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Evaluation of Transfer of Care Initiative

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1 EXECUTIVE SUMMARY

1.1 Introduction

In July 2015 PACEC was commissioned by the Mid and West Wales Health & Social Care Collaborative (HSCC) to undertake an evaluation of the Intermediate Care Fund (ICF or the Fund) and six selected projects of the eighty-six in total. The aim of the Intermediate Care Fund (as detailed in the guidance issued by Welsh Government) is 'to develop services that help to 'avoid unnecessary hospital admissions, or inappropriate admission to residential care, as well as preventing delayed discharges from hospital'. Funding is targeted at supporting older people, particularly the frail elderly, to maintain their independence and to be cared for in their own home. This report evaluates the Transfer of Care Advice and Liaison Service (TOCALS) project in Carmarthenshire. Background / Project Summary

TOCALS was awarded £260,000[1] from the ICF under the 1st phase of funding from the ICF via the Mid and West Wales Health and Social Care Collaborative from June 2014 to March 2015 (operational in the Prince Philip Hospital (PPH) from September 2014 and Glangwili General Hospital (GGH) from December 2014.[2] TOCALS was established with the main aim of: 'facilitating the active development and implementation of an effective frailty pathway, acknowledging the significant risk of permanent loss of function associated with frail elderly people being admitted to an acute general hospital.'

1.2 Methodology

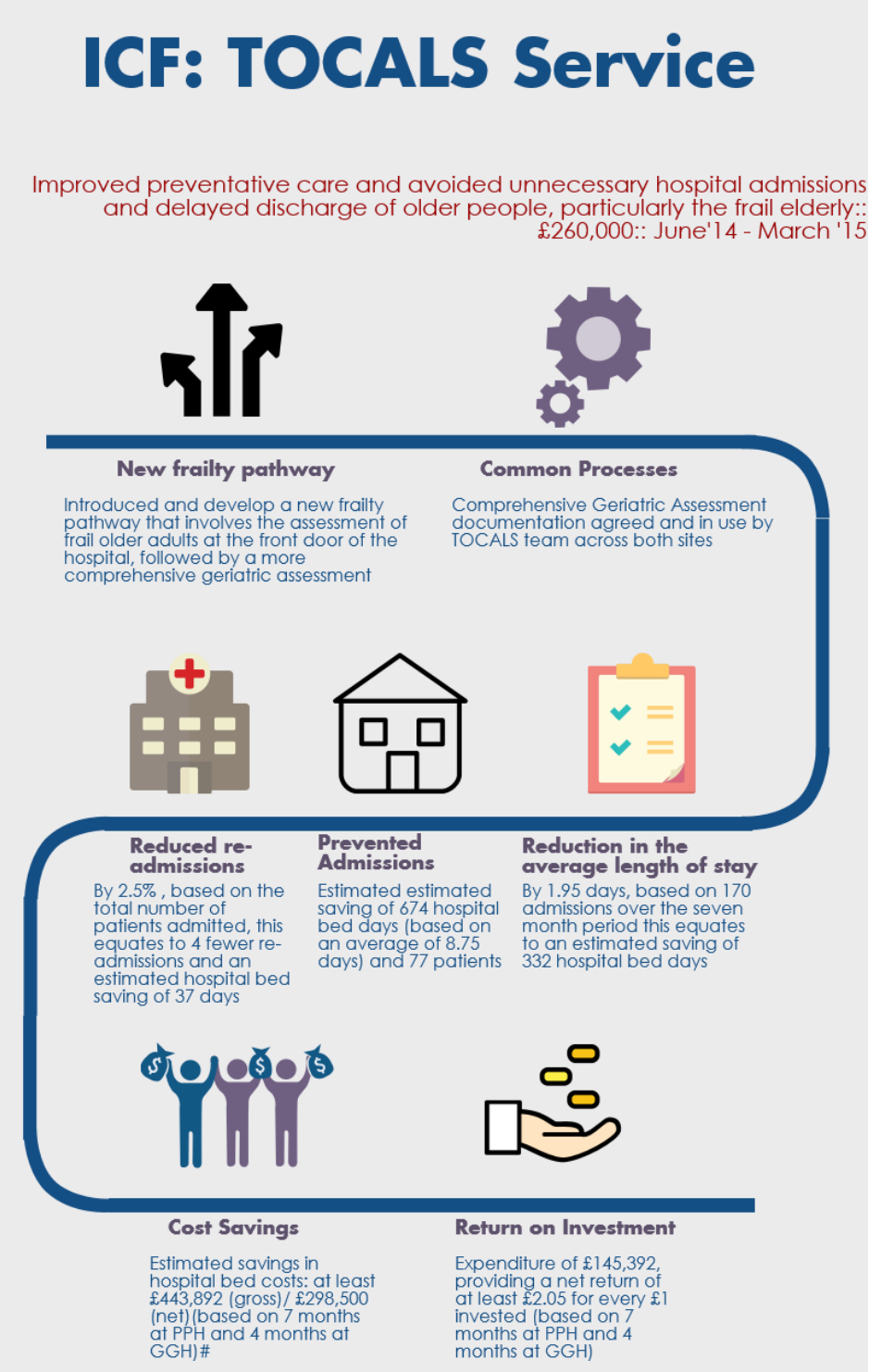
Methodological Element	Summary
Project Initiation and Initial Evidence Review:	A desk-based review of policy and literature regarding health and social care provision in Wales, including the integrated care context (project level reports) A review and analysis of internal monitoring data, including financial data A desk based benchmarking exercise to identify and compare (to the extent possible) inputs, outputs and outcomes delivered by the projects
Primary Research	A workshop and internal consultation with project managers across all six ICF projects involved in the evaluation, including group exercises to define pre and post service user pathways and service level logic models; and Online surveys of staff members (17 of 17 staff[3] – 100% response rate). However, the project promoters felt it was inappropriate for PACEC to survey service users on the grounds of confidentiality and data protection.
Economic Assessment	Assessment of: Value for Money (economy, efficiency and effectiveness); and Estimation of cost savings and return on investment
Analysis & Synthesis	Synthesis of qualitative and quantitative data; Identification of key lessons; Development of recommendations; and Analysis of desk based / survey data.

[1] Information provided to PACEC by accounting officer for TOCALS (October 2015) / ICF Spend by Workstream Document
[2] TOCALS Project Report 2 (November 2014)
[3] The TOCALS staff survey was issued by the current project manager

1.3 Evaluation Summary

The following infographic summarises the background, ambitions, and a number of evaluation findings from the TOCALS project.

* Please view Section 7 for a breakdown of the cost savings/return on investment.



The cost to deliver the project does not include the in-kind support from staff that were in post prior to TOCALS

1.4 Recommendations

This report sets out four thematic sets of recommendations regarding integration, project monitoring and outcomes, economic assessment and benchmarking, and future prospects the service with consideration of performance to date. The points below reflect the headline recommendations; a full depiction is set out in Section 8 of the main report.

1.4.1 Integration

TOCALS was overseen by an Integrated Project Board that involved senior representatives from Council, the Health Board and the Third Sector who worked together to influence the structure and delivery of the project. Structure and systems (i.e. monitoring reports) were put in place to govern the project and the Project Board also reported progress against ICF objectives to the Health and Social Care Board Staff who provided feedback noted improved levels communication with staff from other agencies and disciplines as a result of the project, therefore the project supported increased levels of integration between health board staff and council staff.

Recommendation:

TOCALS should ensure that they maintain strong working relationships with staff in the community (e.g. Community Resource Teams) so that those who are not admitted to hospital continue to have an appropriate form of alternative provision to be signposted to.

1.4.2 Outcome Measures

A number of measures were used to record the performance of the service against the reduction of bed days, hospital admissions avoided and readmissions within 30 days.

Recommendations:

- Baseline data should be collected and reported against in relation to the average length of stay prior to the TOCALS intervention or the re-admittance rates for older or frail, old patients[4].
- There is a strong body of evidence noting that the collection of feedback from service users is best practice in the evaluation of intermediate care services,[5] this includes patient satisfaction, health and well-being improvements[6] and patient quality of life.[7] TOCALS should therefore collect data on the impact of the service on patients. We recognise that this may be difficult to implement given that the TOCALS service blends with other hospital services and patients may not necessarily be aware that they have gone through

[4] Whilst it is recognised that the Project made us of generic hospital statistics on admissions and average length of stay for those aged over 65 it is not clear how directly comparable this population group is with the TOCALS target population.

[5] For example see Kings Fund (2002) Developing Intermediate Care. A Guide For Health And Social Services Professionals.

[6] Kings Fund (2002) Developing Intermediate Care A Guide For Health And Social Services Professionals

[7] Kings Fund (2014) Community services How they can transform care. Nigel Edwards

a TOCALS process. However, it is important to understand the impact of the service on patients and to collect data that can also be used to compare patients' outcomes with those from other services.

1.4.3 Performance

The TOCALS project had a number of significant achievements within a short period of time, including:

- The development and implementation of processes and procedures to facilitate the enhanced assessment of frail old patients attending A&E departments;
- Establishment of multi-disciplinary teams;
- 77 patients avoided admission;
- Reduction in the average length of stay of older patients; and
- Improved discharge planning.

Recommendations:

- An area for further consideration is **whether more patients could be assessed by TOCALS staff within the two relevant hospitals.** Further research and data collection is needed to confirm that all frail, older, people presenting in A&E are being referred for Comprehensive Geriatric Assessment, this would then determine if the potential benefits of TOCALS are being maximised. **In doing so any notable barriers to assessment under TOCALS should also be considered and minimised.**
- We recommend that targets should be developed for each objective going forward; and
- We recommend that future reporting templates detail quarterly and cumulative progress against all the objectives and targets details in the PID.

1.4.4 Economic Assessment

The project was assessed against its economy, efficiency, effectiveness and cost effectiveness and it demonstrated that gross savings for the health service amounting to £443,892. Minus the ICF monies of £145,392 the net savings achieved are in the region of £298,500. This equates to net return on investment of £2.05 for every £1 invested. However, it must be noted that, these figures are only illustrative as the costs did not include an allocation for staff involved in the project outside of the ICF core funded posts.

Recommendation:

To further inform economic assessment in the future, more detailed financial data on staffing costs should be collected, this would include time spent by all staff on TOCALS activities in addition to those who have been funded through ICF.

2 TERMS OF REFERENCE AND METHODOLOGY

2.1 Background

In July 2015, PACEC was commissioned by the Mid and West Wales Health and Social Care Collaborative (MWWHSCC) to undertake an evaluation of the Intermediate Care Fund (ICF). The table below details the terms of reference for the evaluation.

Table 2:1: Terms of Reference

Terms of Reference
To examine the process and benefits of integrating health and social care services within the region with a view to assessing (as set out in analysis and reporting): • Whether the process of integration has worked as expected and what aspects have worked well or less well; • If and how processes of integration have contributed to or retarded progress towards outcomes; and • What practical lessons can be learned for the continuing integration of services within the region and more widely.
Assess, to the extent possible, the outcomes of a selection of the region's ICF projects (through evidence review and primary research): • Characterise and categorise the range of outcomes expected from the region's projects, distinguishing service-related outcomes from service user outcomes and intermediate from final outcomes; • Gather evidence from a sub-set of the region's projects to explore if, how and to what extent these outcomes have been realised; and • Comment, as far as possible, on future prospects for realising outcomes, given the progress made to date
Conduct, to the extent possible, an economic assessment (see section 7), focusing on: • The cost-effectiveness of the region's integrated service models, vis-à-vis non-integrated ways of delivering services; • The extent to which integrated care is more efficient than non-integrated care; and • The potential for cost avoidance/negated costs contributed by preventative approaches
Provide commentary on the future prospects for care integration within the region by (as set out in conclusions and recommendations): • Identifying approaches with potential for replication or scaling up (within the context of the Social Services and Wellbeing (Wales) Act); • Discussing options for sustaining approaches following the cessation of WG funding; • Recommending components of an outcomes-based performance framework for the future • Discussing the likelihood of outcomes being realised in future; and • Discussing the trade-offs between investing further in integrating care and continuing to invest in other forms of care.

