

Supporting Information - Clinical Evidence

Based on developments in the Teignmouth and Dawlish area in 2015, the *Clinical Case for Change* for the rest of South Devon and Torbay was developed in 2016 by Dr David Greenwell who is a local GP and member of the CCG Governing Body. It was written to explain the new model of care and the reasons for the 2016 community services reconfiguration consultation. The *Case for Change* responds to The Five Year Forward View, the 2013 Keogh Report, local hospital acuity audits, 2014 National Audit of Intermediate care, Cochrane Systematic Reviews, The King's Fund reports, and the Devon County Council Health Overview and Scrutiny Committee Future of Community Hospitals task group 2012.

1. Changes in Teignmouth and Dawlish in 2015

Following the consultation in Teignmouth and Dawlish in 2015:

- The role of Dawlish Community Hospital ward was expanded to care for more acutely unwell patients, take more admissions from the health and wellbeing team and GPs across Teignmouth and Dawlish, and become a centre for care at the end of life, with a safer nursing model of two registered nurses on every shift. The ward is run by the local GP practice with weekday and Saturday ward rounds. This model allows the hospital to admit patients from their own homes who temporarily need a higher level of attention from nursing or medical staff. This often avoids the need for them to be admitted to Torbay Hospital, keeping them in the locality, nearer to home. In addition, it is used by the local GPs to investigate frail patients, for care at the end of life and for complex rehabilitation and discharge planning.
- The ground floor in Teignmouth Hospital was reconfigured and refurbished to create space for the health and wellbeing team which includes enhanced intermediate care and a voluntary sector information and support centre. There was also investment in more community nurses, therapists, social care and support staff.
- The reconfiguration meant that the health and wellbeing team were accommodated in one office space that helped social care, therapy, nursing, pharmacy and the voluntary sector all work together to support local patients.
- The medical beds in Teignmouth Community Hospital were moved to Newton Abbot Community Hospital in 2016 due to staffing shortages and the desire to prepare for the rehabilitation beds.

- A physiotherapist consultant on the Stroke Unit in Newton Abbot Hospital worked with local clinicians to create a specification for how a rehabilitation unit would be structured, staffed and supported, with costings for the existing ward to be converted. The building works were due to be in phase 2 of the conversion of Teignmouth Community Hospital.
- The local GPs remained employed for their time by Torbay and South Devon NHS Foundation Trust and attended the daily enhanced intermediate care meetings.

Overall, this created an environment in Teignmouth Community Hospital with improved communication and coordination among the different professions within the locality from which the needs of the vulnerable and older population could be effectively supported. The sharing of space led to decreased duplication, and improved flow between members of the team, enabling the appropriate team member to attend a person in need and intervene without delay. This sharing is both powerful and highly effective and ensures that staff are able to work in an integrated manner irrespective of profession or employer (for example Devon County Council social care staff, voluntary sector staff or NHS staff).

Dr Liz Tough (clinical lead physiotherapist) says that *“working under the same roof as the GPs should allow patients a better experience of joined up care between their GP and allied health professionals; it should give both GPs and musculo-skeletal physiotherapists a better understanding of each other’s’ role especially around the single point of access and onward referral into secondary care. It would also be great to collaborate on training opportunities and service development ideas around health and fitness.”*

2. South West Clinical Senate

The model of care now being proposed for Teignmouth and Dawlish is based on the new model of care which has not changed since the 2016 consultation. The 2016 consultation culminated in the development of health and wellbeing teams and health and wellbeing centres (including co-location with GPs) across the South Devon and Torbay footprint. The NHS England South West Clinical Senate reviewed and supported the model of care that was proposed in 2016 and subsequently adopted.

The South West Clinical Senate reviewed the South Devon and Torbay model of care in 2016 and members of the original clinical panel were subsequently convened in 2019 to undertake a desktop review and to consider the latest version of the Pre Consultation Business Case for proposals to services in the Teignmouth and Dawlish area (Appendix 5a). The panel was presented with the following questions:

- *Can the Clinical Senate be assured that the model being proposed for Teignmouth/the Coastal Locality is the same as the model reviewed in 2016 for other localities?*

Yes, the model they are using for Teignmouth and the Coastal locality is largely the same as that used for the other localities within South Devon.

