Airedale NHS
NHS Foundation Trust

Report to:	Board of Directors				
Date of Meeting:	30 April 2014				
Report Title:	Transform Programme Trust Board paper 2.				
Status:	**For information**	**Discussion**	**Assurance**	**Approval**	**Regulatory requirement**
Mark relevant box with X	x	x			
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Appendices (list if applicable):	Appendices 1-6 as part of the paper.				

Purpose of the Report

This paper builds on the one which came to the trust board in June 2013 and summarises the programme.
The purpose of the report is to

- Update on progress against aims and outcomes
- The value of the products and promoting their use
- Demonstrate the developed products and their effectiveness
- Discuss the findings and potential further improvements from planned developments
- Describe the next steps for integration and the arrangements for continuing the journey.

Key points for discussion

The key points for discussion are;

- The impact of the programme projects on hospital & health economy wide services
- The complexity of attempting to allocate costs and financial savings when the whole health and social care system has to be accounted for.
- The implications of the programme as part of the Patient Pathways and Flow Programme to maximize the benefits from the products produced

Recommendation

Action required by the Board of Directors

To note the achievements of the transform programme, understand the information and financial analysis is complicated and be confident that arrangements are in place for integration Right Care Programme.

Transform Programme
Trust Board paper 2

1 Introduction

Airedale NHSFT Transform Programme was initiated in the Autumn of 2011 in recognition that 'the traditional models of health provision must change and diversify in order to meet the needs of the local population' Ref 1

The vision for the programme is

Right Care, Right Place, First Time.

Joined up services to enable people to
regain and keep their optimal health, well-being and independence
and involve patients in decision making in ways which reflect
'Nothing about me, without me'

The purpose of the programme is to develop new pathways, services and products which align with the trust vision and strategy and empower the patient, provide them with choice and enable them to remain independent and active members of their local community.

The predicted outcomes of the programme are

- Reducing attendances at A&E
- Reducing inpatient admissions
- Reducing length of stay in hospital
- Reducing re admissions
- Increasing the number of people who receive intermediate care in community
- Improving the co-ordination and quality of care
- Improving independence and self care
- Improving patients experience of care
- More people dying in the location of choice.

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- Demonstrate the developed products and their effectiveness
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2 National context

National policy has supported the concept of shifting care from hospitals into community settings since the publication of Transforming Community Services, Ambition, Action, Achievement in 2008, (ref 2). The evidence base for the effectiveness of community developments in reducing hospital admissions and length of stay is incomplete and in some cases inconclusive, but is growing (ref 3). This latest Kings fund review says that the evidence suggests caution against assuming a large impact from locality based services on the use of hospital care. However, it also predicts that a combination of approaches is likely to produce a significant impact on admission rates.

The evidence base for integrated care reducing the need for hospital care is also inconclusive, (ref 4), but shows that it improves patient and carer experience and the co-ordination of care. This is likely to bring about efficiencies in service delivery, improve patient outcomes and reduce the cost of care. Bradford and Airedale applied to be one of the test sites as a pioneer for integrated services in the national programme in October 2013. Although getting through to the final round this bid was not successful. However, the work up of the bid was beneficial in developing a shared vision for integration between the partners in the local area and the principles developed are being used to continue the integration for adult services programme mentioned later in this paper.

Limited funding for transformation has been made available through the Integration Transformation Fund and the trust has been successful in securing this funding for some of the projects outlined in this paper. This fund has recently been renamed the Better Care Fund and will still offer local opportunity to bid for resources to implement change.

One of the national and local drivers for change has been the reduction in resources available for both statutory and voluntary organisations. The need to reduce expenditure and improve outcomes for service users, although difficult to implement, had been an important stimulant in the transform process. It also presents challenges between organisations as financial incentives do not always align to transform and the need to deliver individual cost improvement programmes is still paramount in all partner organisations.

3. Local context

The programme was established following the transfer of community services to the trust in April 2011. Part of the bidding process had involved identification of service developments which would provide alternatives to hospital admissions and support early discharge. The transform programme built on this proposal.

Although initiated by Airedale NHS Foundation Trust the vision for transformation was whole system in recognition of the complexity of pathways between provider organisations and the need to involve commissioners in decision making from the start. Changing processes which were well established over many years with interdependent organisations and expectations of the population embedded in current practices was always going to be a challenge. The Transforming Community Services chart from October 2011 in appendix 1 Identifies the number of potential partners, the complexity of the system and the degree of ambition. Not all possible partners were directly involved in the programme but many were members of the four work streams facilitating a shared vision and generating buy in for transformation. The four work streams were

1 Specialist assessment and treatment
2 Reablement and intermediate care which developed to include community teams.
3 Long term conditions which developed to include self care.
4 End of Life

The infrastructure enablers for transforming patient pathways were also identified and include

- Rapid access to diagnostics services
- Telemedicine, telehealth and telecare
- Integrated teams using structured processes to personalise care
- Integrated IT
- Use of buildings for facilitating patient pathway flows and co locating teams
- Financial incentives for organisations to change pathways

- Cultural issues between professionals and organisations requiring organisational development programmes

People who could influence the enablers were also included in the programme work streams.

Then multi agency work streams were intended to be task and finish groups. The first phase was to design new pathways and products which transformed services, empowered patients in the decision making process and enabled them to live independent lives in their local community for as long as possible.

Keeping patients and service users at the centre of the pathways was important and patient and service user group representatives were on each work stream. A patient and public experience plan was developed in August 2012 ensuring involvement at all levels of the programme.

The work streams came together and identified new generic patient centred pathways which could be used in complex presentations rather than focusing on single clinical conditions. On each work stream there was representation from the Primary Care Trust which is now the Airedale, Wharfedale and Craven Clinical Commissioning Group (AW&C CCG). The developed pathways were then agreed in the joint Service Development Group with AW&C CCG.

The generic pathways are currently being used for guiding service developments ensuring they are transformational instead of more of the same. An example of this is the recent CCG lead multi agency events to redesign services for patients with dementia. The elements discussed were taken from the agreed generic long terms conditions pathway and ensure self care and the voluntary sector were involved and changes identified for improving service quality and reducing the need for hospital admission.

The funding to support the programme consisted of a full time programme manager for a year and then part time for the following 18 months from non recurrent funding. All the work stream leaders and members were doing this as part of their role with the exception of one consultant Programmed Activity (PA) identified for the development of the ambulatory care pathways. Support was also available for the pathways from the service development team and from the information and finance departments for the metrics, accounting and business planning. When considered against many programmes this is minimum funding for a programme with a scope of this size.

Funding for pathway implementation came through non recurrent funding from the CCG and continuation was dependent of successful evaluation. All the developments are now recurrent because they demonstrated their effectiveness as outlined in the original bids. These developments included:

Development	**Recurrent Expenditure**
1 Extending the scope and capacity of Airedale Collaborative Care Team	£321,000
2 Developing the Craven Collaborative Care Team*	SM£157,613
3 Ambulatory Care Unit and short stay beds	£806,000
4 Advanced Nurse Practitioners in Emergency Department	£100,000
5 Health information service	£42,000
Total	£1,426,613

**Note that the Craven CCT is funded by NY County Council and funding is only guaranteed until March 2015.*

The End of Life work stream and telemedicine service were successful in securing £420K over a period of 3 years to implement quality changes in conjunction with telemedicine in care homes and patients own homes. This work is progressing well and the Goldline 24 hour telephone link to the telemedicine hub for all registered End of Life patients in AW&C was launched in November 2013.

In April 2013 there was a launch event attended by 49 people from all participating organisations and patient representative groups. Each work stream leader presented their developed pathways and services and explained how they were going to be implemented in the next year.

A marketing plan for the pathways and services was developed and in October 2013 and a colour coded staff Directory of Services was launched with services clearly identified for community staff to prevent admission and hospital staff to facilitate discharge. This was initially on the trust Sharepoint site and in paper copies including laminated locality 'flashcards' which were developed to remind busy staff of the contact details of services local to the patients home address.

The Directory of Services was updated in March 2014 and, by popular staff request, expanded to include East Lancashire community services. This was relaunched with an emphasis on the electronic versions which are now also available on SystmOne. The introductory information for the DOS is in appendix 2 with an electronic link to the document.

The development of the supporting infra structure enablers has been crucial to the programme. Early in the programme they were identified as

- Information technology connectivity between local service providers in order to exchange information for planning, co-ordination and delivery of care
- The use of technology in patients own homes in the form of telemedeicine video conferencing, telemonitoring eg of blood pressure, and telecare to support a safe home environment.
- The use of buildings for collocating teams and services
- Rapid access to diagnostic services and test results
- The financial incentives for organisations to encourage change

In May 2012 the trust made the decision to transfer the outdated Patient Administration System to SystmOne and went live in November 2012. This is the information system used by the majority of GP practices in the local area so offered huge potential to connect for administration purposes but also for clinical information sharing and planning and co-ordination of care. Most AW&C GP practices are now on SystmOne with the last one transferring in April 2015. Bradford Metropolitan Council has also decided to transfer to SystmOne in 2015 which will improve connectivity between primary and secondary health care and social care with links across to social care in North Yorkshire through portals.

A review of pathology services and community diagnostics was completed and the results were encouraging because services were responsive and systems in place for rapid referral if required. Pathology already had a good electronic test results system but reporting for radiology could be a lengthy process unless referred under the fast track access for suspected cancer diagnosis. However, non recurrent funding was secured for the introduction of electronic reporting as in pathology and all plain X ray are now reported within 2 working days.

