

Weekend Stroke Therapy Commissioning Guidance

London Stroke Strategic Clinical Leadership Group

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Introduction

The recent development of stroke services across London as part of the London stroke model has resulted in improved patient outcomes, such as reduced patient mortality, as well as reductions in hospital length of stay [1]. Key to these improvements in patient and service outcomes is the delivery of a consistent and standardised approach in providing high quality stroke patient care. However, there remain a number of areas of practice within stroke care that are not delivered consistently across London that may impact upon patient outcome. One such area is the provision of weekend therapy for stroke patients in hospitals and in the community.

Therapy for stroke patients encompasses physiotherapy, occupational therapy and speech and language therapy. It is accepted that stroke rehabilitation, which is largely delivered by the professionals listed above, is an essential part of the management and treatment of stroke survivors [2]. There is evidence to demonstrate that providing more therapy, particularly within the first six months after stroke, results in greater functional improvements for patients post-stroke [3]. This has led to the development of standards of practice that suggest patients post-stroke should be offered a minimum of 45 minutes of each therapy that is required, for a minimum of five days per week, at a level that enables the patient to meet their rehabilitation goals for as long as they are continuing to benefit from the therapy and are able to tolerate it [4]. Whilst stroke rehabilitation is traditionally delivered across a five day working week, it seems logical that providing therapy across seven days, as opposed to five days, may result in faster improvements in patients' functional outcome as well as ensuring that patients move swiftly through the stroke pathway, from acute hospital care and into the community.

The drive to deliver NHS services across seven days has increased over the past few years, with the publication of a number of national guidance documents to support the implementation of seven day services across England [5, 6]. Within stroke care, there are a number of published examples of services that deliver a seven day therapy service within the hospital and community environments [2], as well as studies that have compared a five day per week stroke rehabilitation programme to a seven day per week stroke rehabilitation programme [7, 8]. Benefits of the seven day per week therapy model include:

- greater improvements in patients' functional abilities
- reduction in hospital length of stay
- reduced backlog of work on a Monday resulting in less staff stress
- reduced time from admission to initial therapy assessment, resulting in the earlier provision of therapy
- more opportunities to deliver a greater proportion of therapy

Whilst these benefits seem promising, there are a number of reported disadvantages to existing weekend therapy services that are not sufficiently funded to provide an equitable service over a seven day period. Weekend services are often staffed by voluntary rotas, which can be difficult to maintain and staff, thereby affecting the delivery of therapy over a weekend. Therapy staff members that work on a weekend may take time in lieu back during the week, which can have a detrimental effect on the delivery of stroke rehabilitation during the working week. Therefore, there is a need to ensure that weekend therapy services are appropriately funded so that additional staff members are recruited to ensure that there is no detrimental effect on the provision of therapy during the traditional Monday–Friday working week.

There is also a large amount of variation in the delivery of weekend therapy services in stroke units and community services across London. A recent review of stroke services across London

demonstrated that 63% of hyperacute stroke units (HASUs), 38% of stroke units (SUs), 10% of early supported discharge (ESD) teams and 0% of community stroke teams were delivering some form of therapy at the weekends [9]. This review also demonstrated that therapy provision varied greatly across the different regions of London. Therefore, there is a need to ensure that the delivery of weekend therapy for stroke patients is fair and equitable across London so that all patients benefit from the input that therapy can provide across all stages of the stroke pathway. In addition, it is vital that all services, from hyperacute stroke units to community services, invest in delivering weekend therapy, in order to ensure the smooth flow of patients across the patient pathway and maximise patient outcomes.

The aim of this document is to present a number of different options to deliver therapy services on weekends across all stroke services in London. The document will also present case studies of services currently delivering weekend therapy as well as views from patients and services users about weekend therapy.

Weekend Therapy Case Studies

Case Study One- HASU & SU

St George’s University Hospitals NHS Trust began a process to introduce expanded weekend therapy services within stroke in April 2012. The therapy department conducted two 3 month pilot projects of weekend therapy working in 2012 and 2013 within the Acute Neurosciences Directorate, which includes stroke services.

