London North West Healthcare NHS
NHS Trust

THE NORTHWICK PARK

DEPENDENCY SCORE – Hospital

(NPDS-H v1.05H)

GUIDELINES FOR COMPLETING

NPDS-H TOOL

The Northwick Park Dependency Score – Hospital (NPDS-H) and Rehabilitation Nursing Assessment (NPRNA)

The Northwick Park Dependency Score–H (NPDS-H) is designed to provide a measure of dependency on nursing care in a rehabilitation setting and an estimation of the nursing provision and skill mix required to meet individual patient need (NPRNA).

The NPDS-H is an extension of the Northwick Park Dependency Score (NPDS) and Northwick Park Care Needs Assessment (NPCNA) incorporating additional nursing activities and timings that more closely reflect the care provided in a hospital rehabilitation setting.
The principles of the tool remain unchanged, in that an ordinal scale is used to assess the dependency of patients in a rehabilitation setting, in terms of impact on nursing staff time.

The tool is used in exactly the same way as the NPDS/NPCNA by recording individual ratings prior to admission to quantify needs in advance of a patient's arrival on the ward and during admission, to monitor improvement in independence, or to gain collective information of the whole ward to assess case mix in relation to staffing levels and skill mix.

The tool is divided into four sections:

Basic Care Need (BCN)	– 12 nursing interventions
Special Nursing Needs (SNN)	– 7 nursing interventions
In-patient Assessment (IPA)	- 8 in-patient nursing interventions
Care Needs Assessment (CNA)	– 5 community based questions.

Basic Care Needs
Each item has an ordinal score (ranging from 0-5) to indicate level of dependency. Some items have additional questions related to frequency of the activity and time of day.
The total score in the Basic Care Needs Section ranges from 0 – 65.

Special Nursing Needs
This section contains nursing interventions that occur less frequently but nevertheless impact on nursing resources. They are dichotomous variables (it either happens or it doesn't) and therefore do not have an ordinal score, but a choice of 0 or 5.
The total score for this section ranges from 0 – 35.

In-patient assessment
The SNN section identified some less frequently performed nursing interventions. However, a more detailed explanation of the care required was not available. The in-patient assessment section re-visits many of these interventions in the form of ordinal scores. Some additional interventions relevant to the in-patient setting have been included.
A screening question is used to identify interventions relevant to an individual patient. Completion of the corresponding question is then required to provide a more detailed summary of the care needs required.
The items in this section are mainly ordinal scores. The total score ranges from 0 –35

Care Needs Assessment
This section relates to the community setting and is necessary to derive community care hours and suggested care packages.

Total Score
Two scores can be obtained from the tool.
The integrity of the original NPDS has been maintained so this score can be obtained by summating the ordinal scores from Section 1 (Basic Care Needs) and Section 2 (Special Nursing Needs). The range of scores is 0 -100

Secondly an NPDS-H score can be obtained.
Addition of Section 1 (Basic Care Needs), and Section 3 (In-patient Nursing Needs) scores provides the total NPDS-H score. The range of scores is 0 – 100
NB Scores from Section 4 are not included in the total scores.

Completing the NPDS-H

- The term "nurse" is used to describe the level of assistance needed to meet care needs. "Nurse" may refer to any individual that provides care interventions. Where the intervention is considered necessary to be performed by a Registered nurse RN indicates this, if the intervention requires rehabilitation knowledge and a certain level of competence but not necessarily a RN then the term rehabilitation/skilled carer is used.

- When choosing the most appropriate item for each question it is important to remember that help may be interpreted as either physical assistance, supervision or verbal prompting and should reflect the approximate time that is required.

- The term "assistance" refers to help from a person and not the use of devices. For example, if the patient is able to mobilise on their own but uses a stick or frame this would be "independent". Similarly, if they can brush their hair with a long handled hair brush and clean their teeth with an electric toothbrush this too would be "independent"

- All scores should be chosen based on a nurse performing the intervention, even if a relative/friend provides help for some or all of the time.

- If a relative/friend or another health professional (including a supernumerary student) is providing the second pair of hands this needs to be captured as two people performing the activity.

