Huntleigh HEALTHCARE

Sonicaid™ Centrale

Release 2

Version 6

User Manual

Document No 725301-5

DIAGNOSTIC Products Division

1 Introduction

This document describes the use of the Sonicaid Centrale II system, this is known as Dopplex Centrale II in some markets. It does not include system configuration, set-up or installation information – refer to the System Administrator manual for further information on these aspects of the system.

1.1 Cautions & warnings

3rd Party Software
Sonicaid Centrale is designed to run as a stand-alone system on a dedicated server. Under no circumstances must any 3rd party software be installed on the system without prior approval, in writing, from Huntleigh Healthcare. In the event of unauthorised software being installed, Huntleigh Healthcare cannot be held responsible for resulting data corruption, misrepresentation, loss or any other failing of the system.

While remote access clients may have 3rd party software installed, it is recommended that running multiple applications concurrently should be avoided, or kept to a minimum. If system resources are overloaded, data may be lost or corrupted. Huntleigh Healthcare cannot accept liability for any such loss or resultant problems or outcomes.

System back-up
As with any software system, crashes may occur at any time, and may result in loss or corruption of clinical data. Similarly, hardware failures may result in loss or corruption of data. While every effort is made to minimise this risk, it is strongly recommended that back-up protection measures are employed. A range of back-up options are available as upgrades – contact your supplier for details.

Clinical management
Sonicaid Centrale II is not a diagnostic tool – it simply presents information. As with any computer / software system, bugs or faults may result in incorrect information being displayed. If any doubt as to fetal or maternal condition arises through using the Sonicaid Centrale II system, alternative measures must be undertaken immediately to ensure appropriate clinical management.

FetalCare Analysis Intended Use
The intended use of FetalCare analysis is for the computerised analysis of antepartum cardiotocograms in pregnancies from 26 weeks gestation onwards (32 weeks in the USA). It can be used on women who are experiencing Braxton-Hicks contractions but is not intended for use in established labour as the fetus is then exposed to additional factors such as labour contractions, pharmacological agents, and epidural anaesthesia.

The analysis provided by FetalCare is intended as an adjunct to - and not a replacement for - the physician's visual assessment of a cardiotocogram. As such, FetalCare analysis is an aid to clinical management but not a diagnosis, which remains the responsibility of an appropriately qualified physician. Indeed, both the physician's visual assessment of a cardiotocogram and the analysis provided by FetalCare should be considered within the context of a full clinical assessment before decisions are made regarding management. Such an assessment may include further tests such as umbilical blood flow velocity waveforms or biophysical profiling.

STAN monitoring
The STAN functionality is an aid to clinical management but not a diagnosis, which remains the responsibility of an appropriately qualified physician. Sonicaid Centrale II is merely presenting data from the STAN monitor, and therefore, any clinical significance of the data is down to the user, who should refer to the STAN documentation and Neoventa's guidelines.

System Security
In the event of unauthorised access ('hacking') into the system or through any other malicious actions, data may be lost or corrupted. The standard system has no protection against unauthorised access. It is strongly recommended that the optional Security & Audit package is purchased. This provides reasonable protection against such unauthorised use through standard user name / password access control, together with a full audit trail of who did what, when & from where. Huntleigh Healthcare cannot accept liability for any such actions or resultant damage or outcomes.

Data protection & patient confidentiality
Due to the flexible, user configurable nature of Sonicaid Centrale II, the system administrator is responsible for ensuring compliance with any local, national or other regulatory requirements relating to patient information, the storing, displaying and archiving of such data, and access to such data.

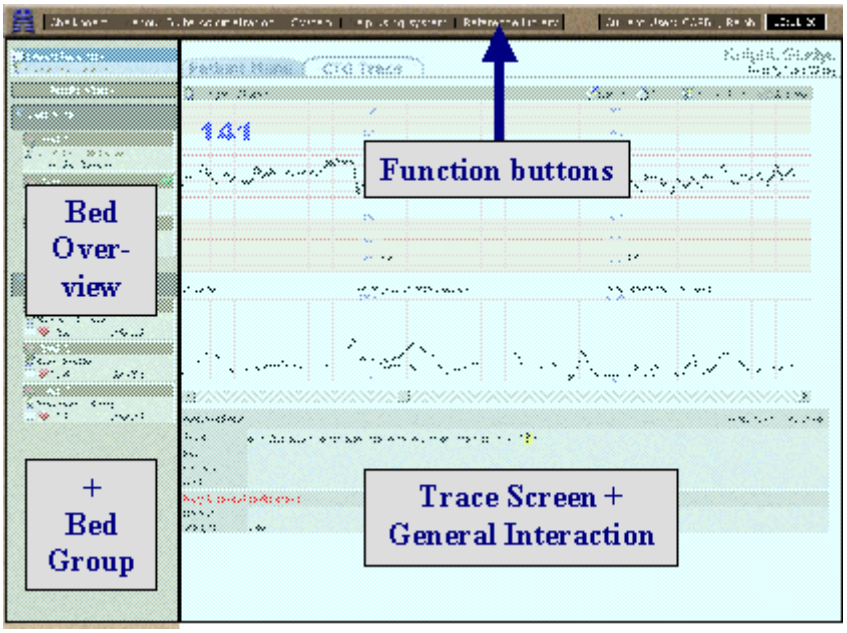
Data integrity
At all times, clinical practitioners must retain full responsibility for appropriate management of any situation. Sonicaid Centrale II is designed as an information system intended to present information to assist clinicians in delivering the highest possible standard of care, not to replace established clinical practice. All users are responsible for ensuring the accuracy of entered data, and for confirming that it has been correctly logged.

Date / Time
Traces, data entry, etc. are time stamped using the system clock. If the system clock is incorrectly set, the logged times will reflect this error. The user is responsible for checking that the date & time are correct – this is shown in the top right-hand corner of the screen at all times. If time is incorrect, advise the system administrator immediately.

2 Getting started

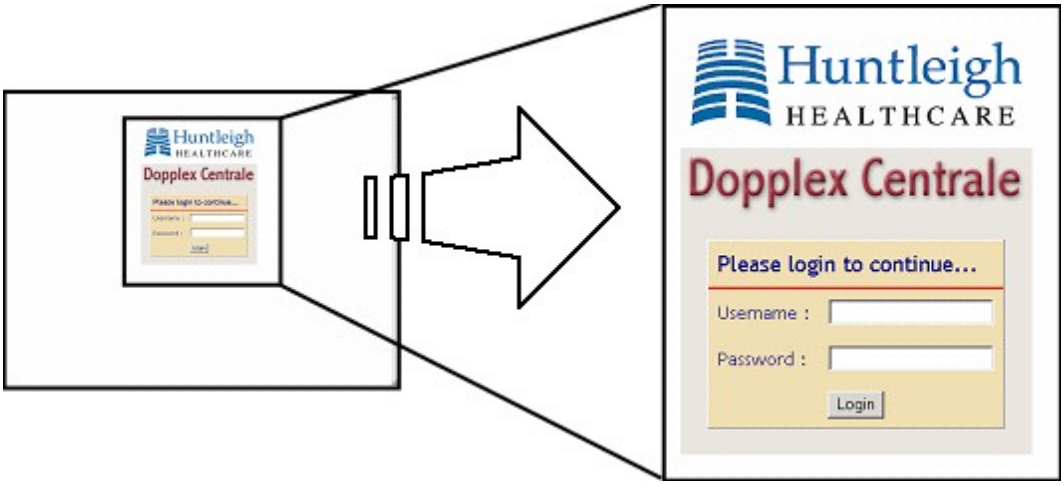
Sonicaid Centrale II uses our own unique user interface, called ‘Point & Click’ to make it very easy to use in the clinical environment with the minimum of training.

The screen is divided into 3 main areas as shown below:



3 System Operation

3.1 Logging on (Upgrade Option)



To log-on, enter your user name and password and click on 'Login' or press the 'enter' key.

CAUTION: *Type in your details carefully – if you make a mistake, you can re-try up to 3 times. After 3 incorrect entries, the access terminal will be locked out.*

If the terminal is locked out, or you forget your user name or password, contact your system administrator for assistance.

IMPORTANT: Your user log-on gives you access to confidential patient information. While logged on, you are responsible for preventing unauthorised access. Do not leave the terminal unattended. You must log off before leaving the terminal. If you are called away in an emergency, however, the system will automatically log you off after a period of inactivity set by your administrator.

IMPORTANT: The automatic log-off will not work if you leave a dialogue box open – the system will remain active under your log-on name indefinitely. To protect against unauthorised access, you must ensure that dialogue boxes are closed before leaving an access terminal.

3.1.1 Logging off

To log off, click on your user name (top right corner of screen). A drop down menu will appear:

Click on 'Logout' to complete logging out.

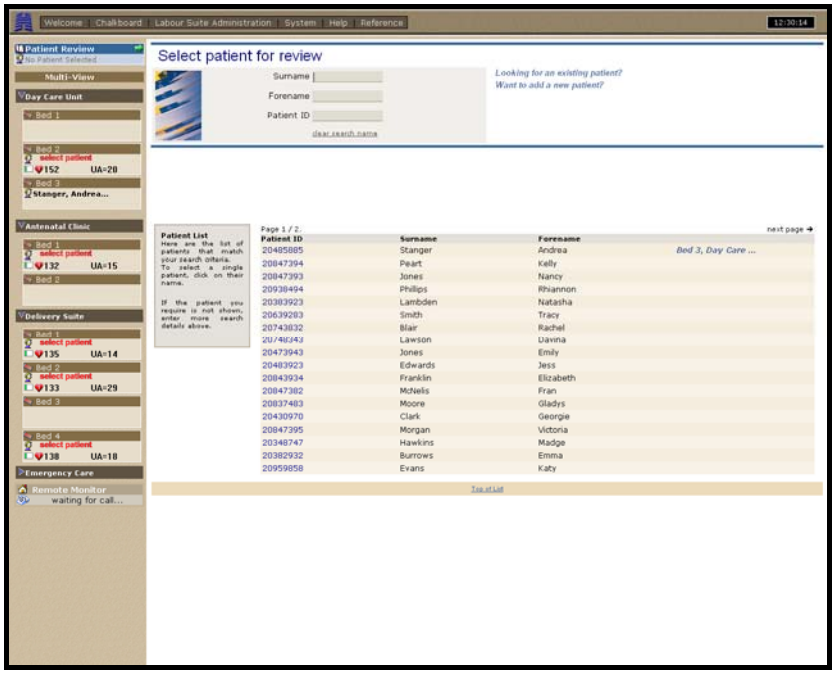
3.1.2 Changing your password

To change your user password, click on 'Change password' in the logging off drop-down menu (see section 3.1.1).

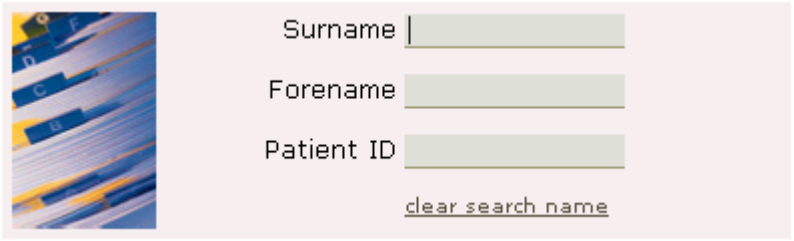
Enter your current & new password details in the form & click on 'Save' to activate your new password.

3.2 Booking patients in

To book a patient into a bed, simply click on the relevant bed. If the bed is not displayed, open the relevant bed-group to access the bed (see section 3.3).



Proceed as detailed below.



Enter the patient's surname. As each letter is typed, the database is searched, progressively 'zeroing in' on the correct patient, if they already exist in the database.

All patients found with the entered surname will be listed on the screen, together with their Forename and Patient ID.

Alternatively, patients can be located by entering the patient I.D., or by paging through the database using the 'next page'/'previous page' buttons:

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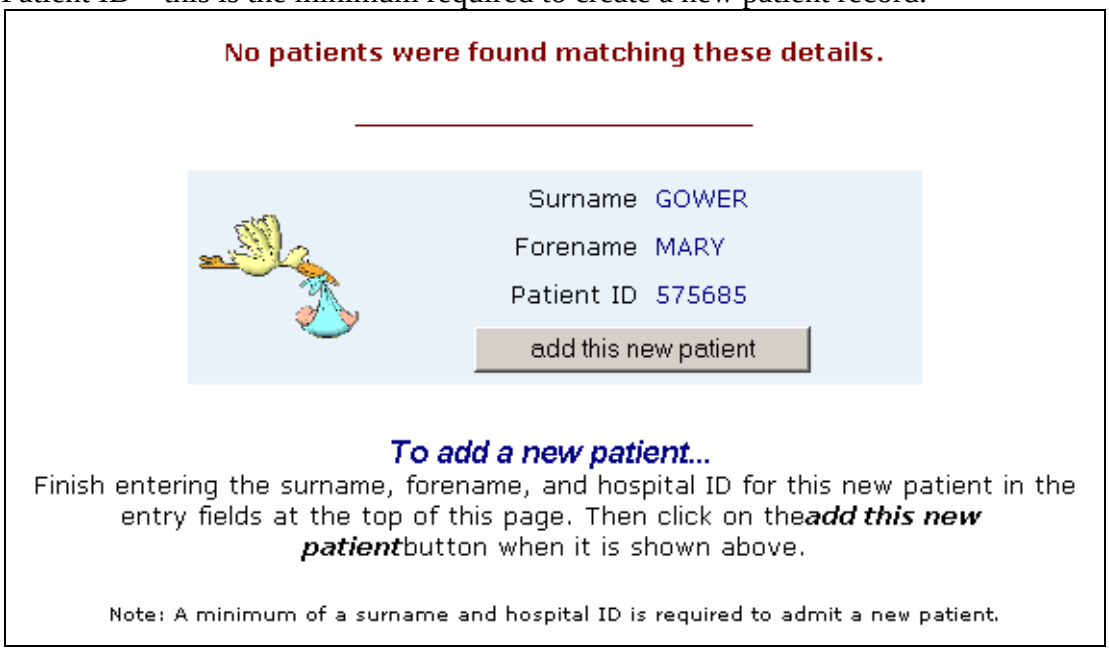
Patient ID	Surname	Forename
3465345	Pietersen	
12465	Rue	Emily
8768574	Sagoo	Mary

'Point & Click' on the correct patient entry to complete booking the patient in.

If no matching record is found, simply complete entry of Surname, Forename and Patient ID – this is the minimum required to create a new patient record.

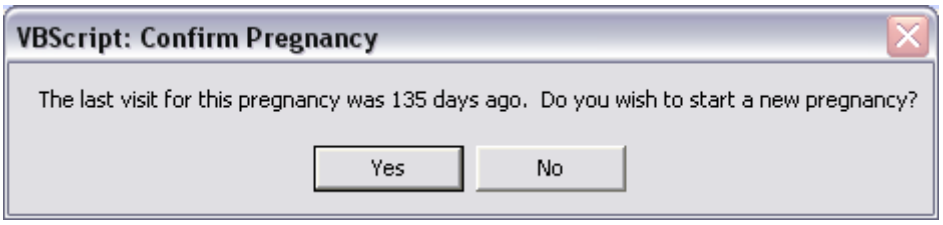


Click on 'add this new patient' to create the patient in the database and to book her into the bed.

Note that where Sonicaid Centrale II is interfaced to a hospital information system (HIS) or patient admission system, the technique for searching for patients may vary.

As each installation is customised to local requirements, contact your system administrator for full details on how this has been set up.

When an existing patient record is retrieved, if the elapsed time since the last note was entered for this patient is greater than 126 days, a dialogue box will appear:



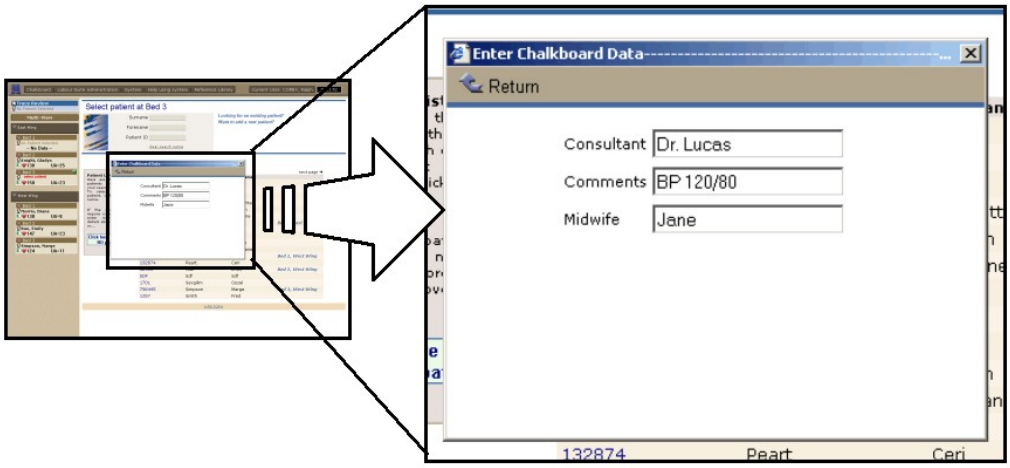
Select 'Yes' or 'No' as appropriate.

If the chalkboard option is installed, a dialogue window will appear for entering her details into the chalkboard. See below for details.

If this option is not installed, the booking-in process is complete and the patient is automatically logged into the bed. Check that her name* is displayed in the correct bed on the left hand side of the screen.

*Note: for confidentiality reasons, the bed may only display the initials, id number or 'patient selected'. This is a system administrator set-up option.

3.2.1 Entering chalkboard details during booking

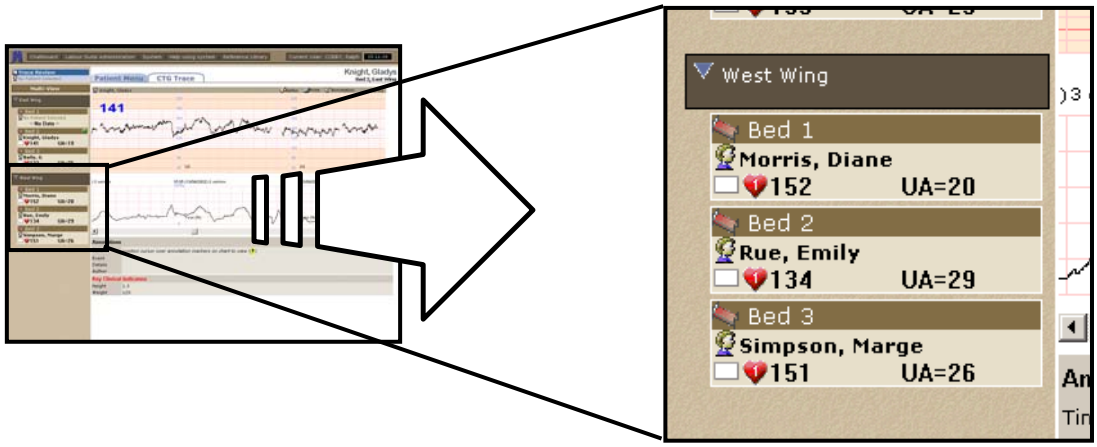


In the dialogue window, enter the relevant information into each field. Note that the number of fields, the field names and the content of each field are determined by your system administrator.

Save or cancel to continue.

Booking the patient into a bed is now complete.

3.3 Bed Management



All beds on the system are displayed in the 'bed column'. This view is maintained at all times, irrespective of what is shown in the main area of the screen, thus providing instant, easy access to all beds – just 'point & click' to select one. Each bed is identified by a unique identifier - either a name or a number.

The number of beds that can be viewed simultaneously in this column will depend on the size & resolution of each viewing screen.
Within each bed frame, various data / messages are displayed reflecting the current status of the bed as detailed below:

A typical active bed is displayed as shown below:

This includes the following elements:

- **'Bed B'** – this is the bed name as defined by the system administrator
- '➡' - this indicates that this bed is currently selected in the main screen for single trace view or patient information review / entry
- **'Watson, Mary'** – this is the name of the patient currently booked into this bed. Note that there are a number of options for this:
  - Display patient name as shown in above example – note that if this exceeds 17 characters in length it will be truncated.
  - Display patient initials only (ie. In the above example, Mary Watson would be shown as 'M.W.')
  - Display patient i.d. number.
  - Display 'Patient selected' – this option is selected where patient confidentiality is such that none of the above options are appropriate.
  - The above options are selected by your system administrator
- 'select patient' – if this is displayed in place of the patient identifier (name, intials, etc.) this indicates that the system is receiving data from a fetal monitor but the patient has not yet been booked in (see sections 3.2 & 3.5)
- ▮▮▮ - this is the signal quality indicator reflecting the signal quality data received from the fetal monitor.
- '♥ 123' - this is the FHR for a singleton fetus or for FHR1 in a twins pregnancy.
- '♥ 134' – this is FHR2 for the second fetus when twins monitoring
- '♥ - - -' – (also applies to FHR2 where applicable) this indicates either that the fetal monitor is active (ie. switched on and connected to the system) but is not currently in use, or that there is loss of signal on FHR1 (or FHR2).
- 'UA = 16' – this is the uterine activity, or contractions, data received from the fetal monitor. If the UA signal from the fetal monitor goes outside the normal range, 'UA high' or 'UA low' is displayed as appropriate.
- When the fetal monitor is switched off, or if contact with the monitor is lost (eg. loose cable connection), after a few seconds, the message '**CTG disconnected**' is displayed for 30s, after which it clears and the trace is assumed to have been stopped. The trace record will automatically be saved to the patient file. If this bed is currently being viewed in the main viewing screen, this will revert to the patient menu screen.

