NetKonnect Surveillance

NGNK-SURVEILLANCE-001

OPERATOR'S MANUAL

Rx ONLY

Revision C OCTOBER 2024 NIHON KOHDEN DIGITAL HEALTH SOLUTIONS | 14 BUNSEN | IRVINE | CA 92618 2024 © NIHON KOHDEN DIGITAL HEALTH SOLUTIONS

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2 GENERAL

2.1 INTENDED USE/INDICATIONS FOR USE

NetKonnect Surveillance is intended to interface connected medical devices with a user interface to annunciate and display patient information to medical personnel. Patient data is collected from medical devices located inside or outside a hospital.

NetKonnect Surveillance is intended for use of live monitoring of patient data, such as vital signs, alarms, and waveforms. NetKonnect Surveillance extends the operational possibilities without replacing or altering the functions of the independently approved, connected medical devices.

Rx only

2.2 INTENDED USERS

The intended users of NetKonnect Surveillance are healthcare providers (nurses, telemetry technicians, physicians, and advanced practice providers) for use on patients as determined by qualified medical personnel. Regardless of the job title, all intended users will interact with the software in the same way and utilize the same functions. NetKonnect Surveillance is not intended to be used by laypersons.

2.3 INTRODUCTION

NetKonnect Surveillance is designed to be a viewer for live data (vitals and waveforms) from bedside monitors alongside the calculated metrics received from the Nihon Kohden Digital Health Solutions' Data Platform.

2.4 WARNINGS

Do not diagnose a patient based only on data displayed on NetKonnect Surveillance. Overall judgment must be performed by medical personnel who understand the features, limitations, and characteristics of NetKonnect Surveillance and by reading the biomedical signals acquired by other instruments, such as bedside monitors.

Accessing the instructions for use electronically will provide the user with the most recent version. Downloaded and/or paper versions of the instructions for use are only valid on the day of downloading or printing.

2.5 LIFETIME

The product lifecycle is limited by the lifecycle of the operating system upon which the product depends, or the manufacturer declares end of life of the product itself. The performance of the device will be tested with each design cycle according to manufacturer procedures.

3 OPERATIONAL RESTRICTION

Category	Description
General	 No patient data is stored on the web page. Cannot modify any patient data. One instance running NetKonnect Surveillance per client PC.
All Patients page	• Can display a maximum of 48 patients.
Admit/Discharge	Updates patient info on bedside monitor.

4 ACCESSING NETKONNECT SURVEILLANCE

NetKonnect Surveillance is a web application intended for use on Chromium based web browsers, such as Google Chrome and Microsoft Edge. To access NetKonnect Surveillance on a web browser, navigate to the URL for NetKonnect Surveillance provided by the site administrator.

5 LOGIN PAGE

VetKonnect Surveillance	
Login	
Password	
Logii	

Figure: Login page

If installation is configured with authentication enabled, a login page will appear when first visiting the web page. Enter the username and password provided by the administrator. If the web page is in the background or closed for more than 15 minutes (default session timeout), the session will be terminated, and another login will be required for access.

6 ALL PATIENTS PAGE

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Figure: All Patients page

The All Patients page is a scrollable grid display that contains a maximum of 48 patient tiles that have been selected by the user. Each patient tile can display a maximum of 4 vital signs and 2 waveforms. It also displays a patient's name, bed name, and site name in the patient tile header. Patient tiles are ordered based on user preference and follow a left to right from top to bottom placement.



If two or more patients share the same first three letters of their names, the first three letters will be highlighted yellow to indicate the presence of similar patient names.



Figure: Similar patient name indication

6.1 MOVE A PATIENT TILE

A patient tile "A" can be dragged and dropped into a specific position in the ordered list of all patient tiles by clicking and holding on the center of the patient tile header, then moving/dragging the patient tile to a new position on top of a different patient tile "B", then releasing the click. Patient tile A will now be placed in the position that patient tile B was in, and patient tile B will be moved to the adjacent position unless other moved patient tiles are adjacent to the new position of patient tile A. Moved tiles

are marked with a lock icon

Drag and drop with no locked patient tiles



Click patient tile to move



Release click to lock and shift all unlocked patient tiles



Drag and drop with adjacent locked patient tile

Click patient tile to move

Drag to new location next to locked patient tile

Release click to lock and shift all unlocked patient tiles



6.2 LOCKING A PATIENT TILE POSITION

In the top left corner of the patient tile header, a "locked" patient tile is indicated with a lock icon and an unlocked patient tile with a cross directional arrow icon. Click on the cross directional arrow icon to lock a patient tile in its current position.

