

1. Background to the Development of SCAMPS

The Nursing & Midwifery Workload & Workforce Planning Project (NMWWPP), outlined twenty recommendations aimed at developing a more systematic approach to nursing and midwifery workload and workforce planning. The work of the Paediatric and Neonatal Sub Group of this project was to include; hospital based nursing including all clinical specialities in Acute Children's wards, Outpatient Clinics and Day Case areas including ITU, Theatres, Accident and Emergency Units, Neonatal and Community Children's and Specialist Nursing.

SCAMPS is the outcome of four years work developing, testing and piloting and inpatient tool that would largely meet the requirement to have a nursing workload tool, to inform evidence –based decision making on nurse staffing requirements in inpatient children's settings, in the NHS in Scotland.

2. Introduction to the Tool

The workload tool has been specifically developed to capture nursing workload in the children's inpatient hospital setting. IT is to be used as one part of a triangulation process developed by NMWWPP. The process consists of the gathering of data during an agreed time period using your speciality specific workload tool (SCAMPS), the professional judgement tool and an agreed quality measure. The workload tool, when allied to Professional Judgement and the appropriate quality measure will offer nurses and managers a reliable method against which to deliver evidence-based workforce plans to support existing services or the development of new services.

Included is a brief guidance for the people using the tool in practice and includes:

- A brief overview of the tool
- How acuity and/or dependency are measured
- How to ensure that accurate data are collected
- How to get help or support if needed

3. Overview of Tool

Criteria for Use

- All children are to be scored retrospectively twice in 24 hours at times to capture both day and night activity. Criteria for determining *Levels of Care* are included below and these should be consulted before a score is given.
- All children will have a *Level of Care* recorded for the time period stated.

- The highest *Level of Care* achieved in the previous 12 hours should be given.
- Any child's *Level of Care* which does not reflect the actual nurse: child ratio required should be documented below. For example:
 - *Requires 2:1 care*
 - *Score may be in lower Level of Intervention but child requires 1:1 care as isolated because of infection*

Justification of Additional Nursing Assignment

CHI/Hosp No	Score	Nurse: Child Ratio	Reason

- Any additional clinical workload that requires input from nursing staff and is not captured by the scoring system should be documented below. For example:
 - *Attendance elsewhere in hospital e.g. theatre, A&E*
 - *Escorts and transports undertaken by Unit Staff, not by the transport/retrieval team*
 - *Additional nurse/nurses required to stabilise child*

Additional Clinical Workload				
CHI/Hosp No	Start Time	Finish Time	Reason	No of Staff
ECMO				
CHI/Hosp No	Start Time	Finish Time	Reason	No of Staff

Levels of Care Based on Intensive Care Society Guidelines	Inclusion Criteria	Examples of Care Required
Level 0		
Child or Young Person - Requires hospitalisation OR - Needs met through normal care	Emergency or elective admission who is stable including Pre / Post Surgery Care	- Minimal nursing assistance - Immediate Post Op Care – No more than 4 hours - Regular observations 2-4 hourly - Oral re-hydration - Oral / IV bolus medication - General supervision and assessment