2.2 Methodology

To achieve the requirements within the Terms of Reference following methodological approach was deployed:

Table 2:2: Methodology

Methodological Element	Summary
Project Initiation and Initial Evidence Review:	• Review of Project Initiation Document (PID) and Policy Context to outline what the project had set out to achieve / rationale for the project • A desk-based review of policy and literature regarding health and social care provision in Wales, including the integrated care context • Review of relevant literature (to outline the existing and new service user pathways and to develop an evaluation / logic model for the project in relation to outputs[8] and outcomes[9]) • A review and analysis of internal TOCALS monitoring data, including financial data and progress reports • A desk based benchmarking exercise to identify and compare (to the extent possible) inputs, outputs and outcomes delivered by TOCALS and other similar interventions
Primary Research	• A workshop and internal consultation with project managers across all six ICF projects involved in the evaluation, including group exercises to define pre and post service user pathways and service level logic models • An online survey of all 17 staff members, agreed with and issued by the project manager) (see appendix C) • Interviews with project manager and members of the project board (see appendix D)
Economic Assessment	Assessment of Value for Money (economy, efficiency and effectiveness) and estimation of cost savings and return on investment
Analysis & Synthesis	• Synthesis of qualitative and quantitative data • Identification of key lessons • Development of recommendations • Analysis of desk based and survey data.

[8] Outputs are the measureable components of service delivery that can be quantified (e.g. number of patients supported per week) (http://info.wirral.nhs.uk/document_uploads/evidence-factsheets/12%20Logic%20Modelling%20factsheet%20Feb%202014.pdf)

[9] Outcomes are the effects of activities and resulting outputs. These can be divided into short, medium and long term (e.g. short – increased knowledge and skills; medium – improved patient independence; long – reduced health inequalities

3 Background

This evaluation involves a review of the overall ICF programme in Mid and West Wales and a review of six of the ICF funded projects. This report evaluates the Transfer of Care Advice and Liaison Service (TOCALS) project.

3.1 Intermediate Care Fund (ICF)

The ICF was announced by the Welsh Government in December 2013 and provided one year of funding (£50m across Wales) in 2014/15. The purpose of the fund was to:

- Encourage integrated working between local authorities, health and housing; and
- Support older people, particularly the frail old, to maintain their independence and remain in their own home.

The total funding for the Mid and West Wales Collaborative of £8.4 million[10] was shared between the four local authority areas as follows:

Table 3.3:1: Breakdown of ICF Funding 2014 / 15

Area	Revenue		Capital		Total	
Powys	£1,500,000	26.7%	£749,000	26.6%	£2,249,000	26.7%
Ceredigion	£801,000	14.2%	£400,000	14.2%	£1,201,000	14.2%
Pembrokeshire	£1,268,000	22.5%	£634,000	22.5%	£1,902,000	22.5%
Carmarthenshire	£2,058,000	36.6%	£1,029,000	36.6%	£3,087,000	36.6%
Total	**£5,627,000**	**100.0%**	**£2,812,000**	**100.0%**	**£8,439,000**	**100.0%**

Source: Intermediate Care Fund Mid and West Wales – Half Yearly Report – November 2014

ICF was welcomed as an opportunity to build on existing service arrangements and test out new approaches to intermediate care that would:

- Ensure a citizen focused approach to service planning and delivery;
- Promote independence among older individuals;
- Encourage further integration across health, social care and the wider sector;
- Foster direct engagement with key partners within local government (for example housing and the third sector in developing and delivering an ambitious programme of change in the region); and
- Make a key contribution to the delivery of commitments within the Hywel Dda and Powys area.

[10]Intermediate Care Fund Mid and West Wales – Half Yearly Report – November 2014

Over 70 individual projects were funded[11] in mid and west Wales delivering against two themes: "Investing to Go Further" and "Investing to Join Up". Investing to Go Further aims to increase integrated intermediate care capacity in order to prevent hospital admissions and maximise people's independence following a crisis. Investing to Join Up aims to build community resilience, creating environments receptive to intermediate care and contributing to its sustained success.

3.2 Background and Rationale for the TOCALS Project

TOCALS was established with the main aim of 'facilitating the active development and implementation of an effective frailty pathway, acknowledging the significant risk of permanent loss of function associated with frail elderly people being admitted to an acute general hospital' [12]. The rationale for this work was the recognition that:

- Seventy per cent of all hospital admissions are attributed to frailty (this includes frailty syndrome, delirium, dementia and depression) and frailty contributes to the longest lengths of stay and the highest readmission rates[13]
- In Hywel Dda, people over 65 years old utilise 78% of the bed days relating to A&E / GP Emergency admissions
- Facilitating efficient discharge for the frail older population improves health outcomes at micro and macro level, specifically it:
  - Supports effective patient flow and maximised use of acute hospital beds;
  - Reduces the risk and level of functional decompensation to the individual from long hospital stays; and
  - Reduces the need for prolonged rehabilitation and / or long-term care.

The reason for multi-disciplinary teams was also set out in the PID, which showed that effective discharge planning involves the skills and knowledge of professionals across the acute and community settings, given the heterogenetic needs of frail older people.

3.3 Transfer of Care Advice and Liaison Service (TOCALS) – Funding, Aims and Objectives

TOCALS was awarded £260,000[14] from the ICF under the 1st phase of funding from the ICF via the Mid and West Wales Health and Social Care Collaborative from June 2014 to March 2015 (operational in the Prince Philip Hospital (PPH) from September 2014 and Glangwili General Hospital (GGH) from December 2014.[15]

[11] Intermediate Care Fund Mid and West Wales – Half Yearly Report – November 2014
[12] Transfer of Care Initiative – Project Initiation Document, Rhian Dawson (August 2014)
[13] https://www.rcplondon.ac.uk/sites/default/files/acute-care-toolkit-3.pdf
[14] Information provided to PACEC by accounting officer for TOCALS (October 2015) / ICF Spend by Workstream Document
[15] TOCALS Project Report 2 (November 2014)

Objectives under the ICF phase 1 funding, were to:

- Embed a frailty pathway of care within both hospitals which would
- Prevent hospital admission at the front door for frail older people who require rapid MDT (multi-disciplinary team) assessment and community support to mitigate immediate risk and longer term problem solving of their co-morbidity and functional decline
- Reduce length of stay by adopting a co-ordinated approach to problem solving, and care co-ordination
- Support a minimalist (prudent) approach to admission, acknowledging that for some people admission may not lead to a change in long term medical management, but can pose significant risk of long term reduction in functional ability (i.e. increased dependency)
- Identify potential systems change and role redesign that would improve the effectiveness and efficiency of primary care, community and acute hospital services for the frail older persons.

The expected deliverables for TOCALS were identified as:

- Decreased length of stay against baseline at project initiation
- Reduced readmissions for frail older individuals who are supported by the team
- The MDT will contribute to the development of an acute hospital frailty pathway
- Support the development of a realistic Date of Discharge prediction for the frail old

In order to assess the achievement of these outcomes, the following KPIs were set[16]:

- Number of people assessed by the service
- Reduction of inpatient bed days as a result of the service
- Hospital admissions avoided from A&E/CDU[17]
- % of readmissions within 30 days against reported baseline.

3.4 How the TOCALS Operates[18]

TOCALS was set up to:

- Support front line staff to undertake a 'Front door' assessment
  - Frailty screening at presentation in order to trigger detailed comprehensive geriatric assessment (CGA)
  - CGA for those people who may benefit from a co-ordinated and integrated plan for treatment and long-term follow up initiated through a multidimensional interdisciplinary diagnostic process.
  - Geriatricians to carry out early assessment (within 24hrs) for people who are frail.
  - Organised specialist multidisciplinary team (MDT) working to support rapid assessment, care planning and discharge of frail old (reduces length of stay and risk of readmission).

[16] Carmarthenshire Detailed PIs, (July 2015)
[17] Accident and Emergency and Clinical Decisions Unit
[18] Transfer of Care Advice and Liaison Service – Evaluation, Recommendations and Strategy (March 2015),

- Encourage a 'pull' approach to acute discharges
  - Work with community MDT and the patient and their families / carers to develop a shared approach to rapid discharge.
  - Early identification of patients at risk of potentially long stays using a suitable risk tool
  - Utilise lessons learnt from emergency readmissions and people with prolonged length of stay to change the way the service works
- Proactively Approach Prolonged Lengths of Stay
  - Review prolonged hospital stays above a defined level (e.g. 14 / 21 days)
  - Regular progress meetings should take place at least twice weekly to review prolonged stays

Multi-disciplinary TOCALS teams were set up in PPH and GGH. The project was first established in PPH at the end of September 2014 and ran as a proof of concept before it was implemented in GGH in December 2014. The service operated five days a week between the hours of 9am and 5pm.

The teams consisted of 12 staff, seven of whom were funded by the ICF and five were from existing hospital staff. The teams included social workers, district nurses, physiotherapists and staff nurses (see staff detail by hospital and team structure in section 4.3).

3.5 User Pathways

The TOCALS service involves the following key steps:

- The team supports front line staff at the 'front door; to screen all older adults presenting at the front door of PPH & GGH (at A&E or Clinical Decisions Units) for the presence of 'frailty syndrome' or sudden functional decline using the CSHA Frailty Scale[19];
- TOCALS (in conjunction with hospital staff) initiated a Comprehensive Geriatric Assessment (CGA)[20] on frail adults presenting with 'frailty syndrome' or sudden functional decline;
- Based on this assessment the patient was either admitted to hospital or discharged with/ without support from other services, as needed.
- If admission was required:
  - The TOCALS team support hospital staff make recommendations regarding appropriate interventions;

[19] The Clinical Frailty Scale is a widely used tool within the health service and rates an older patient's frailty on a nine stage scale going from 1 – very fit to 9 – terminally ill.

[20] The gold standard for the management of frailty in older people is the process of care known as Comprehensive Geriatric Assessment (CGA). It involves a holistic, multidimensional, interdisciplinary assessment of an individual by a number of specialists of many disciplines in older people's health and has been demonstrated to be associated with improved outcomes in a variety of settings. It was developed by a team from the British Geriatrics Society. (http://www.bgs.org.uk/index.php/cga-managing)

  - Discharge Liaison Nurses, work to ensure that patients are provided with the care required, and establish realistic discharge dates with any support that is needed.

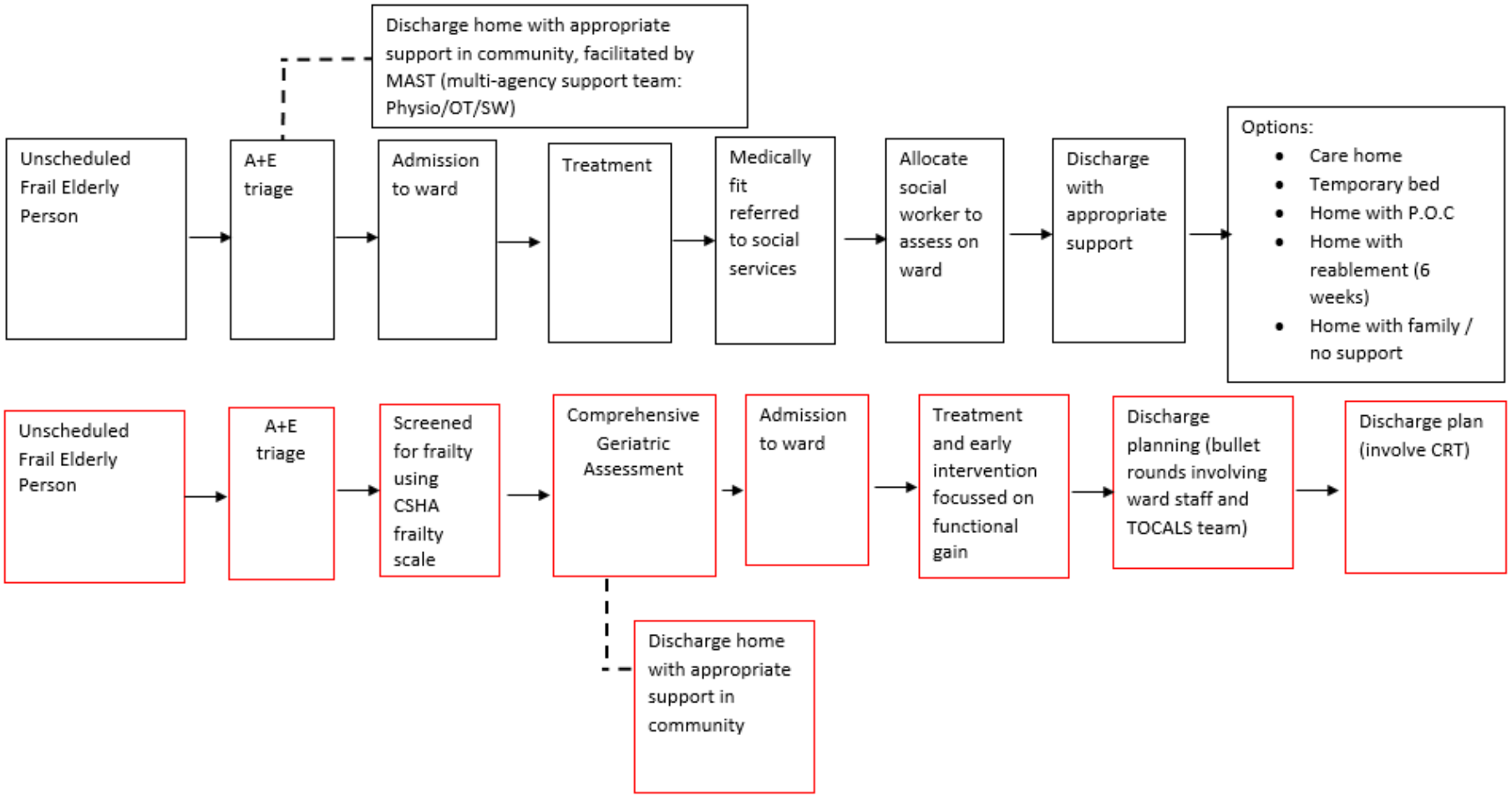
- If discharged after assessment:
  - TOCALS staff will work with Community Resource Teams (CRTs) to ensure any additional community services are provided to facilitate safe discharge. This may also have included a referral to the ICF funded Rapid Response Service, which can facilitate the implementation of a domiciliary care package within two days of an urgent referral. The total number of referrals to Rapid Response from TOCALS is not known.