Pharmacy issues were identified as part of work streams and taken to the appropriate services in secondary and primary care. Some of the improvements came through the introduction of the electronic discharge summary to improve drug reconciliation although work on accuracy still continues. Some issues were resolved by introducing non medical prescribing and a limited stock of medicines for use in intermediate care. A Local Area Prescribing Group is currently being re established in order to provide a forum for solving prescribing and drug issues at a local level. Pharmacy problems can be complicated in terms of contracting with multiple providers but also from a safety and legal perspective. There is also an agreement to develop a shared formulary between secondary and primary care over the next year.

Although local decisions have been made on the enablers most of the complicated multi-agency work is preceding as part of the Bradford, Airedale and Wharfedale Integrated Care for Adults Programme.

The projects on this programme are

- Information management and technology project to map ICT architecture and produce a integrated ICT strategy to guide further developments and plans
- Development of a digital integrated care record for sharing assessments and care plans across service pathways including sharing information with patient and carers
- Mapping the use of estates across all sectors to produce a visual tool (SHAPE) so capacity and demand analysis can be performed and a schedule of Capital Development Schemes agreed so use of buildings can be optimised and savings released.
- Communications and engagement project ensuring staff across all organisations and patients and the public are involved with co-designing services ensuring high levels of commitment to the new ways of working and the service improvements across all sectors.
- Workforce and organisational development project for supporting staff in delivering the new ways of working. This plan is important for staff to think and act in different new ways which place patients at the centre of their services and support them to manage their own health and wellbeing.

4. Patient involvement and experience

All work streams had service user and/or voluntary services representatives in their meetings to bring their perspective into the discussions. The different groups had various ways of involving patients and carers in pathway and service development. Many involved the trust patient experience lead.

In June 2012, an event was held at the Central Hall in Keighley in conjunction with Bradford and Airedale LINK service to walk through the pathways from home to hospital and back out into community for patients with Long Term Conditions. This led to another event where patients met with staff from the Emergency Department where they described how it felt to arrive and go through the process on to a ward.

The intermediate care and community work stream used patient surveys to find out how service users were involved with the decision making about their care.

The End of Life work stream completed an extensive bereaved relatives' survey for families whose relatives had died in Airedale Hospital from July 2012. This showed some excellent care on the wards but also areas for improvement such as communication and choice about place of death. Both issues are part of the quality improvement project. There were also two focus groups for day therapy patients in partnership with Manorlands Hospice to find out

their experience on different parts of the pathway covering hospital, community and hospice care.

There were common themes from different surveys and events which include timely communication, inconsistency of information, waiting around not knowing why, and not being seen as a whole person. Plans have been made to close the gap between expectations and experience

5 Product evaluation

In appendix 3 the transform initiatives have been evaluated against their aims. These initiatives are;

1. Ambulatory care unit pathways (ACPs) and short stay beds
2. Telemedicine nursing and residential homes
3. Telemedicine in patients own homes
4. Extending the scope and capacity of Airedale Collaborative Care Team
5. Establishing Craven Collaborative Care Team
6. Formation of community teams for patients with complex needs
7. End of Life pathways and the Goldline
8. Advanced Nurse Practitioners in the Emergency Department.
9. Health Information Service and website
10. Information Technology architecture development (Directory of Services, ACPs, LTCs Care Plan, How too guide)

The financial information used in the evaluation is based on averages and used to illustrate some of the complexities of trying to evaluate the initiatives developed. It is meant to indicate some of the financial whole health economy savings rather than focus on Airedale NHSFT. It has been used as part of a discussion rather than an accurate reflection of the financial absolutes and may pose further questions.

The assumptions and values in the financial part of the evaluation are:

- The Emergency Department level 3 attendance of £214 has been used as the saving for an attendance avoided
- An average medical admission tariff of £1,992 has be used across all service as the saving for an admission avoided
- A cost per bed day was based on the average length of stay for an average medical admission being 5 days = £398 minus 25% overheads = £300 per day.
- All ambulatory care conditions have different tariffs so a medical condition average of £326 has been used as an indicative amount for an attendance on the Ambulatory Care Unit with a same day discharge
- The reduced short stay tariff is an average of £892 for a stay on ACU between 12 and 48 hours
- If short stay patients have to stay longer then 2 days then the average tariff is £2786
- All tariff prices exclude the emergency threshold adjustment.
- Budget line staff and non staff costs have been used without overheads so a true cost would inflate this by approximately 25% when comparing it with a tariff price which is inclusive of all allocated costs including facilities, human resources, finance etc.

Savings identified are to the health economy as a whole and mostly to the commissioner as pathways improve the patient experience and reduce the cost of care. New pathways require different funding streams and the trust has to ensure the service provided does not cost more than the income stream generated by the development.

Further work looking at the financial flows in and out of the trust before and after the initiatives is being modelled by the finance team.

6 Discussion

6.1 Ambulatory Care Unit and pathways

This initiative has completely changed the model of care for some patients who previously had to be admitted to hospital. It is the equivalent of day surgery for some medical patients and means they can go home the same day and maybe come back the following day instead of staying overnight.

It is more cost effective for the local health economy, as well as the Trust. Some complex patients may require additional support at home but many are mobile and can manage without additional services.

Ambulatory care pathways are being developed across all specialities including obstetrics and gynaecology and surgery and are also reducing admissions and length of hospital stay.

6.2 Telemedicine

Telemedicine in nursing home settings is proving to be both cost effective and an alternative for many patients who do not require hospital admission. Clinical advice is available to care home staff 24 hours a day which prevents the need for patients to attend the hospital but also improves the standards of care in community settings. It is saving money for the local health economy and has benefits for frail elderly patients in not having to travel to the hospital. Telemedicine n Nursing & Residential Homes has seen hospital admissions reduce by 35%, total bed days reduce by 59% & use of A&E reduce by 53% in this group of patients.
East Lancashire CCG have just commissioned a service involving an Advanced Nurse Practitioner assessing newly referred patients in Nursing Homes, developing a care plan to be delivered by the home, which is underpinned by Telemedicine.

Telemedicine in people's own homes appears to be less beneficial in saving money to the local health economy because each installation costs the same as in a single care home. Without doubt it is valued by the patients and carers because it offers reassurance but at a price.

Forty patients with Chronic Obstructive Airways Disease (COPD) and five patients with heart failure have a telemedicine box installed. This has prevented 13 Emergency Department attendances and 24 hospital admissions but was not enough to cover the costs of the boxes. It may also have helped to reduce length of stay for some patients.

When the hospital admissions for COPD (appendix 5) are analysed the number of patients admitted to hospital and their average length of stay has not reduced. The generic long term conditions pathway is currently being used to develop a clinical and social model of care to be used in conjunction with telemedicine and this will hopefully change the care for a larger number of people and start and affect hospital usage.

6.3 Collaborative Care Teams

Funding has been provided to increase the scope and capacity of intermediate care through the collaborative care teams. This service is now delivered across all localities in Airedale, Wharfedale and Craven.

There has been an increase in the numbers of patients both stepped up to prevent hospital admission and stepped down to reduce the length of hospital stay.

Both teams now provide community pathways for Deep Vein Thrombosis (DVT) and Cellulitis instead of hospital admission. In total they saw 484 on the DVT pathway and 133 on the cellulitis pathway (for the period April – December 2013).

The number of hospital admissions for DVT have not decreased, but the average length of stay has fallen from 13.6 in 2011-12, to 8.6 in 2012-13. However, the cellulitis hospital admissions have risen and the length of stay gone up from 9.48 to 11.1 days. (appendix 5).

Overall the collaborative care teams have reduced the number of hospital admissions and reduced the length of stay for patients stepped down from acute care. Both ACCT and CCT are significantly more cost effective than a hospital admission. Although the activity is collated in different currencies, financial data shows that the cost of a referral in these settings is between £155 and £645, whereas the cost of a length of stay in hospital (based on the average length of stay) is between £1,864 and £3,324. Castleberg Hospital also shows similar cost savings when compared to an admission.

6.4 Integrated Community Teams

The formation of the integrated community teams is still in an early stage but with plans in place to improve their efficiency and effectiveness by January 2015.

The early results from the multi disciplinary team meetings are promising in terms of preventing hospital admissions and escalations to intermediate care but there is potential for the new ways of working to extend to more people in the local population. Electronic tools are now in place to improve care planning and integrated team working so efficiency and effectiveness should increase over the next 9 months.

Analysing the cost and benefit equation for the integrated teams will be challenging because teams are composed of staff from all partner organisations including care navigators from the voluntary sector to direct patients towards self care options as their contribution to a shared plan. This may well increase referrals to an already stretched voluntary sector.

6.5 End of Life pathways

This work is progressing well with delivering the plan agreed as part of the Shared Purpose funding. The start of the Goldline access to the telemedicine hub 24 hours a day for end of life registered patients is starting to reduce the need to come to come to the emergency department and for admission to hospital. Work is underway to increase the numbers of patients on the register so more people have access to the Goldline, a comprehensive care plan and receive a service which meets the Gold Standards Framework for end of life care. This will reduce the need for hospital services and improve the experience for patients and their carers.

6.6 Advanced Nurse Practitioners in the Emergency Department

The pilots of this imitative have been very effective at turning patients round from the Emergency Department back into community settings. This saves hospital admissions but patients' often require community including intermediate care. This is better for patients and promotes independence and reablement as part of the pathway rather than waiting until hospital discharge. For some patients this is very beneficial and with increasing numbers having cognitive problems reduces the likelihood of requiring long term care.

