
Overview

The National Institute for Health and Care Excellence (NICE) recently said that patients showing signs of sepsis should be treated with the same urgency as those with chest pain that could be suffering a potential heart attack. In its guidance, NICE asked clinicians to consider the possibility of sepsis in all patients who may have an infection.

In response to this NICE guidance, INPS has created a new sepsis pathway for Vision to help GPs identify and treat sepsis patients quickly and consistently.

A key to reducing death and disability from sepsis is early recognition leading to early treatment. Vision implements the UK Sepsis Trust pathway to alert clinicians to the possibility of sepsis during consultations. These alerts cover patients of all ages, taking into account age specific normal ranges for clinical measurements such as pulse and respiratory rate.

If a patient presents with identified red flag signs of sepsis, the clinician is reminded of the importance of swift action and advises the start of antibiotic treatment within one hour of detection.

Vision makes it easy for clinicians to record important clinical measurements quickly in a structured manner, speeding up data entry and quality. It also incorporates the Royal College of Physicians (RCP) NEWS scoring system (National Early Warning Score) to help assess the severity of illness, as well as being a nationally recognised indicator of urgency of action that can be used in clinical handover.

Pre-requisites

The INPS Sepsis pathway helps clinicians in the early recognition and management of sepsis by analysing routine clinical measurements during the consultation. The pathway consists of:

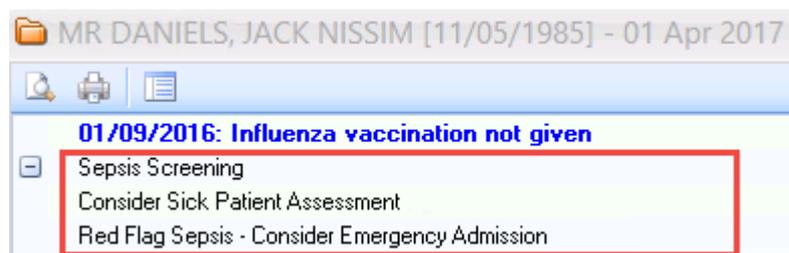
- **Alert Popup** - See [Viewing the Sepsis Alert Prompt](#) (page 1)
- **Data entry template** - See [Using the Sepsis Template](#) (page 4)
- To use the Sepsis Pathway provided by INPS you need to download it from **Download Web Files**. For help on how to download web files, see:
 - [Watch a video on how to download templates and reports](#)
<http://www.inpshep.co.uk/DLM490/Visionplus/index.htm#71145>
 - [On-screen help](#)
http://www.inpshep.co.uk/DLM490/Visionplus/index.htm#52225_1

Viewing the Sepsis Alert Prompt

In **Consultation Manager** when a patient's record is opened, the Sepsis Alert popup window displays different warning messages depending on the information you are recording and is graded on severity. There are three possible levels of warnings:

Sepsis Screening

- **Consider Sick Patient Assessment.** See [Consider Sick Patient Assessment Alert](#) (page 2)
- **Sepsis possible - Clinical Review.** See [Sepsis Possible - Clinical Review \(Amber Flag\)](#) (page 3).
- **Red Flag Sepsis - Consider Emergency Admission.** See [Red Flag Sepsis - Consider Emergency Admission](#) (page 3).



Sepsis screening

 **Note** - The patient's age and gender is also taken into account. For example, if the patient is an infant or if the patient is female and pregnant.

 **Training Tip** - For more information on how to use the Alert Popup window - see [Alert Popup Window](#) <http://www.inpshep.co.uk/DLM490/Visionplus/index.htm#46286>.