The before and after ICF patient pathways were drafted by the evaluation team and agreed with the project manager. The following diagram shows the new TOCALS patient pathways (in red) alongside the old pathways (in blue).

The specific duties of the TOCALS team that were not carried out before are:

- early identification on admission of patients presenting with complex needs who may be predisposed to a long stay in hospital i.e. frail older adults using Clinical Frailty Scale (CSHA), (by working across Emergency Departments (EDs), Clinical Decision Units (CDUs), Acute Medical Units (AMUs), Orthopaedic and Rehabilitation wards; also by working in partnership with Discharge Liaison Nurses (DLNs), ward staff, mental health services, continuing health care (CHC), family and carers, General Practitioners (GPs) and their key workers in the CRTs);
- contributing to the completion of early Comprehensive Geriatric Assessment (CGA) for those presenting with Frailty Syndrome;
- developing and supporting the delivery of integrated care plans for patients; and
- reviewing patients at home/place of residence 24 hours after discharge.

Figure 3.1: Care Pathway – TOCALS



Source: Care Pathway Developed by PACEC in consultation with TOCAL (September 2015).

Summary

TOCALS was awarded funding of £260,000[21] from the ICF over the period June 2014 to March 2015, with operational delivery in PPH from September 2014 and GGH from December 2014. TOCALS was designed to provide a multi-disciplinary approach to address the needs of older people either in, or seeking to attend, hospital and especially those who are assessed as frail. It was recognised that there are older people in hospital at risk of functional decompensation and whose needs could be better and more cost effectively met in a community setting while also avoiding unnecessary hospital admissions / delayed discharge of older people, particularly the frail old.[22]

[21] Information provided to PACEC by accounting officer for TOCALS (October 2015) / ICF Spend by Workstream Document
[22] Transfer of Care Initiative – Project Initiation Document (June 2014)

4 CONTEXT, LITERATURE REVIEW & LOGIC MODEL

4.1 Introduction

This section sets out the context in which the TOCALS operates in Carmarthenshire as well as a brief summary of the literature relating to benefits and the outcomes that can be expected from such services.

4.2 Socio-economic context

4.2.1 Carmarthenshire Population

People over 65 in Carmarthenshire account for 22% of the total population.[23] As shown in table 4.1, these numbers are expected to grow by 11% (n=4,433) by 2020.

Table 4.4:1 Carmarthenshire Population Projections for People Aged 65 and Over[24]

Year	Males Aged 65 and Over	Females Aged 65 and Over	Total Population Aged 65 and Over
2014	19,307	22,368	41,676
2015	19,729	22,684	42,413
2016	20,100	23,015	43,115
2017	20,486	23,364	43,850
2018	20,859	23,758	44,616
2019	21,259	24,097	45,356
2020	21,641	24,468	46,109

Source: Stats Wales[25]

This highlights a growing level of demand for health and social services. However given the reduction in public sector budgets it also demonstrates the need for innovative solutions / models of delivery that can provide the supports needed but much more cost efficiently and effectively to the public purse.

[23] Carmarthenshire County Council: http://www.carmarthenshire.gov.wales/media/824482/county_profile.pdf.
[24] This change relates to the increase of older persons in Wales under the definition solely that these people are over 65. It is anticipated that in future years healthy life expectancy years will improve; and hence service demand for this age bracket will not necessarily increase in line with the growth in size of the number of people over the age of 65. Sourced via: Kings Fund (2014) *Making our health and care systems fit for an ageing population*
[25] StatsWales (2011). Available at: https://statswales.wales.gov.uk/Catalogue/Population-and-Migration/Population/Projections/Local-Authority/2011-Based/PopulationProjections-by-LocalAuthority-Year

4.3 Evidence Review – TOCALS

The literature suggests that services which provide early assessments as well as rapid assessments and care & discharge planning include the following outputs and outcomes:

Service Level Outputs / Outcomes:

- **Reduction in unscheduled hospital admissions**: Most studies suggest that admissions can be avoided in 20-30% of over 75 year old frail persons, with one report noting that 'avoiding admissions in this group of older people depended on high quality decision making around the time of admission, either by GPs or hospital doctors. Crucially it also depended on sufficient appropriate capacity in alternative community services (notably intermediate care) so that a person's needs can be met outside hospital, so avoiding 'defaulting' into acute beds as the only solution to problems in the community.[26] Having specialists trained in recognising and managing frailty at the front door can reduce admissions and a study in the United States[27] found that a service for older persons located in the emergency department reduced admissions by 3% provided there are easy to access, timely, credible alternatives to admission.
- **Facilitation of early discharge**: A Kings Fund report[28] noted that Health Trusts with proactive approaches to discharge and staff with close links / understanding of what services are available in the community (including high degrees of multi-disciplinary working) can reduce the length of time that older patients stay in hospital.[29] Specifically this report notes that the number of extended stays can be reduced by between 14% and 40% (including bed days avoided by reducing admissions) if a proactive, multidisciplinary approach is taken to discharge planning, that also involves the community.
- **Cost savings - a Swedish intervention:**[30] 'Continuum of care for frail older people: from emergency ward to living at home' found that such interventions increase participant's independence as well as saving money for the health service. The intervention involves collaboration between a nurse with geriatric competence at the emergency department, the hospital wards and a multi-professional team for care and rehabilitation of the older people in the municipality with a case manager as the hub. The multi-professional team includes professionals in nursing, occupational therapy, physiotherapy and social work. Together they create a continuum of care for the frail older person from the emergency department, through the hospital ward to their own homes. Information is immediately transferred from emergency department to the wards and the municipality. Discharge planning starts the same day as the older frail person is admitted to the hospital and all planning is coordinated by the case manager. The intervention has a person-centred approach with shared decision-making throughout the care chain. The frailty screening includes five questions concerning endurance, tiredness, falls, needing support shopping and more than three visits at the emergency department within the most recent twelve months. When the screening indicates more than two frailty indicators they are screened for

[26] Mytton et al. British Journal of Healthcare Management 2012 Vol. 18 No 11
[27] Keyes D, Singal B, Kropf CW and Fisk A (2014) 'Impact of a new senior emergency department on emergency department recidivism, rate of hospital admission, and hospital length of stay', Annals of Emergency Medicine 63(5), 517–524.
[28] Kings Fund (2014) Community services: How they can transform care
[29] Kings Fund (2014) Community services: How they can transform care
[30] Best Practice: Continuum of care for frail older people: from emergency ward to living at home (2013) http://www.projectaida.eu/wp-content/themes/thunderbolt/docs/Swedish_Skora.pdf

frailty as part of the program. All persons 75 years of age or older who are screened for frailty within the continuum of care process are target users. Results published in 2013 found that the randomised control study had evidenced positive results for the users. Specifically, participants in the integrated care program were significantly more satisfied with the care planning and their own possibility of participating in the care planning compared to the control group. It also notes that unpublished material shows promising effects on the participant's independence in activities of daily living up to twelve months and indications that the municipality saves money. Identified strengths from the programme are:

- the emergency department recognises and treats the frail older person as a VIP;
- information is immediately transferred from emergency department to the wards and the municipality;
- discharge planning starts the same day as the older frail person is admitted to the hospital;
- all planning is coordinated by the case manager;
- a case manager is available for the frail older person and her/his relatives during daytime in weekdays;
- a rehabilitation team is placed in the direct vicinity with the case manager;
- care planning at home which emphasises the older person's participation;
- those persons that are identified as frail older persons but not admitted to the hospital ward are also offered care planning at home; and
- continuous follow-ups by the case manager.

TOCALS type services also deliver service user / patient outcomes. Examples include:

- **Increased independence**: a study[31] on the effects of delays in transfer on independence outcomes for older people found that the time window for between-service transfers to intermediate care that optimises clinical outcomes for frail older people recovering from an acute illness is small. In this study, it was found that a delay of more than two days was sufficient for detrimental effects on an independence outcome to be observed. Other studies from the Health Foundation and Kings Fund also demonstrate that delayed discharge can lead to a deterioration in the condition of patients and the loss of independence/functionality[32,33]. For example, a Health Foundation report[34] found that delays in getting specialist geriatric medicine assessment meant that many frail older people had to stay in hospital overnight unnecessarily. In addition, during the initial tests of change, a limited audit of ward rounds showed that 20% of these patients had their diagnosis or care fundamentally changed by a geriatric medicine specialist if they were seen at an early stage compared to 20 hours after admission.
- Improved quality of life - a study on the Costs and Outcomes of Intermediate Care for Older People[35] where quality of life was assessed before and after intermediate care using the using

[31] Effects of delays in transfer on independence outcomes for older people requiring postacute care in community hospitals in England Young, John et al. *Journal of Clinical Gerontology and Geriatrics* , Volume 1, Issue 2 , 48 - 52

[32] Kings Fund (2002) Developing Intermediate Care. A Guide for Health and Social Care Professionals.

[33] There is a body of evidence demonstrating that the condition of older patients can deteriorate if they are not discharged from hospital once they are fit to do so, for example, see The Health Foundation. Improving the Flow of older people (2013).

[34] The Health Foundation (2013) Improving the Flow of older people

[35] Intermediate Care National Evaluation Team (ICNET) (2006) A National Evaluation of the Costs and Outcomes of Intermediate Care for Older People

the EuroQol EQ-5D instrument and found that the largest gains in quality of life were seen for admission avoidance schemes (compared to supported discharge).

In addition, a Cochrane Review[36] identified that it was the lack of a comprehensive assessment of the medical, social, functional or psychological needs that led to a high rate of admission to hospital and / or permanent residential care within the frail older people population. A report[37] on the assessment and management of the clinically frail in Nova Scotia, Canada notes that there are various models of service provision for older people: needs related, age defined and integrated. However all share the same strategic aim to ensure that older people have a multi-disciplinary assessment and access to Comprehensive Geriatric Assessment (CGA). The CGA is defined as 'multidimensional interdisciplinary diagnostic process focused on determining a frail older person's medical, psychological and functional capability in order to develop a co-ordinated and integrated plan for treatment and long term follow up'. Moreover, it is noted by this research that the CGA has proven efficacy in maximising independence, reducing hospital admission and maintaining optimal cognitive and physical function and incorporates multi-disciplinary assessment as well as the client's living environment.

This report recommends the screening of all older adults for frailty syndrome at the 'front door' of the hospital and a CGA as appropriate.

4.4 Logic Model

Based on established evidence, Logic Models set out the inputs and outputs needed to deliver the expected outcomes. The following logic model has been developed using the evidence noted in Section 3 and provides evidence of the KPIs used to measure the performance of similar intermediate care services, including service related outcomes[38] and the user related outcomes.[39]

[36] Cochrane Review (2010) *Comprehensive Geriatric Assessment for Older Adults Admitted to Hospital*
[37] Dawson, Rhian; Jenkins, Lesley (2014) *Are We Failing our Frail: Lessons from International Evidence*
[38] These are outcomes that benefit the hospital or the health care system (e.g. improved patient flow)
[39] These are outcomes that benefit the user of the service (e.g. improved health and well-being, greater functionality etc.)