The key components are very similar but with redistribution of activity to the remaining clinical hub. The proposal does include a clinical Hub, Health and Wellbeing Centre and Health and Wellbeing Team as well as Enhanced Intermediate Care.

The model for other localities did reference the Teignmouth model and the provision of rehab beds and in this sense the model has changed as the rehab beds proposed, but never implemented, are removed permanently, however the rationale for this is understood.

- *Can the Clinical Senate be assured that the 12 new rehabilitation beds originally proposed in the 2015 Consultation (which it did not input into at the time) are no longer required?*

It seems very clear that they do not need the 12 rehabilitation beds that were proposed for Teignmouth hospital in 2015, but which have never been implemented. The impact of the Integrated Care Team has reduced the need for beds despite the demographic and demand.

- *Can the Clinical Senate confirm that the relocation of services out of Teignmouth Community Hospital does not constitute a change in Service Model?*

The Clinical Senate is satisfied that the relocation of services out of the hospital does not constitute a change in the service model.

There is a change to the proposed service model that was originally consulted on as regards to the rehabilitation beds, however these were never operational due to the success of the EICT and therefore the actual service model is not being significantly changed.

Overall it is a variation in service capacity and location with reasonable justification.

3. Developing new ways of working with GP practices

The population of Teignmouth is changing, bringing an increase in demand on services due to ageing and a greater number of people living longer with multiple long-term conditions. In order to meet the demand, there needs to be a change in the delivery of primary care.

The NHS Long Term Plan describes the national situation facing primary care that is reflected in Teignmouth:

“Community health services and general practice face multiple challenges – with insufficient staff and capacity to meet rising patient need and complexity. GPs are retiring early and newly-qualified GPs are often working part-time.... Use of locum GPs has increased and there is a shortage of practice and district nurses. The traditional business model of the partnership is proving increasingly unattractive to early and mid-career GPs.”

The two practices are not flexible if they stay in separate and outdated buildings. Each practice has already made changes to their premises and has no more scope for improvement in terms of space or meeting accepted standards of access. Co-location of GPs with community services and the voluntary sector, in a new building, provides an exciting opportunity to implement new ways of working to meet the needs of the local population, This fits with the Devon system-wide strategy.

In order to meet the increased demand, there needs to be investment in the workforce. Both practices are involved in teaching, but their offer is limited by space. For the future sustainability of primary care, the workforce needs to be trained and developed in order to ensure staff are recruited and retained.

New infrastructure in terms of IT and buildings will support more flexibility in working approaches and the scope for better solutions for the future. The ability to improve direct communication between health, social care and the voluntary sector is essential for service delivery. This is further underpinned by shared IT systems already piloted and now fully embedded in the locality.

Data showing the impact of the introduction of the new model of care - and specifically the locality health and wellbeing team which is supported by both GP practices - demonstrate the efficacy of collaborative working, with fewer emergency admissions to Torbay Hospital. Greater collaboration between GP teams, the community health and social care workforce and voluntary sector must be developed to meet the needs of the population and the increase in demand. This will enable the locality to meet the commitment made in the NHS Long-Term Plan:

“More NHS community and intermediate health care packages will be delivered to support timely crisis care, with the ambition of freeing up over one million hospital bed days. Urgent response and recovery support will be delivered by flexible teams working across primary care and local hospitals, developed to meet local needs, including GPs, allied health professionals (AHPs), district nurses, mental health nurses, therapists and reablement teams. Extra recovery, reablement and rehabilitation support will wrap around core services to support people with the highest needs.

