EMResource®

Quick Reference Guide

Using the NEDOCS Saturation Score

Overview

Saturation Scores allow hospitals to calculate the degree of saturation or overcrowding in their Emergency Departments (EDs) so the facility can accurately communicate its availability and, potentially, reduce overcrowding.

EMResource offers the National Emergency Department Overcrowding Score (NEDOCS), a saturation scoring tool that takes a variety of factors into account, including the number of ED patients, beds, and admissions. It also measures ED throughput—the time it takes from the moment the patient entered the ED to admission or discharge.
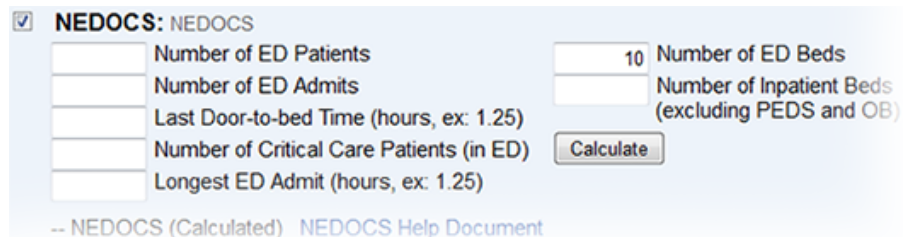
Updating Scores

When you update a NEDOCS status, the system asks you to enter numbers into seven fields. To get an accurate calculation, you must enter a number in each field.

EMResource assumes the questions are being answered based on current conditions and automatically notes the date and time the score is calculated and saved.

To Update a NEDOCS Score

1. Open the *Region Default* page or another *View*.

2. Locate the resource and click the value in the NEDOCS column. The *Update Status* page opens.

3. Select the **NEDOCS** check box, if it is not already selected.

4. Enter numeric values in the seven fields in the form.

5. Click **Calculate**. The score appears below the form fields.

6. Click **Save**. The view re-opens.

To View the Calculated Score

Once computed and saved, the calculated score appears in *View* and resource details pages when the status is configured to do so.

If the score is configured to expire, the system displays the expired saturation score as dashes.

Configuration

Your administration has a number of options when configuring a saturation score status type. Note, for example, in this example the saturation scores are color coded. Your organization can use the default set of colors or specify their own for each range.

The calculated score also shows a brief description, such as **168 - Severe**. Your organization may have opted to remove these descriptive labels. In these cases, the score appears and is color coded, but without an associated descriptive label.

More Information

After you enter a value in the **Number of ED Beds** field for a specific resource, the system retains that information. That value automatically appears in the field the next time you update this status.

You can continue to change values in the form and recalculate the score. Click **Save** to retain your currently entered values.

If the calculation results in a negative number, the score is considered to fall in the **Normal / ED is not busy** range and is labeled as such.

Scale

The following table shows the scale for NEDOCS. By default, these ranges have already been color-coded in EMResource to aid your users in quickly detecting the current level of overcrowding. The calculated score appears in the color specified for that score.

Scale	Definition	Default Color	Default Label
00-20	ED is not busy	Green	Normal
21-60	ED is busy	Blue	21-50 Normal 51-60 Busy
61-100	ED is extremely busy but not overcrowded	Yellow	Busy
101-140	ED is overcrowded	Purple	Overcrowded
141-180	ED is severely overcrowded	Red	Severe
181 and higher	ED is dangerously overcrowded	Black	Disaster

Fields and Calculation

EMResource uses the following formula and the data in the form's fields to calculate NEDOCS.

$$NEDOCS = 85.8(C/A) + 600(F/B) + 13.4(D) + 0.93(E) + 5.64(G) - 20$$

You need to determine the following values for entry into the NEDOCS form.

Field in Form		Description
A	Number of ED Beds	Total number of ED beds available or staffed, including hallways and chairs
B	Number of Inpatient Beds	Total number of inpatient beds (excluding PEDS and OB)
C	Number of ED Patients	Total number of ED patients, including hallways, chairs, admissions, and waiting room
D	Number of Critical Care Patients (in ED)	Total number of critical care patients in the ED (1:1 ratio, ventilators, psych, or ICU patients)
E	Longest ED Admit (in hours)	Longest admission time waiting in the ED; 15 minute increments; example: enter 2.25 for 2 1/4 hours
F	Number of ED Admits	Total number of ED admissions waiting in the ED (that is, waiting for an inpatient bed)
G	Last Door-to-bed Time (in hours)	Door-to-bed time for the last ED patient to get an ED bed; 15 minute increments; example: enter 2.25 for 2 1/4 hours

For more information, contact your Customer Success Manager or the support desk at 888-735-9559; in the support phone system, press 1 for Client Application Support and then 6 for EMSystems.