

MedSync™ User Manual



Humanscale®
HEALTHCARE

Better Design,
Better Care

Humanscale® MedSync™ Medication Distribution System

This manual contains information on the installation and operation of Humanscale's MedSync™ medication distribution system and associated MedSync™ control software. Read all instructions completely before using MedSync™.

HUMANSCALE HEALTHCARE PARTNERS WITH BD TO CREATE MEDSYNC™ AUTOASSIGN SOFTWARE

MedSync™ AutoAssign is the product of a strategic partnership between Humanscale Healthcare and BD (Becton, Dickinson and Company), a leading global medical technology company, to further optimize the medication management process for the pharmacy and nursing industries.

MedSync™ AutoAssign is a piece of custom software for the MedSync™ Mobile Technology Cart which is available exclusively to BD partnership customers.

MedSync™ software works with the BD Pyxis™ MedStation™ automated medication dispensing system to create a fully closed-loop medication system.

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Introduction

1 ABOUT HUMANSCALE HEALTHCARE

At Humanscale Healthcare, we believe better design leads to better care.

As a division of Humanscale, the premier designer and manufacturer of ergonomic products, we use our ergonomic expertise to create next-generation medication administration carts, mobile workstations, wall mounts, seating and accessories for healthcare environments.

Our design-led approach frees caregivers to focus on what matters—patient care. Our solutions streamline everyday workflows and encourage effortless interaction with patients. We help caregivers prioritize their patients and offer better care.

Humanscale Healthcare's products include the ViewPoint™ series of technology wall stations, HealthPoint™ technology cabinets and the TouchPoint™ line of mobile technology carts.

For more information about Humanscale Healthcare, please visit www.humanscalehealthcare.com or call 1-800-400-0625.

1.1 CONTACT INFORMATION

Humanscale

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Website: www.humanscale.com

1.2 INTRODUCTION TO MEDSYNC™

The MedSync™ Mobile Technology Cart is a point-of-care solution that ensures safe, accurate medication administration. MedSync™ is specifically designed to reduce human error, keep patients safe, and create a closed-loop medication system.

Improving Patient Safety

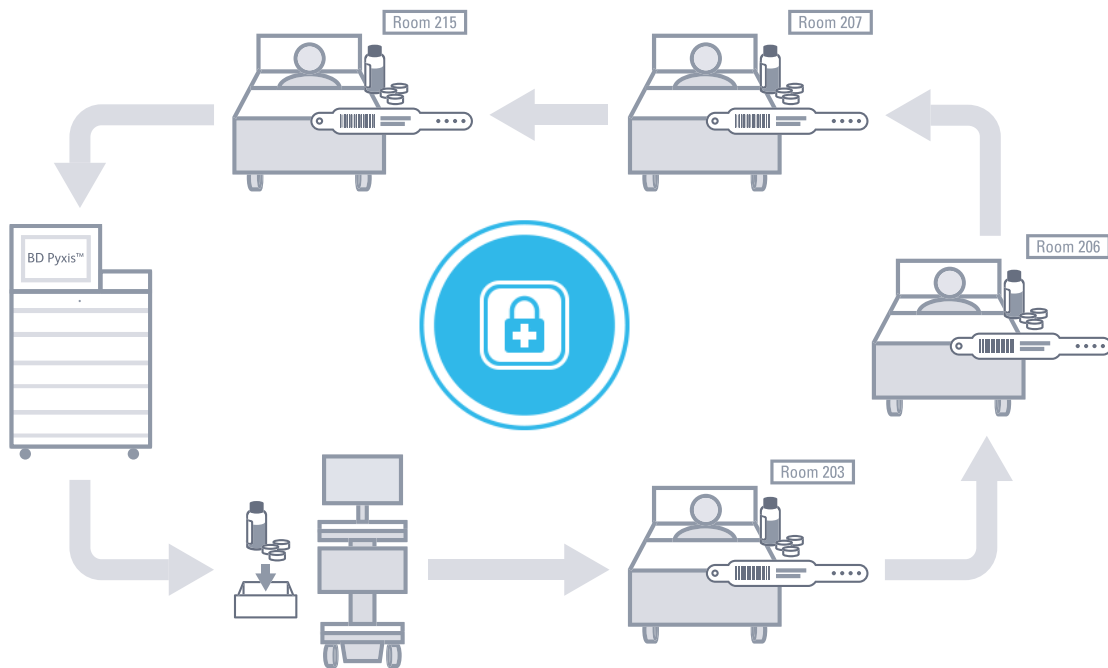
MedSync™ creates a closed-loop medication delivery system. Each drawer is electronically labeled in the MedSync™ system and assigned to a specific patient. The individual, patient specific drawers are loaded with medication at the pharmacy, ADC, or nursing station. When medication needs to be administered, only when that patient's wristband is scanned, the drawer unlocks automatically.

Increasing Accountability

Every event is recorded—log-ins, barcode scans, overrides and drawer opening/closing—introducing a new level of accountability and visibility into the medication workflow.

Streamlining Workflows

MedSync™ offers significant efficiency gains for any healthcare organization. It streamlines the medication transportation workflow and reduces medication errors. MedSync™'s intelligent automation optimizes medication administration, so caregivers can focus on what truly matters—patient care.



Graphic 1 - MedSync™ Workflow

1.3 ABOUT THE T7™ POINT-OF-CARE TECHNOLOGY CART

At the core of MedSync™ ecosystem is T7™—part of the revolutionary TouchPoint line of mobile technology carts. Built with the caregiver's workflow in mind, T7™ addresses the challenges faced by existing medical carts by offering optimal ergonomic positioning with minimal (and often automatic) adjustments.

To reduce the risk of injuries and change the way caregivers interact with point-of-care technology, the T7™ provides simple, quick adjustments that encourage you to work in safe postures. Its compact footprint makes the T7™ easy to maneuver and prevents parts from sticking out and breaking. Accommodating PCs, tablets, and laptops, the T7™ facilitates mobile computing in healthcare environments.

Setting up MedSync™

2 ABOUT THE MEDSYNC™ DRAWER SYSTEM

- **Housing:** is permanently attached to the T7™ cart. The housing is modular and there may be a second housing fitted under the first to create a high capacity medication cart.
- **Cassettes:** are removable from the housing and are interchangeable from cart to cart.
- **Drawers:** are where medication is placed and fit into the cassettes. There are 5 sizes of drawers: small, medium, large, XL and XXL.
- **Shelves:** are used to compartmentalize cassettes depending on the required drawer layout.
- **Dividers:** can be placed into the drawers to create multiple compartments within a single drawer.
- **Override Keys:** are used to unlock and gain access to the drawers in the event of a system or power failure. The keys are not used during normal operation and should be held by a manager or supervisor to prevent unauthorized use.



M1 - MedSync™ Standard Configuration



M2 - MedSync™ High-Capacity Configuration



Housing with Override Key



Cassette with Shelves



Back of the Cassette with Communication Connection and Override Lock



Drawers and Dividers

2.1 UNPACKING AND ASSEMBLY

If you have purchased a new T7™ cart with MedSync™, the cart will arrive with the housing pre-installed on the cart. The Cassettes will be in the housing. Remove the Cassettes from the housing and remove and discard any protective packaging.

If you have purchased a Drawer System to retrofit to an existing T7™ cart the housing must be installed on the T7™ cart by a Humanscale representative or an authorized service technician.

Drawers, shelves and dividers are shipped in a separate box. Before continuing you should locate the proper Drawer and shelf components.

2.2 INSTALLING SHELVES INTO CASSETTES

Before inserting Drawers into a Cassette, you must first insert shelves to configure your required Drawer layout. Cassettes maybe reconfigured at any time if the layout requirements change.

1. To insert a shelf, hold the Cassette in place on a flat surface with one hand. With the other hand, insert the shelf so that the slots on sides of the shelf slide over the locating pins on the inside side walls of the Cassette.
2. Ensure the rear snap features are aligned with the locating holes on the inside rear wall of the Cassette.
3. When the slot and snap features are aligned with the locating features inside the Cassette, push the shelf firmly into the Cassette. The shelf should click into place.
4. The shelf can be removed by reversing this process. Pull the shelf firmly outwards, ensuring you are pulling outwards parallel to the shelf. The rear locating features will disengage, and you can slide the locking slot clear of the pin.

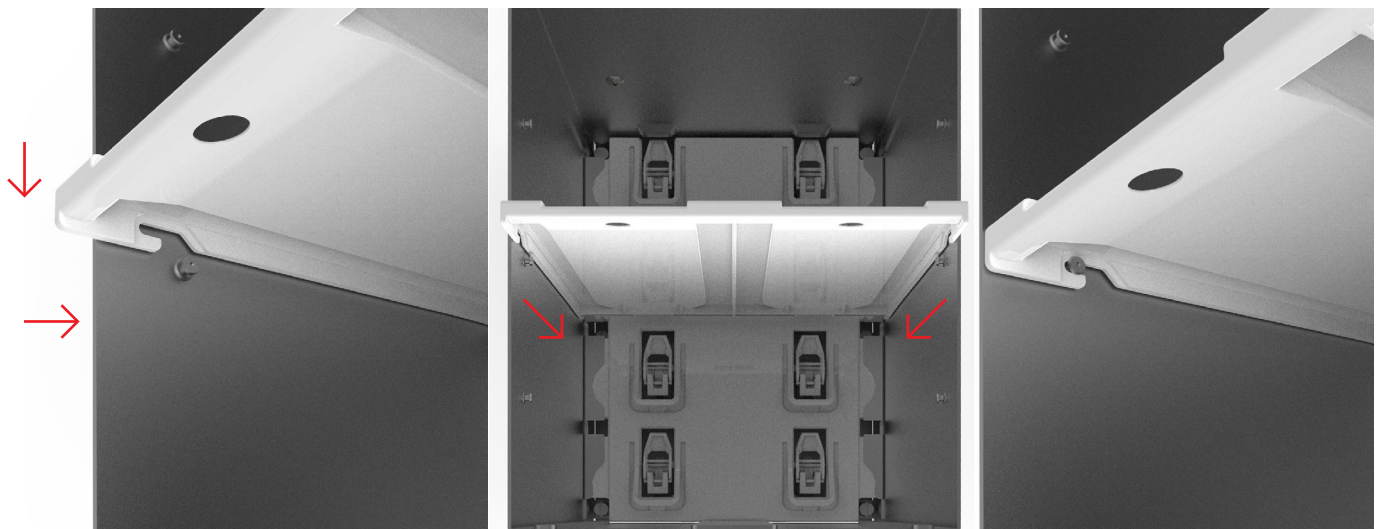


Image 2 - Installing Shelves

2.3 INSTALLING DRAWER DIVIDERS

Dividers can be used to subdivide a small or medium Drawer into smaller compartments. This may be useful if you want to separate medication by type or by time of day when it is due to be administered. Dividers are simply slotted into the Drawers using the alignment ribs on the inside of the Drawers. The cutouts positioned upwards allows packaged syringes to be laid flat on top of the dividers. Note that Dividers should not be used to store more than one patient's medication in a single drawer. Each Drawer can only be linked to one Patient for safety purposes.

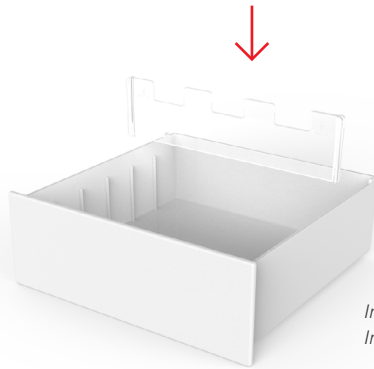


Image 3 -
Installing Divider

2.4 INSERTING DRAWERS

1. When inserting Drawers, they must be tilted backwards slightly to ensure the tabs at the rear of the Drawer clear the underside of the shelf.
2. Once the back of the Drawer is inserted, tilt the Drawer back to a horizontal angle and push it all the way in.
3. When the Drawer is fully inserted, you should hear a click. This is the locking mechanism engaging.



Image 4 - Inserting / Removing Drawer

2.5 DRAWER CONFIGURATIONS

Tool-less removal of shelves, allowing rapid drawer reconfiguration based upon changing workflow requirements. With the five drawer sizes there are more than 12 different drawer kit configurations available.

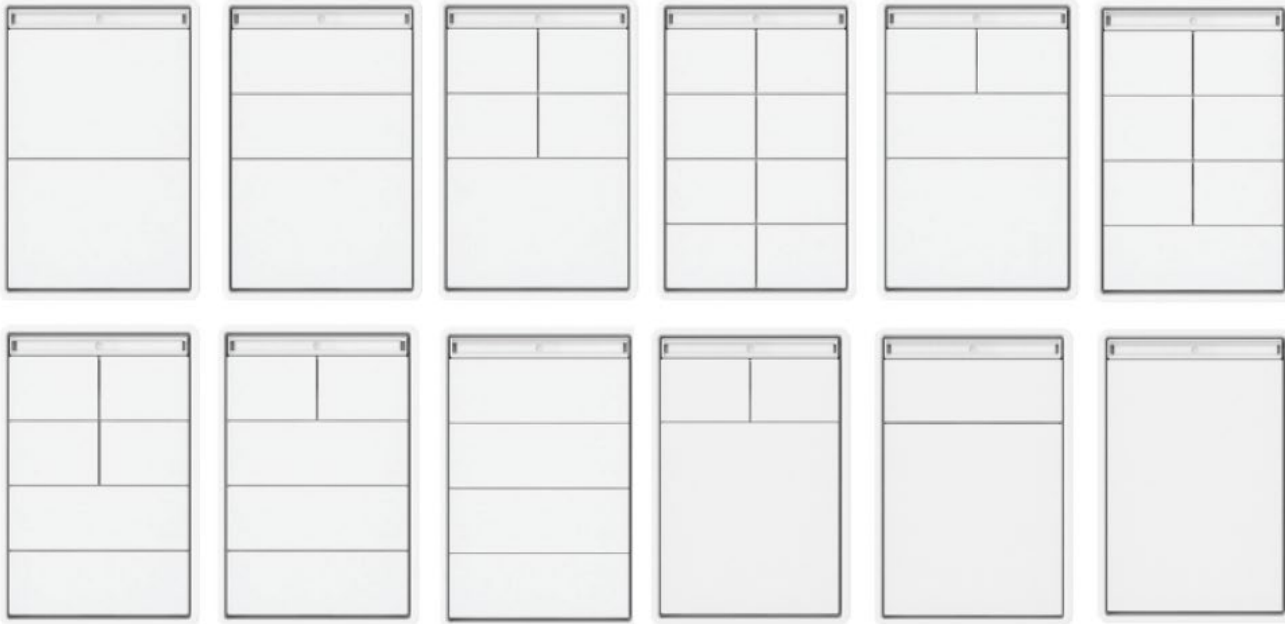


Image 5 - Drawer Configurations

2.6 INSERTING AND REMOVING CASSETTES



Image 6 - Operating Cassettes

To insert a Cassette once it is configured:

1. Slide the Cassette into an available location on the housing and push it fully into place.
2. Push the Cassette handle into the housing until it locks into place.
3. The Cassette is now installed and should be controllable via the MedSync™ software.

To remove a Cassette, during normal operation it may be electronically ejected through the MedSync™ software.

1. When the Cassette is ejected, the Cassette handle will pop out.
2. Pulling the handle outwards will allow the Cassettes to be removed from the housing.

Initial Software Configuration

There are multiple software packages available to control the MedSync™ Medication Drawer System. Hospitals can choose the most suitable option for their workflow. Before deploying any of the software solutions below in your facility, you should consult with a Humanscale MedSync™ Specialist to configure the system based on your needs.

MedSync™ Lite

The MedSync™ Lite control software is built into the T7™ cart touch screen user interface. MedSync™ Lite is a stand-alone solution to electronically label and operate drawers on carts.

MedSync™ Pro

MedSync™ Pro is an advanced network software application with many configurable user permissions, workflow options and customizable preferences.

- **MedSync™ Pro Standard Workflow** allows the user to electronically label drawers using the computer's keyboard as an input.
- **MedSync™ Pro Advanced Workflow** enables HL7 integration and utilizes the ADT feed to link real time hospital patient information to individual drawers, eliminating the need for manual data entry.
 - o **HL7** is a healthcare specific communications protocol for how different kinds of devices from different manufacturers can exchange information.
 - o **ADT Feed** contains admission, discharge, and transfer (ADT) messages about Patients in a healthcare facility. Messages are sent via the HL7 protocol.
- **MedSync™ AutoAssign** introduces an additional feature to MedSync™ Pro. This background process automatically assigns a drawer to a patient when they are admitted to a room. This streamlines your workflow by eliminating the step of having to manually assign a patient to a drawer.

3 ENABLING MEDSYNC™

The following steps ensure the T7™ cart is configured to allow the MedSync™ software to control the Drawer system, rather than being configured for use with the less advanced cart-based MedSync™ Lite software.

