

# Theoretically informed case study accompanying the film

# Stroke care – Patient led rehabilitation (through "Early Supported Discharge") - UK



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QR-Code to the Homepage and video:

Link to the video: http://www.inno-serv.eu/esd

This report is part of the research project "Social Platform on innovative Social Services" (INNOSERV). INNOSERV investigates innovative approaches in three fields of social services: health, education and welfare. The INNOSERV Consortium covers nine European countries and aims to establish a social platform that fosters a europeanwide discussion about innovation in social services between practitioners, policy-makers, researchers and service users. This project is funded by the European Union under the 7th Framework Programme (grant agreement nr. 290542).





# 1. Short profile: Stroke care – Patient led rehabilitation (through "Early Supported Discharge" from Hospital based Acute Stroke Care Services)

People who suffer stroke often experience long-lasting cognitive and physical symptoms and require rehabilitation from a team of specialists, including physiotherapists, speech therapists and occupational therapists in order to recover function. This service is an example of the Early Supported Discharge model of stroke care. This type of service represents a new means of achieving clinical and patient directed goals, based on research evidence.

# **Specific innovative elements**

Healthcare at homePatients receive specialist rehabilitation for stroke **at home** rather than as a hospital inpatient; this care is of the same level as would have been received in hospital; the service is provided by the specialist stroke team who deliver their care out in the community.

### Personalised care

Clinicians and therapists work with patients and carers to help them set their own **personalised** rehabilitation goals.

#### Patient and Carer Involvement

Patients and carers (where relevant) share the management of their rehabilitation programme with therapists

# Integration with intermediary care services

The service is very integrated with intermediary care services, and patients are supported in their transition to these services where appropriate.

## **Key characteristics of the service**

#### Principle

The principle is that stroke patients who are able to have rehabilitation in their own home, but of the same intensity as would have been received if they had remained in hospital, achieve better clinical outcomes than those who are provided with rehabilitation in hospital. Greatest benefits are seen when the services were provided by a specialist multidisciplinary team to a selected group of patients (those with mild to moderate stroke) (Langhorne et al, 2005).

# Organisation

The service is provided by the Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust (RBCHFT). The Trust receives approximately 730 acute stroke and 200 transient ischaemic attack (TIA), or 'mini-stroke', admissions per year.

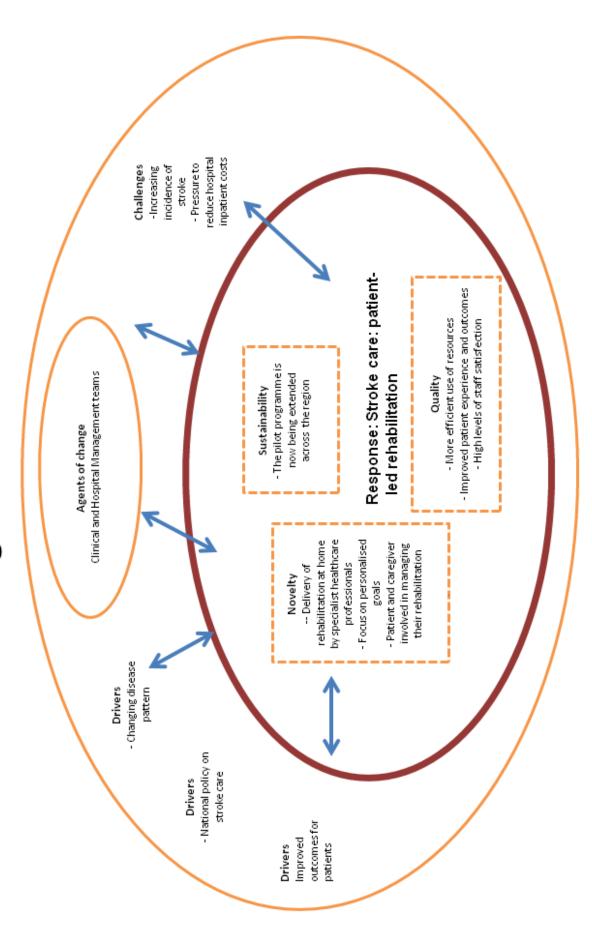
# User groups

The service is provided to patients who have experienced mild to moderate stroke (and their carers) who are suitable for early supported discharge because they are medically stable, carers can cope and the patient has active rehabilitation goals.

