Nottingham and Nottinghamshire
Clinical Commissioning Group

Overview of Rehabilitation and Neuro-Rehabilitation Services in Nottinghamshire

Nottinghamshire Health Scrutiny Committee – January 2021

1.0 Introduction

Following the presentation to the Nottinghamshire Health Scrutiny Committee in December 2020, the CCG has been asked to meet with the Committee in January to consider rehabilitation services further.

Rehabilitation is used to describe many services that range from exercise classes and information sessions through to intensive in-patient specialist programmes. The fundamental element is that rehabilitation is provided on an individual basis, relevant to their condition and/or type of injury and in response to the level of complexity in rehab need and potential. Rehabilitation at all levels aims to reduce disability, increase self-management, participation in society including returning to an occupation as relevant and quality of living. Therefore, the paper provides a brief overview of rehabilitation as a general term and includes a description of some of the services available, recognising that rehabilitation is not an "extra" or "add-on" but part of an individual's journey to recovery. In this respect, in order to properly take into consideration the context for the discussion, the paper will particularly focus on neuro rehabilitation which in itself has a number of levels and types of services.

2.0 What is Rehabilitation

Rehabilitation is defined as "***a set of interventions designed to optimise functioning and reduce disability in individuals with health conditions in interaction with their environment".***

Rehabilitation interventions can be provided in primary care, hospital settings (during an inpatient episode or as an outpatient referral) and/or in the community including in a person's own home. The breadth of rehabilitation means that a range of organisations may contribute to meeting a person's individual needs, including the NHS, local authorities, user-led and community groups, and independent and charitable organisations.

Rehabilitation intervention is essential in helping to address the impact of:

- ⇒ physical or movement problems – such as impaired motor control; loss of limbs; reduced balance, strength or cardiovascular fitness; fatigue, pain or stiffness
- ⇒ sensory problems – such as impairment of vision or hearing; pain; loss of or altered sensation of touch or movement
- ⇒ cognitive or behavioural problems – such as lapses in memory and attention; difficulties in organisation, planning and problem-solving

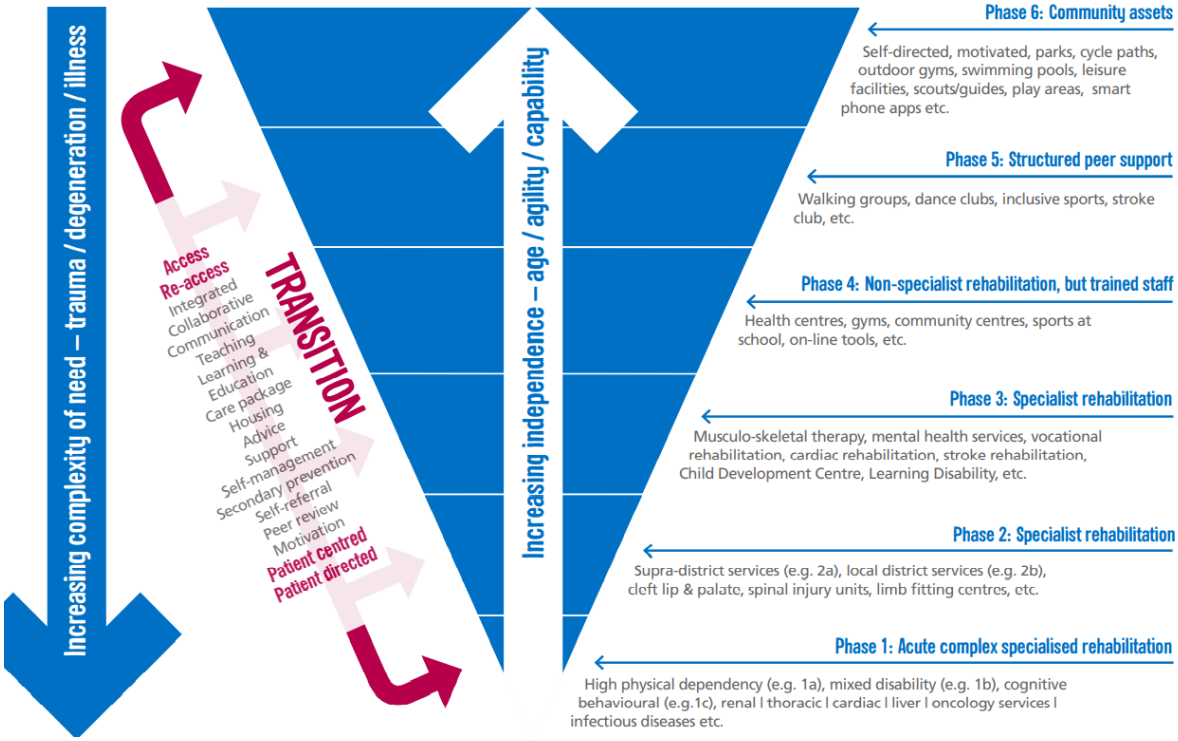
- ⇒ communication problems – such as difficulties in speaking, using language to communicate and fully understanding what is said or written
- ⇒ psychosocial and emotional problems – such as the effects on the individual, carer and family of living with a long-term condition. These can include stress, depression, loss of self image and cognitive and behavioural issues
- ⇒ medically unexplained symptoms – where a holistic approach is needed to ensure the best possible support for both mental and physical wellbeing
- ⇒ mental health conditions – such as anxiety and depression, obsessive/compulsive disorders, schizophrenia, eating disorders, post-traumatic stress disorder and dementia