Access criteria were developed for the two pilot projects and three priority groups of patients were identified: new admissions; potential discharges; and patients requiring early rehabilitation. Outcome measures of LOS, assessment within 72 hours of admission, achievement of stroke NICE quality statement 5, patient contacts, weekend discharges, patient and staff satisfaction were selected. Following these pilot projects the therapy team were supported by the Trust Board and CCGs to introduce a substantive service.

From April 2014, a substantive weekend stroke therapy service involving 1 OT, PT and SLT working both days with access to a therapy technician was introduced. Dietetics services have been introduced on both days from January 2015. Staff members work a 7.5 hour day and take compensatory rest days during the week. The impact on existing weekday has been mitigated through uplift in staffing for all teams participating in the expanded weekend services roster. The activity data and service metrics for January to September 2014 are outlined in Table 1. There have been an increased number of weekend discharges and a reduction in new patient caseload on a Monday, improving staff satisfaction. Patient and carer satisfaction has been overwhelmingly positive, with reported weekend therapy benefits including getting home sooner and feeling more reassured about coping on discharge.

The introduction of this service has demonstrated measurable quality improvements as evidenced by SSNAP data and patient satisfaction questionnaires. This suggests that patients receive a more equitable stroke service across the week with those admitted and discharged within a weekend now having access to therapy services during their admission.

Activity	OT	PT	SALT
Total Weekend Patient Sessions (New)	432 (312)	481 (309)	399 (74)
Weekend discharges by therapy discipline	111	143	
SSNAP	Q4 (Jan-Mar)	Q1 (Apr-Jun)	Q2 (Jul-Sept)
Seen by one therapist in 24 hours, all therapists by 72 hours and have goals set by 5 days	55.1%	78.6%	79.1%
Median time to assessment (hh:mm)	OT: 21:30 PT: 21:22 SALT: 25:36	OT: 21:00 PT: 20:07 SALT: 20:29	OT: 21:10 PT: 20:38 SALT: 21:15

Table 1- Activity data and service metrics January – September 2014 at St George’s University Hospital HASU and SU

Case Study Two- HASU and SU

Following staff consultation, a 7 day therapy service was implemented from January 2014 at Northwick Park Hospital, London North West Healthcare Trust. Initially, the service comprised of 1 OT, 1-1.5 PT, 1 SLT and access to a dietetic and psychology service. The SLT and psychology team have not received any additional staffing to support this service and so have been unable to sustain a 7 day service. Therefore, SLT, dietetics and psychology now offer a 6 day service.

Staff members are scheduled to work a 7.5 hour day and take rest days during the week, which impacts on the weekday Monday – Friday service. Table 2 shows contacts and outcome for a typical weekend.

	SLT	OT	PT	Dietetics	Psychology
New stroke patients	5	9	5	1	3
Follow up stroke patients	3	11	16		1
Stroke patients discharged (who otherwise would have waited until Monday)		2	1		1
Stroke patients discharge facilitated (went home earlier in the week)	1	1	3		1
NBM (nil by mouth) days saved	1			1	
Early initial assessment for communication disorders (including family support/discussions)	4				

Table 2- Contacts and outcomes for weekend working at Northwick Park HASU and SU

Since implementation of the 7 day therapy service, performance on SSNAP bundle 1 (i.e. seen by one therapist in 24 hours, all therapists within 72 hours and rehabilitation goals set within 5 days) has improved by 64%. (October –December 2013: 26.2%; October – December 2014: 89.9%). Staff members have reported that weekend working has reduced the caseload and pressures on a Monday and has also improved continuity of care. Patient and carer feedback has also been extremely positive. Many have felt assured having therapy presence on the ward 7 days of the week. Patients discharged on a weekend have reported feeling assured and confident about going home.

Case Study Three- Inpatient rehabilitation, ESD & Community Service

Kingston community neurorehabilitation team (CNRT) commenced a weekend physiotherapy and occupational therapy service in November 2014. The service provides physiotherapy and occupational therapy to 4 inpatient stroke rehabilitation beds at the Cedars Unit, Tolworth Hospital, ESD patients and community stroke patients.