1. From any screen on the interface, touch the “gear” icon in the header to enter the Settings screen.

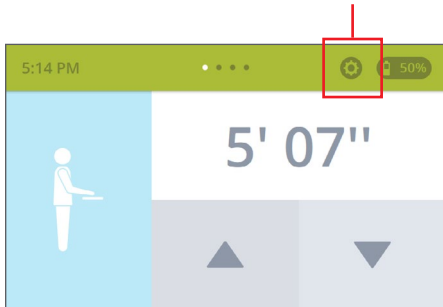


Figure A

2. Scroll to the bottom of the Settings list and touch Administrative Login.

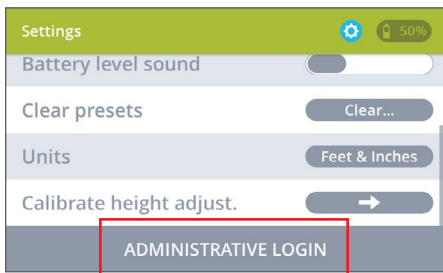


Figure B

3. Enter the Administrator PIN code. On new T7™ carts, the default PIN code is set to 1234. You should change the PIN to a unique code that is only known to supervisors, managers, and technical support staff within your facility. Instructions for this can be found within the T7™ User Guide.

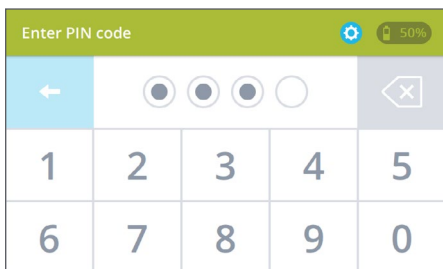


Figure C

- On the Admin Settings screen, find the "Enable MedLink Pro" option.
Disabling MedLink / MedSync™ Pro enables MedLink / MedSync™ Lite, and vice versa.

If the toggle control is green (on), MedLink / MedSync™ Pro is already enabled and you can exit from the process.

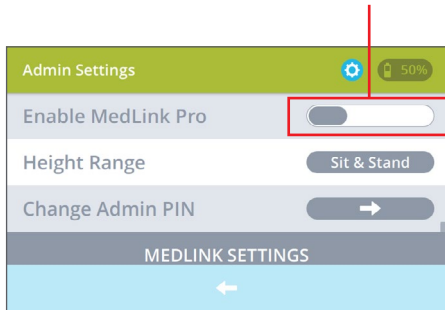


Figure D

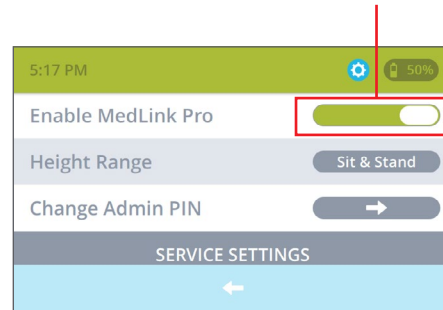


Figure E

- If the toggle control is gray (off), touch the control to switch it to green and enable MedLink / MedSync™ Pro.

When switching this control on or off you will be prompted to confirm the change. The cart will reboot with the new setting configured.

Once fully booted with MedLink / MedSync™ Pro enabled, the system is ready for use with the MedSync™ Pro software installed on your PC or laptop.

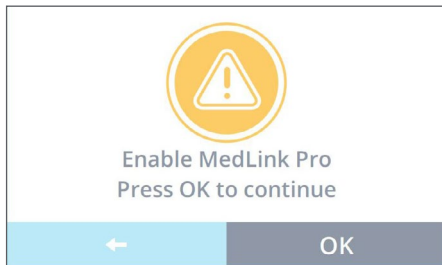


Figure F

4 MEDSYNC™ CONFIGURATION

4.1 SERVER SETUP

Before using MedSync™ Pro, you must point the application to the server where the MedSync™ server application and database is installed. The server application and database should only be installed by an authorized service technician. The following steps explain how to configure MedSync™ Pro to point to the correct server.

NOTE: You must have administrator privileges to perform this task.

1. Load the MedSync™ Pro application and the login screen opens.

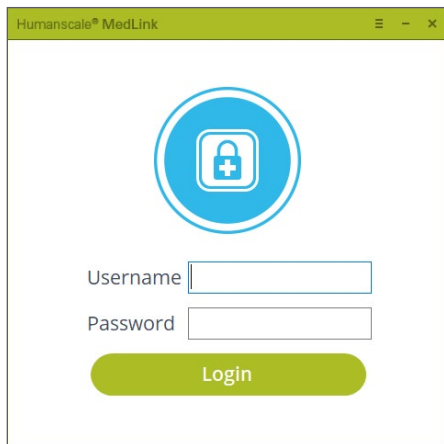


Figure 1 – Login Screen at initial setup

2. Click on the menu icon in the title bar to access the Setup screen.
3. In the Setup screen, enter the server address where the MedSync™ server application and database are installed. Server address may be obtained from hospital IT personnel or authorized service technician.

The COM port field will be automatically entered if the MedSync™ Drawer system is connected properly.

MedSync™ Pro is now set up to connect to the right server. You should only need to go through this process once during the first installation or if a different PC or Drawer system is used on the cart.

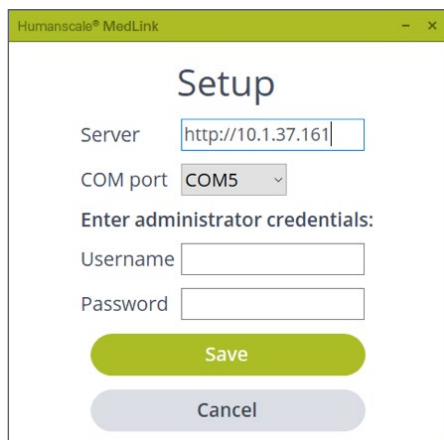


Figure 2 – Login Setup Screen

4.2 MEDSYNCTM PRO CONFIGURATION MENU

The MedSync™ Pro Configuration menu has all the settings that control the function of the MedSync™ software. Before deploying the system in your facility, you should work through all the options and configure the system in the way that best meets the requirements of your workflows and organizational needs.

NOTE: You must have administrator privileges to perform this task.

1. Log in typing in the required credentials. After the initial setup the Login screen will display the name of the cart for easy identification.

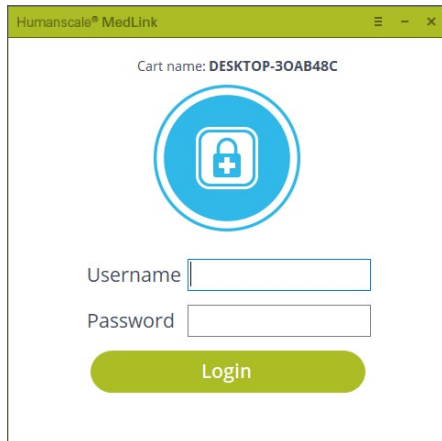


Figure 3 –
Login Screen

2. Click on the menu icon in the title bar.

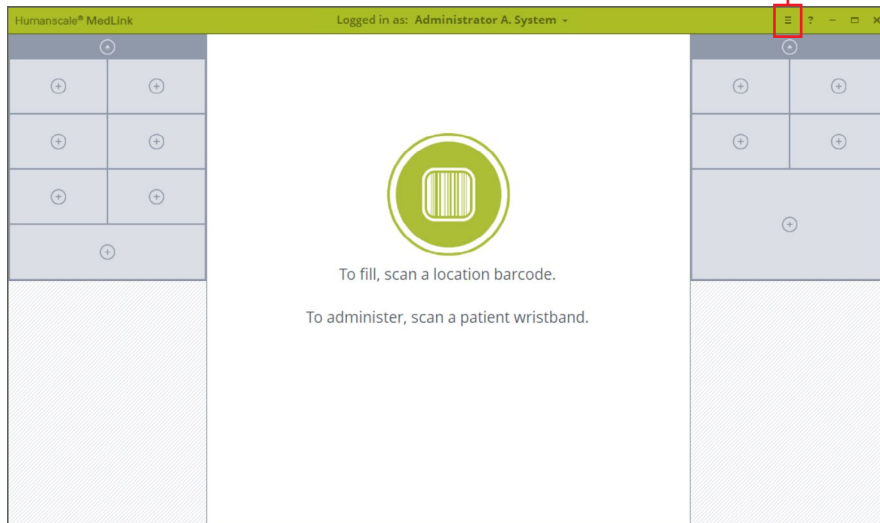


Figure 4 – Home Screen

This displays the MedSync™ Pro Configuration menu. Below is a brief description of the purpose of each section. Further chapters detail specific options.

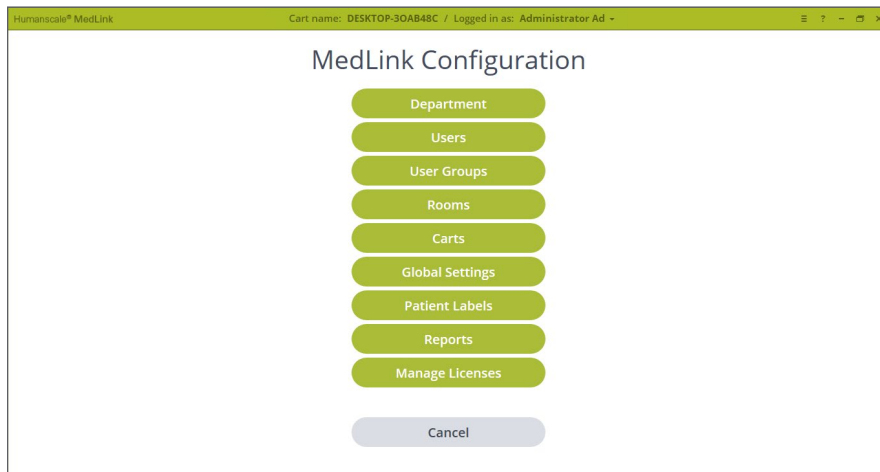


Figure 5 – Settings Screen

Departments

- Associates Patients and Carts into the same organizational units.
- A user can be in multiple Departments.
- A Cart can be in only one Department.

Users

- Defines a user and login information.

User Groups

- Permissions that apply to a user in the assigned group
- A user can be assigned to only one User Group

Rooms

- Rooms are created from the HL7 feed.
- Rooms are associated with Departments.

Carts

- Associates Cabinets with Departments and a PC.

Global Settings

- Settings that apply to all Users and all Cart.

Patient Labels

- Configures displayed information on Drawer fronts and current Drawer selection header.

Reports

- Used to create reports.
- Reports can be exported in CSV format.

Manage Licenses

- Used to view, activate and remove licenses.

4.3 DEPARTMENTS

4.3.1 DEPARTMENT LIST



Figure 6 – Settings / Departments

Displays a list of Departments.

- Select **“Remove”** to remove a department.
- Select **“Edit”** to edit that department’s information.
- Select **“Add Department”** to create departments.

4.3.2 ADD/EDIT DEPARTMENTS

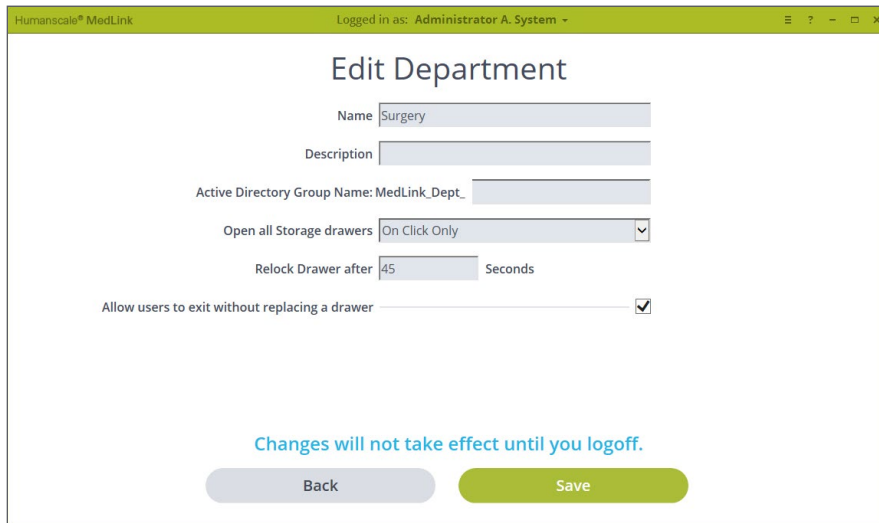


Figure 7 – Settings / Departments / Edit Department

Name:

- The name that will be displayed in MedSync.

Description:

- Description of the department. Only displayed in Department List page.

Active Directory Group Name:

- Active Directory Groups must be prefixed with “MedLink_Dept_”
- Each User can be in multiple departments.

Open all Storage Drawers:

- Defines when storage Drawers will automatically open.
- Options are to open:
 - o On Click Only
 - o On Login and On Click
 - o With Patient Drawer and On

Relock Drawer after:

- Defines how long the Drawer will sit in the “Unlocked” state before auto-closing. Allow users to exit without replacing a Drawer:
- If a Drawer is unlocked and removed and this option is not checked, you will not be able to continue without replacing the Drawer.
- This option shows and hides the Cancel button on various screens.

4.4 USERS

4.4.1 USERS LIST

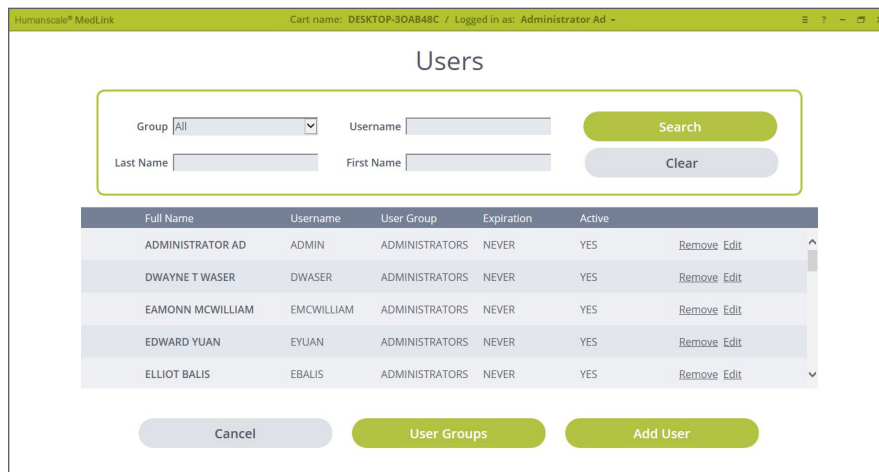


Figure 8 – Settings / Users

Displays the list of users

Can filter or search list using the given fields.

- Select **“Remove”** to remove a user.
- Select **“Edit”** to edit a user.
- **“User Groups”** button is a shortcut to User Groups.
- Select **“Add User”** to add a new user.

4.4.2 ADD/EDIT USERS

Humanscale® MedLink Logged in as: Administrator A System

Edit User

Title

First Name

Middle Initial

Last Name

Suffix

Login Settings

Username

Badge ID

Password

Confirm password

Expires Never Expire

Password requirements: 1 characters.

Deactivate

User Group and Department Settings

User Group

Departments for: ADMINISTRATOR A SYSTEM

Available Departments	Departments
ICU Add	Surgery Remove
Maternity Add	
Pharmacy Add	

[Back](#) [Save](#)

Figure 9 – Settings / Users / Edit Users Screen

Personal Information

- User's name with optional Title and Suffix

Login Settings

- Username, Password and Expiration are required.
- The Password Requirements are configured in Global Settings. The requirements are displayed here.
- Expires is for the users account, not their password.
- If a user is NOT set to **“Never Expire,”** they are considered to be a **“Temporary”** user.
- Deactivate deactivates this user's account and they will not be able to login.

User Group and Department Settings

- **User Group** - Assigns this user to the selected User Group.
- **Departments** - Assigns this user to the selected departments.
 - o Select **“Add”** in the left list to assign a user to that department.
 - o The list under **“Departments for:”** on the right displays a list of assigned departments.
 - o To remove you from an assigned department, select **“Remove”** in the list on the right for that department.

