PACE: Pushing the Boundaries of Community Care

An Evaluation of Bromley Post Acute Care Enablement Service
July 2009-April 2010

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Acknowledgements

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We also thank the patients who kindly agreed to be photographed.

PACE partners:
Foreword

The PACE journey started in July 2009 when NHS Bromley’s Community Provider Unit, in partnership with primary, acute and social care partners, responded to NHS London’s request for expressions of interest to pilot a new service to enable patients to leave hospital earlier than existing services allowed. The success of Bromley’s response is attributable to the clear partnership approach, supported by a strong service model owned and led by clinicians and social care professionals.

The initial ten week PACE pilot was incredibly successful and the benefits quickly recognised along with the impact that could be delivered over the challenging winter period ahead. On this basis the multi-agency Winter Planning group supported the continuation of the PACE service. The positive impact of the service over this period is detailed within this report and the service has been widely recognised as contributing to the health and social care economy’s management of winter pressures during 2009-10.

The end result in simple terms is that PACE patients spend an average of 3 fewer days in hospital and consistently report an 85% level of satisfaction with the care they receive from the PACE Team.

The PACE story is far from over. Through NHS London, the service model is being rolled out in three other boroughs and the service is gaining an increasing level of interest nationally. In Bromley, the CPU is working with commissioners to develop the service further and integrate the PACE concept with allied admission avoidance services which will hopefully see the service mainstreamed in the near future.

On 12th July 2010, the Coalition Government outlined its vision for the future of the NHS in the white paper “Equity and Excellence: Liberating the NHS”. This ambitious and wide-ranging document outlines the Government’s intention to place a focus on continuously improving those things that really matter to patients: the outcomes of their healthcare. The paper seeks to empower health professionals to
be able to use their professional judgement about what is right for patients; the aim being to further develop a system which will focus on personalised care that reflects an individual’s health and social care needs, supports carers and encourages strong joint arrangements and local partnerships. As you read this document it will become apparent that the PACE service does all of these things.

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July 2010
The PACE Service Delivery Team – Past and Present

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## Abbreviations

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<td>A&amp;E</td>
<td>Accident and Emergency department – usually referring to the Accident and Emergency Department at the Princess Royal University Hospital</td>
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<td>CART</td>
<td>Community Assessment and Rehabilitation Team – a component of Bromley’s Intermediate Care Service.</td>
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<td>CPU</td>
<td>Community Provider Unit</td>
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<td>EAU</td>
<td>Emergency Admissions Unit – usually referring to the Emergency Admissions Unit at the Princess Royal University Hospital where patients stay for up to 24 hours.</td>
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<td>FAC</td>
<td>Fair Access to Care – Assessment Used by Social Services</td>
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<td>LBB</td>
<td>London Borough of Bromley – The Local Authority with responsibility for Social Care in the Borough</td>
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<td>LMT</td>
<td>Local Management Team</td>
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<td>MBI</td>
<td>Modified Barthel Index</td>
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<td>MSSW</td>
<td>Medical Short Stay Ward – referring to a set of beds within M9 ward of the Princess Royal University Hospital where patients have been assessed as only requiring acute hospital care for 48-72 hours.</td>
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<td>NHS</td>
<td>National Health Service</td>
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<td>NHSL</td>
<td>NHS London – London’s Strategic Health Authority</td>
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<td>OT</td>
<td>Occupational Therapist</td>
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<td>PACE</td>
<td>Post Acute Care Enablement</td>
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<tr>
<td>PADL</td>
<td>Personal Activity of Daily Living (such as washing and dressing)</td>
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<td>PCT</td>
<td>Primary Care Trust</td>
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<td>POD</td>
<td>Physician of the Day – the admitting consultant of the day based in the Princess Royal University Hospital.</td>
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<td>PROM</td>
<td>Patient Recorded Outcome Measure</td>
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<td>RCP</td>
<td>Royal College of Physicians</td>
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<td>SDT</td>
<td>Service Delivery Team</td>
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<td>SLHT</td>
<td>South London Healthcare Trust</td>
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### PACE timeline

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<td>NHS London invites all PCT Providers to express interest in exploring a new model of community care</td>
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<td>22nd June 2009</td>
<td>Bromley CPU chosen to host a PACE pilot, in partnership with SLHT, LBB and General Practice</td>
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<td>23rd June - 20th July 2009</td>
<td>Mobilisation of PACE Model</td>
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<td>July 20th 2009</td>
<td>Bromley PACE Pilot Launched, PACE Base located on Surgical Ward 8 in the PRUH</td>
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<td>August 2009</td>
<td>ITN Consulting produces a short film about the PACE Service in Bromley to be shown at the NHS Alliance Conference in October 2009</td>
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<td>October 2nd 2009</td>
<td>PACE Pilot Phase ends having accepted 164 patients and saving an estimated 592 hospital bed days</td>
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<td>October 2nd -18th 2009</td>
<td>PACE Pause: An opportunity to reflect on lessons learned, modify service design to incorporate learning and provide competency training for new and existing staff.</td>
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<td>October 19th 2009</td>
<td>PACE Phase 2 Launched following agreement between all partner organisations to continue to support PACE.</td>
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<td>November 2009</td>
<td>PACE evaluated by Saigei and findings presented to NHS London</td>
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<td>November 2009</td>
<td>Bromley PCT agrees to develop business case for incorporating PACE functions into mainstream Intermediate Care services.</td>
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<td>January 2009</td>
<td>PACE Base relocated to Medical Ward 9</td>
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<td>February 2010</td>
<td>LBB launches Reablement Service – PACE Facilitators successfully recruited to new team</td>
</tr>
<tr>
<td>24th February-8th March 2010</td>
<td>PACE Pause to enable new Facilitators to be trained to replace the staff who joined Reablement</td>
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<td>April 2010</td>
<td>The ITN Consulting film is placed on ‘Health Exec TV’, generating queries about the PACE model from all over England</td>
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<td>June 2010</td>
<td>PACE nominated for two Bromley Star Awards in the categories of ‘Partnership Working’ and ‘Lasting Legacy’ and for an NHS Institute of Innovation and Improvement ‘Health and Social Care Award’ in the category of ‘Success in Partnership Working’.</td>
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1. Introduction

In June 2009, the Provider Development Directorate of NHS London invited the thirty-one London Primary Care Trust (PCT) Provider Arms to express an interest in hosting a pilot scheme to explore a new model of post-acute care. The pilot was intended to explore the practical detail of how community providers could lead the safe and appropriate transfer of patients from acute bed-based models of care to community settings. The invitation to Providers encouraged them to collaborate with their partners in the health and social care economy to deliver cost and quality outcomes as part of a ‘supply-chain’ model of reform.

1.1 National Context

At the time, national health policy a strategic intent to transfer services traditionally regarded as the preserve of the acute sector to community settings in ways that increase accessibility for patients and the quality and efficiency of these services.

In 2006, the Department of Health (DH) published *Our Health, Our Care, Our Say*, a White Paper which set out the Government’s intention to “shift care closer to home” and to “provide more care in more local, convenient settings” to provide health and social care services that are “flexible and responsive to individual needs”. The practical details of how this could be achieved were set out in 2007 by the document *Shifting Care Closer to Home* (DH, 2007) which provided examples of how clinicians, managers and patients had worked together in a range of specialities to develop new ways of improving services.

*Our Health, Our Care, Our Say* (DH, 2006) acknowledged that many people, particularly those with long term conditions, have “social care as well as health care needs” and that there was a need for these people to receive a more “joined-up service”. *Putting People First: A Shared Vision and Commitment to the Transformation of Adult Social Care* (DH, 2007) followed, which set out a strategic intent to collaborate across the health and social care boundary to “redesign local systems around the needs of citizens”, thus providing seamless, integrated care for
patients. A system where “prevention, early intervention and enablement become the norm” was envisaged to support people to remain in their own homes for as long as possible and to reduce ongoing care needs.

1.2 Regional Context

*Healthcare For London: A Framework for Action* (NHS London, 2007) set out a ten-year vision for healthcare in London. One of its key proposals stated that “more care should be provided at home” and that “people will...spend less time in hospital and more at home recovering from acute illnesses and surgery”. It went on to state that “to provide more care at home, the NHS will need to work closely with social care to ensure there is enough support for people, especially for older people who live on their own”.

NHS London aligned the pilot objectives to these national and regional policy directions.

1.3 Local Context

NHS London’s invitation provided a golden opportunity for the Bromley health and social care economy to address some of the shortcomings of existing hospital discharge procedures and services which were particularly apparent during the Winter of 2008-09. During this period an increase in referral and admission rates, compounded by throughput delays, resulted in an Intermediate Care system that failed, at times, to meet the demand placed on it. Delays in establishing care packages to support discharge from Intermediate Care further exacerbated the situation. An earlier report by *Alan Bedford Consulting* identified a number of obstacles to the timely discharge of patients from the Princess Royal University Hospital (now part of South London Healthcare NHS Trust) which included delays with medication ‘to take out’ (TTOs), lapses in communication, duplicate assessments being necessary to access intermediate care services, and a lack of availability of intermediate care beds.
In this context Bromley Community Provider Unit (CPU), in partnership with South London Healthcare Trust (SLHT) Bromley Sites, London Borough of Bromley (LBB) and General Practice, enthusiastically responded to the challenge set by NHS London by proposing a service model intended to support earlier discharge of medically stable older adults from hospital to their homes. NHS London considered this to be one of the two strongest expressions of interest and Bromley CPU and Outer North East London (ONEL) Havering Community Services were invited to host Post Acute Care Enablement (PACE) pilots.

Bromley and Havering worked closely together for the duration of the pilot, coordinated by NHS London’s Head of Provider Transformation and representatives of Saigei Limited, a consultancy engaged by NHS London to support and evaluate the new models of care.

The Bromley PACE pilot was launched on 20th July 2009 and came to an end in October 2009 but the value of PACE to all partner organisations was such that they agreed to continue to fund the Service during the Winter months whilst NHS Bromley developed a case for the redesign of existing services to incorporate the functions of PACE.

PACE has generated a considerable amount of interest from other community services in London and beyond. Questions have focused on the service model and how it was implemented, how partnership working was developed and subsequently maintained, how PACE is different from existing Intermediate Care Services in Bromley and the impact of PACE on the local health and social care economy.

This paper has been produced in response to these questions. It will describe the mobilisation period prior to the launch of PACE and outline the service model, team structure and governance arrangements before presenting analysis of demographic information and clinical outcomes collected for patients who received intervention from the PACE Team between July 2009 and April 2010. The diversity of care delivered by PACE will be illustrated and evidence of patient satisfaction will be demonstrated. The paper will conclude by capturing the key lessons learned
over the past year followed by partner organisations’ aspirations for PACE in the future.
2. Service Mobilisation

In line with NHS London’s timeframe, PACE had to be launched on Monday 20\textsuperscript{th} July 2009 which allowed for a four-week service mobilisation period.

The PACE service model was finalised by a Consultant Geriatrician from SLHT, a Consultant Physiotherapist from the CPU, a GP and LBB’s Acting Head of Assessment and Care Management. These individuals subsequently joined the PACE Clinical Reference Group alongside representatives from NHS London, Saigei Limited and ONEL Community Services.

The PACE Local Management Team (LMT) was rapidly established, with senior professional and managerial representation from all organisations, to oversee the establishment of PACE and its subsequent development. The LMT was responsible for removing barriers to the implementation and subsequent management of the Service. Some of the barriers that were encountered and subsequently overcome are presented in Appendix 1.

A joint implementation plan was constructed which outlined a series of tasks for each organisation to undertake to ensure that PACE was launched on time. The key areas of focus and actions undertaken under each are summarised below:

2.1 Identification of Staff

- The PACE Team Leader was identified and staff were selected from the three partner organisations to form the Service Delivery Team (SDT) and rotas were planned and shared.

- Teams that lost staff to PACE had to adjust to a reduced establishment
• The Human Resources (HR) departments of the three organisations worked together to develop honorary contracts and secondment arrangements where necessary

2.2 Identification of and Responding to Training Needs

A competency framework was developed, encompassing all specific skills that were expected to be required by the PACE team members. It was based around 3 key skill sets:

• **Understanding and communicating** the PACE service and its philosophy to manage service users’ expectations

• **Therapy skills** - the identification of need, appropriate provision and fitting of equipment and walking aids, reviewing a patient’s mobility and assessing patients within their home environments

• **Nursing skills** - non invasive nursing skills (for non-registered nurses) such as understanding the provision and use of assisted medication devices, understanding medication charts and medication labelling, monitoring and taking blood pressure and assisting a person with catheter care, reviewing pressure areas and monitoring blood sugars.

In the week prior to the launch of PACE, a Consultant Geriatrician (SLHT), Consultant Physiotherapist (CPU) and the PACE Team Leader jointly planned and delivered two half-day workshops to provide training in the aforementioned competencies. All team members (both registered and non-registered staff) received training in the same competencies. This ensured that every team member had a baseline of broad skills with which to deliver PACE interventions, with some team members having advanced skills in their professional domain.

In addition to addressing training requirements, the workshops provided team members with an opportunity to:

• Accelerate team-building
• Develop a ‘PACE manifesto’, outlining the vision and values that members wanted the Team project. A key feature in the training of new staff members was to install a “can do”, problem-solving approach which helped to foster a positive team culture. Members were engaged and empowered to drive their own direction within clear boundaries of service operation and agreed achievable team goals and targets.