“The £4.5 billion of new investment will fund expanded community multidisciplinary teams aligned with new primary care networks based on neighbouring GP practices that work together typically covering 30-50,000 people. ... Expanded neighbourhood teams will comprise a range of staff such as GPs, pharmacists, district nurses, community geriatricians, dementia workers and AHPs such as physiotherapists and podiatrists/chiropractors, joined by social care and the voluntary sector. In many parts of the country, functions such as district nursing are already configured on network footprints and this will now become the required norm.”

4. Evaluation of Impact of Enhanced Intermediate Care Team

The integrated care model has been evaluated by Researchers in Residence (RiR) from the University of Plymouth, Dr Felix Gradinger and Dr Julia Elston. This involves a two-year mixed-method case study of the experience and impact of two part-time RiRs, embedded within an Integrated Care Organisation to support the implementation of new models of care. Information on this method of research can be found at Gradinger, F., Elston, J., Asthana, S., Martin, S. and Byng, R. (2019) Reflections on the Researcher-in-Residence model co-producing knowledge for action in an Integrated Care Organisation: a mixed methods case study using an impact survey and field notes, *Evidence & Policy*, vol 15, no 2, 197–215, DOI: 10.1332/174426419X15538508969850.

A presentation of their emerging themes was given at the International Conference for Integrated Care in April 2019 and can be seen in Appendix 5b and 5c and is summarised below.

The consultation of 2014-5 led to the creation of the award nominated and nationally recognised Coastal enhanced intermediate care team (EICT) based at Teignmouth Hospital as well as the highly efficient and high performing inpatient ward in Dawlish Hospital. With these services in place the local population can be supported without the need for dedicated rehabilitation beds.

The EICT, including local GPs, are able to provide rehabilitation, mainly in people's own homes or in short term residential or nursing home placements.

This had an immediate benefit to the EICT in terms of being able to support a greater acuity of person with GP support, and also resulted in an improved understanding of the role of the EICT by the GPs. This is reflected in the high GP referral rate to EICT in comparison with other localities.

There is a locality multidisciplinary team meeting daily to discuss those clients or patients at current high risk, requiring intervention from one or more sector. This includes reviewing people admitted to the acute hospital over the previous 24 hours so in-reach work can take place if appropriate. There is also a focus on end of life patients who are being supported at home. Teignmouth Hospital previously supported 12 inpatient beds, but the new model enables support of a population of 10,000 within the community setting.

The research has identified the outcomes of enhanced intermediate care as:

- Closer working has been achieved by the creation of the environment, embedding all parts of the team, including the voluntary sector in the same physical room. The multidisciplinary team meeting has access to all the IT systems used by all providers including community staff, social care, GP surgeries and the acute trust so can access all relevant patient information.

- A monthly strategic planning meeting chaired by the Locality GP brings all the agencies together to assess current activity against local dashboards and to plan the further expansion of the team to support a wider proportion of the population.
- The zone manager, covering both health and social care, is in a joint post created between the NHS and Devon County Council.
- By working in in a combined office space there has been a shift in culture, hugely improving understanding of each other's work roles and responsibilities. For example, the therapy, nursing and social care leads all understand each other's roles and responsibilities and are empowered to provide support, guidance and backup to members of the other agencies.
- A dedicated coordinator refers to any of agencies and the multidisciplinary team has access to all the local IT systems including nursing, social care, mental health, GP and the acute Trust.
- By working in this manner the outcomes for our patients have been changed as below:
 - We have the highest referral rate into and use of the EICT in the CCG, including social prescribing.
 - The lowest rate of bed days used per 1000 population over 70 in the CCG.
 - An estimated saving of over £200,000 in year by using the EICT instead of other agencies.
 - A 6% reduction in emergency admissions compared to a 3% CCG average increase with a 2% cost saving against a 7% CCG average increase.
 - We have recorded patient experience scores throughout the process with an average score of 66%.
- Staff work in a dynamic and positive environment, as a self-managed team. There is an ethos of patient centred care, problem solving and risk management. The multidisciplinary team meetings feel positive, energised and dynamic.
- Quality of care for Coastal patients has improved hugely. The patients are likely to spend less time in hospital, are less likely to be in residential care and more likely to have any care they need at home.
- The Coastal GPs and paramedic services routinely refer to the EIC Team for emergency intervention to avoid unnecessary admission to the acute hospital.
- In a collaborative project with the voluntary sector an information hub has been created at Teignmouth Hospital so members of the public can be signposted to voluntary services and local groups to support them focusing on a strengths-based approach.