Figure 4.1: Logic Framework for TOCALS

Inputs	Activities	Outputs	Outcomes
Funding Resources Facilities IT	• Multi-disciplinary teams developed at each hospital site. • Buy in appropriate stakeholders in the hospital and community • Development of a functional 'medical fit' list and glossary of terminology to be used across health and social care • Set targets for outputs and outcomes. • Monitor performance against outputs and outcomes. • Communication Activities: Highlight Meetings[40] on a weekly basis to ensure all staff up to date on patients. • Bullet rounds[41] to support and guide Comprehensive Geriatric Assessment	• Number of referrals from relevant hospital staff • Number of patients assessed under the (CGA)[42] within target times. • Number of patients supported through the service/ referred to other more relevant supports (i.e. there link to Rapid Response service) • Number of staff involved / trained in the geriatric assessment process and specific needs of older, frail patients. • Development of Geriatric Assessment Process and supporting documentation.	Service Related Outcomes • Reduction in unscheduled hospital admissions[43] • Reduction in the length of stay • Facilitation of early discharge[44] • Cost savings to the health service[45] Service User Outcomes • Increased independence[46] • Improved quality of life.[47] • Increased patient satisfaction

[40] Highlight meetings were held with staff involved in TOCALS delivery and other hospital staff to discuss communication challenges and issues in order to facilitate closer working relations. These sessions supported learning, service development and improved outcomes from patients.

[41] Bullet rounds are quick fire multidisciplinary discussions on all patients in order to share current patient status and any interventions required.

[42] The gold standard for the management of frailty in older people is the process of care known as Comprehensive Geriatric Assessment (CGA). It involves a holistic, multidimensional, interdisciplinary assessment of an individual by a number of specialists of many disciplines in older people's health and has been demonstrated to be associated with improved outcomes in a variety of settings. It was developed by a team from the British Geriatrics Society. (http://www.bgs.org.uk/index.php/cga-managing)

[43] Mytton et al. British Journal of Healthcare Management 2012 Vol. 18 No 11

[44] Kings Fund (2014) Community services: How they can transform care

[45] Best Practice: Continuum of care for frail older people: from emergency ward to living at home (2013) http://www.projectaida.eu/wp-content/themes/thunderbolt/docs/Swedish_Skora.pdf

[46] Effects of delays in transfer on independence outcomes for older people requiring post-acute care in community hospitals in England Young, John et al. *Journal of Clinical Gerontology and Geriatrics* , Volume 1, Issue 2 , 48 - 52

Inputs	Activities	Outputs	Outcomes
	• Bi-monthly newsletters, outlining case studies which support learning and development of staff and cultural change.		

As shown in the logic model there is a range of KPIs needed at output and outcome level to measure performance. To date TOCALS has focused mainly on output measures and to a lesser extent outcome measures (see section 5.1). While a focus on output measures was appropriate for a pilot stage intervention, there is now an opportunity to develop further outcome KPIs in order to demonstrate the achievements of the service at both output and outcome level.

The research shows that similar intermediate care services provide a wide range of outcomes and these should be measured to provide a full picture of the impact the service provides. Patient surveys can be used to collect this evidence as well as tools such as the Older People's Quality of Life Questionnaire. The Office of Research Ethics Committee Wales note that is ethical to speak to patients in receipt of care services as part of an evaluation providing they have sufficient competence to understand what they are agreeing to and that they understand they can opt out. Looking ahead to any future evaluation of the service, patient feedback should be gathered to help develop the evidence base.

Key Findings

The number of older people in Carmarthenshire is projected to grow significantly over the next five years, which will lead to increased pressure on the health and social care system. The literature review shows that models of care focusing on early assessment of older patients at the "front door" of the hospital and planning patient discharge as soon as patients are admitted have a number of positive impacts on the health service (including a reduction in unnecessary admissions and a delayed discharge). In addition patients have better health and well-being outcomes and report higher levels of satisfaction with the care they have received. ICF monies for the TOCALS service were used to develop this approach by providing a service that implements decision making at the 'front door' of the hospital and discharge planning on the ward, in order to ensure the timely and efficient 'transfer of care' of frail older adults back to their community.

The TOCALS project has focused on a number of output measures such as number of patients assessed or decreased length of stay, however there is an opportunity for the service to also measure the patient experience and how quality of life is improved for those who use its services.

5 INTEGRATION

The following section details the level of integration of stakeholders at strategic and operational levels with regard to TOCALS.

5.1 Strategic Level Integration

5.1.1 Project Board

The Project is overseen by a Project Board which consists of senior staff from Carmarthenshire County Council and Hywel University Dda Health Board; including the Head of Primary, Community and Social Care; the Locality Manager and TOCALS Project Lead; the clinical lead physiotherapist; the Directorate Lead Nurse for Unscheduled Care; the clinical lead occupational therapist; the Professional Lead for Social Work; the Assistant Locality Manager for Llanelli, the Directorate Lead Nurse for Scheduled Care; and the Scheduled Care General Manager.[48]

Therefore the project board includes representation from senior members of staff from Health and Local Government, therefore ensuring that they are involved in the leadership and governance of the project.

Project Board meetings were held every month from October 2014 – March 2015, in order to:

- Review the performance of the service and advise on changes and alterations to the delivery model;
- Report issues and develop solutions for the service (e.g. the inability to recruit certain team members, especially Occupational and Physio therapists);
- Approve any changes to project objectives, constraints, products and timescales of the initiatives; and
- Oversee the implementation of new processes and protocols associated with the service, including the Frailty Assessment Process and 'bullet rounds'.

Whilst many members would have been familiar with each other prior to meeting on the Board, feedback from project staff highlighted that it provided a new forum for the professionals to focus on working more closely together and specifically on the needs of older frailer patients.

The Project Board has worked together to engage staff at both hospitals and to develop protocols and processes, including the patient assessment processes and bullet rounds[49] and to garner support and input from other existing teams including Multi-disciplinary teams (MDTs) and CRTS.

[48] TOCALS Project Board Meeting 15th December

[49] Bullet rounds are quick fire multidisciplinary discussions on all patients in order to share current patient status and any interventions required.

5.2 Operational Level Integration

The operational level integration involved different disciplines and required staff involved in the hospitals to be aware and knowledgeable regarding the capacity and support in the community. Specific examples of operational level integration are:

- TOCALS team staff worked with existing hospital staff including Discharge Liaison Nurses (DLNs), Physiotherapists, and Occupational Therapists to support patients (either in the hospital or in the community);
- Systems and processes were established to facilitate partnership working between TOCALS and staff in Emergency Departments (ED) and Clinical Decision Units (CDU) to ensure that all frail older adults attending the 2 hospitals were referred to TOCALS for a Comprehensive Geriatric Assessment;
- Highlight meetings were held with staff involved in TOCALS delivery and other hospital staff to discuss how communication could be improved between TOCALS staff, hospital and community staff and to address any potential issues in order to facilitate closer working relations. Feedback from staff suggests that these sessions supported learning, service development and improved outcomes from patients;
- 'Bullet rounds' were introduced on the hospital wards; these were quick fire multidisciplinary discussions on all patients in order to share current patient status and any interventions required. This was a very successful in keeping everyone fully updated on the status of individual patients
- Ward handover sheets were developed to support multidisciplinary discussion on patient progress and discharge planning; and
- Teaching sessions on Frailty / Delirium led by consultant Geriatrician were held; and
- TOCALS was also supported by Geriatrician staff who provided clinical advice when needed and helped communicate the 'frailty approach' to nursing and physician staff.

5.2.1 Project Management and Integrated Working

The Project Manager is employed jointly by Hywel Dda University Health Board and Carmarthenshire County Council.[50] This provides the project with a strategic overview of both health board and council processes and procedures and a clear understanding of how the project contributes to the aims and objectives of both organisations.

The Project Manager is responsible for overseeing the progress of the project and reports to the Board throughout the year. The role also requires the manager to liaise with other health service professionals in the planning and implementation of the service. This included the development of protocols and processes for the frailty assessment and discharge planning.

The Project Manager established relationships and referral processes with community based staff such as those on the Community Response Teams (CRTs) (evidenced by referrals to the community). Therefore, the pre-existing relationships with community based staff and a detailed understanding of community based health and social services helped to contribute towards the successful implementation of the project.

[50] Transfer of Care Initiative – Project Initiation Document, Rhian Dawson (June 2014)

Two TOCALS teams were put in place for the delivery of the project, one based at Prince Phillip Hospital (PPH) and the other at Glangwili General Hospital (GGH). As shown in the following table the ICF funded staff included social workers, physiotherapists and nurses who worked alongside existing (non ICF funded) staff (including Discharge Liaison Nurses, Physiotherapist and OTs in both hospitals).

Table 5.5:1: Staff involved in the TOCALS service at each hospital site

Hospital	Staff Involved	
	ICF Funded Staff	Existing Staff
PPH	• 1x Social Worker • 1x Physiotherapist • 1X Discharge Liaison Nurse	• 1 x Occupational Therapist (OT)
GGH	• 1x Social Worker • 2x Nurse • 1x Discharge Liaison Nurse	• 1x Physiotherapist • 1X OT Technician • 1x Discharge Liaison Nurse • 1 x Social Worker

The project manager noted that the TOCALS team members were experienced individuals who had professional, clinical and leadership skills that allowed for constructive and positive discussions with clinicians and multi-disciplinary staff within the hospitals.

In Glangwili Hospital the TOCALS team worked in partnership with the Clinical Decisions Unit (CDU) staff to ensure that all frail older adults received CGA at the 'front door'. The TOCALS staff also worked closely with the DLN to enhance and support existing discharge facilitation at ward level. Feedback from the Project Manager and service delivery staff indicates that the TOCALS team in Prince Phillip Hospital also worked closely with hospital staff and were supported and endorsed by clinicians, geriatricians and multi-disciplinary staff within the hospital.

5.2.3 Staff Feedback on Integrated Working[51]

TOCALS staff were surveyed as part of the evaluation to get their views on how well the project had worked.[52] 100% (n=18) of those who responded noted that there is effective inter-agency team working on the TOCALS service; and 94% of respondents (n=17) believed that the TOCALS project provided the opportunity to share knowledge and expertise with other staff from other agencies.

Furthermore, 94% of respondents either 'agreed' or 'strongly agreed' that there was effective multi-disciplinary working within the TOCALS service. Some of the additional responses in relation to this question include:

> *"As a member of the team we discuss patients in a holistic way with everyone inputting their specialised knowledge" (GGH)*
>
> *"Excellent communication between all staff groups. Work closely together and see referred patients together." (PPH)*
>
> *"Every team member had an understanding of each other's role and had the same work passion and enthusiasm towards patient care." (PPH)*

A key element to the successful implementation of the TOCALS project was hospital staff working with and referring patients to community services, 88% (n=16) of respondents to the staff survey believed that hospital staff were 'a lot more' or 'somewhat more' confident about discharging patients to the community safely as a result of TOCALS.

5.2.4 Risk Management

A risk management plan was developed and included in the PID in August 2014. The majority of risks identified for TOCALS related to the potential failure to integrate the new processes into the existing care pathways; lack of communication between team members and confusion on roles / responsibilities. The actions taken against identified risks is outlined below:

- **Integration of new processes into existing Care Pathways**: This was actioned early on in the project, through the development of the CGA and the training of relevant staff.
- **Communication:** There was on-going communication to ensure that the team were kept up to date throughout for example: the highlight meetings held weekly between staff on the multi-disciplinary team and the introduction of the 'bullet rounds' (i.e. brief daily information sessions on patients including all those responsible for care e.g. consultant, nurse, discharge liaison nurse, physio etc.) helped demonstrate to those involved the benefits of the service. Feedback from staff survey, highlighted 72% (n=13) of staff survey respondents agreed or strongly agreed that there was good communication with staff across the different professions within the hospital while 22% (n=4) indicated neither / nor and 6% (n=1) disagreed. Moreover, 100% agreed or strongly agreed that there was effective multi-disciplinary team working within the TOCALS service. Comments included:

[51] Transfer of Care Advice and Liaison Service – Evaluation, Recommendations and Strategy (March 20 15),
[52] In total 18 staff completed an online survey: 8 from PPH, 6 from GGH and 4 community based staff.

> *"Excellent communication between all staff groups. Work closely together and see referred patients together"*
>
> *"There is good communication with staff from other agencies/organisations"*

Furthermore, case studies were used to support learning at practitioner level through newsletters distributed to clinicians, nursing staff and acute sector managers.

- **Confusion on Roles and Responsibilities**: There is no evidence from the consultations or staff survey that this risk materialised. For example 94% of respondents to the staff survey noted that they were very satisfied or satisfied that Staff were working together and knowing what each other was doing.

Key Findings

The project has demonstrated integration at a strategic level as a Project Management Board was developed which created new, inter-agency working relationships and met on a monthly basis throughout the implementation phase of the project. Furthermore, new processes (i.e. Frailty Assessment) and protocols (i.e. Bullet Rounds with MDT members) were implemented and integrated into the care systems quickly and seamlessly.