There are different professionals who support rehabilitation depending on the need and this can include clinical nurse specialists, clinical psychologists, dietitians, rehab medicine consultants, occupational therapists, physiotherapist, speech and language therapists, podiatrist/chiropodist, art therapist, social workers.

Effective rehabilitation takes a holistic and individualised approach. This is because two people with the same diagnosis may have very different abilities and needs because of a complex interaction between their health conditions, the environments they live in, their values and beliefs, and their aspirations and motivations. The interaction between an individual's mental and physical health is also key, with one having the potential to significantly affect the other. For these reasons rehabilitation in the community setting for those who don't require the complexity of in-patient care, is conducive to effective rehabilitation through care closer to home and/or at home, supporting self-care and providing care relevant to an individual's support network.

The following diagram illustrates the different phases of rehabilitation that are applied flexibly depending on the needs of a local population and the rehabilitation pathway of each individual.

Figure 1 – The Model of Rehabilitation[1]



Transition between the phases and exiting and re-entering different phases can be critical times for the patient and their families. There is no specific guidance on what should be provided for each phase and who should fund, but fundamentally, phase 1 are the most complex cases and as such, services are commissioned and funded by NHS England. Phase 2 and 3 relates to services that would predominantly be locally funded. Phase 4, 5 and 6 tend to relate to existing services that are either local authority, privately or voluntary sector funded and accessed to provide very specific areas of support as identified by the individual themselves.

The below provides an overview of some of the specific services commissioned across the spectrum of rehabilitation services.

Community Rehabilitation Team (mental health) - deliver intensive rehabilitation support for people with severe and enduring mental health problems, in a community setting.

Community Therapy Team – rehabilitation in patients' own homes. Includes exercise to improve strength and balance, home hazard assessments, specialist equipment, strategies to reduce the risk of falling.

Pulmonary Rehabilitation – Relates to Chronic Obstructive Pulmonary Disease (COPD) or a lung problem and aims to help individuals to cope with breathlessness and to feel stronger and fitter at the same time. Services provide case management,

[1] Commissioning Guidance for Rehabilitation, NHS England, Publications Gateway Ref No. 04919, March 2016

including integrated, multidisciplinary assessment and treatment through person-centred care plans, in line with case management strategies.

Cardiac Rehabilitation – is an individualised programme that includes a mix of exercise and education sessions. It is operated by the two Trusts and is a community service with patients accessing cardiac rehab centres/gyms two sessions per week for up two six weeks. Cardiac rehab is supported by nurses and physiotherapists. Home programmes are also provided where individuals are assessed and given home exercises.

Community Reablement Beds – A short term intervention within a bedded facility – with the overarching aim to support patients to return home where possible, and where not possible and long term residential care is required, ensure the onward provider is able to appropriately meet the patient's care needs.

3.0 Pathways for Neuro Rehabilitation

Neuro rehabilitation includes services in phases 1, 2 and 3 and the following provides an overview of the structure of neuro rehabilitation relevant to the different levels that are defined nationally. It should be recognised that the majority of patients reach a level of recovery that means that they go from injury/illness to independence with the help of community rehabilitation (phases 4, 5 and 6) therapy and support services and don't require specialist rehabilitation.

There is a need for provision at all levels of complexity and the aim is that this is delivered through co-ordinated networks with specialist neuro-rehabilitation services working both in the hospital and the community. As mentioned in the previous section, rehabilitation involves a range of professions and the number of specialists will depend on the complexity of patient needs with the least intensive interventions requiring one to three therapy disciplines ranging to the highest intensity with four or more therapy disciplines.

Specialist neuro rehab service provision is provided across four different levels[2].

Hyper-acute Specialist Rehabilitation services.

Hyper-acute units are sited within acute care settings. They take patients at a very early stage in the rehabilitation pathway when they still have medical and surgical needs requiring continued active support from the trauma, neuroscience or acute medical services.