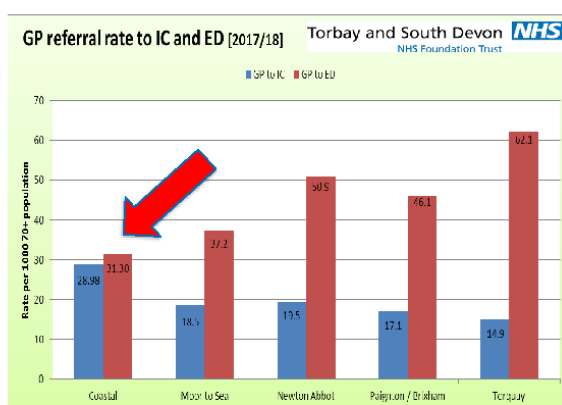
The success of the team in integrating health and social care to put the patient at the centre and support more people at home has been recognised locally, nationally and internationally. The Coastal Locality has hosted multiple visits from neighbouring NHS Trusts both within Devon and

further afield including NHS Cornwall and the Isle of Man and nationally from NHS England and the previous Secretary of State for Health, Jeremy Hunt, all keen to learn how such working could be replicated in other communities. The team has been shortlisted for a Health Service Journal (HSJ) Award, (out of 1,700 applications from the whole of the NHS) and members of the team have spoken at national and international conferences, including the [International Conference on Integrated Care](#) on their success.

Torbay Medical Research Fund

Torbay and South Devon
NHS Foundation Trust

GP - EIC referrals and relationships (Apr17-Mar18)



Ratio of GP referrals to IC and ED

Coastal ~ 50:50

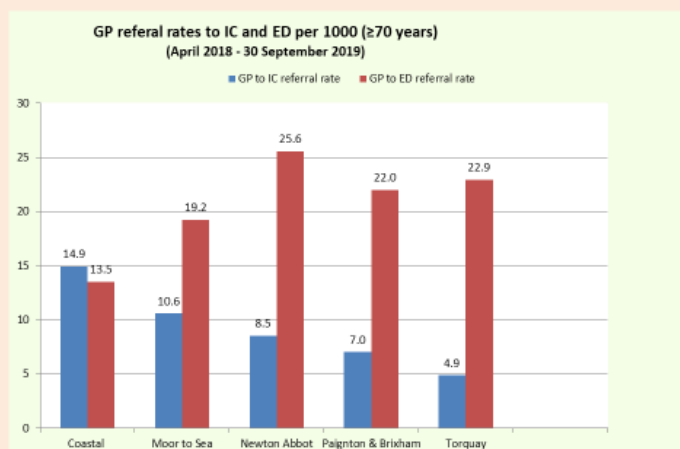
Others ~ 30:70

Hypothesis:
Coastal GPs are better integrated; locality is holding a higher complexity case load