• Develop skills in reflection and self-regulation.

• Identify risks to service delivery and solutions

An ongoing training plan was developed to ensure that team members were able to update their training, enabling them to have their competencies signed off and to further develop clinical reasoning skills, thus reinforcing a positive and high performing team culture.

Training was provided for all non-CPU staff on how to use RiO, the CPU’s patient administration system.

2.3 Development of Pathways, Processes and Procedures

• Operational leads for partner organisations combined their respective assessment documents to develop two forms that capture the appropriate data collection and assessments that are required by all organisations and assist LBB’s Care Managers should ongoing care management be required

• Record keeping requirements for each partner organisation were considered and data sharing agreements signed off

• Representatives from the clinical governance and risk teams from the three organisations supported the development of a common governance framework and risk register

• PACE Outcome Measures were agreed and training provided in their use
• Liaison between the PACE Leads and London Ambulance Service (LAS) and Age Concern identified processes to ensure prompt hospital discharge for PACE patients, avoiding transport delays

• ‘Out of hours’ arrangements for PACE patients were established

• Exit strategies were developed with all health and social care services that could potentially receive referrals from PACE

• A base for the PACE team was identified in Surgical Ward 8 at the PRUH (the Discharge Lounge), making the team ‘visible’ and accessible

• IT Departments from SLHT and the CPU worked together to provide access to the CPU’s network via SLHT’s network points.

2.4 Communication

• A comprehensive communication strategy using a range of methods (printed, electronic and face-to-face) was implemented to introduce PACE to staff and services who could potentially come into contact with PACE patients - including all GPs, LAS, Community Services, existing Intermediate Care Services and SLHT staff.

• A patient leaflet was developed to explain the service to patients and carers and to manage their expectations.

• Posters were displayed in all wards to raise the profile of PACE, outlining the acceptance criteria and team contact details

PACE was successfully launched on 20th July, combining thirteen staff from four disciplines, funded by three employers, to deliver one service with common processes for assessment, care delivery and record-keeping.
3. The PACE Service Model

PACE proactively identifies, and facilitates the immediate discharge, of medically stable inpatients whose needs do not require the intensity of care provided by an acute hospital and can be safely met in the community. PACE operates from 8am-8pm, 7 days per week, providing short-term, holistic care until the patient is independent or another community service can meet their needs. The ethos within PACE is to tailor services to the individual and provide both health and social care closer to people’s homes, thereby reducing the length of acute hospital stay and potentially preventing admission to longer-term care.

3.1 The PACE Objectives

The objectives of PACE are:

- To proactively identify inpatients whose clinical needs do not require the intensity of care provided by an acute hospital and who, with appropriate support in their homes, can be discharged from hospital immediately

- To provide health and social care to patients in their homes until such a time that they are independent or can be appropriately managed by another community service

- To enable and support SLHT to manage the timely discharge of patients thus decreasing the length of patient stay and increasing acute capacity

- To mitigate the risks of an acute hospital admission

- To provide a high-quality patient experience by delivering seamless, well-coordinated health and social care
3.2 PACE Patient Cohort

As the population ages, the number of older patients hospitalised with functional debility and exacerbations of chronic illnesses increases (Kao and Walter, 2009). Traditional hospital care can result in adverse outcomes, and risks of an acute hospital admission are widely recognised to be particularly serious for older adults. Such risks include

- Immobility
- A loss of confidence
- Reduced functional ability
- Infection
- Loss or breakdown of social and community care networks

The risks associated with a long hospital stay for older people often outweigh the benefits as soon as the factors necessitating an admission to an acute setting have been addressed. Two Cochrane reports into admission avoidance and early supportive discharge services indicated that such services improved patient satisfaction and had no significant impact on mortality or acute re-admission rates (Shepperd et al, 2008; Shepperd et al, 2009).

Kao and Walter (2009) argue that shortcomings in care at the time of hospital discharge (such as poor explanation of discharge medication, failure to communicate care plans to primary and community services and missed follow-up appointments) also lead to adverse outcomes and in some cases readmission to hospital. Adverse outcomes of hospital stay and poor discharge procedures can therefore in turn increase the risk to these patients of functional dependency, institutionalisation and dying.

Data from SLHT suggests that patients over 75 are most at risk of the detrimental effects of hospital stay, with those over 85 being particularly vulnerable. An audit completed by SLHT during the summer of 2008 indicated that people over 75
years had a disproportionate length of hospital stay in relation to their medical condition, with an average length of stay of 12 days.

It was therefore anticipated that the patients who would derive the most benefit from the PACE model would be 75 years and over, however younger patients were not excluded.

3.3 The PACE Team

The structure of the PACE Team was developed following an assessment of the likely needs of the target group of patients and a capacity planning exercise. It was expected that the target group of patients would need intervention from qualified registered nurses, therapists and (non-registered) facilitators.

NHS London set PACE a target to discharge three patients each day. It was anticipated that the maximum length of time any one patient would remain with PACE would be 10 days. Therefore the maximum number of patients that could be in the service at any one time is 30. However it was not expected that all patients would remain with the service for this length of time; it was predicted that the majority of patients would remain with PACE for 5-7 days with a small number being discharged after 1-4 days, and a similarly small number discharged up to a maximum of 10 days.

Several scenarios were considered in order to predict the maximum demand for PACE (Appendix 2). This suggested that the Team structure should be designed to manage a minimum of 16 and maximum of 20 patients at any one time. A staffing model was developed accordingly, combining therapists, nurses and facilitators (‘carers’). At the end of the pilot phase, the staffing model was evaluated and some minor adjustments were made. The PACE Team structure as at June 2010 is outlined in Figure 1.
Figure 1: The Structure of the PACE Team (June 2010)

**PACE Team Leader (CPU)**
- 0.6 wte Band 7 Community Physiotherapist
  - Supervises the Service Delivery Team’s operations
  - Co-ordinates appropriate training and team supervision
  - Chairs the Service Delivery Team Meetings.
  - Reports current and forecasted activity and any associated concerns or service developments directly to the Local Management Team

**Therapists (CPU)**
- 1.0. wte Band 6 OT, 0.4 wte Band 7 PT
  - Therapy cover is ideally provided over 7 days
  - Train and support all other members of the PACE team to provide and fit an agreed set of frequently required equipment and aids.
  - Undertake specialist patient assessments
  - Joint responsibility for ensuring all members of the PACE team provide safe, evidence-based, high quality and person-centred care.

**Nurses (CPU)**
- 2.5 wte Band 6 Nurses
  - Nursing cover is ideally provided over 7 days
  - Train and support all members of the PACE Team to undertake nursing interventions including prompting medication, monitoring observations, dressings and catheter management.
  - Ensure that all members of PACE work within, and understand, the legal boundaries and clinical aspects of medication management

**Case Finder (SLHT)**
- 1.0 wte Band 6 Acute Occupational Therapist
  - Works closely with medical consultants participating in the Physician of the Day (POD) rota, Hospital Matrons, Discharge Co-ordinators and bed managers as well as hospital-based therapists to identify suitable patients.
  - Completes PACE assessments and makes decision whether to accept patient
  - Initiates care planning process

**Team Administrator (CPU)**
- 1.0 wte Band 3 Administrator
  - Administration cover is provided Monday-Friday, 9am-5pm
  - Manages the office operations on a daily basis
  - Supports the team by ordering supplies
  - Assists with electronic record collection
  - Types admission and discharge letters which and sends to the patient’s GP
  - Provides some personal assistance to senior members of the PACE team and LMT

**Facilitators (LBB)**
- 8.4 wte Home Carers, 8am-8pm, 7 days
  - Provide social care support to help patients to wash, dress, mobilise and prepare meals
  - All receive additional training to provide equipment, assess a patient’s home environment, conduct simple risk assessments and undertake basic non-invasive nursing interventions. This enables them to manage a patient’s health and social care needs.
  - All have a clear understanding of the boundaries of their role and know when it is appropriate to seek expert advice or assistance from professionals both within and outwith the PACE Team.

**Care Management Function (LBB)**
- Provided by Care Managers based in the PRUH
  - Support the PACE team to signpost patients to appropriate social care and tertiary organisations to meet their social needs.
  - Liaise with the PACE team and use PACE assessments and observations to assist in setting up appropriate care services, such as homecare, re-ablement or institutional care for patients upon discharge from PACE.
3.4 Realigning Resources to Staff the PACE Team

Had the PACE Team been established entirely through the creation of new posts, the annual cost would have been in the region of £450,000. However, the majority of positions were filled through the realignment of existing resources and some positions were additional for the duration of the pilot supported by funding from NHS London. These posts were subsequently removed and incorporated into functions of existing services in the post-pilot phase.

3.4.1 The PACE Team Leader

This position was created as a 1.0wte Band 7 additional post and filled by one of the Community and Rehabilitation Team (CART) Therapists, a role that was subsequently backfilled. For the duration of the pilot, the Team Leader provided the Case Finding function. In the post-pilot phase, the Team Leader no longer had this responsibility and the role was reduced to 0.6wte.

3.4.2 The Case Finder

The nature of the information gathering and clinical reasoning skills required this role to be performed by a registered health care professional with appropriate knowledge and skills. Following the pilot phase, this responsibility was gradually shifted from the PACE Team Leader and incorporated into SLHT’s existing Occupational Therapy Service.

3.4.3 Therapy Staff

For the duration of the pilot, two additional therapy posts were created; 1.0wte Band 6 Physiotherapist and 1.0wte Band 6 Occupational Therapist. Both therapists were filled by community therapists working for the CARTs and their roles were backfilled.

Following the pilot phase the LMT agreed that there was insufficient nursing cover to manage patients’ medication needs and that the required level of therapy input
had been overestimated. Therefore in the post-pilot phase therapy provision was reduced to 1.4wte (0.4 Band 7 Physiotherapist and 1.0wte Band 6 Occupational Therapist).

### 3.4.4 Nursing Staff

A 1.0wte Band 6 District Nurse joined the PACE Team for the duration of the pilot and her role was not backfilled until PACE moved into its second phase. A 0.5wte Band 5 Intermediate Care Nurse joined the team to provide additional nursing support until the end of the pilot. Her role was not backfilled.

A need for another 1.0wte nurse was identified in the post-pilot phase and this role was filled through the reorganisation of the CPU’s Community Liaison Practitioner Team and therefore did not represent an additional cost to the CPU.

### 3.4.5 Care Manager

During the pilot, one of LBB’s Care Managers joined the PACE Team and provided dedicated Care Management support to PACE patients. This role was backfilled and at the end of the pilot it was recognised that the arrangement was not sustainable. Therefore in the subsequent phase the Care Management function was fulfilled by the Care Manager with responsibility for the ward upon which the PACE patient is identified. When a patient is accepted to PACE the appropriate Care Manager is notified immediately and assesses patients for their likely ongoing social care requirements prior to their discharge from hospital to ensure minimal delays when exiting the PACE Service.

### 3.4.6 Facilitators

To provide a 7-day, 12 hour service to facilitate the safe discharge of 21 patients per week, 8.4wte facilitators were required. It was agreed that these roles should be filled by existing facilitators working for LBB’s Home Care Service as it was believed that the majority of patients accepted by PACE would require short or long term intervention from social care in any case. All LBB’s Home Care staff
were offered the opportunity to join PACE, however due to the temporary nature of the service it proved difficult to attract 8.4 wte facilitators to join the team. For the majority of the pilot the team operated with 6.4wte. PACE was still not in a position to offer permanent positions as it entered its second phase and the facilitators who joined the team during the pilot phase successfully applied for permanent positions offered by LBB’s Reablement Service\(^1\). Five new facilitators joined the Team in February and the team has operated at this reduced level of staffing since.

### 3.4.7 Team Administrator

This 1.0wte Band 3 role has been filled by a member of the CPU’s administration and clerical staff bank. There is no administration cover at weekends.

### 3.5 Service Delivery

#### 3.5.1 Hours of Operation

Facilitators work 12-hour shifts whilst other professional posts (therapists, nurses, and case finders) work for 7.5 hours per day (staggered between 8am and 8pm) across 7 days per week. Should PACE patients require non-life threatening urgent support between 8pm and 8am, they are advised to contact Bromley CPU’s Out of Hours Team, LBB’s Emergency Duty Team or to use their own “care link” alarm if appropriate.

#### 3.5.2 The PACE Care Pathway

An overview of the PACE Care Pathway is presented in Figure 2.

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\(^1\) Reablement is an intensive social care package offered for up to six weeks. It is not offered to those who will need intensive clinical input into their care. New clients for Reablement must meet LBB’s FACE (Fair Access to Care) criteria.
Figure 2: The PACE Care Pathway

Case Finder identifies patient in collaboration with POD and other acute colleagues and assesses against criteria:
- The patient’s permanent address is within the London Borough of Bromley
- The patient’s registered GP is in Bromley
- The patient has access to their home
- The patient has been documented as medically stable according to RCP Guidelines by a POD Consultant or Specialist Registrar and has no medical requirement for an acute inpatient stay
- It is anticipated that the risks associated with the patient’s physical and mental health can be successfully managed in their own home.
- It is anticipated that the patient has appropriate function or available support to remain safe at home during the night and between PACE visits.