The weekend rota is staffed by a range of qualified physiotherapists and occupational therapists (ranging from Band 5 – 7), a physiotherapy technician and therapy assistants. Staff working on the weekend work one weekend day, receive weekend pay enhancement and have a compensatory rest day during the week.

As the service is relatively new, data to demonstrate the impact of weekend working are not readily available. Data are currently being collated on response times to initial assessment, length of inpatient stay, number of referrals and discharges, and patient feedback. The reported benefits of this model are that ward patients receive therapy, including group sessions, on 6 days a week, there are more opportunities to communicate with patients' families and next of kin, and community patients can be contacted and seen on the weekend, which should result in a reduced time to initial assessment.

Case Study Four- ESD

Tower Hamlets began to offer rehabilitation over 7 days in 2009. On Saturday and Sunday, 1 rehabilitation support worker (RSW) works a 7.5 hour day from 0830-1630. Each weekend, a senior stroke therapist is on call to support the RSW both for clinical advice and lone worker safety. RSWs undertake all therapy tasks as outlined by the team. This includes facilitating washing and dressing, hence avoiding the need to use social services care workers. Once patients are identified as ready for discharge from the SU, the RSWs in reach to the ward and work jointly with the inpatient team.

This service has increased the confidence in the acute inpatient team to discharge patients over the weekend. It has also saved around £14,500 in social care costs over a year.

Service user feedback on weekend therapy services

Feedback on seven day therapy services was sought from patients in a stroke unit in North West London and stroke survivors in a focus group run by the Stroke Association in North Central London during February 2015.

People indicated that no therapy input at the weekend resulted in a lack of structure on those two days and a sense of frustration at the inability to continue to practice rehabilitation tasks or access the gym without supervision. It was felt that having a break at the weekend made it difficult to 'start again' on Monday.

The people consulted expressed a 'more is better' approach to rehabilitation and the general consensus was that seven day therapy would be welcomed both in hospital and at home. The greatest benefits of a seven day service were felt to be more opportunity to practice exercises and build confidence and to allow relatives who work during the week to meet therapists and ask questions. The focus group agreed that they would be happy to participate in practising therapy tasks as well as Activities of Daily Living at the weekend. They particularly welcomed the concept of being seen at home by the same people for rehabilitation rather than the constantly changing faces presented by re-ablement services.

They expressed concern about the impact of weekend working on staffing during the rest of the week and felt that services should be sufficiently funded and staffed to ensure no detrimental effect of weekend working on weekday service provision.

Overview of Proposed Weekend Therapy Services

The following table provides an overview of the aims of 3 different options to deliver weekend therapy services. As stated in the introduction, it is expected that the aims will only be achieved if all services across the stroke pathway commission and deliver weekend therapy.

Service	Option 1- full weekend therapy service	Option 2- enhanced weekend therapy service	Option 3- limited therapy service
HASU		<ul style="list-style-type: none"> assesses new patients admitted on a weekend facilitates discharge of patients to SU or to community commences rehabilitation for patients who may deteriorate without intervention 	<ul style="list-style-type: none"> assesses new patients admitted on a weekend facilitates discharge of patients to SU or to community if limited care needs
SU	<ul style="list-style-type: none"> equal level of therapy service across 7 days uses existing Monday – Friday therapy staffing to patient ratios for PT, OT and SLT on the weekend access to allied disciplines e.g. dieticians, pharmacy, orthotics, psychology 	<ul style="list-style-type: none"> assesses new patients discharged from HASU on a weekend and sets up their rehabilitation programme provides limited rehabilitation e.g. for patients that will deteriorate without intervention facilitates weekend discharge to community if services are available 	<ul style="list-style-type: none"> assesses new patients discharged from HASU on a weekend and sets up their rehabilitation programme provides limited rehabilitation e.g. for patients that will deteriorate without intervention
ESD/ Community	<ul style="list-style-type: none"> equal level of therapy service across 7 days 	<ul style="list-style-type: none"> assesses new patients discharged from HASU/SU on a weekend and sets up their rehabilitation programme provides limited rehabilitation e.g. for patients that will deteriorate without intervention 	<ul style="list-style-type: none"> accepts new patients discharged from HASU on a weekend and sets up their rehabilitation programme

The following pages detail different options to deliver weekend therapy in HASUs, SUs and ESD/community services. The options provide examples of different staffing configurations to achieve these models of weekend therapy, including advantages, disadvantages, and indicative costs of such models. However, providers and commissioners will need to understand the specific needs of their service in order to determine what specific model of weekend therapy is appropriate for their service.