4.5 USER GROUPS

4.5.1 USER GROUPS LIST

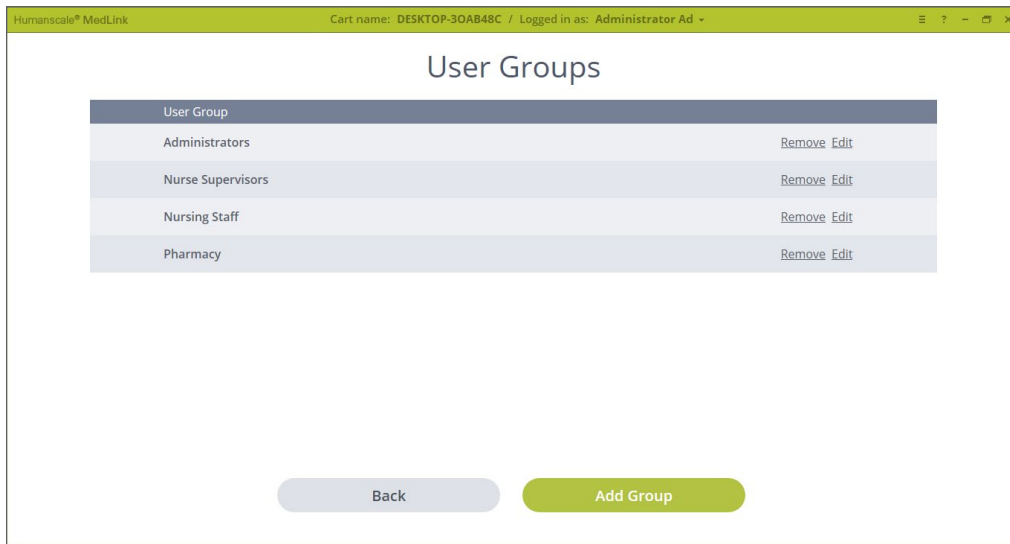


Figure 10 – Settings / User Groups Screen

Displays list of User Groups

- Select **“Remove”** to remove the User Group.
NOTE: Users should be removed from the Group before removing the group itself as they will not be able to login if they are in only this group.
- Select **“Edit”** to edit the User Group rights.
- Select **“Add Group”** to create a new User Group.

4.5.2 ADD/EDIT USERS GROUPS

Humanscale® MedLink Cart name: DESKTOP-3OAB48C / Logged in as: Administrator Ad

User Group Name:

Active Directory User Group Name:

Inactivity timeout: seconds 0 = Inactivity timeout disabled.

Timeout reminder before logoff: seconds

Workflow Permissions

Allow Users to assign/reassign patient drawers

Allow Users to assign/reassign storage drawers

Allow Users to swap patient drawers

Allow Users to eject Cassettes

Disable drawer auto-close

Enable double click to open drawers

Override process

Require Users to enter override reason

Allow User to open manually labeled drawers without override

Administrator Permissions

Allow Adding/Editing of Users

Allow Adding/Editing of Temporary Users

Allow Editing of Users' Passwords

Allow Adding/Editing of User Group Rights and Global Settings

Allow Adding/Editing of Departments

Allow Adding/Editing of Carts

Allow Report creation

Allow Adding/Editing of Rooms

Changes will not take effect until you logoff.

Figure 11 – Settings / User Groups / Edit User Groups Screen

- **Group Name Active Directory User Group Name** - Connects a MedSync™ Group to an Active Directory Group. A user can be part of only one MedSync™ Group.
- **Inactivity timeout** - The amount of time before the program will auto-logout you when there is no activity within the program or Drawer interaction. Setting the value to **"0"** (zero) will disable the auto-logout.
- **Timeout reminder before logoff** - Amount of time the program will show a **"Logoff"** warning message before auto-logout.

Note: This time is within the Inactivity timeout; therefore, it must be less than the inactivity timeout time.

Workflow Permissions

- **Allows you to assign/reassign Patient Drawers -** Check this setting to allow users to assign Patient Drawers.
- **Allow Users to assign/unassign storage Drawers -** Check this setting to allow users to assign storage Drawers.
- **Allow Users to swap Drawers -** Check this setting to allow users to swap Drawers of the same size.
- **Allow Users to eject Cassettes -** Check this setting to allow users to eject Cassettes.
- **Disable all timeouts (including Drawer auto-close)** - Check this setting to turn off all timeouts. Any Drawer in the "Unlocked" position will still be automatically closed on Cancel, Logoff, or program close.

NOTE: If a user does not logoff and leaves Drawers in the "Unlocked" state, they will not be automatically closed.

- **Enable double click to open Drawers -** Check this setting to allow the Left Double Click action on Drawers.
- **Override process -** Select "Witness" or "PAN / MRN" to require a witness login or you to enter the Patient's PAN/MRN to open a Drawer without a Location Barcode Scan.

NOTE: Select "Disable" to turn the Override process off.

- **Require users to enter override reason -** Check this setting to require you to enter a reason for the Administrative Override.
- **Allow User to open manually labeled Drawers without override -** Check this setting to allow manually labeled Patient Drawers to be opened and not require an Override.

NOTE: Manually labeled Patient Drawers cannot be opened by scanning a Patient's wrist band.

Administrator Permissions

- **Allow Adding/Editing of Users -** Check this setting to allow users to add or edit other users.
- **Allow Adding/Editing of Temporary Users -** Checking this setting and unchecking "Allow Adding/Editing of Users" will Auto set the "Expires" date based on the Global Setting "Temporary Users expire after XX days" and disable the "Never Expire" option when this user creates other users.
- **Allow Editing of Users' Passwords -** Check this setting to allow this user to modify other users' passwords.
- **Allow Adding/Editing of User Group Rights and Global Settings -** Check this setting to allow this user to Add/Edit User Groups and change User Group Rights and Global Settings.
- **Allow Adding/Editing of Departments -** Check this setting to allow this user to Add/Edit Departments and Department settings.
- **Allow Adding/Editing of Carts -** Check this setting to allow this user to Add/Edit carts and settings.
- **Allow Report creation -** Check this setting to allow this user to run reports.
- **Allow Adding/Editing of Rooms -** Check this setting to allow this user to assign rooms to departments.

4.6 ROOMS

The Rooms list is available only if there is an HL7 feed. Rooms may be assigned to a Department. This allows the Patient List to be correctly filtered by Department when assigning a drawer to a patient manually.



Figure 12 – Settings / Rooms

4.7 CARTS

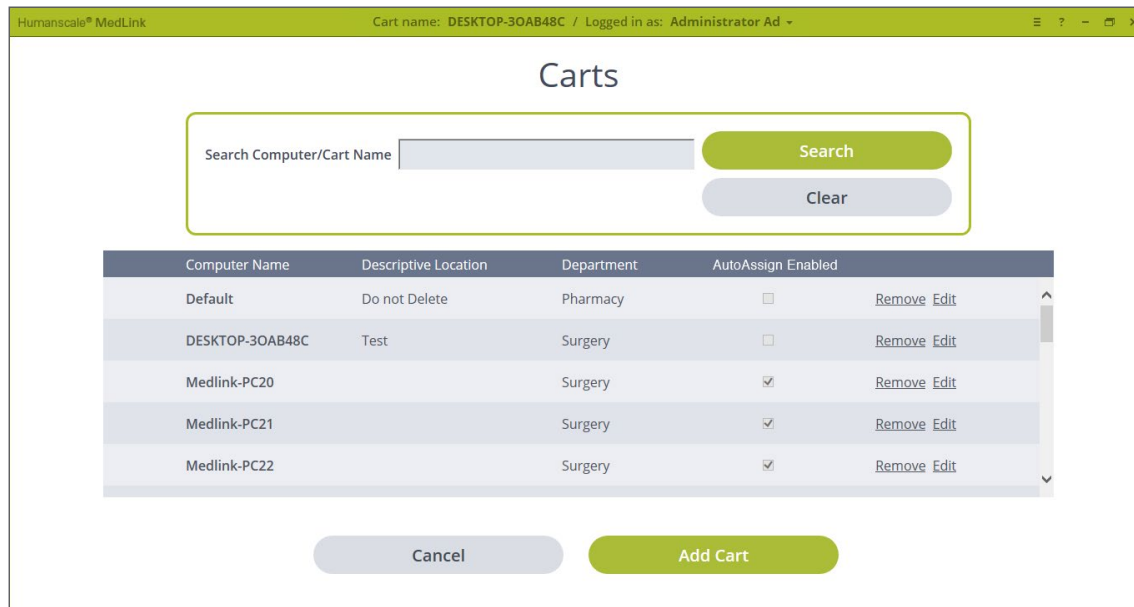


Figure 13 – Settings / Carts

- Select **“Search”** to search for Computer Names and Cart Names.
- Select **“Remove”** to remove a cart.
- Select **“Edit”** to edit the carts information and Assigned Department.
- Select **“Add Cart”** to add a new cart.

4.7.1 ADD/EDIT CARTS

Humanscale® MedLink Cart name: DESKTOP-3OAB48C / Logged in as: Administrator Ad

Edit Cart

Computer Name:

Cart Name:

Assigned Department:

Enable Pharmacy Mode

Enable AutoAssign

AutoAssign Routing

Department Rooms		
Rooms	Assigned Carts	
103		Add
104		Add
105	LAPTOP-OQ3KOP7F	Add
106	LAPTOP-OQ3KOP7F	Add
107	LAPTOP-OQ3KOP7F	Add
108	LAPTOP-OQ3KOP7F	Add

Rooms Routed to This Cart via AutoAssign		
Rooms	Assigned Carts	
101	DESKTOP-3OAB48C	Remove
102	DESKTOP-3OAB48C	Remove

Changes will not take effect until you logoff.

[Back](#) [Save](#)

Figure 14 – Settings / Carts / Edit Carts Screen

- **Computer Name** - Name of the computer in the cart. The system automatically displays the name of the computer that was given in the OS on each computer.
- **Cart Name** - By default this field displays the computer name. However, it is possible to choose another name that is going to be displayed in the software to identify the cart.
- **Assigned Department** - The department where the cart is assigned.
- **Enable Pharmacy Mode** - Pharmacy has special rights for assigning, filling and emptying Patient Drawers.
- **Enable AutoAssign** - Enables AutoAssign (Automatic Drawer Assignment) feature. This feature is available only if the associated license key is entered.
- **AutoAssign Routing** - AutoAssign Routing allows a Cart to be configured so that it, and the nurse using it, are responsible for certain Rooms within a Department, and by extension responsible for the Patients in those Rooms. This configuration process allows Patients to be automatically assigned drawers on whichever Cart is going to be used for their care. Allocating all Rooms within a Department to a single Cart would mean that that Cart gets Assigned all the Patients admitted to that Department.

4.8 GLOBAL SETTINGS

Humanscale® MedLink Cart name: DESKTOP-30AB48C / Logged in as: Administrator Ad -

Global Settings

Hospital Name: Elliott Data Systems

Environment: Production

Workflow Settings

Enable location barcode scanning

Location barcode: 654183

Location barcode scan timeout: 180 seconds

Clear removed drawer labels after: 10 days 0 = Never clear drawer labels

User and Password Settings

Temporary Users expire after: 365 days

Default User Group for Temporary Users: Administrators

Passwords expire after: 0 days 0 = Passwords never expire

Lockout inactive Users after: 0 days 0 = Never lockout Users

Remind Users to change password: 30 days before expiry

Password minimum length: 2 characters

Alpha and numeric characters

An upper case letter

Integration Settings

Enable Active Directory Integration

Active Directory server: LDAP://servername

Enable Single Sign On

Enable HL7 integration

Patient Identification: PAN

Localization Settings

Language: English-US

Date format: mm/dd/yyyy

Time format (24-hour)

ADT Feed Settings

ADT feed refresh frequency: 60 seconds

Changes will not take effect until you logoff.

Cancel Save

Figure 15 – Global Settings Screen

- **Hospital Name** - Hospital name to be displayed in reports.
- **Environment** - Used to label specific installations. (Optional)

Workflow Settings

- **Location Barcode** - Enter/scan the barcode to be used for Location Scanning.
- **Location Barcode Scan Timeout** - The amount of time before the Location Barcode Scan is cleared after inactivity.
- **Clear Removed Drawer Labels After XX Days** - If a Drawer is not used for the set number of days, it will be cleared from the database.

User and Password Settings

- **Temporary Users Expire After XX Days** - This value is used when creating temporary users. It sets the Account Expiration date for the set number of days ahead of the date you are created.
- **Default User Group for Temporary Users** - Sets the default User Group the Temporary user will be assigned when created.
- **Passwords Expire After XX Days** - Sets how often to force password changes. Set to "0" (zero) to disable forced password changes
- **Lockout Inactive Users After XX Days** - Sets how long a User can be inactive before their account is disabled. Set to "0" (zero) to disable auto-lockout.
- **Remind Users to Change Password** - Number of days to warn Users to change password before it expires.
- **Password Minimum Length** - Sets the password length rule.
- **Alpha and Numeric Characters** - Sets the password rule to require both alpha and numeric characters.
- **An Upper-Case Letter** - Sets the password rule to require an upper-case letter.

Integration Settings

- **Enable Active Directory Integration** - Check this setting to enable Active Directory. With active directory enabled and configured, the login will use their windows login.
- **Active Directory Server** - Path for the Active Directory Server.
- **Enable Single Sign On** - With this setting enabled and Active Directory Setup, you will be automatically logged in when opening MedSync™ Pro.
- **Enable HL7 Integration** - With HL7 integration enabled and configured Patient, Room, Groups and Department information will be received. When HL7 is disabled, the Rooms and Patient Labels buttons will be disabled on the Configuration menu.
- **Patient Identification** - When HL7 is enabled, this setting specifies which Patient identifier to display within the GUI, for example of Drawer labels. Choose the option that is right for your facility.

Localization Settings

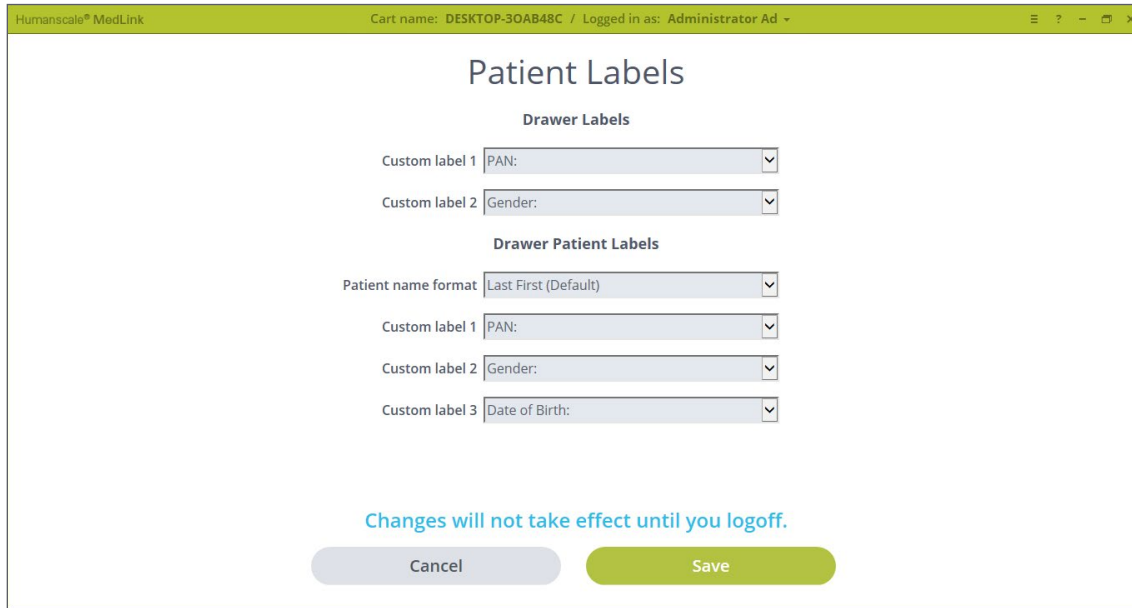
- **Language** - Sets the programs language.
- **Date Format** - Choose the date format for display.

ADT Feed Settings

- **ADT deed refresh frequency** - Sets the frequency of how often the system checks for new information from the ADT feed. Minimum time: 60 seconds.

4.9 PATIENT LABELS

4.9.1 DRAWER LABELS



Humanscale® MedLink Cart name: DESKTOP-3OAB48C / Logged in as: Administrator Ad

Patient Labels

Drawer Labels

Custom label 1 PAN: ▾

Custom label 2 Gender: ▾

Drawer Patient Labels

Patient name format Last First (Default) ▾

Custom label 1 PAN: ▾

Custom label 2 Gender: ▾

Custom label 3 Date of Birth: ▾

Changes will not take effect until you logoff.

Cancel Save

Figure 16 – Settings / Patient Labels Screen

- Custom Label 1 - Specifies what information to display in the first label under the Name.
- Custom Label 2 - Specifies what information to display in the second label under the Name.