3.4 Patient review

The 'Patient Review' frame is used in the same way as a bed to review records for patients not currently on the unit. Patients can be 'booked' into or out of this review frame in the same way as a normal bed.

Note, however, that this review frame is local to the access terminal used. This allows different users, working on different client access terminals, to review different patients at the same time.

Once a patient is 'booked in', the Patient Menu screen is shown for this patient. From this screen, notes, databases and stored traces can be edited / viewed in the same way as for patients booked into a bed.

3.5 Starting a CTG recording session

CTG trace recording is initiated simply by turning the fetal monitor on, ensuring it is connected to the system via the wall socket.

The CTG data will appear in the bed frame as shown below:

CAUTION:
In the event of intermittent signal loss between the fetal monitor and the system, the bed frame data may show the heart symbol but no data, & may alternate with the message 'CTG Disconnected'. In this event, check the cable connection between the fetal monitor and the wall socket. Note that data will be lost until the connection problem is resolved.

Once the CTG is started, the patient must be booked into the relevant bed on the system to enable the trace to be viewed and saved to the database.

Note: the data is stored in a temporary file until the patient is booked into the bed. If the patient has still not been booked in when the fetal monitoring is discontinued, or after 24 hours continuous monitoring, the data will be saved to a back-up file. This data is retrievable but not by normal users. Contact your service provider for assistance.

3.6 Ending a CTG recording session

The CTG trace can be stopped in one of two ways:

- Switch the CTG off – after a few seconds the following will be displayed in the bed frame:

  After ~30 seconds the trace will automatically be stopped and archived. If this bed is currently selected as the single trace view, this will change to the patient menu screen for this patient.

- Discharge the patient from the bed – refer to 'Patient Menu' section for details.

- Transfer the patient – refer to **section 3.9.1.2**

3.7 Ambulatory / mobile monitoring (Upgrade option)

If this option is installed, you can use Sonicaid Centrale II, in conjunction with the Fetal Assist portable fetal monitor, for CTG monitoring while keeping the patient mobile, or for continuous monitoring during patient transfer, for example, from ward to theatre.

In Sonicaid Centrale II, one or more beds, typically in a separate bed group, will have been assigned as 'virtual beds' for use with this option. There will be one virtual bed per Fetal Assist wireless network channel.

3.7.1 wLAN System configuration

The wireless network system comprises a number of Fetal Assist CTG units, each equipped with a wireless network card.

Actual operating range for each receiver is subject to local variables including the building construction.

3.7.2 Wireless networking operation

In normal use, while the Fetal Assist remains in range, management of these 'virtual beds' within Sonicaid Centrale II is no different from any other bed.
However, specific messages may be displayed in the bed frame under certain conditions as detailed below:

3.7.2.1 Loss of signal

In the event of loss of signal between the Fetal Assist and Sonicaid Centrale II while monitoring, trace updating will cease and the following 'Out of range' message will appear in the bed frame:

At the Fetal Assist end, the user will be informed that the unit is out of range. However, trace recording continues in the Fetal Assist, with the data being stored locally.

If loss of signal continues for more than 25 minutes, the 'Out of Range' message changes from black text to flashing red text:

If contact is re-established within the 30 minutes limit, the stored data in the Fetal Assist is automatically uploaded to Sonicaid Centrale II, the trace on the screen is updated and monitoring continues without any loss of data or discontinuity in the trace.

If contact is not restored within 30 minutes, the trace will be stopped and saved locally on the Fetal Assist, with appropriate user messages to inform the user.

In this event, the section of trace already received by Sonicaid Centrale II will also be saved as a separate trace. In the bed frame view, the 'CTG disconnected' message will appear as per normal end of trace operation (see section 3.6). The full trace, saved on the Fetal Assist, can subsequently be transferred into the Sonicaid Centrale II database via phone.

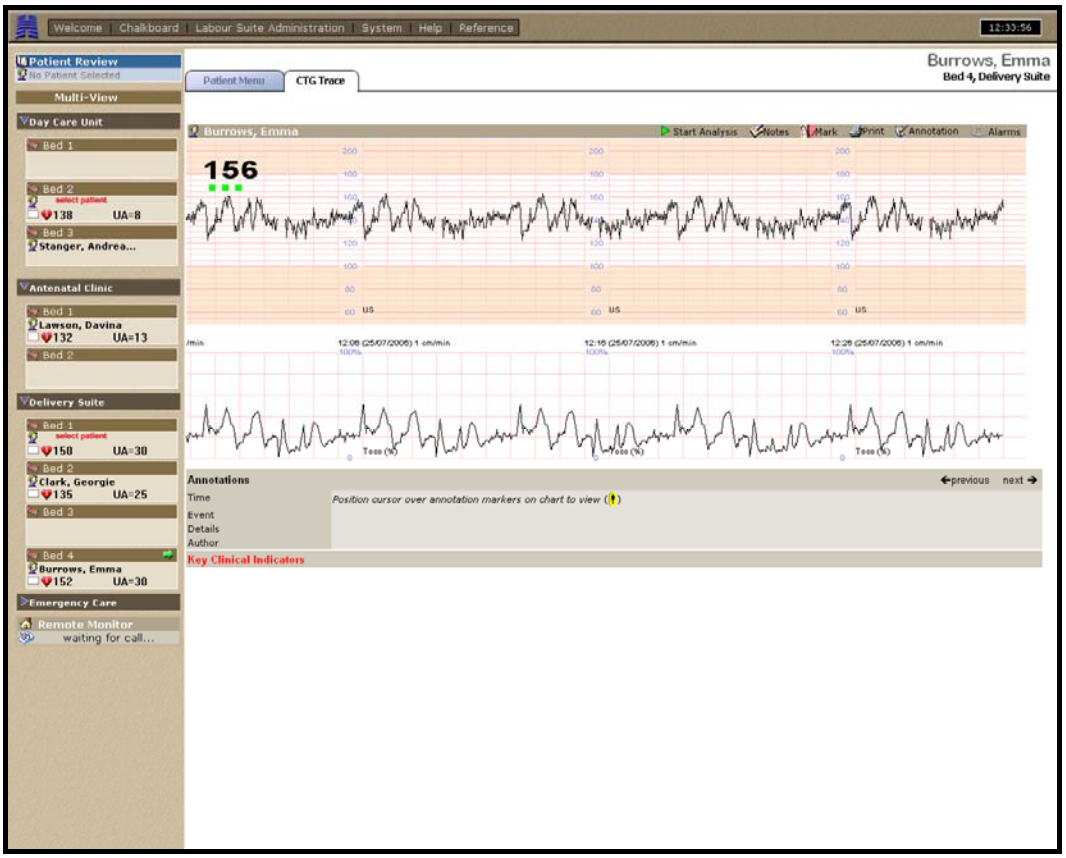
Refer to the Fetal Assist user manual for further details on wireless network operation.

3.8 Viewing CTGs

Traces can be viewed for any bed at any time, while the CTG is active, simply by clicking on the bed. If a bed is not currently displayed, the bed group to which it belongs can be opened simply by clicking on the bed group header bar.

Clicking on the bed will display a single trace view for that bed only. To view more than one bed simultaneously, see 'Multi-bed view' below.

3.8.1 Single trace view



Note, that the exact data displayed, and the format, will vary depending on the make/model of fetal monitor connected, and the sensors used.

The various elements of the trace screen are detailed below:

Tabs for selecting other screens are displayed above this – these will change depending on current status.

For singleton traces, the FHR is displayed either in black digits and as a black trace, or blue digits & a blue trace, depending on make/model of fetal monitor. For twins, FHR1 data is in black, FHR2 data in blue. The green blocks indicate signal quality / strength, reflecting the signal condition indicator on the CTG.

Date / Time
The date & time are shown on the trace, between the FHR & contractions scales. This is repeated at 10 minute intervals.

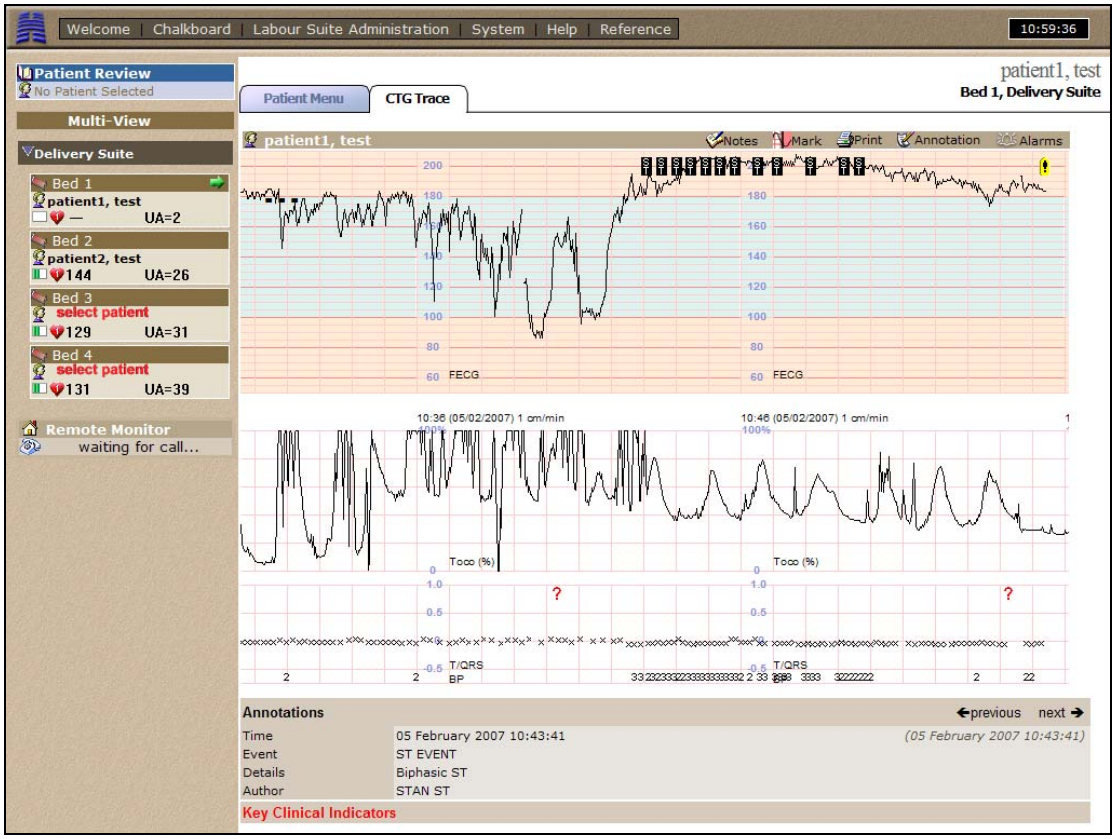
Warning:
If traces are viewed from an access terminal on which the date and/or time are incorrectly set, the dates & times shown on the displayed trace will be wrong.

FHR mode
At the bottom of the FHR channel, mode labels indicate whether ultrasound (U/S) or fetal ECG (FECG) is being used to collect the FHR data. This is repeated at 10 minute intervals.

Contractions mode
On the contractions scale, a mode label indicates whether an external contractions transducer (Toco (%)) or an Intra-Uterine Pressure catheter (IUP (mmHg) is being used to measure contractions activity. The units for IUP can be changed to kPa if required – refer to your system administrator.

3.8.2 Single trace view – STAN functionality enabled

The STAN functionality is an aid to clinical management but not a diagnosis, which remains the responsibility of an appropriately qualified physician. Sonicaid Centrale II is merely presenting data from the STAN monitor, and therefore, any clinical significance of the data is down to the user, who should refer to the STAN documentation and Neoventa's guidelines.



As with the single trace view in section 3.8.1, all the elements of the trace screen remain as standard, but with the added STAN functionality. Below the TOCO area lies the STAN graph section. The STAN graph section shows information regarding:

T/QRS data

The T/QRS marks are crosses drawn on the STAN grid area. They represent the relative height of the T wave compared to the QRS amplitude in an average complex computed from the last 30 approved beats. Valid values fall in the range -0.30 to 0.90.

NOTE: The scaling of the STAN area of the trace screen is different to that of a STAN monitor. Users who are familiar with STAN should be aware that data will be scaled differently on Sonicaid Centrale II and could give the impression that the ST rise is lower than it actually is.

Biphasic (BP) value

This is a number 0, 1, 2 or 3. Note that if the number is zero, it is not plotted.

Events

There are three types of event:

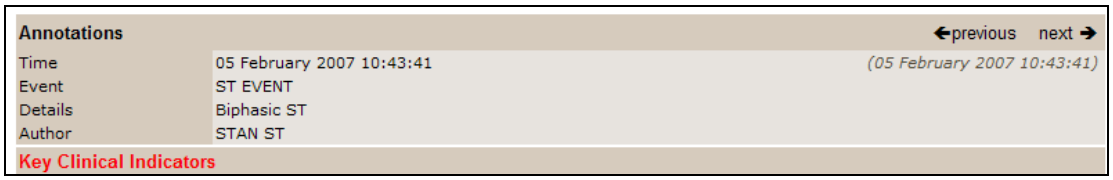
1. **User event**

   When a user event is entered, the graphic will be displayed at the top of the CTG trace view, as well as the event details being shown below the STAN graph section

2. **ST events**
When an ST event occurs, the ST graphic ( ) will be displayed at the top of the CTG trace view, as well as the ST event details being shown below the STAN graph section. In addition to the ( ) graphic a warning sound will be played for each new ST Event, alerting the user of its presence. This is slightly different to what happens on the STAN monitor, where a sound is played and a dialog appears which has to be manually cleared.

3. **Other events**
When an event occurs, the graphic ( ) will be displayed at the top of the CTG trace view, as well as the event details being shown below the STAN graph section.

NOTE: There is a difference in the way that the event log is displayed between a STAN monitor and Sonicaid Centrale II. On the monitor, the event log can be seen at the same time as the CTG, so the details associated with any event markers on the trace can be seen without changing view. On Sonicaid Centrale II, the event markers are shown on the CTG, but the entire event log can only be viewed by changing to the **Patient Notes** area of the **Patient Menu** screen (See 3.9.5).
Specific event data can be viewed by placing the mouse icon over the event graphic (or) and viewing the information in the section under the graph data, as highlighted below.



NOTE
If there is a break in the T/QRS data on the STAN graph, and a red question mark has appeared on the STAN graph section, then a communication error has occurred.

STAN monitor modes

A STAN monitor can be set to one of three protocol modes:
- STAN ST
- CTG
- CTG extended (CTG + FSpO2)

When CTG or CTG extended are set, the STAN monitor behaves as a HP50 monitor and the additional STAN data is not sent. In these modes, Sonicaid Centrale II behaves as in section 3.8.1 of this document.

3.8.3 Trace scrolling

After ~25 minutes, the trace will automatically start to scroll from right to left, with new data appearing on the right-hand side of the screen.

To scroll backwards / forwards to review traces, simply 'drag' the trace using the mouse.

If you drag the mouse pointer off the left / right edge of the trace, it will increase the scroll speed and will continue to the end / start of the trace. The further the pointer is moved off the end, the faster the scroll speed.

If the trace is scrolled to move the live trace point off-screen, the trace will automatically scroll back to the live trace point 60 seconds after stopping scrolling activity.

3.8.4 Function bar

The following functions are all selected by clicking on the appropriate button on the function bar.

3.8.5 FHR analysis (option)

This option is installed if '▶ Start Analysis' appears on the function bar.
A full description of the analysis, its use and how it is adopted into clinical practice is beyond the scope of this document. Refer to the 'FetalCare' documentation available from your supplier for full information.

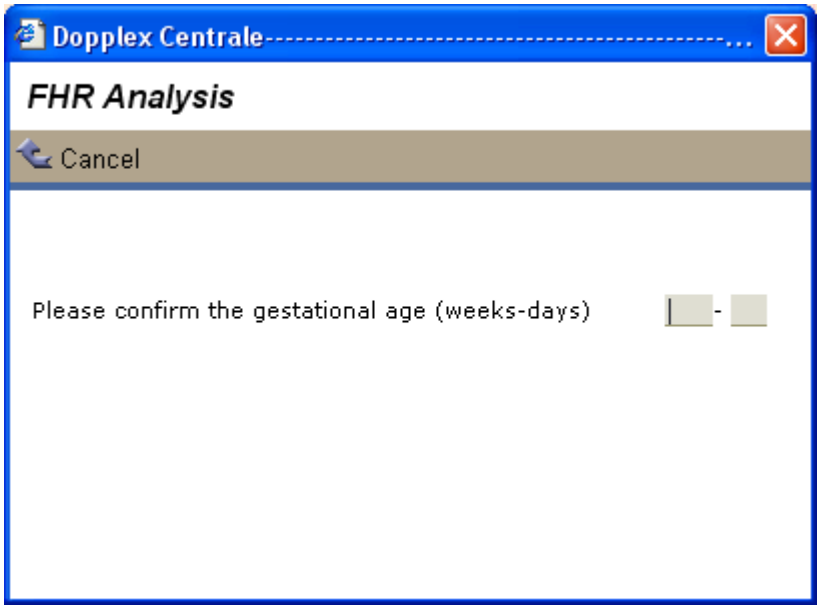
It is important that users are fully trained on this before using this feature.

Important: FetalCare Analysis Intended Use
The intended use of FetalCare analysis is for the computerised analysis of antepartum cardiotocograms in pregnancies from 26 weeks gestation onwards (32 weeks in the USA). It can be used on women who are experiencing Braxton-Hicks contractions but is not intended for use in established labour as the fetus is then exposed to additional factors such as labour contractions, pharmacological agents, and epidural anaesthesia.

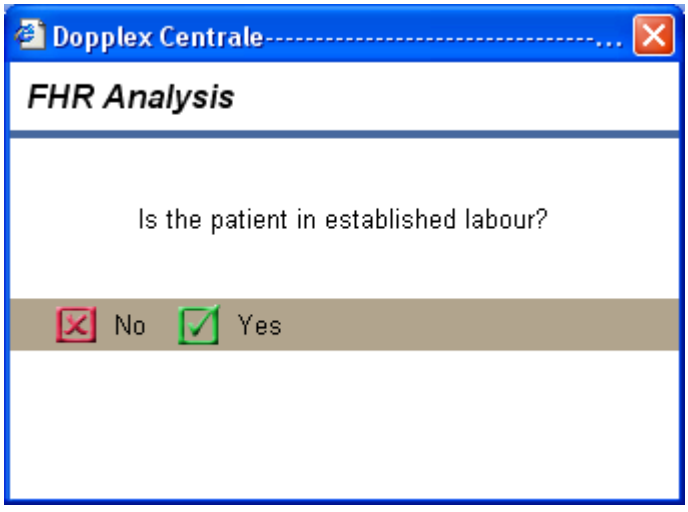
The analysis provided by FetalCare is intended as an adjunct to - and not a replacement for - the physician's visual assessment of a cardiotocogram. As such, FetalCare analysis is an aid to clinical management but not a diagnosis, which remains the responsibility of an appropriately qualified physician. Indeed, both the physician's visual assessment of a cardiotocogram and the analysis provided by FetalCare should be considered within the context of a full clinical assessment before decisions are made regarding management. Such an assessment may include further tests such as umbilical blood flow velocity waveforms or biophysical profiling.

3.8.5.1 To start analysis

- Click on ‘ Start Analysis’ on the function bar
- A cursor will appear. Use the mouse to position the cursor at the point where you want the analysis to start.
- Click the left-hand mouse key – this will start the analysis at the selected point on the trace.



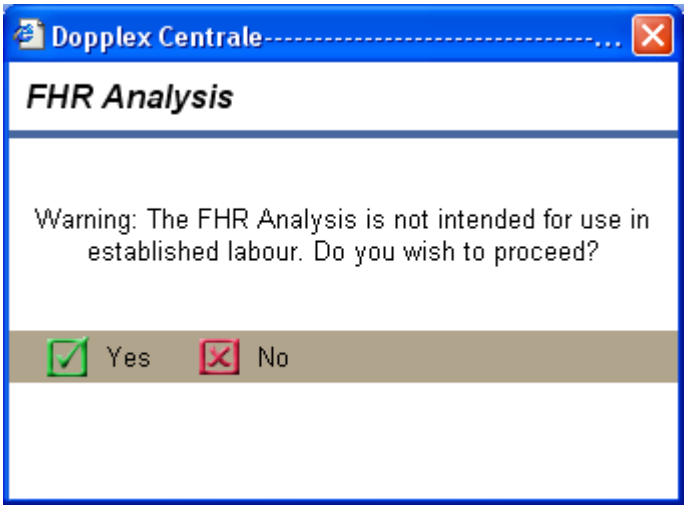
- Enter the gestational age (GA in weeks and days) in the two fields
- Click on ‘OK’ to proceed



- The user must confirm whether or not the patient is in established labour

Important: *The analysis criteria are only valid prior to the onset of labour. If the patient is in established labour, the analysis can still be run and some of the analysis data will still be valid, but the outcome (ie. criteria met or not met) statement is not. For further information refer to the 'FetalCare' documentation available from your supplier.*

- Confirm that the patient is NOT in established labour by clicking on 'No'. An annotation mark will appear on the chart to indicate the selected start point and the analysis will start
- If the patient is in established labour, but you still wish to run the analysis, click on 'Yes'.