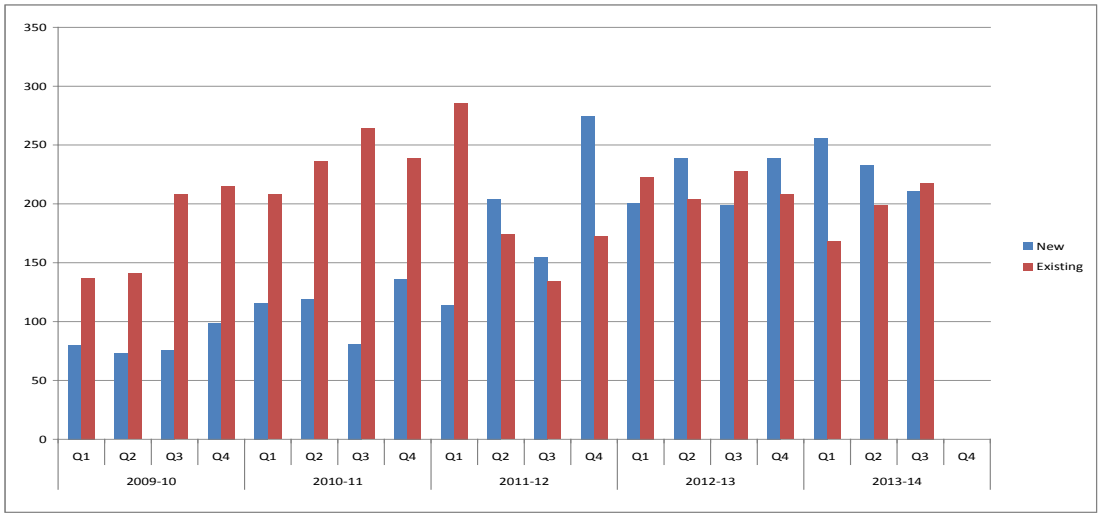
This initiative is part of the frail elderly pathway project which has developed a new pathway aiming to return vulnerable patients back into their local community with the support they need, to continue in their current home and prevent readmission to hospital.

6.7 Voluntary services

Voluntary services are essential to the new pathways and ways of working which are transforming care. Most are provided by national and local organisations funded by various statutory organisations. This funding is proving difficult to maintain in the current financial climate and is destabilising for service users and service providers.

Community pathways are now building the use of the voluntary services into care plans as part of the self care initiative. This is increasing referrals to voluntary services and they need to be considered when funding is allocated for new ways of working.

The graph below illustrates the increase in demand on carers resource from Airedale , Wharfedale and Craven residents over the last 4 years and is invaluable resource to support carers in their roles and reduce the need for statutory services.



Data from Carers Resource.

7 Transform programme evaluation matrices

The key question is are we stemming or turning the tide for ED attendances and admissions by making service changes in Airedale, Wharefdale and Craven?

National projects with funding for evaluation have found it difficult to prove causality between community developments and decreasing hospital activity. This paper is a simple analysis of local developments using information available to paint a picture of what might be happening.

The baseline year for the initial metrics was taken as year 2010-11. Maintaining data consistency across the years is a challenge with new ways of coding and accounting for activity changing to meet contracting needs.

The data matches the scope of the programme so relates to adults over 18years of age, who have an Airedale, Wharfedale or Craven General Practitioner. This can sometimes lead to confusion if compared with trends in the overall population who access Airedale General Hospital from neighbouring CCG areas.

Emergency Department attendances

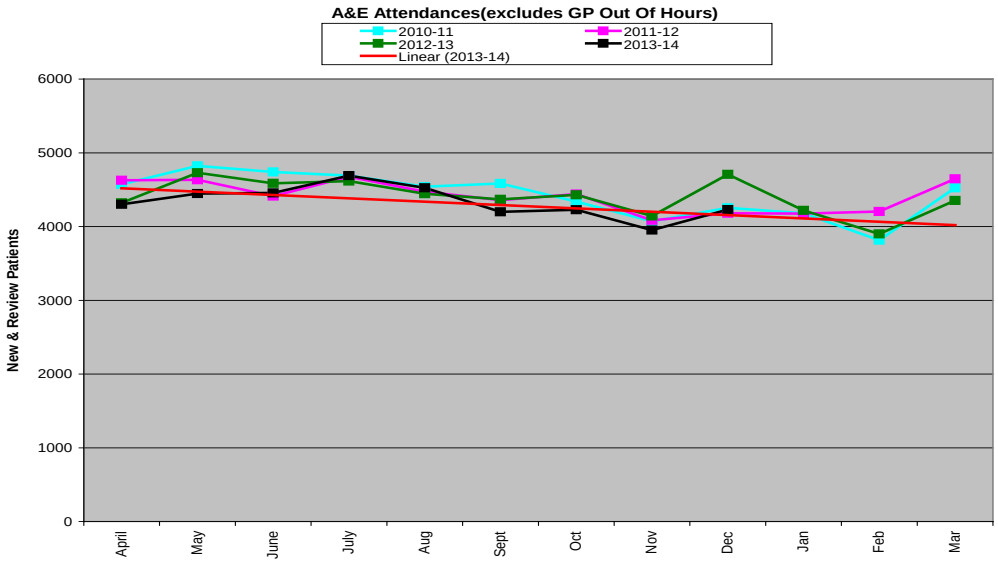


Figure 1 Emergency Department attendances

ED attendance decreased by 0.42% in 2011-12 and another 0.17% in 012-13. From the graph above then ED attendances in the 9 months to December 2012 they have been lower than last year for the same period and account for a 2.5 % decrease (1,320 patients) for the first 9 months of this financial year.

Non elective (emergency) admissions

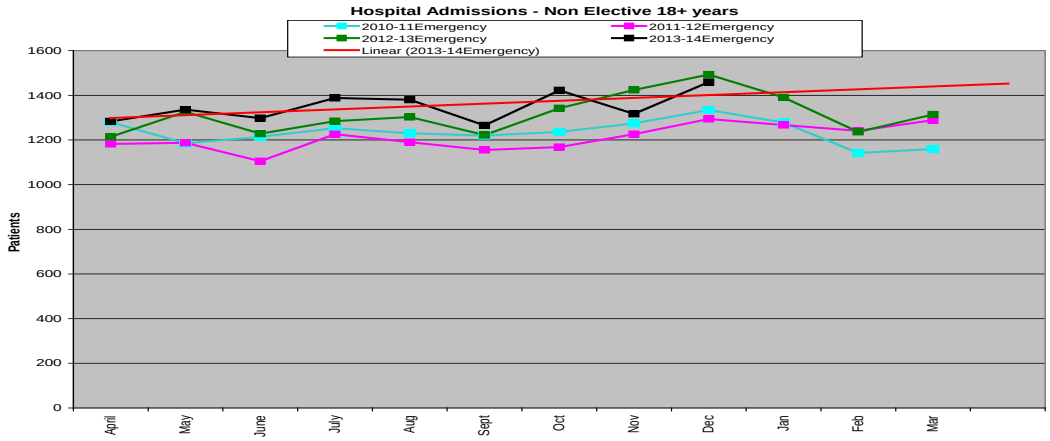


Figure 2 Non elective admissions data.

In figure 2 there was a 1.20% fall in the number of patients (178) admitted into hospital as emergencies in year 2011-12 from the previous year but a rise of 6.80% (1005 patients) the following year.

This year the non elective admissions are again consistently higher each month than in previous years until November and December 2013 when they dip below. This year to date there has been a 2.6% increase which is 312 patients. However, these figures include those who are admitted to the ambulatory care and other hospital services with an increasing

number being for under 24 hours. This activity is less expensive to provide and so reduces the cost of care in the local health economy.

Length of Stay

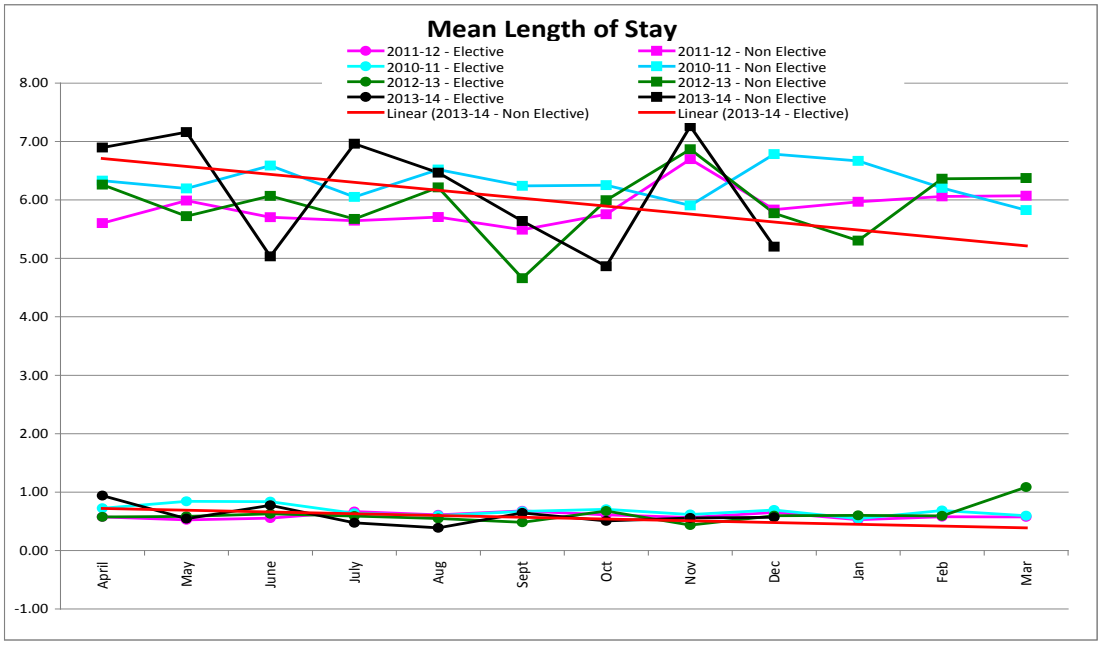


Figure 3 Mean length of stay (LOS) for non electives and electives respectively

The length of hospital stay for emergencies still fluctuates and shows a process which is not stable. The trajectory this year is down and this may reflect the increasing number of patients who stay for less than a day since the introduction of ambulatory care pathways. The LOS for electives is relatively stable and below the baseline.