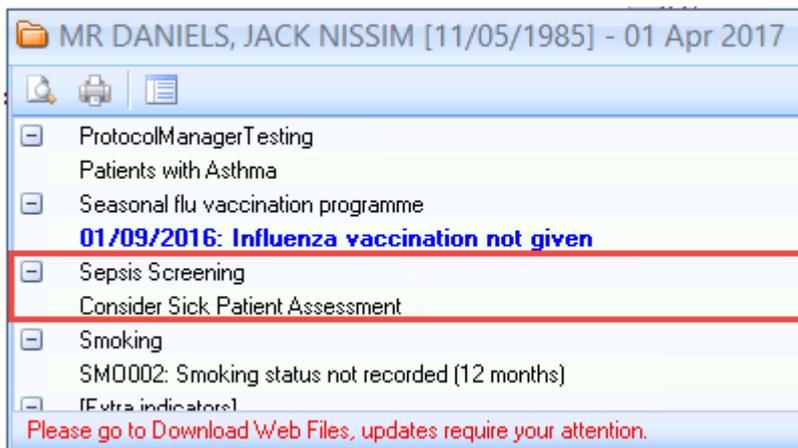
From the alert popup you can launch the Sepsis template by double clicking on the alert prompt (or by selecting the **Show Template**  icon from the toolbar). From here you can further assess your patient's risk of sepsis. See [Using the Sepsis Template](#) (page 4).

Consider Sick Patient Assessment Alert

If a patient meets the following criteria during their consultation you are prompted that there might be a possible case of Sepsis and that action is needed. You see the prompt **Consider Sick Patient Assessment**.

- Antibiotic treatment issued today or in the last 7 days
- Flu symptoms
- Gastroenteritis
- Temperature

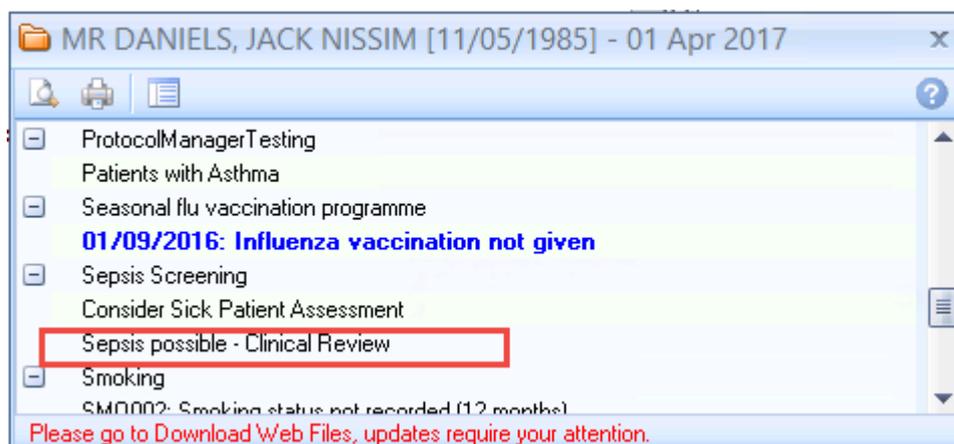
- Rigors



Sepsis Alert

Sepsis Possible - Clinical Review (Amber Flag)

The warning message **Sepsis Possible - Clinical Review** displays to indicate that further assessment or follow up is required. This prompt displays if the patient meets the criteria for **Consider Sick Patient Assessment** and has additional risk factors such as recent surgery, immunosuppression or other abnormal observations.