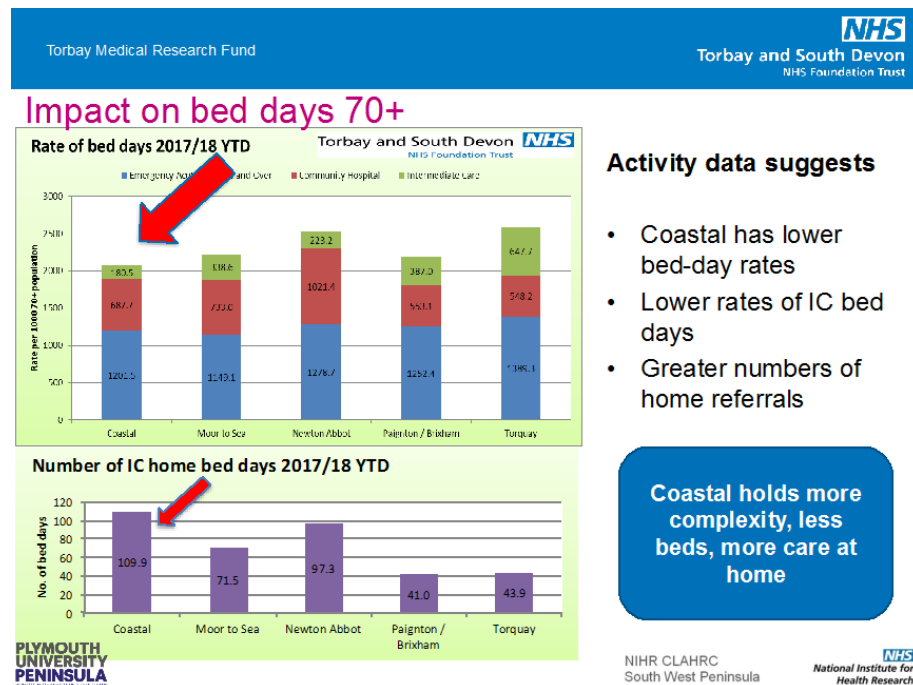
PLYMOUTH
UNIVERSITY
PENINSULA

NIHR CLAHRC
South West Peninsula

NHS
National Institute for
Health Research



Independent research by the University of Plymouth using latest full year data illustrates that because of our local use of the EICT, we have an effective alternative to admitting patients to A&E.

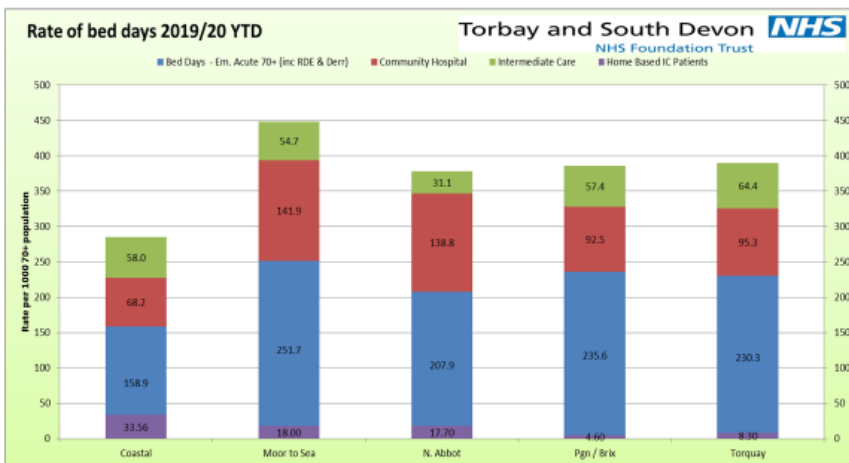


Activity data suggests

- Coastal has lower bed-day rates
- Lower rates of IC bed days
- Greater numbers of home referrals

Coastal holds more complexity, less beds, more care at home

Period: 01/04/2019 – 31/05/2019



More of our patients are looked after in our community than in other localities, with fewer days in Torbay or community hospital beds.

Community Hospital Performance YTD:

			Mar-18	
	Total Admissions	Target YTD	Average LoS	Target YTD
Community Hospital Admissions (General Total)	2,866	2,520	11.0	
Direct Admissions (General Total)	274	252	8.4	12.0
Transfer Admissions (General Total)	2,592	2,268	11.4	12.0
Brixham Hospital	536	645	10.8	
Direct Admissions	8	15	9.2	12.0
Transfer Admissions	528	630	10.8	12.0
Dawlish Hospital	656	481	7.5	
Direct Admissions	119	94	6.6	12.0
Transfer Admissions	537	387	7.7	12.0
Newton Abbot (General Rehab)	1,203	832	12.6	
Direct Admissions	124	106	9.6	12.0
Transfer Admissions	1,079	726	13.0	12.0
Totnes Hospital	446	562	12.0	
Direct Admissions	23	37	10.3	12.0
Transfer Admissions	423	525	12.1	12.0
Newton Abbot Hospital (Neuro Rehab)	25	0	0.0	
Newton Abbot Hospital (Stroke)	301	266	15.1	18.0

NB. Measure for total admissions is performance rated as follows:

Green: activity 95% - 103% of plan; Amber: 95% - 98% or 104% - 109% of plan; Red: <95% of plan; Purple: >=110% of plan.