Case Finder initiates care planning

PACE team work with acute colleagues to facilitate patient’s discharge

Meet and Greet – assessment at home

Care Plan amended and number of visits and goals agreed with patient and carer

Therapeutic interventions such as
- Personal Assistance with Daily Living (PADL)
- Medication Review
- Medication Prompt
- Equipment Provision
- Therapy Assessment and Intervention
- Medical Monitoring/Nursing Intervention
- Social Care Support
- Enabling independence with meal preparation
- Signposting to tertiary organisation partners

Care reviewed and amended by appropriate PACE team member and at daily hand over

Patient returns to a suitable and agreed level of independence and is discharged with no further support

Longer term rehabilitation needs identified. Patient discharged from PACE and referred to their own community or intermediate care services

Patient reaches maximum level of independence but requires ongoing assistance with activities of daily living so discharged with ongoing social care package

Patient is unable to manage at home in the long term and is referred to long term care

Patient is unable to be maintained safely at home, admitted to Intermediate care bedded unit or via A&E for acute readmission for a physical or mental health emergency
3.5.3 Case Finding

Case Finding is an aspect of PACE that is unique among community services in Bromley. The PACE Case Finder works closely with hospital doctors, nurses and therapists to proactively identify and triage suitable patients whose clinical needs do not require the intensity of care provided by an acute hospital and who, with support in their homes, would be suitable for immediate discharge. Early identification is fundamental to the mitigation of the risks of hospital admission outlined in section 3.2 and to the prevention of unnecessary and potentially disorientating moves for patients within the hospital.

The Case Finder uses medical notes and information from the ward staff to review the patient’s medical history, medication and physiological parameters and to confirm that the patient has been declared medically stable. They then complete a physical assessment to determine (as far as possible) that the patient would be able to manage at home. The Case Finder completes the ‘Rapid FACE’ and ‘Contact Assessment’\(^2\) documents, jointly agreed by LBB and the CPU. The hospital Care Managers have access to these completed documents, and use them to facilitate the timely transfer of responsibility for care provision from PACE to social care if required.

The assessment findings allow the Case Finder to develop a care plan in collaboration with the patient. The Case Finder then communicates the assessment findings and initial care plan to the PACE Team at the daily hand over.

Once the Case Finder has accepted a patient, the hospital ward commences arrangements for immediate discharge including transport and medication. The three main transport providers for PACE patients are family members, LAS and Age Concern

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\(^2\) Both documents were devised as part of the Department of Health’s Single Assessment Process and form part of the Social Services Fair Access to Care Eligibility (FACE) assessment.
3.5.4 The “Meet and Greet” Visit

PACE aims for a “Meet and Greet” visit to be completed within two hours of the patient’s arrival at home. A home environment assessment is conducted, following a pro forma that was developed specifically for PACE, and base-line clinical outcome measures are also collected. The patient’s care plan is reviewed and updated (the team will be informed of any changes at team handover). If a need for an adaptation or equipment is identified, the PACE team requests this and arranges for installation or delivery as soon as possible – often on the same day or following day.

The “Meet and Greet” model is popular with referrers, particularly within A&E and short stay wards, as they feel reassured that PACE will alert appropriate services if there are risks that cannot be safely managed in the patient’s home. This promotes a less risk-adverse approach to discharge in the hospital, and accelerates discharge by shifting assessment of patients for social and functional competence from hospital to a community setting.

3.5.5 Ongoing Intervention at Home

The types of health and social care interventions delivered are outlined in Figure 2 (above). Pre-existing social care is reinstated immediately on discharge from hospital or as soon as possible thereafter; additional personal care to compensate for any additional functional decline relating to the cause of the hospital admission is provided by the Team.

PACE is built on a trans-disciplinary approach to health and social care. Through competency training, staff development and team work shops, individuals within the team expanded their skill boundaries horizontally into roles traditionally carried out by another profession. For example, a District Nurse within the PACE team may not only manage a wound but would also have skills to attend to the person’s social care needs, fit bathing and toileting equipment and also assess for, measure and provide walking aids within one visit. In addition, some vertical transition of
roles took place where appropriately trained non-professional staff assume roles that would have traditionally been completed by a registered nurse or a therapist.

There are a number of advantages to this way of working, but most importantly for the patient it means that they have fewer different professions and team members stepping over their threshold to complete fragmented interventions.

All members of the team are encouraged to adopt a rehabilitation and enabling philosophy with strong problem-solving and clinical reflective skills that encourage care which ‘predicts and prevents’.

3.5.6 Daily Handover

Daily handover is vital in a service such as PACE with such a rapid turn-over of patients. It is attended by all members of the SDT on duty and is a key tool to ensure care plans are adhered to and remain appropriate for the patient’s changing needs. Care plans are updated as the patient’s acuity de-escalates and their coping skills improve. Handover provides a forum for the team to identify solutions to issues or problems that may have arisen since hospital discharge. It also enables the registered team members to provided direct daily supervision to the facilitators to manage potential risks to patients and staff and to ensure that the care provision and quality is appropriate.

The Case Finder attends handover not only to provide information on patients being discharged from hospital that day, but also to gain feedback on patients that were discharged the previous day which informs their decisions on the appropriateness of PACE for future patients.

3.5.7 Discharge from PACE

The final decision to discharge the patient is taken by a registered health or social care professional at the daily handover, in collaboration with other members of the team and based on the patient’s progress. The agreed exit strategies for PACE are outlined in Figure 2.
4 Governance

PACE operates in the context of a governance framework developed collectively by representatives from the clinical governance and risk teams from the three partner organisations. The approach to the development of the framework was both reactive (through the use of Bromley CPU’s ‘New Service Checklist’ and the compilation of a Risk Assessment and Action Plan) and proactive (following National Patient Safety Agency risk assessment guidance which emphasises the importance of engaging with staff in an analysis of the care pathway to identify and manage risk).

There are three multi-professional inter-organisational groups that contribute to the governance of PACE, as outlined below:

- **Service Delivery Team**
  - Chair: PACE Team Lead
  - Meets fortnightly
  - To review service delivery
  - To be responsible for the delivery of the PACE model of care
  - To raise any issues for resolution
  - To be responsible for capturing learning
  - To escalate unresolved issues to the LMT

- **Local Management Team**
  - Chair: PACE Clinical Lead
  - Meets Monthly (Weekly during pilot)
  - To ensure SDT has a clear mission and is properly enabled to deliver the service
  - To direct staff/resources to achieve PACE objectives
  - To review and monitor PACE activity
  - To resolve issues where possible and escalate unresolved issues through appropriate organisational channels

- **Clinical Reference Group**
  - Met monthly during the pilot. No longer meets regularly but members are called upon for their professional input as and when required.
  - The architect of the design of the PACE model
  - To support the LMT to ensure that the model of care is clinically sound.
  - To ensure that PACE elicits technically valid evidence for Service evaluation
Fortnightly meetings of the SDT are attended by all registered and non-registered members of the team. These meetings provide an opportunity to receive feedback from the last LMT meeting and an update on team performance, a forum for the discussion of training issues, a safe environment for expressing thoughts and concerns, and an opportunity to highlight and agree issues that need to be raised at the next LMT meeting.

Operational management is overseen by monthly meetings of the LMT. The key function of this group, with senior representation from all partner organisations, is to remove barriers to the smooth delivery of the PACE Service. The meeting receives and reflects on a performance report, a staffing update and a feedback report from the SDT. Significantly, this meeting is attended by the PACE Team leader and the direct link between the SDT and LMT facilitates the swift resolution of issues that cannot be resolved locally.

The Clinical Reference Group (a Consultant Geriatrician from SLHT, a Consultant Physiotherapist from Bromley CPU, a GP and LBB’s Acting Head of Assessment and Care Management) met monthly during the pilot to oversee the development of the service model and ensure its clinical quality and safety. Following the transition into the post-pilot phase, the group ceased to meet on a regular basis but members continue to be called upon to provide expert advice as and when needed.

For the duration of the pilot, a Coordination Group met monthly, with senior managerial representation from both Bromley and Havering pilot sites, NHS London and members of Saigei Limited. This group was chaired by NHS London’s Head of Provider Transformation and was tasked with ensuring that the aims, objectives, progress and evaluation of the two pilots were aligned.
5. Activity

Between July 2009 and the end of April 2010, PACE was in operation for 37 weeks\(^3\). All data presented and analysed in this section relate to patients referred to and/or accepted by PACE during this time.

5.1 Number of Patients Accepted by PACE and Bed Days Saved

PACE records both the number of patients accepted and the number of bed days saved as indicators of its performance. During the course of the 37-week period, a total of 1075 patients were identified as potentially appropriate for PACE and 529 patients were accepted following assessment by the Case Finder.

The reasons why some patients were rejected included:

- Patient’s GP was not in Bromley
- Patient’s address was not in Bromley
- Patient did not have access to their house
- Patient was not deemed medically stable by an SpR or Consultant
- Patient’s needs could be met through usual discharge processes
- PACE reached full capacity (PACE can accept a maximum of 3 patients per day and, to ensure that discharges are not delayed, does not operate a ‘waiting list’).

As hospital staff have become increasingly familiar with PACE there has been a corresponding reduction in the number of patients inappropriately identified. In addition, the PACE Case Finder has been able to recognise inappropriate patients more quickly (prior to full assessment) therefore reducing the number of patients who receive a full assessment and are subsequently rejected.

\(^3\) The PACE pilot lasted for ten weeks and was followed by a two week ‘PACE Pause’ to allow the team to make arrangements for the transition from the PACE Pilot to PACE Phase 2. A period of rapid staff turnover in March 2010 following the introduction of LBB’s Reablement Service led to a second ‘PACE Pause’ to enable five new Facilitators to be trained.
For each patient accepted by PACE, an estimate is made of the number of hospital bed days saved by triangulating the patient’s original estimated discharge date and the opinions of medical and nursing staff.

The total numbers of patients accepted by PACE and bed days saved in each month between July 2009 and April 2010 are plotted in Figure 3.

This illustrates that PACE’s performance increased rapidly during the pilot phase (until October 2009), thought to be a reflection of the challenges of associated with the establishment of a new service including building awareness of PACE’s remit and referral processes.

Following the two-week ‘PACE Pause’, performance increased over the Winter months when there was considerable demand for PACE within the hospital. Activity declined in February and March which may partially be attributed to a reduction in demand as the Winter pressures eased. This period also coincided with the redeployment of PACE staff to LBB’s Reablement Service. The PACE Team supported Reablement during its first weeks by redirecting patients from PACE to Reablement if considered appropriate, thus reducing the number of patients accepted by PACE but laying the foundations for complementary working practices in the future.

At this stage it is not possible to tell whether the increase in April’s performance is an anomaly or whether it will be sustained. It is believed by the team however that performance will be sustained and is a reflection of Reablement and PACE operating independently (with separate assessors) and the improved understanding within the hospital of the discrete functions of each Service.
Figure 3: Number of Patients Accepted by the PACE Team and Associated Bed Days Saved

July-09 (PACE Launched 20/07)
Aug-09
Sep-09
Oct-09 (2 wk month: PACE Pause)
Nov-09
Dec-09
Jan-10
Feb-10 (3 wk month: PACE Pause)
Mar-10 (3 wk month: PACE Pause)
Apr-10

Number of Patients

No. of Patients Accepted

Total Bed Days Saved

37
The total number of bed days saved by PACE between July 2009 and April 2010 was 1771, an average of 3.3 per patient.

Anecdotally, this has helped to maintain acute capacity and has had a significant impact on patient throughput in the PRUH. According to senior clinicians and managers:

- PACE has been one of the factors contributing to an improvement in the PRUH’s performance against the 4-hour waiting time target in A&E. During the Winter months, the PRUH performed better than the two other hospitals in SLHT and this was partly attributed to PACE.
- PACE has increased the proportion of patients discharged from hospital before their third night
- PACE has reduced the average length of stay for patients aged over 75. Available data from an audit indicate that the average length of stay in July 2009 for patients aged 75-84 was 8.4 days and this had fallen to 7.1 days by December 2009.

A crude way of estimating the cost savings attributable to PACE is to multiply the number of hospital bed days saved by the cost of a hospital bed day. During the pilot phase, SLHT provided a conservative estimate that the cost of a hospital bed day is £144. This therefore could suggest that PACE has potentially saved £255,024 between July 2009 and April 2010. This method is perhaps too simplistic, however, as it does not take into account the tariff system which determines the cost to the commissioner of a patient’s hospital admission.

It is perhaps worth noting that members of the LMT are aware of other discharge services in London that use the patient’s length of stay with their

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4 There is currently limited statistical evidence of the impact of PACE on the PRUH’s performance, due to Bromley Hospitals Trust becoming part of SLHT in April 2009 and therefore comparisons between 2008-09 and 2009-10 are not meaningful. Analysis of performance since the formation of SLHT is of limited use because PACE only operates in the PRUH whilst published performance figures are aggregated to Trust level.
own service as an indicator of the number of hospital bed days saved. Had PACE adopted this approach it would have saved approximately 3,660 bed days, saving £527,040.