Figure 17 - Patient Drawer

4.9.2 DRAWER PATIENT LABELS

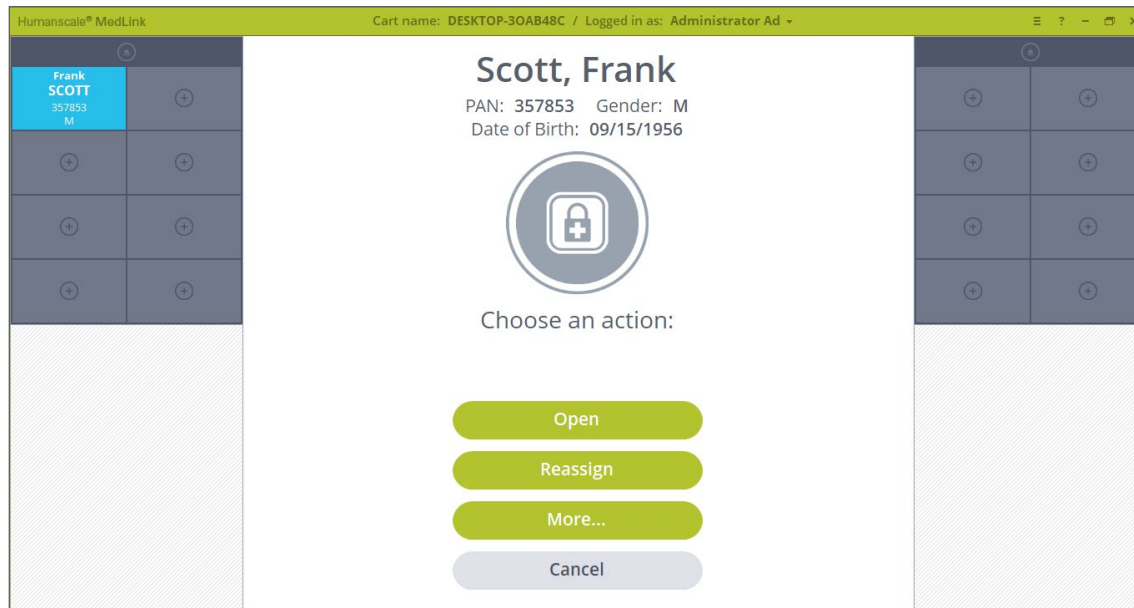


Figure 18 - Prompt Window Patient Information

- **Patient Name Format** - Specifies the name format for display. Options are:
 - o Last First (Default)
 - o Last First Middle
 - o First Last
 - o First Middle Last
- **Custom Label 1** - Specifies what information will be shown. In this image, Label 1 is PAN.
- **Custom Label 2** - Specifies what information will be shown. In this image, Label 2 is Gender.
- **Custom Label 3** - Specifies what information will be shown. In this image, Label 3 is Date of Birth.

4.10 REPORTS

4.10.1 GENERATING A REPORT

The Create Report screen allows you to generate a custom report by defining the parameters as described below. Once the required options are selected, click the Create button to generate the report.

Humanscale® MedLink Cart name: DESKTOP-30AB48C / Logged in as: Administrator Ad

Create Report

Select Report Transactions by Cart

Filter By Default

Start Date 11/06/2018

End Date 12/06/2018

Show only Override actions

Highlight Override actions in Red

Back Create

Figure 19 -Generating Report

- **Filter By** - Filters the report by the selection or entry.
- **Date Range** - The date range is limited on some reports due to the possible size of the report. If you want a single day, set the start and end dates the same.
- **Show only Override actions** - If this option shows, it will limit that report to only show Override actions if selected.
- **Highlight Override actions in Red** - If this option shows, it highlights all Override actions in red on the report.

4.10.2 VIEWING AND SAVING A REPORT

- The top of the page shows the selections made to generate the report
- The top header of the report viewer has options to print, export, and various viewing options.
- The **“Export CSV”** button generates a text file with the data formatted for use within Excel. This gives you more flexibility in organizing the data to meet your needs.

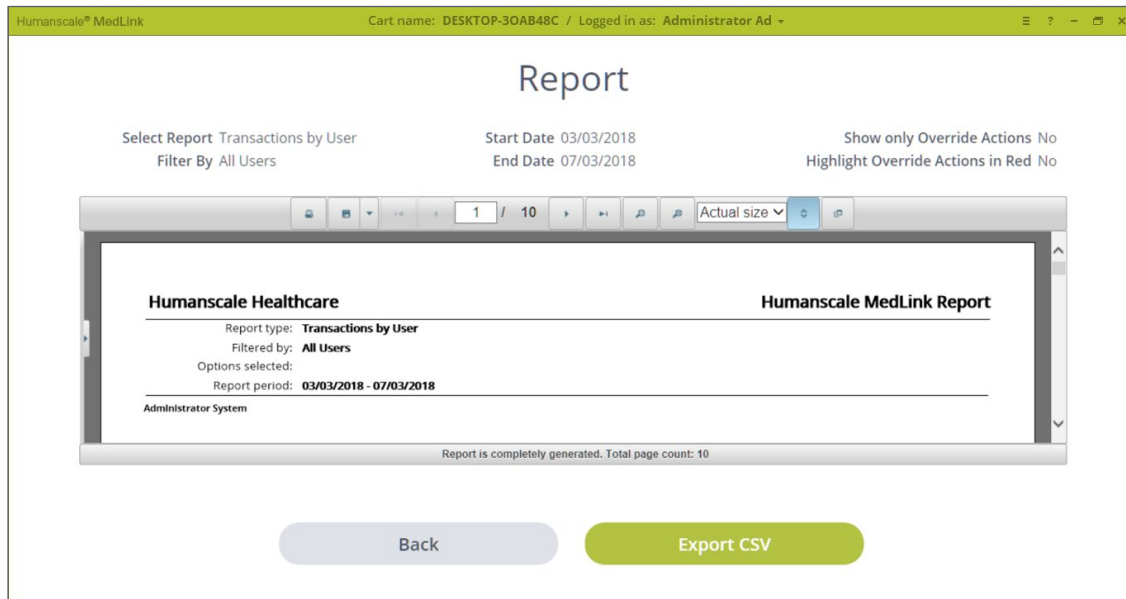


Figure 20 – Viewing Reports

4.11 MANAGE LICENSES

On the Manage Licenses page users with Administrator privileges can view, activate, sort and remove licenses.

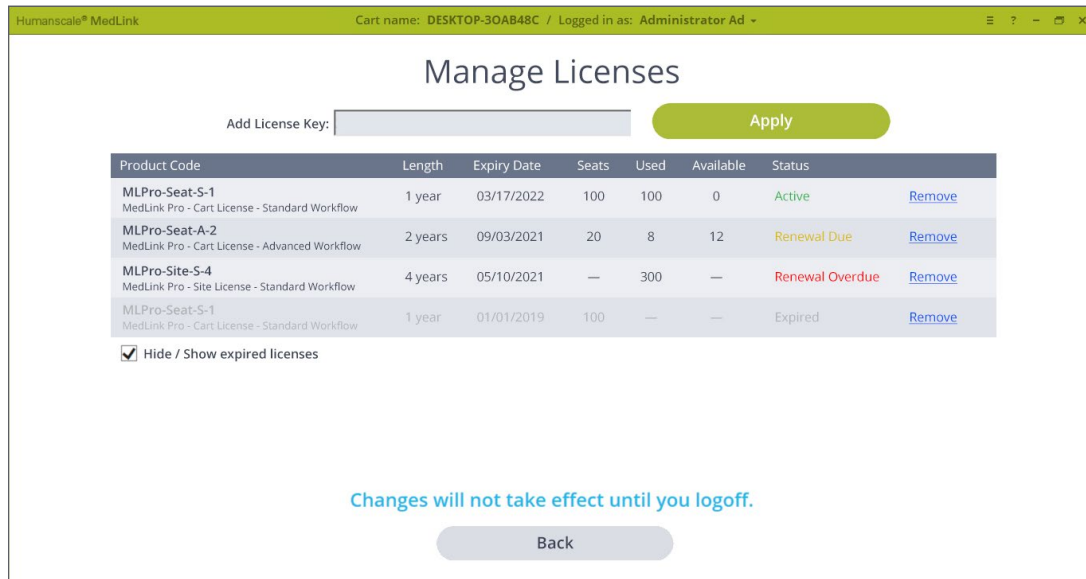


Figure 21 - Manage Licenses

4.12 ADT NOTIFICATIONS

The system detects when a Patient has been Admitted, Discharged or Transferred. When an ADT event is detected the GUI indicates the change in status of the Patient via a Drawer label icon. The software must be connected to an ADT feed through an HL7 interface.



Figure 22 - Patient is Newly Admitted



Figure 23 - Patient has been Discharged



Figure 24 - Patient has been Transferred to a different Department

Operating Instructions

5.1 LOGIN

Depending on how you configured the system, you may login using one of the following methods:

1. Enter a username and password and click the Login button.
2. Scan your ID barcode badge. The system will check your credentials and log you in automatically. There is no need to click the Login button. The cursor must be active within the Username field to receive the barcode scanner input.
3. The system can also be configured for use through Microsoft Active Directory to allow the login screen to be bypassed entirely.

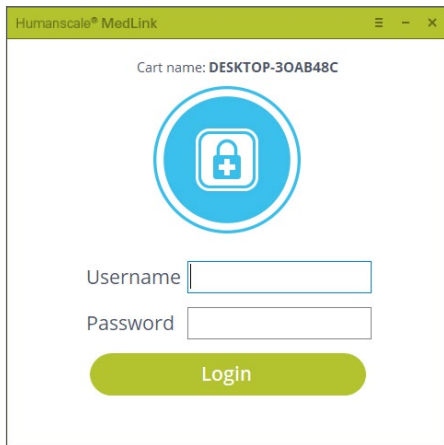


Figure 3 – Login Screen

5.2 HOME SCREEN

Once your login credentials are accepted, you will be presented with the home page. The home page displays a graphical representation of the Drawer system itself. The Cassettes are represented on the left and right of the screen, just as they are positioned on the left and right of the cart. If you have a single MedSync™ Housing installed, you will see two Cassettes, with the lower two Cassette Locations grayed out. If you have two MedSync™ Housings installed, you will see four Cassettes.

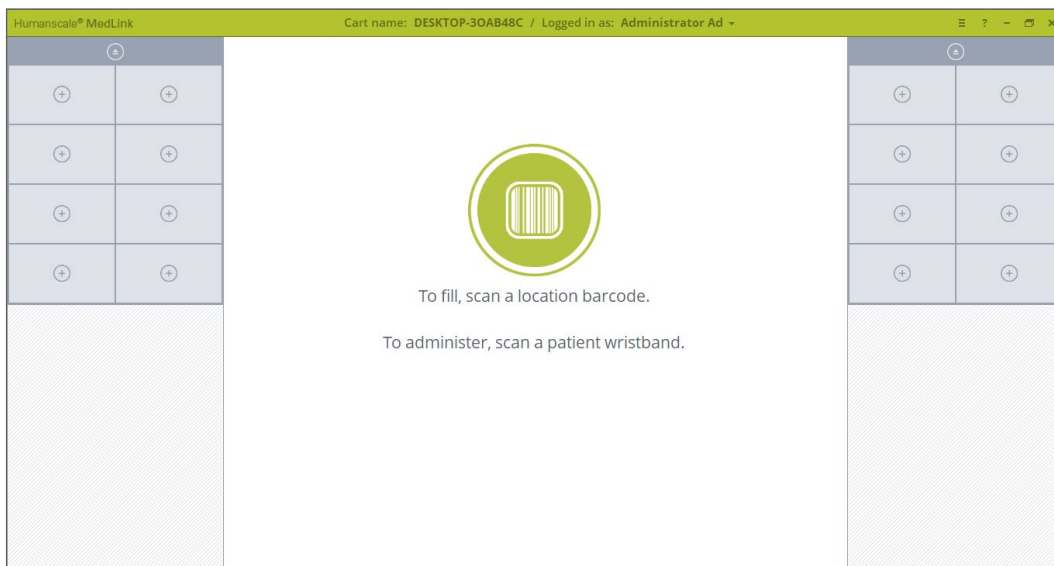


Figure 4 – Home Screen

5.2.1 TITLE BAR BUTTONS

The title bar of the application has the typical controls that are found on many Windows applications, as well as buttons to access the MedSync™ Configuration Menu and Help page.



Figure 25 – Header Icons



Leads to the Configuration menu. This button is only displayed if your user account has administrator privileges



Toggles between full screen and windowed mode.



Opens the Help page.



Closes this page and shows login page.



Minimizes to task bar.

5.2.2 USER NAME BUTTON

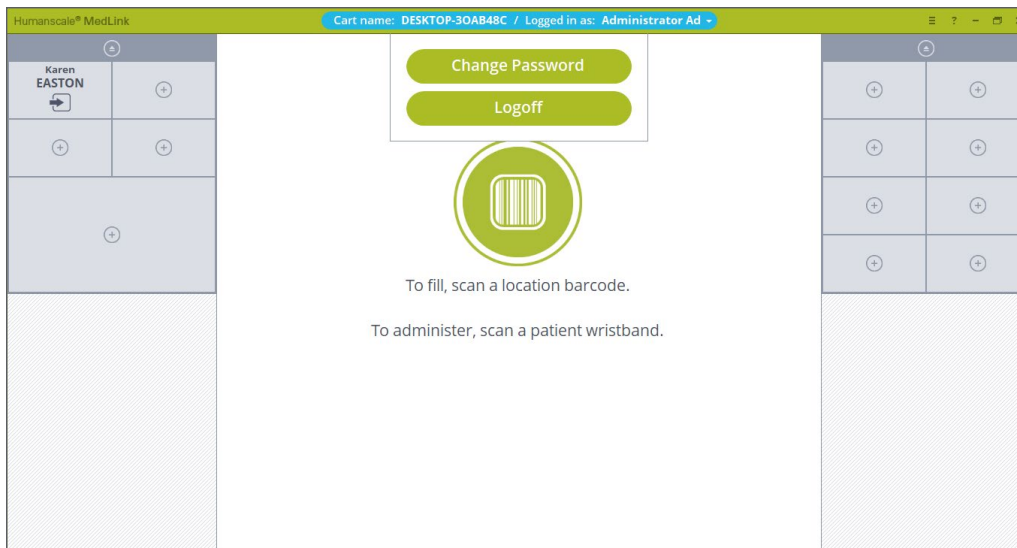


Figure 26 – User Name Button

The center of the title bar displays the name of the cart and name of the currently logged in user. This is also a button that allows you to log off and change your password.

5.2.3 UNDERSTANDING ON-SCREEN PROMPTS AND BARCODE SCANNING

The center of the screen contains the on-screen prompts that you follow to complete various tasks, such as opening Drawers to retrieve and administer medication. In a typical configuration, the Home screen will prompt you to either:

- **Scan a Patient wristband**
- **Scan a Location barcode**
- **Select a Drawer**

It is important to understand how barcodes are used to control access to the MedSync™ drawer system. With HL7 enabled, MedSync™ uses each Patient's hospital-issued barcoded wristband to control access to their Drawer.

Scanning Patient wristband – Administering medication

When a Patient is assigned to a Drawer, scanning their wristband will automatically open that Drawer. This ensures medication can only be accessed when the caregiver is physically with the correct Patient.

Scanning Location Barcode – Filling drawers with medication

When filling Drawers with medication, the Patient's wristband cannot be used to access the Drawer, since the medication store, pharmacy or Automated Dispensing Cabinet will likely not be located near the Patient. Therefore, during the filling and Drawer assigning process, you are prompted to scan what is referred to within the MedSync™ ecosystem a "Location" barcode.

A Location barcode is a barcode printed on a sticker which should be placed where medication is dispensed or retrieved by a nurse. Typically, this should be next to an Automated Dispensing Cabinet or in a medication store room. Location barcode stickers

are supplied by Humanscale with the MedSync™ system and should be located based on your workflow.

Scanning the Location barcode is equivalent to scanning a Patient's wristband in the sense that it lets the system know you are in an appropriate area for accessing MedSync™ Drawers. Scanning the Location barcode does not automatically open any Drawers, since the code does not relate to a particular Patient but doing so allows you to go ahead and assign Drawers to Patients, refill existing assigned Drawers or unassign Drawers.

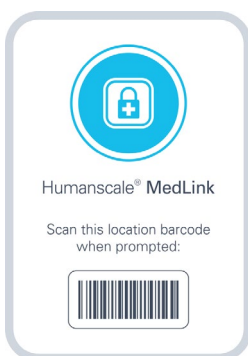


Figure 27 – Location Barcode Sticker

Selecting Drawer – Managing Drawers

Selecting a Drawer on screen displays more actions for that Drawer, but to open or reassign that Drawer you will be prompted to scan either a Patient wristband or Location barcode further in the process.

NOTE: The system of requiring barcode scans to perform certain tasks is central to the secure and accountable nature of the MedSync™ system. More details instructions for assigning and opening Drawers is given in the following sections.

The above explanation assumes a typical MedSync™ configuration, with HL7 enabled. It is possible to configure the system so that neither Patient wristbands nor Location barcode scanning are required to open Drawers. If you intend to use the system this way, you should consult a Humanscale MedSync™ specialist for guidance.

5.3 DRAWER STATES

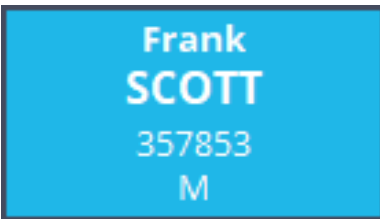
A Drawer may be in one of four states: locked, selected, unlocked, or open.