Click on the lock icon to switch a patient tile from locked to unlocked states. Switching a patient tile to unlocked state may make that patient tile move in position after locked patient tiles depending on the selected sort order.

A locked patient tile can still be moved by moving and locking other patient tiles before or on top of the locked patient tile.



Locked Patient Tile



Unlocked Patient Tile

Figure: Locked vs unlocked patient tiles.

6.3 MINIMIZING A PATIENT TILE

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To minimize a patient tile, click the minimize icon located in the top right of the patient tile as highlighted below.



Figure: Minimize patient tile button

After the patient tile has been minimized, the patient will be displayed in the minimized patient tile section as highlighted below.

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Figure: Minimized Patient Tile Display

6.4 EXPANDING A MINIMIZED PATIENT TILE

To expand a minimized patient tile, click on the Minimized Patient Tile. Once the tile has expanded, it will return to its original place based on the current sort ordering of the All Patient tiles.

6.5 ALARMS

Vital sign, technical, and arrhythmia alarms are displayed on a patient tile by highlighting the border and header color. A crisis alarm will be red, a warning alarm will be orange, and an advisory alarm will be blue. At the bottom right corner of the patient tile, the vital sign parameter or arrhythmia reason for the alarm will also be stated as individual alarm indicators. Each alarm indicator will be colored with its corresponding priority.



Figure: Alarm indications for crisis, warning, and advisory alarm priorities.

Alarms are also indicated on a minimized patient tile by highlighting the border with the highest priority color.



Figure: Alarm indications for crisis, warning and advisory alarm priorities on minimized patient tiles.

6.6 SILENCING ALARMS

An alarming patient tile will display an alarm icon in the top right corner of the patient tile. The alarm icon will appear if the bed is licensed for alarm silence feature. Clicking on the alarm icon will silence all audible and visual alarms on the bedside monitor for a period based on monitor settings (typically 2 minutes). The bedside monitor will display a silenced alarm state.



Figure: Alarming patient tile displaying alarm icon.

If silencing all alarms bedside is intended, confirm the pop-up dialog that appears after clicking the alarm icon.



Figure: Confirm silence alarm at bedside popup dialog.

If silenced, either by user interaction on NetKonnect Surveillance or at the bedside monitor, the patient tile will indicate that the alarm has been silenced by displaying "Silenced" next to a disabled silenced

alarm icon **L**. The vital sign parameter or arrhythmia reason for an alarm will still be indicated on the patient tile in the bottom right corner, for as long as the alarm condition is met.

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Figure: Silenced patient tile indicating alarm is silenced at bedside monitor.

Once the alarm silence period has ended, and if an alarm condition is still occurring on the bedside monitor, the patient tile will enable the alarm icon to allow for another alarm silence request.

6.7 CUSTOMIZING A PATIENT TILE

To customize the vital signs and waveforms displayed for each patient tile, click on the gear icon F in the top right corner of a patient tile. Then select the preferred vital signs (max 4) and waveforms (max 2) from the list of available parameters. If 4 vital signs or 2 waveforms are already selected, first deselect parameters to replace and not show in the patient tile. Once a selection is made, click Apply Changes to confirm, or Cancel to exit the menu.

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Figure: Patient tile vital signs and waveforms customization.

6.8 OPENING A SINGLE PATIENT PAGE

To open a new web browser tab containing a Single Patient page, where only one patient is displayed,

click on the URL link icon \checkmark in the top right corner of a patient tile. This view will contain all functionality of a patient Slide Out view. The Single Patient page can also be accessed by external applications or directly inputting the patient/bed specific URL into a web browser tab (i.e. HTTPS://<NetKonnect Surveillance ADDRESS OR HOSTNAME>/bed/<BED NAME>.



Figure: Single Patient Page

To close the Single Patient page, click on the close web browser tab icon displayed on the browser tab.



Figure: Close Single Patient Page

6.9 SITE TAB FILTERS

The top right corner of the All Patients page contains the Site/Unit Tabs for filtering displayed patient tiles by their associated site. If a Site Tab is selected, a check mark will appear next to the site name, the Site Tab will be underlined, and all selected patient tiles associated to the site will be displayed.