Readmissions

Figure 4 Readmissions emergency and elective respectively.

Emergency to emergency readmissions although almost consistently lower than the base year are still higher than last year and this is a cause for concern. In November and December however they were significantly lower but there is nothing to suggest it is a trend. Elective to emergency readmissions are also higher than last year and the base line year too.

Deaths in hospital

These figures on the next page are for all adult deaths in AGH and are not only those on the End of Life Gold Standards Framework register with a recorded preferred place of death.

In 2011-12 the deaths in hospital reduced and this might be linked to reduced numbers of emergency admissions. However, this year the number of hospital deaths is 2.5% lower than last year for the same period even though admissions have increased. The Goldline for patients on the End of Life register was only launched in November so the effect of this on the figures has yet to be known.

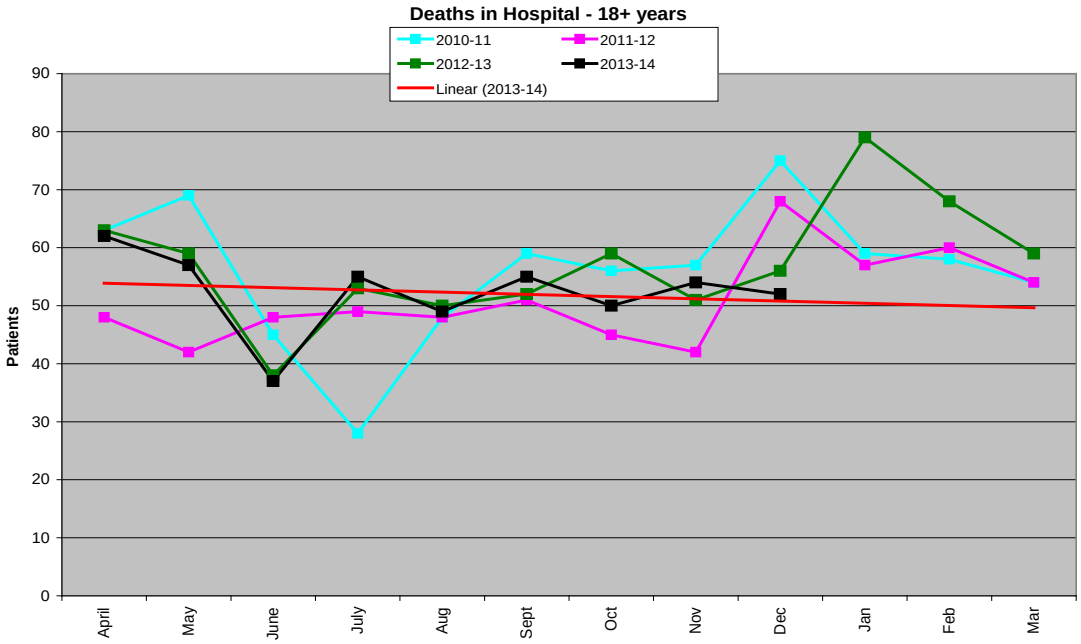


Figure 5 deaths in hospital

Intermediate Care activity

Intermediate care activity has increased each year over the transform period. This has achieved through increased funding and some from working more efficiently utilising generic workers as part of the teams. Craven Collaborative Care Team was established early in 2013 to mirror Airedale Collaborative Care Team in Craven and provide similar access to intermediate care services across the district.

Admissions to Intermediate Care	2010-11	2011-12	2012-13	April – Dec 2013
Step up care	773	989	1431	2,952
Step down care	218	405	480	384

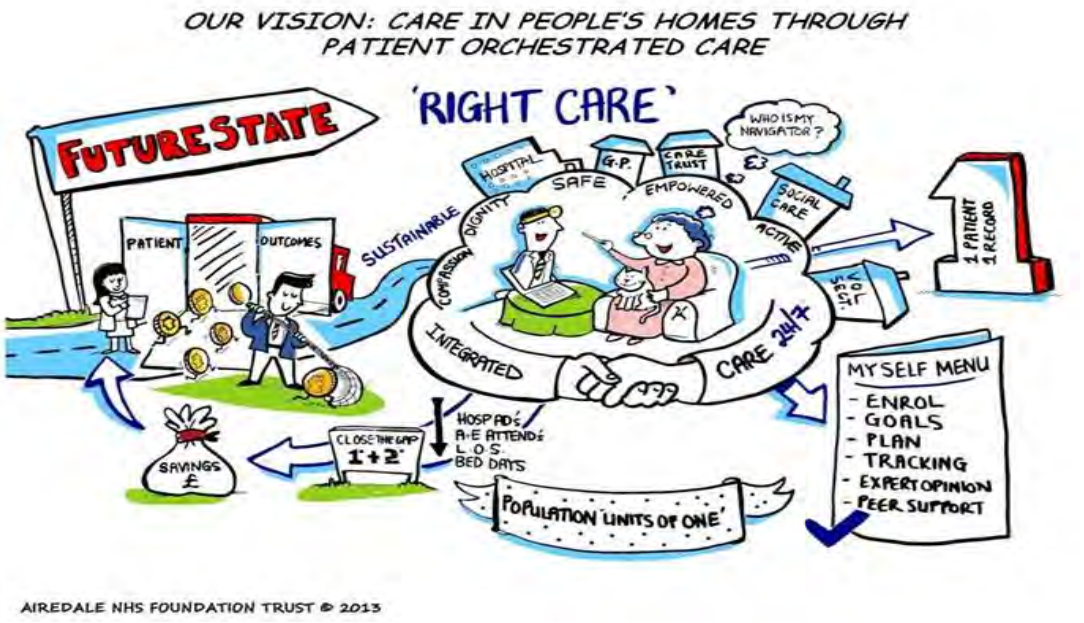
The first 9 months of this year again show a projected increase in intermediate care activity. Step down care is used to pull people out of hospital and provides a period of rehabilitation

for patients to give them more time and opportunity to return to their homes. Step up activity continues to increase and provides services which prevent hospital admission.

8 Next steps

From April 2014 the transform programme integrates with the Patient Pathways and Flow and Medicine and Surgery Outpatients Programme as part of the Right Care Portfolio. At the time of writing ambulatory care, intermediate care and community integration and the end of life work streams will feed directly into the Patient Pathways and Flow programme board and the self care and long term conditions into the outpatient project (appendix 6).

During the transform programme lifespan the local context has changed in terms of developing the vision for how services should look in the future. From an initial proposal by Airedale NHSFT there is now a shared vision across the health and social care economy which is pictured in the image below.



This illustrates the concept of the patient being seen as an individual at the centre of their health and social care which is integrated to meet their needs. An important change is that people are empowered to access help and support in ways which suit their personal circumstances rather than service providers controlling and deciding what is appropriate. Their care will be integrated and provided closer to home in ways which protect their dignity and utilize technology and community assets. People who access these services will find their experience improved when compared with more traditional models of care.

An internal transformation within ANHSFT is the establishment of the Medical & Integrated Care Group in Q1 2014-15. This will deliver care which is patient centric – right care, right place, first time & not focussed on the environment of care (hospital or community). It will promote integrated strategic planning, governance, workforce planning & service provision, supported by technology. It will seek to further partnership working & opportunities to offer the right care for our population. It will seek to further close the primary & secondary care gap. This is a natural transition on the journey to Transformation & Integration.
Funding has also been provided by NHS England for the Health & Social Care Economy to work with Oliver Wyman, an international consultancy firm with experience and expertise in health care system reforms. This project is at an early stage but builds on the local vision to develop ambitious new models of care. Part of this is utilising data on the local population needs, developing options for potential high level models for Airedale and then selection

based on the impact for the local community. The impact of these would include the clinical model, facilities and workforce implications, information technology requirements and financial models including incentives and investments required.

9 Summary

Although assuming changes to hospital activities are attributable to the transform programme cannot be made there are shifts in clinical activity for the population of Airedale, Wharfedale and Craven. These shifts include:

- Fewer Emergency Department attendances
- More hospital admissions seen and treated the same day
- Increased community activity replacing hospital attendance and admission
- Decreasing length of hospital stay
- Fewer local people dying in Airedale Hospital.

From the graphs it can be seen there are variations in performance month on month which reflect inconsistency in care but also the complexity of the system. When consistency is achieved these early outcomes can be expected to improve.

