Healthcare Improvement Scotland

Emergency Care Provision Staffing Level Tool

User Guide

March 2024

NHS SCOTLAND

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1. Introduction

The Emergency Care Provision Staffing level tool gathers workload data in Emergency Departments. This tool was designed by doctors and nurses working within NHS Scotland emergency departments.
The tool was previously known as the Emergency Department and Emergency Medical staffing level tool, EDEM.

The national working group recommended to apply this tool as minimum, twice a year. The current national recommendation is to run the tool at least once per year. This should be for two consecutive weeks. It should be run concurrently with the Professional Judgement Tool. However, Boards can apply the tool as often as they wish, to gather useful data over time.

Background information on staffing level tools can be found in Appendix A

To aid accurate data collection in the Emergency Care Provision Staffing level tool, a data capture template is available here Emergency Care Provision Staffing level Data Capture Template, and in Appendix B of this Document.

Workload is recorded along with workload acuity, a recommended whole time equivalent (rWTE) based on the workload information is then calculated.

The Emergency Care Provision tool measures all aspects of the emergency department multi-professional work:

- **Direct and Indirect Care**. This is all patient related work including:
  - Record keeping
  - Liaison
  - Communications, etc

- **Associated Work.** This includes general non-clinical workload such as:
  - Clerical
  - Administration
  - Cleaning
  - Stocking
  - Errands
  - Meetings etc.

- **Additional Activity**. This is for any unplanned events that may occur that need extra resources for a period of time. Relevant additional activities were agreed by the national working group who developed the tool.

- Personal time.

There are four dependency levels built into the calculator. Each of these recognise a different measure of complexity of workload. See Appendix C for a detailed description of each level of care.

The tool collates the data entered into a report. Practitioners and managers can use this report to plan the allocation of resources to effectively meet the service or health board's

priorities. This report can also aid managers to identify any risks that may exist in the service.

It is important to remember the report is only one element of the **Common Staffing Method** mandated by the Health and Care (Staffing) (Scotland) Act 2019 (Appendix A).
The report should be considered in conjunction with:

- Funded establishment
- The findings from the Professional Judgement Tool[1]
- Quality indicators and local context

This document will provide detailed information, from how to login, to how to finalise and submit data.

It will not provide information about the methodologies used to develop the tool or how best to use the reports obtained from the tool.

Access further information via the learning resources available on the Healthcare Improvement Scotland (HIS) Healthcare Staffing Programme (HSP) webpages:
Healthcare Staffing Programme (HSP) webpages

2. Logging in

2.1 Accessing the tools

To gain access to the staffing level tool you will require access to the local SSTS platform. Please speak to your Workforce Lead and/or line manager about local processes to obtain this. Some staff may already have a SSTS access but will require additional permissions to access the staffing level tools.

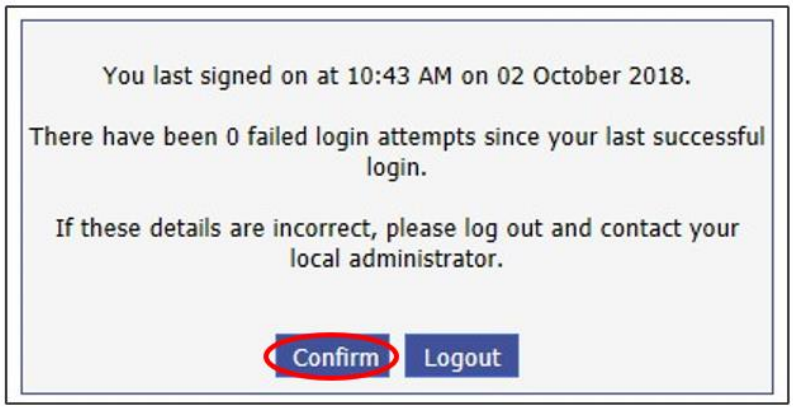
Once the local SSTS manager has confirmed that your additional permissions are in place, you should use the link they provide to go to the login page.

SSTS and the staffing level tools can only be accessed on a board approved computer or portable network.

Enter your username and password as they were provided to you and select **'Login'**:

Passwords are case sensitive, and you will be prompted to change your password the first time you log in.

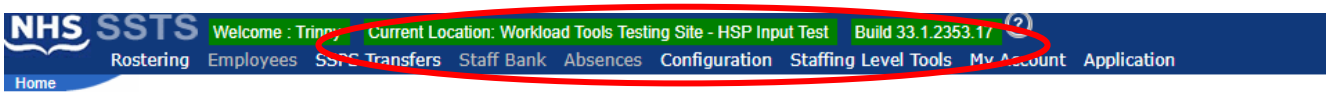
Click “confirm” to proceed



And then select **‘SSTS’**

2.2 Changing working location

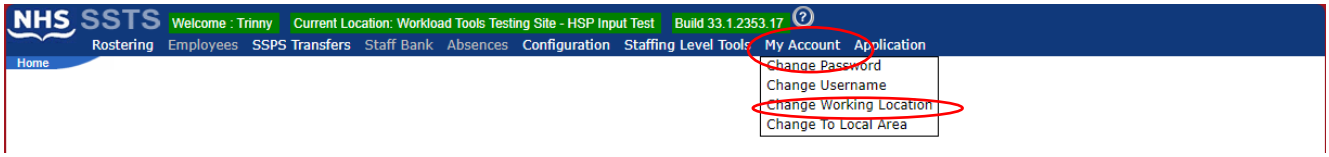
Once you have logged in you will be presented with the following screen:



Check the Current Location at the top of the screen. It is unlikely that you will need to change Working Location. However, if Working Location is incorrect, and you have the necessary permissions select **'My Account'** and then **'Change Working Location'**.

See below:

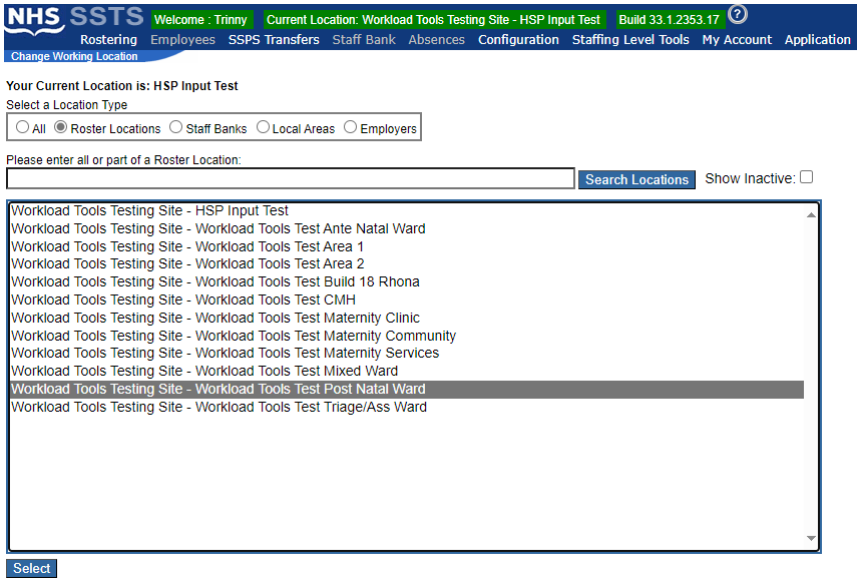
If you do not have these permissions, please contact your local Workforce lead or SSTS team.



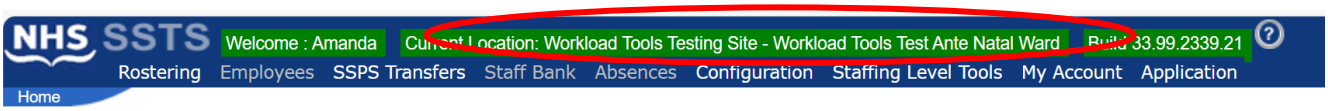
A Screen will then appear containing the ward and clinical area you have access to:

The ward/area can be searched for by roster location, staff bank, local area, or employer.

To choose a ward/area of interest, select it from the available list and then click **'Select'**



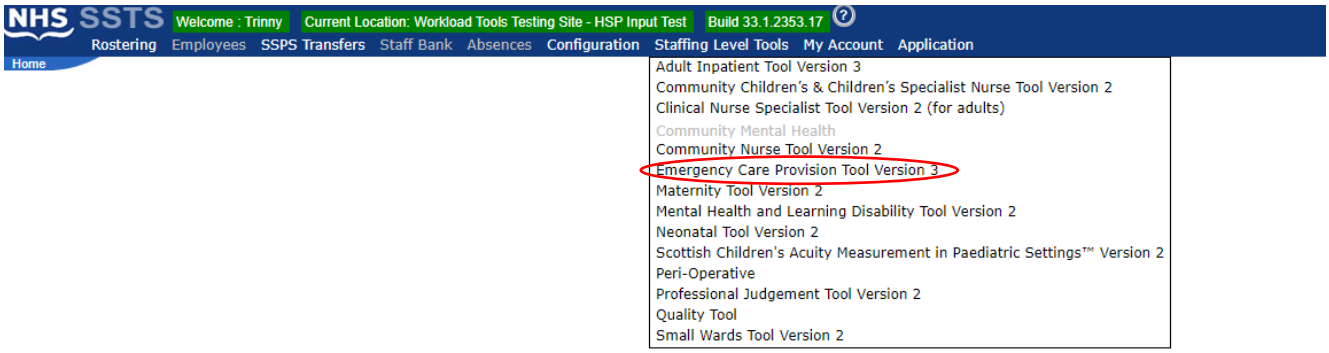
The location will then update on the toolbar:



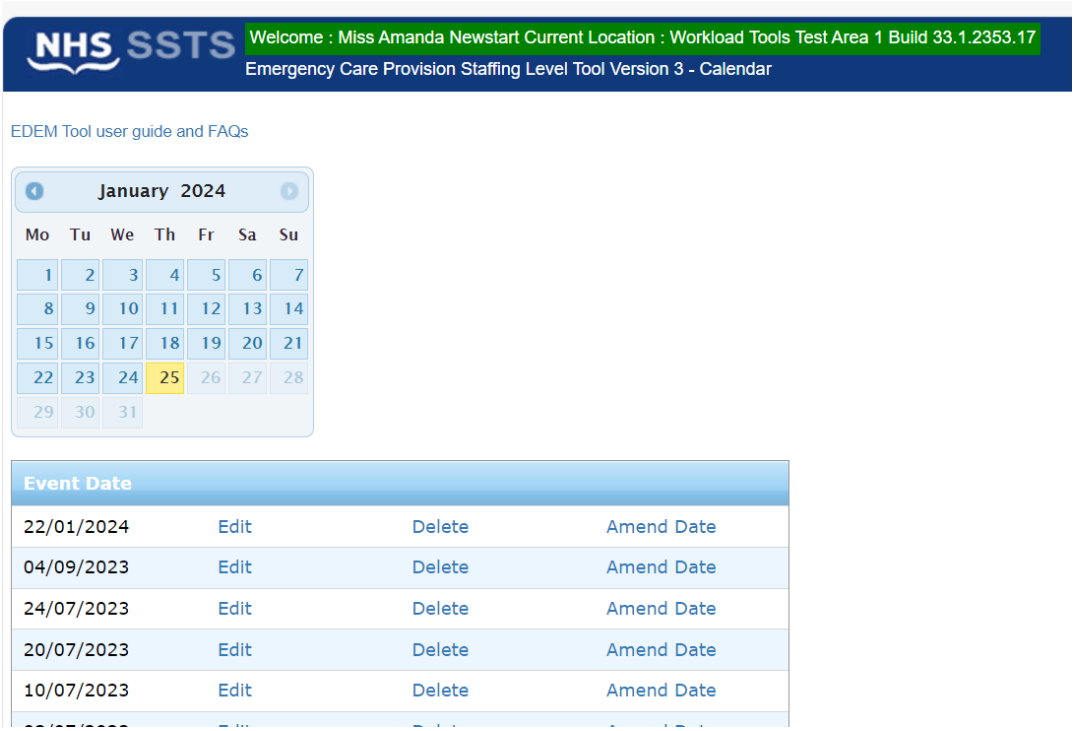
3. Creating/Editing Entries in Tool

3.1 Opening the tool

To open the Emergency care Provision Tool, select ‘Staffing Level Tools’ and then ‘Emergency Care Provision Tool Version 3’:

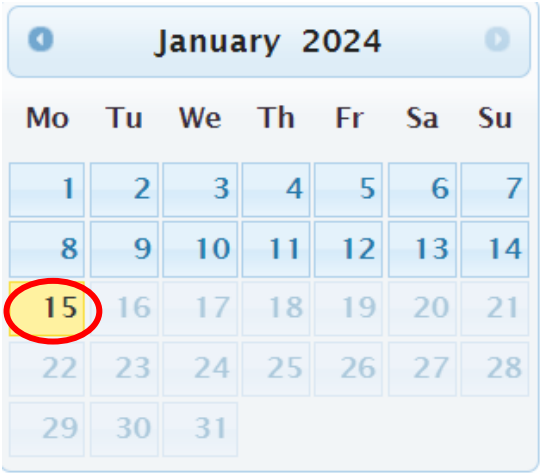


A screen like the one below will then appear:

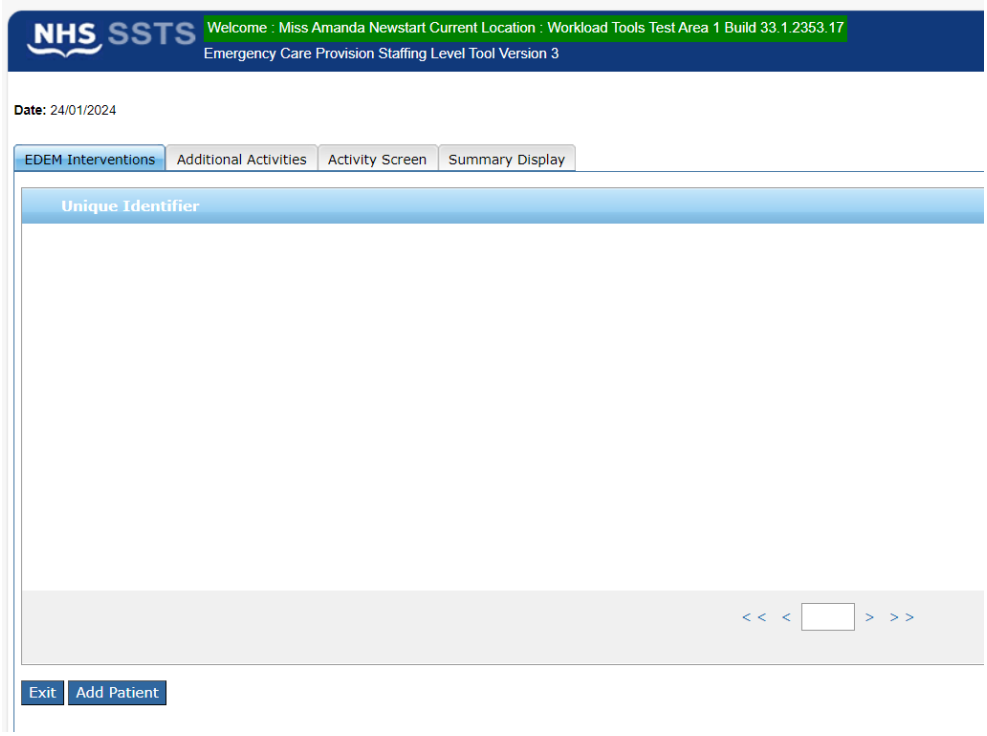


3.2 Entering data

To add data, simply select the relevant date:



Then this screen will appear:

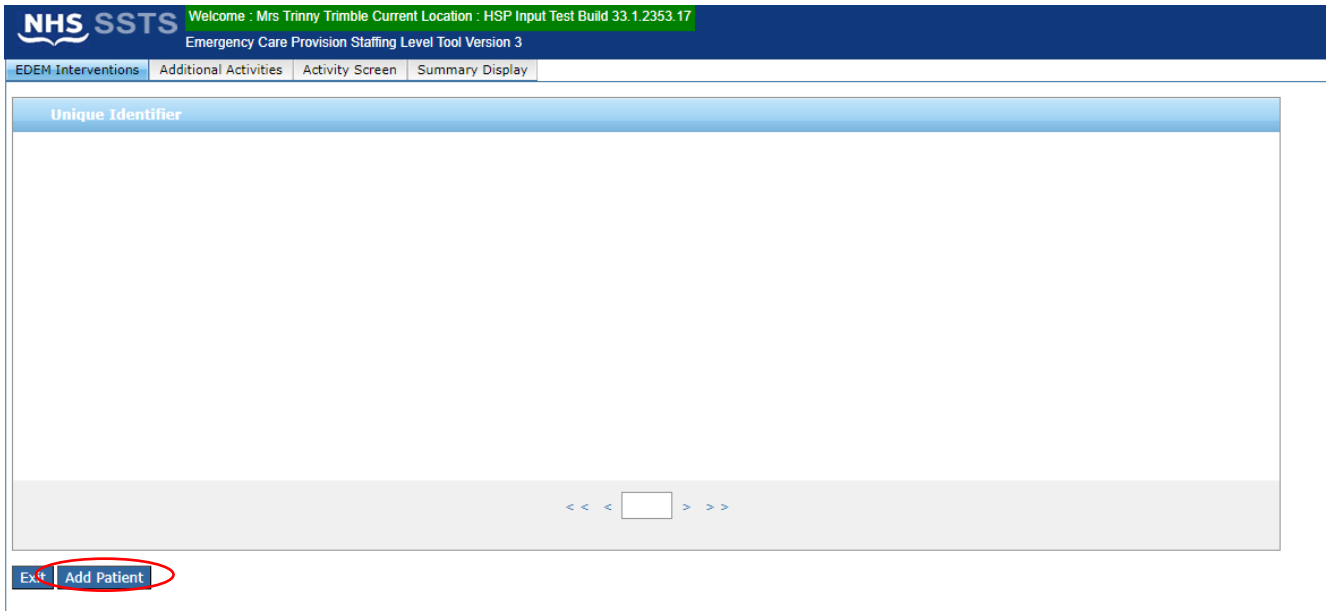


You can only create new records up to two months old

3.3 Adding a direct intervention

The default page when a new record is created is the EDEM Interventions tab. Here, you can enter data for individual patients. The EDEM Interventions tab will initially contain no details when this screen is accessed for the first time.

To add a direct intervention, **"Add Patient"** should be selected at the bottom of the screen:



When the **Add Patient** button is clicked, it will open the box below.

Enter the **Unique Identifier**, **Time In** and **Time Out,** and select the **level of care** from a drop-down menu for each patient:

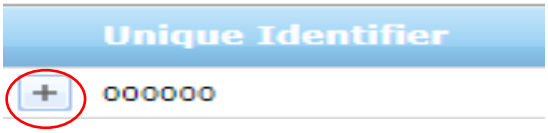
A unique identifier is locally agreed and should meet GDPR requirements. It is used to track patients throughout their stay to ensure workload is documented.

The blue information icons throughout the SSTS tool provide further descriptions of what is expected in that part of the tool. The one above shows the levels of care.

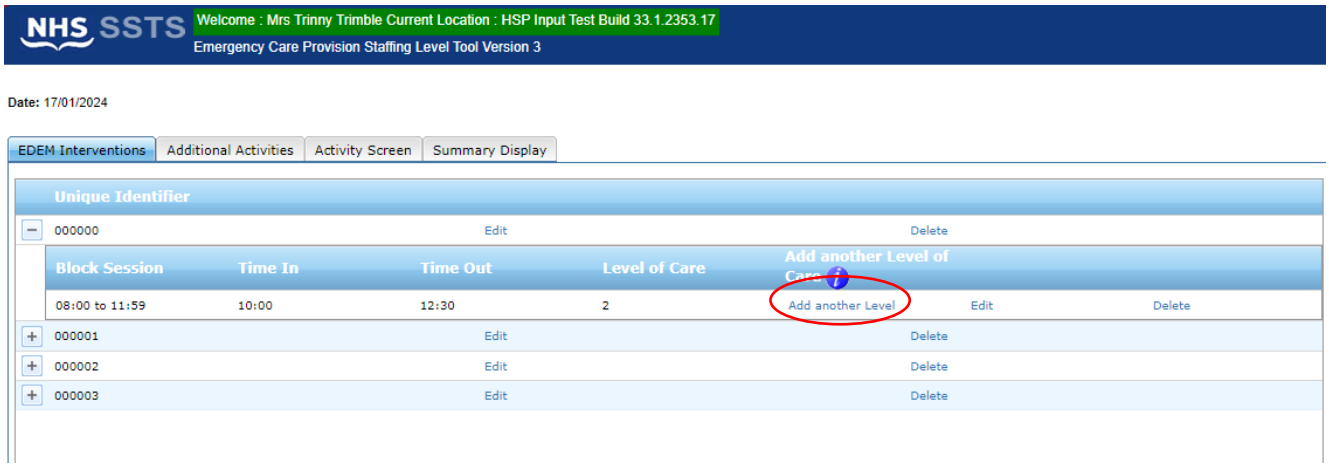
Click '**Save and add new patient**" to save the data and bring up a new screen to enter the next patient's information.
When you have completed entering and saving data for all patients in this way, click '**Save**' to save the data and return to the EDEM interventions tab, which should look similar to below, listing all patient's data has been entered for.

3.4 Adding a Change in Level of Care

If a patient's level of care changes during their stay, click on the plus sign beside their unique identifier:

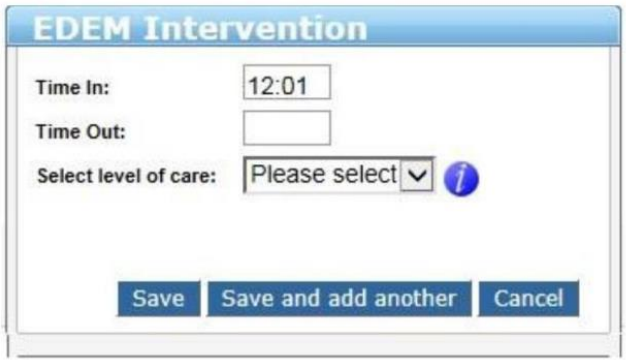


The following will appear under the unique identifier.



Click '**Add another level'.**

The following pop up will appear:



The Time In will be auto populated as one minute after the last Time Out. This cannot be edited.

Enter the Time Out and select the new level of care.

Click **'Save**' to return to the EDEM Interventions screen.