		<ul style="list-style-type: none"> - Resident carer (patients under 5 years) present to attend to basic needs and supervision
Level 1a (Increased Acuity)		
<p>Child or Young Person</p> <ul style="list-style-type: none"> - Is in stable condition but with increased acuity or potential to deteriorate - Can be managed on the wards - Requires parent/carer support 	<ul style="list-style-type: none"> - Exacerbation of existing condition - Emergency Admission - Fluctuating Vital Signs or Levels of Consciousness - Increasing parental/carer reassurance and emotional support 	<ul style="list-style-type: none"> - Continued/frequent observations of Vital Signs ½ - 2 hourly - Oxygen therapy up to 6 litres - O₂ Saturation monitoring - May require: Cardiac monitoring, Fluid management - Infusions of Potassium/Magnesium - Vulnerable family requiring support - Require assistance to arrange parent/carer resident accommodation - May require social work intervention
Level 1b (Increased Nursing Dependency)		
<p>Child or Young Person</p> <ul style="list-style-type: none"> - Requires intensive therapy or increased nursing input - Has complex care needs – Requiring less than 6 hours of nursing time per 12 hour shift - Requires complex emotional and/or social family/carer support e.g. ill child or young person, child protection issues, learning difficulties, requiring less than 6 hours' care input in previous 12 hours 	<ul style="list-style-type: none"> - Observation and therapeutic Intervention - Complex infection/sepsis - Counselling or psychological support - Continual supervision - Children and young people with learning disabilities - Parental and staff support Required due to increased anxieties/behaviours of parents/carers 	<ul style="list-style-type: none"> - Instability requiring continual observation / invasive monitoring - Frequent observation of vital signs ½ -4 hourly - Full isolation measures - Complex drug regimes - Pain management requiring IV analgesia or psychological support - Challenging behaviour / potential for self-harm - Children or young people requiring invasive procedures - Mainly unaccompanied child below school age - Dependant on full assistance for all activities of daily living - No resident carer (patients under 5 years) present to attend to basic needs and supervision - Parents or carer's increased anxiety causing concern within clinical areas - Parent or carer's behaviours causing concern within clinical areas - May require assistance to arrange parent/carer resident accommodation. Acute admission from a distance - May require social work intervention
Level 2		
<p>Child or Young Person</p> <ul style="list-style-type: none"> - Is unstable and a risk of deteriorating, requiring constant monitoring - Has complex care needs requiring more than one person 	<ul style="list-style-type: none"> - Deteriorating/compromised single organ system - Complex post operative management following major surgery 	<ul style="list-style-type: none"> - Increased O₂ requirements via re-breathe mask/head box/nasal CPAP - Immediate post op tracheostomy cannulation/extubation - Airway obstruction/intervention/neb

<p>to attend and/or 6 hours of more nursing time in a 12 hours shift</p> <ul style="list-style-type: none"> - Requires complex emotional and/or social family/carer support, e.g. ill child or young person, child protection issues, learning difficulties, requiring more than 6 hours' care input in previous 12 hours 	<ul style="list-style-type: none"> - Major Physiological Abnormalities - Challenging complex concerns requiring facilitation within the clinical area - Challenging complex concerns requiring multi-disciplinary and specialist team facilitation within the clinical care - Challenging complex child protection concerns requiring facilitation within the clinical area 	<p>adrenaline/prolonged apnoeas/server asthma/IV meds and hourly nebs</p> <ul style="list-style-type: none"> - ECG/non invasive monitoring, haemodynamic instability, hypovolaemia, complex IV fluid regimes – hourly replacement volumes/TPN - Complex pain management therapy – epidural/PCA/infusions - Febrile/Neutropenic/Septic - CNS Depression, GCS 8-12 - Neuro Monitoring – ICP drainage/monitoring systems/infected shunts - Ketoacidosis, complex fluid and electrolyte imbalance - Fluid resuscitation 10-30 mls/kg - Prolonged seizures > 1 hr, complex drug regimes - Meningitis/acute renal failure - End of life palliative care - Dealing with highly anxious family members - Emotional and palliative care support - Preparations for potential transfer to specialist units
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Level 3

<p>Child or Young Person</p> <ul style="list-style-type: none"> - Is unstable and needing advanced respiratory support or monitoring and therapeutic intervention of two or more organ systems - Bereavement support provided to the child and family on day of death 	<ul style="list-style-type: none"> - Monitoring and Supportive Therapy for compromise or collapse of two or more organ systems - Extensive parental and staff support and reassurance required during this period to manage increased anxieties and concerns 	<ul style="list-style-type: none"> - The emphasis with this level is on the multifaceted nature and complexity of care required - The majority of children and young people at this level will require high intensity care for short or long periods - Respiratory or Central Nervous System depression/compromise requires mechanical/invasive ventilation - Invasive monitoring, vasoactive drugs, treatment or hypovolaemia/haemorrhage/sepsis or neuro protection <p>Examples include:</p> <ul style="list-style-type: none"> - Major scald/burn - Major sepsis - Acute obstruction - Haemodynamically unstable - Continual ECG monitoring - CFAM Monitoring - Complex drug regimes (oral and/or IV) - Continual output monitoring - Complex fluid monitoring and replacement therapy - Bereavement support
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4. How is Acuity Measured?