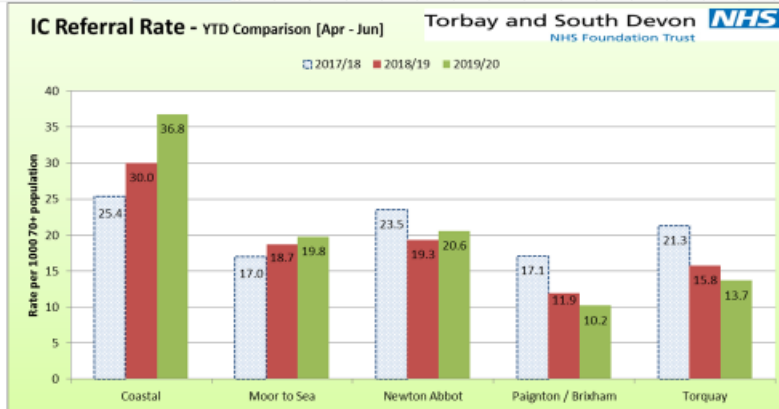
This is confirmation of the efficiency of Dawlish Community Hospital. There are 16 beds in Dawlish, 16 in Totnes, 20 in Brixham (including four intermediate care beds) and 45 in Newton Abbot. Dawlish has many more admissions from home and much shorter length of stay. The, bed occupancy rate of 85% illustrates greater efficiency and the hospital usually has same day bed availability for community admission from home or for a transfer from the acute hospital. Close working between the hospital GPs, nursing staff and the EICT makes the hospital by far the most efficient and highly performing community hospital not just locally but in the whole of Devon.

Enhanced intermediate care referral rates

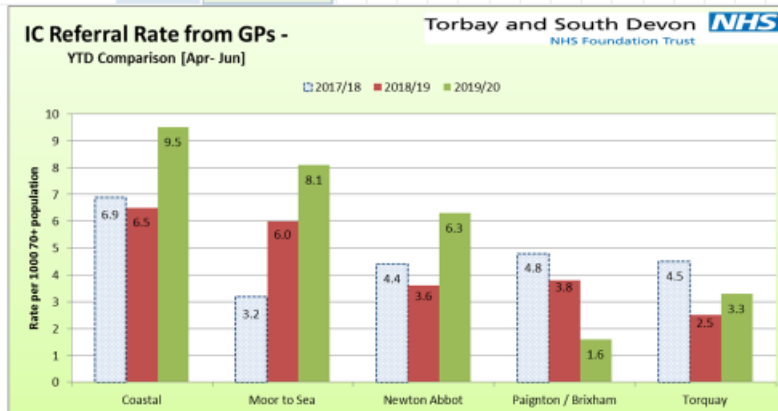
In reviewing the metrics, the data relating to EIC shows that Coastal is the only locality where the numbers of referrals have increased significantly over the past two years. In other localities referrals have plateaued or fallen.

As a consequence, the EIC referral rate (based on the >70 population) in the Dawlish and Teignmouth area is roughly twice the average for Torbay and South Devon, and almost four times that in some other areas. These differences are also apparent in rates of referrals from GPs to EIC. GPs have a choice for patients who show signs of deteriorating health; to send them to an Emergency Department or refer them to EIC. It might be expected that this pool of patients is of relatively similar size across localities (as a proportion of those >70s) and referral thresholds to be similar, which would imply similar ratios of referral rates to intermediate care and Emergency Departments. However, Coastal locality has a very different referral rate and referral ratio to other localities.