Feedback from staff involved at all levels (i.e. project manager, project board and delivery staff) has indicated that the project led to improved communication and increased integration among staff from the different agencies and different professions. Significantly, staff reported increased levels of confidence in referring patients to community services.

One of the key risks for the project, which was noted as the implementation stage was lack of inter-agency communication. This risk does not appear to have materialised, as the majority of staff who responded to the survey provided positive feedback on inter-agency and multi-disciplinary communication, which may be partly due to the processes that were put in place.

6 PROJECT MONITORING AND OUTCOMES

This section provides an assessment of the extent to which outcomes have been realised from June 2014 to March 2015 and how they have been monitored and reported on.

6.1 Monitoring and Reporting

6.1.1 Monthly Data Collection and Reporting

The Assistant Locality Manager collates data on the project and reports to the Project Board on a monthly basis, including details of performance in relation to the following:

- Number of referrals to the service (output)
- Number of patients admitted (output);
- Average length of stay in PPH and GGH (outcome);
- Number of re-admissions (output);
- Number of avoided admissions (outcome); and
- Patient case studies.

The data provided monthly reports against the set KPIs. Table 6.1 reviews the performance against the objectives that were set out in the PID. However, as there were no formal outcome targets set for the project, evidence against indicative outcomes has been examined, and potential KPIs for future consideration are listed below. The Logic Model in section 4 highlights the expected outputs and outcomes. The reporting system should be developed to cover those not currently measured, specifically:

- Patient health and well-being evidence: The National Audit of Intermediate Care recommends the use of the Barthel Index on admission and discharge from intermediate care services to assess changes in functionality. This would be appropriate for patients who have been admitted to hospital and those who have been transferred to community based services;
- Improvement in the quality of life of patients should also be recorded and reported this would also apply to patients who have been admitted to hospital and those who have been transferred to community based services.[53] While it is noted that the TOCALS service plans to collect this through case studies during 2015/16, it is suggested that KPIs are set for these areas and evidence should be collected against using robust tools such as the Older Peoples Quality of Life Questionnaire (OPQOL).[54]
- Patient satisfaction data should be collected consistently and routinely across all localities.

[53] There are a number of quality of life scales that are specifically designed for use with Older people, for example the Older Peoples Quality of Life Questionnaire (OPQOL)

[54] Bowling, A. and Stenner, P. Journal of Epidemiology and Community Health 2011;**65**:273-280

6.2 TOCALS Performance over the Evaluation Period

In total 247 people were referred to the TOCALS service during its seven months of operation in PPH and 3 months of operation in GGH. An overview of the number of people assessed is detailed in table 6.1.

Table 6:1: Performance against expected deliverables-June 2014 – March 2015 (PID August 2014)

Expected Deliverables from both Acute Hospital Sites[55]	Performance September 2014 - March 2015[56]			Details
	PPH (September 2014 – March 2015)	GGH (December 2014 – March 2015)	Total / Overall	
Decreased length of stay against baseline at project initiation	Average length of stay of TOCALS Patients 6.2 days	Average length of stay of TOCALS patients 11.3 days	170 patients were admitted to hospital and the average length of was 9 days.	No baseline of average length of stay for frail, elderly patients was collected prior to TOCALS was provided.
Reduced readmissions for frail older individuals who are supported by the team	4	3	7 re-admissions (4%) of total discharged.	Re-admission rates prior to TOCALS not provided. A report by StatsWales reported average re-admittance rates of 6.5%[57]
The MDT will contribute to the development of an acute hospital frailty pathway	N/A	N/A	TOCALS staff formed part of a multi-disciplinary team that worked to design and implement a new frailty pathway into the 2 hospitals. The pathway involves the assessment of frail older adults at the front door of the hospital, followed by a more	The acute hospital frailty pathway was developed and implemented by September 2014 in PPH and December 2014 in GGH.

[55] Outcomes taken from the Transfer of Care PID – August 2014 – Final Version

[56] Performance information taken from: Information on patients provided by the project manager to PACEC (October 2015); and The End of Programme Evaluation Paper prepared by the Project Manager (March 2015)

[57] StatsWales (2015) – Available at: https://statswales.wales.gov.uk/catalogue/Health-and-Social-care.

Expected Deliverables from both Acute Hospital Sites[55]	Performance September 2014 - March 2015[56]			Details
	PPH (September 2014 – March 2015)	GGH (December 2014 – March 2015)	Total / Overall	
			comprehensive geriatric assessment.	
Support the development of a realistic date of discharge prediction for the frail old	N/A	N/A	Feedback from staff indicates that the new pathway led to the development of a more realistic date of discharge prediction for frail older patients.	Bullet rounds were used to discuss current patient status and any interventions required in order to support discharge. Feedback from staff indicates that this led to the development of a more realistic date of discharge prediction for frail older patients.

Therefore the project has performed well against the deliverables in the PID both in terms of decreasing length of hospital stay and reducing hospital readmissions as well as successfully implementing new processes and procedures.

6.3 Outcomes

In addition to the deliverables noted in the PID the monthly reports covered progress on the following key outcomes.

Table 6:2: Performance against Key Outcomes (PPH: September 2014 – March 2015 and GGH: December- March 2015

Outcome Measure	Evidence
Reduced in-patient bed days (time)	Average length of stay: 10.7[58] days across all of Hywel Dda-University Health Board (for all patients aged 65 years and over). TOCALS average length of stay (ALOS) = 8.75 days: • PPH 6.2 days • GGH 11.3 days The overall ALOS for TOCALS patients was 1.95 days fewer than the Health Board average for all patients aged 75 years and over. Moreover, this is in line with research on interventions to reduce length of stay in hospital[59] that states early discharge planning programmes can reduce average length of stay by less than 1 day.[60] The Project Manager noted that the GGH tends to have patients with more serious/complex conditions and that would expect longer stays than in PPH.
Hospital admission avoided from A+E/CDU	Number of patients avoided admission from the project: 19 in PPH[61] (25% of total avoided admissions due to TOCALS). Number of patients avoided admission from the project: 58 in GGH[62] (75% of total admissions due to TOCALS). **Total avoided admissions: 77** The Project Manager noted that PPH is a smaller hospital with fewer emergency admissions, which mainly accounts for the difference in the number of referrals in the two hospitals.
Hospital readmissions after 30 days %	4% of patients were readmitted after 30 days

Source: TOCALS Project Monitoring Reports (September 2014 – March 2015)

Therefore TOCALS has:

- **Supported a reduction in the average length of stay by 1.95 days**, based on 170 admissions over the seven month period (September 2014 – March 2015) this equates to an estimated saving of 331.5 hospital bed days;

[58] Data on average length of stay across of Hywel Dda University Health Board as provided by project administrative support

[59] Miani C, Ball S, Pitchforth E, Exley J, King S, Roland M, et al. Organisational interventions to reduce length of stay in hospital: a rapid evidence assessment. Health Serv Deliv Res 2014;2(52)

[60] Shepperd S, McClaran J, Phillips CO, Lannin NA, Clemson LM, McCluskey A, et al. Discharge planning from hospital to home. Cochrane Database Syst Rev 2010

[61] TOCALS Project Monthly reports

[62] TOCALS Project Monthly reports

- **77 patients avoided admissions, this equates to an estimated saving of 673.75 hospital bed days** (based on an average 8.75 days x 77 patients). This relates to seven months in PPH (September 2014 - March 2015) and 4 months in GGH (December – March 2015);
- **Reduced re-admissions by 2.5%,** based on the total number of patients admitted, this equates to 4 fewer re-admissions over the seven months, an estimated hospital bed saving of 37.2 days. (based on: 2.5% of 170 admissions = 4.25 x 8.75 (ALOS) = 37.2 days).

Therefore from the 247 patients who were referred to TOCALS an estimated 1,042 hospital bed days have been saved (an average of just over 4 days per patient).

Additionality is a key concept when assessing the impact of any intervention as it assesses the extent to which the outcomes delivered would have happened anyway. A Staff survey and interviews were used to obtain this information. Staff feedback indicates that they believed that patients would have been more likely to be admitted to the emergency department / CDU or stay longer in hospital (89% respectively) without the TOCALS project. In addition, 100% of staff respondents believed that patients received support sooner as a result of TOCALS and 94% believed that patients achieved 'greater benefits' as a result of this support.

6.3.1 Staff feedback on Outcomes Delivered

An online staff survey was issued to all staff involved in the TOCALS project to gather feedback on the service (as set out in appendix C). Eighteen staff completed the survey from the following:

- Community (health manager) – 3
- Glangwili General Hospital – 7
- Prince Philip Hospital – 8

Respondents were asked to rate the impact of the service on a high to low assessment scale and the responses received are displayed in table 6.3.

Table 6:3: Please indicate your opinion of the level of impact achieved by TOCALS

Area of Impact	Low	Medium	High	Total Responses
Patient's ability to regain independence / functionality	1 (5%)	6 (33%)	11 (61%)	18
Patient's ability to access appropriate health and social care services	0	6 (33%)	11 (61%)	17
Patient's ability to access suitable voluntary sector services in the community	1 (5%)	12 (67%)	5 (28%)	18

Area of Impact	Low	Medium	High	Total Responses
Patients' satisfaction with the services and advice received	1 (5%)	7 (39%)	9 (50%)	17[63]

Source: PACEC- TOCALS Staff survey (October 2015)

The majority of staff believed TOCALS had a medium to high impact on a range of patient outcomes including their ability to re-gain independence or functionality and their level of satisfaction with the service. Whilst this is a positive view of the service, robust data collected routinely would be required to fully understand the impact of the TOCALS services on patients.

Survey results also demonstrate the positive impact of the project on staff, for example 100% (n=18) of respondents agreed that TOCALS provided hospital staff with more support when considering the alternatives to admitting patients. One respondent highlighted that the service was well thought off amongst staff and that A&E staff saw it has a valuable tool for them to refer older, frail adults to.

"This has been a valuable asset to the hospital and has had noticeable results on patient flow. The knowledge of the MDT members has made access to information easier and has allowed patients to be discharged home safely with community services which previously wouldn't have been so accessible." (PPH)

6.3.2 Patient Case Studies

While it was not possible through this evaluation to collect primary data from service users to understand the impact of the TOCALS service on them, the project Manager provided case studies to provide qualitative examples of the outcomes achieved, as illustrated below.

Patient Case Study 1:

Mrs J is 87 years old and lives alone while her daughter lives locally and supports her with shopping and banking.

When Mrs J's daughter was on holiday she suffered a fall and presented in the Emergency Department with a swollen right knee. While there was no bone injury, due to poor mobility Mrs J. was admitted to hospital until arrangements could be made for temporary social care support.

On the ward, the nurses observed and recorded that Mrs J had episodes of confusion and disorientation, and while at times she was compliant with nursing care there was also occasions when she resisted any support and exhibited challenging and difficult behaviour.

[63] One respondent did not provide an answer to this question.

Mrs J was also incontinent of urine and faeces and it had been suggested that Mrs J's needs would be best met with EMI Residential Placement.

Collateral information was sought from Mrs J's daughter who advised that her mother's physical and cognitive status prior to admission was significantly different to how she was presenting on the ward. A clinical assessment was undertaken using a validated tool 'Confusion Assessment Method' (short CAM) which was positive and indicative of delirium. Causes for the sudden change in mental status were considered and Mrs J was treated for Intravenous antibiotics and encouraged to mobilise when able. Mrs J was discharged home with reablement providing minimal support.

Patient Case Study 2:

Mrs M is an 81 year old lady who refused any support when she first became known to the Community Resource Team. She had severe cellulitis of the lower limbs at risk of infection. She lives alone, remaining on the ground floor of her house. She has a level access shower, profile bed and rise and recline chair.

She was admitted to CDU after falling at home and being unable to call for help until being found 3 days later. After assessment on CDU, she was moved to a ward for treatment of a chest infection. TOCALS assessed her transfers and mobility and identified that transfers were difficult and she was unable to stand for any length of time. The advice of the CRT senior OT was sought to identify suitable equipment to assist with toileting. Although the patient was progressing well towards returning home, there were some delays caused by scheduling MDT meetings and there was some duplication of therapy input. Mrs M developed two hospital acquired infections, which further set back a timely discharge. However she has now recovered and has been discharged.

Lessons learned: Scheduled MDT meetings are valuable but should not take the place of daily inter-disciplinary conversations on a daily basis that are recorded. Robustly communicated daily progress reports from the multi-disciplinary team ensure that actions identified have been undertaken and support the avoidance of unnecessary delays and facilitate timely discharge.

Patient Case Study 3:

102 year old patient attended ED 48 hours after discharge from the hospital's rehabilitation unit with reduced mobility. The patient had been discharged with one carer attending to support identified needs four times a day.