## Driver(s)

- Better outcomes and experience for patients
- Cost savings
- Evidence informed national policy
- · Patient and carer involvement





# 2. Policy Framework related to stroke care in the United Kingdom

Principles/	Key organisa-	Services provided by	Expenditure,
Guidelines	tions and actors	government	Resources
Move towards long	Health care in the UK	The service model is based	Direct cost to
term healthcare	is provided by the	on a number of national	the UK NHS of
provided in com-	National Health Ser-	policy statements in stroke:	stroke care
munity settings,	vice as a universal		- about £2.8
	service funded from	UK Department of Health	billion a year
Personalisation	taxation	National Stroke Strategy,	(Division of
Health care provid-	Dan anton ant of	<b>2007</b> (Department of Health,	Health and
ers work with pa- tients and carers to	Department of Health: UK health	2007)	Social Care
set meaningful reha-	care policy is promot-	states that people who have had a stroke should receive	Research,)
bilitation goals	ing and supporting	high quality rehabilitation as	Annual costs to
Dilitation goals	early supported dis-	soon as possible and for as	the wider econ-
Integrated working	charge in stroke	long as they need it	omy associated
Closer working with	onargo in ou ono	l long do they heed it	with lost pro-
a range of agencies	The RBCHFT pro-	UK Royal College of Phy-	ductivity, dis-
across primary and	vides acute care	sicians National Clinical	ability and in-
secondary care,	services to a popula-	Guidelines for Stroke,	formal care for
social care and the	tion of around	2008 (Intercollegiate Stroke	stroke
voluntary sector	550,000 in the south	Working Party, 2008)	- around £4.2
	of England	states that early discharge	billion. (Divi-
		patients should be followed	sion of
	The RBCHFT has an	up by a specialist stroke	Health and
	established, inte-	rehabilitation service	Social Care
	grated stroke ser-	Collaboration for Loader	Research,)
	vice, including pre- hospital public and	Collaboration for Leader- ship in Applied Health	Stroke care is
	paramedic aware-	Research and Care -	free at point of
	ness, acute and re-	Nottinghamshire, Derby-	access for all UK
	habilitation care and	shire and Lincolnshire - A	residents (tax
	stroke prevention	Consensus on Stroke:	based system)
	,	Early Supported Dis-	, ,
	RBCHFT Stroke	charge, 2005 (Fisher et al,	
	Specialist ESD Team	2011)	
	deliver specialist	uses a review of literature	
	stroke care and re-	and expert consultation to	
	habilitation in the	make recommendations for	
	community	ESD service composition	
	On-going long-term	UK National Health Service	
	support provided by	-National Stroke Improve-	
	primary care, social	ment Programme Acceler-	
	care and voluntary	ated Stroke Improvement	
	sector providers as	Measures, 2010. (NHS Im-	
	appropriate	provement Programme,	
		2008)	
		NHS committed to an accel-	
		erated programme of im-	
		provement in stroke ser-	
		vices, including provision of	
		ESD	

# 3. The social, political and institutional context

# 3.1 Population/ Government

	UK	EU27
Total Population, (2010)	62.3 million (ONS, 2011a)	501.1 million (Eurostat, 2011a)
Population projections 2035	73.2 million (ONS, 2011a)	525 million (Eurostat, 2011b)
Proportion of population aged 65-79 years, (2010):	11.9% (ONSa)	12.7%
Proportion of population aged 80 years and more (2010):	4.7% (ONSa)	4.7%
Proportion of population aged 65 and over (2010):	16.6% (ONSa)	17.4%
Old-age-dependency ratio (2008)	310 (ONSb)	
Projected old-age dependency ratio 2051	495 (ONSb)	
Life expectancy at birth in years: male/female	78.1/82.1 (2008-2010) (ONS, 2100b)	76.4/82.4 (2009) (Eurostat c)
Expenditure on health care (% of GDP, 2009)	9.8	10.2 (EC, 2012)
Direct NHS care costs for stroke (2003-4)	2.8bn (Division of Health and Social Care Research,)	-
Number of people having a stroke per annum	150,000 <sup>12</sup> (Stroke Association)	About 1,000,000 <sup>17</sup> (EC, 2007)