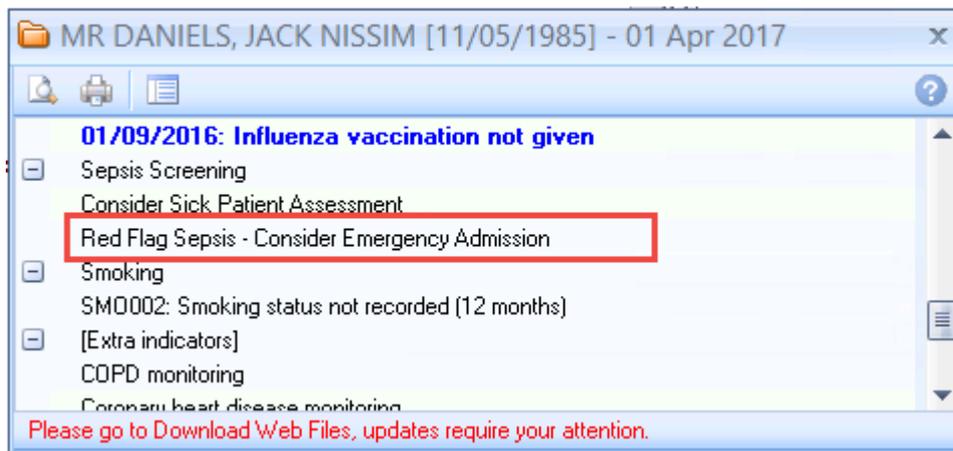
Amber flag sepsis warning

Red Flag Sepsis - Consider Emergency Admission

The **Red Flag Sepsis - Consider Emergency Admission** warning displays where there is a clear case of Sepsis. You see this warning if the patient has a single red flag symptom, and meets the criteria for **Consider Sick Patient Assessment**. The following is also taken into account:

- Patient's age
- Patient pregnant

- Low blood pressure in conjunction with a fast pulse or confusion



Red flag sepsis

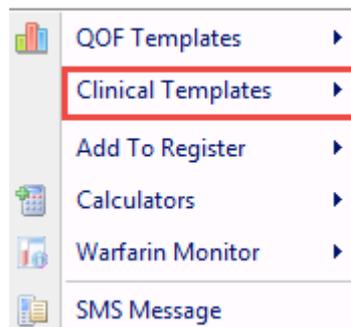
Using the Sepsis Template

The Sepsis template is easy for clinicians to record important clinical measurements quickly in a structured manner, speeding up data entry and quality. It also incorporates the Royal College of Physicians (RCP) NEWS scoring system (National Early Warning Score) to help assess the severity of illness, as well as being a nationally recognised indicator of urgency of action that can be used in clinical handover.

From the patient record, you can quickly access the Sepsis data entry template:

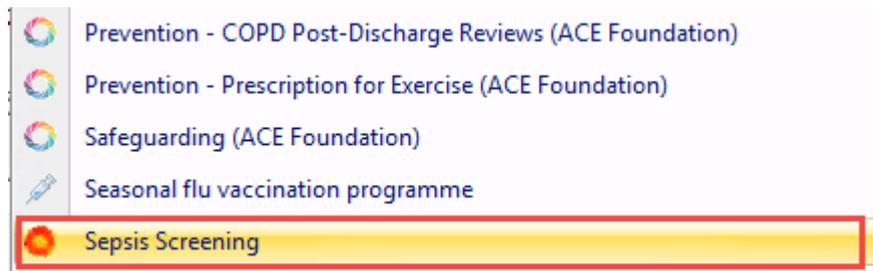


1. Click the **Vision+ icon** on the floating toolbar.
2. Select **Clinical Templates**.



Clinical Templates

3. Choose the **Sepsis Screening** template.



Sepsis Screening Template

Key Points about the Sepsis Template

Below are some key points about using the Sepsis Template:

- The screen is interactive so only displays information relevant to the patient; for example Immunosuppression and Pregnancy.
- Where applicable, amber and red flag guidance information displays at the top of the screen.
- The three tabs displayed on the template are:
 - **Sepsis** - Click the **Sepsis** tab to view a patient's flag status, review patient data and record your observations. You can also access the NEWS Calculator from this tab.
 - **Information** - The **Information** tab provides direct links to NICE NG51 guidance, Sepsis Trust Toolkit and RCP NEWS (National Early Warning Score).
 - **History** - Use the **History** tab to view the patient's Read codes, Active Repeats, Acutes, Inactive Acute/Repeats, and Additional Information.
- As you record information the flag status changes automatically.
- Embedded in the Sepsis tab is the NEWS (National Early Warning Score) calculator. To access the calculator click the **Popout Template** icon at the bottom of the template. A separate NEWS Calculator tab displays **NEWS Calculator**.