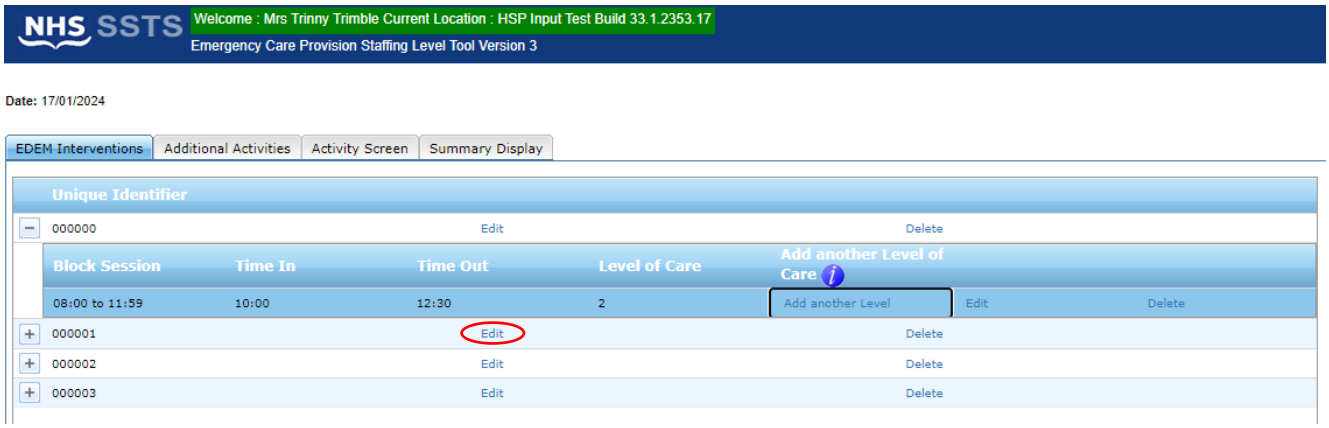
A new line will have been added showing the new level of care for that patient.

Click '**Save and add another'** to save the entry and add another change in the level of care for the same patient.

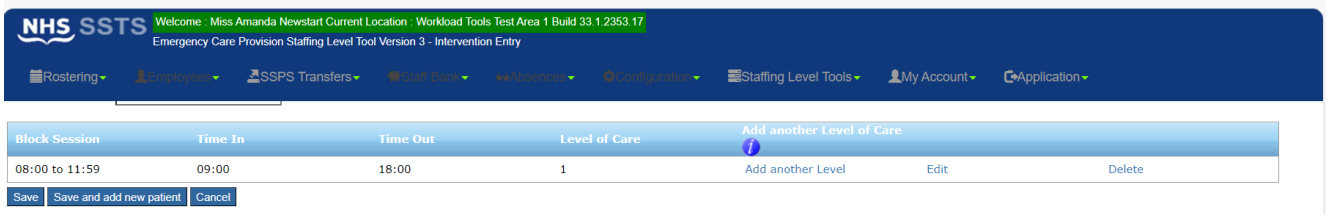
Clicking '**Cancel**' returns you to the previous screen.

3.5 Editing and Deleting an Intervention

To edit an intervention for a particular patient, click on 'Edit' beside the Unique Identifier:



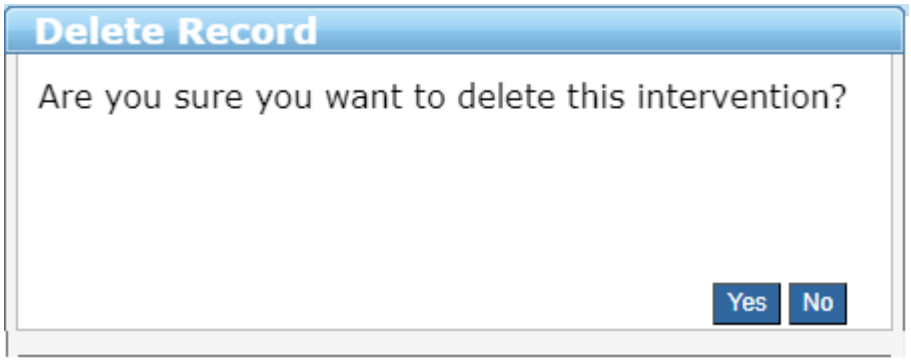
This will give you the following screen:



It is possible to edit the Unique Identifier on this screen.

You can also click on **Edit** beside any level of care to edit the corresponding information. This brings up a pop-up as shown above.

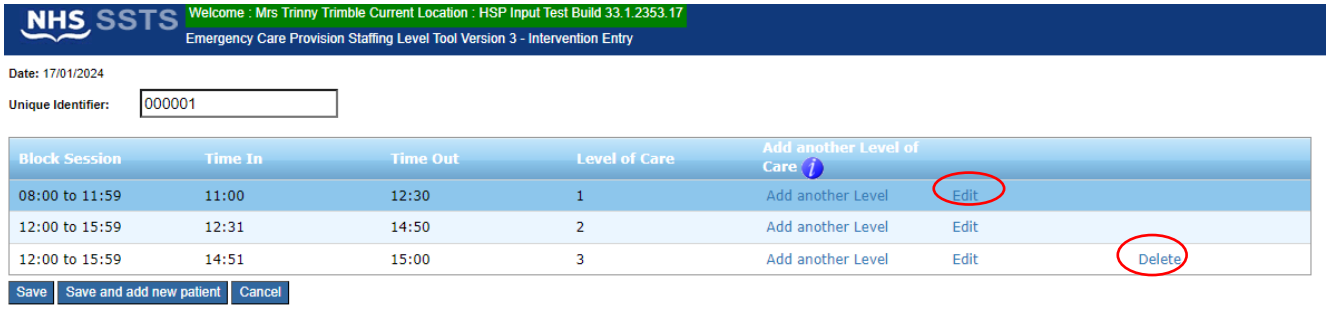
Clicking '**Delete**', beside the last level of care deletes the entry for that level of care.
On this screen, you can only delete one level of care entry at a time.
You will be asked to confirm that you want to delete the level of care entry:



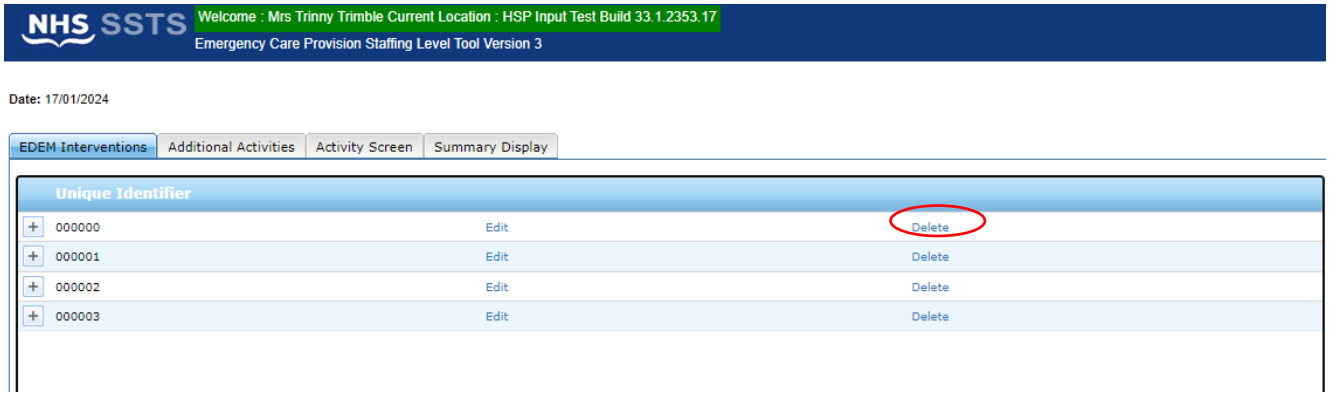
Once you have made the changes, click **'Save'** to save the changes and return to the EDEM Intervention screen.
Alternatively, click '**Save and add new patient'** to save the data and add data for a new patient.

'Cancel' will take you back to the previous screen without saving the changes.

You can also edit entries for individual levels of care by clicking the **plus** beside a Unique Identifier on the EDEM Interventions page.
This brings up a list of the levels of care, allowing you to Edit or Delete for different entries as above.
The Unique Identifier cannot be edited this way:



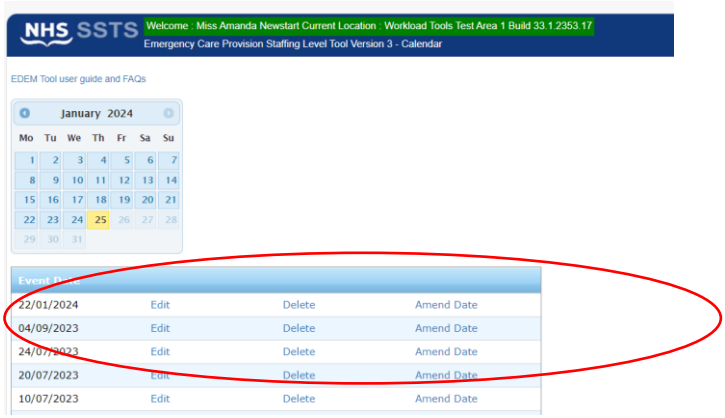
To delete all data for a Unique Identifier, click **Delete** beside the Unique Identifier on the EDEM Interventions screen:



You will be asked to confirm that you wish to delete all data for that Unique Identifier.

3.6 Editing existing records

Existing records will be shown in the Event Date table, with records for the most recent dates first:



If you have SSTS editor permissions, you may be able to edit or delete existing records.

Click on Edit beside a date to amend individual patient data that has been recorded for that date.

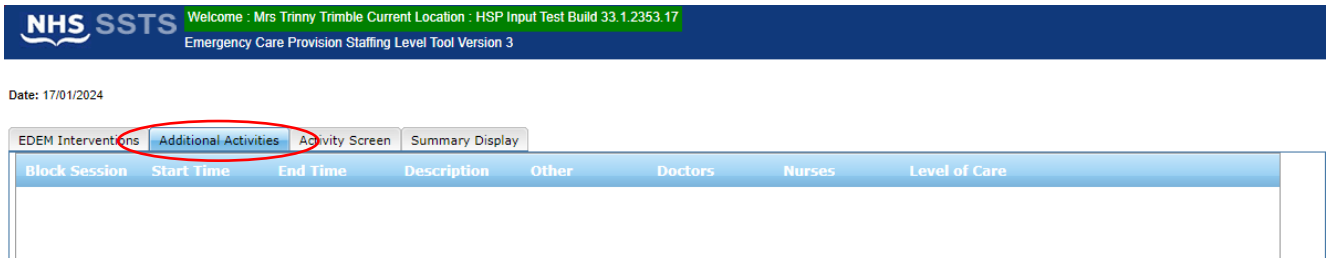
Clicking on Delete or Amend Date will alter the information for all of the records that have been entered for that date. If you click on one of these options, you will be asked to confirm that you want to amend the date or delete the data.

4. Additional Activities Tab

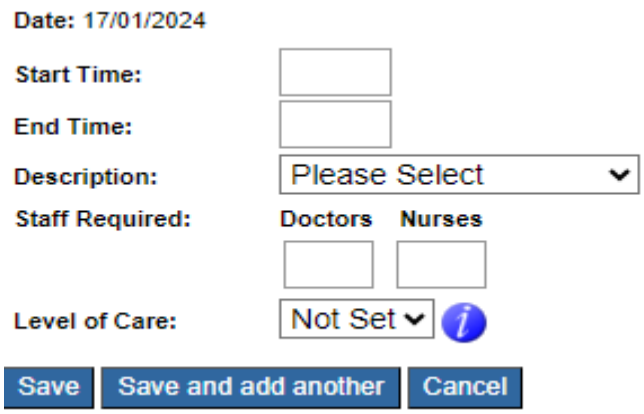
The additional activity section should only be used if there is a rare event that has a significant adverse effect on the Emergency Department (ED) resource, which requires the interventions of a number of rostered staff, for a specific period of time, out with the ED.

For example, having to provide an emergency response in another part of the hospital.
If there were any additional activities that took place on the date concerned click on the Additional Activities tab to enter data.