The Site Tabs only filter patient tiles that have been selected in the Bed Selection tab to be viewed on the All Patients page. Selecting a Site Tab does not select all possible patient tiles associated to that site from the Bed Selection List.



Figure: Site Tab filters show or hide selected patient tiles based on their associated site/unit.

To hide patient tiles for a certain site, click on the selected Site tab associated to those patient tiles. To select all patient tiles for display, click on the "Select All" text.

6.10 STARRED TAB FILTER

Next to the Site Tab filter buttons is the Starred Tab filter button. Patient tiles that have been starred will be displayed when the Starred Tab filter is selected. All non-starred patient tiles will be hidden and all Site Tabs will be deselected.



Figure: Starred Tab Filter

To star a patient tile, click on the patient tile to open the Slide Out View and select the star icon next to the bed name. A starred patient tile will have a yellow star, and an unstarred patient tile will have a white star.



Figure: Patient tiles can be starred by clicking on the star icon in the Slide Out View

THE SLIDE OUT VIEW 7



Figure: Slide Out View

The Slide Out View is a partial-screen view of a single patient tile. It can display more vital signs (number of vitals depends on the screen size) and waveforms than a patient tile. To display the Slide Out View, click on any patient tile in the All Patients page. If you want to change the Slide Out View to a different tile, then click on the desired patient tile on the left side of the screen.

When the Slide Out View is opened, the patient tiles are placed on the left side of the screen in a scrollable view. In the scrollable patient tile view, a darkened patient tile with no alarm means a specific patient tile was selected for the Slide Out View. *Note: an alarm will still be displayed on the darkened patient tile and other alarming patient tiles are also darkened.*

The Slide Out View will indicate alarms the same way a patient tile does. When one or more alarms are present, it will be indicated by highlighting the border of the Slide Out View with the highest priority alarm color, and the alarm(s) reason will be displayed in the bottom right corner.

7.1 Adding a waveform(s) to the Slide Out View

You can add waveforms by clicking the blue tab which is located on the top right of the Slide Out View.



Figure: Waveform Selector Pop-out Tab

The Waveform Selector pop-up menu is displayed after clicking the blue tab. It contains all available waveforms for the patient. Add waveforms by clicking on their corresponding check boxes. To remove displayed waveforms, simply uncheck them. Close the pop-up menu with the same blue tab used to open the menu.

Any additions/removals you made in the Waveform Selector will be remembered by the NetKonnect Surveillance, meaning if you were to switch to another bed or exit the Slide Out View and then come back to that specific bed, then those changes will still be in effect.

Note: The NetKonnect Surveillance will still remember Slide Out View waveform changes when you refresh the screen only if you use the same computer/workstation and user login.

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Figure: Waveform Selector

If more than 4 waveforms have been selected, then NetKonnect Surveillance will make the wave display area scrollable to view other selected waveforms. Use the mouse wheel or the blue scroll bar to view all selected waveforms.



Figure: Example of Slide Out View with more than 4 Waveforms.

7.2 CHANGING A WAVEFORM'S PREFERENCES

To open a waveform's preferences menu, click on the gear icon For located in the bottom left corner of any displayed waveform.



Figure: Waveform Preferences Gear Icon

These preferences include different scaling or limit options and a grid toggle. The scaling options change the scale/amplitude of the waveform, the limit options change the y-axis range, and the grid toggle will display or hide the grid.



Figure: Waveform Scaling and Limit Preferences

To change the waveform scaling to a different multiplier click on the corresponding radio button that denotes the scaling factor. Some waveforms will have choices for limits instead of the default scaling options. Change the waveform limits by clicking on the desired radio button. To alter the waveform limit options, contact the NetKonnect Surveillance administrator. To toggle if the waveform grid is displayed or not, click on the switch.

To close the pop-out menu, click on the same gear icon on the bottom left of the corresponding displayed waveform.

7.3 CHANGING THE VITAL SIGN ORDERING

To change how the vital signs are ordered in the Slide Out View, click on the up-and-down-arrow Sort icon located at the top-right of the vital signs area.



Figure: Vital Selector Sort Icon

Clicking the sort icon brings up the Vital Selector pop-up menu. The Vital Selector contains all available vital signs for a patient. Clicking on unchecked vital signs will push those vital signs up to the top where the rest of the check-marked vital signs are listed. Unchecking the vital signs will make them sort back to alphabetical ordering.