- If a qualified nurse is supervising a student performing the nursing activity then this would only be one nurse required (the patient is dependent on one person, the qualified nurse is only present to assess the student nurses competence)

- Set-up is defined as help given only at the beginning or end of an activity either to get them started or to assist with positioning items within reach - e.g. cutting up food or laying out clothes, carrying toiletries to washroom.

- Scores should reflect time taken to ensure understanding, allow for patient communication (e.g use of Etran, alphabet board), mobility and behavioural issues.

- If in doubt about which level to score - score the highest that applies.

MANUAL FOR COMPLETION OF THE NPDS-H

Section 1. BASIC CARE NEEDS

1. MOBILITY

This describes the level of dependence in mobility

Score for the level that normally applies in moving around the ward/bay area
If two levels apply equally - score the highest i.e. the more dependent.
If the patient is able to operate their wheelchair, but needs supervision/assistance of one record this at level 2.

2. BED TRANSFERS

This describes the level of dependence in bed transfers.

This item refers only to the help required for bed transfers (toilet and bath transfers are included under those activities).
Help from one/two people may refer to supervision/prompting only or some hands on care and includes, sliding board transfers, low pivot transfers or step transfers.
Hoisting refers to overhead hoisting or standing hoist transfer. The option for hoisting with one is only relevant for the community setting. Hoisting should always be performed with the assistance of two in the hospital situation.
If the patient is confined to bed, record at level 0.

2.1 FREQUENCY OF BED TRANSFERS

This reflects the number of times transferring on/off the bed occurs for rest periods

It is assumed that all patients will transfer twice each day – getting up in the morning and getting back to bed at night therefore these transfers do not need to be recorded.

However, if the patient returns to bed for rest periods throughout the day, record the number of rest periods they have (these can be timetabled events or patient preferences).

For example, the patient gets up in the morning, returns to bed after lunch, gets up for their evening meal, and returns to bed after the evening meal and does not get up for social reasons any more times during the evening (they may get up for toilet purposes but this will be included in the toilet transfer section).
In this example 2.1 Frequency of bed transfers would be recorded as 1

3.1 MODE OF EMPTYING BLADDER

This question identifies:
a) Mode used for emptying bladder by day and by night
This helps form a mental picture

3.2 TOILETING - BLADDER

This item describes the level of dependence in emptying bladder by whatever method.

This item includes	If bottles are used, it includes:
• getting there • transferring onto the toilet • cleaning themselves • adjusting clothing	• reaching for it • positioning it • replacing it unspilt • adjusting clothing

If the patient uses two modes - e.g. toilet and bottles, score for the more dependent mode, considering the amount of assistance needed

At Level 0: the patient manages independently. In the case of using bottles this would mean the ability to collect and empty their own urinal.
At level 1: patient copes if bottles have been left within reach, but must be able to manage entirely alone and return bottles to table unspilt (emptying of bottle and replacing it in reach is performed by staff).

If the patient requires intermittent catheterisation score the mode of emptying bladder (3.1) as "catheter/conveen", and level of assistance (3.2) according to the amount of help/preparation required. If a Registered nurse is actively teaching self-catheterisation the appropriate box must be checked in Section 4 number 6.

Assistance due to incontinence/catheter leakage is not scored in this section but in 3.4
NB If patient uses pads all the time, score pad changes as for toileting and accidents for times when urine leaks outside pads requiring a change of clothing / bedding.

3.3: Number of times of times they need help to pass urine

During the DAY-TIME and **During the NIGHT**

If the patient needs assistance from 1 or 2 nurses at night only, because of disorientation, record the need for assistance at the highest level required, and select "help at night only" in the frequency section.
NB: If the patient needs help to toilet more than twice at night (between 11pm and 7am), it is not necessary to include this again in the >2 night intervention section

3.4 URINARY ACCIDENTS

This item relates to the frequency of accidental voiding, or leakage from catheter / conveen resulting in the need to change clothes / bed-clothes

State frequency:
1. Occasional accidents - occur less often than daily. i.e. 1-6 times per week. Indicate how many times per week
This may be as a result of the patient leaving insufficient time to get to the toilet, non-availability of nursing staff to assist at time of request, the force of voiding causing conveen to come off, patient pulled conveen off or by-passing of urinary catheter.
(NB If frequency = 7 or more per week, must score at least 2 on dependency rating)
2. If score 3: Indicate how many times in 24 hours Frequency = 3-6 times per 24 hours

NB If patient uses pads all the time, score pad changes as for toileting and accidents for times when urine leaks outside pads requiring a change of clothing / bedding.