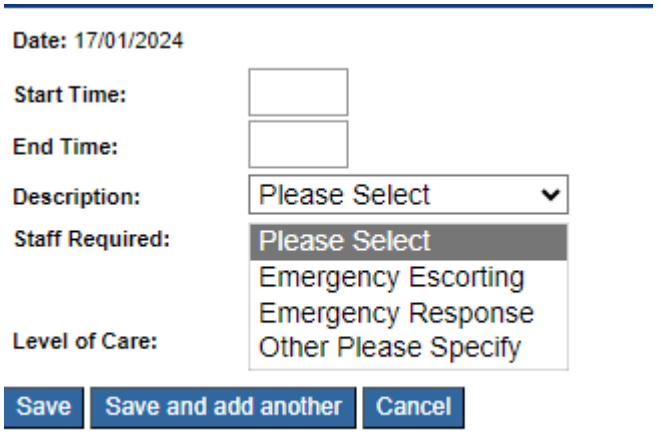
The Additional Activities screen will initially contain no details when you access this screen (and date) for the first time. To add an additional activity, select "**Add Additional Activity**":



The following screen appears, allowing you to enter the Start and End time, Description, Staff required for an activity and the Level of Care:



The description box is a drop-down list that allows the user to select one of three options:

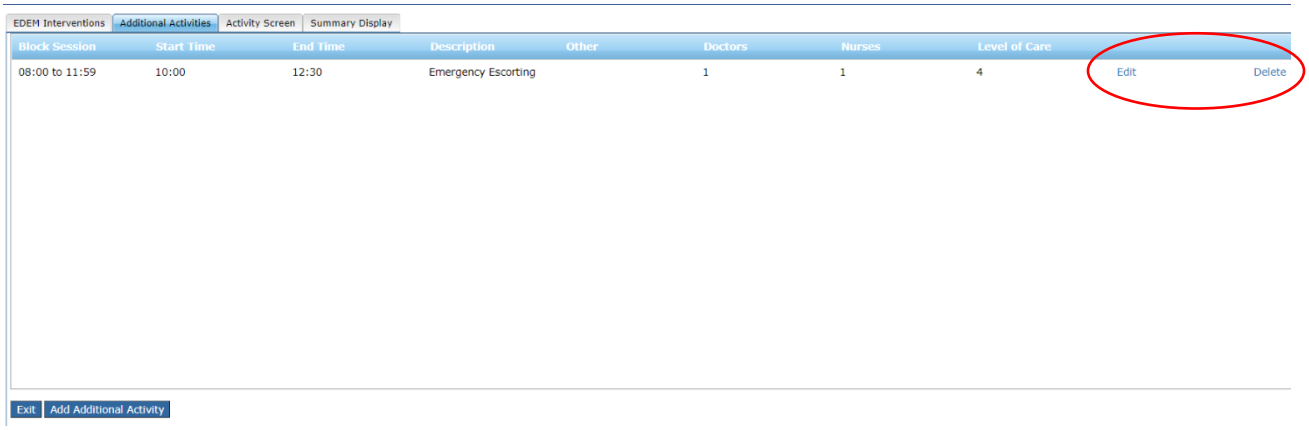


If **"Other Please Specify"** is selected, a free-text box will appear for the user to type a short description of the additional activity that took place.

Click on the information icon next to Level of care to see a description of the levels of care.

Click **'Save'** to save the data and return you to the Additional Activities screen, or **'Save and add another'** and enter more data.

Once the data entry has been completed and you have returned to the Additional Activities tab, you should now see a screen similar to the one below:



You can choose to Edit or Delete any Additional Activity that has been entered.

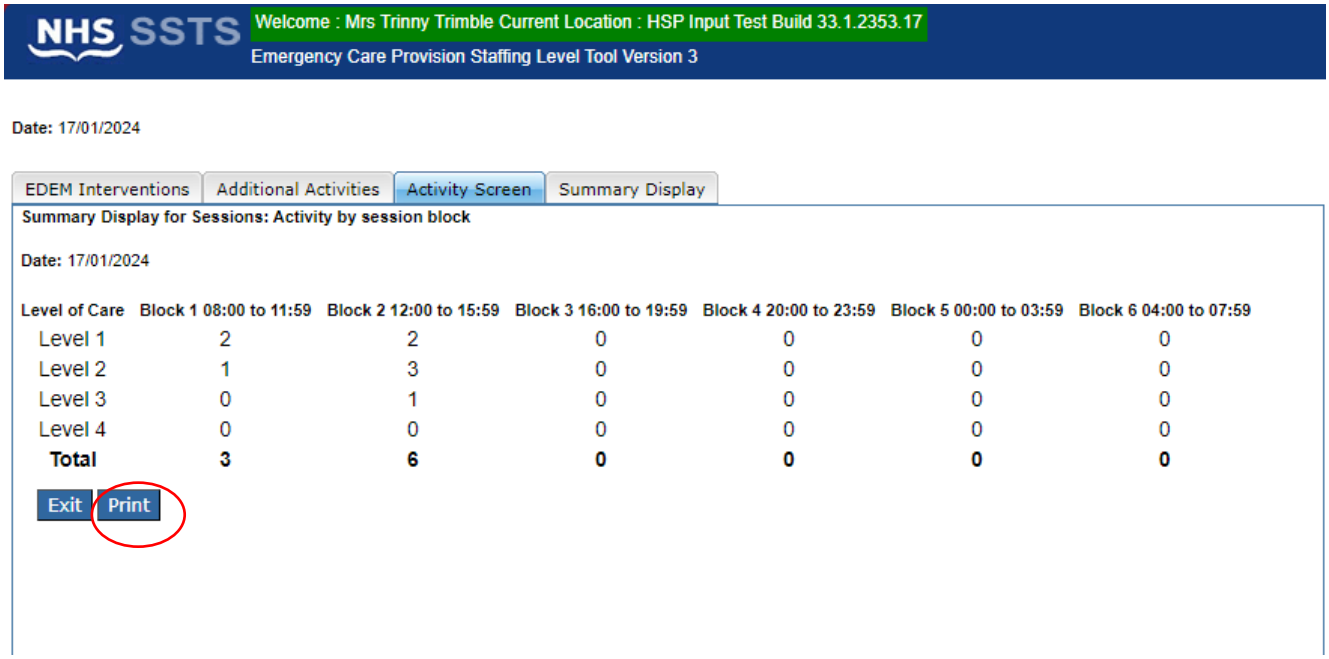
5. Activities Screen

This tab shows the number of patients that have been entered for each block.

If a patient's stay spans multiple blocks, they are shown as a patient in each block.

Each change to a patient's level of care throughout their stay is shown as an additional patient on this screen.

For example, if a patient was a level 1 from 11:00-11:59 and a level 2 from 12:00- 14:00, they would be counted as one level 1 patient in block 1 and one level 2 patient in block 2.



You can click **Print** on this screen to print a copy of the data.

6. Summary Display Tab

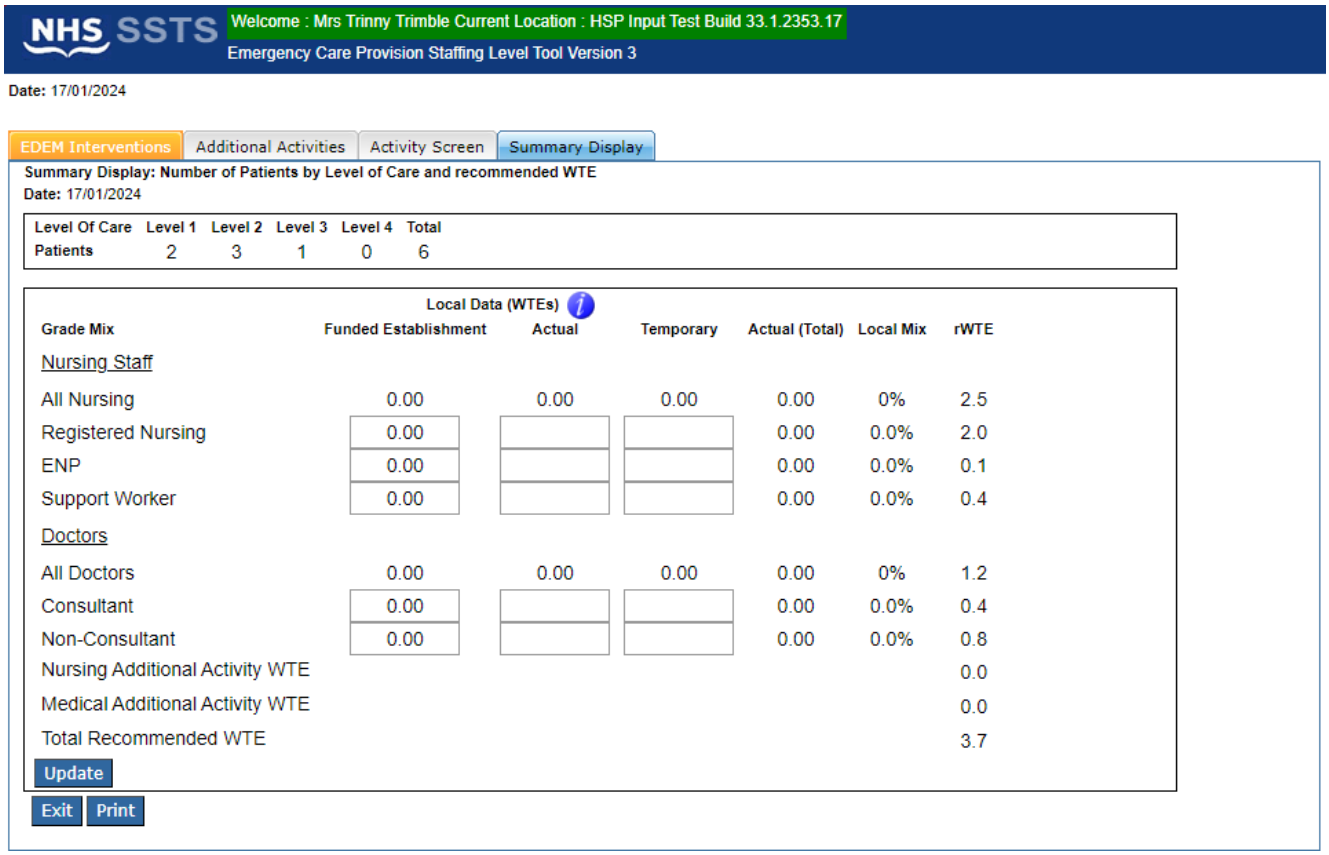
6.1 Summary Screen

The summary Display tab is only available for users with Editor permissions. Users with data entry only permissions cannot see or access this tab.

Please contact your local SSTS team to ensure you have the correct permissions.

The Summary Display tab only needs to be completed once.

This should be done on day 14 or the last day of the tool run.



The top of the Summary Display tab shows a count of the number of patients for the day.

As in the activity screen, patients are counted for each change in their level of care. The total may not be the same as the total on the activity screen tab. This is because the patients in the activity screen are counted once for each time block, while the patient sin the summary display are counted once over the whole day.

The rWTEs column shows the rWTE based on the patient data entered into the workload tool for that date. This is calculated automatically to the tool.

The rWTE is broken down by nursing staff and doctors, and by different staff roles.

The rWTE needed to cover the Additional Activity is shown separately.

The Total rWTE includes the rWTE for all nursing and medical staff, including Additional Activity WTE.

The rWTE for each day of the tool run are pulled through to the BOXI report for comparison with the other local data entered at the end of the tool run and the professional judgement data.

6.2 Local Data Calculations

Local Data can be added under the Funded Establishment, Actual and Temporary columns.

Funded WTE - Funded establishment. This information can be provided by the SSTS team.

Actual WTE - The Actual staff hours worked during the tool run period.

-This includes PAA

-This would not include those staff who are normally rostered to work but are absent e.g. sickness, absence, leave, etc.