Level 1 – Tertiary 'specialised rehabilitation services

These are commissioned by NHS England at a regional level and provide for patients with highly complex rehabilitation needs and high physical dependency or cognitive/behavioural disabilities.

Rehabilitation can best be described as an intensive, co-ordinated interdisciplinary intervention with four or more therapy disciplines. It also requires medicine and nursing care

[2] Rehabilitation for patients in the acute care pathway following severe disabling illness or injury: BSRM core standards for specialist rehabilitation, British Society of Rehabilitation Medicine, October 2014.

in an in-patient rehabilitative environment. Patients are typically within a programme for two to four months but it is not uncommon for people to be in a programme for six months or more. Patients require high staffing ratios including 24 hour 1:1 nursing and highly specialist clinical input in the context of an acute hospital setting.

Level 2 – Specialist rehabilitation services

Level 2 services are provided at a regional and local level and access will be dependent on the level of expert staff, staffing ratios and facilities required. Services are provided in a specialist unit and this unit may also treat patients as outlined in level 1.

Similarly to level 1, patients require intensive co-ordinated interdisciplinary interventions but this may be provided by a lower number of therapy disciplines. They still require specialist medicine and nursing care in a rehabilitative environment. Length of programmes are typically one to three months, with up to six months not being uncommon. Special facilities, equipment or interventions will also be required. Interventions support goals to return to work and/or resumption of extended activities of daily living.

Level 3 – Non-specialist rehabilitation

Local non-specialist rehabilitation teams provide general multi-professional rehabilitation and therapy support for a range of conditions within the context of acute services (including stroke units), intermediate care or community services. These services may 'specialise' in certain conditions or offer a more general service but with a significant component of rehabilitation. They often are seen as a local source of expertise.

Slowstream Rehabilitation

Slowstream rehabilitation is separate to specialist rehabilitation. Slow stream rehabilitation refers to a model of service delivery provided to individuals whose recovery is considered to be slow or prolonged, and who are often regarded as being inappropriate for traditional, intensive rehabilitation, in particular those with severe to very severe brain injuries. These cases are very much managed on an individual basis with some patients being cared for in care home settings and others in their own homes with the relevant support.

Nottinghamshire Neuro Rehabilitation Services

The following outlines services that are provided for Nottinghamshire, against phases one to three. As mentioned above, there is no defined movement from one phase to another as individuals will access the relevant services according to their rehabilitation needs. Some patients may access rehabilitation as an in-patient and then have an additional support through a non-specialist service for example intermediate care. Within this structure there are opportunities to consider how we can integrate specialist and generalist services more effectively across Nottingham and Nottinghamshire as a single system.

Table 1 – Neuro-Rehabilitation Services Nottinghamshire

Phase	Service	Description
1	Level 1 Neuro Rehabilitation – Leicester Level 2a Neuro Rehabilitation – Leicester and Lincoln Units Spinal Cord Injury Centre - Sheffield	NHS England commissioned services on a regional basis. Due to the complexity of patients, referrals tend to be through NUH as a Major Trauma Centre, but where relevant Kings Mill Hospital can refer into the services.
2	Level 2a and 2b Neuro Rehabilitation – Linden Lodge Spinal Cord Injury Centre – Sheffield Acute Stroke Rehabilitation	Spinal Cord Injury Centre commissioned by NHS England as a regional service. Linden Lodge is a specialist in-patient service commissioned by the CCG for Nottinghamshire. Acute Stroke Rehabilitation is provided as part of in-patient acute pathways
3	Level 3 Community Neuro Reablement Service Greater Nottingham and Chatsworth Service Community Stroke Rehabilitation	Community Neuro Reablement Service – time limited service for individuals with minor brain injuries Chatsworth at proposal stage – community service for those with minor brain injuries Community Stroke is in Greater Nottingham and currently being reviewed for commissioning in Mid-Notts
4	Parkinson's Rehabilitation	Parkinson's Rehabilitation – supported by physiotherapy and occupational therapy and includes anxiety and cognitive group sessions

4.0 Conclusion

Rehabilitation is a broad range of services that are often attributed to the end of a treatment pathway but can also include preventative measures including for example smoking cessation, physical activity and obesity management. The breadth of care therefore ranges from education sessions to specialist, intensive in-patient services and as a result, a range of organisations may contribute to meeting a person's individual needs at different stages of recovery. In relation to neuro-rehabilitation, rehabilitation needs and potential may result in patients accessing in-patient specialist services or community services and what is fundamental is that care is focused on an individual's goals and outcomes. Nottinghamshire benefits from having services across the different levels of neuro-rehabilitation and these can be developed further by considering the needs across the system as a whole.