4.1 ASSISTANCE FOR TOILETTING - BOWELS

The item describes the level of dependence in emptying bowels by whatever method.

This item includes	If colostomy is used, it includes:
• getting there • transferring onto the toilet • cleaning themselves • adjusting clothing • washing hands afterwards	• emptying bag • changing bag • hygienic handling throughout • washing hands afterwards

4.2 OPENING BOWELS OR TRIAL OF EVACUATION

This question identifies:

a): How frequently they open their bowels or number of trial evacuations

b): Timing of bowel action – "no specific time – variable" should only be selected if the patient is continent of faeces but does not have a routine time for using the toilet/commode. At least one time of day must be selected. Do not use this selection for faecal incontinence.

c): Number of times they need to open their bowels at night (between 11pm and 7am)

NB: Do not include faecal incontinence here

If the patient is unable to be transferred on to the toilet/commode and therefore has their bowels opened in bed (either they defaecate following suppositories/enema or they verbalise the need to open their bowels), this is considered as "planned incontinence" and would be recorded in this section and not faecal incontinence.

Frequency of bowel action is based on the most frequent pattern.

Time of day is based on the most common pattern for the patient having their bowels opened. If frequency was recorded as twice, or more than twice, then 2-3 time periods throughout the day must also be indicated – "no specific time" cannot be used on this occasion.

"No specific time" should be rare, but may occur during the initial stages of formulating a bowel regimen pattern. It should not be used because the scorer is unfamiliar with the usual pattern.

4.3 FAECAL ACCIDENTS

This item relates to the frequency of faecal accidents or leakage from colostomy bag resulting in the need to change clothes / bed clothes

State frequency:

1. Occasional accidents occur less often than daily and may include the patient not identifying the need to defaecate or the nurses' inability to assist them to the toilet as part of a regular regimen.
   Indicate how often per week (1-6 per week)

2. If frequency is 7 or more per week, must score 3 on dependency rating

Regular accidents: (≥1 in 24 hours).
Indicate how many times in 24 hours

NB If patient uses pads all the time, score pad changes as for toileting and accidents for times when faeces leak outside pads requiring a change of clothing / bedding.

5. WASHING AND GROOMING

This item describes the level of dependence in washing and grooming.

Including:
- Washing hands and face
- cleaning teeth
- brushing hair
- shaving or applying make-up

Set-up would include just laying out things or filling a bowl

This item does <u>not</u> include bathing / showering or a thorough strip wash/bed bath

NB: It is <u>rare to need 2</u> unless subject requires support to sit up / restraint or suctioning during teeth cleaning

6. BATHING / SHOWERING

This item describes the level of dependence in bathing / showering, or a thorough strip wash/bed bath.

Including:
- getting to the bath / shower room
- transferring
- washing
- drying

Set-up would include running a bath / checking water temperature/carrying toiletries etc.

7. DRESSING

This item describes the level of dependence in dressing.

Including:
- putting on shoes
- socks
- tying laces
- putting on splint or orthoses if worn throughout day
- daily transfer into standing frame etc.
- changing tracheostomy gauze/lyofoam

Set-up would include laying out clothes

8.1. EATING

This item describes the level of dependence in eating.
If entirely gastrostomy fed - Score 0 and see 8.3
If part gastrostomy fed / part orally, complete eating <u>and</u> enteral feeding sections

It is assumed that eating occurs three times per day, breakfast, midday meal and evening meal.