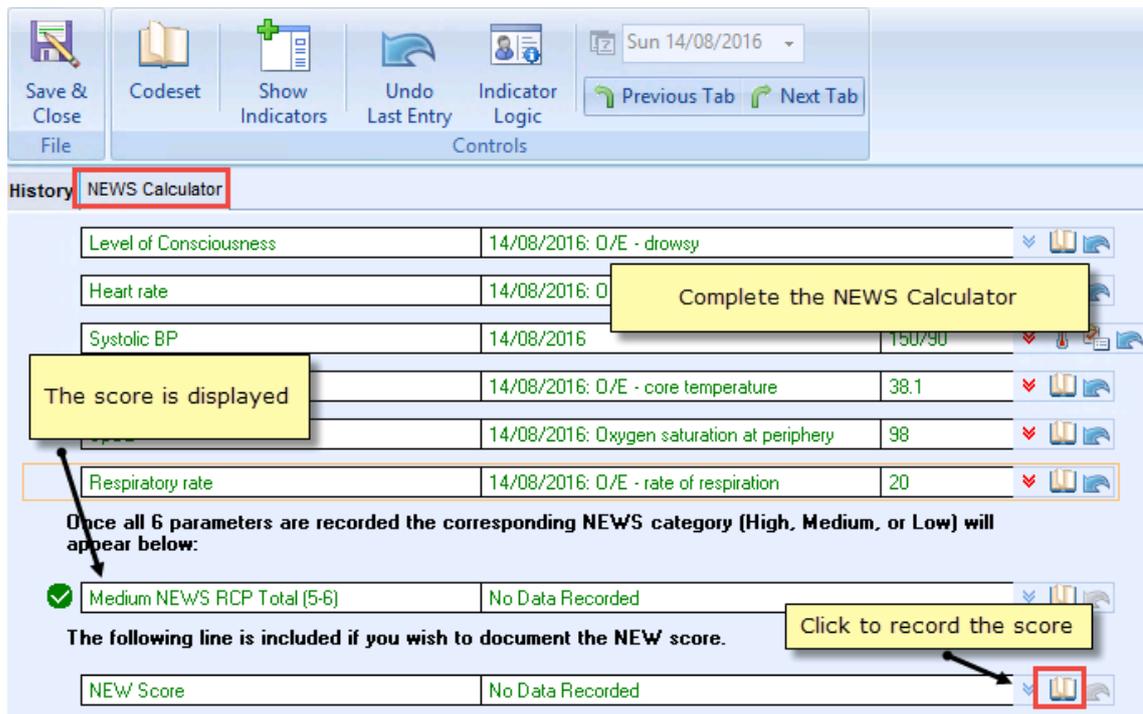
The screenshot shows a table with the following rows:

Rigors	No Data Recorded	⌵ 📄 🗑️
Trauma / Surgery	No Data Recorded	⌵ 📄 🗑️
Wound / skin infection / abscess	No Data	⌵ 📄 🗑️
Possible sepsis	No Data	⌵ 📄 🗑️
You can estimate the patients NEWS value, based on recorded physiological parameters by clicking the icon at the end of the row below to show the calculator		
NEWS Calculator - Click the first icon to launch...	No Data Recorded	⌵ 📄 🗑️

A yellow callout box with a black border contains the text: "From the **Sepsis Template**, select the **NEWS Calculator** by clicking the Popout Template icon". An arrow points from this box to the first icon (a document with a plus sign) in the bottom row of the table, which is highlighted with a red square.

NEWS Calculator

- Complete the six areas of NEWS Calculator **NEWS Calculator** tab to help assess the severity of the illness. To record the score in the patient's record, click the **Codeset**  icon.



History **NEWS Calculator**

Level of Consciousness	14/08/2016: O/E - drowsy	
Heart rate	14/08/2016: O	
Systolic BP	14/08/2016	150/90
Core temperature	14/08/2016: O/E - core temperature	38.1
Oxygen saturation at periphery	14/08/2016: O/E - oxygen saturation at periphery	98
Respiratory rate	14/08/2016: O/E - rate of respiration	20

Once all 6 parameters are recorded the corresponding NEWS category (High, Medium, or Low) will appear below:

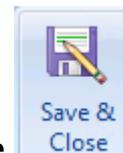
Medium NEWS RCP Total (5-6)	No Data Recorded
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The following line is included if you wish to document the NEWS score.