5.2 Length of Stay

The patient’s length of stay with the PACE Service is influenced by a number of variables including:

- Reason for admission to hospital
- Patient’s health status upon discharge from hospital
- Patient's need for equipment and its availability
- Patient's medication requirements and availability of NOMADs
- Level of support available to patient from family members/friends
- Level of health and social care support already in place for patient prior to hospital admission
- Length of time other community and social services respond to referrals from PACE
- Patient compliance
- Deterioration in health or functional status during the PACE spell

Prior to the launch of PACE, it was estimated that the majority of patients would remain with the Service for 5-7 days and indeed the mean length of stay between July 2009 and April 2010 was 7 days. There was a level of variation however; the minimum length of stay was 1 day (typically for patients who had no ongoing needs and not requiring PACE support following the “Meet and Greet” visit) and the maximum length of stay was 42 days (for a patient who required support whilst awaiting specialist equipment to enable independence). The monthly averages are presented in Figure 4, illustrating that the minimum average length of stay was 5.7 days in February and the maximum average was 8 days in November.
Figure 4: Average Length of PACE Episode for Patients Accepted
July 2009-April 2010

Days

July-09 (PACE Launched 20/07)
Aug-09
Sep-09
Oct-09 (2 w k month: PACE Pause)
Nov-09
Dec-09
Jan-10
Feb-10 (3 w k month: PACE Pause)
Mar-10 (3 w k month: PACE Pause)
Apr-10

Average LOS
6. Demographic Profile of Patients Accepted by PACE

6.1 Age

The mean age of patients accepted by PACE between July 2009 and April 2010 was 84, with a minimum of 27 and maximum of 104. The mode (most frequently occurring) age was 90.

Alison’s story

Alison has profound physical disabilities. She sustained bilateral femoral shaft fractures in November 2009 following a fall at home. On the day that she was referred and assessed by PACE, Alison was unable to weight bear through both legs and was using an electric wheel chair. She was assessed as being “Severely Dependent” on the Modified Barthel Index. At 27, she was the youngest patient accepted by PACE.

Alison was keen to go home and was medically stable however she continued to require input from a multi-disciplinary team to support her with pain management, wound care, pressure area care, transfer practice, personal care, meal preparation and medication prompting. Initially, Alison needed three visits from the PACE team each day but the frequency of visits reduced to once a day as her functional independence improved.

Alison is a home marketing consultant and works from home. PACE’s visits were arranged to accommodate her working day, ensuring that she was supported to wash and dress prior to 9am. In addition, her social life and commitments to friends and family were also considered within her care plans, ensuring that the PACE interventions were person-centred.

On discharge from PACE, Alison was assessed as “Moderately Dependent” on the Modified Barthel Index. Whilst with the PACE team, she gained full independence in her own home to manage her meals and medication and she returned to working full time. Alison arranged a private social care package and onward referrals were made from PACE to hydrotherapy and community physiotherapy services.

Alison evidently benefited from a team that enabled her to adjust to her new physical disabilities and helped her to develop strategies to improve her independence. Had she not received intervention from PACE, she would not have been discharged from hospital until she was safely able to function within her own home. In turn she would have missed several weeks of employment and she felt that this would have resulted in her losing motivation, feeling low in mood and becoming more dependent on society.
6.2 Gender

Projected population statistics for Bromley in 2011 estimate that 52% of a population of 301,000 will be female. Analysis of the gender of PACE patients indicated that 68% of the patients accepted by PACE were female which, at first glance, raises questions regarding the equity of the service.

Further examination of the Bromley population, however, shows that 63% of the population aged 80 and over is female and 71% of the population aged 90 and over is female, suggesting that the gender of the patients accepted by PACE does reflect the wider Bromley population in this age group.

6.3 Location

A Bromley address was one of the criteria for acceptance to PACE. Figure 5 plots the postcodes of residence for all of the patients accepted by PACE between July 2009 and April 2010. This illustrates that patients were geographically distributed throughout the borough but with particular concentrations of PACE patients in BR1 (which corresponds with the wards of Plaistow and Sundridge, Bickley and Bromley Town), BR3 (Kelsey and Eden Park, Copers Cope and Clock House), BR4 (West Wickham and Coney Hall), BR6 (Farnborough and Crofton, Orpington and Chelsfield and Pratts Bottom) and TN16 (Biggin Hill).
Figure 5:
Bromley PACE Patients by Postcode
July 2009 - April 2010
PACE, like all health and social services in Bromley, has a commitment to ensuring that services are provided equitably across the Borough. Two further maps were produced; Figure 6 which illustrates the distribution of PACE patients in relation to levels of deprivation\textsuperscript{5} in Bromley and Figure 7 which illustrates the distribution of PACE patients in relation to the size of the population aged 80 and over\textsuperscript{6}.

At first glance, Figure 6 suggests that whilst PACE has accepted patients from areas of low and moderate deprivation, it has not accepted patients from some of the most deprived areas of the Borough (Cray Valley East and Crystal Palace) which could be a cause for concern. A comparison of Figures 6 and 7 indicates however that the most deprived areas of the Borough have a comparatively low population aged 80 and above (i.e. the majority of areas that are dark red on Figure 6 are light green on Figure 7).

The area around Bromley Civic Centre (corresponding with the wards of Plaistow and Sundridge and Bromley Town) has a relatively large population aged 80 and above and experiences moderate levels of deprivation (with one area of high deprivation). Both figures indicate that PACE accepted a significant number of patients from this area, which reassuringly suggests that patients from deprived areas are not at a disadvantage in terms of their access to the PACE Service.

One particular feature of Figure 7 is striking; that very few patients have been accepted by PACE in one of the two areas with the highest population aged 80 and over (East of Bromley Civic Centre, an area that corresponds with parts of Bickley and Chislehurst). There are two potential explanations for this. Firstly, this area corresponds with one of the least deprived areas of the Borough, and it is possible that a greater proportion of the population aged

\textsuperscript{5} The Index of Multiple Deprivation combines a number of indicators, chosen to cover a range of economic, social and housing issues, into a single deprivation score for each small area in England.

\textsuperscript{6} This is based on 2007 data – this is the most recent year for which information is available at middle super output area level.
over 80 in this area have privately arranged care packages which provide them with the support they need on discharge from hospital.

Alternatively, this may be explained in terms of location rather than relative affluence. The majority of PACE patients are admitted to hospital following an emergency admission. It is likely that if patients in the Bickley/Chislehurst area are taken to hospital in an emergency, it is quicker for them to be taken to Queen Mary’s, Sidcup than to the PRUH. This would indicate that there is a small but significant population in Bromley who are unable to access PACE because their nearest acute provider is in Bexley. This therefore demonstrates a pressing need to explore the opportunity to extend the PACE model to neighbouring health and social care economies to ensure that all those who can potentially benefit from PACE have equitable access to it.
Figure 6: The Distribution of Patients Accepted by PACE July 2009-April 2010 in Relation to the Index of Multiple Deprivation (2007)
Figure 7: The Distribution of Patients Accepted by PACE July 2009-April 2010 in Relation to the Size of the Population Aged 80 and Over (2007)
7. Reason for Hospital Admission

At assessment, the Case Finder recorded the reason for the patient’s admission to hospital as described in the patient’s medical notes. The reasons for admission to hospital for patients accepted to PACE between July 2009 and January 2010 have been categorised and the numbers of patients in each category are presented in Figure 8. There were 3 patients for whom this information was not recorded.

**Figure 8: The Reason for Admission to Hospital of Patients Subsequently Accepted by PACE July 2009-April 2010**

- **Abdominal Pain**: 18
- **Anaemia**: 7
- **Cancer**: 10
- **Cellulitis**: 8
- **Chest Infection/ Pneumonia**: 46
- **COPD**: 8
- **Diarrhoea**: 20
- **Dizziness**: 14
- **Elective/ non-elective surgery**: 7
- **Fall and/or Fracture**: 241
- **Mental Health Condition**: 15
- **Other**: 7
- **Other Cardiovascular**: 20
- **Reduced Mobility**: 51
- **TIA/Stroke**: 24
- **Unstable Diabetes**: 5
- **UTI/Sepsis**: 25

**Number of Patients**
Figure 8 indicates that the most frequent reason for admission to hospital of patients subsequently admitted to the PACE service was following a fall and/or fracture – 46% of the total PACE patient cohort were admitted to hospital for this reason. This finding is not surprising given the demographic of the population of Bromley, and is supported by the experience of clinicians working with older people in the Borough. Patients admitted with falls often presented with a complex mix of falls risk factors.
George was found on his floor by London Ambulance Service and admitted to the PRUH in March 2010. He could not recall the length of time that he had been on the floor but remembered that he had sustained a number of falls lately and reported a general feeling of being unwell. Urinalysis indicated that George had a Urinary Tract Infection and a CT scan later indicated that he had small vessel disease. An x-ray of his shoulder confirmed that it was not fractured.

After three days in hospital, George was medically stable and referred to PACE. He was assessed and accepted by the PACE Case Finder, who established that although George was mobile with a Zimmer frame, he was likely to require assistance with meal preparation, personal care and medication prompting. Prior to George’s admission to hospital, he did not have a social care package in place. A potential need for this support was identified by the Case Finder.

George was discharged from hospital and seen later the same evening by a member of the PACE team. George’s home environment was assessed along with his mobility and transfers. Equipment was provided to raise his chair and toilet seat. Subsequent daily visits enabled George re-establish his social network, which enabled him to get daily meals from a café and arrange for family members to do his shopping. The PACE nurse reviewed George’s medication and supported the management of his leg dressings.

George’s level of dependence, measured using the Modified Barthel Index, improved from being ‘Moderately Dependent’ on admission to PACE to being ‘Mildly Dependent’ on discharge. His previous support networks were restarted and the Care Manager working with PACE implemented a once-a-day care package to support him with a thorough wash and prompt his medication to prevent further Urinary Tract Infections.
The second most common reason for admission to hospital was a category which has been labelled ‘Reduced Mobility’ which accounts for 51 patients (10% of the total). This term was used as a descriptor where a patient was admitted due to any rheumatic or arthritic conditions which affected mobility to such an extent that hospitalisation was sought, either by the patient themselves, by their GP or by family members. PACE was able to respond quickly to altered mobility needs and facilitate fast access to mobility aids and equipment, as well as providing advice and support to families and carers.

A respiratory condition (a chest infection or pneumonia) was the third most common reason for admission to hospital with 46 patients in this category (representing 9% of all PACE patients). In addition to those with exacerbations of Chronic Obstructive Pulmonary Disease (COPD), some of these patients required support with newly established home oxygen programmes which utilised the skills of the registered healthcare professionals.

Although some patients with a diagnosis of Stroke/transient ischemic attack (TIA) were accepted (5%), these were predominantly those with fast resolution of their symptoms, or pre-existing stroke disease, requiring some post-discharge support. PACE did not accept those patients for whom specialist rehabilitation was required.
Emma’s Story

Emma, 34, has learning disabilities and lives at home with her mother who is in her early 70s. In December 2009, she spent three weeks in the PRUH with a chest infection which had affected her exercise tolerance and strength. This caused her particular difficulty with her mobility and transfers and her mother was unable to manage Emma’s needs at home.

Emma and her mother, together with Emma’s medical team at the PRUH, were very keen that she should be discharged from hospital as soon as possible to mitigate the risk of Emma being admitted to long-term institutional care.

PACE facilitated Emma’s discharge from hospital and supported her at home with her personal care, provided her with a perching stool and a commode and gave physiotherapy to help her clear her chest. The Team also monitored her condition to see if she exhibited any signs of further chest infection. PACE reassured Emma’s mother which reduced her level of anxiety about her daughter’s condition, and provided her with advice regarding how to access voluntary and social care agencies to be support Emma to continue to live at home.

On discharge from PACE, Emma was referred to the community physiotherapy service to progress her mobility and to monitor her chest and coughing ability. Emma’s mother arranged a private care package following advice given by members of the Team.

Overall, these findings fit broadly with the profile of causes of hospitalisation of older people in Bromley. PACE was not designed to accept patients with complex and ongoing rehabilitation needs, (common following a new stroke or complex orthopaedic surgery). The selection of patients by the Case Finder reflects the nature of the service that PACE offers: fast intervention with assessment and monitoring for a short time period following discharge. This includes educating patients to ensure compliance with medication, monitoring of blood pressure, urinalysis and the prescription, fitting and instruction in the appropriate use of aids and equipment.
7.1 The Distinction between PACE and Intermediate Care

The case studies throughout this document illustrate the wide range of health and social care interventions provided by the PACE team.

In the development of the PACE Service model, members of the Clinical Reference Group were anxious to ensure that that PACE added ‘something new’ and did not simply replicate or provide additional capacity in existing Intermediate Care services.

Bromley’s mainstream Intermediate Care services (Intermediate Care Beds and CARTs) provide goal-orientated rehabilitation, often requiring intervention from at least two rehabilitation professional specialties, with input for up to 6 weeks. Intermediate Care services in Bromley were established to facilitate discharges, prevent acute admissions, prevent premature admission to long-stay residential care and prevent excessive use of long-term domestic social care. Admission to Intermediate Care follows a referral from an acute, community or primary care profession and is predicated on establishing clear functional objectives – something that often requires more time than is readily compatible with acute timelines.

PACE departs from this idea. It promotes proactive Case-Finding in the acute setting and accepts responsibility for a patient’s care from the moment of discharge from hospital. No attempt is made to define outcomes in advance; the team builds care around the patient in their own home, developing a plan to meet the patient’s needs - predictable or otherwise - as they arise. The act of re-establishing a person in their own home enables the professional to appreciate the holistic needs of a recovering person and develop solutions drawing on skilled evaluation of a particular situation. This model of post acute enablement allows skilled healthcare professionals to develop person-centred treatment packages supported by social care provision, using the health and social care economy’s workforce to greatest advantage.
Eric’s Story

Eric, who is severely deaf, fell at home in March 2010 and fractured his spine. Prior to this admission he had been prescribed medication to control his blood pressure. He was discharged from the PRUH with PACE.