8.2. DRINKING

This item describes the level of dependence in drinking.
If entirely gastrostomy fed - Score 0 and see 8.3
If part gastrostomy fed, and part orally, complete both sections

FREQUENCY OF DRINKING

Daily intake requirements should be at least 1.5 litres, so 500 ml should be taken on three occasions.
However, if prompting/supervision is required, the frequency of assisting with fluid intake should be recorded. If 7-9 occasions is selected, it is assumed that drinks are offered 2 hourly between 7am and 11pm, for more than 10 occasions frequency would be 2 hourly by day and once during the night (between 11pm and 7am). However, time allocation is used for three times a day. If assistance is required more frequently than three times a day, time allocation is reduced.

8.3. ENTERAL FEEDING (Nasogastric / gastrostomy)

This item describes the level of dependence in managing enteral feeds / flushes
If no enteral feeding - Score 0 and complete 8.1 and 8.2
If part gastrostomy fed, and part orally, complete both sections

It is assumed that flushes between/on completion of feed will be given. If additional flushes are required to maintain fluid intake, select (e) or (f).
During their hospital stay, feed may be given during the night to facilitate attendance at therapy sessions during the day. However, this regimen may not be possible in the community setting so it may be necessary to score this section differently for establishing the community care hours on discharge.

9. SKIN PRESSURE RELIEF

This item describes the level of dependence in managing skin care in terms of turning or moving to provide pressure relief with or without the use of pressure relieving mattress/cushion.

This does not include wound dressing

If skin is intact, it is usually adequate to turn the patient 4 hourly during the day
It is rare to turn the patient at night as enhancing sleep and maintaining a minimal turn regime suitable for use at home would be encouraged. If turns are continued during the night "more than 2 night interventions" needs to be selected in Section 2.
However, within the community setting 2 hourly turns may be appropriate, this item relates to the calculations within the NPCNA but not the nursing care hour requirements within the NPRNA

10. SAFETY AWARENESS

This item describes the level of dependence in maintaining personal safety

Level 0 – No concern for patient's personal safety

Level 1, (Some concern for patient safety) patient is safe to be left in the ward situation between care activities (up to several hours), has some safety awareness but benefits from repetition, but is able to gain nursing assistance if required either by locating a nurse, using the nurse call bell or using another system previously agreed between the nurse and patient.

Level 2, (Increased concern for patient safety) patient can be left for over one hour between care activities, but the patient may attempt unsafe activities so needs closer supervision, OR they are unable to gain nursing assistance.

Level 3, (High concern for patient safety) the patient could not be left for more than one hour, has little or no awareness for safety, will attempt unsafe activities when left unsupervised and is unable to gain assistance. OR there is maximum concern for patient safety. The patient is unable to be left alone at any time due to safety concerns – requires designated nurse present at all times throughout the day (may not be required at night if the patient sleeps).

NB. If a member of staff remains with the patient at all times this should be recorded in Section 3 and 4 as one to one specialing.

11. COMMUNICATION

This item describes the level of dependence in communication

Where communication slows down interaction during self-care tasks, this should be reflected in the time taken for that task.

Conversations occurring separately to those within basic care needs should be recorded in this section. An indication of the frequency of these events is required. These conversations can have been initiated either by the nurse or the patient, and may take substantial time to resolve due to the patient's receptive and expressive dysphasia. It may not be known that a basic need is trying to be conveyed until an understanding has been reached.

12. BEHAVIOUR

This item describes the level of dependence in behavioural management

Where behaviour slows down interaction during basic care needs, this should be reflected in the time taken for that task.

SECTION 2 SPECIAL NURSING NEEDS

Special nursing needs reflect needs for nursing care which are:

Specific to a hospital environment (e.g. MRSA positive status or patient requiring substantial psychological support)
OR
Would require skilled / trained help in the community (e.g. tracheostomy care, enemas, manual evacuations etc).