TOCALS assessed function and gained collateral from family. It was identified that the patient had increased anxiety about falling and did not feel that one carer was sufficient to support her. It was identified that the patient's functional performance improved significantly with the assistance of two for transfers and mobility. There were no medical concerns identified by either TOCALS or the clinician involved.

The TOCALS OT liaised with the patient's social worker in the community and discussed options for increasing support on discharge. The Social Worker was able to support temporary increase in support with two carers using the ICF funded Rapid Response Domiciliary Care service on a temporary basis while further assessment on the individual's progress was made by the community based therapists. Lessons learned: The patient's overall presentation was affected by anxiety due to a history of falls. The nursing staffs in the ED were reluctant to mobilise client due to her frail appearance. TOCALS were able to complete a full Comprehensive Geriatric Assessment and identify that her functional needs could be met in the community. Working with the Social Worker allowed the exploration of all options including the use of Rapid Response Domiciliary service and the development of a contingency plan. As a result, a hospital admission was avoided.

Key Findings

The TOCALS has had a number of notable successes during the 7 (PPH) and 4 (GGH) months of delivery including:

- Reduced hospital admissions, with 77 of the 247 patients referred to the service avoiding admission, over the 7 months of the pilot.
- Supported early discharge, as on average TOCAL patients who were admitted experienced shorter lengths of stay at 9 days compared to a Health Board average of 10.7 days;
- A lower than average re-admission rate after discharge from hospital (only 4% of those discharged under TOCALS were re-admitted, compared to an overall average of 6.5%);
- Increased integrated health care provision through the development and training of a multi-disciplinary team of experts (Introduction of highlight reports and bullet rounds led to a new way of working with both care staff within the hospital and community care staff coming together to deliver the TOCALS service). Respondents to the staff survey reported effective working with staff from other agencies; and

- Improved patient pathways for those classified as frail old (introduction of new frailty assessment for patients entering the hospital and a comprehensive geriatric assessment has led to improved care for frail, older adults).

Feedback from staff also indicated that without the service patients would have been admitted to the emergency department / CDU or remained in hospital for longer.

It is a strength of the TOCALS programme that it is focused on measuring its contribution to the ICF outcomes, namely reduced admissions and decreased length of stay. Research shows that it is likely to be delivering positively in other areas that are a benefit to the health and social care system, however in order to assess the full impact of the project further data should be collected focusing on service user related outcomes. This would include data such as:

- Improvement in the quality of life of patients (those who have been admitted to hospital and those who have been transferred to community based services, for example through the use of a quality of life tools such as the Older People's Quality of Life Questionnaire).
- Patient experience of the new processes (patient satisfaction / feedback on TOCALS should be collected consistently and routinely across all localities).

7 ECONOMIC ASSESSMENT

7.1 Introduction

This section sets out the economy, efficiency and effectiveness of the TOCALS service as well as the cost savings it has generated.

7.2 Economy [64]

The service was awarded £260,000 from the ICF and ran from June 2014-March 2015. A breakdown of the budget and expenditure is set out in the following table below.

Table 7.7:1: TOCALS- Breakdown of Costs against ICF monies June 2014 – March 2015

Area of Spend	Budget[65]		Actual[66]		Variance[67]	
	£	% of total budget	£	% of spend	£	% of spend vs. budget
Staffing						
Salaries and Staff Costs	£208,108	80%	£125,456.50	86.3%	-£82,651.50	60%
Administration and Equipment						
Admin, Operational & Office Equipment	£51,892	20%	£19,006.47	13.1%	-£31,956.27	37%
Computer Hardware	-	--	£929.26	0.6%	-	-
Total	**£260,000**	**100%**	**£145,392.23**	**100%**	**£114,607.77**	**56%**

Source: Information provided to PACEC by accounting officer for TOCALS (October 2015) / ICF Spend by Workstream Document

Overall the project has an underspend of £114,608 (44%) under the budget. This was primarily due to the inability to recruit staff, (including Occupational Therapists and one of the two Physiotherapists as set out in the PID, therefore arrangements were made to access existing staff (who were not funded through ICF) as needed.

[64] Economy considers the extent to which activities were delivered at minimum cost-
[65] Carmarthenshire County Council Finance Department
[66] Carmarthenshire County Council Finance Department
[67] Refers to how much an actual expense deviates from the budgeted or forecast amount

The majority of spend (86%) was on staff salaries. As noted in section 5, the ICF funded staff included:

- 2 Discharge Liaison Nurses,
- 2 Social Workers,
- 1 Physiotherapist; and
- 1 Nurses

In addition to the clinical staff noted above a small amount of funding (£1,811) was allocated to administration. Expenditure on hardware and equipment included expenditure on Patient Status at a Glance (PSAG) boards and IT equipment.

7.2.1 Other in-kind contributions

As summarised in section 5, the TOCALS project staff worked within the hospital and community teams in both localities and relied upon input from a number of staff who were already in post prior to TOCALS (such as Nurses Occupational Therapists and Physiotherapists). During September 2014 to March 2015 a total of 12 staff were involved in the delivery of the service, seven of whom were funded through ICF and five were not. Therefore the project received in-kind support from Carmarthenshire County Council and Hywel Dda University Health Board via five additional staff. The actual time spent on the TOCALS project and the value of their time was not available for this evaluation.

The project also received support during the implementation phase from Integrated Services. This equated to approximately 20% of the Project Managers time, equating to around £11,718 over the 10 month period. Furthermore, during the project implementation and piloting phase TOCALS was overseen by a Senior Staff member, with approximately 80% of their time was spent on TOCALS during its operation, equating to approximately £46,872 over the 10 month period.

7.3 Efficiency [68]

Efficiency is measured by comparing the performance of the TOCALS service with other similar services (where comparable data is available). Research[69] notes that the average length of stay in hospital is frequently used as an indicator of efficiency[70], and measures to reduce length of stay can be seen to enhance both operational and allocative efficiency. Specifically, this research notes that a shorter stay reduces the cost per discharge and may shift care from the inpatient setting to alternative settings for the delivery of continued care after discharge that tend to be less expensive. The average length of stay for TOCALS patients was 9 days, 1.7 days fewer that the Hywel Dda University Health Board average for patients aged 75 or over[71]. Furthermore, re-admission rates are also regarded as a part of

[68] **Efficiency:** considers the benefits (the net outputs or outcomes) compared to the intervention costs
[69] Miani C, Ball S, Pitchforth E, Exley J, King S, Roland M, et al. Organisational interventions to reduce length of stay in hospital: a rapid evidence assessment. Health Serv Deliv Res 2014;2(52)
[70] Organisation for Economic Co-operation and Development (OECD). Health at a Glance 2012: OECD Indicators. Paris: OECD; 2012
[71] Data on average length of stay provided by project administration staff

an overall measurement of hospital performance and efficiency[72], re-admission rates for TOCALS patients are 2.5% less than the Welsh national average at 4% compared to 6.5%.

The evaluation team identified a similar service in Cardiff and Vale as a useful comparator for the TOCALS project. The Frail Older Persons Assessment and Liaison service (FOPAL) at University Hospital of Llandough (UHL) was noted as having similar aims, objectives and processes as TOCALS. It also identifies frail older patients presenting at A&E who can be returned directly to the community with or without support from community services and those who would benefit from being admitted to an appropriate in-patients ward for assessment treatment with a discharge plan. The project was also funded under the ICF and was established in July 2014, further details on FOPALS are set out in appendix C).

The FOPALs project received 95 referrals in one month and has a multi-disciplinary team with seven staff, if multiplied to seven months (the length of time TOCALS operated) this would equate to 95 patients per member of staff, compared to 35 patients per ICF funded staff member for TOCALS[73]. As costs for the FOPAL service were not provided it is not possible to provide a cost per patient comparison. Therefore, whilst the TOCALS project was efficient in making use of existing staff and resources and reducing the average length of stay for patients to below average, it does not compare well to other projects on number of staff per patient referred. It should also be noted that UHL has significantly more people presenting A&E than either PPH or GGH, for example in March 2015 10,960 patients attended UHL in Cardiff compared to a total of 6,023 for both GGH and PPH in Carmarthenshire[74]. The attendance rates suggest that there are likely to be more, frail, elderly patients who could be referred to the service in Cardiff and Vale than in Carmarthenshire.

7.4 Effectiveness[75]

Effectiveness considers how well the project delivered against the objectives and targets that were set for it and the outcomes achieved. No specific targets were set for the number of patients to be treated through the service, the rate of hospital admissions prevented or days saved, therefore it is not possible to comment on the project's effectiveness in this regard.

However, as set out in Section 6.2, the project manager provided data on progress against the project's deliverables, these primarily related to the establishment of services and have been achieved.

Feedback provided by staff also noted that the TOCALS project was also effective in achieving positive outcomes for patients, for example staff noted that the TOCALS was effective in helping patients regain their independence and functional ability and they believed that there was high levels of patient satisfaction. Therefore, overall the project is effective as

[72] NHS Institute: (2008) Performance Management: Available at: http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/performance_management.html
[73] 247 patients / 15 staff members = 16.47 ~ 16
[74] http://www.infoandstats.wales.nhs.uk/page.cfm?orgid=869&pid=62956
[75] **Effectiveness:** involves considering whether an intervention's objectives have been met.

it has achieved the deliverables set out in its Project Initiation Document and has increased communication and cooperation between hospital and community staff and feedback from staff also indicates that the project also had a positive impact on the health and well-being of patients.

7.4.1 Cost Effectiveness / Cost Savings

From the September to March 2015 the project prevented 19 hospital admissions in PPH and 58 in GGH and reduced the average length of stay in hospital to 6.5 days in PPH and 11.3 days in GGH. Furthermore, the rate of re-admission for TOCALS patients was lower than would have been expected at 4% (rather 6.5%). In totals these actions resulted in an estimated saving of 1,042 bed days over the seven months from September 2014 to March 2015. Data from NHS Wales[76] indicates that the cost of an acute hospital bed day is £426. The following table provides an overview of the estimated savings in hospital bed days generated by the project.

Table 7.7:2: Estimated Savings as a Result of the TOCALS project

Key Outcomes	Output	Calculations	Savings achieved @ £426 per hospital bed day
Reduced in-patient bed days (time)	Average length of stay: TOCALS = 8.75 days. Health Board = 10.7 days Difference = 1.95 days	170 patients x 1.95 days = 331.5 bed days	£141,219
Hospital admission avoided from A&E/CDU	77 avoided admissions	77 x 8.75 days = 673.75 bed days	£287,018
Hospital readmissions after 30 days %	4% patients were readmitted after 30 days, = 4 less than would have been expected for the 170 patients who were admitted.	4.25 x 8.75 days = 37.2 bed days	£15,842
Total		= ~ 1,042 bed days	**£443,892* (due to rounding)**

The table above shows that based on the 247 referred to TOCALS, it is estimated that gross savings for the health service amount to £443,892. Minus the ICF monies of £145,392 the

[76] Welsh Government | *Health statistics Wales. Finance. 2012/13*. Available at: http://gov.wales/statistics-and-research/health-statistics-wales/?lang=en.

net savings achieved are in the region of £298,500. This equates to net saving of £2.05 for every £1 invested. However, it must be noted that, these figures are only illustrative as the costs did not include the in-kind support provided by Carmarthenshire Council and Hywel Dda Health Board in the form of staff who were involved in TOCALS activities but, were outside of the ICF core funded posts.

Furthermore, this analysis does not take into account the benefits to patients such as improved health and well-being and/or quality of life, nor does the analysis account for potential benefits achieved to other part of the health service, for example through a reduction in delayed discharges. Due to a lack of data these additional savings cannot be measured at this point in time.

7.5 Future

It is projected that by 2020 there will be 46,109 people in Carmarthenshire who are 65 years or older compared to 41,676 in 2014 (an increase of 10.6%). This will place significant pressure on the health and social care system as data from NHS Wales indicates that health and social care provision for older people is proportionately higher that the population size (specifically those aged over 74 account for 8% of the population, yet receive 24% of the procedures in NHS Wales).[77] The financial analysis set out above indicates that the TOCALS project can deliver a net return of approximately £2.05 for every £1 invested. This service can therefore help deliver significant savings to the health and social care system.

Discussions with the Project Manager and members of the Project Board have highlighted that the services and processes developed under the TOCALS project have now been mainstreamed, are being developed further and embedded within the core health and social care system. Feedback from staff and key stakeholders suggests that the processes and procedures that were implemented under the TOCALS project have created a cultural change amongst hospital staff in how they think about frail patients and has helped them to have increased confidence in referring patients on to community based services. Therefore TOCALS services are being reviewed and developed within Carmarthenshire and are likely to continue to do so in the near future.