NEW Score	No Data Recorded
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NEWS Calculator

- For information on how to add data to a template - see *Vision+ Data Entry* <http://www.inpshelp.co.uk/DLM490/Visionplus/index.htm#48822>.



- After recording information you must click **Save & Close**
- All information recorded on the template is written back to the patient's journal.

Examples of the Sepsis Templates

Below are some examples of the Sepsis template and how the content varies depending on the patient's age, observations etc.

Non-pregnant adult, no triggering codes

Sepsis Screening for AHUJA, PATVEER KAUR [06/06/1949]

Home Appearance

Save & Close File Codeset Show Indicators Indicator Logic Wed 13/07/2016 Previous Tab Next Tab

History Sepsis NEWS

Consider screening in:

- Patients for whom you are considering antibiotic prescription or stewardship discussion
- Patients with "Flu"
- Patients with gastroenteritis
- the unwell patient without clear cause.

Particular risk factors: immunosuppression, age over 75, recent trauma or surgery, invasive devices

Then think "Could this be an infection?"

**For example:
Pneumonia, Urinary Tract Infection, Abdominal pain or distension, Meningitis, Cellulitis / septic arthritis / infected wound / device**

Respiratory rate	No Data Recorded		
SpO2	No Data Recorded		
Temperature	27/06/2016: O/E - core temperature	37.8	
Systolic BP	09/02/2016: O/E - Systolic BP reading	170	
Heart rate	No Data Recorded		
Level of consciousness	No Data Recorded		
Confusion	No Data Recorded		
Oliguria	No Data Recorded		
Anuria	No Data Recorded		
Rash, cyanosis or mottling	No Data Recorded		
Rigors	No Data Recorded		
Trauma / Surgery	No Data Recorded		
Wound / skin infection / abscess	No Data Recorded		
Immunosuppression - Drugs	No Data Recorded		
Immunosuppression - Conditions	No Data Recorded		

◀ Previous Next ▶ No Data Recorded Previous Tab Next Tab

Non-pregnant adult, no triggering codes

Non-pregnant adult, red flag alerts

Red Flag Sepsis
This is time critical, immediate action is required.

Immediate actions

- Dial 999
- Arrange blue light transfer
- Administer oxygen to maintain saturations >94%
- If estimated transfer time over 1 hour administer antibiotic intravenously

Communication

- Write a brief clear handover including observations and antibiotic allergies where present
- Ensure Paramedics pre-alert as 'Red Flag Sepsis'

Consider screening in:

- Patients for whom you are considering antibiotic prescription or stewardship discussion
- Patients with "Flu"
- Patients with gastroenteritis
- the unwell patient without clear cause.

Particular risk factors: immunosuppression, age over 75, recent trauma or surgery, invasive devices

Then think "Could this be an infection?"

For example: Pneumonia, Urinary Tract Infection, Abdominal pain or distension, Meningitis, Cellulitis / septic arthritis / infected wound / device

Respiratory rate	No Data Recorded	
SpO2	No Data Recorded	
Temperature	27/06/2016: D/E - core temperature	37.8
Systolic BP	09/02/2016: D/E - Systolic BP reading	170
Heart rate	No Data Recorded	
Level of consciousness	No Data Recorded	
Confusion	No Data Recorded	
Diagnosis	No Data Recorded	
Anuria	13/07/2016: Anuria	

Non pregnant adult, red flag alerts

Non-pregnant adult, amber flag alerts

Sepsis Screening for ANJJA, PATVEER KAUR [06/06/1949]

Home Appearance

Save & Close File Codaset Default Read Code Show Indicators Undo Last Entry Controls Indicator Logic Wed 13/07/2016 Previous Tab Next Tab

History Sepsis NEWS

Sepsis possible

Use clinical judgment to determine whether patient can be managed in community setting

If treating in the community, consider:

- planned second assessment
- brief written handover to colleagues
- specific safety netting advice

Consider screening in:

- Patients for whom you are considering antibiotic prescription or stewardship discussion
- Patients with "Flu"
- Patients with gastroenteritis
- the unwell patient without clear cause.