HASU Weekend Therapy Service Options

HASU	Option 1- full weekend therapy service	Option 2- enhanced weekend therapy service	Option 3- limited therapy service
Typical staffing configuration	For a 20 bedded HASU 0.73 WTE PT for 5 beds 0.68 WTE OT for 5 beds 0.34 WTE SLT for 5 beds	For a 20 bedded HASU 0.36 WTE PT for 5 beds 0.34 WTE OT for 5 beds 0.17 WTE SLT for 5 beds	For a 20 bedded HASU: 0.5 WTE PT (Band 6 and above) 0.5 WTE OT (Band 6 and above) 0.5 WTE SLT (Band 6 and above) Sat only
Advantages	<ul style="list-style-type: none"> no delay in patient access to specialist therapy intervention across the week resulting in an equitable rehabilitation service likely reduction in LOS due to timely therapy assessment, implementation of treatments plans and facilitation of patient discharge across the whole week improved HASU capacity due to patient discharges across the whole week 	<ul style="list-style-type: none"> slightly reduced workload on Monday as new patients seen over weekend may improve HASU capacity and reduce LOS due to weekend patient discharges some patients at less risk of physical deterioration over the weekend 	<ul style="list-style-type: none"> slightly reduced workload on Monday as new patients seen over weekend may improve HASU capacity due to limited weekend patient discharges requires least financial investment compared to other options
Disadvantages	<ul style="list-style-type: none"> requires most financial investment compared to other options organisational outcomes will only be achieved if whole stroke pathway adequately resourced 	<ul style="list-style-type: none"> lack of equitable rehabilitation service as patients will be prioritised out and patients admitted on weekend receive different level of care compared to a weekday limited LOS reductions likely to be achieved any LOS reduction will only occur if whole stroke pathway adequately resourced increase in staffing costs 	<ul style="list-style-type: none"> no rehabilitation provided for patients lack of equitable therapy service as patients admitted on weekend receive different level of care compared to a weekday lack of full and specialist therapy assessment may delay patient treatment resulting in minimal to no LOS reductions any LOS reduction will only occur if whole stroke pathway adequately resourced slight increase in staffing costs working half days at weekends will be unpopular
Costs	£222,768 per annum	£110,864 per annum	£38,844 per annum

Assumptions: Costed at top of B6 to represent range of bands of staff present each weekend. Figures include Outer London Weighting (will need to adjust for Inner London Weighting) and time x 1.33 on Saturday and x1.66 on Sunday. Figures cover cost of weekend enhancement but not backfill of staff during week to cover rest days.