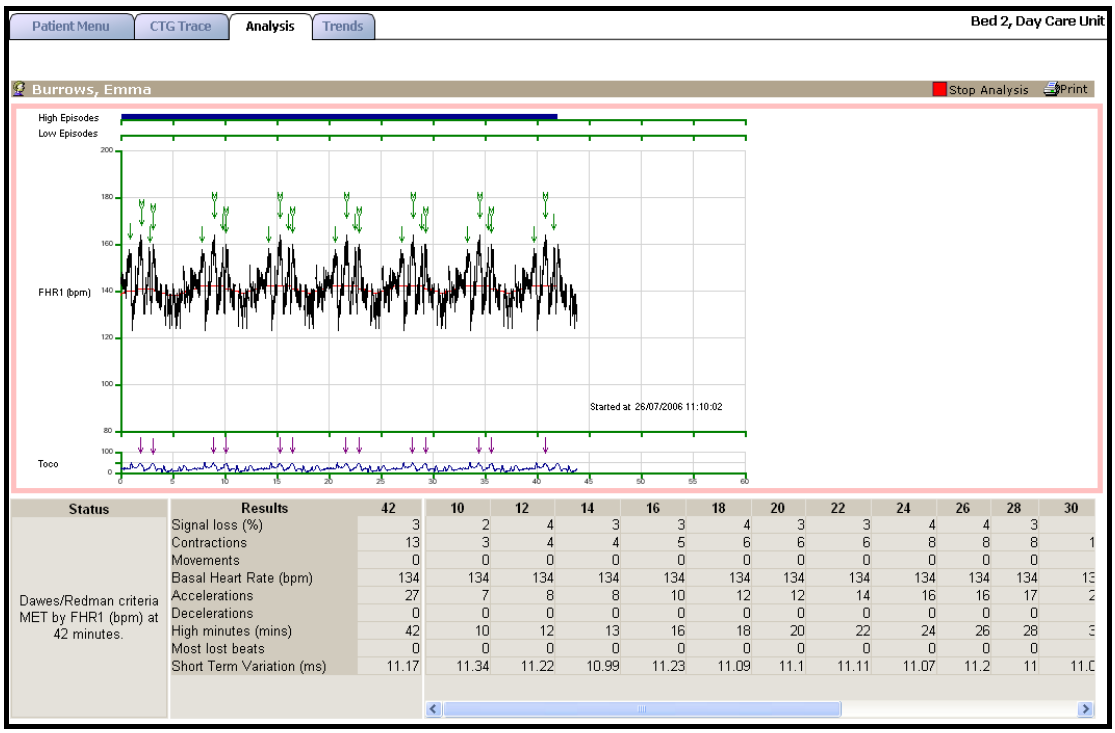
- Click on 'Yes' to proceed or 'No' to quit. If you choose to proceed, you are accepting full liability for the use of this information – use of this data during labour may result in inappropriate actions and resulting poor outcomes. Refer to the FetalCare literature for further information.

- The analysis requires a minimum of 10 minutes of good quality data to complete the first analysis. The analysis is then repeated every 2 minutes, based on the entire trace up to that point. This will continue for 60 minutes. The analysis will stop after 60 minutes whether the criteria have been met or not.

Important: *If the criteria have still not been met after 60 minutes, this should be interpreted as meaning that the fetus is compromised. Further tests and assessments of fetal condition must be made immediately and appropriate action taken. This analysis is an adjunct to clinical judgement only, it is not a clinical management tool and must not be used to replace expert clinical judgement – if in any doubt as to fetal condition, seek urgent expert opinion.*

3.8.5.2 Viewing analysis results

When a new analysis data set is available (this will be immediate if there are 10 minutes or more data already available from the selected start point), the 'Start Analysis' icon on the function bar changes to an animated '  Analysis Results' icon. An 'Analysis' tab will also appear above the trace. Click on the tab or the function bar icon to go the analysis trace view.



Status	Results	42	10	12	14	16	18	20	22	24	26	28	30
Dawes/Redman criteria MET by FHR1 (bpm) at 42 minutes.	Signal loss (%)	3	2	4	3	3	4	3	3	4	4	3	
	Contractions	13	3	4	4	5	6	6	6	8	8	8	1
	Movements	0	0	0	0	0	0	0	0	0	0	0	
	Basal Heart Rate (bpm)	134	134	134	134	134	134	134	134	134	134	134	13
	Accelerations	27	7	8	8	10	12	12	14	16	16	17	2
	Decelerations	0	0	0	0	0	0	0	0	0	0	0	
	High minutes (mins)	42	10	12	13	16	18	20	22	24	26	28	3
	Most lost beats	0	0	0	0	0	0	0	0	0	0	0	
	Short Term Variation (ms)	11.17	11.34	11.22	10.99	11.23	11.09	11.1	11.11	11.07	11.2	11	11.0

A full understanding of the data presented in this analysis screen is beyond the scope of this document. For further information, refer to the Sonicaid FetalCare Clinical Application Guide.

To set the focus on any particular analysis data set, click on the minutes counter above the relevant data set. This will highlight the section of trace used for this particular analysis on the compressed trace and display the data in the results field against the parameter labels as shown below:

Status	Results	14	10	12	14	16	18	20	22	24	26	28	30
Dawes/Redman criteria MET by FHR1 (bpm) at 14 minutes.	Signal loss (%)	3	2	4	3	3	4	3	3	4	4	3	3
	Contractions	4	3	4	4	5	6	6	6	8	8	8	1
	Movements	0	0	0	0	0	0	0	0	0	0	0	0
	Basal Heart Rate (bpm)	134	134	134	134	134	134	134	134	134	134	134	134
	Accelerations	8	7	8	8	10	12	12	14	16	16	17	2
	Decelerations	0	0	0	0	0	0	0	0	0	0	0	0
	High minutes (mins)	13	10	12	13	16	18	20	22	24	26	28	3
	Most lost beats	0	0	0	0	0	0	0	0	0	0	0	0
	Short Term Variation (ms)	10.99	11.34	11.22	10.99	11.23	11.09	11.1	11.11	11.07	11.2	11	11.0

3.8.5.3 To stop the analysis

The analysis will stop automatically after 60 minutes.

To stop the analysis manually, click on the '  Stop Analysis' icon on the function bar in either the standard CTG trace view or in the analysis screen view.

3.8.5.4 To view stored analysis results

- Retrieve the CTG from the patient notes (refer to section 3.8.10)
- An 'Analysis' tab will be displayed above the CTG trace view – click on this to switch to the analysis view

3.8.5.5 Analysis trend view

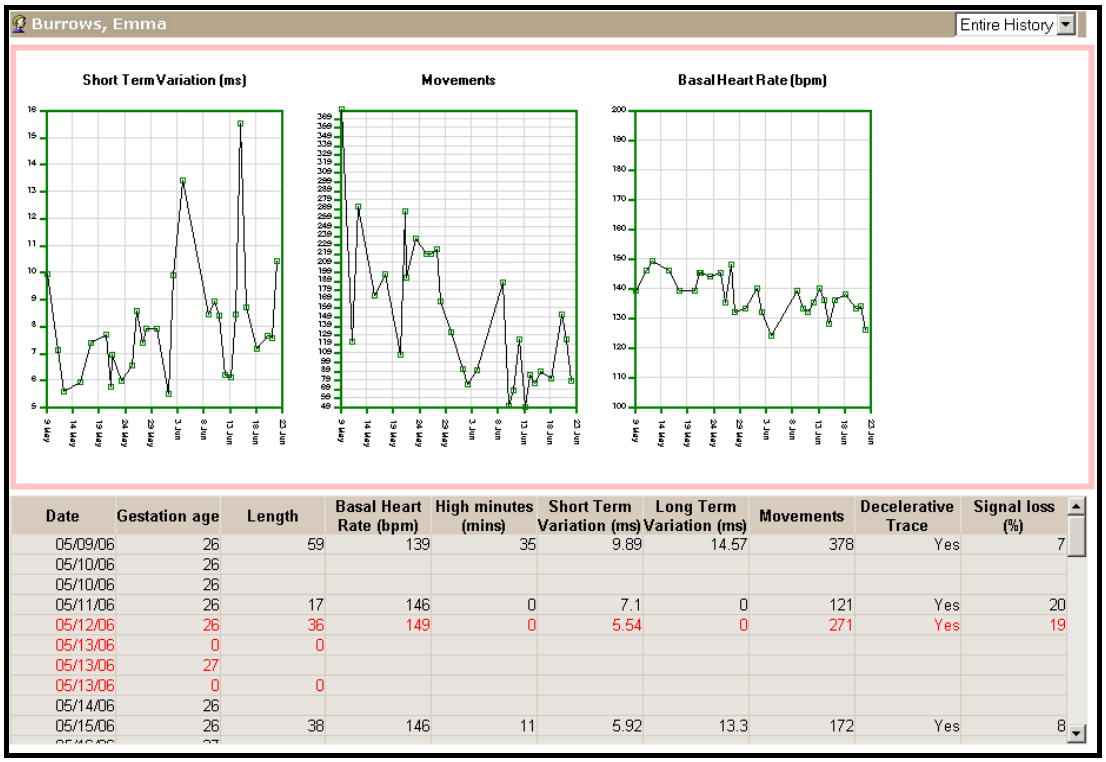
This allows you to see a trend view, in graph form, for 3 parameters:

- STV
- Movements
- Basal heart rate

The Trends can show changes over periods of weeks by comparing analysis data for a number of CTGs. Most significantly, a consistent downward trend in STV is an indicator of developing fetal compromise, in particular, the risk of the fetus developing metabolic acidaemia or of intrauterine death. If this trends down towards, or below, 3ms, this may indicate that delivery needs to be expedited. For further information on this, refer to the clinical application guide and published clinical data.

Trend view is only available if 3 or more CTGs, with analysis data, have been recorded for the patient. It is not available for twin or multiple pregnancies.

- To view trend data, click on the 'Trend' tab (if this tab is not displayed, trend data is not available for this patient).



Date	Gestation age	Length	Basal Heart Rate (bpm)	High minutes (mins)	Short Term Variation (ms)	Long Term Variation (ms)	Movements	Decelerative Trace	Signal loss (%)
05/09/06	26	59	139	35	9.89	14.57	378	Yes	7
05/10/06	26								
05/10/06	26								
05/11/06	26	17	146	0	7.1	0	121	Yes	20
05/12/06	26	36	149	0	5.54	0	271	Yes	19
05/13/06	0	0							
05/13/06	27								
05/13/06	0	0							
05/14/06	26								
05/15/06	26	38	146	11	5.92	13.3	172	Yes	8

- This view can be changed to show all data, data from the last fortnight or the last four weeks. To change views, click on the drop-down button in the field in the top right corner of the trend view frame, and select the required view.

A summary of data from each CTG for which analysis data is available, is shown in table form below the trend graphs:

Date	Gestation age	Length	Basal Heart Rate (bpm)	High minutes (mins)	Short Term Variation (ms)	Long Term Variation (ms)	Movements	Decelerative Trace	Signal loss (%)
05/09/06	26	59	139	35	9.89	14.57	378	Yes	7
05/10/06	26								
05/10/06	26								
05/11/06	26	17	146	0	7.1	0	121	Yes	20

3.8.6 Notes

This allows trace related notes to be entered directly from the trace screen. Note that these notes will also be added to the patient notes and can be viewed from the 'patient notes' screen as well.

Click on '  Notes'.

This opens a dialogue box, type in text as required. Save or cancel changes to continue.

These notes can be reviewed / edited by returning to this dialogue box. They can also be viewed, but not edited, from the 'patient notes' screen as well.

3.8.7 Mark / Print

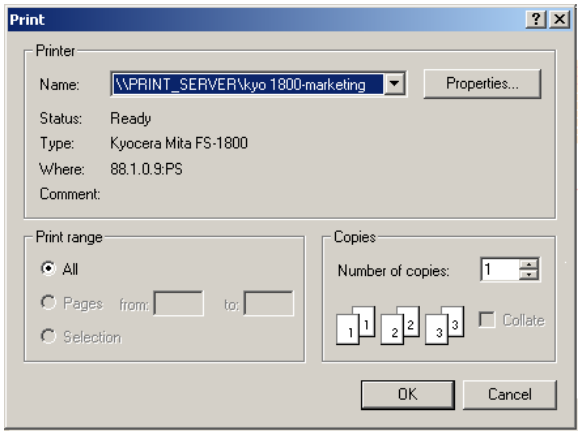
3.8.7.1 Mark

The 'Mark' function allows you to select a segment of a trace by highlighting the required section using cursors prior to printing.

Click on '  Mark'. A cursor appears on the trace – use the mouse to position this at one end of the section you want to print. Click the left-hand mouse button to lock the cursor position.

Click on '  Mark' again. A second cursor appears – position this at the other end of the required section as above. The selected section of trace is highlighted as shown below:

Click on '  Print'.



Select which printer you want the printout to be printed on.

Click on 'OK' to print.

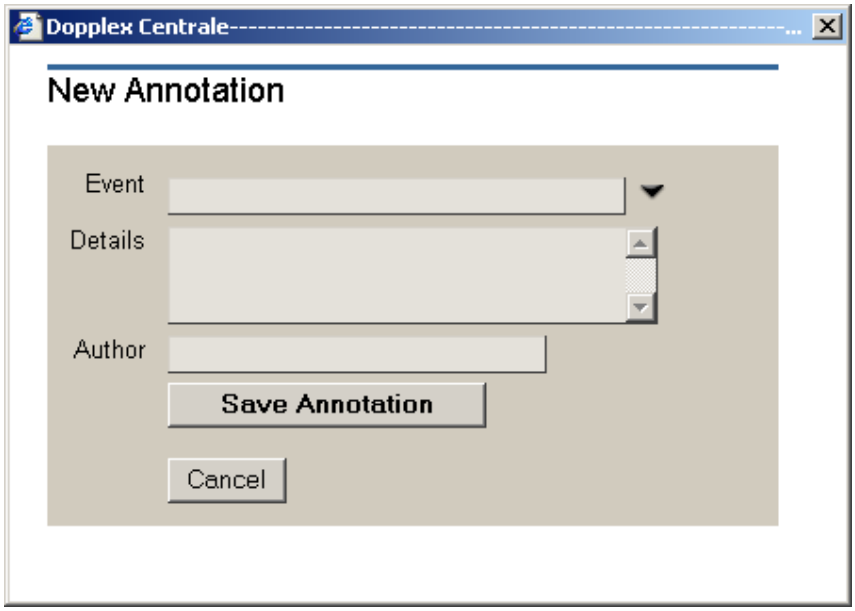
To remove the marks, simply click on the 'CTG' tab.

3.8.8 Annotating the trace

This allows you to annotate the trace to record clinical actions directly on the trace.

Click once on '  Annotation'.

The mouse pointer changes to a cursor. Move the cursor to the required position on the trace & click to open the dialogue box:



- Event
  - Select a standard annotation from the drop-down list.(▼).
    Note: this list can be customised by your system administrator.
  - Or enter free text (max 35 characters).
- Details
  - Enter any additional notes (max 100 characters).

- Author
    - Enter your name or initials If enabled, an additional 'Password' field may be displayed (this is an option set by your system administrator). If this field is present, a valid user name and password must be entered in these fields. This does not have to be the same as the current logged on user, so allows other authorised users to annotate traces, without the logged on user having to log off first.
      If this option is not enabled, entry into the 'Author' field is voluntary.

Click on 'Save Annotation'.

A marker () will appear on the chart in the position selected. Note that if annotations are added to a previously stored trace, the marker will be grey to indicate that this was done after the trace had been stopped.

The details of this marker will appear immediately below the trace:

IMPORTANT: The system allows retrospective annotations to be made anywhere on the trace. The system will also log the actual date/time that the annotation is created (shown at right of frame).

3.8.9 Review annotations

To view details of an annotation, pass the mouse pointer over the marker () on the chart. The details will be shown in the annotation frame. Alternatively, use 'Previous' or 'Next' to move between annotations.

Annotations can also be viewed from the 'patient notes' screen, and a summary report is included at the end of trace printouts.

3.8.10 Alarms

The system includes alarms for tachycardia, bradycardia, loss of contact and, for twins, cross-channel verification.

Note that these alarms operate independently of the local alarm system of each connected fetal monitor and the settings may be different.

Caution:
These alarms are not clinical alarms, they are user alerts.

Although it has become standard practice in the industry to refer to these as, for example 'Tachycardia alarm', implying by its name some clinical significance, this is not the case. They do not interpret the FHR data in any way, they simply draw the user's attention to the fact that the FHR has been outside a user defined range for a user defined period of time.

For example, the 'Tachycardia alarm' simply indicates that the FHR has been above a certain level for a set period of time. This is not necessarily a clinical tachycardia – the fetus may just be very active with a prolonged accelerative pattern.

In the event of an alert, or user alarm, it remains the responsibility of the user to determine what has caused the alert, whether there is any clinical risk, and to ensure appropriate management

3.8.10.1 Tachycardia alarm

If FHR rises above the threshold, **& remains above it continuously for the set time***, the tachycardia alarm will be triggered.

3.8.10.2 Bradycardia alarm

If FHR falls below the threshold, **& remains below it continuously for the set time***, the bradycardia alarm will be triggered.

Caution:
Note that the alarm system does allow for a small amount of drop-out and/or transient return(s) to a normal rate within the set time. So long as this is less than 25% of the FHR data, the alarm will still trigger. If the cumulative drop-out and/or return to normal rate within the set time exceeds 25%, the alarm will not be triggered. These 'alarms' should be treated as 'alerts' to a potential problem only, and must not be relied on as an indicator of actual fetal status. The use of the terms 'tachycardia' & 'bradycardia' in this context refer to periods of high or low FHR on the trace. They do not necessarily reflect actual clinical tachycardia or bradycardia conditions in the fetus.

3.8.10.3 Loss of contact alarm

The loss of contact alarm alerts users to loss of FHR signal from the fetal monitor. Check the fetal monitor in the room and confirm fetal condition as appropriate.

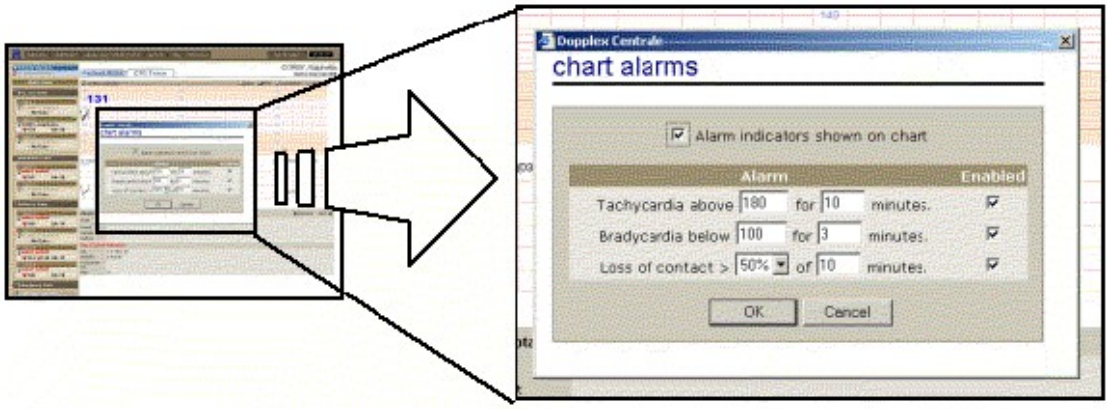
As loss is often intermittent, the alarm condition is defined by the cumulative loss of FHR data being greater than a percentage of a time period. For example, typical settings might be 50% of 10 minutes. The system constantly monitors the FHR data over the last 10 minutes. The durations of periods of signal loss within this 10 minutes are summed – if this sum exceeds 5 minutes (i.e. 50% of 10 minutes), the alarm is triggered.

3.8.10.4 Adjusting alarm settings

If authorised, you can adjust these individually for each bed as follows:

Clear any active alarm condition (see below).

Click on the static ‘ Alarms’ icon.



Adjust the settings for each alarm by editing the values in each field as required.

To set time to less than one minute, the ‘minutes’ field must first be set to ‘0’. This enables the ‘seconds’ field – use the drop-down to select the required time.

3.8.10.5 Alarm notification

If an alarm is triggered, a ‘’ is displayed on the trace at the point where the alarm occurred and a note is entered into the patient notes. Also, the ‘ alarms’ icon will become animated and will turn red ( ).

The alarm condition is also shown in the bed frame by the heart symbol ( ) alternating with a bell symbol ( ). This ensures that alarms are visible even when the trace is not currently selected to view.

If an alarm is triggered on a bed in a bed-group which has been minimised, the alarm sound will still be heard. Open any minimised bed groups to find which bed the alarm is on.

An alarm bleep may also be heard on one or more access terminals – the type of sound and the volume are preset by your system administrator. Note that your administrator may have disabled this sound completely.