Particular risk factors: immunosuppression, age over 75, recent trauma or surgery, invasive devices

Then think "Could this be an infection?"

For example:
Pneumonia, Urinary Tract Infection, Abdominal pain or distension, Meningitis, Cellulitis / septic arthritis / infected wound / device

Respiratory rate	No Data Recorded	
SpO2	No Data Recorded	
Temperature	27/06/2016: D/E - core temperature	37.8
Systolic BP	09/02/2016: D/E - Systolic BP reading	170
Heart rate	No Data Recorded	
Level of consciousness	No Data Recorded	
Confusion	No Data Recorded	
Oliguria	13/07/2016: Oliguria	
Anuria	No Data Recorded	
Rash, cyanosis or mottling	No Data Recorded	
Rigors	No Data Recorded	
Trauma / Surgery	No Data Recorded	

Previous Next 13/07/2016: Oliguria Previous Tab Next Tab

Non-pregnant adult, amber flag alerts

Child 5-12 years, no alerts

Sepsis Screening for ALLIBONE, KEIRAN [24/06/2008]

Home Appearance

Save & Close File Codeset Show Indicators Indicator Logic Controls

Wed 13/07/2016 Previous Tab Next Tab

History Sepsis NEWS

Consider screening in:

- Patients for whom you are considering antibiotic prescription or stewardship discussion
- Patients with "Flu"
- Patients with gastroenteritis
- the unwell patient without clear cause.

Particular risk factors: immunosuppression, age over 75, recent trauma or surgery, invasive devices

Then think "Could this be an infection?"

For example:
Pneumonia, Urinary Tract Infection, Abdominal pain or distension, Meningitis, Cellulitis / septic arthritis / infected wound / device

Respiratory rate	No Data Recorded
SpO2	No Data Recorded
Temperature	No Data Recorded
Heart rate	No Data Recorded
Capillary refill time	No Data Recorded
Level of consciousness	No Data Recorded
Confusion	No Data Recorded
Lethargy	No Data Recorded
Drowsiness	No Data Recorded
Oliguria	No Data Recorded
Anuria	No Data Recorded
Rash, cyanosis or mottling	No Data Recorded
Leg pain	No Data Recorded
Cold hands or feet	No Data Recorded

< Previous Next No Data Recorded Previous Tab Next Tab

Child 5-12 years, no alerts

Infant, no alerts

Sepsis Screening for BATRA, BRAHMDEV SINGH [17/02/2015]

Home Appearance

Save & Close File Codeset Show Indicators Indicator Logic Controls

Wed 13/07/2016 Previous Tab Next Tab

History Sepsis NEWS

Consider screening in:

- Patients for whom you are considering antibiotic prescription or stewardship discussion
- Patients with "Flu"
- Patients with gastroenteritis
- the unwell patient without clear cause.

Particular risk factors: immunosuppression, age over 75, recent trauma or surgery, invasive devices