Vital signs clicked first will take priority in terms of ordering. For example, if BIS was clicked first, Apnea second, and CVP third, then the ordering will be BIS, Apnea, and CVP from top to bottom, then all other unchecked vital signs.



Figure: Vital Selector

The size of the screen determines the number of vital signs that can be viewed. Not all checked vital signs may be viewed. If the number of vital signs checked exceeds the maximum number of viewable vital signs, first uncheck enough vital signs to be able to see all checked vital signs.

To close the Vital Selector pop-up menu, click on the Sort icon on the top right of the Vital Selector popup menu.

Any additions/removals made in the Vital Selector will be saved per bed. Closing the Slide Out View for the edited patient will show the same edits upon next open.

Note: The NetKonnect Surveillance will still remember Slide Out View vital sign changes when you refresh the screen only if you used the same computer/workstation and user login.

7.4 ADMIT/DISCHARGE/TRANSFER (ADT) – SLIDE OUT VIEW

The top right corner of the Slide Out View contains the Admit/Discharge/Transfer (ADT) buttons. The buttons will be visible for beds that are licensed for the ADT feature.



Figure: Transfer and Admit/Discharge in Slide Out View

If a bed has an admitted patient, the Discharge icon will be visible. If a bed does not have an admitted patient, the Admit icon will be visible. For admit/discharge workflow, see The Settings Page -> Admit/Discharge Patients - From Bed Selection List below.

Click on Transfer icon to discharge patient from existing bed and admit them to an empty bed available in the same facility.



Figure: Transfer patient popup dialog.

7.5 VITAL HISTORY

To view vital history, also referred to as graphical trend data, click on the VITAL HISTORY tab on the Slide Out View. The vital history plots will display the history of 4 default vitals selected in the Settings Configuration screen. By default, the vital history plots show 24 hours of data.



Figure: Vital History tab showing history of the 4 default vitals selected in Settings Configuration Screen

For each history plot, zoom into a specific time window by clicking on time point A, then moving the mouse to time point B and clicking again. This will zoom the view from time point A to time point B. To drag the plot and move through time, click on the Move button, and then click and hold in the direction desired to move the plot. The Move button will become the Zoom button to switch between the two actions.

Click on the "12 hours" or "6 hours" buttons to see data for the most recent 12- and 6-hour time span of each plot, respectively. Click on the Reset button to reset the plot to show the default 24-hour time span of data.

Vital sign parameters for pressure that contain diastolic and systolic values will be combined and plotted together in one plot as two separate trend lines.

7.6 WAVE HISTORY

To view wave history, click on the WAVE HISTORY tab on the Slide Out View. The wave history plots will display the history of 2 default waves selected in the Settings Configuration screen. Additional waves can be added using the same Wave Select popout menu in the LIVE tab.



Figure: Wave History tab showing the waveform history of the 2 default waveforms selected in Settings Configuration screen, and any other additional waveforms selected in Wave Select Menu.

7.7 SEND WAVEFORM SNIPPET TO EMR

To send a waveform snippet to an EMR, first click on the EMR Snapshot camera icon for a certain waveform to open the Waveform Snippet menu. The EMR Snapshot camera icon will be present for beds that have the Send to EMR feature enabled.

The Send Waveform Snippet to EMR menu contains a Send to EMR paper airplane icon/button, a Measure Time stopwatch icon \bullet , a Measure Amplitude ruler icon \bullet , an Add Note chat bubble icon , an Undo icon \circ and a Cancel/Close icon \bigotimes .





Clicking the Measure Time button will enable placement of a time measurement annotation. Click a location on the plot, move the mouse along the x-axis (along time) and click again to place a time measurement between the two click points. Clicking the Measure Amplitude button will enable placement of an amplitude measurement annotation. Click a location on the plot, move the mouse along the y-axis (amplitude) and click again to place an amplitude measurement between the two click points.



Figure: Add Measure Time and Amplitude Annotations to Waveform Snippets.

Clicking the Add Note button will enable placement of a note annotation. Click a location on the plot and a text input field will appear at the mouse cursor. Type the note annotation with a max of 50 characters, click at different location on the plot if note needs to be relocated, then hit Enter on the keyboard to place the note annotation.



Figure: Add Note Annotations to Waveform Snippets.