The scale of investment and service changes have been moderate in terms of developing community capacity and service redesign. This makes large shifts in activity difficult to achieve because of other factors affecting the demand on hospital services.

The Kings Fund (ref 3) state that 'Small incremental changes do not allow hospitals to make any significant adjustment in their cost base' and that 'where community services are cheaper than the inpatient equivalent , there may be an inflationary effect as overhead and other semi-fixed costs will remain stuck in the system'.

There may be a case for increasing the scale and pace of change but this requires different financial models and has major governance, workforce, information technology and facility implications, and may need a risk sharing agreement for all partner organisations in the local health economy.

References

1 Creating a Sustainable Local Health Economy.
Airedale NHSF Trust May 2011

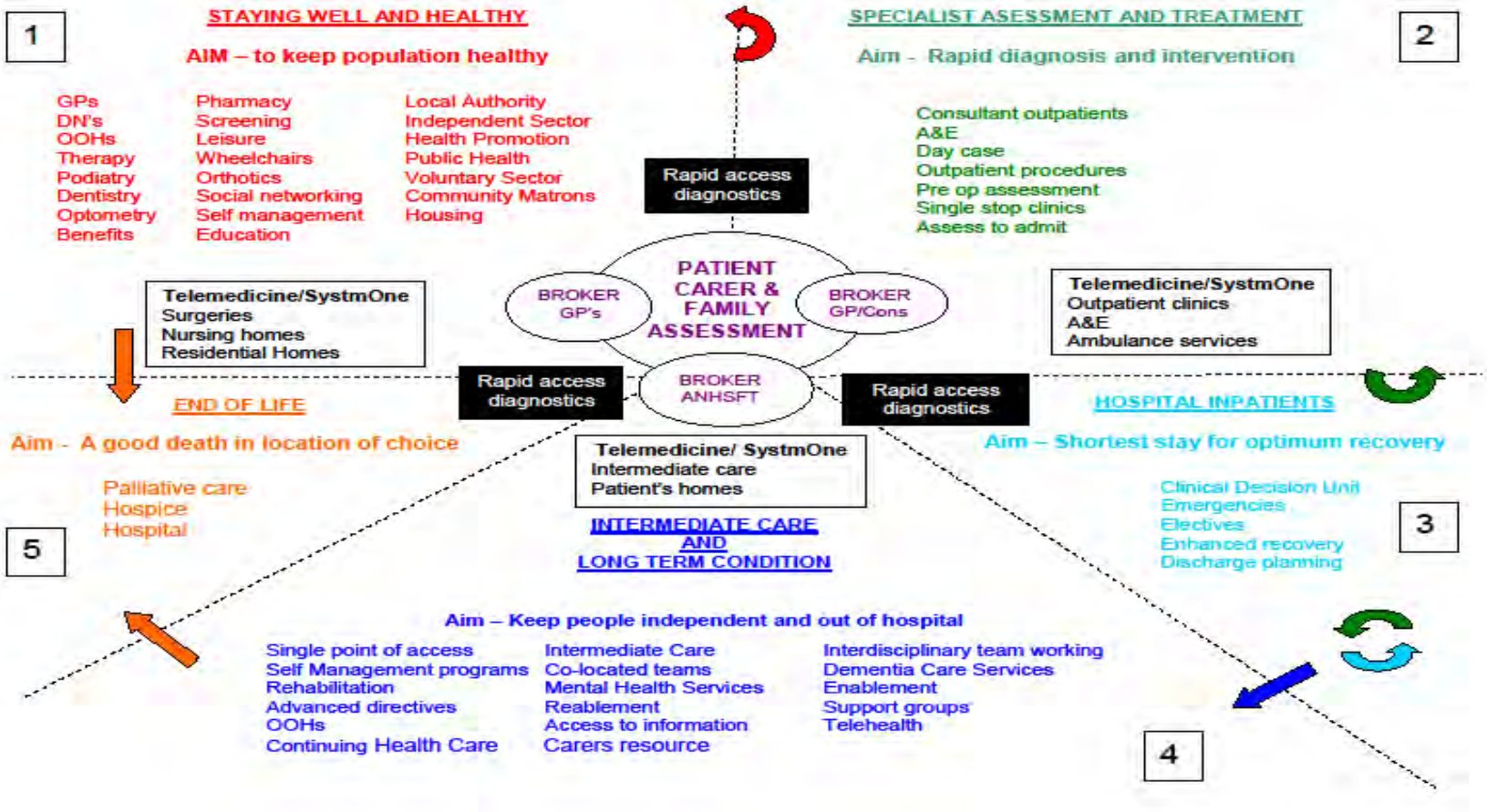
2 Transforming Community Services, Ambition, Action, Achievement
Department of Health 2008

3 Community Services. How they transform care.
Kings Fund Feb 2014

4 The evidence base for Integrated Care
Nuffield Trust October 2011

Appendix 1

Transforming Community Services - October 2011



Appendix 2

Directory of Services

Supporting Right care, Right place, First time.

The Directory of Services (DOS) has been enhanced to assist staff across health, social and voluntary services refer people to the right service, in the right place, first time, so they receive the right level of care for their assessed needs. It includes services in Airedale, Wharfedale, Craven and Pendle

The DOS provides an easy guide and access information for each service and staff are encouraged to consider services using:

It includes 2 pathways designed to help professional staff to plan care for:

- Patients in community requiring further assessment and/or support
- Inpatients awaiting discharge from acute hospital care

When choosing a service staff are asked to consider

- Where does the person live? Airedale, Wharfedale, Craven or Pendle?
- How urgent is the need? Not urgent (days) Urgent (hours) or Emergency (Immediate)
- It this person within one year of the end of life? If so gold services may be appropriate

For each locality there is an easy to carry ‘flashcard’ providing access information and a reminder of the local options. These include

- Primary care community services
- Intermediate care services
- Secondary care hospital services
- Social services
- Voluntary services
- Health information services

Those who know about it and take a moment to look have found it very useful.

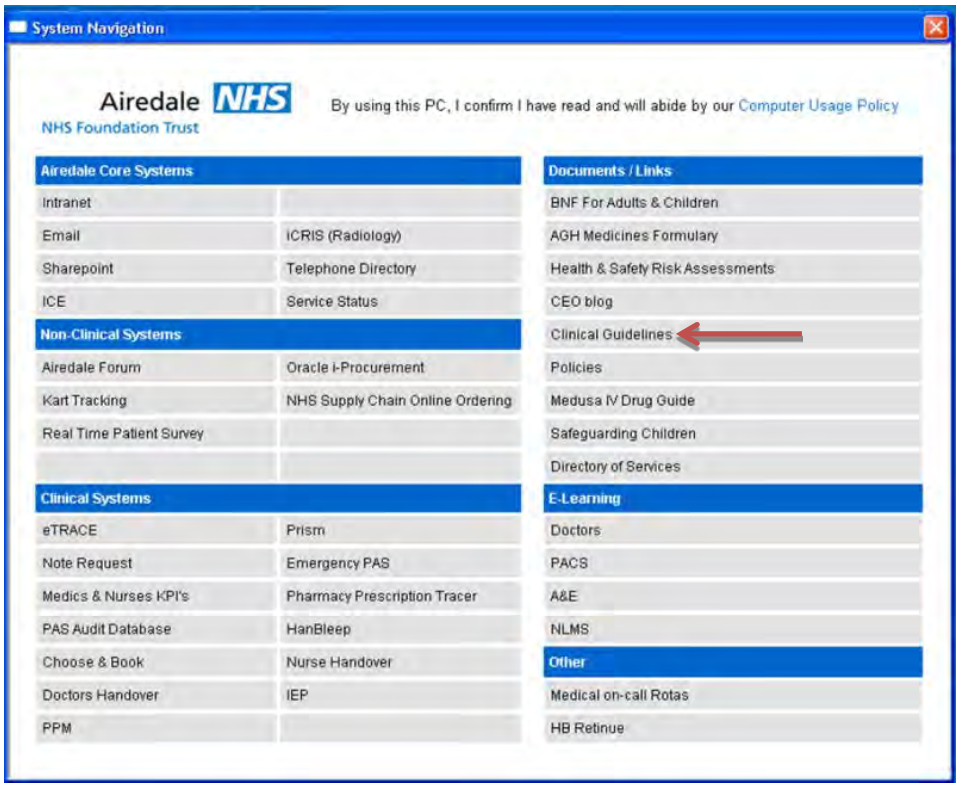
Please take one minute to look now and save time later

For how to access the Directory of Services Please Turn Over

1 The DOS is available on Airedale SystmOne and SharePoint

- On SystmOne, open the Clinical Tools menu and look for the Bookmarks section. This contains a folder containing links to the DOS and related documents.

- On SharePoint, follow this link http://sharepoint-srv2/C12/C8/Directory%20Of%20Services/default.aspx
  Or alternatively, trust staff can access this through the navigation menu found on the desktop:



This Directory of Services can be used as an interactive electronic document with active links.

Within each section you will find active links embedded within each area and by service colour.

When using the links with the electronic word document you will need to press ctrl on your keyboard and left click of your mouse to open the link.

Demonstrations

Please contact Helen Roberts on helene.roberts@anhst.nhs.uk to arrange a demonstration for your team. It only takes 10 minutes and can save time later.

Further developments are planned so watch out for new items and new links.