3.8.10.6 To cancel an active alarm

To cancel an alarm, the single or multi trace view for the bed must be selected. Click on the alarm icon to clear the alarm.

A graphic is displayed on the trace to document this action. An entry will also be made in the patient notes.

3.8.10.7 Cross-channel verification alarm – Twins monitoring only

When monitoring twins, you may be monitoring the same fetus on both channels simultaneously without realising it. The cross-channel verification alarm will indicate any section of trace where the two FHR traces correspond within pre-defined limits.

To clear this alarm, check that the two channels are picking up different fetuses, re-positioning the ultrasound transducer(s) as required.

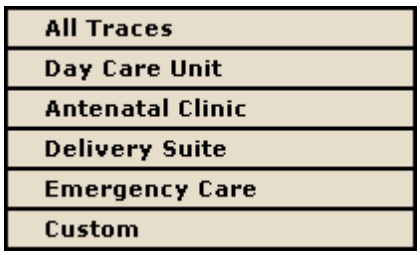
Cancel the alarm as above.

3.8.11 Multi-trace view

Traces can be viewed from all active beds in any combination required.

Traces are auto-scaled to fit the screen.

To select multi-trace view, click on 'Multi-view' in the bed column. A drop-down menu will appear listing the following options:



Select the option required.

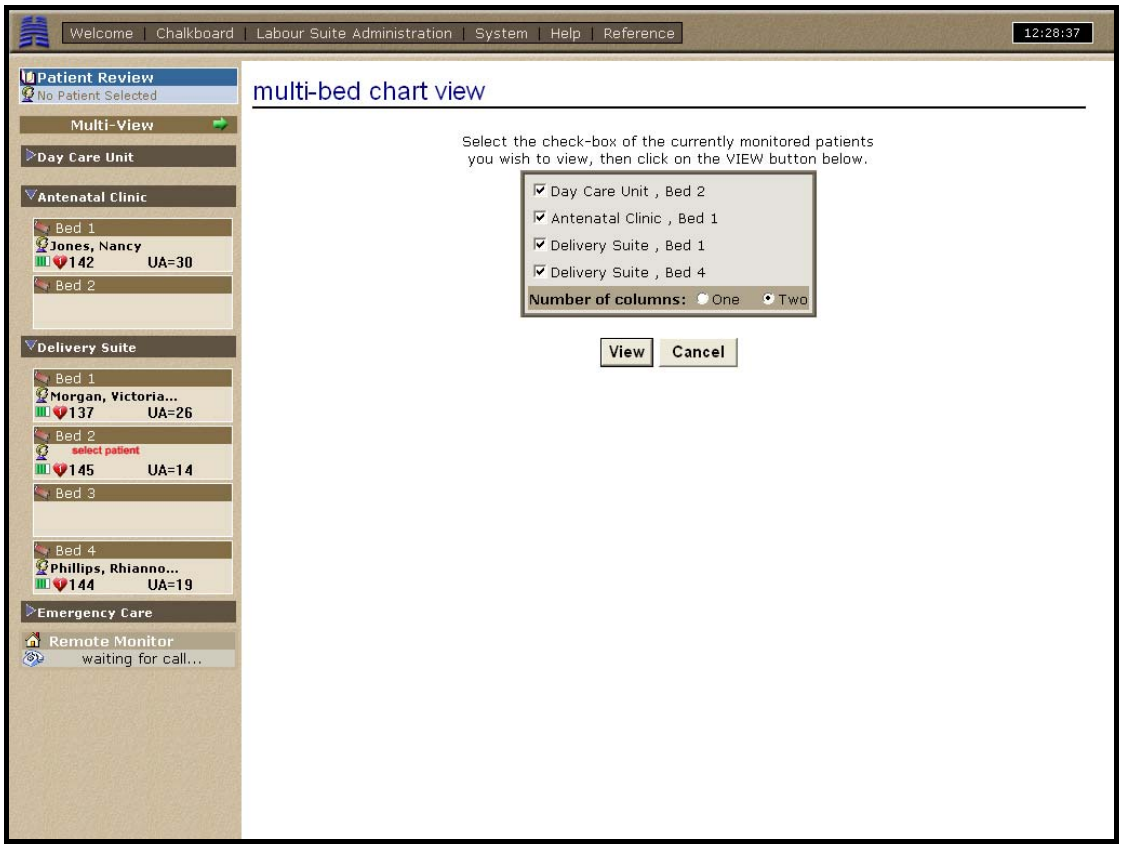
All traces – this option displays all active traces.

Select a bed group – this will display all active traces within the selected bed group.

Custom – this will select any combination of active traces, selected as required from all bed groups.

A typical 4 bed view is shown below:

To configure or change the custom view, click on ‘select beds to view’ at the top of the screen.

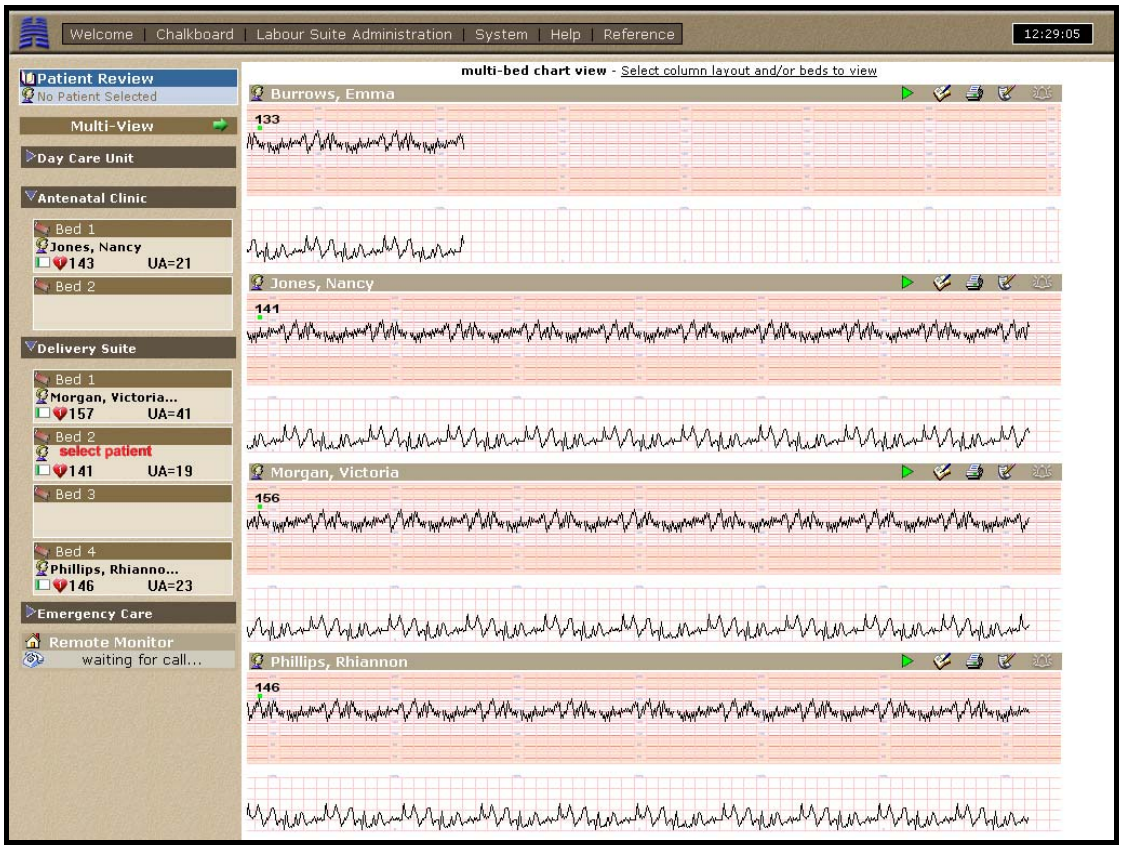


An active bed is one for which live CTG data is currently being received. Patients booked into rooms but not actively being CTG monitored will not be included.

Click on the check boxes to select / de-select beds.

Traces can be viewed in one or two columns. Select the view required.

Single column view provides a longer term 'trend' view of all active beds, as shown below:

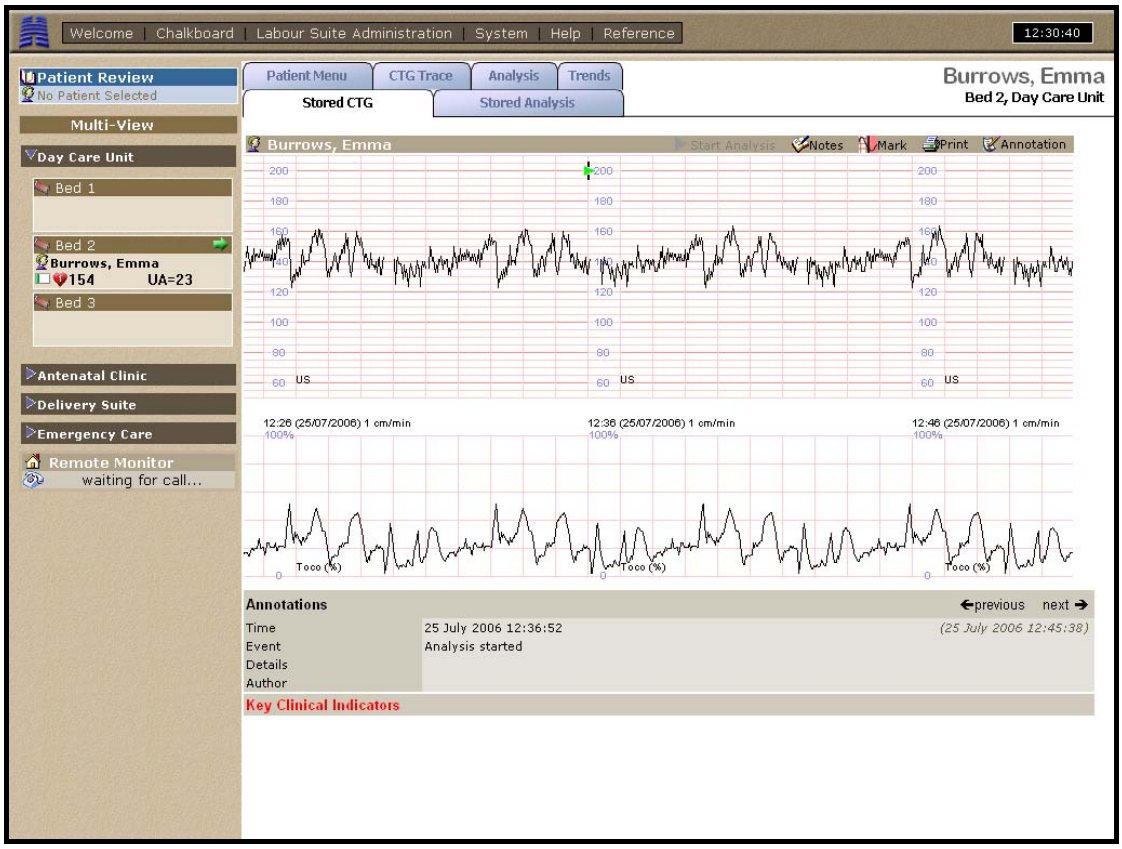


Click 'View' to display the selected traces.

Note - In multi-trace view, each trace can still be independently scrolled, annotated, etc. as per single trace view.

3.8.12 Reviewing stored CTGs

If the patient is still booked into a bed, select the required CTG to view from the patient notes.



Note that a new tab ‘Stored Trace’ appears.

If the patient is not currently booked into a bed, use the ‘Patient Review’ function to view stored CTGs. See section 3.4 for further details.

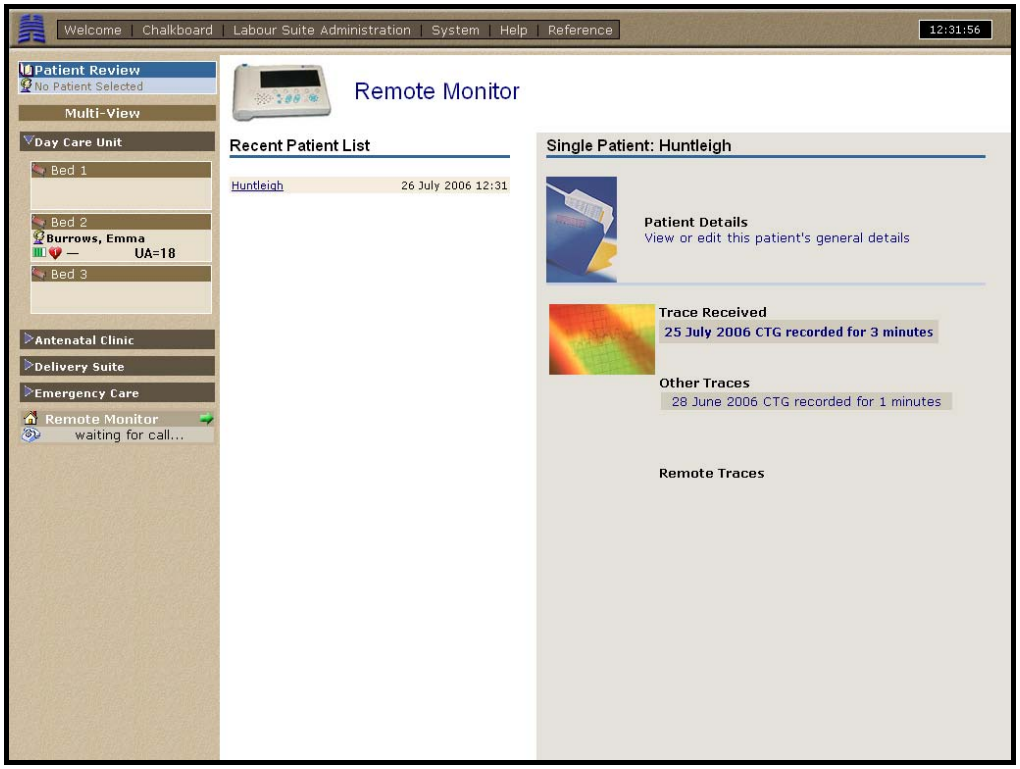
3.8.13 Viewing traces received by phone from Fetal Assists

CTGs can be transmitted into the system from Fetal Assist portable fetal monitors.

When a trace is received, an animated message ‘**received new trace**’ will appear in the ‘Remote Monitor’ frame:

Depending on system settings, a printout may also be generated automatically at the same time.

To view this trace, click on this frame.



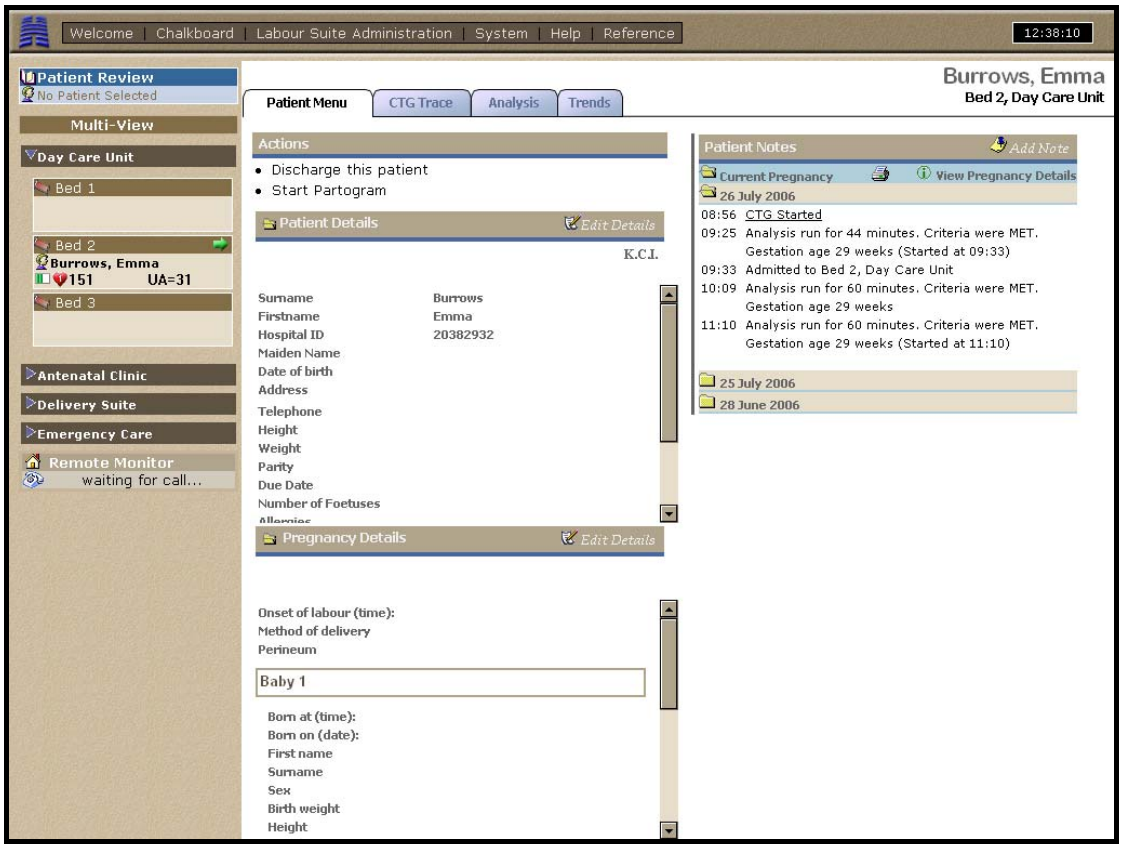
A list of patients from whom traces have been received is listed in reverse chronological order, with the latest at the top. For this latest patient, the details will be shown on the right of the screen.

Click on the trace details shown under 'Trace received' to view the latest trace.

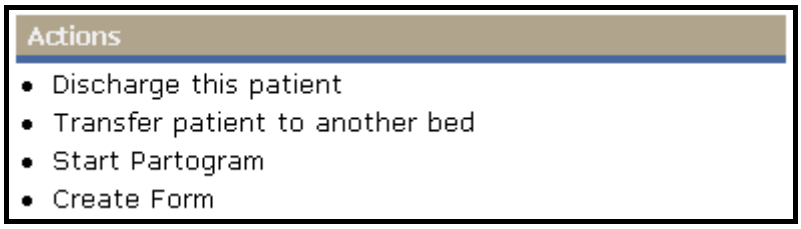
Other traces in the database for this patient will also be listed in this screen, and can be reviewed by clicking on the relevant trace.

3.9 Patient Menu

Click on the 'Patient Menu' tab from the single trace view, partogram or Stored trace screen.



3.9.1 Actions



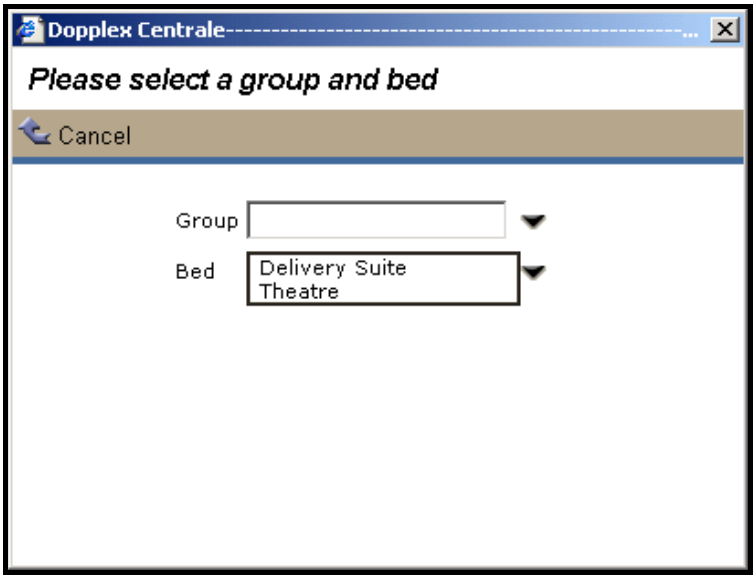
This provides the following functions:

3.9.1.1 Discharge this patient

Click on this to discharge the patient from the system.

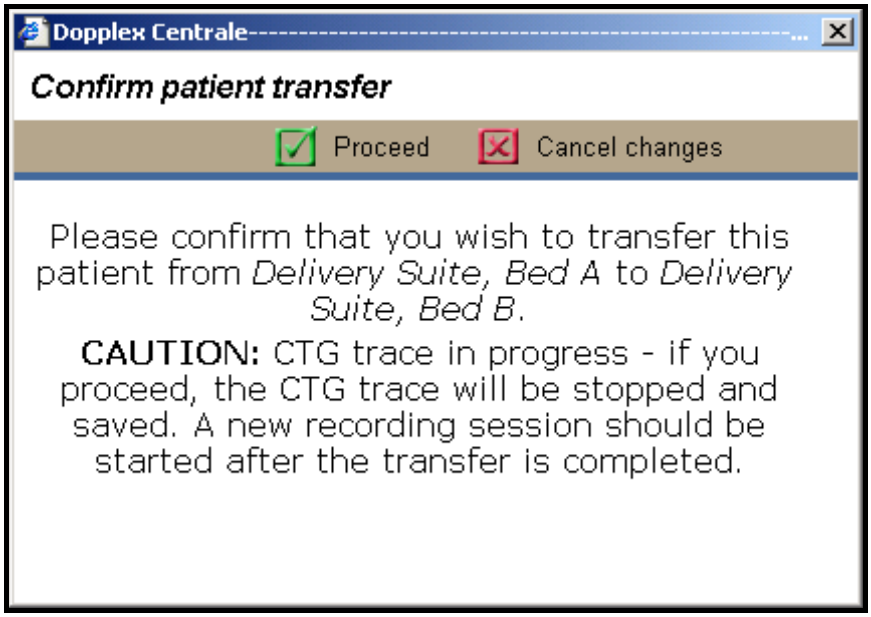
3.9.1.2 Transfer patient to another bed

Click on this to transfer a patient from one bed to another.
This opens a dialogue box to select the bed group and bed you wish to transfer the patient to. Beds already occupied are greyed out and cannot be selected.