Clicking the Undo button will revert the last annotation placement for time, amplitude or note. Clicking the cancel button will exit the Send Waveform Snippet to EMR menu and unfreeze the waveform to return to live view mode.

Clicking the Send to EMR button will send a request to an EMR interface. If NetKonnect Surveillance is able to send the waveform snippet/strip message, a popup message will appear at the bottom of the screen confirming the message was sent.



Figure: Waveform strip message sent to EMR.

7.8 SEND ALL WAVES TO EMR

All displayed waveforms in the WAVE HISTORY tab can also be sent by clicking on the Send All Waves to EMR button. The Send All Waves to EMR button will be visible if the bed is licensed for the Send to EMR feature.

Each wave will be sent as a separate message and will contain the default vitals selected in the Settings Configuration screen. No caliper time or amplitude measurements, and no custom notes can be added when using the Send All Waves to EMR function.



Figure: Clicking on the Send All Waves to EMR button will send all displayed waveforms to the EMR.

7.9 CLOSING THE SLIDE OUT VIEW

To close the Slide Out View, click on the close X icon in the top right corner of the Slide Out view. This will display the default All Patients Page.

8 THE SETTINGS PAGE

The Settings Page allows you to update certain behaviors and UI elements of the NetKonnect Surveillance website. It is split into three sections: Configuration, Bed Selections, and About. The Configuration section contains general UI settings and default waveforms and vital signs. The Bed Selections section is where you are able to add/remove patient tiles that are displayed in the All Patients page. The About section displays the NetKonnect Surveillance's product information and a link to the Nihon Kohden Digital Health Solution (NKDHS) privacy policy.

To navigate to the Settings page, click on the blue gear icon on the top right of the header. This settings icon is present for both the All Patients page and the Slide Out View.



Figure: Navigating to the Settings Page from the All Patients page

The Settings Page should initially start in the Bed Selections list, as shown below.

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Figure: Settings – Bed Selections View

8.1 ADDING/REMOVING A PATIENT

Click on the Bed Selections tab on the Settings Page. The Bed Selections tab displays a list of beds and their corresponding patient, site, and status information. The list contains the following columns:

Display: Shows an eye icon for any selected beds. Header contains a count of selected beds out of the 48 bed max.

Bed: The bed name of each bed as it appears on the bedside monitor itself or through a particular data feed.

Patient Name: The name of the patient admitted to the bed.

Site: The site name of the bed based on NetKonnect installation configuration.

Inactive: Displays an unplugged icon if no data is received from the device for some time.

Admit / Discharge: Displays admit icon for beds that have no patient admission, and the discharge icon for beds that do have a patient admission.

	BED SELECTIONS		CONFI	GURATION		ABOUT
Q Search	Bed, Patient, or Site Data					
	Display (3 of 48)	Bed 🔸	Patient Name	Site	Inactive	Admit / Discharge
	٥	OR09	UNKNOWN	site-5		-1
	0	OR07	MMMO, TEST	site-5		-1
		OR01	TURING,ALAN	site-5		-1
		MIC U37	Levant,Steven	site-3		-1
		MIC U36	Sharmouli,Zaynab	site-3		-1
		MIC U35	Wonda, Tiffany	site-3		-1
		MIC U34	Diallo,Simone	site-3		-1
		MIC U32	Brooks,Cynthia	site-3		-1
		MIC U30	Ling,Mai	site-3		-1
		MIC U29	Adams,Peter	site-3		-1 .
					APPLY	CHANGES REVERT CANCEL

Figure: Bed Selections Screen

Displayed beds are check marked, have the eye icon under the display column, and have a dark blue background. These beds will appear as patient tiles in the All Patients page. Hidden beds are unchecked, do not have the eye icon under the display column, and have a black background.

To add a patient, click on the associated empty check box on the left-most column. To remove a patient, click on the associated check marked box.

Note: At least one bed must be selected, and a maximum of 48 beds can be selected.

You can also use the left-most column header checkmark **i**, minus-sign icon to automatically select or de-select all available beds.

There are three different header checkbox states to toggle:

, or empty box



Empty: No beds are selected. Note that there will be a pop-up notification at the bottom stating "No Bed Selected." The 'Apply Changes' button is also disabled since there must be at least one patient tile displayed in the All Patients page.



Minus Sign: Some beds are selected and other beds are not. Click to select all.