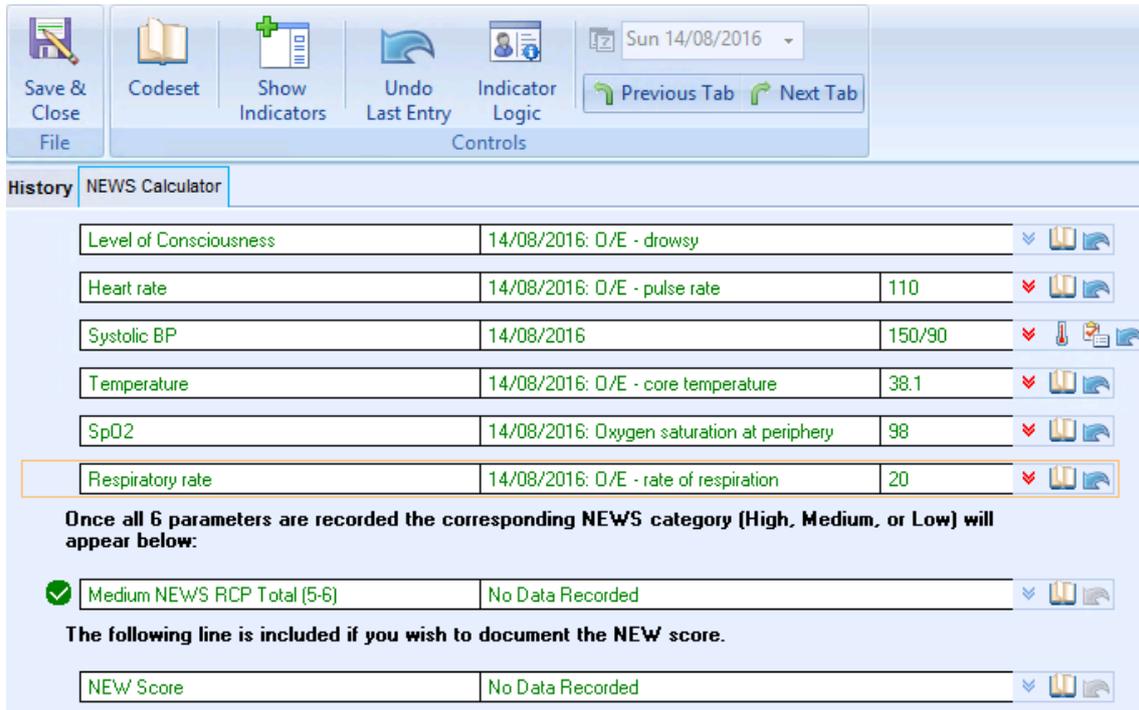
Then think "Could this be an infection?"

For example:
Pneumonia, Urinary Tract Infection, Abdominal pain or distension, Meningitis, Cellulitis / septic arthritis / infected wound / device

Respiratory rate	No Data Recorded	
SpO2	No Data Recorded	
Temperature	No Data Recorded	
Heart rate	No Data Recorded	
Capillary refill time	No Data Recorded	
Level of consciousness	No Data Recorded	
Lethargy	No Data Recorded	
Drowsiness	No Data Recorded	
Oligouria	No Data Recorded	
Anuria	No Data Recorded	
Rash, cyanosis or mottling	No Data Recorded	
Leg pain	No Data Recorded	
Cold hands or feet	No Data Recorded	
Pale or flushed	No Data Recorded	

Infant, no alerts

NEWS Score completed, medium result



The screenshot shows the NEWS Calculator interface. The top toolbar includes 'Save & Close', 'Codeset', 'Show Indicators', 'Undo Last Entry', 'Indicator Logic', and navigation buttons for 'Previous Tab' and 'Next Tab'. The date is set to Sun 14/08/2016. The main area displays a table of parameters:

Level of Consciousness	14/08/2016: O/E - drowsy	
Heart rate	14/08/2016: O/E - pulse rate	110
Systolic BP	14/08/2016	150/90
Temperature	14/08/2016: O/E - core temperature	38.1
SpO2	14/08/2016: Oxygen saturation at periphery	98
Respiratory rate	14/08/2016: O/E - rate of respiration	20

Below the table, a message states: "Once all 6 parameters are recorded the corresponding NEWS category (High, Medium, or Low) will appear below:"

Medium NEWS RCP Total (5-6)	No Data Recorded
-----------------------------	------------------

The following line is included if you wish to document the NEWS score.

NEWS Score	No Data Recorded
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NEWS Score completed, medium result

Further Information

For further information, please refer to:

- *Sepsis Trust Toolkit* <http://sepsistrust.org/clinical-toolkit/>
- *NICE NG51* <https://www.nice.org.uk/guidance/ng51>
- *RCP NEWS (National Early Warning Score)*
<https://www.rcplondon.ac.uk/projects/outputs/national-early-warning-score-news>