SU Weekend Therapy Service Options

SU	Option 1- full weekend therapy service	Option 2- enhanced weekend therapy service	Option 3- limited therapy service
Typical staffing configuration	For a 20 bedded SU: 0.84 WTE PT for 5 beds 0.81 WTE OT for 5 beds 0.4 WTE SLT for 5 beds	For a 20 bedded SU: 0.42 WTE PT for 5 beds 0.4 WTE OT for 5 beds 0.2 WTE SLT for 5 beds	For a 20 bedded SU: 1.0 WTE PT or OT 1.0 WTE rehab support worker 0.5 WTE SLT Saturday only
Advantages	<ul style="list-style-type: none"> no delay in patient access to specialist therapy intervention across the week resulting in an equitable rehabilitation service quicker attainment of patient goals and likely reduction in LOS due to timely therapy assessment, implementation of treatments plans and facilitation of patient discharge across the whole week improved SU capacity to accept patients from HASU due to patient discharges across the whole week resulting in less delayed discharges from HASU 	<ul style="list-style-type: none"> earlier provision of rehabilitation for patients admitted over weekend may improve patient outcomes some patients at less risk of physical deterioration over the weekend may reduce LOS due to weekend discharges 	<ul style="list-style-type: none"> earlier provision of rehabilitation for patients admitted over weekend may improve patient outcomes some patients at less risk of physical deterioration over the weekend requires least financial investment compared to other options
Disadvantages	<ul style="list-style-type: none"> requires most financial investment compared to other options organisational outcomes will only be achieved if whole stroke pathway adequately resourced 	<ul style="list-style-type: none"> lack of equitable rehabilitation service as patients will be prioritised out which may impact upon patient outcomes lack of specialist therapy intervention and limited opportunities for MDT working which may impact upon patient outcomes any LOS reduction will only occur if whole stroke pathway adequately resourced increase in staffing costs 	<ul style="list-style-type: none"> lack of equitable rehabilitation service as patients will be prioritised out which may impact upon patient outcomes lack of specialist therapy intervention on weekend may impact upon patient outcomes unlikely to reduce LOS slight increase in staffing costs working half days at weekends will be unpopular
Costs	£260,000 per annum	£129,792 per annum	£62,348 per annum

Assumptions: Costed at top of B6 to represent range of bands of staff present each weekend. Figures include Outer London Weighting (will need to adjust for Inner London Weighting) and time x 1.33 on Saturday and x1.66 on Sunday. Figures cover cost of weekend enhancement but not backfill of staff during week to cover rest days.

ESD Weekend Therapy Service Options

ESD/Community	Option 1- full weekend therapy service	Option 2- enhanced weekend therapy service	Option 3- limited therapy service
Typical staffing configuration	For an integrated ESD service accepting 8-10 new patients/month: 1.0 WTE PT 1.0 WTE OT 0.4 WTE SLT	For an integrated ESD service accepting 8-10 new patients/month: 0.5 WTE PT 0.5 WTE OT 0.2 WTE SLT	For an integrated ESD service accepting 8-10 new patients/month: 0.5 WTE PT or OT 0.5 WTE rehab support worker
Advantages	<ul style="list-style-type: none"> no delay in patient access to specialist therapy intervention across the week resulting in an equitable rehabilitation service quicker attainment of patient goals and reintegration into the community due to timely therapy assessment and implementation of treatments plans across the whole week improved HASU and SU capacity due to accepting patient discharges across the whole week 	<ul style="list-style-type: none"> earlier provision of rehabilitation for patients admitted over weekend may improve patient outcomes some patients at less risk of physical deterioration over the weekend may improve HASU and SU capacity due to accepting a limited number of patient discharges from HASU/SU into the community 	<ul style="list-style-type: none"> may improve HASU capacity due to accepting a limited number of patient discharges from HASU into the community earlier provision of rehabilitation for patients admitted over weekend may improve patient outcomes requires least financial investment compared to other options
Disadvantages	<ul style="list-style-type: none"> requires most financial investment compared to other options organisational outcomes will only be achieved if whole stroke pathway adequately resourced 	<ul style="list-style-type: none"> lack of equitable rehabilitation service as patients will be prioritised out which may impact upon patient outcomes lack of specialist therapy intervention and limited opportunities for MDT working which may impact upon patient outcomes any improvements in HASU and SU capacity will only occur if whole stroke pathway adequately resourced increase in staffing costs 	<ul style="list-style-type: none"> lack of equitable rehabilitation service as patients will be prioritised out which may impact upon patient outcomes lack of specialist therapy intervention on weekend which may impact upon patient outcomes limited improvements in HASU capacity due to accepting a limited number of patient discharges slight increase in staffing costs
Costs	£69,368 per annum	£34,684 per annum	£24,081 per annum

Assumptions: Costed at top of B6 to represent range of bands of staff present each weekend. Figures include Outer London Weighting (will need to adjust for Inner London Weighting) and time x 1.33 on Saturday and x1.66 on Sunday. Figures cover cost of weekend enhancement but not backfill of staff during week to cover rest days.

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