Special Nursing Needs Items are given below

a) **Tracheostomy** - means having a trachy in situ, requiring stoma care, monitoring of cuffing etc.

b) **Open skin wound** is a wound or sore that requires regular dressing / monitoring of healing etc.

c) **>2 interventions at night** may be required for turning for pressure relief, IV line, frequent bell-ringing etc.

d) **Substantial psychological support** means regular meetings with patient or relatives to ensure consistent communication provide counselling or negotiate a contract/agreement in cases of poor co-operation.

e) **MRSA screening / isolation** involves barrier nursing / isolation in a side room where gloves and aprons must be worn.

f) **An intercurrent medical / surgical problem** is one that requires acute nursing care with increased frequency of observations e.g. an RTI or recent surgical procedure.

g) **"One-to-one specialing"** involves the constant presence of one-to-one nursing for specialised nursing needs (e.g. acute illness awaiting transfer to acute medical/surgical care) OR
particularly unsafe behaviour that places themselves or others in danger. Patient cannot be left unsupervised, even on ward.

SECTION 3: IN-PATIENT ASSESSMENT

The first box in this section contains dichotomous variables to assist in clarification of skill mix.

Maintenance of Rehabilitation programme

- While many aspects of intervention are part of the patients therapy rehabilitation programme, this item relates to specific intervention such as application of equipment or regular participation in seating/standing programmes whereby the patient requires close supervision during the maintenance programme.

Complex feeding needs includes

- Patients requiring close supervision (from an experienced rehabilitation nurse) during feeding due to concerns for aspiration/choking requiring expert knowledge in the case of emergency management. It does not include patients on food trials with SLT within therapy sessions.

Complex basic care needs and high dependency includes

- Patients requiring the presence and direction of care needs from an experienced rehabilitation nurse/registered nurse throughout the 24-hour period are included in this section. Often these patients will require at least 2 nurses to meet their care needs, one of which is a Registered nurse.

Complex discharge needs

- This incorporates multi-professional approach to discharge, liasing closely with district nurse teams, community pharmacists, family and patients.

Three or more people needed for basic care needs

- If more than two people are required for most basic care activities then this should be selected

Active teaching of self catheterisation

- If supervision, education or guidance is needed to complete self catheterisation then this box should be indicated.

Infective Isolation

- If the patient is nursed in a side-room due to any infection or during MRSA screening this box should be indicated

More than 2 night interventions

- This box should be selected if the patient requires assistance from nursing staff during the night for intervention additional to toileting.

1. TRACHEOSTOMY MANAGEMENT

This indicates the level of dependence for maintaining ventilation and the frequency of intervention throughout a 24 hour period.

Level 1 refers to regular inner tube change and minimum suctioning

Level 3 refers to regular intervention for tube change, suctioning, cuff inflation pressure, dressing changing and active weaning.

Level 5 indicates frequent or prolonged suctioning, 2 people, close monitoring and dressing change

2. WOUND/PROBLEMATIC STOMA DRESSINGS

This section includes all skin breaks requiring nursing intervention in terms of assessment, cleaning and application of a dressing. It includes the management of oozing, infected or ulcerated stoma sites.

Level 1 - Simple wound dressing refers to wounds requiring minimal intervention and application of dressing. A student nurse or Health Care Assistant could complete this.

Level 3 – Simple dressing but requires regular assessment, some cleaning and application of dressing. A qualified nurse completes this.

Level 5 – Complex and/or exuding wound dressings refer to wounds requiring packing or vac therapy. Alternatively two people are required to complete the wound care due to agitation.

Do not include change of gauze/lyofoam for gastrostomy/tracheostomy dressings in this section if there is no problem with the entry site, record under stoma care in Section 4

3. MEDICATION

This item establishes independence in self-medication It includes:

- Remembering to take tablets at the right time
- Physical ability to get tablets out of the bottle etc,

Stage 2 medication is divided into two options.
Level 1 indicates patients able to identify correct medication, remove it from packaging/dosett box and administer it in less than 5 minutes with minimal supervision

Level 2 patient is unable to identify correct medication. Most/all medication is dispensed and administered by a nurse or administered by the patient under very close supervision

Level 3 indicates medication requiring additional qualified nurse time, two nurses to complete, or patients self-medicating but who take more than 5 minutes to identify/administer correct medication under close supervision of a nurse.