- **Locked** means the Drawer is fully closed within the Cassette and cannot be opened until the locking mechanism is release through a software input, or the Cassette is removed, and the mechanical override is used.



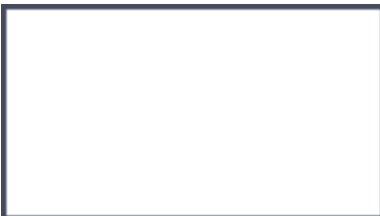
*Figure 28 - Patient
Drawer Locked*

- **Selected** means the Drawer has been selected on screen. The Drawer stays physically locked by is highlighted on screen for further action.
- **Unlocked** means the Drawer locking mechanism has been triggered, and the Drawer has been pushed out far enough that it can be removed. From this position, the auto close feature can close the Drawer and relock it if there is no further user input.



*Figure 29 – Patient
Drawer is Selected
or Unlocked*

- **Removed** means from the unlocked position, physically pulling the Drawer out further. At this point the auto close feature will no longer work, and the Drawer can be fully removed from the Cassette if desired.



*Figure 30 - Drawer
is removed (empty
drawer slot)*

5.4 ELECTRONIC LOCKING SYSTEM

During normal operation, Drawers are electronically unlocked through the MedSync™ software:

1. When the Drawer is unlocked it will open slightly. Pull the Drawer forward to access the contents. Tabs at the rear of the Drawer prevent the Drawer from accidentally sliding all the way out.
2. The Drawer can be fully removed by tilting it backward in the same way as when inserting the Drawer and continuing to pull the Drawer forward.



Image 7 – Unlocking Drawers Electronically

5.5 MECHANICAL OVERRIDE KEY LOCK SYSTEM

In case of loss of power or communication between MedSync™ hardware and MedSync™ software there is a mechanical override option to gain access to the cassettes / drawers.

1. First, insert the override key into the override lock on the front of the housing. Turn the key anti-clockwise.
2. This will eject the Cassette handles from the housing. Pulling the handles outwards will allow the Cassettes to be removed from the housing

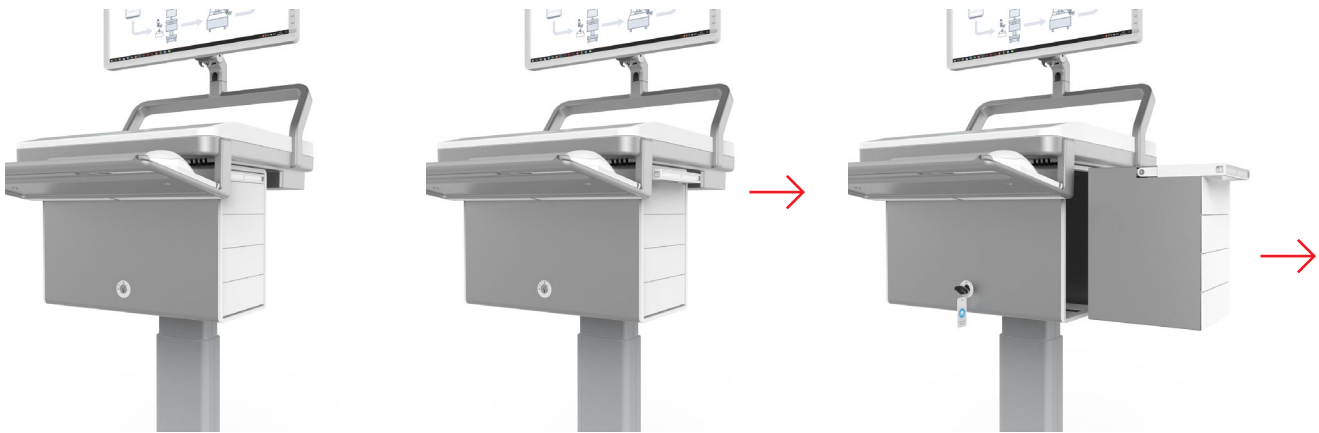


Image 8 - Ejecting Cassettes Using Mechanical Override Key

3. Second, use the same override key in the lock on the rear panel of the Cassette. Turn the key anti-clockwise to unlock all the Drawers in the Cassette. The Drawer may now be removed from the Cassette.



Image 9 - Ejecting Drawers from Cassette Using Mechanical Override Key

5.6 ASSIGNING AND FILLING DRAWERS

In normal usage, a typical workflow will involve a nurse receiving medication from the hospital pharmacy or retrieving it from an Automated Dispensing Cabinet. The nurse would use MedSync™ to securely store each Patient's medication in its own Drawer for subsequent administration. This section details the step by step process for assigning a Drawer to either a Patient or as a storage Drawer, and filling Drawers with medication or supplies.

NOTE: The ability to assign and reassign Drawers is a configurable user permission. If you do not see the option to assign Drawers when following this process, it is likely this function is not allowed for your user or user group profile. You should consult your system administrator for assistance.

5.6.1 AUTOSCAN (BARCODE-ASSISTED DRAWER ASSIGNMENT)

This process streamlines the Drawer Assignment process, particularly when filling Drawers with medication just dispensed from an ADC. The process uses the Patient barcode (typically printed on the medication pack dispensed by the ADC) as a starting point. By scanning a barcode printed from the ADC the system can Assign a Drawer to that Patient.

The system must be connected to an HL7 engine with an ADT feed so that Patient barcodes can be looked up. This process can only be triggered after a Location Barcode has been scanned or Pharmacy Mode is enabled.

1. Ensure you are near to your Automated Dispensing Cabinet or in your medication store room and have access to the MedSync™ location barcode. Upon logging in to the software, you will be presented with the home screen.

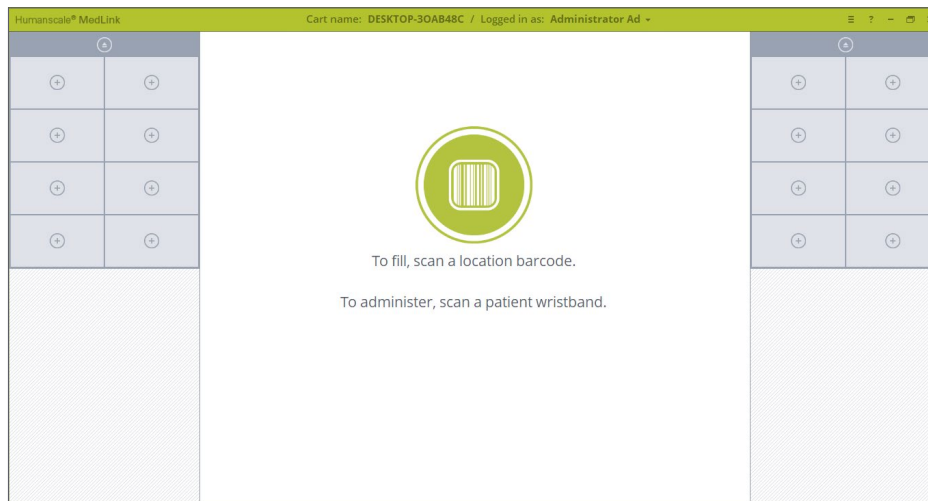


Figure 4 – Home Screen

2. Scan the location barcode as prompted to tell the system you are in a designated location for assigning and filling drawers.
3. When the location barcode is successfully scanned, the center icon will change to blue.

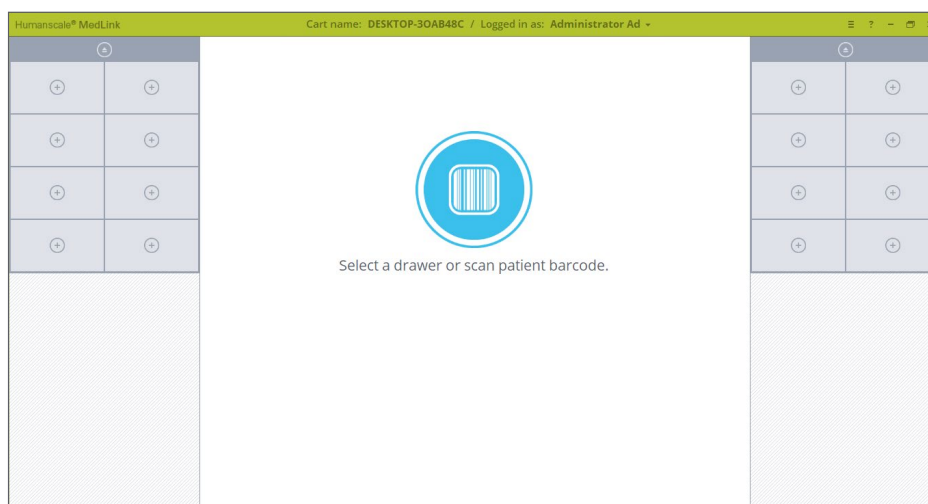


Figure 31 – Home Screen, Barcode is Scanned

- Scan the Patient-specific barcode on the label printed by the Automated Dispensing Cabinet. If the patient is recognized in the ADT feed, and an unassigned drawer is available, a drawer will automatically be assigned to the Patient and will open automatically to be filled.

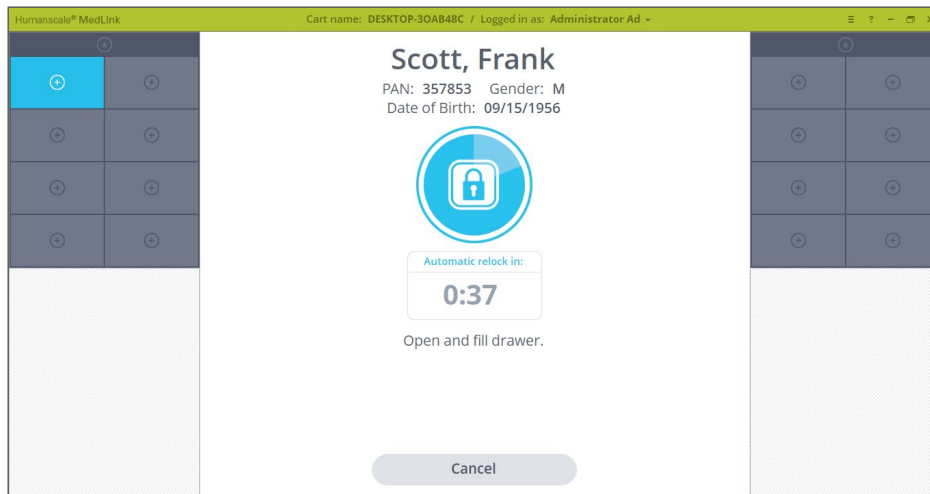


Figure 32 - Drawer Assigned and Opened

5.6.2 ASSIGNING A DRAWER TO A PATIENT MANUALLY

In case Patient's barcode is not available to scan during the assigning process a Patient can be manually assigned to a drawer by selecting Patient from the Patient List.

The system must be connected to an HL7 engine with an ADT feed so that Patient barcodes can be looked up. This process can only be started after a Location Barcode has been scanned or Pharmacy Mode is enabled.

- Ensure you are near to your Automated Dispensing Cabinet or in your medication store room and have access to the MedSync™ location barcode. Upon logging in to the software, you will be presented with the home screen.

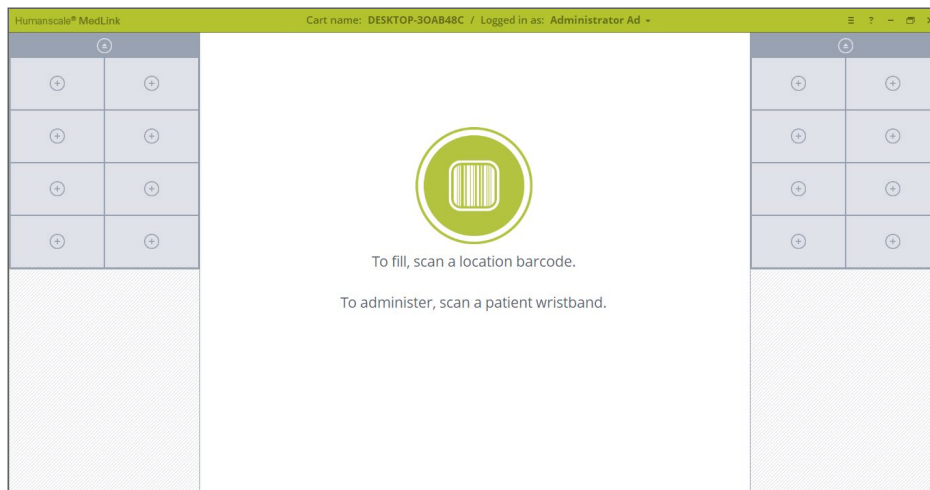


Figure 4 – Home Screen

- Scan the location barcode as prompted to tell the system you are in a designated location for assigning and filling drawers.
- When the location barcode is successfully scanned, the center icon will change to blue.

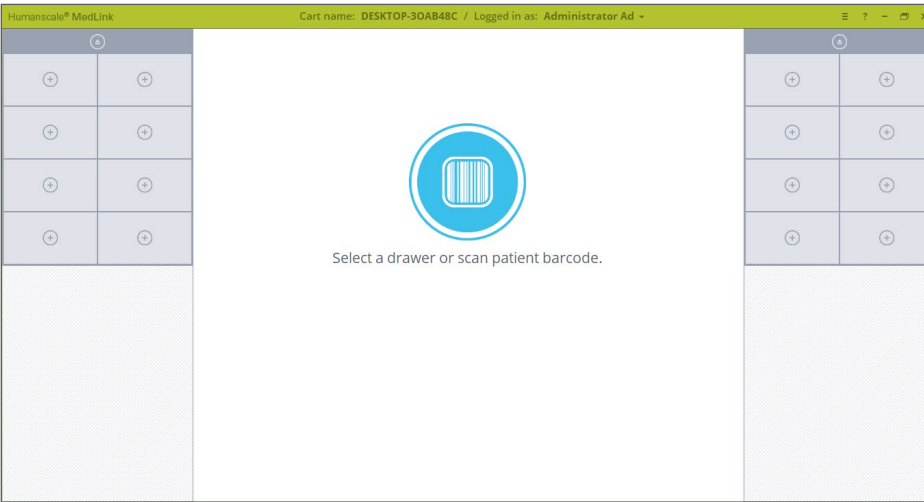


Figure 31 – Home Screen, Barcode is Scanned

4. Select an Unassigned drawer. The selected drawer will highlight in blue and the center prompt area will change, giving you the choice of assigning this drawer to a patient, or as a storage drawer.

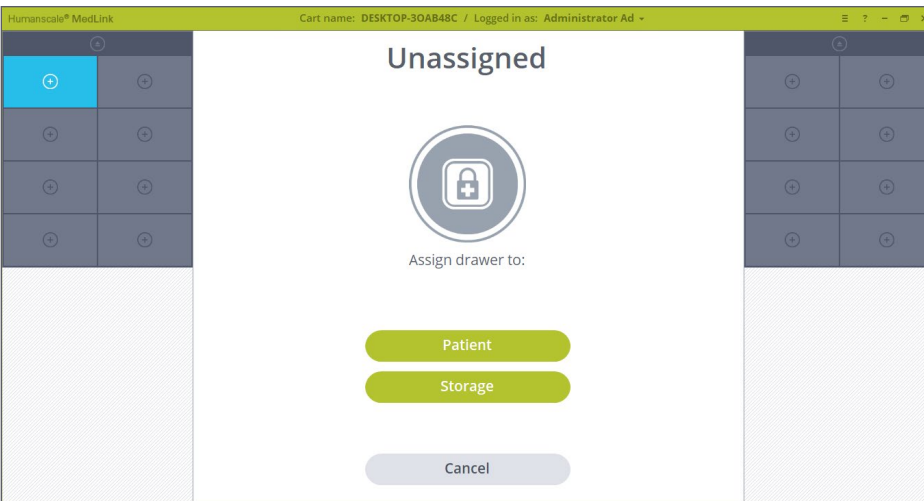


Figure 33 – Drawer Selected to be Assigned

5. Click the Patient button. The selected drawer will open slightly on the physical drawer system and the screen will change to show the drawer is unlocked, with the auto close relock timer counting down. If no further action is taken at this stage, the drawer will relock when the timer reaches zero.
6. Pull open the drawer and remove from the cassette completely if you prefer. If HL7 is enabled, the screen will now display a list of patients within the hospital that can be selected and assigned to the drawer.
 - o By default, the list shows only patients from the current user's department.
 - o The list may be filtered using the drop-down menu to include patients from all departments, or patients from a different department.
 - o The list may be searched using the text box.
 - o If the patient is not found in the list or an HL7 feed is not enabled, a drawer may be manually labelled using the button in the top right. Note that when using this option, drawers do not display any information other than the label you enter, and it will not be possible to open the drawer using patient wristband scanning, since there will not be a wristband barcode associated with the drawer.