Temporary WTE - extra hours, bank hours, overtime, agency/locum worked during the tool run. This does not include Predicted Absence Allowance, referred to moving forward as PAA

The local data should only be entered on the summary tab on day 14 of the tool run.

This tab can be left blank for all other days of the tool run.

To calculate your actual staffing:

1. Add together the actual hours worked by all staff members of each job type for each night and day shift.

The Actual hours worked need to be collected separately for each job family and job type as set out in the summary display tab. The same should be done for any Temporary hours worked.

On Monday:

Day shift:

5 staff worked an 11 hour shift, and

2 staff worked a 7.5 hour shift

Total staff hours on Monday day shift

= (5 x 11) + (2 x 7.5)

= **70 hours**

Night shift:

6 staff worked an 11 hour shift,

2 staff worked a 7.5 hour shift, and
1 staff member worked a 4 hour shift

Total staff hours on Monday night shift

= (6 x 11) + (2 x 7.5) + (1 x 4)
= **85 hours**

Total Registered nursing staff hours for Monday = day shift hours + night shift hours
= 70 + 85 = 155 hours

2. Add the number of registered nursing staff hours for the full week.
   For example:

Week 1	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Total
Day and night, 7 days	155	126.5	138	138	138	161	138	994.5

3. Do the same calculation for Week 2

4. Add the total registered nursing staff hours for Week 1 and Week 2 For example:
   - Total staff hours Week 1 = **994.5**
   - Total staff hours Week 2 = **1005.5**
   - Week 1 staff hours + Week 2 staff hours = 994.5 + 1005.5 = **2000**

5. Divide by 2 to get the average weekly hours. For example: 2000 ÷ 2 = 1000

6. Divide by standard weekly working hours (WTE), i.e.
   • 37.5 for nursing staff

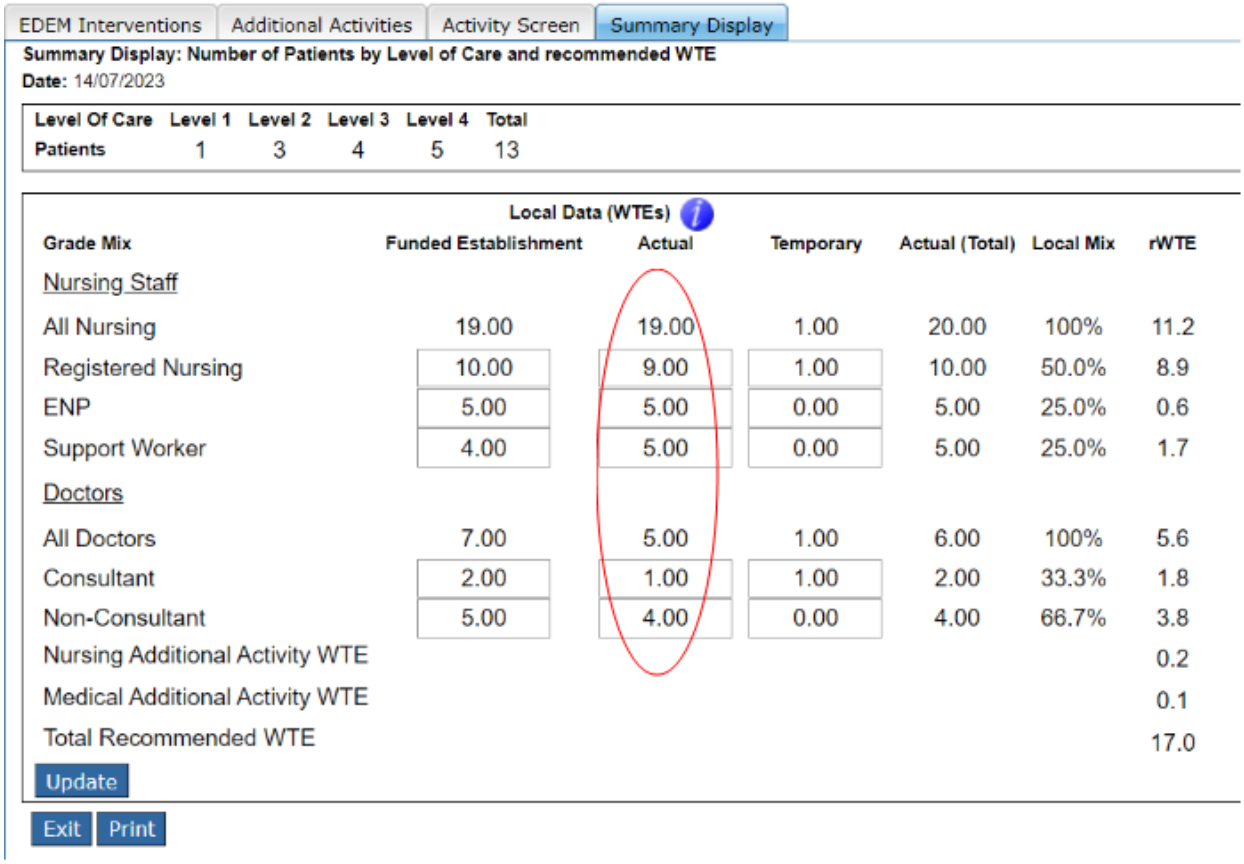
   1000 ÷ 37.5 = 26.67

7. Add a percentage for Predictable Absence Allowance (PAA) of 22.5% for nursing staff **Please check this is what is used locally.**

   26.67 x 1.225 = 32.67

If the staff were medical staff 25% PAA should be added: 25 x 1.25 = 31.25
Please check this is what is used locally.

8. Enter the average weekly WTE of 32.67 into Registered nursing Actual Column on day 14 of the Emergency Care Provision tool.



EDEM Interventions | Additional Activities | Activity Screen | Summary Display

Summary Display: Number of Patients by Level of Care and recommended WTE

Date: 14/07/2023

Level Of Care	Level 1	Level 2	Level 3	Level 4	Total
Patients	1	3	4	5	13

Grade Mix	Local Data (WTEs) Funded Establishment	Actual	Temporary	Actual (Total)	Local Mix	rWTE
Nursing Staff						
All Nursing	19.00	19.00	1.00	20.00	100%	11.2
Registered Nursing	10.00	9.00	1.00	10.00	50.0%	8.9
ENP	5.00	5.00	0.00	5.00	25.0%	0.6
Support Worker	4.00	5.00	0.00	5.00	25.0%	1.7
Doctors						
All Doctors	7.00	5.00	1.00	6.00	100%	5.6
Consultant	2.00	1.00	1.00	2.00	33.3%	1.8
Non-Consultant	5.00	4.00	0.00	4.00	66.7%	3.8
Nursing Additional Activity WTE						0.2
Medical Additional Activity WTE						0.1
Total Recommended WTE						17.0

Update

Exit | Print

Use the same method of calculation for each type of nursing staff specified in the summary tab

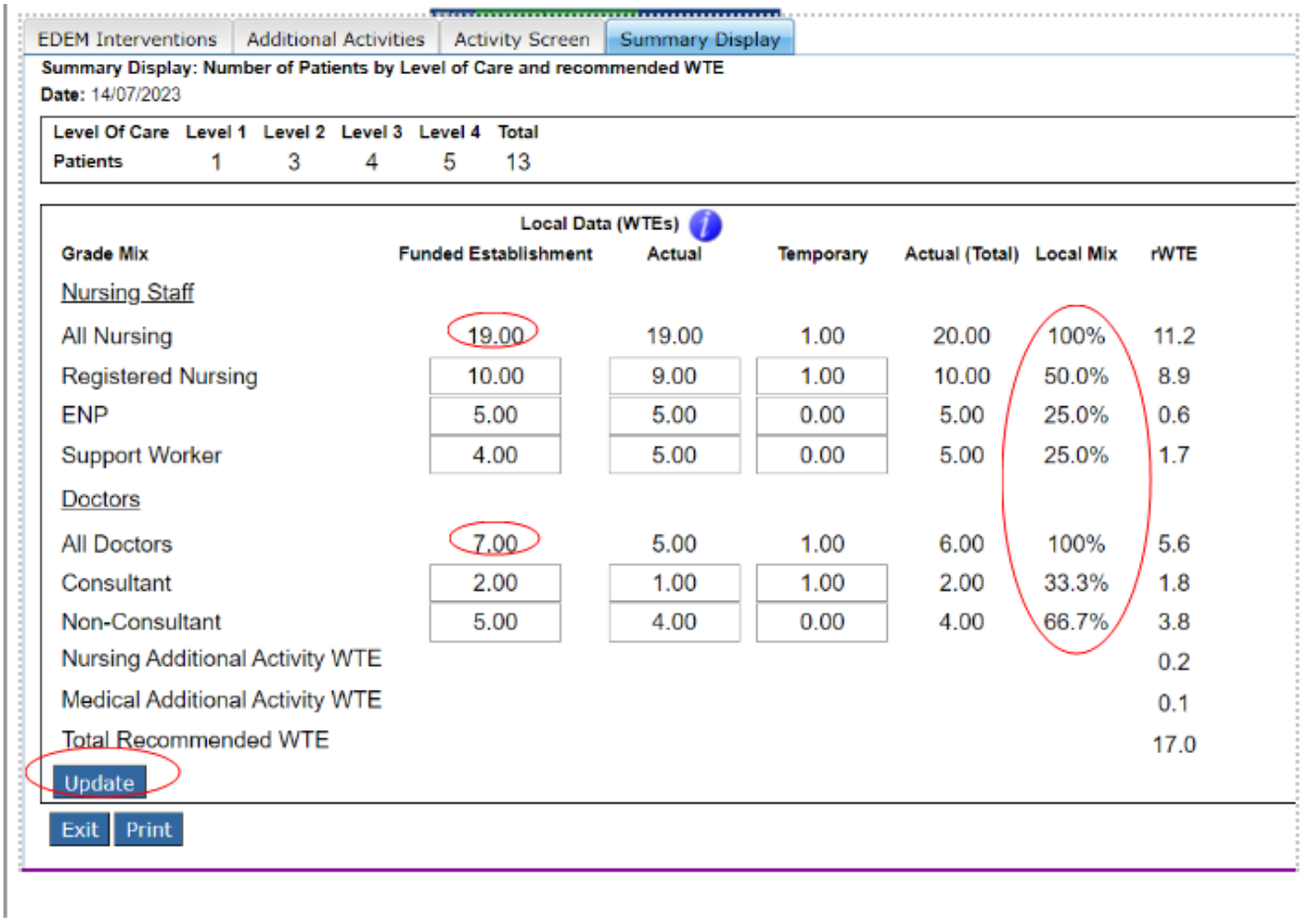
Temporary staffing should be calculated using the same method of calculation for each type of nursing staff and doctors specified in the summary tab, with the exception of step 7. No PAA is added for temporary staff.

For Doctors, use the same method of calculation for both consultant and non-consultant doctors, with the following amendments:

- Step 6: Standard WTE hours are 40. So, divide the average weekly hours by 40 e.g. if the average weekly hours for consultants was 1000: 1000÷40 = 25
- Step 7: The PAA is 25. E.g 25 x 1.25 = 31.25

Once you have entered all of the funded establishment local and temporary staffing information, click the **Update** button.

The “All Nursing”, “All Doctors” “Actual (Total)”and “Local Mix” columns will then be calculated, as shown in the example below:



The Actual (Total) column is the sum of the Actual and Temporary columns.

The local mix % is the mix of nursing and doctors in the department.