4. PSYCHOLOGICAL SUPPORT FROM NURSING STAFF

This item includes psychological support required by patient and/or relatives given by nursing staff.
If a clinical psychologist provides psychological support and no further discussion is required with nursing staff then "no psychological support" can be indicated.

Level 1 refers to reassurance provided by any member of care staff

Level 3 indicates that the support needs to be provided by either an experienced rehabilitation carer or qualified nurse but is less than 2 hours a week

Level 5 is support provided by an experienced carer or qualified nurse and requires more than 2 hours a week

5. SERIAL/RESTING SPLINTS

This includes the level of dependence for applying upper and lower limb splints.

Level 1 – One person can apply splint. Easy application – Velcro splint and no pre stretching of limb required

Level 2 – Two people are needed to apply, either to support the limb or due to agitation/behavioural issues

Level 3 – Two people are needed to apply splint and some pre-stretching of limb is required.

5.1 FREQUENCY OF SERIAL/RESTING SPLINTS

This section refers to the number of times splints are *applied*. It is assumed that if a splint is applied it will also be removed after a designated time.

Record the number of times by day. It is assumed that night splints are applied once, even though in reality it may be applied more frequently if the patient removes it.

6. POSTURAL MANAGEMENT

This item describes the level of dependence in maintaining a good posture both in bed and when sitting out in a chair. It may include the use of T rolls, arm supports, headrests and footrests.

For patients requiring re-positioning due to restlessness/poor posture or as part of a postural maintenance programme, this section can be selected in addition to Skin pressure relief.

7. INTERCURRENT MEDICAL/SURGICAL PROBLEM

This item includes nursing intervention required for acute problems in addition to rehabilitation care.

Level 1 refers to daily recordings of vital signs (if this is not routine practice)

Level 3 includes four hourly monitoring of vital signs (if this is not routine practice) and/or specific intervention by a qualified nurse (such as venepuncture, recording ECG, staying with patient) but does not exceed 2 hours in 24 hours

Level 5 includes the need for qualified nurse input for more than 2 hours a day, but not continuous one to one specialing

8. ONE TO ONE SPECIALING

This item includes the need for a nurse to be present with the patient for some or all of the time.

Level 1. Needs specialing to maintain safety, can be supervised by any member of care staff

Level 3. Needs specialing from a rehabilitation nurse/carer

Level 5. Requires speciality trained nurse such as Registered Mental Nurse.

SECTION 4: CARE NEEDS ASSESSMENT

These items apply to the NPCNA, which will continue alongside the NPRNA

They are items, which the nursing staff may not know the answers to, but they may liase with the Occupational Therapist or key-worker**.**

It is important to realise that these questions will always refer to how the patient functions in the community.

1. STAIRS

This item checks whether they are able to do stairs and if help, prompting or supervision is needed to negotiate stairs at home.

If the patient is wheelchair dependent, or is advised for safety reasons to live downstairs then this item would be recorded as "No, unable to do stairs"
If the patient lives in a bungalow this would be recorded as "No, does not have stairs"

If the patient has a stair lift at home and can use it independently this would be "Yes, without help", but if they need assistance to transfer on/off the stair lift or to carry crutches/walking aid upstairs then this would be "Yes, with assistance/supervision"

This item only refers to stairs within the property. If the patient can manage stairs indoors without assistance but would need help in the community, at a train station for example this would still be recorded as "Yes, independent".

2. MAKING A SNACK / MEAL

This item describes the level of independence in making a snack at home. If they are unable to manoeuvre to the kitchen independently then "needs meals putting in front of them" will need to be selected.

3. SKILLED INTERVENTION

This item describes the requirement for intervention from a skilled person (e.g. nurse) or specifically trained carer.

If help is required for any of the listed tasks, indicate

- How many times a week care is required
- Who provides the help (family, home care, district nurse etc)

4. MEDICATION

This item establishes independence in taking medication

It includes:

- Remembering to take tablets at the right time
- The physical ability to get tablets out of the bottle etc,

5. DOMESTIC DUTIES

This item reflects if help is needed with domestic duties at home in the community.