✓

Checkmark: All beds (max 48) are selected and will be displayed if you click on the 'Apply Changes' button. If you exceed 48 beds, the 'Apply Changes' button will be disabled until 48 or less beds are selected. Click to deselect all.

Click on the "Apply Changes" button to save changes and navigate back to All Patients page. Click on the "Revert" button to set selection back to previous saved. To cancel and exit out of the Settings Page, click on the "Cancel" button.

8.2 SEARCHING/ORDERING THE PATIENTS

In the Bed Selections section, you are able to search patients by utilizing the Bed Selections search bar. Click on the search bar with the message "Search Bed, Patient, or Site Data," and start typing. The search filter works for bed name, patient name, or site.

	BED SELECTIONS		CC	CONFIGURATION		ABOUT
Q Seat	rch Bed, Patient, or Site Data ven					
	Display (0 of 48)	Bed 🗸	Patient Name	Site	Inactive	Admit / Discharge
		MIC U37	Levant,Steven	site-3		-1
					АРР	LY CHANGES REVERT CANCEL

Figure: Bed Selections Search Bar Example

To sort the bed list, click on the desired column header: Display, Bed, Patient Name, Site, Inactive, or Admit/Discharge. This will sort the beds by that specific column in ascending order. To sort by descending order, click on the same column header again. Toggle ascending and descending order by clicking on the corresponding column header.

Note: this ordering only affects the Bed Selections section and does not affect the ordering of the All Patients page.

	BED SELE	CTIONS	C0	NFIGURATION		ABOUT
Q, Searc	ch Bed, Patient, or Site Data					
=	Display (3 of 48)	Bed	Patient Name 🛛 🗸	Site	Inactive	Admit / Discharge
	Ø	MIC U35	Wonda, Tiffany	site-3		-1
	0	OR09	UNKNOWN	site-5		-1
	ø	OR01	TURING,ALAN	site-5		-1
		CICU08	Tibult,Jacob	site-4		-1
		CICU55	Test,Data	site-4		-1
		CICU17	Smiths, John	site-4		-1
		MIC U25	Smith,Gary	site-3		-1
		CICU01	Slater, John	site-4		-1
		MIC U36	Sharmouli,Zaynab	site-3		-1
		CICU07	Sage,Kevin	site-4		-1 .
						PPLY CHANGES REVERT CANCEL

Figure: Bed Selections Ordering Example

8.3 ADMIT/DISCHARGE PATIENTS – FROM BED SELECTION LIST

A bed with an admitted patient will have patient name displayed (if available on monitor) and an Admit

icon **T** in the Admit/Discharge column. A bed with no patient admission will have a Discharge icon

in the Admit/Discharge column. The Admit or Discharge Patient icons will be visible if the bed is licensed for the ADT feature.

			CON	FIGURATION		ABOUT
Q Search E	led, Patient, or Site Data					
=	Display	Bed 🗸	Patient Name	Site	Inactive	Admit / Discharge
		OR09	EG-105BED	site-5		-1
		OR07	JOHN SMITH	site-5		-1
	0	MIC U37	Levant,Steven	site-3		-1
	0	MIC U36	Sharmouli,Zaynab	site-3		-1
	0	MIC U34	Diallo,Simone	site-3		-1
	ø	MIC U32	Brooks,Cynthia	site-3		-1
	0	MIC U30	Ling,Mai	site-3		-1
	0	MIC U29	Adams,Peter	site-3		-1
	0	MIC U28	Gorobo, Takashi	site-3		-1
	0	MIC U27	Davis,Michael	site-3		-1
	0	MIC U25	Smith,Gary	site-3		<u>-</u> ,
						APPLY CHANGES REVERT CANCEL

Figure: Beds with Admitted and Discharged patients and column indicator

If a bed has no admitted patient, click on the Admit Patient Icon to open the Admit Patient dialog. Enter patient name, ID (i.e. MRN), and date of birth and click Admit, then confirm in next dialog to admit the patient. Patient information will appear on the bedside monitor, and the change will propagate to NetKonnect Surveillance.

Admit Patient	×	
Patient Name Last, First		
Patient ID XXXXXXXX		
Date of Birth MM/DD/YYYY		Are you sure you want to admit Brown, × Jacob?
		This action will occur on the beside monitor.
Cancel	Admit	No, Cancel Yes, Admit

Figure: Admit patient popup dialog.