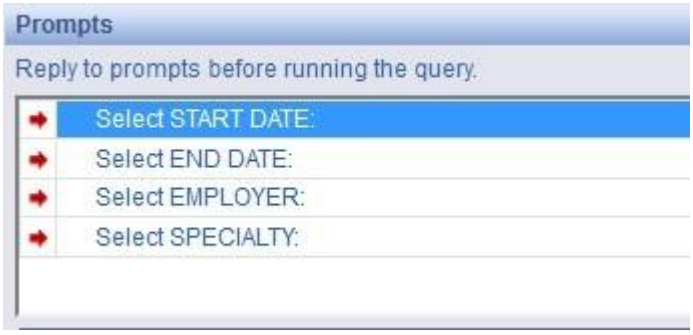
The comparison can then be seen between the recommended WTE for each role, the budget WTE/ funded establishment and the actual (total) staff in each role.

7. Business Objects Report

After Emergency Care Provision and corresponding Professional Judgement data entry into SSTS is complete, please use the Emergency Care Provision standard report developed in Business Objects (BOXI) to view and extract information for a selected period of time.

These reports were created by the national team and has a series of built-in prompts to generate customised outputs locally.

For Example



Access to BOXI reports requires a login and password. Local processes for BOXI access can vary. Typically, BOXI access can be granted by your local SSTS Manager, line manager or Workforce Lead. Access is requested using the same access permission request form as the one for SSTS access.

ⓘ Please seek your line managers permission and authorisation before contacting your local SSTS manager.

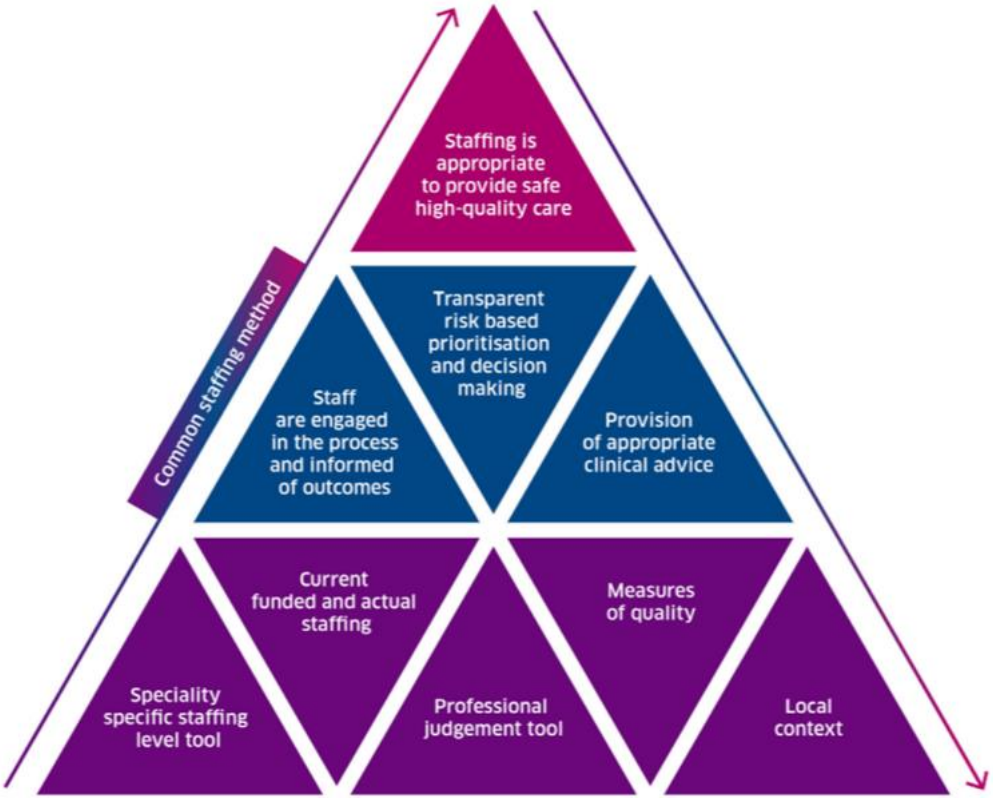
Appendix A

Background

Nursing & Midwifery staffing level tools are an essential part of the Health and Care (Staffing) (Scotland) Act 2019 aimed at ensuring health & social care staffing is at the level required to deliver safe, quality focused care to people using the services. The tools are designed to give staff the platform on which to record information about the actual work they do. This is to collate the activities in a manner that supports decisions about staffing, resource allocation and service design as part of a triangulated process of planning.

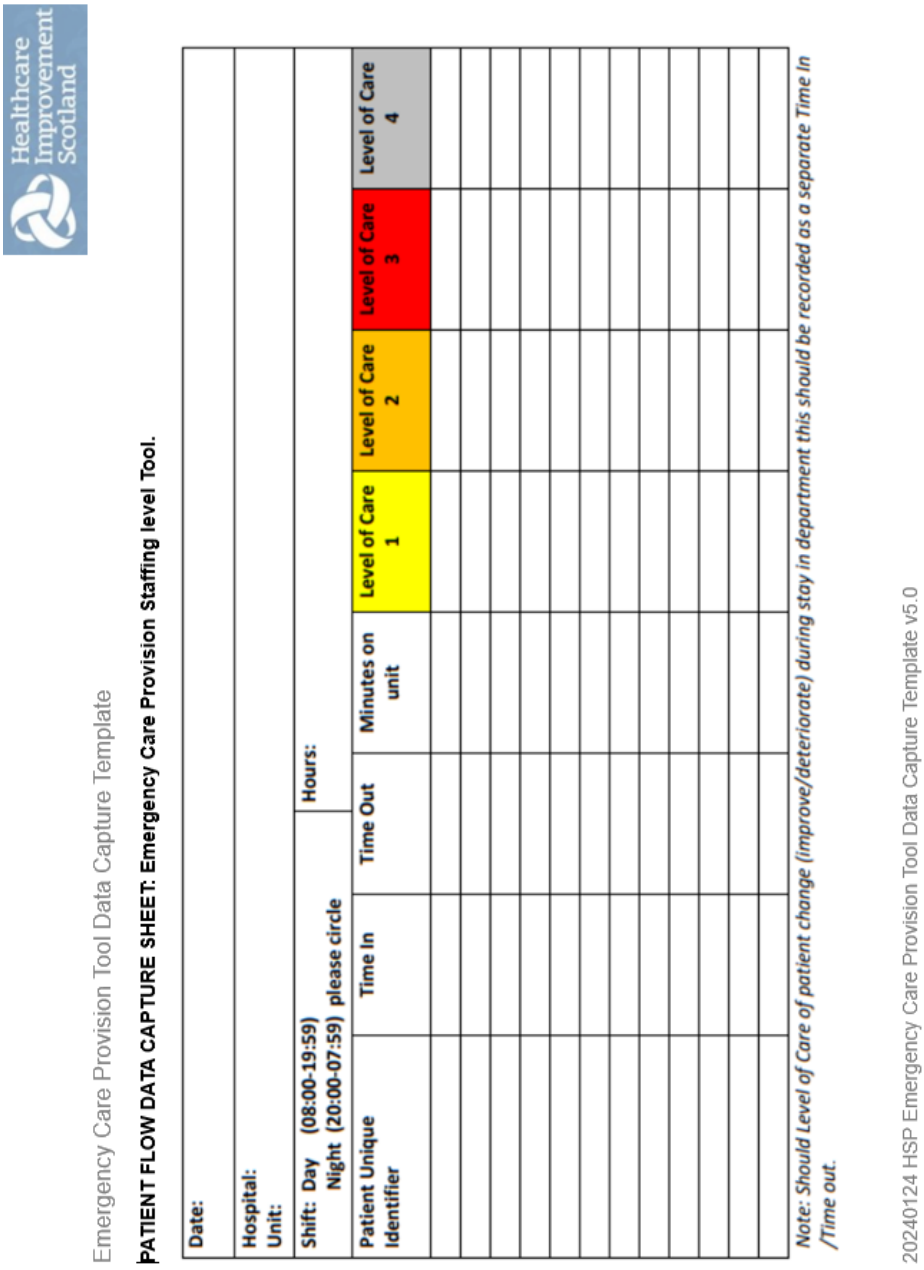
To find out more about this, please refer to the HSP website and learning resources: Healthcare Staffing Programme (HSP) webpages.
The political commitment in Scotland is that, through application of a common staffing method (Figure 1) health services will be staffed to the level required to provide safe, high quality care. To ensure this, each NHS Scotland Board and the services therein, are responsible for having effective planning processes, informed by the activities captured through the mandated use of tools. The Emergency Care Provision tool is one of national staffing level tools available for this purpose.

Figure 1 – The common staffing method



Appendix B

Data Capture Sheet



Emergency Care Provision Tool Data Capture Template

PATIENT FLOW DATA CAPTURE SHEET: Emergency Care Provision Staffing level Tool.

Date:								
Hospital: **Unit:**								
Shift: Day (08:00-19:59) **Night (20:00-07:59) please circle**			**Hours:**					
Patient Unique Identifier	**Time In**	**Time Out**	**Minutes on unit**	**Level of Care 1**	**Level of Care 2**	**Level of Care 3**	**Level of Care 4**

Note: Should Level of Care of patient change (improve/deteriorate) during stay in department this should be recorded as a separate Time In /Time out.

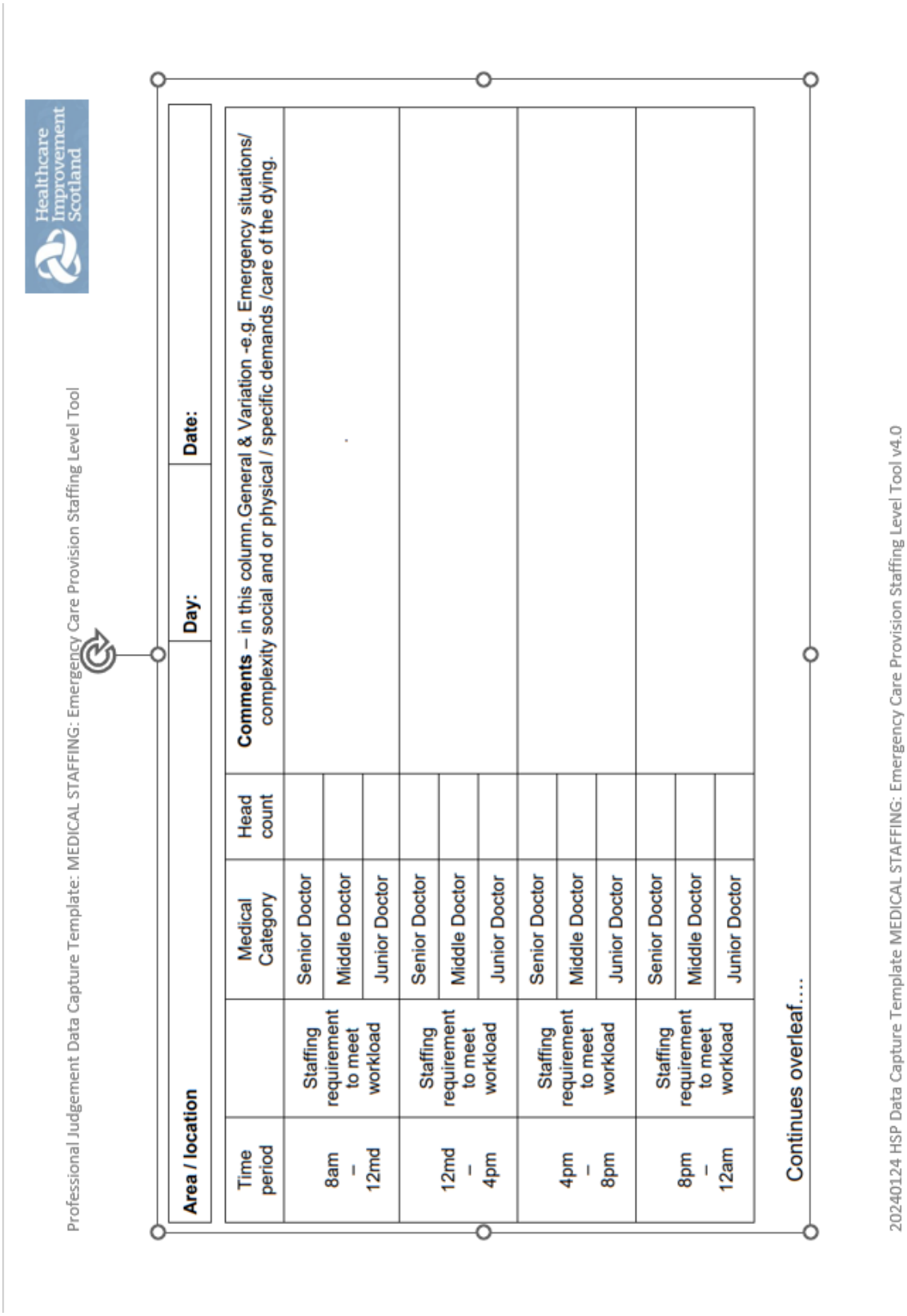
20240124 HSP Emergency Care Provision Tool Data Capture Template v5.0