- Select your chosen patient and then click the Assign button. Clicking Cancel will exit the reassign process and will leave the drawer assigned as it was previously.

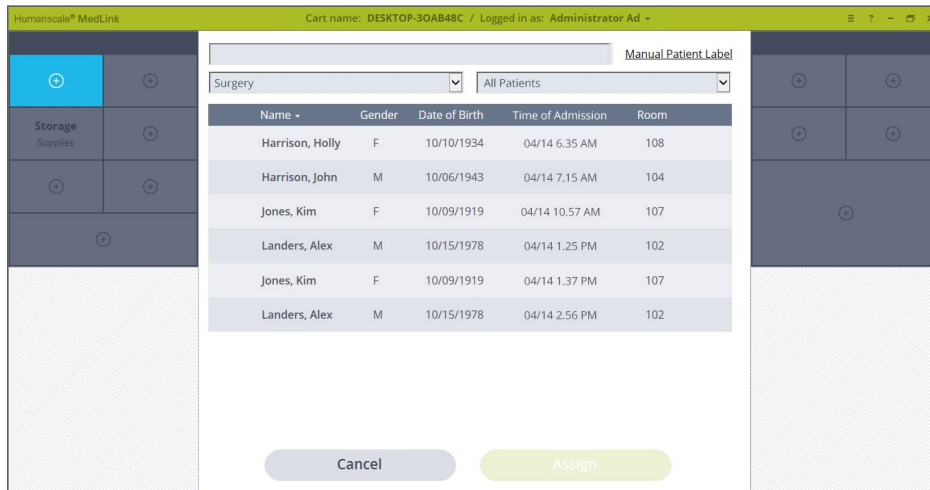


Figure 34 - Patient List

- Fill the drawer with that patient's medication and return the drawer to the cassette as prompted, ensuring it locks into place.
- You will be returned to the home screen, and the selected drawer will now show the details of the patient you chose. The assigning and filling process is now complete.

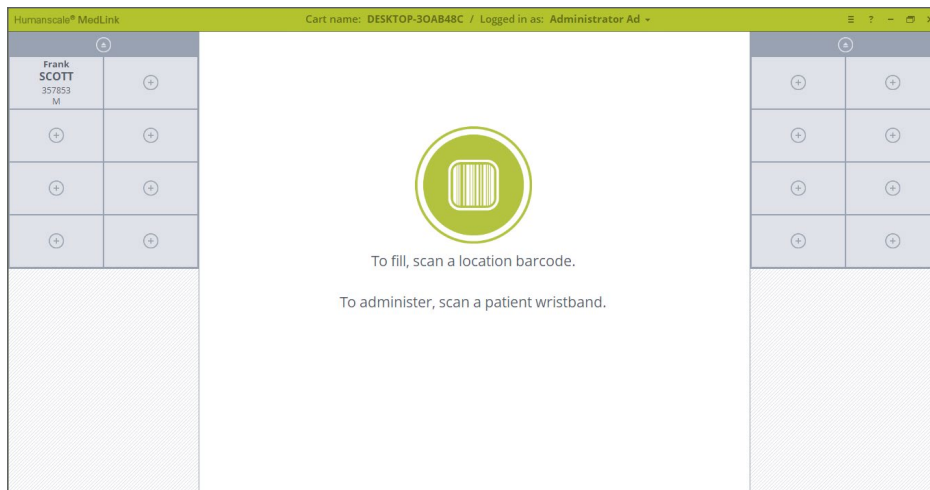


Figure 36 - Home Screen with Assigned Patient

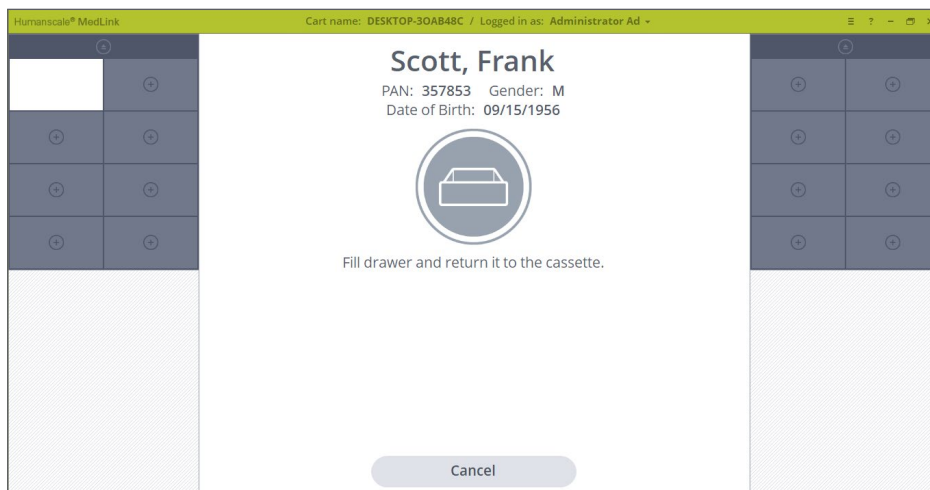


Figure 35 - Drawer is out to be filled

5.6.3 AUTOASSIGN (AUTOMATIC DRAWER ASSIGNMENT)

This background process automatically Assigns a Drawer to a Patient when they are admitted to a Room. This streamlines your workflow by eliminating the step of having to manually Assign a Patient to a Drawer. Newly admitted patient drawers are marked with Newly Admitted Patient icon. (See 4.12 ADT Notifications)

For this feature to work, AutoAssign must be enabled in 4.7.1 Add/Edit Carts and AutoAssign Routing must first be configured.

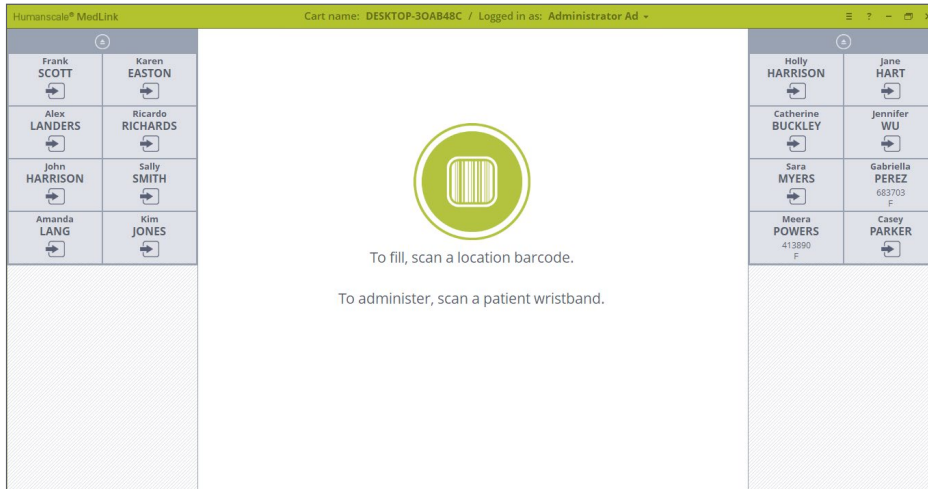


Figure 37 – Newly Admitted Patient

No available drawer warning

In case there is no available drawer to automatically assign a drawer to a patient on the cart the following warning message is displayed. To make room for the newly admitted patient you should unassign an already assigned drawer.

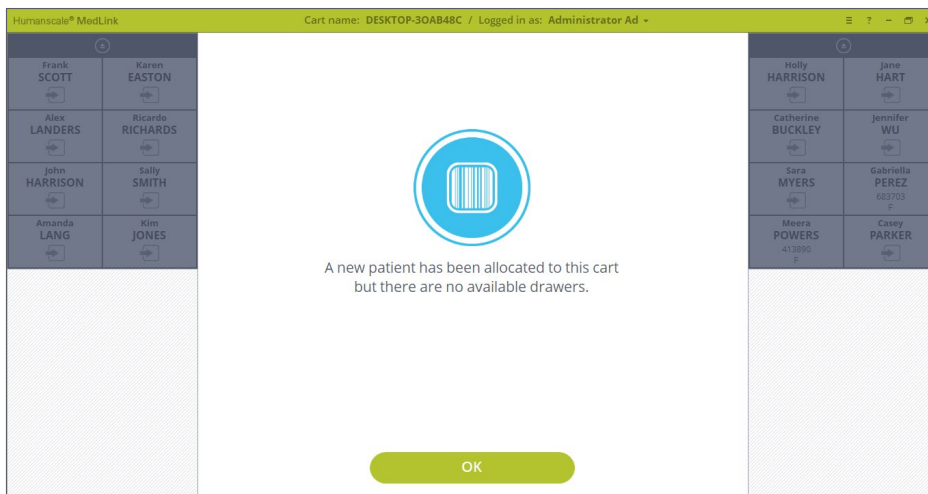


Figure 38 – No available drawer on cart

5.7 SEMI-AUTOMATIC DRAWER ASSIGNMENT

This process makes use of the Room Allocation and Patient List (specifically the admission time) features to streamline the process of Assigning a Drawer to a Patient. Semi-automatically means you initiate a Drawer Assign process manually, but you're then prompted to accept the next Patient in the queue automatically without having to select from the Patient List.

NOTE: This process is initiated by unassigning an already assigned drawer. This process is discussed in details later in this document under chapter 5.9 Unassigning and Reassigning Drawers.

1. Select a drawer that you want to reassign. Click Reassign button.

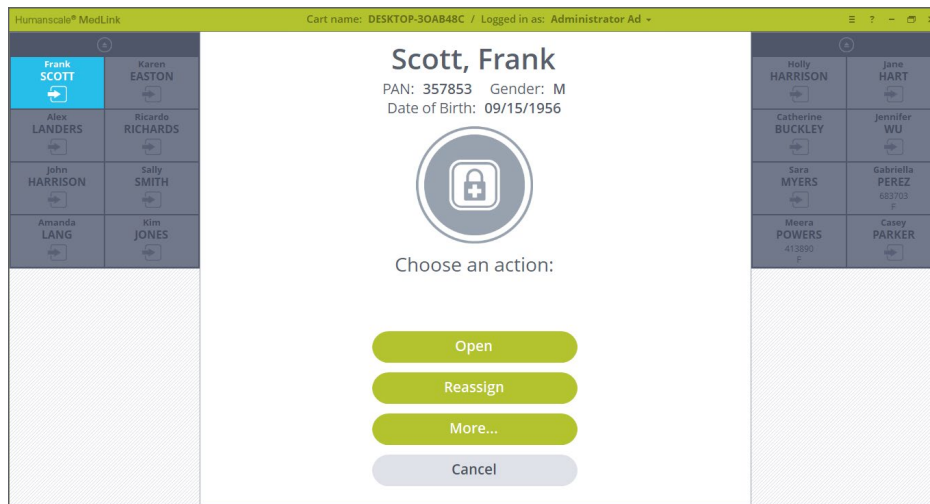


Figure 39 – Assigned Drawer is Selected

2. Scan Location Barcode and select Patient button.

If Location barcode can't be scanned system will prompt you to go through an alternative process that is detailed out later in this document under chapter 5.13 Opening Drawer Without Scanning Barcodes.

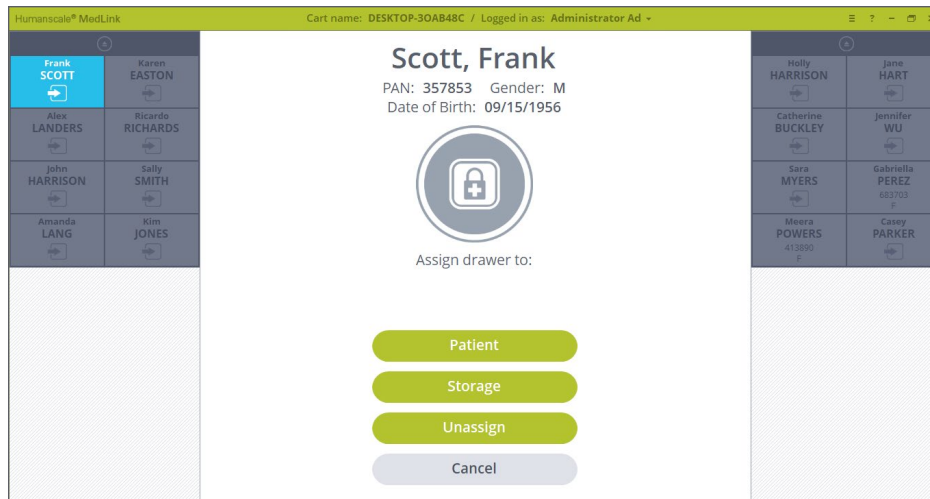


Figure 40 – Assign Drawer To

3. There are three options that you can choose from:

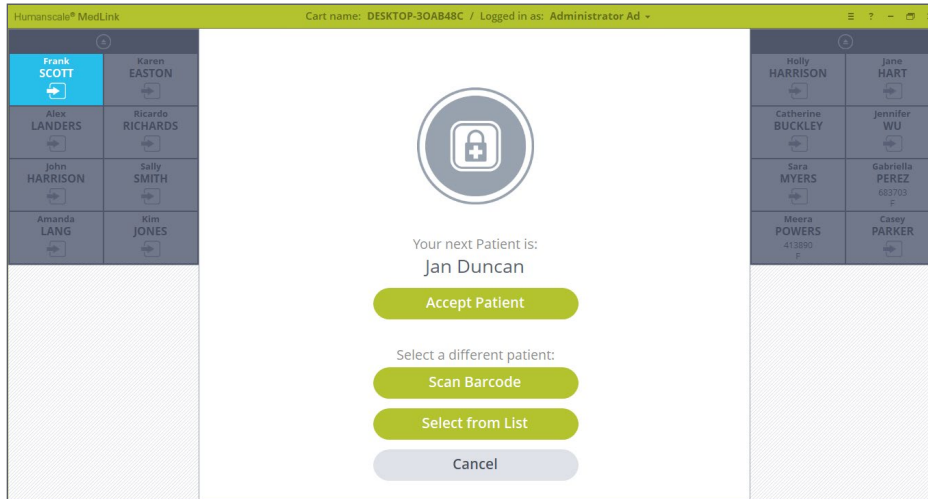


Figure 41 – Select Patient

Accept Patient – This option is a shortcut offering the next Patient in the FIFO (First-In-First-Out) patient list to be assigned to the drawer.

Scan Barcode – Gives you the option to assign a different patient with Patient’s barcode available. This feature utilizes the Barcode Assist Drawer Assignment. Scan the Patient Barcode to initiate the process.

Select from List – This option gives you the option to select from the Patient List.

The Patient List screen allows you more granular filtering and sorting when choosing which Patient to Assign to a Drawer. This functionality, especially admission time sorting, is made use of in the Semi-Automatic Drawer Assignment process.

The filtering options are:

Cart Queue – List of Patient assigned to the cart that you use

Department Queue – List of Patients assigned to the department that the cart is assigned to.

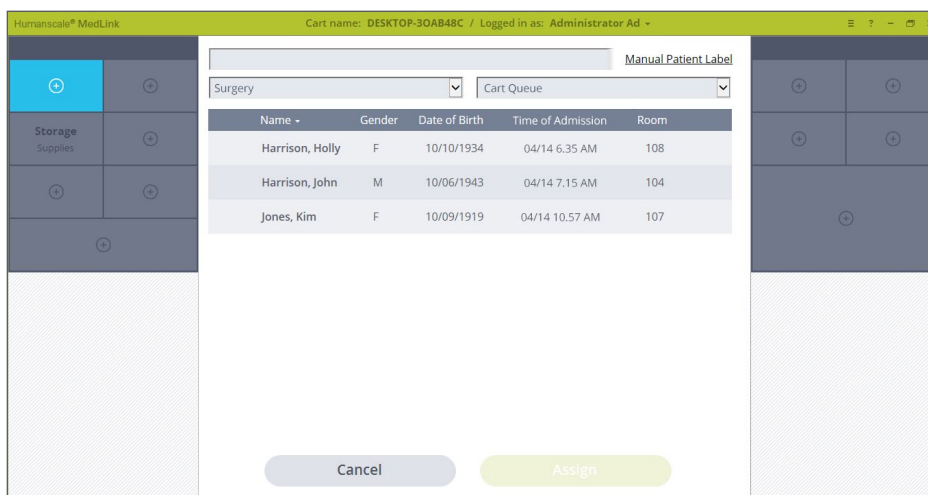


Figure 42 – Patient List

5.8 ASSIGNING A DRAWER AS STORAGE

A Drawer should be assigned a storage Drawer when it will be used for storing non-medication items. A storage Drawer is less secure than a Patient Drawer and once assigned, does not require a barcode scan to open.

Assigning a Drawer as a storage Drawer follows a similar process as assigning a Drawer to a Patient manually.

1. On Home Screen scan a Location barcode.
2. Click on an available Drawer you wish to assign.
3. The selected Drawer will highlight blue and the center area of the screen will change to display action buttons.