The first challenge faced by the Team was how to gain access to Eric’s house as Eric lived alone and was deaf. The team arranged for a key safe to be installed on the day of discharge to facilitate entry.

At the ‘Meet and Greet’ visit, Mr. Collins was assessed by the Team’s Occupational Therapist, who felt that he needed a perching stool, a bed lever and a urine bottle as he had been using a bowl by his bed to urinate in.

When the Team went in the next day, Eric expressed that the urine bottle had made such a difference to him and that he was overjoyed. The Facilitator felt that Eric should have a continence assessment and asked the PACE Nurse to undertake this.

The PACE Nurse visited Eric later the same day to carry out the assessment and whilst there, she realised that Eric didn’t seem to have all the medication that he should be taking to control his blood pressure. The PACE Facilitator followed this up by telephoning the patient’s GP Surgery and speaking to the duty doctor.

It transpired that Eric hadn’t collected his prescription for over three months because he hadn’t felt well enough to venture out of his house. The fact he had not been taking his medication may have given rise to the fall which resulted in him being hospitalised. The medication was very important to the ongoing management of his condition, so the PACE Facilitator collected his prescription from the Surgery, took it to the chemist and once it was dispensed returned to Eric’s house so that he could start on it straight away.

Many of the patients accepted by PACE would not have met the referral criteria for access to existing Intermediate Care services. The onward referral rate from PACE to CARTs was approximately 2% (10 patients of 453 for whom a discharge service was recorded), indicating that most of the PACE caseload did not require further rehabilitation at this point. This supports the argument that this is a different cohort of patients to those usually accepted by CARTs.
8. Clinical and Service Outcomes

This section outlines the three clinical and health assessment tools used by PACE to assess the impact of the Service. A brief description of each tool is provided together with its use in the PACE service; these are

- The Sheffield Complexity Scale (Enderby and Stevenson, 2000)
- The Modified Barthel Index (Shah et al., 1989)
- The EuroQol (EQ-5D)

The initial Pilot Phase mobilisation was very swift (four weeks) and did not allow for reliability testing which must be considered in the interpretation of the findings. Whilst every effort was made to ensure robust data collection, there were instances when data could not be collected due to patient non-compliance or health status. This is reflected in the varying sample sizes for the respective tools used.

8.1 The Sheffield Complexity Scale

8.1.1. Introduction to the Sheffield Complexity Scale

This scale was developed to assess the intensity and complexity of the therapeutic input a patient requires. Patients are classified into one of eight categories of rehabilitation need, ranging from a prevention or maintenance programme to a programme for a complex, profoundly disabling condition (Appendix 3).

PACE uses this tool to assess the clinical needs of patients at entry to the service to inform the design of an appropriate care plan. The category allocation was made by the PACE Case Finder following assessment.
8.1.2 Findings from the Sheffield Complexity Scale

Sheffield Complexity Scores were collected for 349 of 529 patients (66%). The spread of scores for patients on entry to the service is shown in Figure 9. This illustrates that the majority of PACE patients were categorised as:

- Category 2: patient needs convalescence
  (102 patients, 29% of sample)

- Category 3: patients needs slow stream rehabilitation
  (88 patients, 25% of sample)

- Category 4: patient needs regular rehabilitation
  (81 patients, 23% of sample)

No patients were assessed as being in Category 7 (needing medical care and rehabilitation) or Category 8 (needing rehabilitation for a complex profound disabling condition).
Figure 9: The Sheffield Complexity Scale on Admission to PACE
Patients Accepted July 2009-April 2010

Sheffield Complexity Scale

1: Patient needs prevention/maintenance programme
2: Patient needs convalescence
3: Patient needs slow stream rehabilitation
4: Patient needs regular rehabilitation
5: Patient needs intensive rehabilitation
6: Patient needs specific treatment for individual acute disabling condition
7: Patient needs medical care and rehabilitation
8: Patient needs rehabilitation for complex profound disabling condition

Number of Patients
On the whole these findings reflect the anticipated needs of patients admitted to the PACE service, i.e. those requiring short-term, minimally intensive rehabilitation, but with significant early support needs around the transition of care from hospital to home. In some instances the PACE team identified further rehabilitation potential once the patient was at home and made appropriate onward referrals either to CARTs or to uni-disciplinary community therapy teams.

8.2 The Modified Barthel Index (MBI)

8.2.1. Introduction to the MBI

The MBI is a measure of function intended to establish a patient’s level of independence and determine the amount of assistance required. It does not include social and emotional dimensions or reflect perceived quality of life. It uses ten variables to describe a patient’s observed ability to perform a range of activities of daily living and mobility.

This tool allocates 0-10 points for each variable, giving a minimum score of 0 (fully dependent) and a maximum score of 100 (fully independent). A higher number is associated with a greater likelihood of being able to live at home with a degree of independence (Appendix 4).

This tool was used to allow for regular audit of patients’ dependence levels on admission and discharge from PACE. A comparison of admission and discharge scores illustrates whether the patient’s MBI remained the same (indicating that PACE has done no harm) or showed improvement or decline. Significant changes were not expected for PACE patients due to the short-term nature of the Service. A decline in function for some patients may be anticipated, given that patients in this particular patient cohort often have multiple pathologies and progressively deteriorating long-term conditions with

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7 The MBI was initially developed and published in 1965. The PACE service adopted a more recently modified version which allows for a greater sensitivity (Shah et al, 1989).
a limited physiological reserve capacity. This can result in them being particularly susceptible to new illness or exacerbations of existing conditions. Whilst this scale is not without criticism, mostly in terms of sensitivity, it is largely regarded as valid and reliable across a range of patient groups and is in common use in both clinical practice and research. The ten variables addressed in the MBI are shown in Figure 10.

**Figure 10: Variables Addressed by the MBI**

<table>
<thead>
<tr>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Help needed with grooming</td>
</tr>
<tr>
<td>2. Help needed with bathing</td>
</tr>
<tr>
<td>3. Help needed with feeding</td>
</tr>
<tr>
<td>4. Help needed with toilet use</td>
</tr>
<tr>
<td>5. Help needed with climbing stairs</td>
</tr>
<tr>
<td>6. Help needed with dressing</td>
</tr>
<tr>
<td>7. Presence or absence of faecal incontinence</td>
</tr>
<tr>
<td>8. Presence or absence of urinary incontinence</td>
</tr>
<tr>
<td>9. Help needed with walking or wheelchair use</td>
</tr>
<tr>
<td>10. Help needed with transfers (e.g. from chair to bed)</td>
</tr>
</tbody>
</table>

These items are individually scored by a trained observer and the sum of these scores gives a total score out of 100. This is then used to indicate level of dependence as shown in Figure 11.

**Figure 11: Interpretation of Total MBI Score**

<table>
<thead>
<tr>
<th>Category</th>
<th>Descriptor</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total dependence</td>
<td>0-24</td>
</tr>
<tr>
<td>2</td>
<td>Severe dependence</td>
<td>25-49</td>
</tr>
<tr>
<td>3</td>
<td>Moderate dependence</td>
<td>50-74</td>
</tr>
<tr>
<td>4</td>
<td>Mild dependence</td>
<td>75-90</td>
</tr>
<tr>
<td>5</td>
<td>Minimal dependence</td>
<td>91-99</td>
</tr>
<tr>
<td>6</td>
<td>Independent</td>
<td>100</td>
</tr>
</tbody>
</table>
8.2.2 Findings from the MBI

All members of the PACE Team were trained to complete this tool. The baseline MBI was assessed at the ‘Meet and Greet’ visit or at the second visit if it was clear that the patient was too tired following hospital discharge to demonstrate some of the tasks. The assessment was completed again on discharge from the Service. Scores were recorded on both assessment and discharge for 422 of 529 (80%) of patients. Patients for whom only one measure was recorded have been excluded from this analysis.

On admission to PACE, the minimum MBI Score was 0 and the maximum 100, indicating that patients accepted by PACE spanned from total dependence to full independence. However the scores of 0 and 100 represent a very small number of patients with unusual circumstances\(^8\); the median MBI score on admission was 79 and the modal score was 82.

On discharge from PACE, both the median and modal MBI scores were 85 with a minimum of 12 and maximum of 100.

Figure 12 illustrates the number and percentage of patients whose MBI scores changed during their PACE spell.

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\(^8\) Interrogation of the patients scoring 100 on admission to the service (a somewhat surprising finding) indicated that their needs on discharge related to the provision of equipment and managing social care needs in domains that are not measured by the MBI, such as shopping.
Figure 12: Proportion of Patients Whose MBI Score Changed Whilst With the PACE Team
July 2009-April 2010

- 283 patients (67.1%)
- 14 patients (3.3%)
- 10 patients (2.4%)
- 6 patients (1.4%)
- 1 patient (0.2%)

Became More Dependent: Changes by 3 Groups
Became More Dependent: Changes by 2 Groups
Became More Dependent: Change by 1 Group
No Change
Became More Independent: Changed by 1 Group
Became More Independent: Changed by 2 Groups
Became More Independent: Changed by 3 Groups
A total of 283 patients, representing 67% of the sample, did not move categories (but may have changed scores slightly within the same category). This is likely to be a reflection of the fact that PACE is not a rehabilitation service and the very short time frames of intervention limit opportunities for improvement. Additionally, it supports the argument that patients accepted by PACE were largely different to those who would have been referred to mainstream community rehabilitation services.

12 patients became more dependent, representing 3% of the sample. This is not unexpected, given the advanced modal age of the PACE patient cohort (90 years) and the complexity of their co-morbidities. PACE operates at the point of transition between acute and community care and the patients who became more dependent may have been readmitted to hospital with new conditions or exacerbation of existing illness.

30% of PACE patients became significantly more independent during their PACE intervention; a particularly encouraging statistic given that patients were not selected on the basis of having rehabilitation potential. Prior to the launch of the PACE Service it was deemed unreasonable to expect large functional score changes in a group of patients with a modal length of stay of 7 days.

Of the 107 patients (25% of sample) who became more independent by one group:

- One (1%) changed from ‘Total Dependence’ to ‘Severe Dependence’
- Thirteen (12%) changed from ‘Severe Dependence’ to ‘Moderate Dependence’
- Fifty seven (53%) changed from ‘Moderate Dependence’ to ‘Mild Dependence’
- Twenty six (24%) changed from ‘Mild Dependence’ to ‘Minimal Dependence’
- Ten (10%) changed from ‘Minimal Dependence’ to ‘Independence’
8.3 Euroquol (EQ5D)

8.3.1. Introduction to the EQ-5D

The EQ-5D is a standardised measure of health status developed by the EuroQol Group to provide a simple, generic measure of health for clinical and economic appraisal. It has been widely acknowledged that patient reported outcome measures (PROMs) such as this can be used to review service quality, effectiveness and the patient’s perspective of their quality of life. The Clinical Reference Group considered it to be imperative that a PROM was included in the suite of outcomes collected by PACE.

The EQ-5D comprises TWO components, a visual analogue scale (VAS) and a 5-digit self-reported functional score. Both were collected for PACE patients on admission and discharge from the service however only the results from the VAS (Appendix 5) will be presented and analysed in this paper. In order for analysis of the 5-digit scores to take place, further validation tools need to be obtained from the Euroquol group.

The VAS records the respondent’s self-rated health on a vertical, visual analogue scale where the endpoints are labelled ‘best imaginable health state’ and ‘worst imaginable health state’. It is used as a quantitative measure of health outcome, self-reported by PACE patients. The limitation of this tool is that patients suffering with severe cognitive deficits, have paralysis or dementia or are illiterate are unable to comply. Such factors may have influenced the number of PACE patients who agreed to complete the scoring.

8.3.2. Visual Analogue Scale (VAS) component of the EQ5D

417 of 529 patients (79%) completed this score at both admission and discharge from PACE (patients for whom only one measure was recorded have been excluded from this analysis). On admission, the median score was

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9 A network of international multidisciplinary researchers devoted to the measurement of health status
55 and the modal score was 50; at discharge both scores had increased to 70.
Figure 13 displays the number of patients whose scores lay in each category on admission and discharge from PACE. This illustrates a trend towards improved perception of health state whilst receiving intervention from the PACE Team. The modal group on admission was 50-59 (112 patients) and there was a margin of 42 patients between this and the second most frequently occurring group on admission, which was 60-69 (70 patients). On discharge, the modal group was 70-79 (86 patients), with a narrow margin of 7 patients between this and the second most frequently occurring group on discharge (80-89).
9. Care on Discharge from PACE

9.1 Discharge Destination and Discharge Services

The destination of patients on discharge from PACE was recorded for 505 of 529 patients (95%) and the results are presented in Figure 14.

Encouragingly, this indicates that the overwhelming majority of patients remained within their own home upon discharge from PACE. The services providing support to patients who remained at home following PACE were also recorded and the results are presented in Figure 15. Some of these services were in place prior to the patient’s admission to hospital (for example some patients had an existing care package or received regular visits from District Nurses) and some services were implemented as a result of a referral from the PACE Team.
Of the 447 patients who remained in their homes, 52% were independent (or all their needs were met by family members) and did not require support from community or social services. 34% required support from Social Services Home Care; further analysis is required to establish how many patients received a new care package on discharge from PACE, how many patients had a pre-existing care package that increased, how many patients had a pre-existing care package that decreased following PACE and how many patients had a pre-existing care package that remained unchanged.