Ward / area / location	Day:	Date:

Time period		Nurse or Midwife	Insert what number of staff was needed for activity	Comments – in this column: General & Variation -e.g. Transfers/ escorts/ emergency situations/ complexity social and or physical / specific demands/ theatre lists /one-one care
Morning 0800-1200	Staffing requirement to meet workload	Registered		
		Non Registered		
		ENP		
Afternoon 1200-1600	Staffing requirement to meet workload	Registered		
		Non Registered		
		ENP		
Evening 1600-2000	Staffing requirement to meet workload	Registered		
		Non Registered		
		ENP		
Late Evening Night 2000-0000	Staffing requirement to meet workload	Registered		
		Non Registered		
		ENP		
Night 0000-0400	Staffing requirement to meet workload	Registered		
		Non Registered		
		ENP		
Night 0400-0800	Staffing requirement to meet workload	Registered		
		Non Registered		
		ENP		

Professional Judgement Tool Guidance

- This tool runs for 2 concurrent weeks, commencing on a Monday and completed daily.
- To be completed by Senior Charge Nurse / Midwife or recognised leader of each time period / shift.
- The sheet to be completed as 'live' as possible retrospectively at the end of each 4 hourly segment.
- Discuss how the time went with staff and record in the comment section; record any additional workload pressures such as complex social cases, non-English speaking patients, physical issues/ transfers, complex 1-2-1 patients that may not be in labour, bereavement etc. These are the times when in your professional judgement more staff were required.
- Document the actual amount of staff that you required to meet the workload, registered and non-registered in each of the sections, and this can vary over the day due to peaks and troughs in workload i.e. emergencies etc.
- If the available rostered staff in your team exceeds the workload activity please record to indicate this accordingly.
- Queries about what information should be recorded in the tool or the proforma please contact your line manager or workforce planning co-ordinator.
- Data should be input into SSTS timeously once the data is discussed and quality assured in partnership with senior clinical staff and colleagues.
- Ensure the SSTS configuration reflects either 8, 12 or 24 hour services


Professional Judgement Data Capture Template: MEDICAL STAFFING: Emergency Care Provision Staffing Level Tool
Healthcare Improvement Scotland
Area / location
Day:
Date:
Time period
Staffing requirement to meet workload
Medical Category
Head count
Comments – in this column.General & Variation -e.g. Emergency situations/ complexity social and or physical / specific demands /care of the dying.
8am – 12md
12md – 4pm
4pm – 8pm
8pm – 12am
Senior Doctor
Middle Doctor
Junior Doctor
Continues overleaf....
20240124 HSP Data Capture Template MEDICAL STAFFING: Emergency Care Provision Staffing Level Tool v4.0

Professional Judgement Data Capture Template: MEDICAL STAFFING: Emergency Care Provision Staffing Level Tool

12am – 4am	Staffing requirement to meet workload	Senior Doctor		
		Middle Doctor		
		Junior Doctor		
4am – 8am	Staffing requirement to meet workload	Senior Doctor		
		Middle Doctor		
		Junior Doctor		

- To be completed by Medical Staff, Team leader/ Manager or designated individual for a 2 week period.
- Professional judgement sheet to be completed as 'live' as possible retrospectively for each time block i.e. morning / afternoon etc
- Discuss the workload in the time period with staff.
- State how many **Senior/Middle/Junior grade** staff in the section of the table that you would **require** on duty to cover the **workload** using your own professional judgement. This is **not** what you had rostered but what staff were needed to undertake the workload.
- Staff should make a note of their shift on the Professional judgement sheet on each day of the 2 week data collection to facilitate team discussion and judgement with Medical Staff, Team Leader / Manager completing the Professional Judgement tool on SSTS.
- Comments should record any additional workload pressures such as complex social cases, non English speaking patients, physical issues/ transfers/ care of the dying. This is times when in your professional judgement more staff were required in the clinical area.
- If the number of staff required is different from your actual staffing write reasons in the comments box.
- Queries about what information should be recorded in the tool or the proforma please contact your line manager or workforce planning co-ordinator.

20240124 HSP Data Capture Template MEDICAL STAFFING: Emergency Care Provision Staffing Level Tool v4.0

Appendix C

Emergency Care Provision Levels of Care Descriptor Code List

The Emergency Care Provision Tool was developed to define the time and intensity of patient's demands on medical, nursing and support worker staff in this environment.
There are different levels of classifications used to identify the differing levels of complexity in the demands made on staff.
The classifications range from Level 1 - routine care where there is minimal dependence on staff to Level 4 where there is total dependence on staff requiring 1:1 or continuous care.

The symbol indicates criteria or guidance relating to children.

Level 1 ***(Require routine intervention and care)***

Level 1 Description	Inclusion Criteria	Guidance on Care Required
Individual requires assessment. **May require investigation and treatment.** **Needs met with routine care.** **Discharged home**.	Any individual presenting with a minor injury or illness whose condition is stable and requires only minimal intervention. Parent, relative, carer, police/security may be present	• Requires routine clinical assistance • Routine observation (may be frequent for a short period) • Requires simple treatment e.g. wound closure, fracture immobilisation, soft-tissue support • Requires advice and simple instruction on self or follow up care • Parent, relative, carer requires advice and simple instruction on behalf of patient or follow up care • May require social work/other agency intervention ○ (This would put this in level 2 if children's)

Level 2 ***(Require moderate increase in interventions and care and/or may involve the Consultant or more than one person for a specific period of time)***

Level 2 Description	Inclusion Criteria	Guidance on Care Required
Non- life threatening, acutely ill/ injured individual requiring clinical intervention **Or** **Those who are medically unstable with a greater potential to deteriorate** **Or** **Individual who requires increased clinical intervention/ assistance with specific aspects of care**	Patients requiring urgent but not emergency assessment or intervention May require admission to inpatient care • Is in stable condition but with increased acuity and/or potential to deteriorate • Requires more than routine care, but can be managed in ED • Increasing parental/ relative/ carer reassurance and emotional support required • Difficulties, Acute trauma, confusion • Relative, carer and staff support required due to increased anxieties / behaviours of parents / carers / relatives ○ Mild respiratory distress ○ Poor fluid intake e.g. due to D&V • Restricted mobility; spinal instability/ mobility difficulties • Pain • Psychological support with anxiety/ agitation/ psychosis or considered safety risk • Vulnerability risk factors e.g. drug/alcohol abuse • Suspect domestic abuse requiring constant input and supervision	Instability requiring frequent, but not continuous observation i.e. #Neck of Femur May require some or all of the following • Frequent monitoring in view of potential emergent deteriorating condition or fluctuating Vital Signs • Neurological monitoring in view of potential emergent deteriorating condition or fluctuating level of Consciousness GCS • ECG monitoring • Fluid management • Oxygen therapy 24 – 40% • 0_2 Saturation monitoring • Invasive monitoring • Pain Control • Increasing demands on clinical time • Requires frequent monitoring • Constant observation due to risk of harm/ flight or agitiation/ confusion from organic illness, dementia, mental illness or poisoning • Pain management requiring IV analgesia • Psychological support • Challenging behaviour • Parents, relatives or carers require increasing support • Parents, relatives or carers increasing anxiety and/or behaviours causing concern within clinical area • May require social work or other intervention agency

	• Requires increased clinical input due to intensive therapy and invasive procedures • Has complicated care needs, requiring constant clinical attention during stay • May be agitated/aggressive due to underlying drugs/alcohol intoxication ○ Has complicated emotional and/or social family/ carer support needs e.g. ill child or young person, child protection issues, learning disability, acute trauma, confused ○ Challenging complex child protection concerns requiring facilitation within ED	

Level 3 ***(Requires complicated invasive interventions and constant but not continuous care)***

Level 3 Descriptors	Inclusion Criteria	Guidance on Care required
Individual who is seriously ill with uncorrected major physiological abnormalities **and/or** **clinically deteriorating**	• Severe infection; sepsis • Complex wound management • Compromised immune system • Psychological support with severe anxiety/ distress • Severe psychosis or considered flight or safety risk, requiring continual supervision.	• Individual requiring non-invasive ventilation/ respiratory support e.g. re-breathe mask/ head box • nasal CPAP (child) • Respiratory or CNS depression/ compromise requires mechanical/ invasive ventilation • Airway obstruction / intervention / nebulised adrenaline / prolonged

	• Spinal instability / mobility difficulties. Will require admission to inpatient and ongoing care: • Needing advanced respiratory support • Individuals who require 1 to 1 supervision but not dedicated 1:1 care /or constant but not continuous care. • Is seriously ill and at risk of deteriorating, requiring constant monitoring and more detailed monitoring • Challenging complex concerns requiring facilitation within the ED • Requires direct senior medical input/decisions • Challenging complex concerns requiring multi-disciplinary and specialist team facilitation within the ED • Challenging co-existing neurological impairment • Increasing and demanding parental and staff support and reassurance required during this period to manage increased anxieties and concerns ○ Requires complex emotional and/or social family/carer support, e.g. ill child or young person, child protection issues, learning difficulties, acute trauma, confused greater part of their stay	apnoea /severe asthma IV medications and hourly nebulisers • Requires a range of therapeutic interventions including: • Continuous oxygen therapy • • or High flow 02 • ECG / invasive pressure monitoring • ECG / non invasive monitoring • Vasoactive drug infusions (amiodarone, potassium, inotropes, nitrocine, magnesium) • Haemodynamically unstable or who hav • e CNS • depression and loss of airway & protective reflexes and require neurological observation • Treatment of hypovolaemia/haemorrhage/ sepsis or neurological protection • Frequent arterial blood gas analysis • Insertion and care of central lines / chest drains • Complex drug regimes • Complex fluid regimes • Ketoacidosis /electrolyte imbalance • Fluid resuscitation 10-30mls/kg • Acute renal failure • CNS Depression, GCS 8-12 • Providing emotional support to highly anxious parents, relatives, carers

	○ Challenging complex child protection concerns requiring facilitation within the ED	• Vulnerable family requiring support • May require social work intervention • Increasing demands on nursing time • Requires frequent monitoring • Constant observation due to risk of harm/flight or agitation /confusion from organic illness, dementia, mental illness or poisoning • Pain management requiring IV analgesia and/or psychological support • Challenging behaviour • Parents, relatives or carer's require increasing support • Parents, relatives or carer's increasing anxiety and/or behaviours causing concern within clinical area • May require social work/other agency intervention.