Click on the Storage button.

The Drawer unlocks and the screen changes to show the auto close timer. If there is no further input at this stage, the Drawer will relock, and the process will be cancelled.

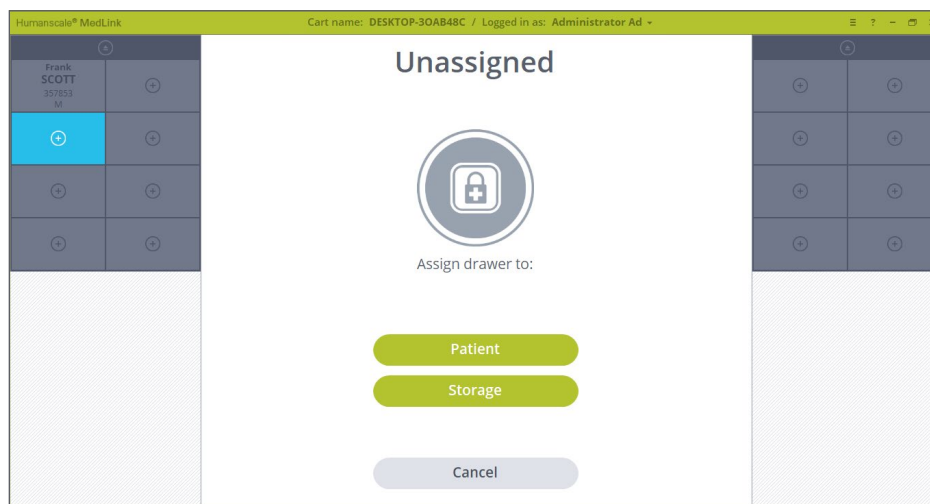


Figure 43 – Assigning Storage Drawer

4. The screen will change to allow you to enter a label for the storage Drawer. Enter a label and click the Save button.

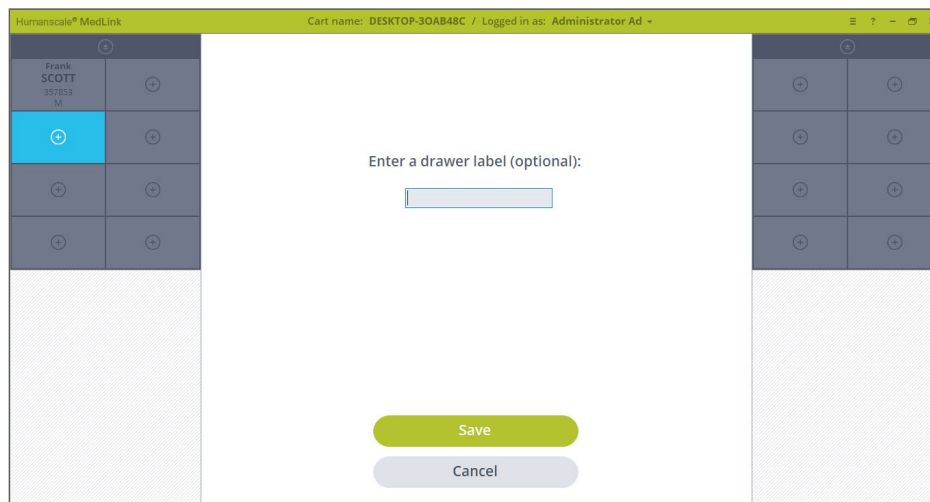


Figure 44 – Labeling Storage Drawer

- The drawer will show and the count down time will be displayed. If you pull the drawer out, you will be prompted to fill the Drawer and return it to the Cassette.

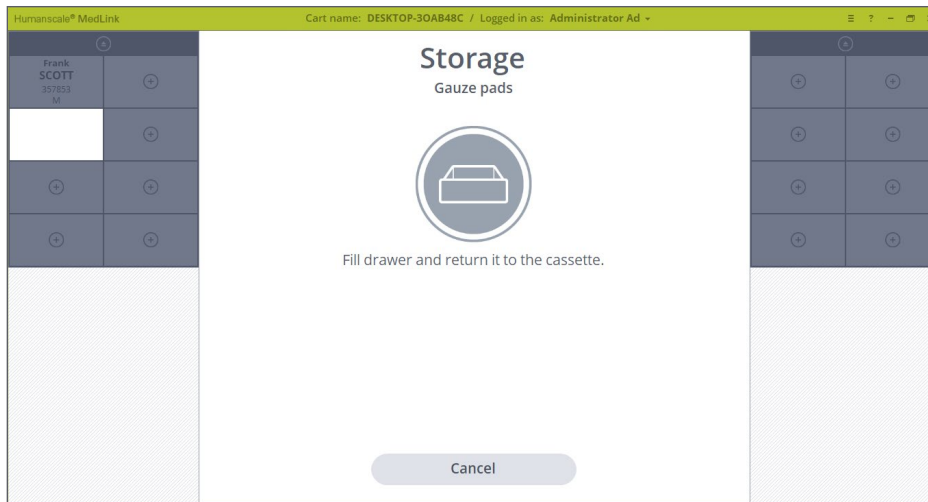


Figure 45 – Filling Storage Drawer

- On returning the Drawer to the Cassette, the screen reverts to the Home screen and the chosen Drawer now displays as a storage Drawer with the label you entered.

5.9 UNASSIGNING AND REASSIGNING DRAWERS

- Begin by following the prompt on the Home screen to scan a Location barcode.
- Click on the Drawer you want to reassign.
- You are prompted to choose whether you want to open or reassign the Drawer. The options of More... button will be discussed in details later in this document at chapter 5.14 Managing Drawers.

Selecting Reassign the following options are available:

Patient – Assigning drawer to another patient.

Storage – Assigning drawer to Storage

Unassign – Unassigning drawer

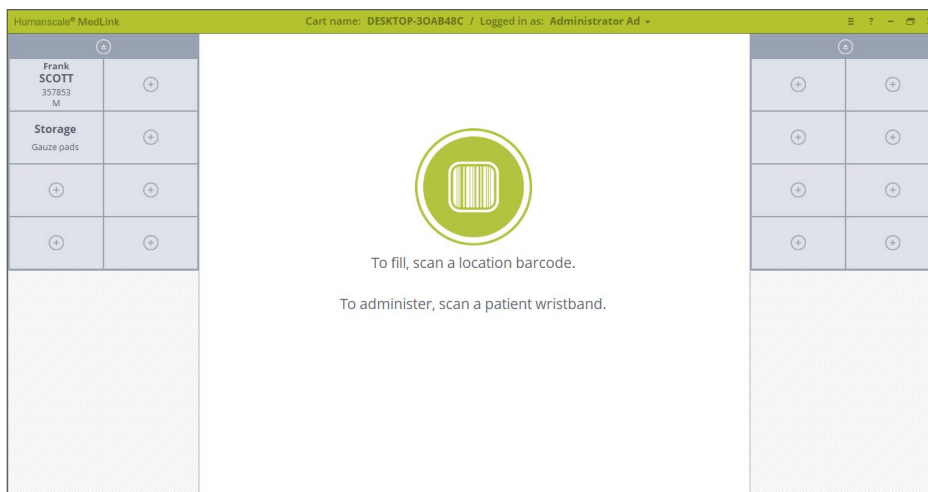


Figure 46 – Home screen with Storage Drawer

The three processes are similar, but this example follows the unassign option. Click the Unassign button to continue.

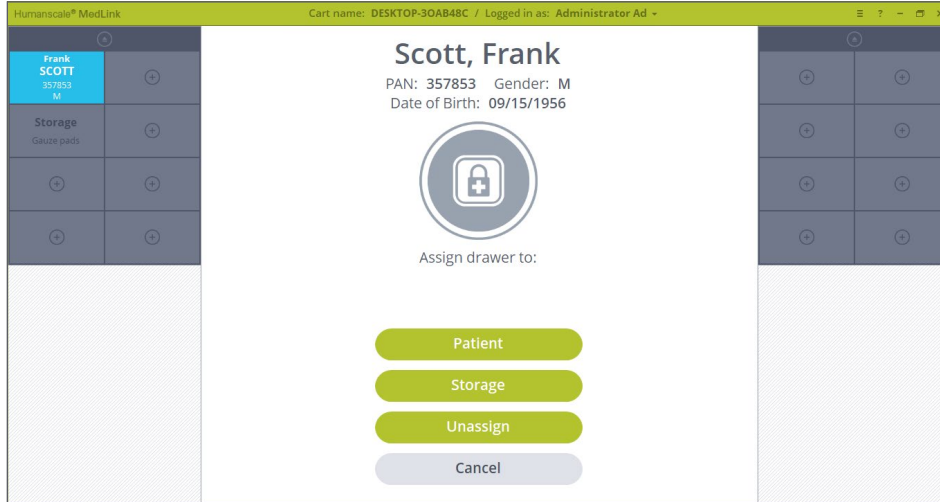


Figure 47 - Reassigning Options

4. The Drawer unlocks and the auto close timer will appear. Pull the Drawer to open it and remove it from the Cassette.

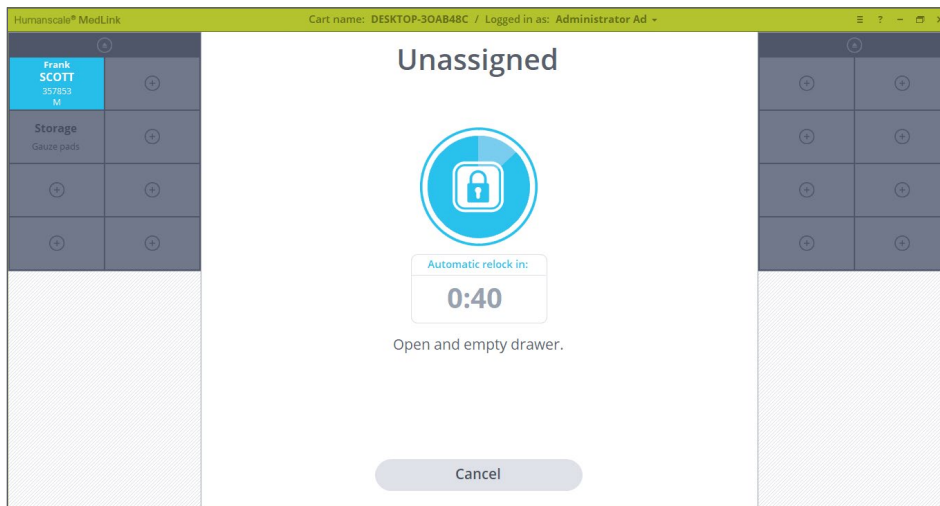


Figure 48 - Drawer is Unlocked

5. Empty the Drawer of its contents and return it to the Cassette as prompted.

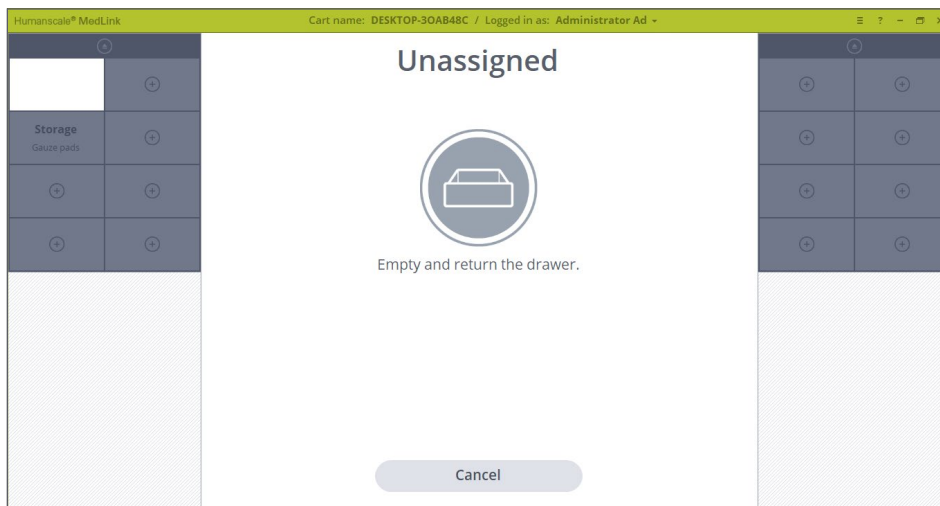


Figure 49 - Drawer is Open

- The display returns to the Home screen and your chosen Drawer will now be displayed as unassigned.

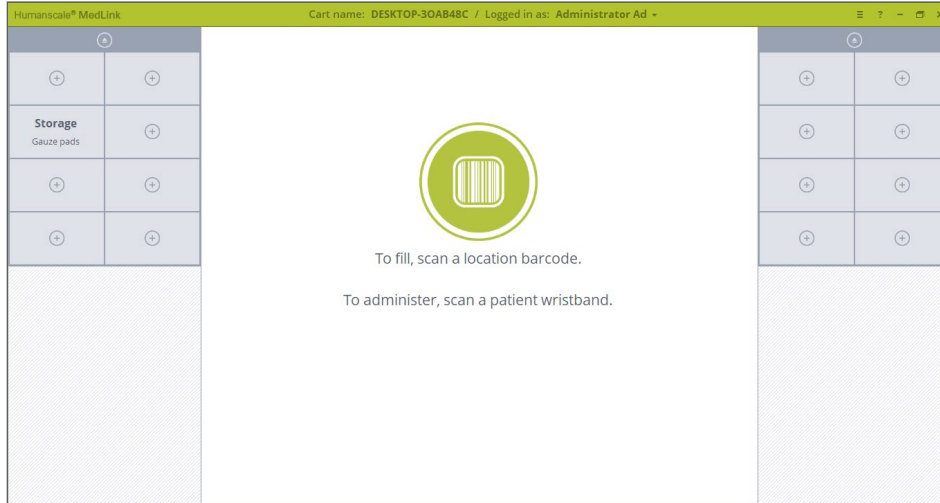


Figure 50 – Drawer is Unassigned

5.10 OPENING DRAWERS TO ADMINISTER MEDICATION

Once a Drawer is assigned to a Patient, it can only be opened by scanning the Location barcode – to refill the Drawer – or that Patient’s wristband, when you are ready to administer medication. This ensures medication cannot be accessed or tampered with between the point when the Drawer is filled and the point where the medication is retrieved. The typical workflow is explained below.

NOTE: Some aspects of this process are configurable (e.g., user, departmental and user group permissions), so the system behavior may not be exactly as described here. Consult a Humanscale MedSync™ specialist to ensure the system is configured for your specific needs.

5.10.1 OPENING PATIENT DRAWERS

- Login to MedSync™ Pro and begin the process on the Home screen with all Drawers closed.

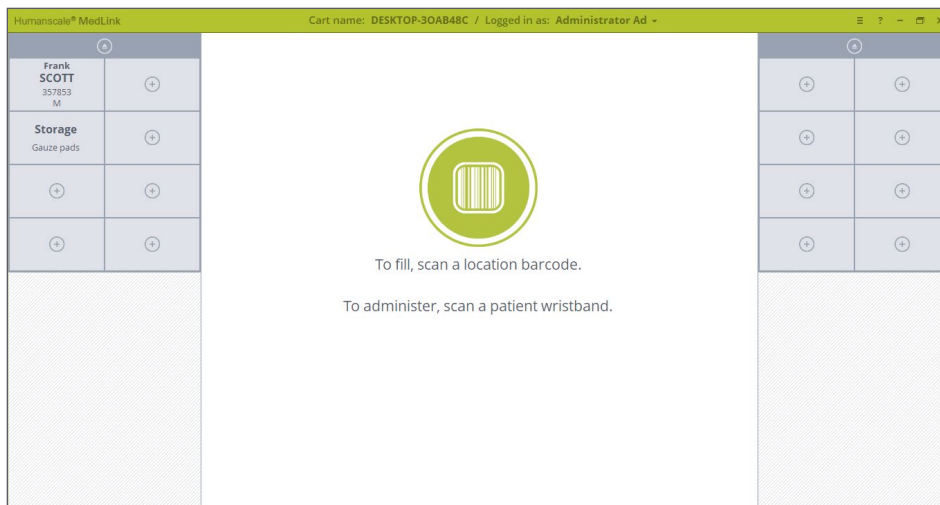


Figure 46 – Home screen

- When you are with the Patient and ready to administer medication, scan the Patient's wristband barcode.

Ensure the MedSync™ window is in the currently active window, otherwise the barcode scan input will not reach the MedSync™ software.



Image 10 – Patient Wristband Barcod

- If a Drawer assigned to that Patient is detected on the cart**, the Drawer automatically unlocks. The screen will display the auto close timer. If no further action is taken at this point the Drawer will relock, securing the medication.