- Select the bed group & bed from the drop down list that you wish to transfer the patient to
- Click on 'OK'

The patient will be transferred. However, if a live CTG recording is in progress at this time.



Click on 'Proceed' to confirm the transfer

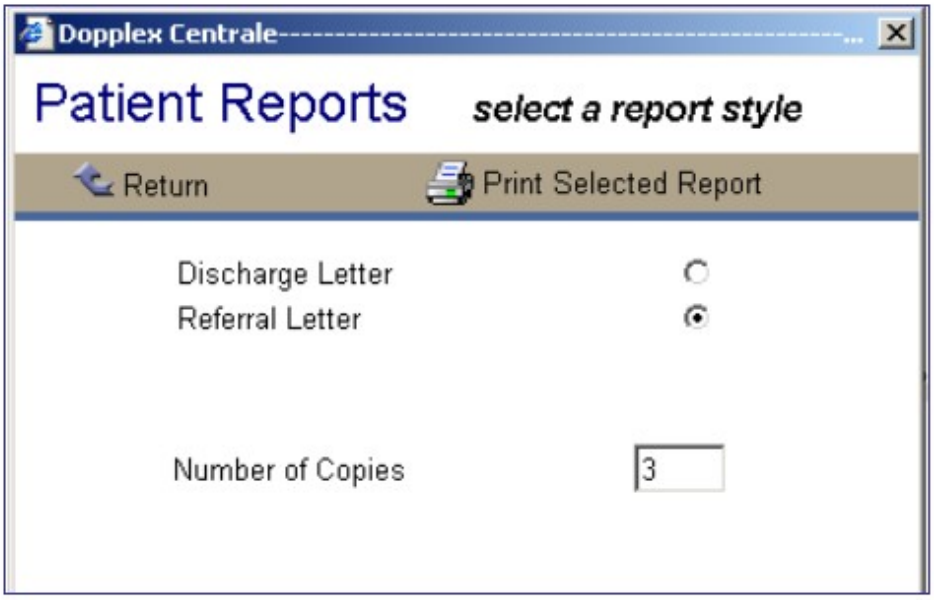
Alternatively, click on 'Cancel changes' to abandon the transfer.

3.9.1.3 Print patient reports (Upgrade option)

This option allows reports to be generated automatically using pre-defined templates.

Which have been set up by your system administrator- refer to local protocols/documentation for details.

Click on 'Print patient reports'



Select the report form required by clicking on the adjacent button.

Enter the number of copies required in the 'Number of Copies' field.

Click on 'Print Selected Report'.

3.9.1.4 Start Partogram (upgrade option)

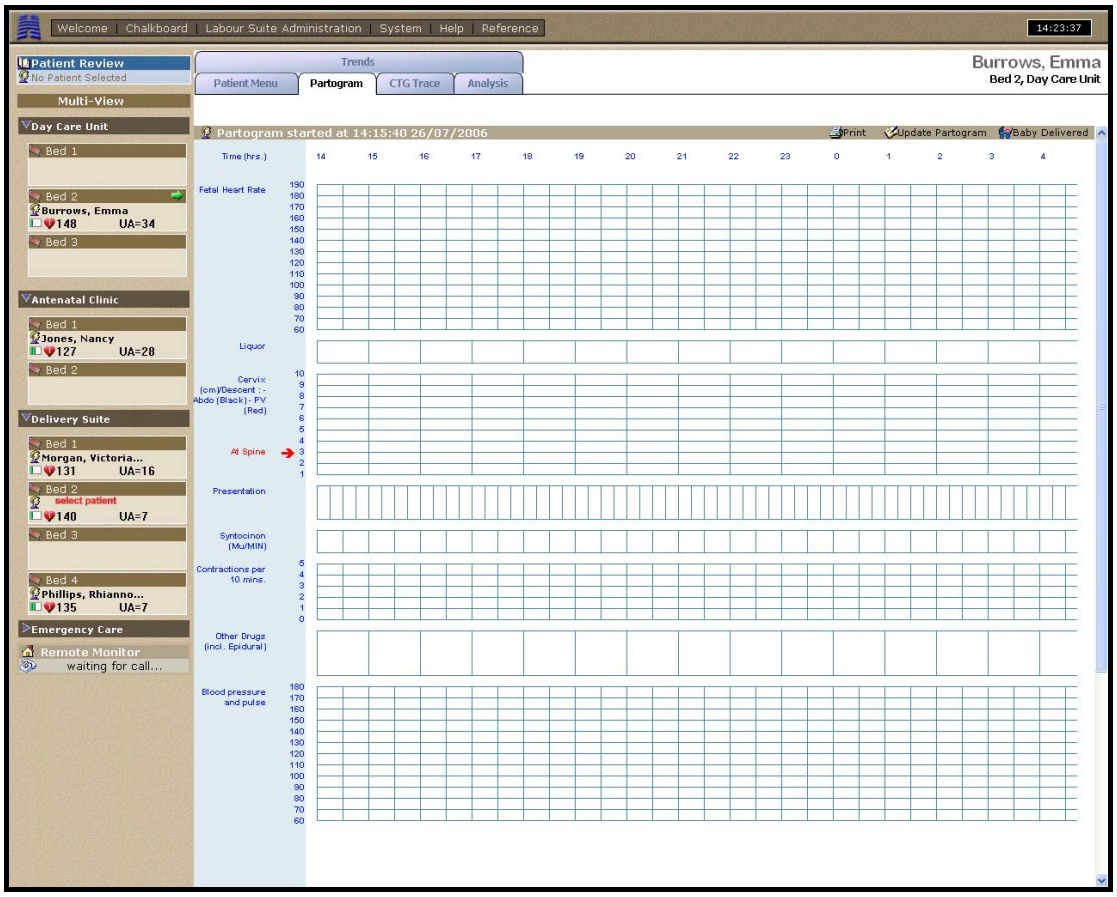
Click on 'Start Partogram' to run the partogram – refer to section 3.9.2 for details.

3.9.2 Partogram (Upgrade option)

Selected from the 'Actions' menu (see section 3.9.1.2) this is only available if the Partogram is not currently active – click on 'Start partogram' to run it. If it is currently active, it can be selected by clicking on the 'Partogram' tab.

Partogram layout & content varies widely – it has been customised to local requirements by your system administrator.

Typically, data is entered into the chart every 15, 30 or 60 minutes. The data set entered at each time interval is also determined by the system administrator.



The partogram form may all appear within the screen, may extend vertically (use the scroll bar to scroll up/down to view) or may be spread over any number of pages. This is determined by the system administrator.

For labours longer than about 10 hours (dependent on display resolution) the chart can be scrolled horizontally, using the mouse in the same way as for scrolling the CTG trace (see section 3.8.2).

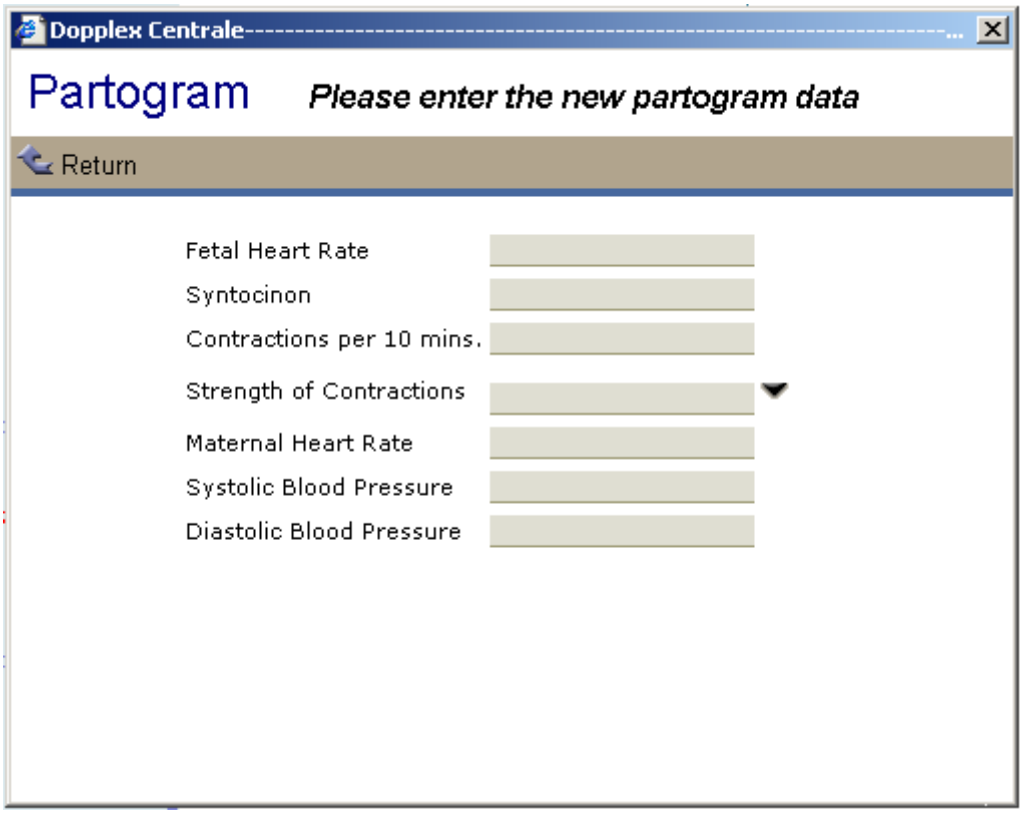
Contact your system administrator or clinical trainer for details on using your particular partogram configuration.

3.9.2.1 Entering data into the partogram

To enter data into the partogram, click on ' Update Partogram' in the function bar at the top of the chart.

Using the mouse, position the cursor on the chart at the required time position on the chart – it will 'snap' to the nearest grid line.

A dialogue box will appear containing a set of data fields determined by your system administrator and may vary depending on whether the quarter, half or hourly time grid line is selected.



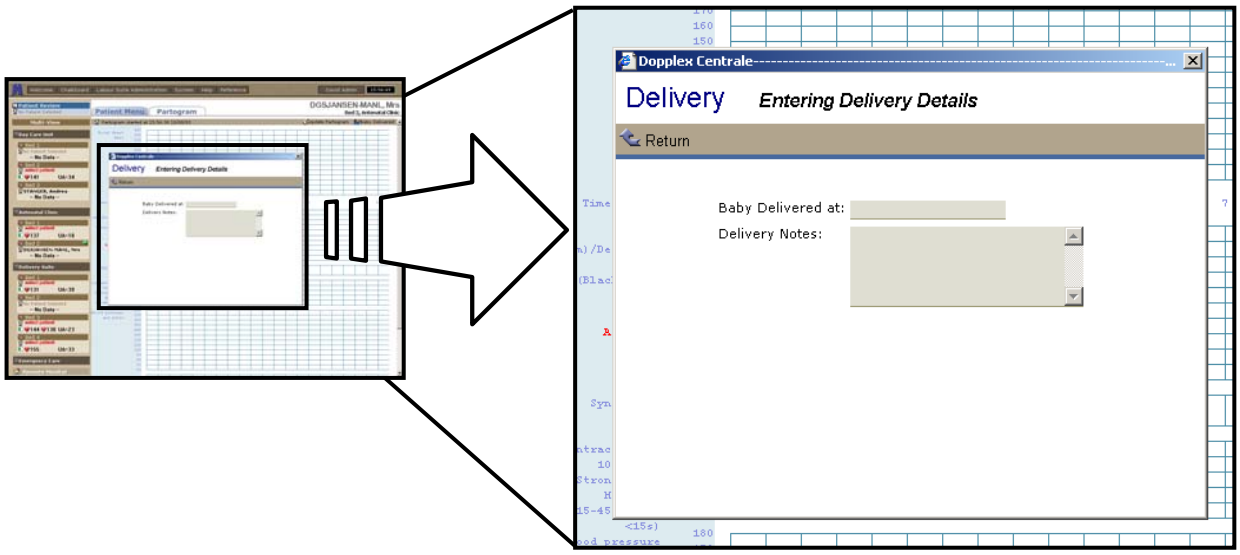
Enter data as required

When data entry is complete, click on 'Save changes' to enter the data into the chart.

3.9.2.2 To enter delivery details after birth

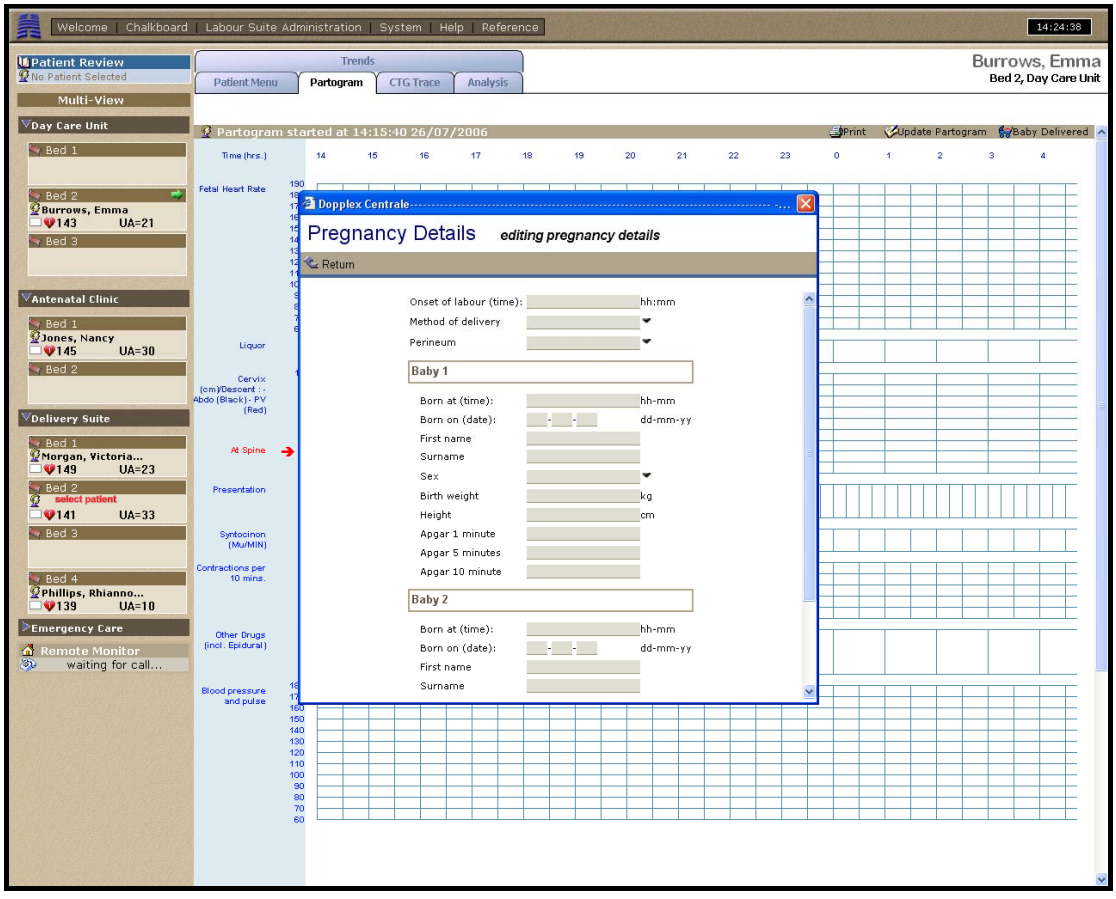
When the baby is born, the partogram can be closed with the outcome, method of delivery, etc. entered on the partogram.

Click on ‘ Baby delivered’.



Enter details as appropriate.

On completion, the following dialogue box will then appear for entering details into the Pregnancy Details database. Note that the fields within this database are determined by your system administrator and may vary from those shown in this example:



Note: This database can also be accessed for entering or editing data at any time from the Patient Menu screen – refer to the 'Patient Menu' section for details.

On completion, the time of delivery and delivery notes will then appear as vertical text across the partogram form.

For twins, triplets, etc., details can be entered for each baby by repeating the above procedure.

3.9.2.3 To view the partogram

Once started, the partogram can be viewed at any time by clicking on the 'Partogram' tab above the single trace view or the patient menu screen, or by clicking on the 'partogram started' entry in the Patient Notes section of the Patient Menu screen.

3.9.3 Patient Details

The patient details database contains any number of fields relating to patient information. This is fully customisable; the exact content of this database is set by your system administrator.

3.9.3.1 To view details

The details are displayed under the 'Patient Details' header bar in the 'Patient Menu' screen. For large databases, use the scroll bar to scroll up/down as required.

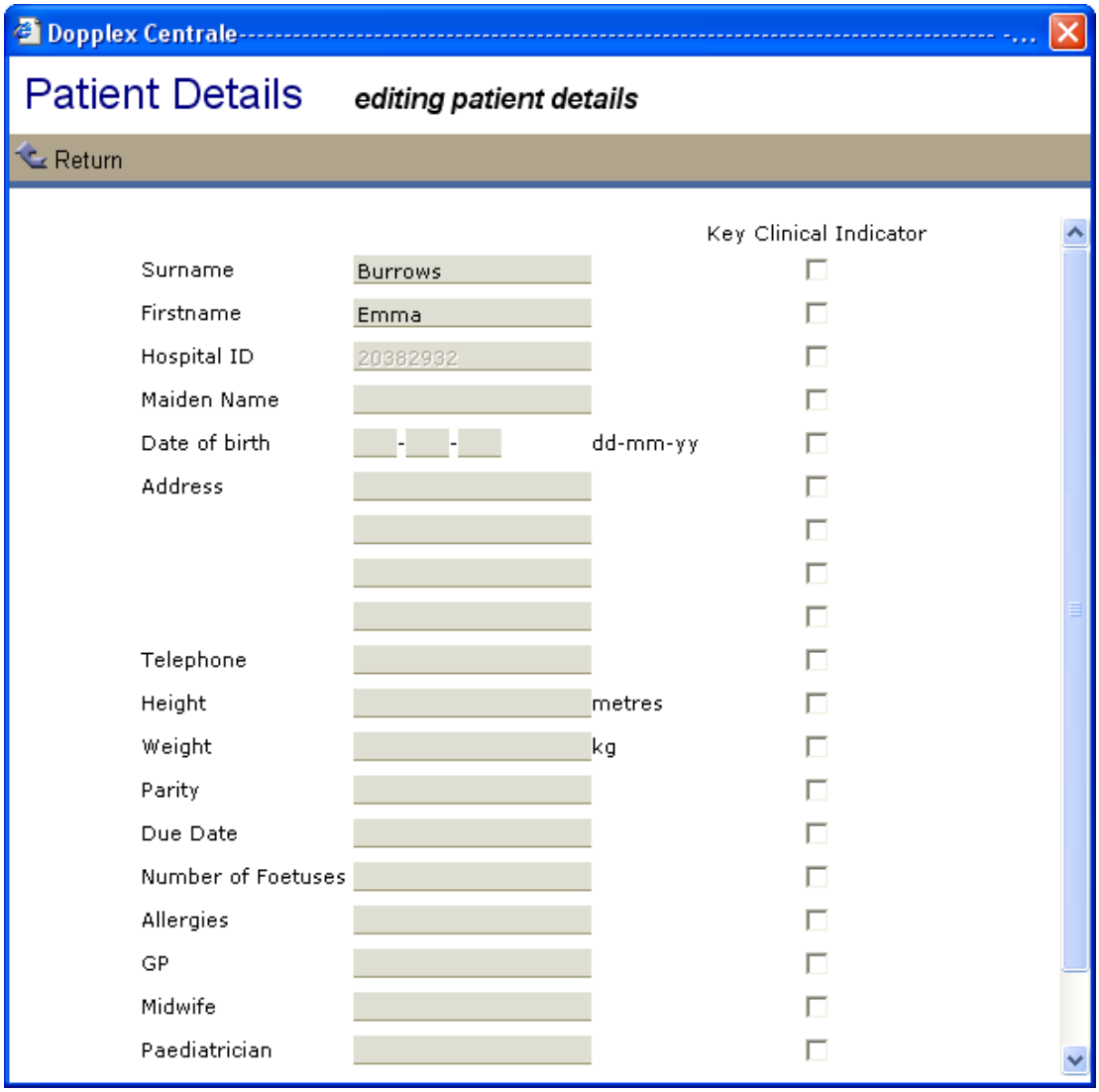
If the data is not visible, the database may have been minimised. To open the database, click on the yellow folder ( ).

To minimise the database, click on the yellow folder again.

Note: adjacent to any of the fields shows that this field has been tagged as a Key Clinical Indicator – see 'Key Clinical Indicators' for details.