Level 4 Descriptor	Inclusion Criteria	Guidance on Care Required
Individual with life threatening trauma/illness who needs advanced respiratory support **and/or** **invasively ventilated and intensive therapeutic intervention**	• Intensive monitoring and supportive therapy for compromised or multi system organ failure • Severe Cardiovascular instability (rhythm abnormalities e.g. frequent defibrillation required), • at risk of Organ failure developing • neurologically unstable requiring (invasive)	• The emphasis at this level is on the multifaceted nature and complexity of care required. • The majority of adults, children and young people at this level will require high intensity nursing and medical care during the period of care in the ED. •

Bereavement care to the individual and family	monitoring and therapeutic intervention, ○ • Severe asthmatic child • Circulatory and respiratory compromised child • Neurologically impaired child • Will require; • Extensive intervention for the resuscitation and/or stabilisation of the critically ill • Admission to inpatient area/transfer and ongoing care • Direct senior medical input/decisions • Advanced respiratory support • Intensive and invasive cardiac monitoring • Extensive assessment and monitoring of the individuals physiological responses • Dedicated 1:1 care/or continuous care, may require more than 1:1 care for periods of time • Extensive support and care of family • Complex emotional and/or social parental, family/carer, staff support, e.g. ill child or young person • Bereavement care and support of parent, relative, carer, discuss organ donation • Management of; • • Challenging and highly complex child protection issues	• The emphasis at this level is on the multifaceted nature and complexity of care required. The majority of adults, children and young people at this level will require high intensity nursing and medical care during the period of care in the ED • • Individual requiring non-invasive ventilation/ respiratory support e.g. re-breathe mask/ head box ○ • nasal CPAP (child) • Respiratory or CNS depression/ compromise requires mechanical/ invasive ventilation • Airway obstruction / intervention / nebulised adrenaline / prolonged apnoeas /severe asthma IV medications and hourly nebulisers • Extubation • Requires a range of therapeutic interventions including: • Continuous oxygen therapy ECG / invasive pressure monitoring • ECG / non invasive monitoring • Vasoactive drug infusions (amiodarone, potassium, inotropes, nitrocine, magnesium) • Haemodynamically unstable or who have CNS depression and loss of airway & protective reflexes and require neurological observation

	• Challenging complex concerns requiring multi-disciplinary and specialist team facilitation within the ED • Challenging co-existing neurological impairment • Frequent measurement of challenging physiological abnormalities • Complex neurological needs	• Treatment of hypovolaemia/ haemorrhage/ sepsis or neurological protection • Airway compromise • Major scald/burn • Major sepsis • Acute obstruction • CFAM Monitoring • Patients who are non-invasively ventilated but showing signs of deterioration • Frequent blood gas analysis • Insertion and care of central lines / chest drains ○ • Intra - Osseus needles • Complex drug regimes • Complex fluid regimes • Ketoacidosis /electrolyte imbalance • Fluid resuscitation 10-30mls/kg • Acute renal failure • CNS Depression • Providing emotional support to highly anxious parents, relatives, carers • Challenging behaviour / potential for self-harm • Bereavement care and support of parent, relative, carer, discuss organ donation • Any disruption to ABC requiring ongoing support and treatment

Appendix D

Frequently Asked Questions and answers

The purpose of this section is to give some quick guidance about completing the EDEM tool and to provide examples. This quick guide has adopted a question/answer format and should be used in conjunction with earlier parts of the user guide

Emergency Care Provision Staffing Level Tool **Frequently Asked Questions and Answers**	
Q1	**What do I need to do before I start using the tool?**
	You need to make sure you are familiar with the staffing level tool. Training and support will be provided via your local Workforce Lead. Please make sure you understand all the information provided, the responsibilities and expectations for you and your team. Please also refer to the: Quality Assurance Checklist:
Q2	**Why am I being asked to use two tools?**
	You are being asked to use the Professional Judgement Tool (PJ) along with the EDEM staffing level tool. This forms part of the Common Staffing Method approach mentioned above. The staffing level tool provides rWTE information on staffing needs that is considered alongside other local information, such as the PJ WTE staffing outcomes, which is based on your judgement of needs for the workload at that time, before decisions on staffing can be made.
Q3	**Does the tool consider mandatory training requirements?**
	The recommended whole time equivalent includes a Predicted Absence Allowance. The Allowance is to support time out such as Staff training, holiday, sickness, maternity and special leave. A national Predicted Absence Allowance of 22.5% for nursing staff and 25% for medical staff is included in the EDEM Tool. 2% of this total is for study leave. Please always check your local policy for your specific PAA percentages.
Q4	**How does the tool capture all aspects and complexity of my work?**
	The tool was developed by ED clinicians, nurses and doctors, across Scotland who have agreed that the tool broadly represents what they do. Levels of Care have been developed within the tool to recognise the workload required for the most straightforward care to the most critical care. The differing Levels of Care reflect the varying complexity. The levels of care are outlined in Appendix C

	The staffing level tool is incorporated into a national programme of work, which will be reviewed and refreshed to ensure that, as far as is possible, all workload, changes and new developments are included.

Q5	**In some cases relatives may require as much, if not more, care than the patient, e.g. bereavement. Is this work captured?**
	Yes, this is recognised in the tool. It is important that you are familiar with the workload descriptors that are in the tool.
Q8	**Who completes the Data Capture for each patient and how often should this be done?**
	The data capture should be completed by the agreed staff on each shift. The nurse in charge of the shift is responsible for making sure the data is collected accurately.
Q9	**Where can I find the definitions for each level of care?**
	See the coding can be found in Appendix C This information is also available on SSTS by clicking the icon beside the level of care drop down
Q10	**What if a patient's level of care changes during their time in the department?**
	Record this on the paper template, if using. On SSTS, use the "add another level" function to record the changes in levels of care for each patient as described in this section. This is important to accurately reflect the patient journey and the workload while they are in the ED.
Q11	**We have ANP and Physio staff within our ED. How do we record this on the Emergency Care Provision tool**
	AHPs and ANPs were not involved when this tool was developed and as such should not be included within the tool at this time. As part of the scheduled refresh of tools the wider multi-professional workforce will be considered. The contribution to the workload can be articulated within the local context information and triangulation.
Q12	**Can the Emergency Care Provision tool be used for Minor Injury Units?**
	Only units classified by the Boards as being dedicated EDEM units should use the EDEM tool, not stand alone Minor injury units.
Q13	**Do we capture clinic patients in the Emergency Care Provision tool?**
	The EDEM tool measures workload activity with the emergency department i.e. Unplanned variable workload. Clinic activity is planned workload therefore, this is not recorded within this tool. However, this workload may be considered during triangulation of the local context information.
Q14	**Why the 70/30 split for Nursing /Medics?**
	The 70/30 skill mix was provided by the ED units and was not part of the actual observation study.
Q15	**What is the calculation for the ENPs within registered nurses based upon?**
	Currently approximately 5% of the 70% is allocated to ENPs. This figure is based upon the observation studies.
Q16	**What are the timescales for inputting data into the EDEM Tool?**

	The EDEM tool allows for data entry to be carried out retrospectively for up to two calendar months
Q17	**Why are medical staff included in the Emergency Care Provision tool but no other staffing level tools?**
	The tools were all developed in conjunction with professional leads/subject matter experts and there are various different methodologies used. The working group for Emergency Care Provision decided when designing this tool (launched 2013) to adopt a multi-professional approach. However, it should be recognised that it doesn't include AHPs etc. As part of the scheduled refresh of tools the wider multi-professional workforce will be considered.
Q18	**How often do I need to add in the local WTE data on the summary screen?**
	This data only needs to be added into the tool on day 14 of the tool run These fields can be left blank for all the other days of the tool run. The information added on day 14 will show the comparison to the rWTEs once the update button is clicked and this will also pull through to the BOXI report Use the information in section 7.2 to assist with calculating the local data
Q18	**Who do I contact if I require help and support with this tool**
	Please contact your local workforce lead in the first instance should you require support with any aspect of the tool or tool run

Appendix E

Trouble shooting guide

EDEM Staffing Level Tool **Troubleshooting guide**
1. **SSTS**
I am getting an error message when trying to login to SSTS. What should I do?
SSTS and the staffing level tools can only be accessed on a Board approved computer network or portable network. If you are experiencing login problems when using a board approved network, contact your local SSTS team for advice
What should I do if I lose my login details?
Contact your local SSTS Team.
The workload tool I need to access is greyed out. What do I do?
Double check that you are trying to access the correct tool Contact your local SSTS manager to change your permissions if you are unable to access the correct tool
The working location shown is incorrect – how do I change this?
See Section 2.0
My service area/ working location isn't shown on the list. What do I do?
Contact your local SSTS manager to ensure that you have the right permissions to access the tool for your specialty.
What happens if the internet goes down whilst during data entry to SSTS?
You will have to re-enter any unsaved data once you are able to access SSTS again
What happens if I enter the wrong information by mistake e.g. wrong dates or level of care?
You will be able to amend any unsaved data while still logged into SSTS If you have Editor permissions, you should be able to amend the entry even after it has been saved using the edit function
Why won't the EDEM intervention entry screen let me "save" or "save and add another"?
Make sure you have added data into all 4 of the data entry cells. This should then let you save your data and open the next screen
Why can't I amend the "time in" when a patients level of care changes?

The time in is automatically set to follow on from the end of the previous level of care for that personI.

Double check the time in and time out on the paper data template, if using, to confirm the recorded times for changes in levels of care.

You can use the “edit” function to go back into the original entry to amend the “time-out” so that this accurately reflects the time that the level of care changes. This should then allow you to add another level where the correct “time in” will be displayed

The categories of additional activity do not reflect the additional activity that was recorded on the shift. What should I do?

There is an option to choose “other” and add a description of the activity.

See editing and deleting data.

Why cant I access the Summary display screen?

Only those with SSTS editor permission access can access the summary display screen.

If you believe you should have access to this screen, please discuss this with your manager and/ or the local Work Force Lead.

2. The Staffing Level Tool

I can’t download the paper data capture template. What do I do?

1. You can try using a different web browser to download the template

2. You can print Appendix B from this document

3. You can speak to the local IT team as permissions may be needed for accessing and downloading documents

4. Speak to your workforce lead and they should be able to assist in providing paper copies of the template

There are data capture sheets missing for some of the shifts – what should I do?

Double check with the teams working on the shifts where data is missing, as they may still have the sheets

You should enter the data you do have onto SSTS and this will pull through to the BOXI report. Gaps will show in the charts for any dates you do not have any data for.

The SCN is off sick. Who takes responsibility for the data collection and SSTS entry now?

The Nurse in charge of the shift should always make sure the data is collected for their shift.

The completed data capture templates should be filed securely in the agreed location for quality checking and SSTS upload.

SSTS entry can be done after the tool run is complete. There is a time limit of 2 calendar months to enter the data

The workforce lead will be able to provide support with completing the tool run in the absence of SCN

The rWTE is much higher/ lower than our actual/FE. What should I do?

This may simply be a reflection of your workload. However, it is worth quality assuring the data, in particular, that you have selected the correct specialty for the roster area, and that patient levels of care has been accurately reflected.

It is also worth checking that you have the most up to date FE for the service and the calculations for actual and additional staff have been completed correctly on the summary screen.

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You can read and download this document from our website. We are happy to consider requests for other languages or formats. Please contact our Equality and Diversity Advisor on 0141 225 6999 or email contactpublicinvolvement.his@nhs.net

Healthcare Improvement Scotland

Edinburgh Office
Gyle Square
1 South Gyle Crescent
Edinburgh
EH12 9EB

0131 623 4300

Glasgow Office
Delta House
50 West Nile Street
Glasgow
G1 2NP

0141 225 6999

www.healthcareimprovementscotland.org