# 3.2 Information about the specific Welfare State: UK

In the UK, the state provides a basic level of social support and social protection. Around half the UK population (approximately 30 million people) receive some social security benefit. These benefits are a mix of taxable/non-taxable; contributory/non-contributory and means/non-means tested benefits. The benefits can be divided into six categories of recipient: families with children, unemployed people, those on low incomes, elderly people, sick and disabled people, and bereaved people. Social security benefits for the period 2011-12 amounted to 13.5% of the GDP of Great Britain, and is the largest single area of government spending (Browne and Hood, 2012).

Social services (social care and social support) are organised at a local level, with some schemes funded nationally but mediated through local government, and some funded locally. Local governments have reduced their role of direct service provider in some areas, with a growing number of independent providers and a growing social enterprise sector becoming involved. The system thus has a plurality of service providers. Social care services in England, Northern Ireland, Scotland and Wales are managed separately, although are similar in most respects (Theil, 2010).

Health care is provided through the National Health Service (NHS) which is funded through taxation and is free at the point of use for anyone living in the UK. Again, NHS services in England, Northern Ireland, Scotland and Wales are managed sepa-

rately, although are similar in most respects. Expenditure on healthcare in the UK in 2009 was £136.4 billion, or 9.8% of GDP (Qaiser, 2011).

In the UK, there is a continuous increase of expenditure in benefits delivered in kind rather than in cash. The table below presents the social protection expenditure of selected countries.

# Social protection expenditure: Aggregated benefits and grouped schemes in millions of Euros

Time	Expenditure for social protection benefits in millions of Euros		Increasing benefits in kind	Part of benefits in kind of social protection benefits	
	1996	2010	1996-2010	1996	2010
EU 27	/	3,605,678.95	/	/	34.07%
United Kingdom	262,859.71	478,281.18	124.56%	32.87%	40.56%
Germany	565,683.07	765,717.82	52.53%	30.79%	34.69%
France	379,396.42	654,238.65	84.47%	31.94%	34.17%

Source: Own calculations based on EUROSTAT 2012

# 4. Challenges and Drivers of Innovation

#### **Structural weaknesses** of the system:

Health services face growing demands on services, from an ageing population, from advances in knowledge, science and technology, and from increasing public expectations. The incidence of stroke and other long term conditions are expected to rise as the population ages. Alternatives to hospital care will be needed to ensure that expensive hospital resources are used to provide for those who need the resources of a hospital setting and cannot be treated in other, usually better, environments. Health services must meet these challenges within a tough financial climate and must work to limit expenditure but also to maintain or improve quality of services.

Innovation: Ideas, criteria, levels and added values

#### What is new and innovative

Early Supported Discharge is an evidence-based model of care for certain groups of stroke patients. Traditional models of stroke care are based primarily in hospital, where patients receive both acute care and rehabilitation. The ESD model facilitates an earlier discharge from hospital, with the rehabilitation that would have been provided in hospital being provided in the patient's home. Rehabilitation at home allows patients to work towards individualised goals which, as they are undertaken at home, are meaningful and functional.

#### Outcomes

An evaluation of the pilot was carried out over a six month period, from August 2011 to January 2012 (Moseley, 2012), in order to test assumptions made in the business case for the service and to evaluate the service impact. The evaluation focussed both

on impact for patients and for the service, and aimed to inform future service provision. The evaluation showed:

#### Impact for patients:

- A total of 153 patients were discharged from hospital to the ESD service
- The service received positive patient and carer feedback
- The majority of patients showed an improved 'quality of life' score on a validated questionnaire based measure compared to those who had previously received hospital based rehabilitation
- All patients maintained or improved their level of functional independence
- All patients demonstrated improvement on their level of personal goal achievement

#### Impact for stroke service:

- A reduction in the average length of inpatient stay from an average of 21 to 13.28 days
- An estimate of 1642 bed days saved over the 6 month period
- The closure of 22 in-patient stroke beds
- No increase in readmissions (in a period of up to 30 days from discharge) indicating that the identification of patients who could benefit from this approach was appropriate

# **Agents of Change**

The service began as a local pilot in order to develop the model of provision and to assess its outcomes. The Senior Consultant Doctor of the stroke service led the development of the pilot. A factor driving the pilot was the requirement to close one of the Trust's stroke facilities and thus to reduce bed numbers.

