/Costs/Detailed-Tables/Speciality-Costs/Acute-Medical.asp

Glossary of Terminology and Abbreviations

Term	Description
ACU's	An abbreviation for the Augmented Care Units. This refers to the beds commissioned by Health & Social Care Moray at Varis Court supported by a 24/7 Nursing Team.
AHP's	This is an abbreviation for 'Allied Health Professionals.' This is the collective term that covers Occupational Therapists, Podiatrists, Speech and Language Therapists, Physiotherapists.
Buurtzorg	Refers to the Dutch term for 'neighbourhood care' and focus on support for the holistic health and wellbeing needs of the patient
Commissioning	An approach to identifying a need and then securing a service. This can be in relation to the procurement of an internal or external service.
FAWN	Forres Area Wellness Network.
FNCT	An abbreviation for the Forres Neighbourhood Care Team. This is the Nursing Team that is based at Varis Court
ICT	Stands for Information Communication Technology.
Informal Carer	Refers to the unpaid role of someone who supports and cares for someone who is in poor health or has a learning disability. This is often a close family member.
iHub	Abbreviation for the Improvement Hub. iHub are part of HiS (see below).
HiS	Abbreviation for Health Improvement Scotland
Transformational Change	This refers to an initiative that reflects a completely new way of delivering a service. It contrasts to incremental change which is focused on smaller scale changes or improvements.
H&SCM	Abbreviation for Health & Social Care Moray. This is the organisation that brings together NHS Grampian and Moray Council Community Care Services in terms of the delivery of integrated health and social care services for adults in the local area.
MDT	An abbreviation for Multi-Disciplinary Team. Refers to a group of different health and social care professionals working towards a common goal.
MIJB	Abbreviation for the Integration Joint Board. This is the high level governance group that determines the strategy and budget for H&SCM.
Palliative	Refers to the process of dying. This can however be over a long period of time, sometimes years.
Personal Outcomes	Refers to the impact and difference a health and/or social care intervention has on an individual's life.
Re-ablement	Refers to a short term health and social care intervention (usually no more than 6 weeks) that aims to increase an individual's independence through re-learning skills of daily living.
Respite	This refers to support for an informal carer which provides a break from their caring role. This sometimes means that the cared for person is looked after by a third party.
The Forres Locality	This refers to the group who have created this plan. See Appendix 1 for a list of the members of health, social care and

Professional Core Group	community representatives.

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