Key Findings: The project was delivered under budget with a total expenditure of £145,392 and 93% of expenditure was focused on service delivery. However it is likely that the service could be more efficient as the service operated at just over 35 patients per member of staff compared to 95 patients per staff member in the comparable benchmark service. It is also noted that the levels of referrals from PPH were significantly less than those in GGH, which would indicate that there is scope to increase the referral rate there and also increase the efficiency of the project.

No SMART targets were set for the project and therefore it is not possible to conclude on whether it delivered on expectations, however it has delivered effectively against the

[77] Patient Episode Database for Wales (2015) (August 2015) Available at: Http://www.infoandstats.wales.nhs.uk/Documents/869/ExcelTables10P_2014_Wales.xlsx

objectives that were set for it. However evidence on effectiveness could be strengthen by the routine collection of data relating service user impacts.

Key Findings

The TOCALS service has generated considerable health savings as based on the average length of stay for patients in Carmarthenshire it is estimated that the service saved approximately 1,042 hospital bed days through preventing admissions, supporting early discharge and reducing re-admissions. **This equates to estimated net savings of £298,500 and associated return on investment of £2.05 per £1 invested.**

8 CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

The TOCALS project was designed to 'improve preventative care and avoid unnecessary hospital admissions and delayed discharge of older people, particularly the frail old'.[78] The key aim for the TOCALS service as set out in the PID[79] was ***"to facilitate the active development and implementation of an effective frailty pathway, acknowledging the significant risk of permanent loss of function associated with frail old people being admitted to an acute general hospital[80]."***

8.2 Outcome Measures

A number of measures were developed and used to record the performance of the service with regard to reduction of bed days, hospital admissions avoided and readmissions within 30 days.

8.2.1 Recommendations

- Baseline data should be collected and reported against in relation to the average length of stay prior to the TOCALS intervention or the re-admittance rates for older or frail, old patients[81].
- There is a strong body of evidence noting that the collection of feedback from service users is best practice in the evaluation of intermediate care services,[82] this includes patient satisfaction, health and well-being improvements[83] and patient quality of life.[84] TOCALS should therefore collect data on the impact of the service on patients. We recognise that this may be difficult to implement given that the TOCALS service blends with other hospital services and patients may not necessarily be aware that they have gone through a TOCALS process. However, it is important to understand the impact of the service on patients and to collect data that can also be used to compare patients' outcomes with those from other services.

8.3 Performance

Performance against activities detailed in the PID is outlined in the table below. The evidence was collected from monitoring reports, interviews with staff and case study information collected by staff.

[78] Transfer of Care Initiative – Project Initiation Document, Rhian Dawson (June 2014)
[79] ibid
[80] Ibid.
[81] Whilst it is recognised that the Project made us of generic hospital statistics on admissions and average length of stay for those aged over 65 it is not clear how directly comparable this population group is with the TOCALS target population.
[82] For example see Kings Fund (2002) Developing Intermediate Care. A Guide For Health And Social Services Professionals.
[83] Kings Fund (2002) Developing Intermediate Care A Guide For Health And Social Services Professionals
[84] Kings Fund (2014) Community services How they can transform care. Nigel Edwards

Table 8:1: Summary of TOCALS Project Performance (June 2014 – March 2015)

Expected Deliverables[85]	Performance September 2014 - March 2015[86]	Details
Decreased length of stay against baseline at project initiation	170 patients were admitted to hospital, the average length of stay decreased to 9 days.	Average length of stay decreased by 6.2 days in PPH and 11.3 days in GGH. No baseline of average length of stay prior to TOCALS was provided. **No specific targets were developed for this deliverable.**
Reduced readmissions for frail older individuals who are supported by the team	Only 7 re-admissions (4%) of total discharged.	Re-admission rates prior to TOCALS not provided. **No specific targets were developed for this deliverable.**
The MDT will contribute to the development of an acute hospital frailty pathway	TOCALS staff have formed part of a multi-disciplinary team which have worked proactively to introduce and develop a new frailty pathway into the hospitals which have participated. The pathway involves the assessment of frail older adults at the front door of the hospital, followed by a more comprehensive geriatric assessment.	The Project Manager noted that this new care pathway for this group lead to better assignment of the next stage of care (i.e. hospital admission or discharge with appropriate support).
Support the development of a realistic date of discharge prediction for the frail old	Discharge Liaison Nurses, working in partnership TOCALS team members have developed an enhanced discharge process by ensuring that patient needs, identified in the CGA carried out before admissions is acknowledged and acted upon on the wards.	Bullet rounds to share current patient status and any interventions required. Feedback from staff indicates that all of this has led to the development of a more realistic date of discharge prediction for frail older patients.

Data sourced on performance and detailed in the table above has been sourced from Project Monitoring reports.

[85] Outcomes taken from the Transfer of Care PID – August 2014 – 'Final Version' – Internal document

[86] Performance information taken from: Information on patients provided by the project manager to PACEC (October 2015); and The End of Programme Evaluation Paper prepared by the Project Manager (March 2015)

Therefore, as summarised in the above table, the TOCALS project had a number of significant achievements within a short period of time, including:

- The development and implementation of processes and procedures to facilitate the enhanced assessment of frail older patients attending A&E departments;
- Establishment of multi-disciplinary teams;
- 77 patients avoided admission;
- Reduction in the average length of stay of older patients; and
- Improved discharge planning.

However an area for further consideration is whether more patients could be referred to TOCALS within the two relevant hospitals.

8.3.1 Recommendations

- Further research and data collection is needed to confirm that all frail, older, people presenting in A&E are being referred for Comprehensive Geriatric Assessment, this would then determine if the potential benefits of TOCALS are being maximised.
- We recommend that targets should be developed for each objective going forward; and
- We recommend that future reporting templates detail quarterly and cumulative progress against all the objectives and targets details in the PID.

8.4 Integration

TOCALS was overseen by an Integrated Project Board that involved senior representatives from Council, the Health Board and the Third Sector who worked together to influence the structure and delivery of the project. The structure and systems (i.e. monitoring reports) were put in place to govern the project.

The service was delivered by Health Board staff who worked closely with staff in the community (i.e. Council staff), as well as staff within the hospitals and Primary Care Teams (Health Board Staff). The TOCALS project staff also worked with closely with established staff in the hospitals such as the Discharge Liaison Nurses and the integrated Community Response Teams. In addition, new processes and procedures were put in place to support joint working such as highlight meetings and bullet rounds.

Staff who provided feedback noted improved levels communication with staff from other agencies and disciplines as a result of the project, therefore the project supported increased levels of integration between health board staff and council staff.

8.4.1 Recommendation

TOCALS should ensure that they maintain strong working relationships with staff in the community (e.g. Community Resource Teams) so that those who are not admitted to hospital continue to have an appropriate form of alternative provision to be signposted to.

8.5 Economic Assessment

The project was assessed with regard to its economy, efficiency, effectiveness and cost effectiveness and it demonstrated that:

- **Economy**: Overall expenditure for the project was under budget by £114,608 (44%). This was primarily due to the inability to recruit staff as it was not possible to recruit the additional OTs and a Physiotherapist therefore the TOCALS project made use of existing staff (who were not funded through ICF). In addition to the ICF funding the Carmarthenshire Council and Hywel Dda University Health Board also invested at least £80,398 into the project, in particular during the implementation phase. The TOCALS project was highly focused on service delivery with 93% spent on staff to deliver the service. The project also made use of existing resources and support in-kind from the Hywel Dda University Health Board.
- **Efficiency:** The cost per patient using the TOCALS service equates to £588 per patient. Overall the project received 49 referrals per month compared to a similar project in Cardiff (FOPALS) which received 95 per month and while this project had one staff member per 95 patients the TOCALS project had one staff member per 46 patients. Overall, this would suggest that the project could be more efficient.
- **Effectiveness**: The service prevented admissions and supported early discharge for 247 patients, resulting in a total estimated saving of 1,042 bed days.
- Based on the 247 referred to TOCALS it is estimated that gross savings for the health service amount to £443,892. Minus the ICF monies of £145,392 **the net savings achieved are in the region of £298,500**. This equates to net saving of £2.05 for every £1 invested. **However, it must be noted that, these figures are only illustrative as the costs did not include an allocation for staff involved in the project outside of the ICF core funded posts.**

8.5.1 Recommendation

To further inform economic assessment in the future, more detailed financial data on staffing costs should be collected, this would include time spent by all staff on TOCALS activities in addition to those who have been funded through ICF.

APPENDIX A – POLICY CONTEXT

Policy Context

There are a number of Welsh Government policies and strategies that are directly relevant to the implementation and delivery of the Rapid Response services as summarised in the following table.

Table 1 Relevant National Policies and Strategies

Policy	Relevance
The National Service Framework (NSF) for Older people in Wales[87] (2008)	This document sets out to improve health and social care services and equity of access for older people by setting national evidence-based standards for health and social care services. Specific aims of relevance include: 'Challenging Dependency- methods should be put in place to help the old retain their independence'
Social Service Wellbeing Act (2014)[88]	This act provides a single statutory framework covering local authorities responsibilities in relation to all those who need care and support, of all ages, and including their carers. It specifically impacts the delivery of integrated care in Wales as it reforms and integrates social service law and makes provision for: • A duty to assess the needs of an adult for care and support, particularly through the provision of preventative measures put in place to meet individual needs • Co-ordination and partnership by public authorities with a view to improving the well-being of people
A Framework for Delivering Integrated Health and Social Care for Older People with Complex Needs (2014)[89]	The purpose of this Framework is to focus on older people with complex needs and ensure they have a strong voice and control over their care and support. It places a strong focus on preventative services and support to maintain well-being. It is about ensuring services, care and support are designed, co-ordinated and delivered effectively, to meet the outcomes that are important to people and their carers. The Statement of Intent in this framework sets out the need for an integrated approach to targeted preventative services e.g. reablement & intermediate care.

[87] Welsh Government. (2006) National Service Framework for Older People in Wales. Available at: http://www.wales.nhs.uk/sites3/Documents/439/NSFforOlderPeopleInWalesEnglish.pdf
[88] HM Government [Legislation] (2014). 'Social Services and Well-Being Act (Wales) 2014. Available at: http://www.legislation.gov.uk/anaw/2014/4/pdfs/anaw_20140004_en.pdf
[89] Welsh Government (2014) 'A Framework for Delivering Integrated Health and Social Care for Older People with Complex Needs'. Available at: http://gov.wales/docs/dhss/publications/140319integrationen.pdf

Policy	Relevance
Setting the Direction (Feb 2010)	'Setting the Direction' recognises the commitment to delivering world-class integrated health care in Wales which requires a change in the approach to developing both policy and service delivery models for primary and community care. The key underlying Principles for improvement include: • Universal population registration and open access to effectively organised services within the community • First contact with generalist physicians that deal with undifferentiated problems supported by an integrated community team • Localised primary care team-working serving discrete populations • Focus on prevention, early intervention and improving public health not just treatment • Co-ordinated care where generalists work closely with specialists and wider support in the community to prevent ill-health, reduce dependency and effectively treat illness • A highly skilled and integrated workforce • Health and social care working together across the entire patient journey ensuring that services are accessible and easily navigated • Robust information and communication systems to support effective decision-making and public engagement • Active involvement of citizens and their carers in decisions about their care and well-being.
Sustainable Social Services (Feb 2011)	The documents sets out the commitment to reshaping social services on the basis of the following: • Prioritise integrated services esp. for families with complex needs, looked after children, transition to adulthood, frail older people • Need to build services around people • Integrated care one of the 8 priorities for action, led to reshaping services in reablement and family support through integration with health services
Delivering Local Healthcare (July 2013)	This document sets out; • Deliver more healthcare closer to home to reduce hospital use • Increase ability of local services to support people being healthier and facilitate easier access • Greater integration with single system of care planning and service delivery

Table 2 Relevant Local Policies and Strategies

Policy	Relevance
Carmarthenshire County Council Annual Report 2014/15 & Improvement Plan 2015/16[90]	The report sets out the aim to 'transform service delivery that reduces dependency and promotes independence. It aims to secure greater independence and choice for local people, with preventative strategies at the heart of service delivery in adult services.' A key area of focus is to reduce the delayed transfer of care through: • Improve the links between the community and acute sector • A Rapid Response domiciliary care service • Key models established to reduce the number of hospital admissions as well as put in place preventative measures.
Strategy for the care of older people in Carmarthenshire[91]	The areas within this theme are intermediate care, delayed transfers of care, aids and equipment and rehabilitation. Aims include: • Ensure that older people will have access to a range of high quality services, including rehabilitation and intermediate care services to enhance their ability to live as independently as possible in their own home or other care settings. • Resolve the problems of delayed transfers of care

[90] http://www.carmarthenshire.gov.wales/media/846036/Full_ARIP_Report_15-16.pdf
[91] http://online.carmarthenshire.gov.uk/agendas/eng/SHEW20040331/REP04_01.HTM

APPENDIX B – BENCHMARKING

Benchmarking

Introduction

As part of the Evaluation the services provided by TOCALS have been benchmarked against the Frail Older Persons Assessments and Liaison Service (FOPAL) Cardiff and Vale of Glamorgan.