3.9.3.2 To enter / edit details

Click on '  edit details'.



Enter / edit details as required.

3.9.3.3 Key Clinical Indicators (KCI)

This function allows any data field to be 'tagged' as a key clinical indicator. All tagged data will be displayed in single trace view:

This ensures that, in an emergency, critical information is immediately available to anyone reviewing the trace.

To tag/de-tag a field, use the tab key to move across to the adjacent check box and press the 'space bar' or use the mouse.

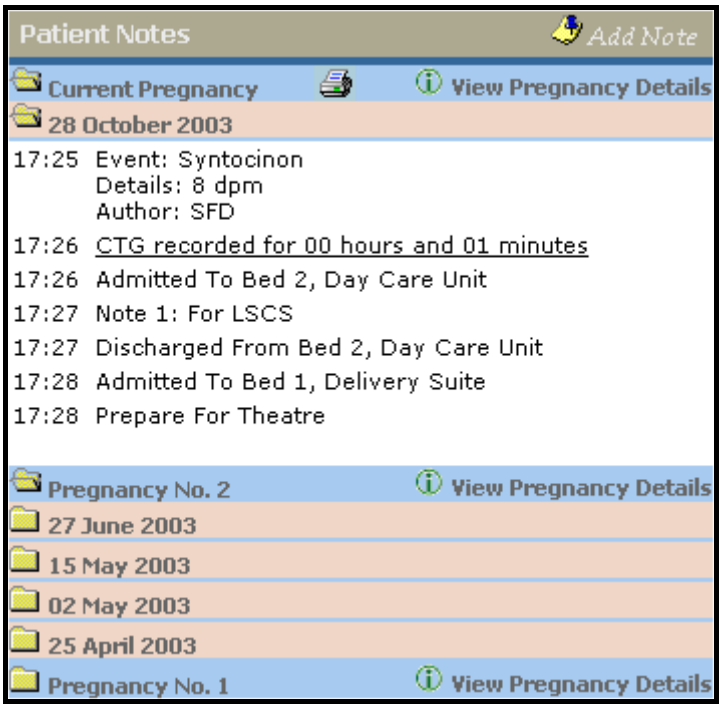
3.9.4 Pregnancy Details

The 'Pregnancy Details' database contains any number of fields relating to the new-born baby and delivery details. This has been customised by your system administrator.

Viewing and data entry/editing is performed as for the Patient Details database.

Note that this database is also entered automatically for data entry when the 'Baby born' function in the partogram is used.

3.9.5 Patient Notes



The patient notes include details logged automatically by the system and notes entered manually.

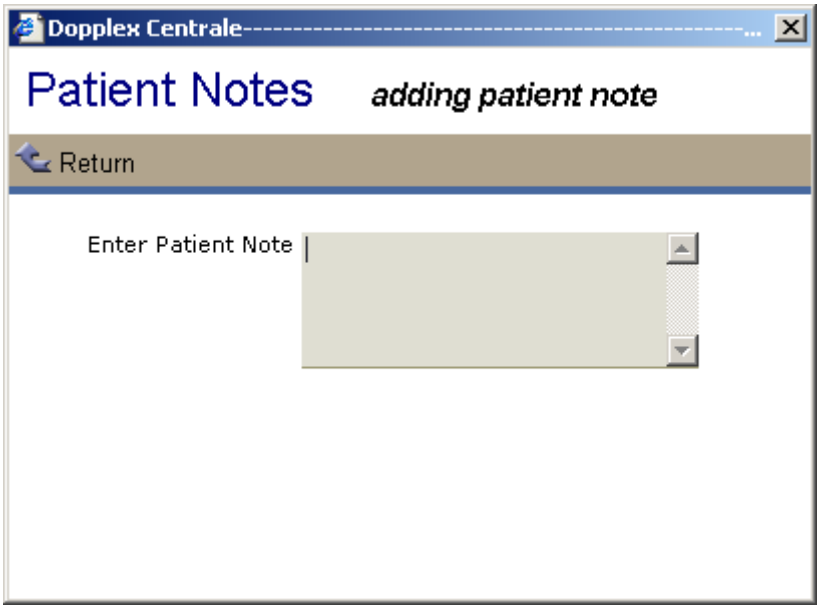
Organised in folders, a folder (- closed folder, - open folder) is shown for each pregnancy listed in reverse date order. Previous pregnancies are numbered 1, 2, etc.

Within each pregnancy folder, there is a folder for each calendar day for which data is logged.

The day folders include the following automatically generated data. For each entry, the time when the entry was logged is shown:

- When CTG started if trace still active
- Time and length of CTG trace for old traces
- When patient was created
- When patient was booked into a bed
- When a partogram was started
- Which bed & bed group the patient was booked into
- When the patient was discharged or transferred from a bed / bed group
- Other data may also be automatically generated depending on options installed

Manually entered data is also logged in these folders. Data can be entered directly by clicking on '  Add note'.



Enter notes as required.

For each pregnancy, click on '  view pregnancy details' to open the pregnancy details database for viewing / editing.

CTGs listed in the patient notes can be viewed by pointing and clicking on the required trace.

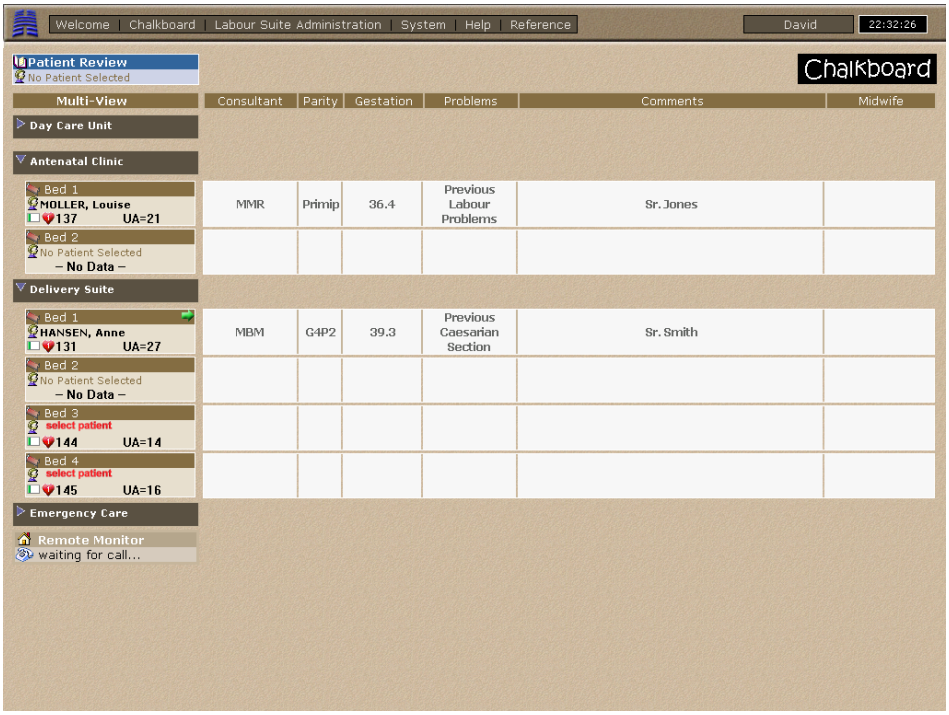
To print patient notes, simply click on the printer icon  in the pregnancy folder bar.

3.10 Chalkboard (Upgrade option)

This optional feature provides an overview of the current status of all beds on the unit. The number of columns of information, and the titles and type of data in each column, are all customised by your system administrator. The following screen images are shown as examples only.

3.10.1 To view the chalkboard

Click on the 'Chalkboard' button on the system function bar at the top of the screen.

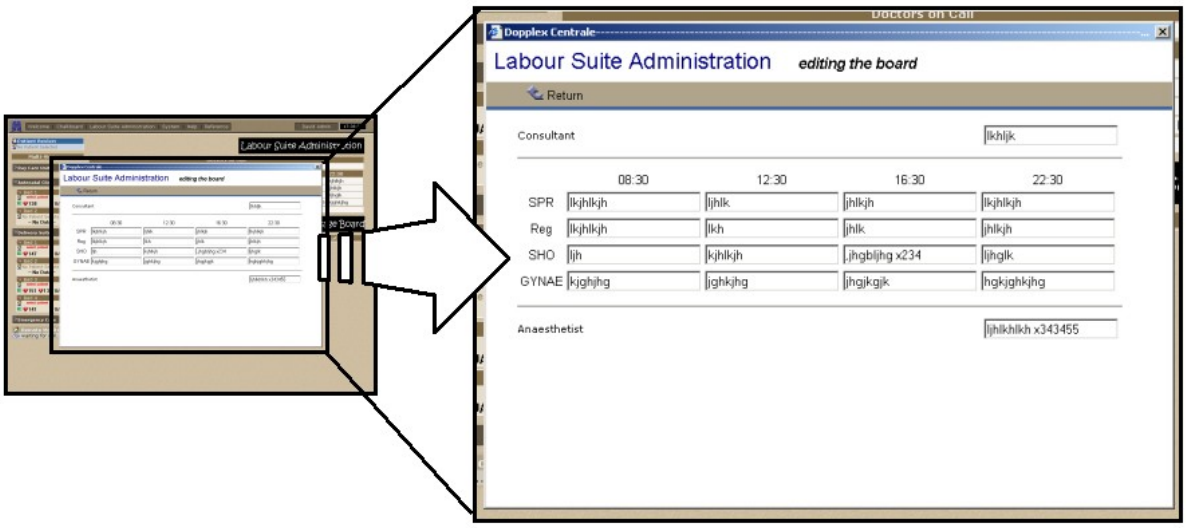


The chalkboard is organised by bed group – each bed group can be minimised or opened as required.

3.10.2 Entering / editing chalkboard details

Position the mouse pointer within the chalkboard area on the row for the required bed and click.

Note: the pointer must be in the chalkboard area, NOT on the bed frame itself – this will select single trace view!



Enter data as appropriate.

CAUTION: IMPORTANT - *This chalkboard display is a live overview of the current status of the unit. This data is not saved.*

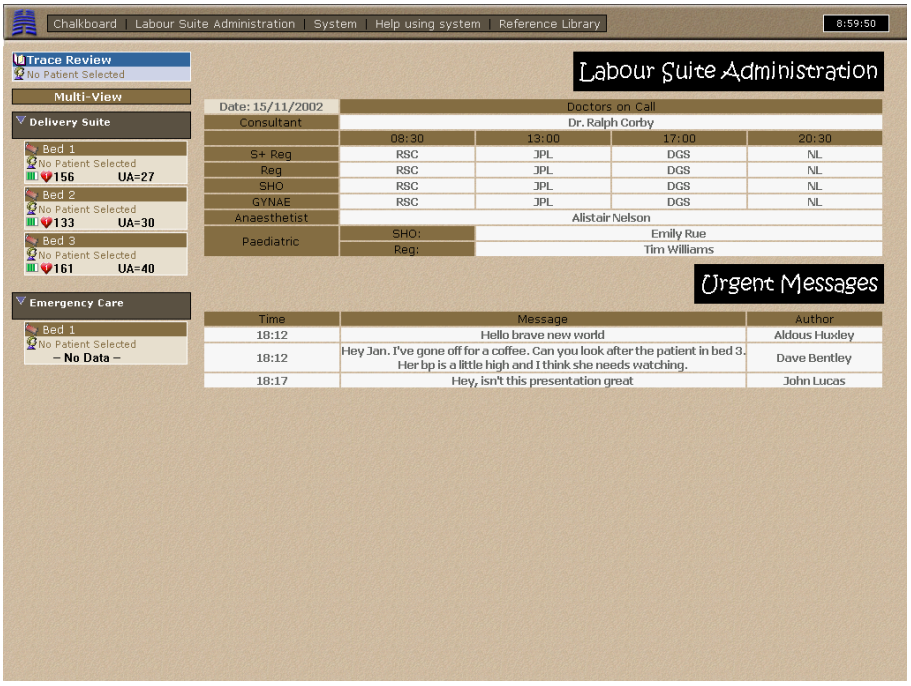
3.11 Administration (Upgrade Option)

This is included with the chalkboard option.

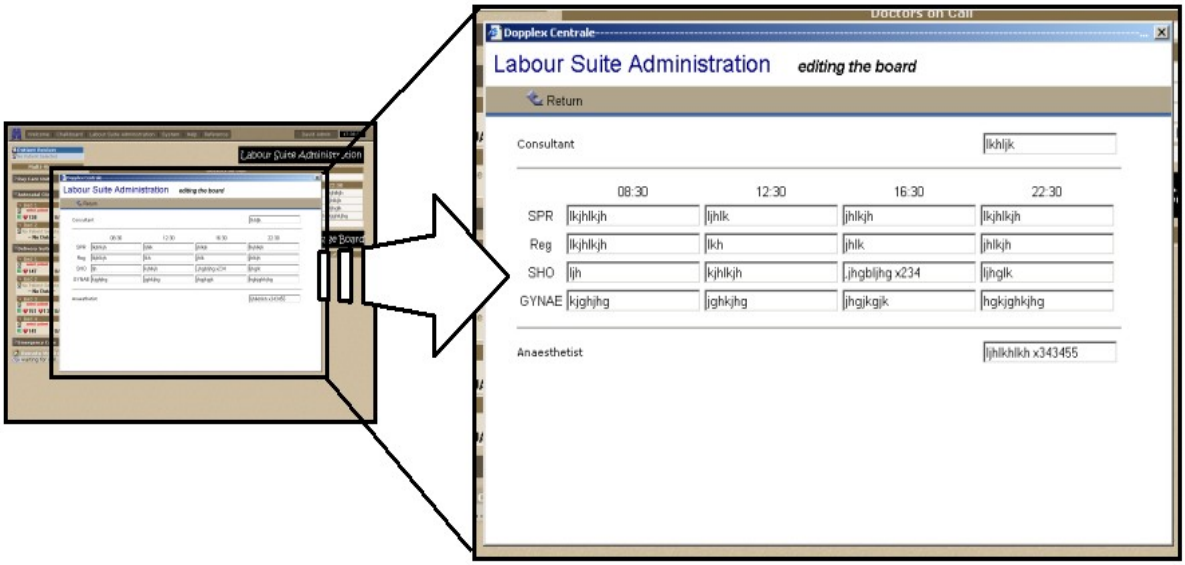
The administration screen provides a customisable table which is primarily intended to provide an on-call duty rota, including key obstetric staff and other specialists who may need to be contacted in an emergency, and their contact details.

3.11.1 To view the administration screen

Click on 'Labour Suite Administration' on the system function bar at the top of the main screen.



To enter/edit details, move the mouse pointer over the table (anywhere in the table where the pointer changes to a pointing hand) and click.
Enter data as required.

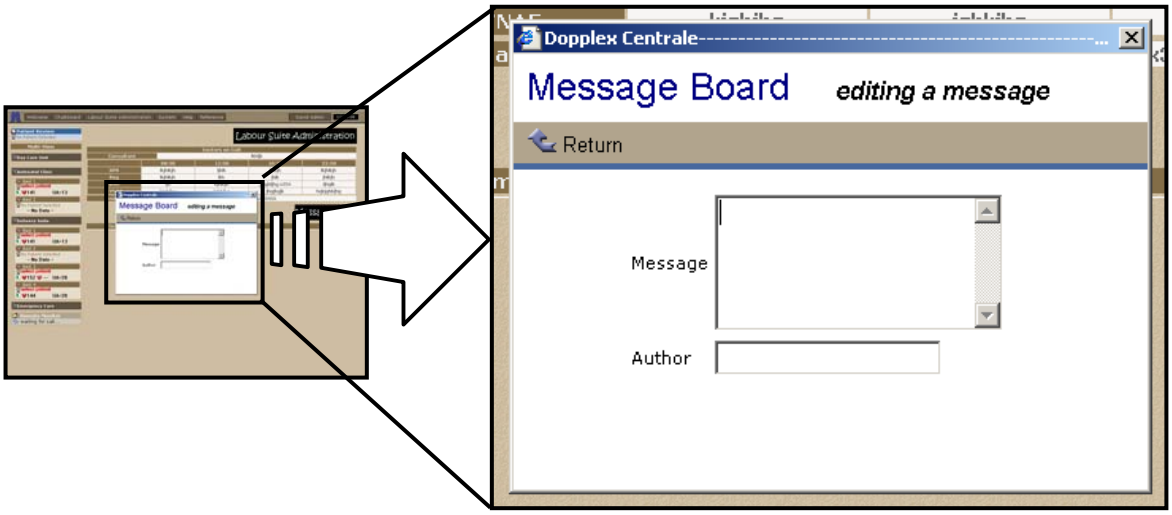


3.11.2 Message board

The message board is an informal message system allowing staff to leave messages for colleagues.

This should only be used for non-critical, non-clinical messages.

To enter a message, click on the 'Message' bar



Enter details as required.

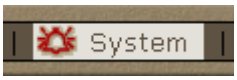
Multiple messages can be entered. These are displayed in date/time order and are automatically erased by default after a period set by your system administrator (default setting 24 hours).

IMPORTANT: *This data is not saved – this facility must not be used for clinical information or important messages.*

3.12 System

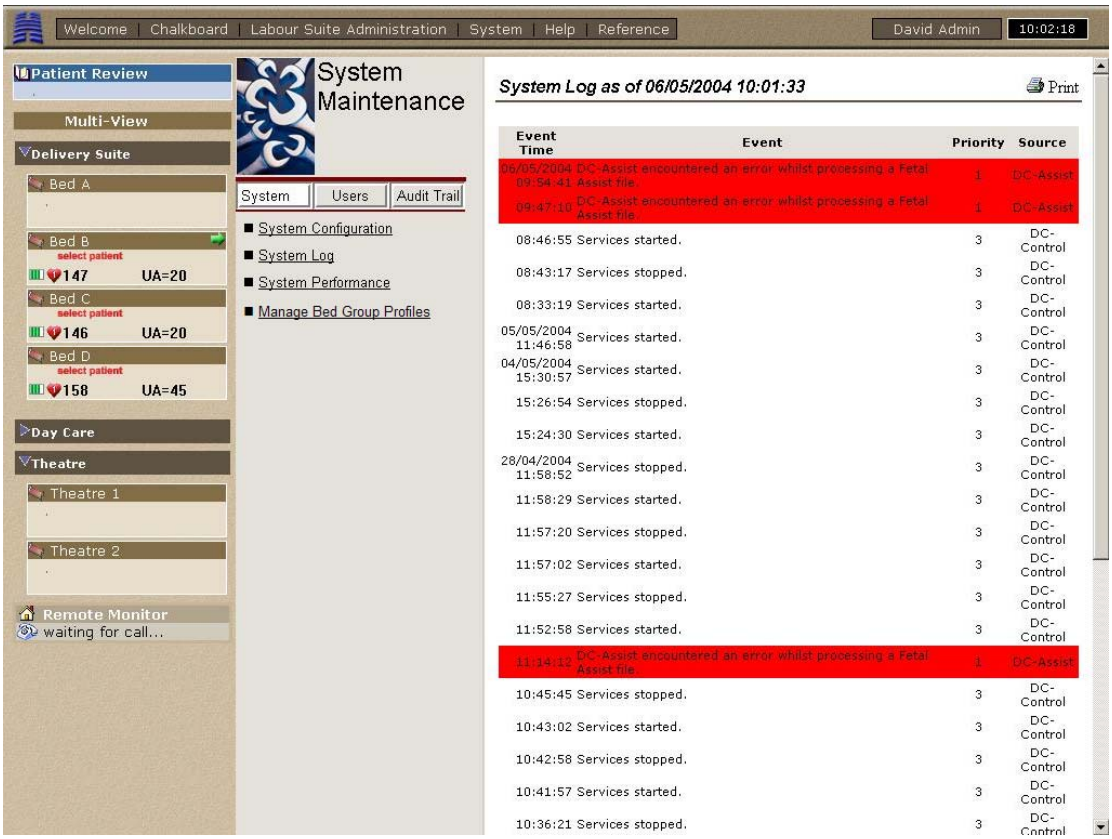
The 'System' function button on the top control bar is for System administrator use only. Do not attempt to access this if you do not have administrator rights – this will result in the access terminal being locked.

In the event of a system fault, an animated alarm icon will appear in the system button as shown below:



If this occurs and you are not authorised to view the system information, report this immediately to a suitably authorised user, super-user or your system administrator. When such alarms occur, it is important to report this as quickly as possible to allow logs to be viewed before they are lost and for appropriate corrective actions to be taken.