The tool has three components, “Levels of Care”, “Inclusion Criteria” and “Examples of Care Required” within each Level of Care. The list of examples is not exhaustive and is provided as a guide to the types of care that may be given within a particular Level of Care.

Levels of Care

The Levels of Care are based on Intensive Care Society guidelines. There are 5 Levels of Care:

- 1) Level 0
- 2) Level 1a
- 3) Level 1b
- 4) Level 2
- 5) Level 3

Each child is measured against the descriptors of each of the Levels of Care to allocate the appropriate Level of Care. The descriptors are described in the tool.

Inclusion Criteria

The Inclusion Criteria provides examples of the type of medical condition and/or type of admission and nursing workload required for the child requiring that specific Level of Care.

Examples of Care Required

The list of examples of care required is not exhaustive and is provided as a guide.

Calculation of Staffing Requirements

Levels of Care are recorded twice daily and this information is transferred to an excel spreadsheet where the WTE staffing requirements is calculated.

Local Application

The tool can be applied in NHS Boards as required locally.

National Application

NHS Boards will collect a recognised dataset during an agreed period of time to enable benchmarking across the speciality in the NHS in Scotland. Over time, it is anticipated that this acuity measurement will enable identification of trends across seasons and in response to changing demographics and healthcare needs. Ultimately, this evidence base will support workforce plans for nursing that should accurately predict and enable resources to be identified to support nursing establishments that meet patient and service needs.

5. Useful tips to ensure a consistent approach to gathering good quality data

These simple steps will ensure a consistent approach to the successful data collection of good quality data.

1. Effective communication is essential for the success of the implementation of the tool.
2. It is important that as many staff as possible are aware of the exercise, why it is happening and what is required of them.
3. The expectations of the outcomes need to be managed.
4. It is essential that staff have had appropriate training in the tool locally prior to implementation.
5. In order that the data collected are as reliable and accurate as possible it will be vital that there are regular checks of the data collection process.
6. Nominate responsible individuals to quality control the data collection and collation on a regular and consistent basis. This should be a senior nurse or ward clerk.
7. During a data collection exercise, it is vital that all children are recorded. Data should be recorded on every patient from Monday until Sunday for a total of 28 days.
8. Every child attending the unit will be recorded, including ward attendees, short stay assessment etc. (record time in and out for short stay children)
9. Data captured must include child initials or CHI number.
10. A Level of Care score must be collected for each child for each defined shift, during the agreed data collection time period. This includes children discharged. Data should be kept up-to-date during the shift with dependencies recorded in real-time. Towards the end of the shift there should be a final check to ensure the dependency recorded is representative of that period and that all children have been included.
11. Any gaps or queries about the data should be addressed as soon as possible.

12. Nominate somebody to quality control the data collection on a daily basis. This should be a senior nurse and may need more than one person depending on the size of the unit. This should be collected on the data capture sheet in this tool and transferred to the data return sheet which is in spreadsheet format.
13. The senior nurse on duty is responsible for ensuring that the scoring is completed accurately daily for the duration of the data collection period and a daily sanity check of data should be carried out at the end of every shift.
14. It is recommended that data sheets should be collected daily where possible and input to the data return spreadsheet, but it should be no longer than weekly.
15. Data should be entered onto the spreadsheet as speedily as possible after collection and data must be checked again at this point to ensure quality and consistency.
16. Data should be captured regularly throughout the shift. At the end of each 12 hour period a final check should be made to ensure that all patient flow through the unit during the 12 hours has been captured.
17. Data should be collected on a 12-hour cycle, one for day workload and one for night workload i.e. looking back over the previous twelve hours. There should be a 12-hour gap between the twice daily collection.
18. If the unit only operates during the day data should be collected only once per day, at regular periods during the shift and a final check at the end of the day shift.
19. Queries should be directed as soon as possible to your manager as a quick resolution to a problem is the best approach to ensure timely and quality data.

6. Professional Judgement Method

The Professional Judgement Tool is provided along with this induction pack and should be used concurrently with SCAMPS.