The ‘other’ category, accounting for 4.3% of patients, encompasses services including privately arranged personal care, Parkinson’s Disease nurses and voluntary agencies such as Age Concern.

One of the limitations of the PACE electronic data collection template was that it only facilitated the recording of one service on discharge from PACE when
in reality it is likely that some, if not many, of the patients who required ongoing support following PACE received this support from more than one community, social or voluntary service. This is something that the Team intends to address.

9.2 Readmissions to Acute Hospital

Monitoring emergency readmissions to hospital is necessary to ensure that PACE remains clinically safe. Figure 14 (above) illustrated that the readmission rate from PACE between July 2009 and April 2010 was 10%. This represents 48 patients of the 505 patients for whom a discharge destination was recorded. A retrospective audit of both PACE and hospital notes (where available) for 44 of the 48 patients who were readmitted was undertaken by a Consultant Geriatrician from SLHT and a qualified member of the PACE team in June 2010. The review encompassed:

- Diagnosis on admission to hospital prompting PACE referral
- Physiological stability at time of discharge with PACE
- Cognitive status
- Whether, based on the above, discharge with PACE was appropriate
- Reason for readmission to hospital (and who initiated readmission)
- Diagnosis at readmission
- Physiological stability at readmission
- Whether, based on the above, the readmission to hospital from PACE met the RCP criteria for hospital admission
9.2.1 Findings from Readmissions Audit

PACE was deemed an appropriate discharge support service for 77% (n= 34) of this sample, whereas PACE was, in retrospect, inappropriate for 33% (n= 10) of these patients and they should not have been discharged from hospital with PACE.

- The physiological observations recorded for two patients suggested that they were not medically fit at the time of discharge from hospital
- Two patients experienced diarrhoea within the hospital and this remained a problem following hospital discharge, resulting in them being unable to managed safely within their home environment
- Two patients had uncontrolled pain
- Two patients were approaching End of Life and this should have been clearly communicated to the PACE team and GP, with appropriate plans put in place for primary care management to support the patient and family. This approach could have prevented potentially distressing and unhelpful hospital admissions and allowed the patient to remain at home with appropriate support from palliative care services
- Two patients had significant social problems that were identified following discharge which resulted in them being readmitted to an acute bed

An Intermediate Care bed was allocated to PACE as a safe-guard to prevent acute hospital readmissions due to a social need and had PACE been consulted prior to the readmission the team could have prevented the inappropriate use of an acute hospital bed by diverting the patient to the Intermediate Care Bed. However these patients either initiated the readmission themselves or were readmitted by other health professionals who did not liaise with the PACE team.

Of the 34 patients for whom it was deemed that PACE was an appropriate discharge support service:
• 68% (n=23) were re-admitted following an exacerbation of the condition/diagnosis which resulted in their initial hospital admission

• New illness accounted for 32% (n=11) of the readmissions

Of the 10 patients for whom PACE was not an appropriate service:
• 70% (n=7) were admitted with a pre-existing condition
• 30% (n=3) had a new condition or illness on readmission

When auditing the reasons for readmissions to acute hospital beds against the RCP criteria, 80% (n=35) where deemed appropriate re-admissions, whereas 20% (n=9) were deemed inappropriate and could have been managed in a primary care setting.

Incidentally, if a member of the PACE team initiated a readmission or if a Case Finder recognised a PACE patient in EAU or A&E they were able to provide significant supplementary information regarding the patient’s home situation and medical status. Many patients were taken home with PACE for a second time following a short acute hospital stay.

9.2.2 Learning from Readmissions Audit

Patients were only admitted to PACE following discussion and consultation between the PACE Case Finder and the patient's acute medical team. Therefore readmissions are not felt to be indicative of a failure of the service model; rather an unfortunate inevitability in a service such as PACE that works at the boundary between hospital and community care.

The findings of the readmissions audit do however reinforce the importance of the Case Finder’s vigilance in the screening and assessment of patients in the hospital environment to be as certain as possible that their symptoms are well controlled and that the medical team is convinced as far as possible that the patient has returned to medical stability.
A series of detailed learning points were drawn from the readmissions audit (Figure 16) and have already been integrated into regular practice.

**Figure 16: Learning Points Based on the Findings of the Readmissions Audit**

1. Where delirium is present, the Case Finder should enquire of the medical staff whether the delirium has completely settled. If concern remains the Case Finder should request that the patient remains on EAU for a further 24 hours to allow resolution of symptoms. Rapid, triangulated histories of pre-morbid intellectual function are essential to assess whether patients have a potentially dangerous delirium or a chronic progression of an existing pathology.

2. Where there is uncertainty regarding a patient's medical stability particularly in relation to delirium, clouding of consciousness or syncope, a brief admission or readmission to the EAU is advised to ensure that a Physician has the opportunity to review the patient. There can then be no suggestion that a patient has been deprived of appropriate specialist review or that unmet medical need is being missed for want of a specialist opinion.

3. Timely referral, access and provision of community services should be aligned to patient need. For example, more timely integrated pathways should be developed to enable patients who require oxygen therapy at home to be referred to and receive oxygen provision within 24 hrs. For such patients discharge without prior planning is inappropriate.

4. In some instances, palliative care decisions had either not been made or had not been communicated to the PACE team at the time of discharge from hospital. This resulted in emergency readmission to hospital whereas the most appropriate action would have been integrated End of Life care at home, where this is what the patient wants.

5. PACE always informs the registered GP by fax when a patient is accepted. It is clear however that GPs are not always aware of the level of support that PACE provides; some readmissions were prompted by the patient's GP who, following a home visit, expressed concern that they were not able to manage at home.

6. Readmission was, on occasion, precipitated by failure to adequately resolve the primary cause for admission. In some cases the emergency readmission consequently prompted better care however in other instances an urgent referral to the Consultant Geriatrician's outpatient clinic would have been more appropriate.

7. Nausea is a presentation of medical unpredictability. If present and there is any doubt regarding the medical stability of the patient, the PACE Case Finder should bring this to the attention of the patient's Consultant/ the Consultant Physician on the Clinical Reference Group to negotiate with the inpatient medical team.

8. Results of any investigations or assessments that have been completed during the episode of inpatient care should be reviewed prior to discharge by the referring medical team for analysis and treatment planning. The PACE Case Finder needs to ensure that the referring physicians have indeed checked all their results.

9. If a person is predictably medically stable with PACE but is unable to function at home, admission to an Intermediate Care bed should be sought. An outpatient review by the responsible physician can then be arranged from the safety of an Intermediate Care bed.
9.2.3 Recommendations for Future Practice Based on the Findings of Readmissions Audit

The audit also gave rise to a series of longer-term recommendations (Figure 17) which require further consideration and strategic intervention before they can be implemented.

<table>
<thead>
<tr>
<th>Figure 17: Recommendations for Future Practice Based on the Findings of the Readmissions Audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Explore different ways of communicating with GPs, particularly where PACE is providing a considerable amount of health and social care support at home, to reduce readmissions that don’t meet RCP admission criteria.</td>
</tr>
<tr>
<td>2) Provide cyclical training in conjunction with the medical teams for PACE Case Finders to ensure that patients are appropriate for discharge prior to acceptance by PACE.</td>
</tr>
<tr>
<td>3) Improve local partnerships with Mental Health Services to ensure patients access appropriate support.</td>
</tr>
<tr>
<td>4) Ensure that all members of the PACE team have knowledge of and understand the roles of other community services with particular reference to complex Long term Conditions e.g. Community Matrons.</td>
</tr>
<tr>
<td>5) Consider how PACE can facilitate timely discharge for patients who are likely to require palliative care by developing relationships with palliative care teams.</td>
</tr>
<tr>
<td>6) Consider follow up telephone calls two weeks after PACE discharge to obtain more accurate and reliable readmission data.</td>
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</tbody>
</table>
10. Patient Satisfaction

On discharge from PACE, all patients are invited to complete a patient satisfaction questionnaire developed by Wilson et al (2006) for use in Intermediate Care Services. Patients are required to state whether they ‘strongly agree’, ‘agree’, ‘don’t know’, ‘disagree’ or ‘strongly disagree’ with a series of 17 statements designed to cover the domains of ‘overall quality of service’, ‘humaneness’, ‘competence’, ‘outcomes’, ‘facilities’ (equipment), ‘continuity of care’, ‘access’, ‘informativeness’ and ‘attention to psychological problems’ (Wilson et al., 2006). Patients also have the opportunity to state that a statement is ‘not applicable’.

Scores are attached to each response which are then combined to give a total individual patient satisfaction score. Individual scores for each question can be collated for the total sample and interrogated to provide a more detailed understanding of the particular aspects of the service with which patients are satisfied and the aspects with which they are less so.

Between July 2009 and April 2010 questionnaires were provided to a total of 481 patients (it was not possible to provide patients who were readmitted to hospital whilst on PACE with a patient satisfaction questionnaire). A total of 267 completed responses were received, representing a response rate of 56%.

The average patient satisfaction score was 85% which indicates that the model of care is extremely popular with patients. Many of the patients added their own comments at the end of the questionnaire, a selection of which are included in Figure 18.
“Following a fracture in my pelvis, I spent about 32 hours as an in-patient in the Princess Royal University hospital...I am now writing to praise unreservedly the work of PACE. I understand they are a new concept in getting patients back to their homes with a great deal of support for a limited time. This must be saving the NHS a vast amount of money spent otherwise on patients occupying hospital beds. The professional team to whom I was assigned worked very hard to help me adjust to walking with a zimmer frame, coping with a staircase and coming to terms with my limited lifestyle in the short term...PACE has given me, for free, great help and kindness and saved me from staying in a hospital, wrestling with the problems of Norovirus. I hope that PACE’s valuable contribution to the NHS may continue for a long time.”

“On completion of care by PACE, I feel I have to express my gratitude. [my sister’s] comments to me were how nice and caring each [caregiver] was. I did meet [named facilitator] shortly after my sister arrived home from hospital and she was so caring and efficient in all she did and took a great burden off me by setting up my sister’s medication in calendar containers, through her GP. Thank you to all who set up PACE and to the team that has transpired. I hope you continue for many years to come.”

“"I wish to thank all the members of the PACE team who were so considerate and solicitous of my welfare after I returned home from hospital. It certainly provided me with more confidence and encouragement towards a speedy recovery. I admired their relaxed attitude and understanding of my needs as a patient. Keep up the good work”

“"I had excellent care from all your staff. They were all charming and kind. I felt really confident after their care. Thank you so much”.

“If this service is discontinued, it will be a great shame. I would have stayed in hospital a lot longer. I was happy to be home and I pushed myself to do things. Everyone from PACE was extremely kind, very pleasant and I looked forward to their visits very much. I shall miss you all. Thank you very much for everything and I wish you the best of luck in the future”

“"The service provided by the PACE team has been excellent. My mother and I could not have managed without them all. Thank you all so much”.

“We were extremely pleasantly surprised to experience the wonderful care and attention given to us by this great team.”
The mean response to each question is presented in Figure 19.

Figure 19: PACE Patient Satisfaction - Mean Scores for Each Question
July 2009 - April 2010

- The start of my care was very efficiently managed
- The service staff were very careful to check everything when they started to provide the service
- The team gave me all the information I wanted about my condition
- The team gave me all the information I wanted about the care I was receiving
- I had problems getting pain relief when I needed it
- I had all the equipment necessary to care for me
- The team did their best to help me become more independent
- I felt able to talk to the team about any problems or worries I had
- The team always had time for me
- I have been treated with kindness, respect and dignity by the team from the service
- The team worked together and knew what each other was doing
- I was well prepared for when the service finished providing care for me
- The service finished providing care for me too early
- The care I received after the service finished providing care for me, was well co-ordinated
- The team did everything that they could to make me well again

Average Response
This graph shows broad satisfaction with all domains of the service with two notable exceptions; “I had problems getting pain relief when I needed” and “The service finished providing care for me too early”.

This may be interpreted in two ways. These are the only two questions which are phrased negatively and are scored in reverse (strongly disagree scores 5, strongly agree scores 1). Wilson et al (2006) commented that this was intended to “prevent response acquiescence, defined as the tendency to agree rather than disagree”. However, members of the PACE team felt that this was confusing to the PACE cohort of patients with a modal age of 90 (the average age of the sample of patients used in the development of the questionnaire was 76.5). It is believed that a failure of some patients to recognise the negative phrasing of the questions resulted in the scores for these two questions being lower than those that were phrased positively.

It is important not to dismiss these lower scores entirely, however. Anecdotally, it is known by members of the PACE Team that some patients do indeed feel that PACE withdraws its support too early. PACE only discharges patients when it is clinically appropriate to do so and makes every effort to signpost patients to other health and social services should they have ongoing needs. Patients may feel nervous at the prospect of having to cope with a reduced level of support when PACE withdraws.