If this occurs and you are authorised to view the system information, click on this button – the following screen will appear:

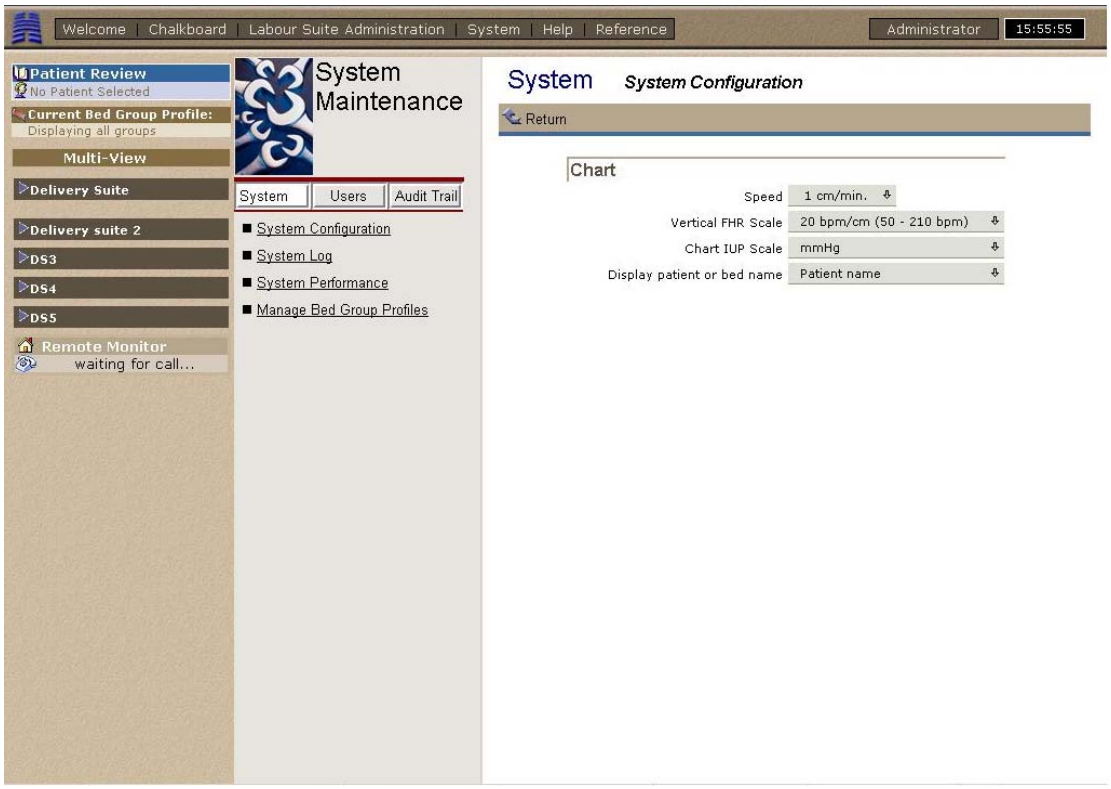


Print this log by clicking on the print icon in the top right-hand corner and contact your 1st line technical support service.

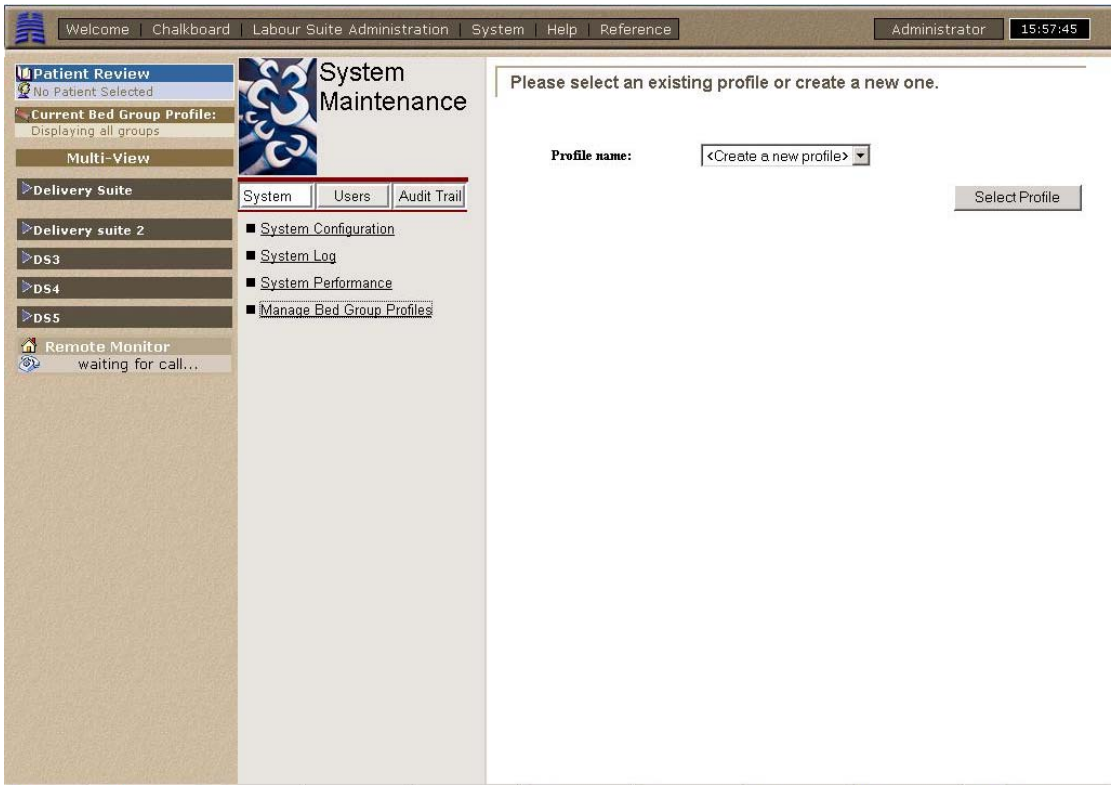
3.12.1 Manage bed group profiles

The manage bed group profile functionality allows the user to set which bed groups are to be displayed on screen. It also has the ability to turn off alarms in bed groups that are not being displayed.

To access the bed group profile feature, select ‘system’ from the top level menu.



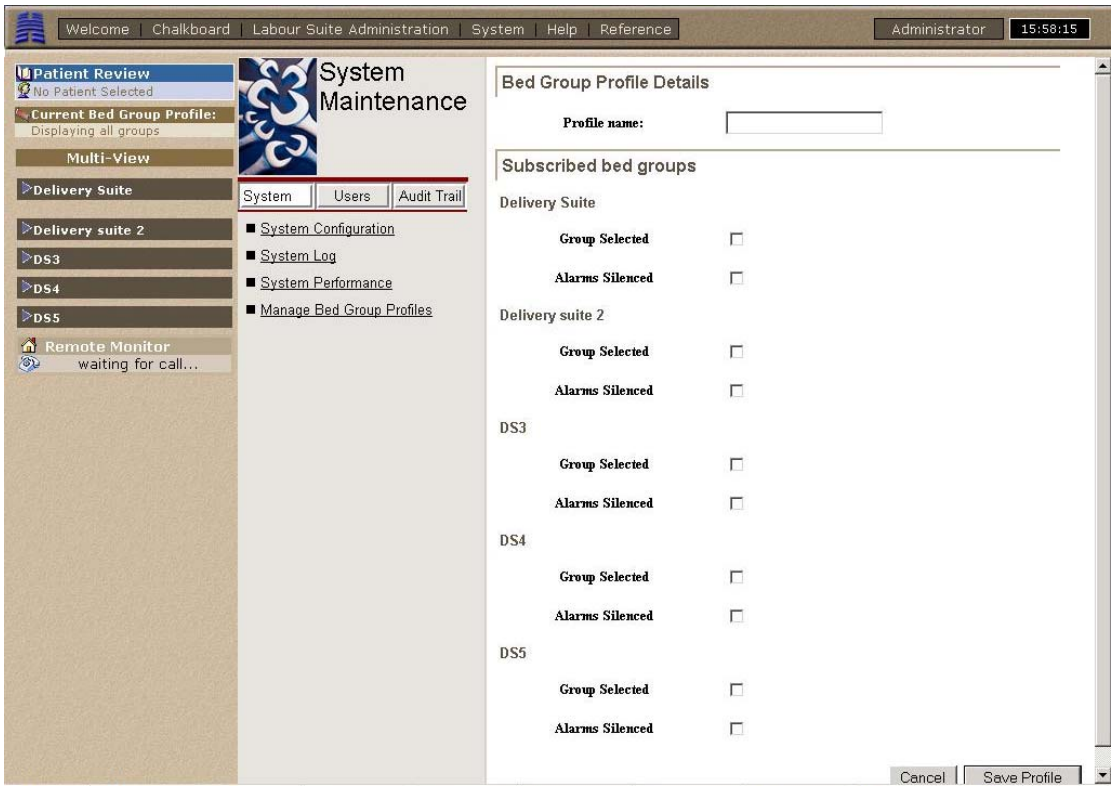
Select the option ‘Manage Bed Group Profiles’.



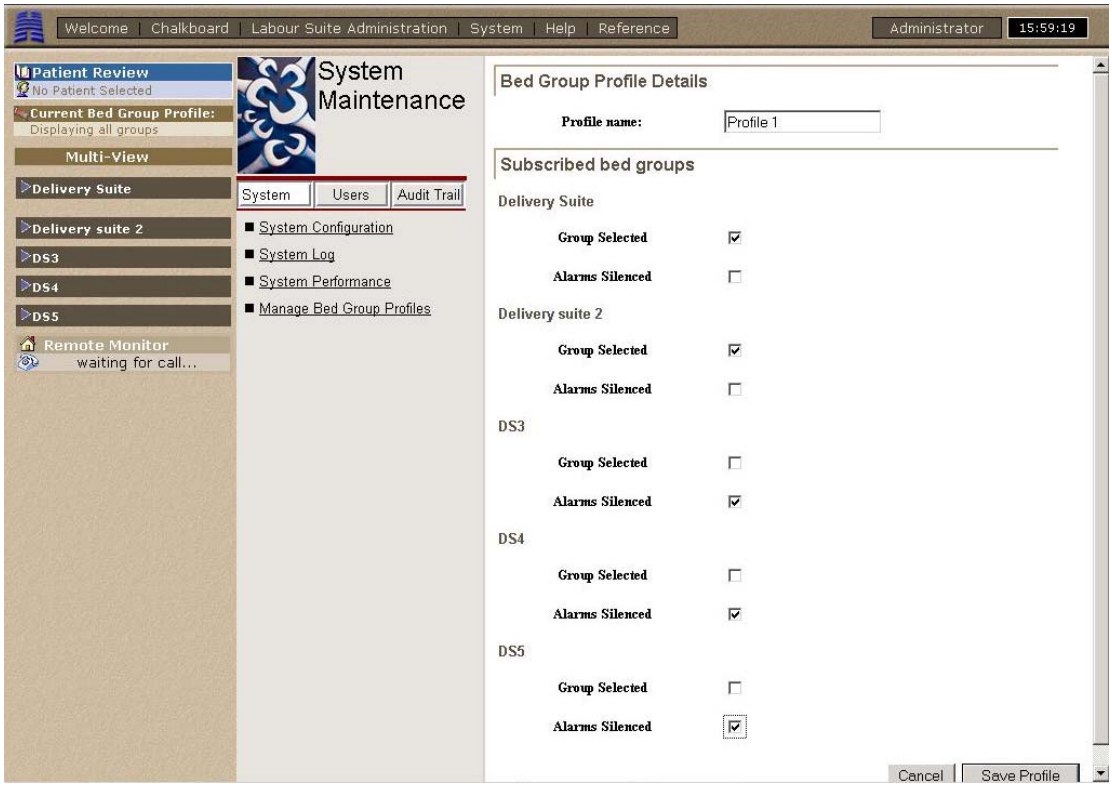
From the manage bed group profiles page, the user can edit or create profiles.

3.12.1.1 Create a new profile

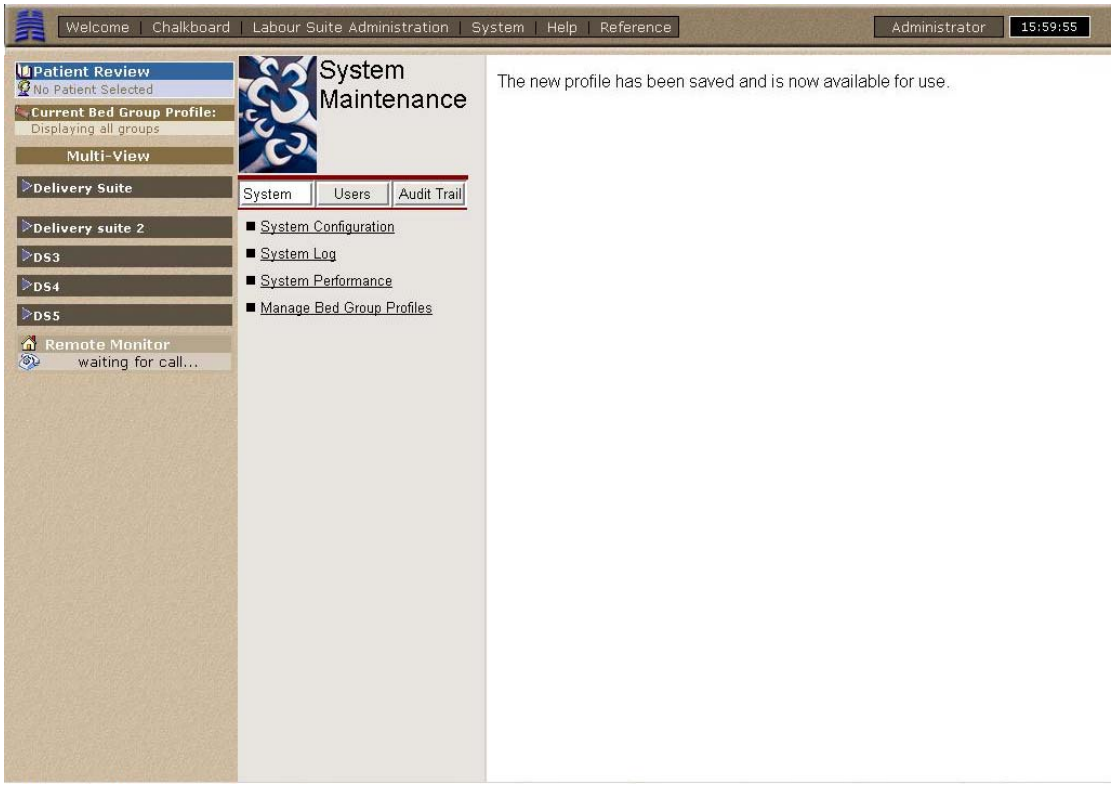
In the profile name dropdown box, select '<create a new profile>'. Then select the 'Select profile' button.



Enter a name for the profile being created in the 'Profile name' text box. Select the groups that are to be displayed by clicking on the tick boxes.
Choose if any of the bed groups are to have their alarms silenced by clicking on the appropriate tick boxes.



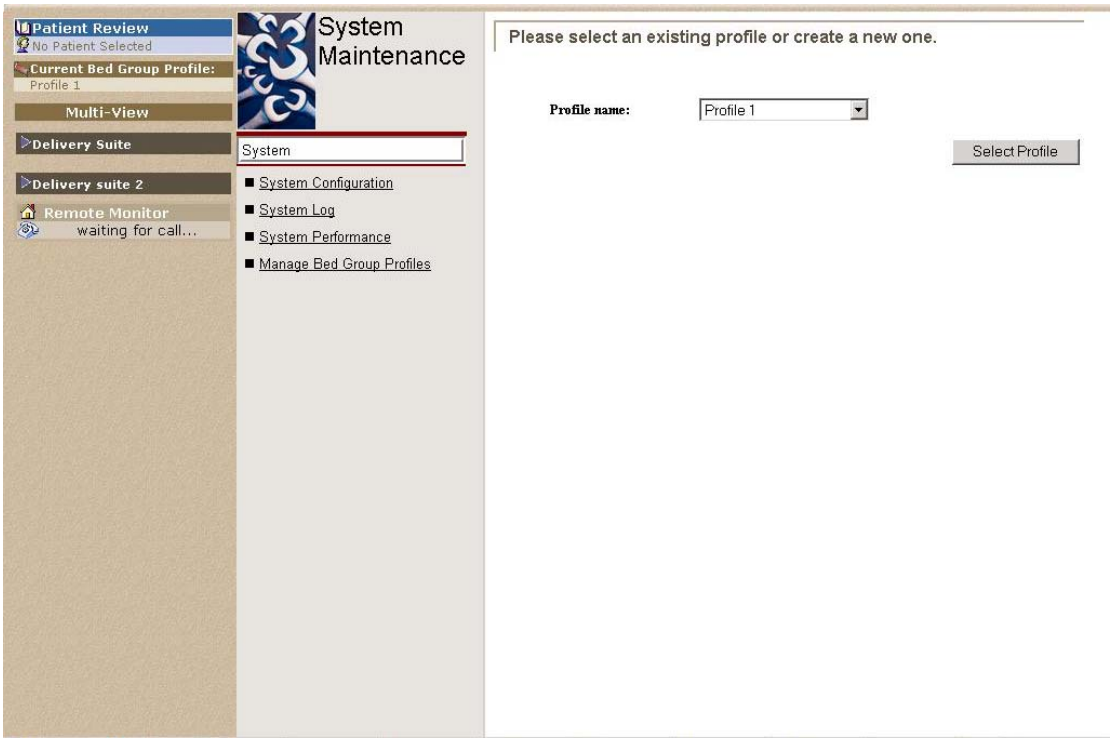
Press the 'save profile' button.

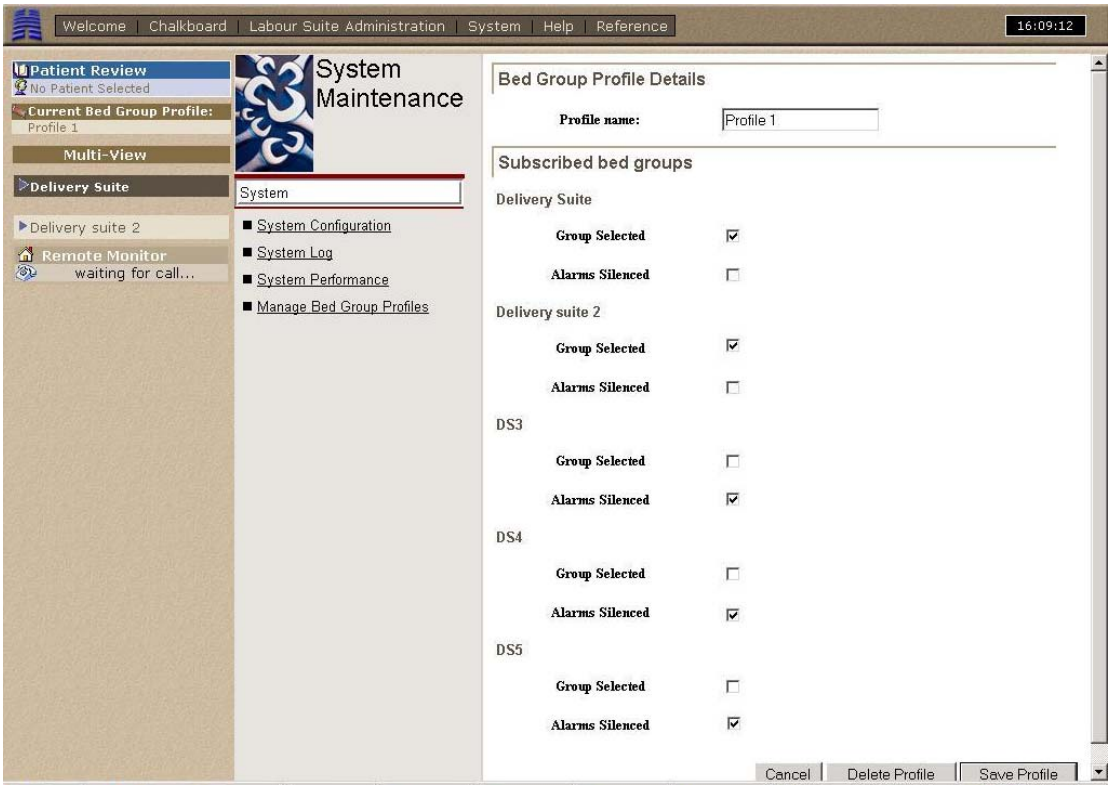


When the profile has been saved, the confirmation screen will be displayed.