	FY 2017/18	FY 2018/19	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	YTD 2019/20	Outturn
Intermediate Care Referrals																			
Total IC Referrals	4688	4046	360	327	312	345	332	332	359	336	304	367	311	311	359	329	336	1024	6144
Total IC Referrals - Coastal	881	950	94	73	76	88	79	87	93	71	62	82	70	75	93	99	106	298	1788
Total IC Referrals - Moor to Sea	529	506	51	48	33	37	46	36	39	35	47	52	43	39	41	52	47	140	840
Total IC Referrals - Newton Abbot	1199	1102	81	80	80	87	91	74	118	124	87	112	81	87	92	78	87	257	1542
Total IC Referrals - Paignton/Brixham	994	773	64	57	68	70	59	77	85	55	68	52	62	58	64	53	44	160	966
Total IC Referrals - Torquay	901	715	70	69	55	63	57	58	96	51	50	89	55	52	69	47	52	168	1008



	FY 2017/18	FY 2018/19	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	YTD 2019/20	Outturn
Intermediate Care GP Referrals																			
Total IC GP Referrals	1062	2098	82	66	76	89	79	89	107	93	85	97	94	76	106	83	90	275	1674
Total IC GP Referrals - Coastal	230	351	22	13	16	25	20	31	29	25	34	34	31	21	22	28	27	77	462
Total IC GP Referrals - Moor to Sea	141	174	15	15	11	10	8	14	15	13	21	21	15	16	22	19	14	57	340
Total IC GP Referrals - Newton Abbot	249	286	13	14	17	22	25	18	35	34	29	31	24	24	26	22	28	76	488
Total IC GP Referrals - Paignton/Brixham	266	307	18	18	23	19	19	19	20	13	17	14	21	9	12	6	8	26	156
Total IC GP Referrals - Torquay	176	120	14	6	9	13	9	7	8	8	8	17	13	8	22	8	11	41	246



- Coastal has the highest overall EIC referral rate
- Coastal has the highest GP referral rate (x2 the Torbay and South Devon average)

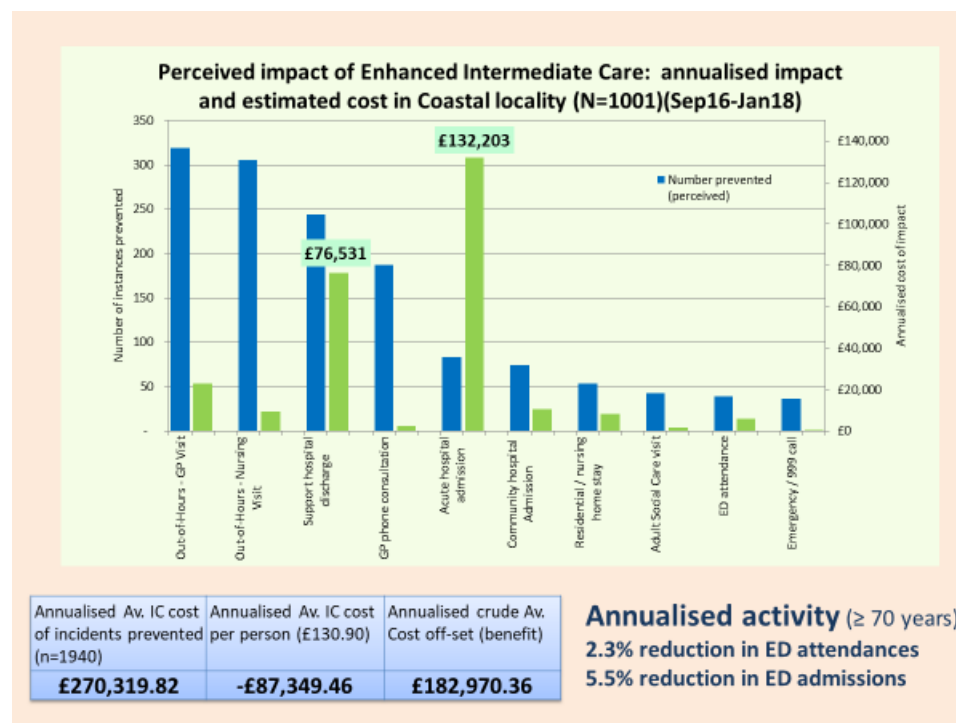
- Coastal has lowest referral rate and absolute numbers of referrals to an Emergency Department.
- The ratio of referral rates to intermediate care and Emergency Department is ~ 50:50 in Coastal compared with 30:70 elsewhere.