PACE Team members are unaware of patients expressing that they have had difficulties getting pain relief. However, since the results of this survey became apparent team members took care to ensure that they enquire about the patient’s presence or absence of pain and where this is shown to be an issue pain management forms part of the care plan.
11. Quality of Staff Experience

Members of the Service Delivery Team were invited to complete a staff satisfaction questionnaire at the beginning of the pilot phase (July 2009), at the end of the pilot phase (October 2009) and again in July 2010. The results give an indication of the Team’s perceptions of PACE at three given points in time and also permits comparisons of how feelings towards the Service changed over time – although it should be noted that PACE has experienced several periods of staff turnover and this does not necessarily represent change in perception at an individual level.

Staff were invited to state whether they strongly agreed, agreed, somewhat agreed, disagreed or strongly disagreed with a series of statements about the Service and these results were collated and translated into an average percentage satisfaction score for each question. The results of the staff satisfaction questionnaire are presented in Figure 20.

![Figure 20: Levels of Staff Satisfaction with the PACE Service](image-url)
The results indicate that there has been a positive shift over the past twelve months, particularly in the dimensions of confidence in the service and patients’ access to the service. The former is perhaps a reflection that as PACE becomes more fully established and there is growing evidence that PACE has a positive impact both on patients’ physical and emotional wellbeing, the Team’s own level of confidence in the model of care they are delivering has increased.

The changing perception of patients’ access to PACE is particularly interesting. One interpretation of this may be that as PACE’s reputation developed and the ‘Case Finding’ approach became embedded in hospital discharge processes all patients who potentially met the acceptance criteria for PACE had the opportunity to be assessed.

The most obvious dimension of staff experience which is least satisfying relates to utilisation of skills; some members of the team clearly feel that their professional skills are not being used to maximum effect. This feeling has remained largely unchanged throughout the pilot. Further analysis of the results showed that this view was predominantly expressed by therapists who felt that they were not fully utilising their therapy skills. Indeed, in July 2010 one therapist commented “Although I have developed many new skills, my clinical physio skills are not fully used...I personally have more rehabilitation skills that are currently not being utilised …”

This exposes one of the challenges of the PACE model of care; to reconcile patient and staff satisfaction. Qualified and non-qualified staff are used interchangeably to meet a patient’s holistic care needs and this proved very popular – a single visit from one or two members of a single team to meet their health and social needs promotes a more positive patient experience than multiple visits from multiple teams to meet those same needs. As evidenced by the staff satisfaction survey, however, this may not be a model of care that maximises the potential for staff members’ professional development which could potentially lead to levels of dissatisfaction that
prompt staff to leave the service, thus destabilising the service to the detriment of patient satisfaction.

One way in which a balance could be achieved between patient and staff satisfaction with the PACE model would be to introduce rotational posts between PACE and community nursing and therapy services which could provide staff with the balance of specialised and generalist skills that meets their personal and professional objectives and satisfaction. Alternatively, it may be that PACE functions should become more closely integrated with mainstream community therapy and Intermediate Care services which would ensure that the responsibility for assessment and fast input to PACE patients is spread across a number of individuals. This would undermine the unity of the Team, however, which is one of PACE’s greatest strengths.
12. Lessons Learned

The establishment and subsequent operational management of the PACE Service has provided a learning opportunity for members of the Local Management Team and Service Delivery Team alike. Managers were challenged to collaborate and devolve responsibility to an extent previously unknown in Bromley; health and social care staff were challenged to acquire skills and adopt ways of working previously unfamiliar to them.

Some of the key lessons that have been learned over the past twelve months have been captured and it is hoped that these will be valuable both to colleagues leading future collaborative ventures in Bromley and to other sites in London and beyond that may wish to implement a PACE Service.

1) Collaborate
   Collaboration is fundamental to the success of a project such as PACE, particularly when swift mobilisation is required. The service requires full support and input from all partners to ensure best outcomes for patients.

2) Field Your Best Team
   The scale of PACE’s success is a direct result of committing the best people to the start-up of the service. A positive, solution-oriented attitude ensured that during the Pilot phase, a pressured project was delivered efficiently with maximum benefit for patients. This has continued in the subsequent months and sustained the team through periods of instability and uncertainty.

3) Team Induction and Unity
   PACE required individuals from different services employed by different organisations to come together as a team more or less immediately. Induction into the philosophy of PACE and a clear description of the desired behaviours and attitudes was essential from the start and was continually reinforced. Ongoing unity proved very
challenging for the Clinical and Team Leaders as partner organisations had co-existing agendas which resulted in staff being moved, often at short notice. This situation therefore necessitated continuous attention to induction programmes which was both time and energy consuming. This investment to engender a ‘PACE Philosophy’ in all members of the team has however been worthwhile; PACE receives regular praise from referrers and patients for its very positive, ‘can do’ approach.

4) Do it With Your Hospital
The PACE model relies on the acute partner believing in and sharing the benefits. The Service should be developed jointly with a top-down understanding of the benefits and a bottom-up approach to implementation. The resulting benefits should be acknowledged and shared by all parties equally. The merger of the original acute site with two neighbouring hospitals to form a large acute NHS Trust and the associated changes in managerial and clinical leadership have meant that it has at times been challenging to maintain a common understandings of PACE’s functions, objectives and performance. However partners have risen to this challenge and the newly formed Trust has reiterated its commitment to PACE.

5) Plan Your Communications
In spite of a formal comprehensive communications plan that was driven diligently, keeping all stakeholders informed of the nature of the service and referral and discharge processes proved difficult. Inadequate communication was immediately apparent and affected service delivery and morale. Some groups complained of not having been informed, even after having been sent details in several formats, and the PACE Team continue to receive requests to check patients’ pacemakers! The LMT regularly reviews the communication plan and addresses any identified communication gaps promptly. Members also capitalise on all opportunities to explain and promote the PACE service.
If a particularly hard to reach group is identified, it may be beneficial to engage with a key member within that group and seek their advice on how best to communicate with their colleagues. Feedback from GPs following the pilot phase indicated that the written PACE summary sent to all GP Practices in Bromley at the start of the pilot had not been effective. The SDT invited a local GP to attend one of their meetings and he supported the team to develop a framework for communication with GPs – both to convey clinical and service-related information.

6) Empower Teams to Respond Quickly and Appropriately
PACE has been at its most successful when staff make appropriate decisions throughout the process. Whilst certain decisions need to be made by practitioners with particular qualifications and skills to ensure the service’s clinical quality and safety, beyond this, team members should be empowered to make decisions that they feel will most benefit the patient and deliver the agreed package of care.

7) Evolve, Don’t Revolve
During the pilot phase, PACE offered a perfect environment for continuous learning and development and rapid implementation of lessons learned. This approach has been perpetuated during the second phase. The temptation to revert to partisan attitudes and behaviours can be hard to resist during times of uncertainty but the clinical leaders fought hard to ensure that this did not happen.

This approach should be adopted as an ongoing principle of any PACE scheme to ensure high-performing teams and services that adapt in the face of experience. All parties who operated at both strategic and implementation levels of the pilot were invited to a number of evaluation workshops with the PACE team to capture the learning from the Pilot, and what was striking was the consistent level of very senior sign-up to this.
8) **Ensure Medical and Therapy Consultant Advocacy**

Success depended upon hospital doctors and therapists believing the service would meet their patients’ needs safely. The Consultant Geriatrician from SLHT had been involved for many years with Bromley's existing Intermediate Care services, enabling her to speak to colleagues with detailed knowledge and confidence. The PACE Clinical Lead had experience in both acute and community services and this encouraged close collaboration.

9) **Strength of Local Workforce**

Community nurses in Bromley are in short supply and there is a need to invest in workforce development to meet the future needs of a mainstreamed PACE Service or equivalent. The project also highlighted a need for a large pool of well trained facilitators supported by trained clinical staff to provide the continuity of services valued by service users.

10) **Ensure Alignment to Local Organisational Objectives**

Close working relationships were facilitated by the alignment of PACE to the three organisations’ objectives and goals. PACE offered a clear advantage for each organisation and its patients or service users, providing an incentive to collaborate. Senior members of services that had been trying to work across boundaries commented that doors were being opened through PACE that had previously been firmly closed.

11) **Ensure Alignment to Regional & National Strategies**

PACE was aligned to *A Picture of Health; Healthcare for London, Transforming Community Services and Transforming Social Care*. It addressed components of all four strategic drivers providing the leverage to open doors that have traditionally remained close.
12) Promote Success to Achieve Sustainability

Sustaining a pilot service can be achieved by ensuring that its success is widely communicated and is understood and discussed in the forums with the power to lead change. Rather than waiting for people to ask about PACE and what it can achieve, members of the SDT and LMT proactively shared and promoted PACE’s success to senior groups, committees and individuals.
13. Next steps…

13.1 …in Bromley
All partner organisations are very proud of the achievements of the PACE Service and are keen that the functions and principles of PACE are firmly embedded in Bromley’s health and social care economy.

It has been agreed that PACE will continue in its current format whilst NHS Bromley commissioners assist in the development of a final structure of an integrated hospital avoidance and early supported discharge service, the aims of which would be to prevent patients from ever crossing the community to acute threshold and to identify patients in A&E and EAU whose needs could be managed at home.

The proposed structure is likely to bring PACE together with the CPU’s Rapid Response and the Care Home Liaison Teams, the functions of which complement those of PACE. The Rapid Response Team, a ‘step up’ service, provides enhanced acute nursing assessments and interventions to patients in their homes (following referral from a primary or community professional) and the Care Home Liaison Team provides both patient-specific and general nursing support and advice to the staff and patients of all Bromley Borough Care Homes.

13.2 …in London

The Head of the Provider Support Unit Team (supported by the Chief Executive) of NHS London applied to the London Regional Innovation Fund in February 2010 for ‘funding to develop, test and evaluate a sustainable funding and diffusion model’ for service innovations exemplified by PACE. In the first instance, NHS London is keen to implement PACE schemes at three further sites in London (Barnet and Chase Farm, the Royal Free and Croydon) and to develop learning sets to initiate the roll out of PACE and an associated funding mechanism scheme to other sites in London by March
2011. Members of the PACE Local Management Team have been invited to support this process and funding will be provided by NHS London to backfill their roles in the CPU.

In addition, NHS London is keen to support the expansion of the PACE model to the other two hospital sites within SLHT (Queen Mary’s, Sidcup, and Queen Elizabeth’s, Greenwich) and their respective community and social services. Initial conversations have taken place at the Emergency Care Pathways and Performance Board attended by representatives of all partner organisations and more detailed discussions are scheduled to take place in the near future.

**13.3.3…and Beyond?**

Members of the PACE LMT have been contacted by representatives of at least five organisations from outside London (from North East England, North West England and the Midlands) who have wanted to find out more about PACE. Enquiries have been received from a mixture of providers and commissioners, PCTs and Community Trusts, Clinicians and Managers. There is clear admiration for the model of working achieved in Bromley through collaboration and integration and a desire to implement PACE-style services elsewhere.
14. Conclusion

Twelve months ago, PACE was launched in Bromley underpinned by a level of partnership working rarely observed in the health and social care economy. Senior clinicians and social care professionals developed a pioneering model of care which senior managers from partner organisations collectively empowered them to implement.

Motivated, enthusiastic and dedicated therapists, nurses and facilitators cast aside preconceptions of their ‘traditional’ roles and adopted new skills, assessment frameworks and clinical outcome measures to deliver a trans-disciplinary service that has proved immensely popular with patients. In addition to enabling patients to go home earlier than they would have done otherwise, PACE has demonstrably improved the functional ability, quality of life and level of independence of many of the patients it has accepted.

PACE has contributed to the realisation of the strategic objectives of all partner organisations: saving bed days has helped the hospital to maintain acute capacity and to assess and treat patients in a timely manner, early social care intervention has contributed to a reduction in the need for longer term care (thereby helping people to remain at home for longer) and the boundary of community care has been extended.

The strong relationships forged between health and social care partners in Bromley through the implementation of the PACE model and the learning that has ensued have laid the foundations for future partnership ventures; both in Bromley and beyond.
15 References

Alan Bedford Consulting (2008) *Third Review of Progress following the Initial January Assessments of 4-hour Wait Performance, and Discharge Arrangements at the PRUH, held 25/11/08*


The EuroQuol Group [http://www.euroqol.org/home.html](http://www.euroqol.org/home.html)

Kao, H. and Walter, L. (2009) *Improvement of Hospital Care of Elderly Patients: Thinking Outside the (Hospital) Box* Archives of Internal Medicine 169(17):1576-1577


Appendix 1: Barriers Encountered and Subsequently Overcome During the PACE Mobilisation Period

**Contrasting terms and conditions**
Each partnership organisation offers staff different terms and conditions of employment (some staff had substantive contracts, others were paid hourly) – differences that had to be managed with sensitivity but also had practical implications for the organisation of the rota.

**Honorary Contracts**
Community staff assessing patients in the PRUH required an honorary contract. These had to be arranged at short notice and gathering the required documentation and paperwork was time-consuming and processes were laborious.

**Risk and Governance (R&G)**
Each organisation had different R&G procedures for a new service. Contact was made with the R&G leads at each organisation and framework and guidelines developed that were acceptable to all.

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Community staff assessing patients in the PRUH required an honorary contract. These had to be arranged at short notice and gathering the required documentation and paperwork was time-consuming and processes were laborious.

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Each organisation had different R&G procedures for a new service. Contact was made with the R&G leads at each organisation and framework and guidelines developed that were acceptable to all.

**Organisational boundaries between support services**
To function, the team needed computers linked into the CPU’s systems via the PRUH’s network. Establishing responsibility for implementing/troubleshooting this system proved a significant challenge.