If a bed has an admitted patient, click on the Discharge Patient Icon to open the Discharge Patient dialog. Verify the patient information that will be removed from the bedside monitor before clicking Discharge and confirming in the next dialog.

Discharge Patient	×
Patient Name	
Patient ID 1780234	
Date of Birth03/21/1995	Are you sure you want to discharge ×
Cancel Discharg	This action will occur on the beside monitor.
	No, Cancel Yes, Discharge

Figure: Discharge patient popup dialog.

8.4 SHOW/HIDE PATIENT NAMES

In the Configuration settings, you have the option of either showing or hiding patient names in the All Patients page. You can do this by clicking on the "Patient Names" switch.

	BED SELECTIONS	CONFI	GURATION	ABOUT
Patient Names Hide Constant Show		Default Waveforms (2)	Default Vitals (4)	
Default Patient Tile View Minimized Dormal		□ II ▼ So02	✓ \$p02 Sp02-2	
Default Sort Value		Resp		
Bed	 Descending 	RIMP ART	NIBP-S	
		CVP	NIBP-D	
			Temp	
			NEWS-Vital	
				APPLY CHANGES REVERT CANCEL

Figure: Patient Names Setting

8.5 CHANGE DEFAULT PATIENT TILE VIEW

In the Configuration settings, you are able to change the default patient tile view between Minimized and Normal. In Minimized view, the All Patients Page will display all patient tiles at first as minimized, after selection from the Bed Selection list. It will also minimize all existing patient tiles in the All Patient Page after clicking Apply Changes. In Normal view, the patient tiles will appear expanded to show waveforms and all 4 vital signs in the All Patients Page by default.

	BED SELECTIONS			ABOUT
Patient Names Hide C Show		Default Waveforms (2)	Default V	ritais (4) ?
Default Patient Tile View Minimized Dormal		□ II ■ \$902	Sp	02
Default Sort Value		Resp		8P
Bed	 Descending 	▼ RIMP		BP-S
		ART		BP-M
		CVP		BP-D
			Z Re	sp
			🗾 Те	mp
				WS-Vital
				APPLY CHANGES REVERT CANCEL

Figure: Default Patient Tile View

8.6 CHANGE DEFAULT SORT PARAMETER AND ORDER

In the Configuration settings, you are able to change the sort parameter and value of patient tiles in the All Patients page. The patient tiles can be sorted by Patient, Bed, or Site name, and in either ascending or descending order. The sort parameter and order will be used in conjunction with patient tiles that have been locked by the user into a specific position within the ordered list.

	BED SELECTIONS	(CONFIGURATION	ABOUT
Patient Names Hide T Show		Default Waveforms (2)	Default	Vitals (4) HR
Default Patient Tile View Minimized		□ II ✔ Sp02	Z :	sp02 sp02-2
Default Sort Value		Resp		NIBP
Bed	- Descending -			NIBP-S
L		ART		NIBP-M
		CVP		NIBP-D
			-	lesp
				lemp
				NEWS-Vital
				APPLY CHANGES REVERT CANCEL

Figure: Default Sort Parameter and Order

8.7 CHANGE THE SELECTED WAVEFORMS

In the Configuration settings, you are able to change the default waveforms the patient tiles display. To add a default waveform, click on the empty check box associated with the desired waveform. To remove a default waveform, uncheck the desired waveform. *Note: you are only able to have a maximum of 2 default waveforms.*

	BED SELECTIONS		CONFIGURATION		ABOUT		
Patient Names		Default Waveforms (2)	Defau	t Vitals (4)			
		✓ '	×	HR			
Default Patient Tile View			∠	Sp02			
Minimized		🔽 Sp02		Sp02-2			
Default Sort Value		Resp		NIBP			
Bed	- Descending	RIMP		NIBP-S			
		🗆 ART		NIBP-M			
		CVP		NIBP-D			
			Z	Resp			
			Z	Тетр			
				NEWS-Vital			
					APPLY CHANGES	REVERT	CANCEL

Figure: Default Waveforms Setting

8.8 CHANGE THE SELECTED VITAL SIGNS

In the Configuration settings, you are able to change the default vital signs the patient tiles display. To add a default vital sign, click on the empty check box associated with the desired vital sign. To remove a default vital sign, uncheck the desired vital sign.