In gathering the information on the benchmarks, only used robust, credible sources of information such as programme data and statistics has been utilised.

Frail Older Persons Assessment and Liaison Service (FOPAL) Cardiff and Vale of Glamorgan

Rationale for Frail Older Persons Assessment and Liaison Service (FOPAL)[92]

FOPAL was created to deliver targeted Comprehensive Geriatric Assessment (CGA) to frail older people presenting at A&E or the Medical Emergency Assessment Unit (MEAU) at University Hospital Wales Cardiff. The vision for the development of the service was to realise the full benefit of investing in a front of house frailty model and achieve the maximum gains of having one.

As the TOCALS being evaluated in this report worked specifically in relation to discharge pathways for frail old patients, FOPAL was deemed to be an appropriate benchmark service.

Background to Frail Older Persons Assessment and Liaison Service (FOPAL)[93]

FOPAL is part of a range of existing and developing specialist older people care services within the Older Persons Acute and Intermediate Care Services which operate alongside integrated community resource teams (CRTs) across three localities. The aim of the service is to work across the boundaries between hospital and community, and health and social care.

As no new resources became available to support service development, FOPAL occurred in a succession of stages, with the early phase predominantly dedicated to exploring feasibility of the concept and providing accurate information on which to base further developments. Subsequent stages involved the establishment of the FOPAL service, as well as a Frailty Clinical Decisions Unit (FCDU) and Acute Geriatric Medicine beds which allow direct admission to a single ward area without requiring further moves and give immediate access to a Geriatrician-led multi-disciplinary team. The Service also required the development of an Emergency Frailty Unit (EFU) within A&E where patients stay for no more than 36 hours.

The FOPALS team is based within A&E and/or MEAU. The team is comprised of a consultant geriatrician, a senior geriatric assessment liaison nurse, senior nurse sessions specifically linked with the CRTs, a part-time social worker and physiotherapy, occupational therapy and mental health links.

[92] FOPAL Proposal OPSD (Older People's Service Delivery Group)
[93] FOPAL Proposal OPSD (Older People's Service Delivery Group)

The FOPAL teams complete CGAs before agreeing a plan for the patient which is discussed with the relevant team to agree its implementation. This could include discharge home with or without community interventions, or to a community hospital or an acute ward. In a small proportion of cases, discussions may be had over end of life planning. Patients may also be referred to a myriad of other available community services such as Palliative Care, Day Hospitals and CRTs. Key requirements of the successful functioning of this system are maintaining the link with primary care and timely transfers of good quality information.

Objectives and Targets

The purpose of this service was to deliver targeted Comprehensive Geriatric Assessment (CGA) to frail older people presenting as emergencies (A&E and MEAU) at University Hospital Wales. A number of targets were set for Stage 2 of the service, which would provide measures of success[94]. These were:

- Reduced emergency admissions for over 65s.
- Reduced bed utilisation for over 65s.
- Increased discharge to usual place of residence.

Outcomes

Performance information is available for the one month period from 01 July 2014 – 31 July 2014[95].

Outcomes

KPI	Outcome
Increase the rate of timely discharge	FOPALS received 95 referrals – 56 of these (58.9%) avoided admission, 2 (2.1%) due to frailty and 37 who (38.9%) received therapy only 66 (69.5%) were discharged within the same month of referral
Avoid unnecessary hospital admissions	Of the 95 referrals received, 56 (58.9%) were able to avoid hospital admission. Of the 92 patients seen, 17 were admitted to University Hospital of Wales within the same month as referral and 3 were admitted to Llandough Hospital. This brings total number admitted to 20 (21.7%) of total seen.
Discharge to community care facilities	Of the 86 patients which were referred and discharged in the same month: One was admitted to a nursing home; • 39 recovered and returned to their own homes; • Three were discharged to a care home;

[94] The Wyn Campaign Milestone Report – February 2013 (Available at: http://www.cardiffandvaleuhb.wales.nhs.uk/sitesplus/documents/1143/Wyn%20Campaign%20Milestone%20Report%20February%202013%20final.pdf)
[95] FOCAL Performance Report July 2014

KPI	Outcome
	• Three are functioning independently of support; • Three were referred to social service care package; Four were referred to community MDT; Five were referred to community physio; Seven were referred to CRT; and One refused further intervention.

Benefits Delivered

Unfortunately, an evaluation of FOPALS had not been undertaken at the time this report was written. However, a 2010 study of another older person's assessment and liaison team (OPAL) in the acute admissions areas of a general hospital found that OPAL was effective as a medium for timely review and intervention of frail older patients in an acute medical setting, and as a mechanism for reducing length of stay[96]. The performance information for FOPALS that is discussed above would suggest that similar benefits will be delivered by this service.

Conclusions and Summary

TOCALS and FOPAL appear to be very similar services, with similar aims and objectives: both aim to avoid unnecessary hospital admissions and delayed discharge of frail older patients; both have established frailty/discharge pathways; and both are multi-disciplinary teams which operate at the 'front door' of the hospital. However, the two services operate in very different contexts. Carmarthenshire, where TOCALS operates is a rural region of Mid and West Wales; whereas FOPAL operates in the capital city of Cardiff. This may somewhat explain the difference in referral numbers as compared below. As described in Section 1 of this report the TOCALS is targeted at frail, older people in Carmarthenshire with the aim of reducing the length of their hospital stay and boosting the rate of timely discharge back into the community. The benchmarked example described above has similar aims and appears to have similar outcomes.

Comparing FOPAL to the TOCALS Programme shows a number of key findings:

Comparison of services

	TOCALS	FOPAL
Average number of referrals	247 (over two hospitals in a 10 month period)	95 (in one hospital over a 1 month period)
% Avoided admissions	31% (over 10 month period)	58.9% over 1 month period

[96] Allen, S., Bartlett, T.,Ventham, J., McCubbin, C., and Williams, A. (2010).'Benefits of an older persons' assessment and liaison team in acute admissions areas of a general hospital', *Pragmatic and Observational Research, 1,* pp. 1-6: http://www.dementiapartnerships.org.uk/archive/wp-content/uploads/may-ooi.pdf

APPENDIX C – STAFF SURVEY TEMPLATE

Welsh Intermediate Care fund – staff Survey – TOCALS Project

As you may be aware PACEC (Public and Corporate Economic Consultants) have been appointed by the Mid and West Wales Health and Social Collaborative to evaluate services and projects delivered under the Intermediate Care Fund (ICF).

As part of this evaluation we are required to gather feedback from staff involved in the TOCALS (Transfer of Care) project on their experience of delivering the services and working collaboratively, the effectiveness of the service, the impacts of service and how additional the service is.

It should take no more than 15 minutes to complete and your responses will be completely confidential and you will not be identifiable in any report.

The response date for this survey is Friday 4th December 2015.

This survey can also be completed online using the following link:

http://www.smartsurvey.co.uk/s/TOCALSSTAFF/

1 - Your job role

Q1 What is your title? *(Please tick one)*

Hospital Ward Manager	
Emergency Department Sister	
TOCALS Team Member	
Consultant	
Hospital Doctor	
Health Manager (Community)	
Local Authority Manager	
Professional Lead	
Other*(Please specify below)*	

Q2 In which setting do you work? *(Please tick one)*

Prince Philip Hospital	
Glangwili Hospital	
Community Response Team	
Other community based team	
Other *(please specify below)*	

Q3 How does your role interface with TOCALS? *(Please provide details below)*

2 – The Effectiveness of the TOCALS Service

Q4 To what extent do you agree or disagree with the following statements relating to the TOCALS service? *(Please tick one per row)*

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Don't know
It is clear what type of patient is likely to benefit from TOCALS support						
The service is patient focused						
Level of staffing resource is adequate						
In the Emergency Department TOCALS helps to avoid unnecessary admissions						
TOCALS helps support discharging planning in the wards						
There is good communication with staff across the different professions within the hospital						
There is good communication with staff from other agencies/organisations (e.g. hospital and community staff)						
The service provides Value for Money for the level of resources in TOCALS						
The service has provided hospital staff with a knowledge of the support that is available to patients in the community						

Q5 Please indicate your opinion of the level of impact achieved by the service. *(Please tick one per row)*

	High	Medium	Low
Reduction in the number of patient bed days			
Reduction in the number of older people who are admitted to hospital			
Improved patient flow			
Patient's ability to regain independence / functionality			
Patient's ability to access appropriate health and social care services			
Patient's ability to access suitable voluntary sector services in the community			
Patients' satisfaction with the services and advice received			
Increased confidence in hospital staff in discharging patients to the community			

Q6 How satisfied were you with the following aspects of the services provided? *(Please tick one per row)*

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Don't know
Staff working together and knowing what each other was doing						

The speed of the service delivery once a patient has been referred						
The knowledge of all staff involved of patients' needs and their ability to provide me with what I needed						
The information given to patients about their care						
The overall level of care provided by the service						

Q7 Do you think the service could be improved? *(Please tick one)*

Yes	No

If yes, how? (Please provide details below)

3 - Additionality of the support from the Intermediate Care Services

We are interested to find out if the benefits to patients and hospital staff would have happened anyway without the services provided under the TOCALS project.

Q8 In your opinion, did TOCALS make an impact on the support patients received whilst in the Emergency Department or, as an in-patient? *(Please tick one)*

Very positive impact	
Positive impact	
No impact	
Negative impact	
Very negative impact	

Q9 In your opinion did TOCALS make a difference to the timeliness of the support patients received? *(Please tick one)*

Sooner	
Later	
About the same	

Q10 In your opinion did TOCALS make a difference to the scale of the benefits achieved? *(Please tick one)*

Greater benefit	
Smaller benefit	
About the same	

Q11 In your opinion did TOCALS make a difference to the support for hospital staff in feeling confident about discharging patients into the community safely? *(Please tick one)*

A lot more confident	
Somewhat more confident	
No change	
Less confident	
A lot less confident	

Q12 In your opinion did TOCALS make a difference to the support for hospital staff in considering the alternatives to admitting patients? *(Please tick one)*

A lot more support	
Some more support	
No change	
Less support	
A lot less support	

Q13 In the absence of TOCALS do you think that your patients would have been more or less likely to: *(Please tick one per row)*

	More likely	Neither	Less likely
Be admitted to hospitals from the Emergency Department / CDU			

Stay longer in hospital			
Receive the appropriate support in the community after discharge			

4 - Multi-disciplinary working

Q14 To what extent do you agree there is effective multi-disciplinary team working within the TOCALS service? *(Please tick one)*

Strongly Agree	
Agree	
Not sure	
Disagree	
Strongly Disagree	

Please state the reason for your answer below:

Q15 Has multi-disciplinary working improved as a result of the TOCALS project? *(Please tick one)*

Yes	
No	
Not sure	

Please state the reason for your answer below:

Q16 To what extent has the TOCALS project provided the opportunity to share knowledge and expertise with other staff from other disciplines? *(Please tick one)*

A lot	
A little	
Not at all	
Not sure	

5 - Inter-agency working

Q17 To what extent do you agree there is effective multi-agency team working in the TOCALS service? *(Please tick one)*

Strongly Agree	
Agree	
Not sure	
Disagree	
Strongly Disagree	

If you disagree or strongly disagree, please explain why:

Q18 To what extent has the TOCALS project provided the opportunity to share knowledge and expertise with other staff from other agencies? *(Please tick one)*

A lot	
A little	
Not at all	
Not sure	

Other issues

Q19 To what extent do you agree with the following statements? *(Please tick one per row)*

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Don't know
The aims and objectives of this service have been well communicated through the TOCALS newsletters and other means						
The service has the potential to positively contribute to patient flow						
The service has the right mix of skills and expertise to work as efficiently as possible						

Q20 Is there anything else that you feel is important about the project that we should take into account as evaluators? *(Please provide details below)*

Thank you for taking the time to complete the survey – the information that you have provided will greatly assist in evaluating the TOCALS Project and the ICF in Mid & West Wales

APPENDIX D – CONSULTEES

Consultee	Role
Debra Llewellyn	Project Manager
Rhian Dawson	Project Director
Linda Williams	Chair of the Project Board