**Documentation/Record Keeping**
Each organisation had different documentation requirements and additional information was also collected for the purposes of the evaluation. The PACE LMT ultimately agreed a data set and process that satisfied all organisations.

**Duplication**
The PACE service was perceived as a potential competitor to some of the acute services with discharge functions.

**Accommodation/ Furnishing**
Co location on the PRUH’s site was imperative to the functioning of PACE. The Team required a lockable operational base in the hospital for team handover and for access to patient administration systems. Pressure on space in the hospital made this challenging.

**Changing Practices**:
The PACE criteria requires a Specialist Registrar (SpR) or Consultant to record ‘medically stability’ in the patient notes. This step is not required on referral to other community services.

**Seven Day Working**:
To support weekend discharges PACE operates a full seven day service in contrast to the services from which members of the Delivery Team were drawn. For the duration of the pilot phase, staff were willing to ensure rotas were covered. However as PACE progressed to its second phase it was clear that any substantive appointments should be on the understanding that this is a seven-day service.

**Adjusting to Working in An Acute Environment**:
Most members of the SDT were accustomed to working in the community. A new base in the hospital required adaptation to a range of policies - from staff car parking to an awareness of the 4-hour target in A&E and its implications for Case Finding and discharge.

**Releasing Staff Quickly From Mainstream Services**
The Pilot asked for volunteers from existing services to support the rapid start and to ensure the team had local knowledge. Services had to adjust to their new establishment rapidly and arrange backfill were agreed. Occupational Therapists are in particularly short supply and this required the use of Agency staff with associated costs.
Appendix 2: Predicting the Maximum Case Load of the PACE Team

Appropriate capacity planning was undertaken to ensure that clinical risk is minimised and quality patient care is maintained across the whole journey. Based on current understanding of existing Intermediate Care services, a predictive model has developed to predict expected caseloads. It is anticipated that the maximum length of time any one patient would remain with PACE would be 10 days. Therefore the maximum number of patients that could ever be in the service at any one time is 30. However it was not anticipated that all patients will remain with the service for this length of time. It was predicted that the majority of patients will remain with PACE for 5-7 days with a small number being discharged after 1-4 days, and a similarly small number will be discharged up to a maximum of 10 days.

Several scenarios were considered in order to predict the maximum number of patients in the service at any one time. Three key points were used for these calculations – 2 days (representing patients staying with the service 1-4 days), 6 days (representing patients staying with the service 5-7 days) and 9 days (representing patients staying with the service 8-10 days).

<table>
<thead>
<tr>
<th>% discharged after 2 days</th>
<th>% discharged after 6 days</th>
<th>% discharged after 9 days</th>
<th>Maximum Number of Patients in PACE</th>
<th>Days of pilot Maximum number expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>60%</td>
<td>20%</td>
<td>18</td>
<td>9-70</td>
</tr>
<tr>
<td>30%</td>
<td>60%</td>
<td>10%</td>
<td>16</td>
<td>9-70</td>
</tr>
<tr>
<td>20%</td>
<td>70%</td>
<td>10%</td>
<td>17</td>
<td>9-70</td>
</tr>
<tr>
<td>15%</td>
<td>70%</td>
<td>15%</td>
<td>18</td>
<td>8-70</td>
</tr>
<tr>
<td>25%</td>
<td>50%</td>
<td>25%</td>
<td>18</td>
<td>9-70</td>
</tr>
<tr>
<td>10%</td>
<td>60%</td>
<td>30%</td>
<td>20</td>
<td>9-70</td>
</tr>
</tbody>
</table>
## Appendix 3: The Sheffield Complexity Scale

<table>
<thead>
<tr>
<th>1. Patient need: Prevention/maintenance programme</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aim to:</strong></td>
<td>Prevent physical and psychological deterioration</td>
</tr>
<tr>
<td></td>
<td>Prevent loss of independence</td>
</tr>
<tr>
<td></td>
<td>Promote psychological well-being</td>
</tr>
<tr>
<td></td>
<td>Encourage Healthy Living</td>
</tr>
<tr>
<td></td>
<td>Promote positive attitude to independence</td>
</tr>
<tr>
<td><strong>Services:</strong></td>
<td>Home care/support – social enablers</td>
</tr>
<tr>
<td><strong>Setting:</strong></td>
<td>Own home – local community setting</td>
</tr>
<tr>
<td><strong>Status of patient:</strong></td>
<td>Slight frailty or some physical/psychological threat to independent living</td>
</tr>
<tr>
<td><strong>Include:</strong></td>
<td>Individuals with physical/emotional or cognitive disorder who will not benefit from active rehabilitation but who need monitoring and advice.</td>
</tr>
<tr>
<td><strong>Exclude:</strong></td>
<td>Persons not at risk of deterioration.</td>
</tr>
<tr>
<td></td>
<td>Any person wishing to exercise personal responsibility for this.</td>
</tr>
<tr>
<td></td>
<td>Anyone receiving continuing health service where responsibility for this can be identified and passed over.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Patient need: convalescence</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aim to:</strong></td>
<td>Encourage improvement and/or maintenance of independence</td>
</tr>
<tr>
<td></td>
<td>Improve recuperation</td>
</tr>
<tr>
<td></td>
<td>Wait for aids adaptations</td>
</tr>
<tr>
<td></td>
<td>Wait for family adjustment support</td>
</tr>
<tr>
<td></td>
<td>Adjust to new circumstances</td>
</tr>
<tr>
<td><strong>Services:</strong></td>
<td>Home support</td>
</tr>
<tr>
<td></td>
<td>}</td>
</tr>
<tr>
<td></td>
<td>Residential</td>
</tr>
<tr>
<td></td>
<td>} not specialist</td>
</tr>
<tr>
<td></td>
<td>General care</td>
</tr>
<tr>
<td><strong>Setting:</strong></td>
<td>Step down beds</td>
</tr>
<tr>
<td></td>
<td>Own home</td>
</tr>
<tr>
<td></td>
<td>Short term residential home</td>
</tr>
<tr>
<td><strong>Status of patient:</strong></td>
<td>General malaise but generally well, mostly independent</td>
</tr>
<tr>
<td><strong>Include:</strong></td>
<td>Those needing encouragement, extra time, verbal support, general enablement and confidence building</td>
</tr>
<tr>
<td><strong>Exclude:</strong></td>
<td>Any person whose family are willing and able to provide convalescence.</td>
</tr>
<tr>
<td></td>
<td>Any person needing active rehabilitation.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>3. Patient needs slow stream rehabilitation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aim to:</strong></td>
<td>Provide watchful waiting</td>
</tr>
<tr>
<td>Services:</td>
<td>Community rehabilitation team }</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Home support } generalised/enablement skills</td>
</tr>
<tr>
<td></td>
<td>Day hospitals }</td>
</tr>
<tr>
<td></td>
<td>Out patient therapy }</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Setting:</th>
<th>Own home - nursing home care</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intermediate care beds</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Status of patient:</th>
<th>Stable condition, moderate level of disability, partially dependent, potential for improvement. May have combination of disabling conditions.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Include:</th>
<th>Those with mild impairments and disabilities who need specific guidance, treatment and the opportunity to practice new approaches and techniques.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Those requiring rehabilitation with reduced stamina.</td>
</tr>
<tr>
<td></td>
<td>Those with slowly deteriorating conditions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exclude:</th>
<th>Those more likely to benefit from another programme.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Those with stamina and ability to benefit from more active rehabilitation.</td>
</tr>
</tbody>
</table>

### 4. Patient needs regular rehabilitation programme

<table>
<thead>
<tr>
<th>Aim to:</th>
<th>Provide rehabilitation to maintain steady and measurable progress. Improve expected recovery trajectory.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Services:</th>
<th>Community rehabilitation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Home support</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Setting:</th>
<th>Home – out patients – day hospital</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Status of patient:</th>
<th>Patient progressing in rehabilitation - further recovery expected. Intensive rehabilitation not appropriately given Nature of patient’s condition and length of time since onset.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Include:</th>
<th>Those patients who can benefit from active targeted, goal orientated treatment from a multidisciplinary team.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Those with ability to retain information, to co-operate and understand rehabilitation objectives.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exclude:</th>
<th>Those more likely to benefit from other programmes.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Those who are not making measurable progress with regular intervention.</td>
</tr>
</tbody>
</table>

### 5. Patient needs intensive rehabilitation
| Aim to: | Change from dependent to independence  
|         | Reduce level of dependency on carers  
|         | Achieve maximum level of function  
|         | Resolve acute disabling conditions  |
| Services: | Community rehabilitation  
|         | Home support  
|         | Specialist therapy teams  
|         | Specialised nursing  |
| Setting: | Home  
|          | Rehabilitation ward  
|          | Intermediate care  
|          | Day hospital  |
| Status of patient: | Medically very fit, motivated, but dependent and identified by therapist as good candidate for intensive rehabilitation.  
| Include: | Fit, motivated patient with (mostly) acute condition judged to make significant active treatment.  
|          | Patient requiring intensive treatment as cognition reduces, generally without input.  |
| Exclude: | Patient who will benefit from another programme.  
|          | Patient unable to tolerate level of intervention.  
|          | Patient not making measurable improvement.  |

### 6. Patient needs specific treatment for individual acute disabling condition

| Aim to: | Target specific treatment by one profession.  
|         | Alleviate or reduce specific impairment/disability.  |
| Services: | Specialised therapy/nursing  |
| Setting: | Community/domiciliary based therapy  
|          | Out-patient therapy  |
| Status of patient: | Medically stable, single acute or chronic disabling impairment which can be managed by one specific professional.  
| Include: | Patient with single defined disabling condition.  
|          | Goal to be clearly defined. Intensity of input may vary.  |
| Exclude: | Patient with diffuse or generalised disability requiring team approach.  
|          | Patient unable to contribute to therapy programme.  |

### 7. Patient needs medical care and rehabilitation

| Aim to: | Actively treat medical condition in order to prevent/modify deterioration or secondary sequelae whilst enabling patient to improve/maintain  |
| independence.  
| Appropriately manage medical condition whilst patient undergoing multidisciplinary rehabilitation  
|  
| Services:  
| Medical care with generalised/specialised rehabilitation support  
| Nursing care  
|  
| Setting:  
| Home (less often)  
| Rehabilitation ward  
| Nursing home  
|  
| Status of patient:  
| Unwell/unstable medical condition, disabled specifically or generally  
| Include:  
| Patients requiring specialised medical intervention as part of rehabilitation programme  
| Exclude:  
| Patients too unwell/unstable to benefit from rehabilitation component  
|  
| 8. Patient needs rehabilitation for complex profound disabling condition  
| Aim to:  
| Provide rehabilitation as part of long term management of condition.  
| Maximise level of function, prevent secondary disabling condition and improve quality of life.  
| Provide particular provision of services related to those with low incidence specialised cognitive and physical disorders.  
|  
| Services:  
| Community rehabilitation - specialist multidisciplinary team  
|  
| Setting:  
| Home - regional unit - rehabilitation ward  
|  
| Status of patient:  
| Patient will have prognosis of long standing complex needs requiring specialist medical and multidisciplinary rehabilitation and multiagency input, e.g. progressive neurological disease, head injury, complex neurological and physical trauma  
| Include:  
| Patients requiring specialised multidisciplinary input.  
| Exclude:  
| Any client whose needs can be met in other programmes stated above  
|
### Appendix 4: The Modified Barthel Index

Patient Name:_________________________         D.o.B:________________ 

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal hygiene</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Bathing self</td>
<td></td>
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<td></td>
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<tr>
<td>Feeding</td>
<td></td>
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<tr>
<td>Toilet</td>
<td></td>
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<td></td>
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<tr>
<td>Stair climbing</td>
<td></td>
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<tr>
<td>Dressing</td>
<td></td>
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<tr>
<td>Bowel control</td>
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<tr>
<td>Bladder control</td>
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<tr>
<td>Ambulation</td>
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<td></td>
</tr>
<tr>
<td>or Wheelchair*</td>
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<tr>
<td>Chair/Bed transfer</td>
<td></td>
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</tr>
</tbody>
</table>

**Column Totals**

*Score only if patient is unable to ambulate and is trained in wheelchair management

**Total score**

### INTERPRETATION OF SCORE

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 24</td>
<td>Total Dependence</td>
</tr>
<tr>
<td>25 – 49</td>
<td>Severe Dependence</td>
</tr>
<tr>
<td>50 – 74</td>
<td>Moderate Dependence</td>
</tr>
<tr>
<td>75 – 90</td>
<td>Mild Dependence</td>
</tr>
<tr>
<td>91 – 99</td>
<td>Minimal Dependence</td>
</tr>
<tr>
<td>100</td>
<td>Independent</td>
</tr>
</tbody>
</table>

Initial Score: [ ] Date completed: __________ Completed By: __________

Discharge Score: [ ] Date completed: __________ Completed By: __________
Appendix 5: The Euroquol Visual Analogue Scale
Completed by PACE patients on admission and discharge

To help people say how good or bad a health state is, we have drawn a scale (rather like a thermometer) on which the best state you can imagine is marked 100 and the worst state you can imagine is marked 0.

We would like you to indicate on this scale how good or bad your own health is today, in your opinion. Please do this by drawing a line from the box below to whichever point on the scale indicates how good or bad your health state is today.
Should you require any further information regarding the PACE Service, please contact

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