You are only able to have a maximum of 4 default vital signs and the HR vital sign must be displayed at all times (this is the reason why the HR vital checkbox is disabled).

Note: in the Slide Out View's Vital Sign Selector, you are still able to select/deselect default vital signs.

	BED SELECTIONS	CONFIGURATION	ABOUT
Patient Names Hide C Show		Default Waveforms (2)	Default Vitals (4) ☑ HR
Default Patient Tile View Minimized		□ II ✔ \$902	☑ sp02
Default Sort Value		Resp	I NIBP
Bed	- Descending	← RIMP	NIBP-S
		ART ART	NIBP-M
		CVP	NIBP-D
			🗹 Resp
			🗹 Temp
			NEWS-Vital
			APPLY CHANGES REVERT CANCEL

Figure: Default Vitals Setting

To apply the changes, click on the "Apply Changes" button on the bottom right of the page. To undo changes and go back to the previous settings, click on the "Revert" button. To cancel and exit out of the Settings Page, click on the "Cancel" button.

8.9 ABOUT SECTION

The About section contains product information about NetKonnect Surveillance, such as the product name, part number, software revision number, product Unique Device Identifier (UDI), and a link to the NKDHS privacy policy page.



Figure: Product Info Screen

The privacy policy page explains what personal information that NetKonnect Surveillance collects, how that information is used, how that information is protected, and choices regarding personal information. This information is presented in a Q&A format. The privacy policy page also provides NKDHS contact information.

8.10 NAVIGATING TO THE ALL PATIENTS PAGE

To navigate to the All Patients page from the Settings page, click on the website title "NKDHS Next Generation NetKonnect - Settings" or the NKDHS icon left to the title. You can also click on the Home

icon on the top right of the header. Clicking on the Apply Changes or Cancel button will also navigate you back to the All Patients page.

KDHS NetKonnect Surve	illance – Settings		Select to return to All Patients	
	BED SELECTIONS		CONFIGURATION	ABOUT
Patient Names Hide C Show		Default Waveforms	(2) Defa	it Vitals (4) HR
Default Patient Tile View Minimized () Normal		🗹 II 🗹 Sp02		\$p02-2
Default Sort Value		Resp		ART
Bed	 Descending 	▼ 🗌 RIMP		NIBP
				NIBP-S
		СVР		NIBP-M
		FP1REF		NIBPO

Figure: Navigating Back to the All Patients page

9 TROUBLESHOOTING

Problem	Solution
Waveforms are frozen and not updating	The web browser has put the page to sleep, please click on any patient to wake the page and view live waveforms again.
Server Down message on the home page, not receiving any data	Contact administrator.
Waveforms show Comm Loss on all or most patient tiles	Refresh browser. Contact administrator if issue persists.
Vital signs on all or most patient tiles show ""	Refresh browser. Contact administrator if issue persists.
No patient tiles visible	Navigate to Bed Selection list in Settings, review selected patients and Apply Changes. If no beds available to select from, contact administrator if issue persists.
Silence alarm icon not appearing on an alarming bed	Contact administrator to check if bed is licensed for Alarm Silence feature.
Admit/Discharge/Transfer icon not appearing on slide out view for bed	Contact administrator to check if bed is licensed for ADT.
Send to EMR or Send All Waves to EMR icon not appearing in Slide Out view WAVE HISTORY tab	Contact administrator to check if bed is licensed for Send to EMR.
No vital sign history is appearing for a patient	If a patient has been admitted to a bed for more than 1 minute, and no vital history is displayed, contact administrator to troubleshoot connection between NetKonnect Surveillance and Digital Health Platform Data Cache
No wave history is appearing for a patient	Contact administrator to troubleshoot connection between NetKonnect Surveillance and Digital Health Platform Data Cache
Admit/Discharge/Transfer patient request did not add patient info to the patient/bed tile	Data from the bedside monitor must arrive on NetKonnect Surveillance to view the latest patient info and bed admission status. If vital sign and waveform data are arriving but patient info has not been set, contact administrator to troubleshoot connection between NetKonnect Surveillance and HL7 interface for the site belonging to that bed.

10 SPECIFICATION

10.1 BROWSER

Minimum Chrome Internet Browser Version 114.

10.2 COMPUTER

Minimum 8GB of RAM and 4 core processor.

10.3 MONITOR

Minimum 27-inch monitor with 60Hz refresh rate.

10.4 Accessories

None

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