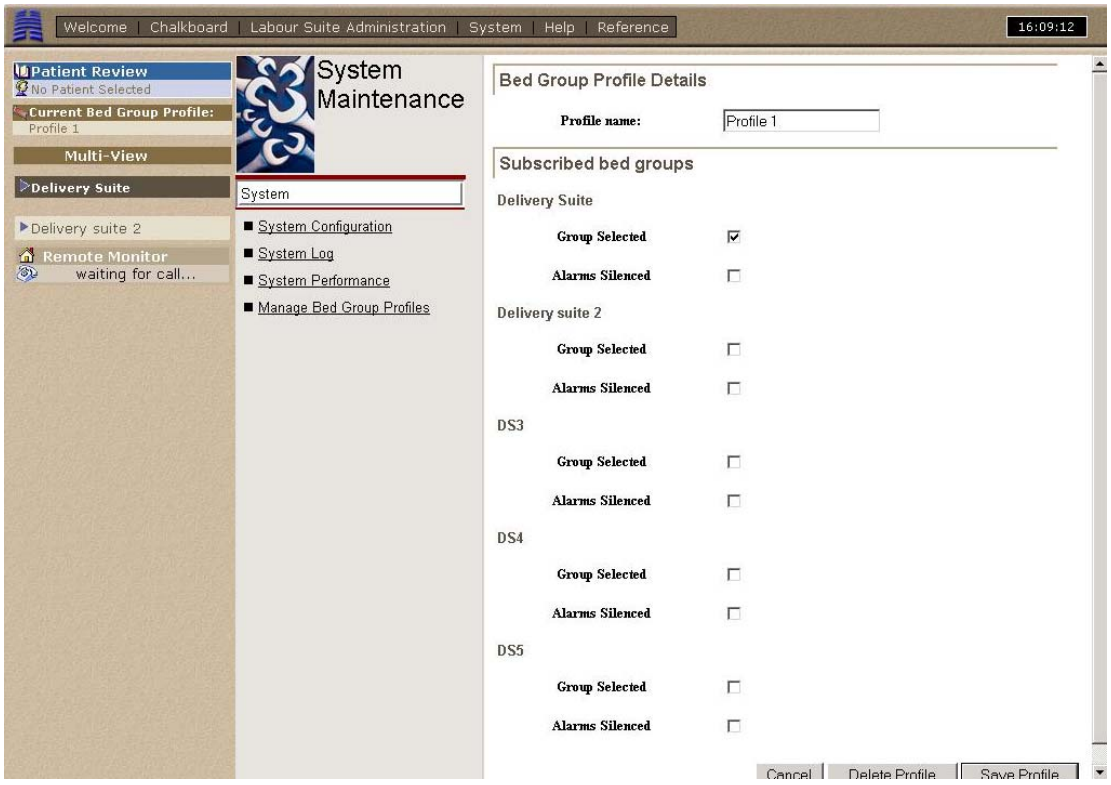
3.12.1.2 Edit an existing profile

Select the profile to edit in the drop down box. Press the select profile button.

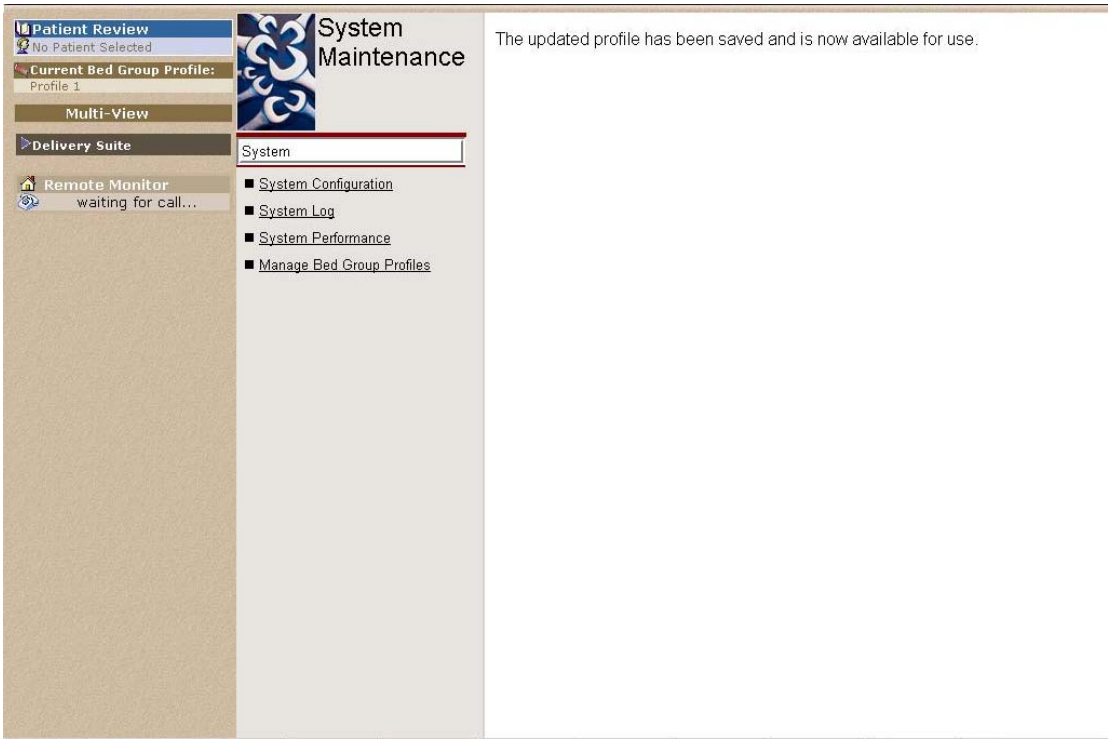




Make the necessary changes to the profile.

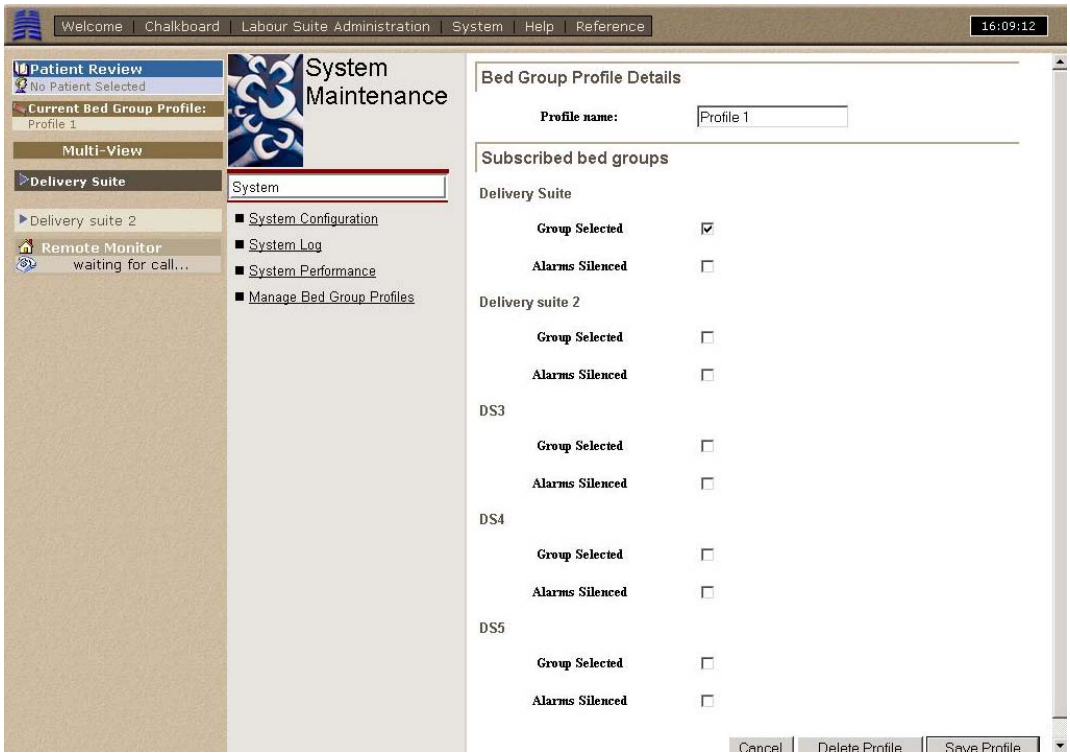


Press the save profile button.

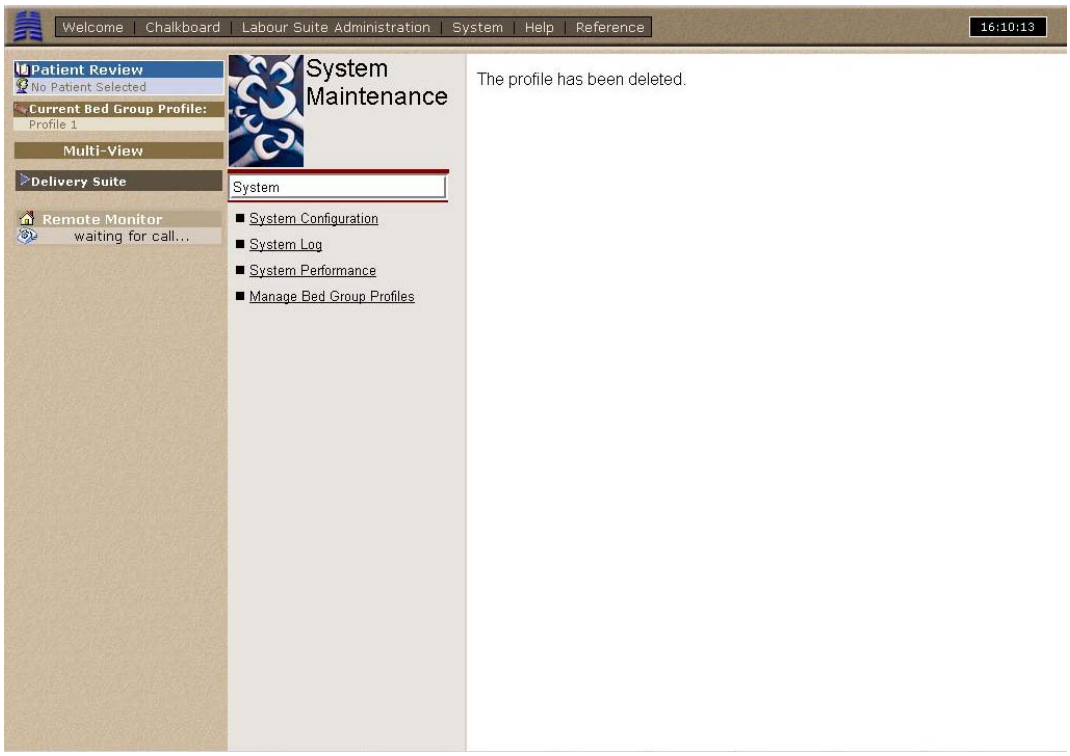


3.12.1.3 Delete a profile

Select the profile to delete in the drop down box, press the select profile button.



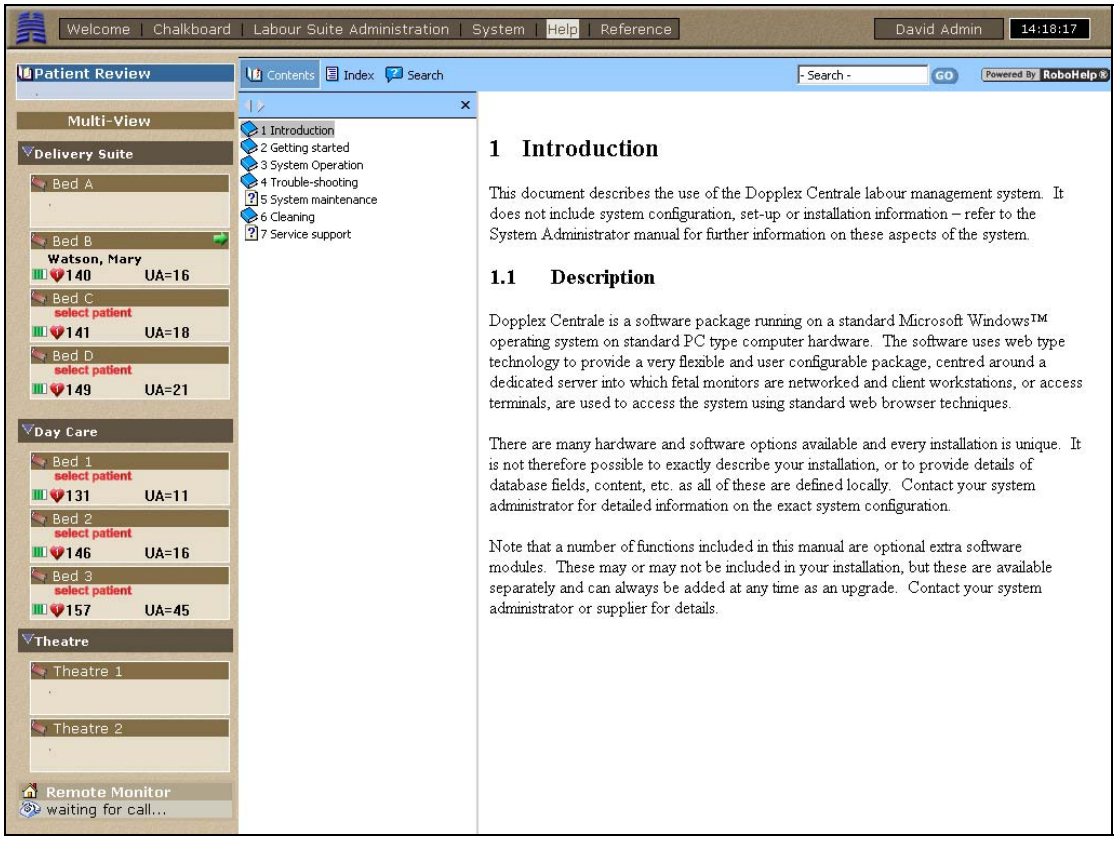
Press the delete profile button.



For details of other ‘System’ functions, refer to the System Administrator manual.

3.13 Help

An on-line help ‘manual’ is available. To view this, click on the ‘Help’ button on the system function bar at the top of the screen.



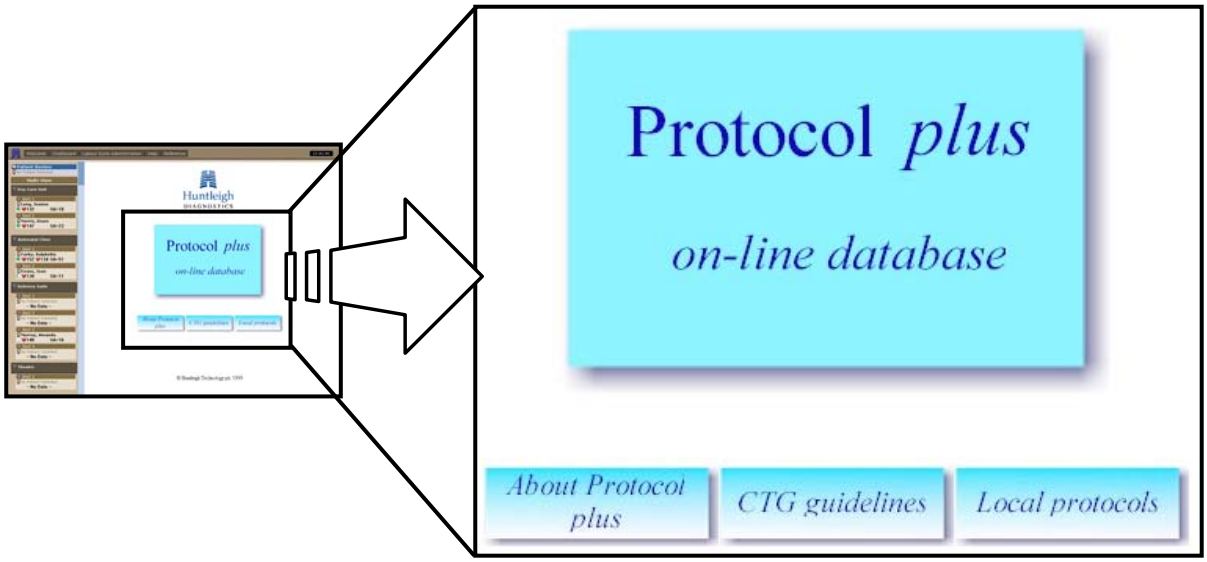
You can browse this using the expanding contents list.

In the patient database screen, help is provided on-screen for searching for a patient and for creating a new patient. To view this, simply ‘point & click’ on the appropriate text.

3.14 'Protocol *plus*' Reference database

The 'Protocol *plus*' database is divided into two sections. The first contains the international FIGO guidelines for labour CTG interpretation. The second can be customised to include local protocols.

To view this database, click on the 'Reference' button on the system function bar at the top of the main screen.



'About Protocol plus' – select to display information about using this database.

'CTG guidelines' – select to view the international FIGO guidelines and guidelines on labour fetal monitoring.

'Local Protocols' – select to view local protocols. Refer to your system administrator for details.

4 Trouble-shooting

Due to the nature of the system, it is not possible to cover all possible areas of trouble-shooting in this manual. This section includes first-line trouble-shooting relating primarily to difficulties in using the system. For more in-depth system support refer to your system administrator.

Problem	Possible solutions / explanations
Screen is blank	-Check screen connected to mains power. -Check power is switched on at mains socket -Check screen on/off switch is On. On most screens there is a small green or amber light – confirm that this is lit. -Blank screensaver may have been activated – move/click mouse or enter keystroke on keyboard to re-activate screen -Computer may have been switched off – refer to 'Re-starting an access terminal' for details.
Not receiving data from CTG	-Check CTG is switched on and working (note – CTG printer does not need to be running) -Check CTG is connected to wall socket in room – check cable connectors are secure -Book patient into bed – traces cannot be viewed until this is done
Unable to annotate trace	-Traces can only be annotated within the timeframe of the trace, not on the blank grid area to the right of the trace. -You may not have authority to perform this action – refer to system administrator
Unable to log on	-Check user name & password. The number of re-tries allowed is limited (set by your administrator). -The terminal may have been locked by failed log-on attempts - Contact your system administrator to unlock the terminal
Message 'You do not have permission to view this page' displayed	Your user name is linked to a user group which has a defined set of authorised actions. If you try to perform actions not authorised for your group, you will see this message. Your group assignment and action authorisations can only be changed by your system administrator
Unable to receive traces from Fetal Assists by phone	-Check telephone line connections. -Check line with switchboard manager – line priorities may have been changed.

System not responding	Check connections between the computer, keyboard, mouse and the network socket. Refer to your administrator – the server may need to be shut-down and re-started – do NOT attempt to do this unless authorised and trained.
All access terminals shut-down and not responding	Power cut – the main server will be supported for a short time by the UPS (depending on model) – typically about 10-15 minutes. After this, if power is not restored, the server will be shut-down. When power is subsequently restored, the whole system will need to be re-started – contact your administrator or IT department If power is restored before the server shuts down, simply re-start all access terminals – refer to 'Starting an access terminal' for details
Mouse not responding	Check cable and connection
Keyboard not responding	Check cable and connection
Print-outs not printing	Check printer is switched on, is 'On-line' and has sufficient paper loaded. For ink-jet printers, ink cartridge may need replacing – refer to printer manual for details. For laser printers, toner may need replacing – refer to printer manual for details.
System error message appears on screen	During system maintenance, while shutting down or re-starting the system, error messages may appear – these will normally clear themselves after a short delay. If the message does not clear after ~1 minute, contact your system administrator or first line support team.

4.1 Starting an access terminal

Access terminals should not normally be turned off. If they are turned off, either for maintenance or through user error, Sonicaid Centrale II can be re-started as follows:

- Start the computer & log-in to Windows
- When system log-on is complete, click on the 'start' button in the bottom left-hand corner of the screen.
- This opens a menu – proceed as follows:
    - Select 'Programs' Select 'Sonicaid Centrale II'
    - Click on 'Sonicaid Centrale II'
    - Wait while the Sonicaid Centrale II client software is loaded
- The Sonicaid Centrale II 'Log-On' screen will appear.

Note that there is a limit to the number of access terminals which can be active on the system at any one time. If the screen shown below appears, proceed as follows:

- Press & release the 'ESC' key on the keyboard or, while holding down the 'Alt' key, press the 'F4' function key & then release both keys.
- This will shut-down the application
- You will now have to wait until one of the other access terminals stops accessing Sonicaid Centrale II. You can then try again as detailed above.

5 System maintenance

5.1 General maintenance

The only scheduled maintenance required is to back up the database. This is subject to local policy and is normally managed by your IT department. Contact your system administrator or IT department for details.

No other maintenance is required, other than cleaning and checking for damage. This can be included in your routine local equipment maintenance programmes.

If you have maintenance contract cover, this will include a scheduled on-site inspection and maintenance programme – contact your system administrator or supplier for details.

5.2 STAN license functionality

The STAN monitor functionality in Sonicaid Centrale II requires a license in order for communications with STAN monitors to take place.

STAN Expiry date

The expiry date for the STAN functionality in Sonicaid Centrale II contains three stages of expiry:

- Pre-expiry warning – The number of days before the product expires (typically one month), allowing the customer time to re-license the STAN functionality.
- Expiry date – The date that the product expires.
- Post expiry grace period – The product expired grace period (typically 1 week), after which, the STAN functionality will be disabled.

Contact your system administrator for licence renewal.

6 Cleaning

Important - Before cleaning any part of the system, switch the relevant part off and disconnect from mains power. Note that access terminals must be shut-down first – refer to your system administrator or super-user for details.

Computer screens, keyboards, mice, printers etc. can all be cleaned by wiping down with a soft cloth dampened with a mild disinfectant solution.

Clear covers are available for keyboards as an optional accessory for use in environments where contamination is of concern – refer to your supplier for details.

6.1 Infection control

Refer to local infection control policies for details.

7 Service support

If service support is required refer to your system administrator for local contact details.

First-line service support is provided by your local supplier – contact them to initiate support. Where necessary, and only by referral through your local supplier, rapid remote software support is available directly from Huntleigh Healthcare in Cardiff, UK

If a problem occurs, immediately note as much detail as possible as to system status before the problem occurred, what the user was trying to do when the problem occurred and any attempted corrective actions. You should then ensure that your first-line support service is notified as soon as possible. The faster a problem is reported, the easier it is to resolve. If necessary, we can access the system remotely via a phone link and take appropriate corrective action.

This service is provided free of charge during the warranty period. Thereafter it is available at cost, or can be covered by maintenance contracts. Contact your supplier for details.

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As part of the ongoing development programme, the company reserves the right to modify specifications and materials of the Sonicaid Centrale II without notice.