Thus, there appears to be a correlation between high use of intermediate care, high GP referrals to intermediate care and lower use of an Emergency Department in Coastal. This supports a hypothesis that Coastal is holding a higher complexity case load.

How does the number of referrals and proportion and length of placements impact on use of bed-days?

This data suggests that Coastal has lower bed-day rates overall, lower rates of intermediate care bed days, and a greater number and rate (as Coastal has a relatively smaller population of >70s than other localities) of home referrals than other localities, all pointing to a difference in practice. However, across Torbay and South Devon it is not clear if there is a correlation between low intermediate care bed days and high home-based placements.

Again, this supports a hypothesis that Coastal is holding a higher complexity case load but using fewer beds as more care is provided at home.



The EIC in Coastal has been capturing data on what service activity they have prevented due to their work over the past year, since the service became “enhanced”. This data is based on the

professional judgement of the EIC lead and recorded shortly after the episode but has not been externally audited so may be positively biased. Nevertheless, the data gives an indication of the average benefit of the EIC.

You can see that the benefits of EIC (blue bars) accrue to the wider health system, particularly general practice, and not just the acute and community services. In relation to A&E attendances and A&E acute admissions, these numbers represent about 2.5% of the attendances and 2.5% of the admissions from the Coastal population (>70s) over the same period of time.

If these prevented consequences are costed up using national tariff costs (green bars) compared to the average tariff cost for the number of people using the service, the service more than pays for itself (on average), with an annualised benefit of £149,323 (£127,169-£167,866). The majority of these cost benefits come from preventing hospital admissions and proactive hospital discharges.

It must be noted that these do not represent real costs or savings (or the marginal benefit of investing in an “Enhanced” IC).

5. Impact of wellbeing co-ordination service

Detail from the study by Researchers in Residence shows that the impact of the holistic wellbeing coordinator service on frailty was also assessed using the validated Rockwood Clinical Frailty Scale which measures frailty on a scale 1-9 (very fit to terminally ill).

This shows a small but statistically and clinically significant average improvement in frailty of 4.1% (nearly one level). Or put another way, 41% of people reduced their score by 1 to 2 levels.

This means that those using the holistic wellbeing coordinator service are, on average, more able to look after themselves in relation to activities of daily living (ADL).

Impact on use of health and social care use

The results show that 47% of participants saw a reduction or no change in activity or cost in the 12 months after first referral compared with the 12 months before.

In South Devon, 10 people accounted for 80% of the costs. This prompted an investigation of the drivers of increased service use and costs in Coastal locality.

This showed that 13 people accounted for 60% of the overall increase in health and social care cost. A deep dive on these 13 people found that this increase was due to a significant, rapid escalation in morbidity and frailty. Wellbeing coordinators played a valuable key-worker type of role, improving continuity of care, reducing isolation, improving mental health and supporting carers.

Statistical modelling identified that only the Rockwood Clinical Frailty Score could be used for costs, and that was for social care costs only.

Overview of wellbeing coordinator review: evaluation focused on triage and assessment and the wellbeing coordinator (holistic coaching goals) = 12 weeks of support and 12 month follow up. Nearly half were referred from MDT and hospital. Nearly half used 3 or more service types in previous year.

In general, the cohort was mainly the frail elderly, who are using a range of different types of services.

- Over half of the people going through the service were aged 80+ years
- Nearly half were referred from the new integrated locality services, so were likely to be fairly frail
- Half of participants were using three or more types of service so they were fairly dependent on health and social care services