Appendix 3

Workstream products

1 Specialist assessment and treatment

- Generic pathway for ambulatory care and template for use on SystmOne
- Clinical Assessment Team (CAT) and ambulatory care centre established
- 17 Specific pathways developed to prevent hospital admission
- Development of a standard proforma for all pathways for use on Sharepoint and SystmOne
- Telemedicine into 31 Care homes in Airedale, Wharfedale and Craven
- Community diagnostics review completed and action plan implemented
- Electronic reporting of radiology results to GPs in 2 working days
- Electronic referral to radiology in the TPP SystmOne programme

2 Reablement and Intermediate care

- Increased capacity and scope of services with reablement funding
- Introduction of a Craven Collaborative Care Team (CCCT)
- Improved integration of intermediate care and local authority reablement schemes to increase independence
- Improved integrated working with A&E and Acute Medical Unit by Advanced Nurse Practitioners
- Development of 8 integrated community teams based on GP surgeries and implementation of integrated assessment and joint care planning tools.
- Active case finding through the use of risk stratification tools by GP Practices.
- Successful application for non recurrent funding to introduce voluntary services care navigators into each team to improve self care and social interaction
- Project plans in place for scale and pace development in 2014 for intermediate locality based care and integrated community teams.

3 Long Terms Conditions and self care

- Generic LTC pathway and model agreed with the CCG
- Telemedicine into 45 patients who have heart and respiratory problems in their own homes
- Improved integration of services for dementia patients and upgrading of the hospital environment for those who require admitting to hospital.
- Information specialist service and website with plan agreed to open a health information centre in the hospital instead of the library
- Development of Bradford and Airedale self care packs to support patients in managing their own long term conditions.
- Staff training for empowering patients through a health coach approach and initiate cultural change towards self care
- Clinical Commissioning Group events to test out a joint commissioning approach for people with dementia.

4 End Of Life

- Generic End Of Life pathway agreed with the CCG
- Shared Purpose bid funding on target for the agreed plan in year 1

- Staff training to raise difficult issues
- End of Life Register development and co-ordination
- Gold Standard Framework for End of Life Care being adopted across the health economy including GP practices and some care homes
- Implementation of the Goldline telephone central point for end of life registered patients so support and advice is available 24 hours a day from clinical staff via the telemedicine hub.
- Telemedicine units in some peoples homes to support carers in maintaining people in their preferred place of death

Appendix 4

Outcomes summaries of transform projects.

1 Ambulatory Care Unit and pathways and short stay Beds

Aims

- Triage GP admission calls and provide appropriate advice on alternatives to admission
- Increase the number of patients seen and treated and discharged the same day.
- Reduce the number of patients requiring admission to speciality inpatient beds
- Increase the number of ambulatory care pathways across all clinical specialities

Outcomes from April to December 2013

- 124 patients provided with advice for primary care management instead of admission
- 256 GP referred patients appropriate for ambulatory care instead of admission (discharged same day)
- 105 patients from the Emergency Department appropriate for ambulatory care
- A total of 444 patients seen as reduced short stay admissions
- A total of 207 patients seen as longer admissions
- Total of 1012 patients treated in ambulatory care centre

Costs	**Whole system efficiencies**
o Staff £604,500 for 9 months o Average cost per patient £597 (same day and short stay)	o 124 Hospital admissions avoided @ £1,992 o 361 patients seen on ambulatory care tariff at an average of £326 instead of an admission @ £1,992 o 444 patients were short stays @ £892 instead of an admission @ £1,992 o 207 patients were longer stays @ £2,786 and therefore did not provide any financial benefit.

Additional information/ analysis

- The 124 admissions avoided saved £247,008 over 9 months
- The 361 ambulatory care patients saved an average of £1,666 per patient and £601,426 in total over 9 months
- The 444 short stay patients saved an average of £1,100 per patient and £488,400 total over 9 months

The income for the ACU covered the costs assuming the tariff at 100%, however there is a marginal loss when the tariff threshold is applied: 361 ambulatory care patients @ £326 = £117,686

- 444 short stay patients @ £892 = £396,048 (£118,814 @ 30%) 207 longer stay patients @ £2,786 = £576,702 (£173,010 @30%) Total Average Income = £1,090,436 based on 100% income (reduced to £409,510 after the 70% reduction to the NEL tariff) There were 763 patients seen on ambulatory care pathways in other parts of the hospital e.g. obstetrics and gynaecology also making contributions to whole system efficiencies.

2 Telemedicine in Nursing and Residential Homes

Aims

- To reduce the number of unnecessary admissions and A&E attendances from nursing and residential care.
- Improved patient experience in accessing the advice and support needed to assist them to manage their own condition in their own residence
- Improved support for care workers in nursing and residential homes

Outcomes From April to December 2013

- Video conferencing equipment has now been installed into 31 nursing and residential care homes in Airedale, Wharfedale and Craven and the homes can acess the Telehealth Hub via video and gain advice and support on their condition from senior nurses and where necessary a Consultant.
- 228 telemedicine consultations in 9 months
- 42 Emergency Department attendances avoided
- 76 hospital admissions avoided
- Telehealth Hub working in an integrated way with ACCT, Community Matrons and GPs to ensure the right care is delivered at the right time.
- Patients needing hospital admission following a telemedicine consultation were managed through the system and admitted directly to Medical Assessment Unit. MAU are given advanced prior warning of the expected admission and full details of the patient's condition and their medical notes are prepared.
- Improved co-ordination and quality of care in community and patients experience of care by improving support to care staff

Costs

- £2,400 per year once installed = £ 55,800 over 9 months
- 228 clinical calls charged to the commissioner @ £78 = £17,784
- Total costs April to Dec 2013 is £73,584
- Unknown costs in community services for some patients

Whole system efficiencies

- 42 ED attendances avoided @ £214 = £8,988
- 76 hospital admissions avoided @ £1,992 = £151,392
- Decreased length of hospital stay for some
- Transport costs

Additional information/ analysis

- Tariff savings are £8,988 plus £151,392 making a total of £160,380
- Value for money equation = costs @£73,584 – tariff saving @ £160,380 = net gain of £86,796
- To cover the running costs of 31 units over 9 months then 28 admissions need to be avoided.
- This does not however cover the costs of running the hub but the calls are assumed to cover these costs (if a greater number are achieved by economy of scale from other installations.)

3 Telemedicine in peoples own homes

Aims

- To reduce the number of unnecessary admissions and ED attendances for Chronic Obstructive Airway Disease (COPD), heart failure and those patients at End of Life.
- Improved patient experience in accessing the advice and support needed to assist them in managing their condition and remaining in their place of residence

Outcomes from April to December 2013

- Video conferencing equipment was installed into 5 patients' own homes with Heart failure and 40 patients' own homes with COPD
- Patients are able to connect to the Telehealth Hub via video and gain advice and support on their condition from senior nurses and where necessary a Consultant.
- 13 Emergency Department visits avoided
- 24 hospital admissions avoided
- Reduction on hospital length of stay for those who were admitted
- Telehealth Hub working in an integrated way with ACCT, Community Matrons, GP to ensure the right care is delivered at the right time. This could be health or social care. This included records on SystmOne.
- Patients needing hospital admission following a telemedicine consultation are managed through the system and admitted directly to MAU. MAU are given advanced prior warning of the expected admission and full details of the patient's condition and their medical notes are prepared.

- Improved co-ordination and quality of care in community
- Helped patients manage their own conditions and regain independence
- Improved patients experience of care

Costs	**Whole system efficiencies**
o £200 per month per installation o Total April to December 2013 = £81,000 o Costs for installation and telemedicine hub staff to consult when patients dial in.	o 13 ED attendances avoided @ £214 = £2,782 o 24 hospital admissions avoided @ £1,992 = £47,808 o Transport costs o Some reductions in length of stay

Additional information/ analysis

- Value for money equation = costs @£81,000 – tariff saving @ £50,590 = net loss of £30,410
- To cover the running costs of 45 units over 9 months then 40 admissions need to be avoided.
- This does not include the costs of staffing the hub.

4 Extending scope and capacity of Airedale Collaborative Care Team

Aims

- Increase the advanced nurse practitioner capacity and scope of care in community settings
- Increase therapy, night care and carers support capacity
- Decrease intermediate beds by 6 and use capacity for more patients in their own homes
- Improve integration with A&E, ACC and social services reablement services
- Embed the Deep Vein Thrombosis and the Cellulitis pathway

Outcomes from April to December 2013

- 1554 patients through the ACCT team in 9 months
  - 1251 (80.5%) patients stepped up from community preventing hospital admission
  - 303 (19.5%) patients stepped down from hospital decreasing length of stay
- 355 patients were on the DVT pathway and 96 on the cellulitis pathway
- 113 patients were in intermediate care beds of which 79 patients (69.9%) were step down
- Delivered the integration with social care for patients to continue their rehabilitation
- Improved co-ordination and quality of care in community
- Helped patients manage their own conditions and regain independence
- Improved patients experience of care

Costs	**Whole System Efficiencies**
o The total cost for ACCT for the period April 2013-Jan 2014 is £1,136,597. o Total referrals 1,762. o Cost per referral £645	o £xxxx (intermediate care bed) o Assuming referrals to ACCT have resulted in the reduction of a hospital length of stay, the average length of stay cost is £1,992. o Cost per referral to ACCT £645. o Gross saving £2.4m (see notes below).