# 5. Key innovative elements of this example

Field of service	Health	
Establishment of organization	August 2011	
Type of organization	National Health Service, acute stroke service	
Financing	NHS; 6 month pilot in August 2011	
Sing of agreementing	Number of staffs 0 full times are 0.0 of full times	
Size of organization	Number of staff: 8 full time, one 0.6 of full time,	
	plus 1 session per week stroke consultant, 3 sessions per week consultant therapist	
	Number of users: 153 over 6 month pilot period	
Manchara and participation		
Members and participation	Royal Bournemouth and Christchurch Hospitals	
	NHS Foundation Trust (RBCHFT). The Trust	
	receives approximately 730 acute stroke and 200	
	transient ischaemic attack (TIA), or 'mini-stroke',	
	admissions per year.	
Contact	Stroke care - Patient led rehabilitation (through	
Name of the innovative example	"Early Supported Discharge")	
Homepage	http://wires.wessexhiecpartnership.org.uk/	

# Background

Early Supported Discharge (ESD) is a model of accelerating discharge from hospital to home, with provision of specialist rehabilitation in the home setting. The provision of rehabilitative therapy in the community for suitable patients has been shown to improve patient outcomes in those patients with mild to moderate symptoms of stroke, which equates to about 40% of all stroke patients.

Major improvements have been made to Stroke care services in recent years, in response to government policy guidance, but the uptake of an early supported discharge model of service delivery has been slow. The Stroke Early Supported Discharge service at Royal Bournemouth and Christchurch NHS Foundation Trust began as a 6 month pilot in August 2011. The service was started as a local pilot based on evidence from research based practice elsewhere in the UK in order to test the model of service delivery and to evaluate the impact of the service over this period (Moseley, 2012).

The introduction of this service has supported the merger of two stroke units, with a planned reduction of 22 inpatient beds.

# The setting

The Bournemouth and Christchurch NHS Trust serves a population of 350,000 across Dorset and Hampshire in the south of England. The Trust has around 730 acute stroke and 200 transient ischaemic attack (TIA), or 'mini-stroke', admissions per year. Specialist stroke care is delivered by a multidisciplinary team on the stroke unit at the Royal Bournemouth Hospital. The ESD team is situated within the Rehabilitation Department of the hospital. The ESD team work alongside the in-patient team to identify patients for ESD. Patients can be discharged to the ESD service if deemed suitable according to certain eligibility criteria, including medical stability and low likelihood of carer strain.

## Service delivery

The ESD service is delivered by specialist stroke staff from a variety of disciplines (see box below), and is delivered 7 days per week in the patient's home.

### **Staffing of RBCHFT ESD service**

- 1 clinical leader
- 2 Physiotherapists
- 2 occupational therapists
- 1 speech and language therapist
- 0.6 stroke nurse
- 2 rehabilitation assistants
- 1 session per week stroke consultant
- 3 sessions per week consultant therapist

Welcome home visits take place within 24 hours of a patient's discharge. The ESD team work with the patient and carer to set individualised rehabilitation goals and a programme of rehabilitation. As these goals are actioned within the patients' own home, they are relevant to the patient's daily lives. The team is normally involved with a patient for around 2 weeks. Discharge from the ESD service then includes referral to a continuing community support services when appropriate.

# Relevance for Europe

ESD in stroke care is an evidence based model of care which provides more appropriate outcomes for stroke care patients and their families, helps support independence and which can address pressures to contain healthcare costs. As such, it is likely to be a model of interest to other countries within the EU.

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