Additional information/ analysis

- The saving will be over inflated due to the fact that not every referral to ACCT will have resulted in a full length of stay saving. ACCT may come after the patient has already had a period of stay in the hospital. This analysis is not easily triangulated due to the way patients journey works. The table below shows the number of different pathways that a patient can go through that include ACCT as part of the journey:

Row Labels	Count of String
AE AMU BASE INT	30%
AE BASE INT	17%
GP AMU BASE INT	13%
AE AMU SSU BASE INT	10%
AE SAU BASE INT	10%
AE AMU INT	7%
AE AMU SSU INT	7%
OTHER BASE INT	3%
ELECTIVE BASE INT	3%
Grand Total	**100%**

KEY	
AE	A&E
AMU	Acute Medical Unit
BASE	Base Wards
DCU	Day Case Unit
ELECTIVE	Elective Admission
GP	GP Non Elective Admission
ICB	Intermediate Care Bed
INT	Intermediate Care Service
SAU	Surgical Assessment Unit
SSU	Short Stay Unit

Wherever there is a reference to 'Base' this means that the patient has already had a period of stay on a ward.

- Every day of reduced length of stay for step down patients saves the trust £300 against the tariff but the number of days is not known. A conservative estimate is an average of 7 days per patient £2,100. Although beds cannot be closed because of increased demand then a new patient under a new tariff is admitted.
- In January 4 beds were opened at Holmewood local authority home for delivering a shared model of care for people with dementia requiring intermediate care. This will reduce the need for hospital admission and contribute to decreasing the length of stay.

5 Establishing Craven Collaborative Care Team

Aims

- Increase scope and capacity of the fast response team to develop the Craven Collaborative Care Team
- Recruit a mental health worker, social worker, therapist and advanced nurse practitioner to enable interdisciplinary working similar to Airedale Collaborative Care Team
- Improve integrated working with social services Reablement Scheme (START)
- Launch cellulitis and DVT pathway

Outcomes from April to December 2013

- 1782 patients through the CCCT team in 9 months
- 1701 (95%) patients stepped up from community preventing hospital admission
- 81 (5%) patients stepped down from hospital decreasing length of stay
- 129 patients were on the DVT pathway and 37 on the cellulitis pathway
- Delivered the integration with social care for patients to continue their rehabilitation
- Improved co-ordination and quality of care in community
- Helped patients manage their own conditions and regain independence
- Improved patients experience of care

Costs from

- The total cost for CCT (for the Intermediate Care element of the service) for the period April 2013-Jan 2014 is £299,172.
- Total referrals 1,924.
- Cost per referral £155

Cost per CCCT patient

- Assuming referrals to CCT have resulted in the reduction of a hospital length of stay, the average length of stay cost is £1,992.
- Cost per referral to CCT £155.
- Gross saving £3.5m (see notes below).

Additional information/ analysis

- The saving will be over inflated due to the fact that not every referral to CCT will have resulted in a full length of stay saving. CCT may come after the patient has already had a period of stay in the hospital. This analysis is not easily triangulated due to the way patients journey works. The table

below shows the number of different pathways that a patient can go through that include ACCT as part of the journey:

Row Labels	Count of String
AE AMU SSU INT	24%
AE AMU BASE INT	24%
AE BASE INT	10%
AE AMU INT	8%
GP AMU BASE INT	6%
GP AMU INT	6%
ELECTIVE DCU BASE INT	6%
ELECTIVE ICB INT	4%
GP AMU BASE ICB INT	2%
HODU AMU INT	2%
GP SSU INT	2%
AE AMU SSU	2%
OTHER AMU BASE INT	2%
AE AMU SSU ICB INT	2%
GP SAU BASE INT	2%
Grand Total	**100%**

KEY	
AE	A&E
AMU	Acute Medical Unit
BASE	Base Wards
DCU	Day Case Unit
ELECTIVE	Elective Admission
GP	GP Non Elective Admission
ICB	Intermediate Care Bed
INT	Intermediate Care Service
SAU	Surgical Assessment Unit
SSU	Short Stay Unit

Wherever there is a reference to 'Base' this means that the patient has already had a period of stay on a ward.

- Every day of reduced length of stay for step down patients saves the trust £300 against the tariff but the number of days is not known.

6 Formation of Integrated Community Teams for patients with complex needs

Aims

- Maintain the independence of patients with long term conditions and complex needs in community settings
- Reduce the needs for hospital admission or escalation to intermediate care
- Reduce re admission following hospital discharge
- Reduce the need for home care services and admission to long term care

Outcomes From April 2013 to end of January 2014

- 139 new patients discussed in 49 multi disciplinary team meetings
- 39 admissions and 8 re admissions to hospital avoided
- 9 patients avoided long term care
- 8 patients were stepped up to home based intermediate care and 2 to intermediate care beds
- 16 required additional home care services
- Helped patients manage their own conditions and regain independence
- Improved patients experience of care

Costs from April to December 2013

Part of a block for some services
Unknown costs in community services for some patients

Whole system efficiencies

- 47 hospital admissions avoided @ £1,992 = £93,624
- Decreased length of hospital stay for some
- Transport costs

Additional information/ analysis

- This new initiative is complicated to analysis because it is a multi-agency project including General Practice.
- There are the costs of the staff to attend the meetings
- There are costs of service to support people in their own homes
- More work is underway to develop the outcomes of this initiative.
- Contributing services are funded and commissioned by several organisations.

7 End of Life Pathways and the Goldline

Aims

- Identify more patients who are at the end of their lives so care plans can be made and they have the opportunity to chose their preferred location to die
- Reduce the number of patients on end of life pathways who are admitted to hospital to die.
- Increase the number of patients who die in their preferred location.

Outcomes from January to December 2013

- 126 staff trained with core skills for having potentially difficult conversations with patients on distressing issues such as end of life pathways
- Average numbers of patients on the end of life register increasing every month with 217 at the end of February 2014
- Introduction of the Gold line for all end of life registered patients from November with patient's carer's making 67 initial contacts in the first 2 months.
- The top three interventions were
  - given advice 48 (including medication)
  - Referral to the district nursing service 22
  - General Practitioner visit required 22
- 13 hospital admissions avoided
- 9 Emergency Department attendances avoided.
- For 20 patients appropriate admission to hospital was arranged.
- Improved co-ordination and quality of care
- Improved patients experience of care

Costs

- Part usage of the 24 hour telemedicine hub staffing
- Complicated as part of commissioned multi agency contracts
- Unknown costs in community services for some patients

Whole system efficiencies

- 9 ED attendances avoided @ £214 = £1926
- 13 hospital admissions avoided @ £1,992 = £25,896
- Transport costs

Additional information/ analysis

- With a population the size of Airedale and Wharfedale and Craven a total of 1200 people can be expected the be within one year of life at any one time
- The advent of the end of life register means that more meaningful data is now being reported including diagnosis and preferred and actual place of death

8 Advanced Nurse Practitioners in the Emergency Department

Aims

- Provide assessment of patients with complex health and social care needs
- Facilitate co-ordinated discharges from the Emergency Department
- Reduce the number of hospital admissions

Outcomes from five sessions in December 2013

- 8 admissions to hospital avoided
- A further 2 not implemented because of lack of capacity in step up beds
- Improved co-ordination and quality of care
- Improved patients experience of care

Costs	**Whole system efficiencies**
5 sessions of ANP cost £628 in staff time. o Unknown costs in community services for some patients	• 8 hospital admissions avoided @ £1,992 = £15,936

Additional information/ analysis

- In 5 sessions the scheme saved at total of £15,308 (15,936-628) in hospital admissions
- Some patient however will have needed community services in order to go home safely.

These services will have been from a variety of providers similar to the community team initiatives and are difficult to cost

9 Health Information service and website

Aims

- Increase the numbers of people accessing the service by
  - relocating the drop in centre in the hospital
  - Participating in the First Contact Self Care enquiry scheme across Bradford, A,W&C
  - Working with Healthwatch and local libraries offering outreach sessions.
- Improve awareness of the service within the trust by through meetings with service managers and teams and distribution of printed material.
- Upgrade the Your Health Webpages as part of the new trust website and develop a health awareness and self care blog
- Develop information prescriptions supporting self care for people with long term conditions following successful implementation in cancer serves.

Outcomes from April to December 2013

- 76 direct access enquiries
- 13,590 page views of website
- 13,666 people accessing reliable health information for managing their own conditions

Costs

£34,041 for 9 months

Additional information/ analysis

- The information centre is now being re-sited on the top landing in the hospital where it can easily be accessed by patients and seen by staff to remind them to direct patients for reliable information.

10 Information Technology architecture development

Aims

- To improve the connectivity between information systems to support improvements in assessing patients needs, identification of shared care plan and co-ordinating the delivery of care.
- To provide staff across all care sectors in health and social care and the voluntary sector by providing rapid access to reliable resources to facilitate the care planning process and local community activities for people to promote healthy lifestyles and empower them to self care.
- To provide the general public with information technology solutions for accessing reliable information enabling them to make their own health and social care choices.

Outcomes across the time of the programme

- Start of a journey to integrate IT solutions across primary and secondary health care and local authority social care
- Electronic access for professions on Sharepoint and SystmOne for
  - ambulatory care pathways,
  - long terms and complex conditions pathway,
  - Directory of Services for community, intermediate and hospital services in local communities
  - Care planning tools
  - Staff guides on how to manage team meetings, use the risk assessment tools, and access community service data bases
- Staff pilots of mobile technology solutions across health and social care enabling access to information in community settings for care assessments and planning.
- Increased numbers of resources available to local people on line for finding services to meet their needs and empower them to stake small steps to improve their own health
  - Airedale Your Health webpages with links to national reliable sources
  - First Contact self referral service for support to find local services.
  - Development of community health maps which proved contacts for local services
  - National Self Care week promoted the use of these tools in Keighley and Skipton with over 500 people attending.

Costs

- The costs are not available because funding came from many sources to many different organisations

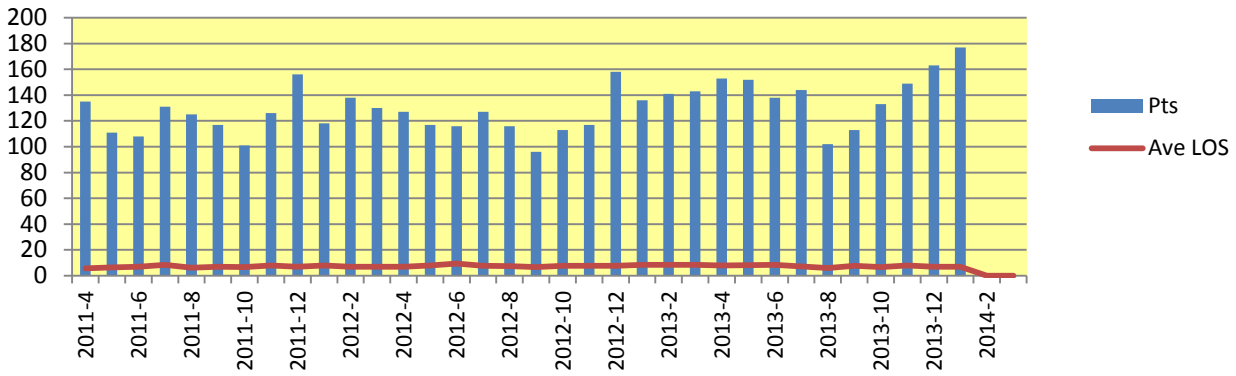
Whole system efficiencies

- The evidence of the effectiveness of these strategies across a whole system has yet to be demonstrated but is a recommended approach currently promoted by national policy

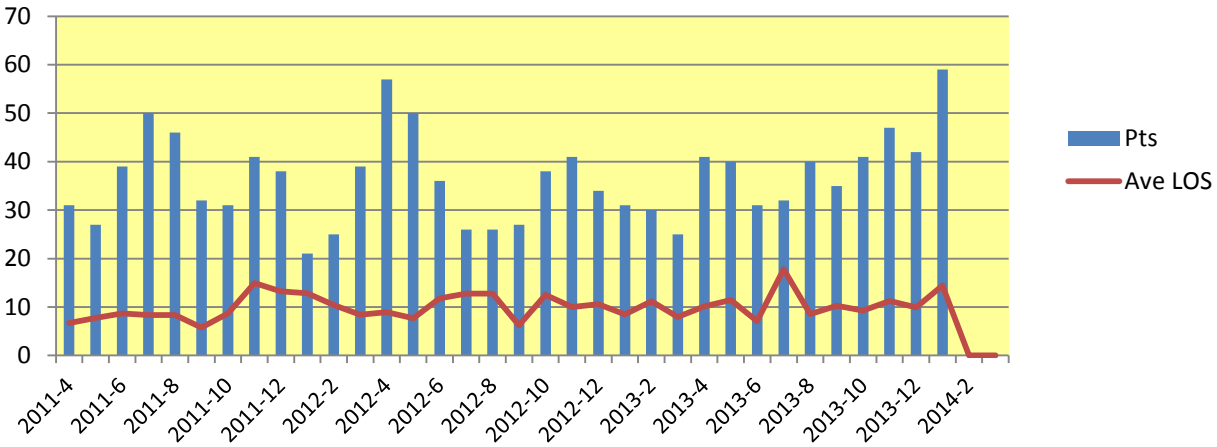
Additional information

- This work is continuing across Bradford, Airedale, Wharfedale and Craven under the Digital Care Programme

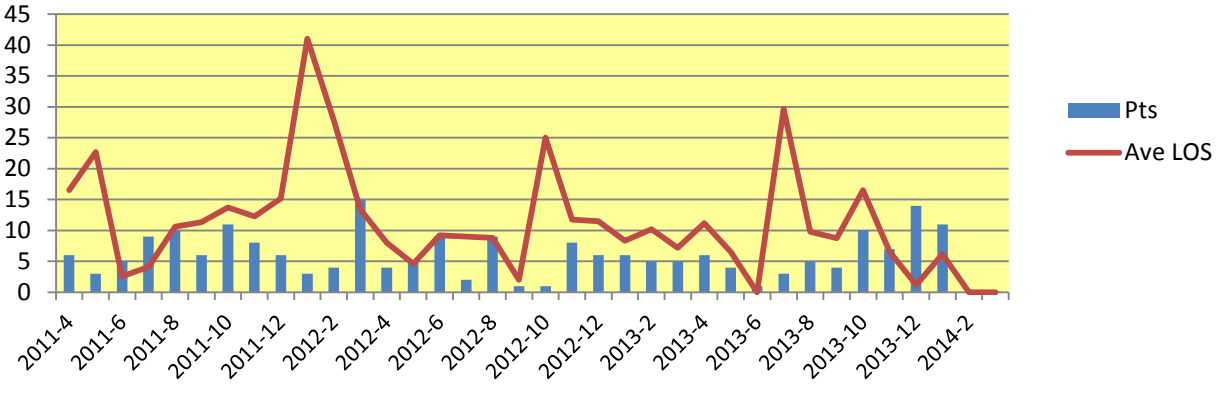
COPD - Number of pts and Average LOS



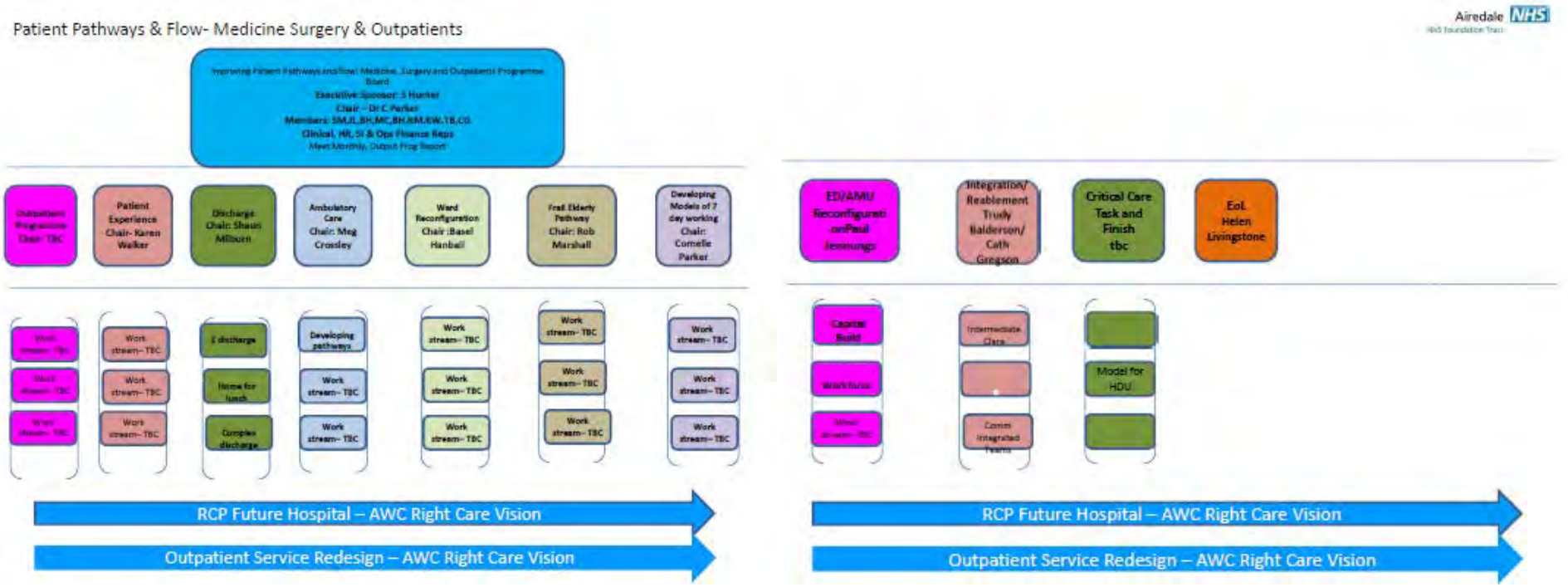
Cellulitis - Number of pts and Average LOS



DVT - Number of pts and Average LOS



Appendix 6


Patient Pathways & Flow- Medicine Surgery & Outpatients
Airedale NHS
Patient Experience Chair- Karen Walker
Discharge Chair: Shaun Milburn
Ambulatory Care Chair: Meg Crossley
Ward Reconfiguration Chair :Basel Hanbali
Frail Elderly Pathway Chair: Rob Marshall
Developing Models of 7 day working Chair: Comelle Parker
EDAMU Reconfiguration Paul Jennings
Integration/ Reablement Trudy Balderson/ Cath Gregson
Critical Care Task and Finish tbc
EoL Helen Livingstone
Work stream- TBC
Developing pathways
Home for lunch
Complex discharge
Capital Build
Model for HDU
RCP Future Hospital – AWC Right Care Vision
Outpatient Service Redesign – AWC Right Care Vision
RCP Future Hospital – AWC Right Care Vision
Outpatient Service Redesign – AWC Right Care Vision