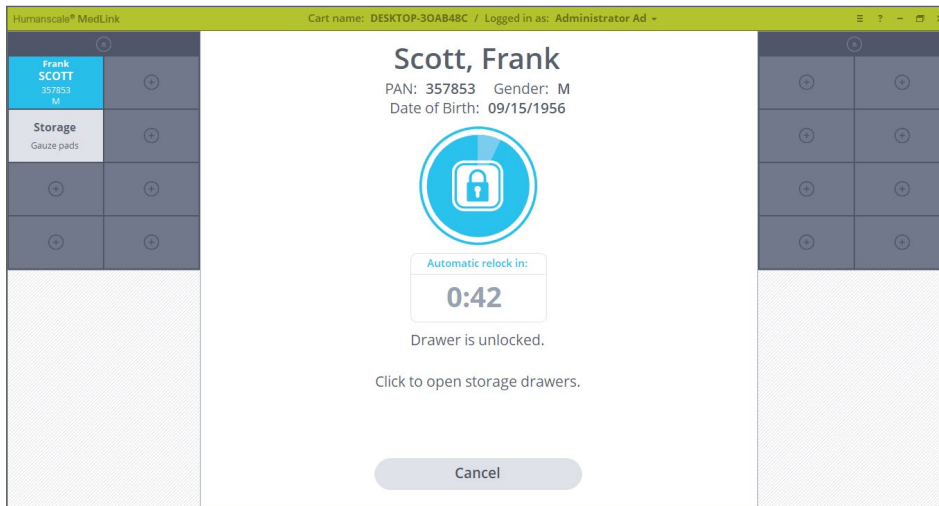


Figure 51 - Patient Drawer Unlocked

- Pull the Drawer out and remove it completely if you wish.

The screen updates, indicating the Drawer has been removed. At this point, you can go ahead with your normal medication administration process.

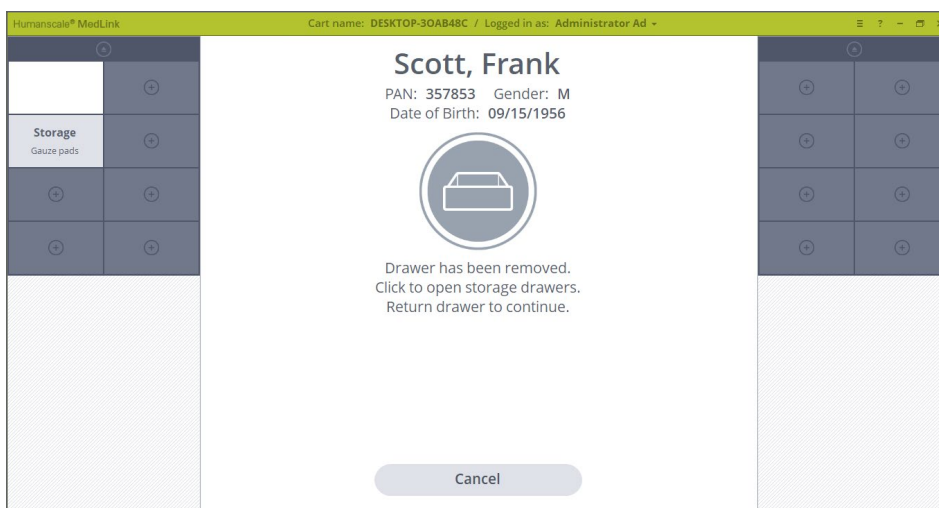


Figure 52 – Patient Drawer is Open

- With a Patient Drawer open, you may also open storage Drawers to access supplies and consumables needed to administer the medication. Simply click on a storage Drawer to unlock it.

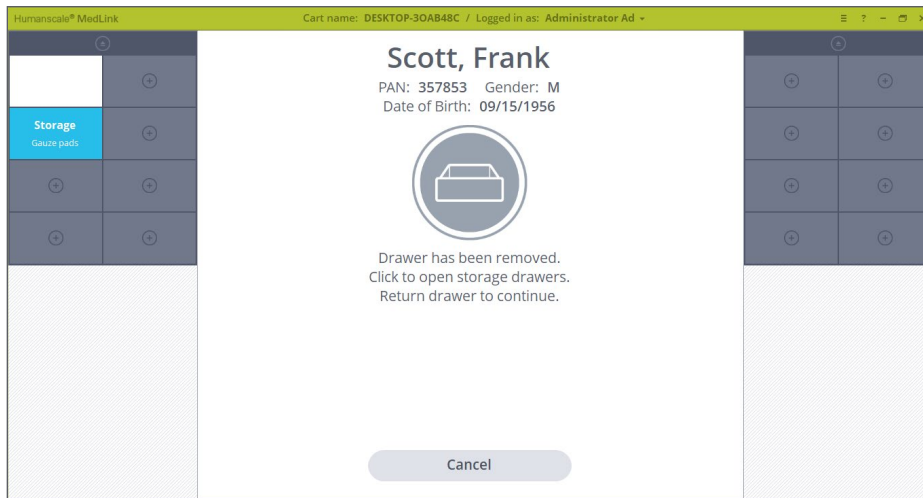


Figure 53 -Storage drawer is Unlocked

- If a Patient Drawer is open, the on-screen prompt will remain, advising you to return the Patient Drawer to continue. This ensures that only one Patient Drawer may be opened at a time, thereby preventing the possibility of medication getting mixed between Patient Drawer.

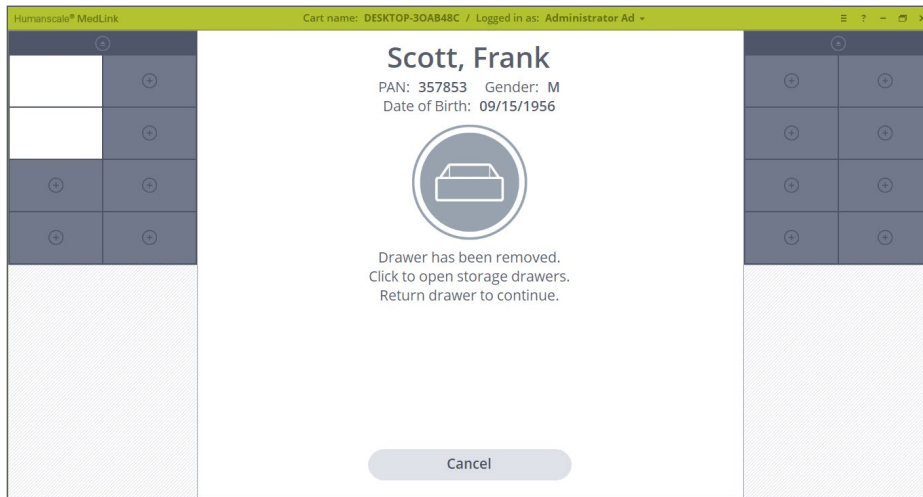


Figure 54 – Patient and Storage Drawers are Open

- When the Patient Drawer is returned to the Cassette, the process has ended, and you will be returned to the Home screen.

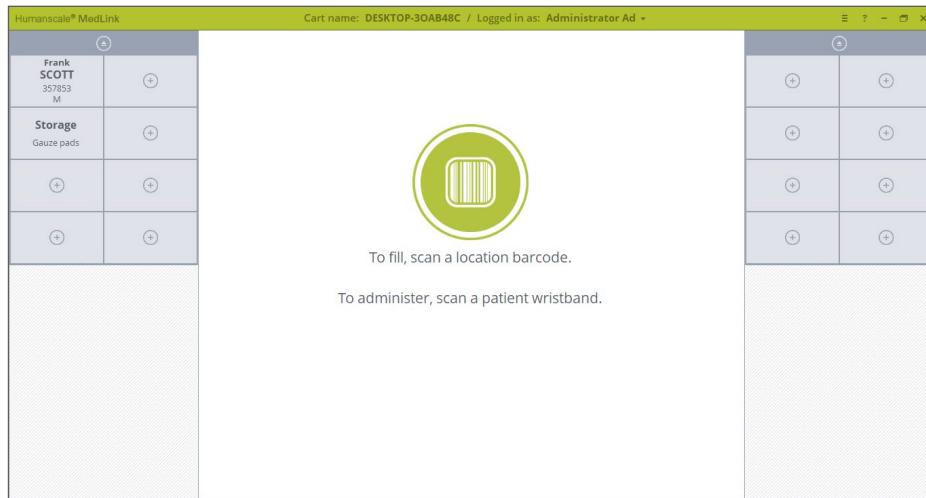


Figure 46 – Home screen

When you scan a Patient barcode, if a matching Drawer is not detected on that Cart, a notification displays on screen informing you that there is no match. The notification can be cancelled, or you can continue to create a Temporary Patient. Temporary Patient is discussed in detail later in this document at chapter 5.15 Temporary Patient.

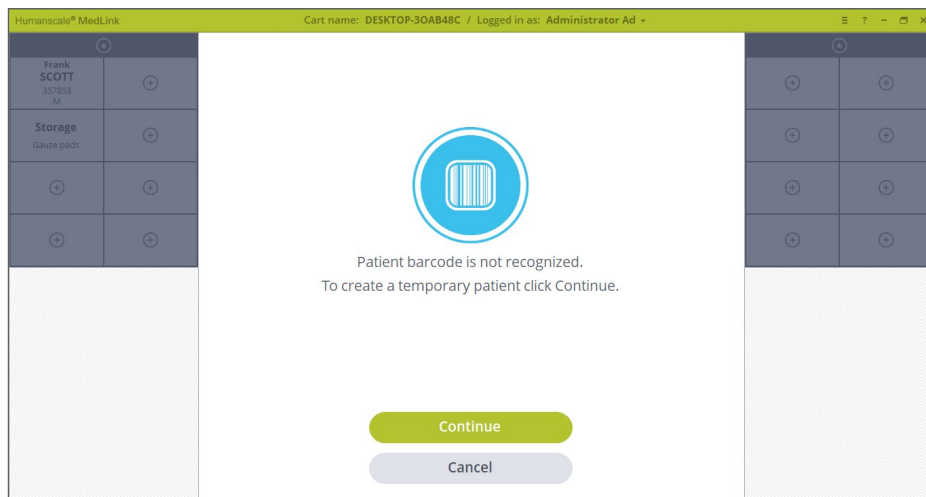


Figure 55 – Patient Is not detected on cart

8. When you scan a Patient barcode, if a matching Drawer is not detected on the Cart you're using, but a matching Drawer is detected as being Assigned to a Drawer on a different Cart within the same Department, a notification displays on screen informing you that your Patient has a Drawer Assigned on another Cart. The notification includes the name of the Cart which contains the Patient's Drawer. If multiple Carts within the same Department are detected as having a matching Drawer, all Cart names are listed. The notification will timeout back to the Home screen according the global inactivity timeout setting name.

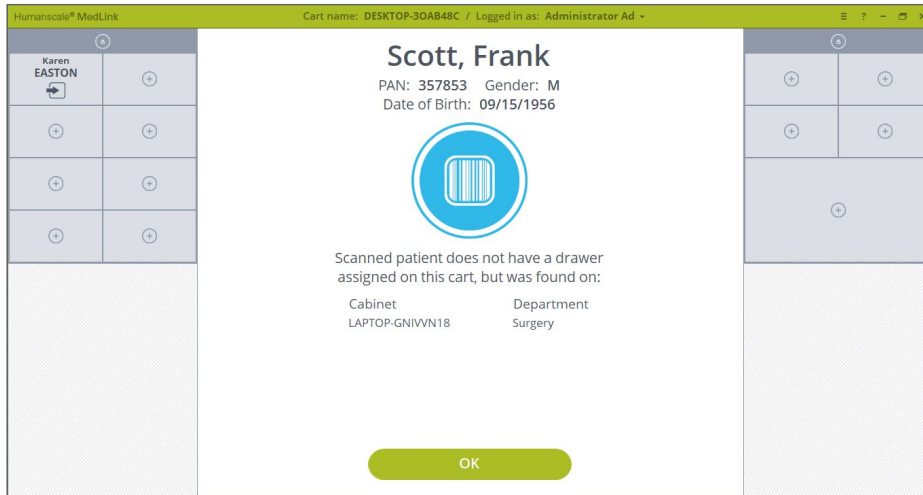


Figure 56 – Patient Is not detected on cart but detected on another cart

5.11 OPENING STORAGE DRAWERS

Storage Drawers may be opened at any time without scanning a barcode:

- By Single Left Clicking on the Drawer, and then clicking the Open button.
- By Double Left Clicking on the Drawer.
- By Single Left Clicking on the Drawer when Patient drawer is open.

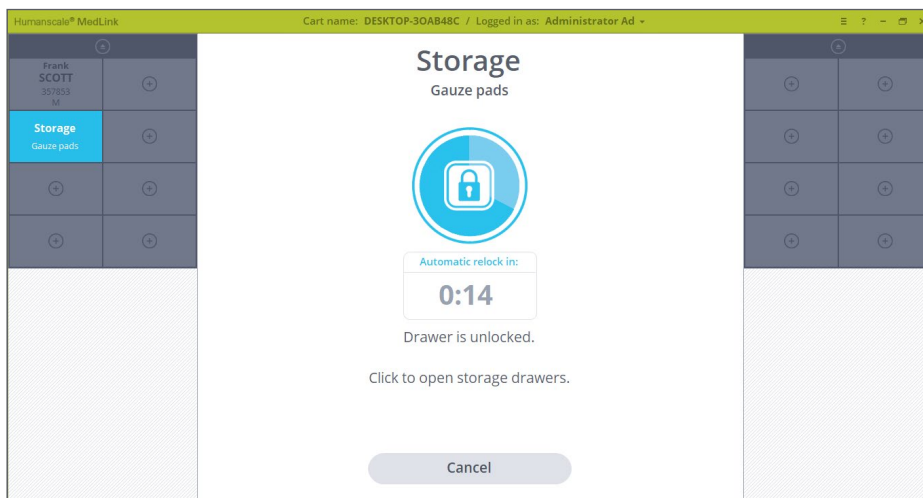


Figure 57 – Storage Drawer is Open

5.12 CONFIGURABLE DRAWER BEHAVIOR

As shown in the above step by step instructions, the MedSync™ system can be configured to behave differently depending on your organizational and workflow requirements. The following section details the standard and configurable behavior for each type of Drawer.

Patient Drawer Behavior

- Scanning a Patient's Wristband: unlocks the Drawer with no other interaction.

NOTE: Mouse focus must be on the page to scan.

- Single Left Click allows you to Open or Reassign the Drawer.

If User Rights for Location Scanning and Override are enabled: you will need to Scan a Location barcode or use the Override process to Open or Reassign the Drawer. If User Rights for Location Scanning and Override are disabled: The Drawer will unlock or enter the Reassign process with no other interaction.

- Left Double Click: opens the Drawer

If User Rights for Location Scanning and Override are enabled: you will need to Scan a Location barcode or use the Override process to unlock the Drawer.

If User Rights for Location Scanning and Override are disabled: The Drawer will unlock with no other interaction.

- Right Click: takes you to the Reassign process.

If User Rights for Location Scanning and Override are enabled: you will need to Scan a Location barcode or use the Override process.

If User Rights for Location Scanning and Override are disabled: you will enter the Reassign process with no other interaction.

Storage Drawer Behavior

- A left click gives the option to Open or Reassign that Drawer.

Selecting **"Open"** unlocks the Drawer with no other interaction.

Selecting **"Reassign"** takes you to the Reassign process.

- If User Rights for Location Scanning and Override are enabled: you will need to Scan a Location barcode or use the Override process to reassign the Drawer.

- If User Rights for Location Scanning and Override are disabled: The Drawer enters the Reassign process with no other interaction.

- Double Left Click: unlocks the Drawer with no other interaction.

- A right click takes you to the Reassign process.

If User Rights for Location Scanning and Override are enabled: you will need to Scan a Location barcode or use the Override process.

If User Rights for Location Scanning and Override are disabled: you will enter the Reassign process with no other interaction.

Unassigned Drawer Behavior

- A left single click takes you to the reassign process.

If User Rights for Location Scanning and Override are enabled: you will need to Scan a Location barcode or use the Override process to reassign the Drawer.

If User Rights for Location Scanning and Override are disabled: The Drawer will enter the Reassign

- Right click takes you to the reassign process.

If User Rights for Location Scanning and Override are enabled: you will need to Scan a Location barcode or use the Override process to reassign the Drawer.

If User Rights for Location Scanning and Override are disabled: The Drawer will enter the Reassign process with no other interaction.

- Left Double Click: has no effect on unassigned Drawers.

5.13 OPENING DRAWERS WITHOUT SCANNING BARCODES

When Location Scanning and Override processes are enabled, there is a choice to scan the “Location barcode” or use an administrative login to “Override” the Location scan for the open action. The override may optionally be followed by a prompt to enter a “Reason” for the override. This override action is recorded and noted in reports.

1. If a barcode is damaged or unavailable to scan and you need to access that Drawer, begin by selecting a Drawer and clicking the Open button.
2. On the following screen where you are prompted to scan a barcode to continue, click the Cannot Scan Barcode button.

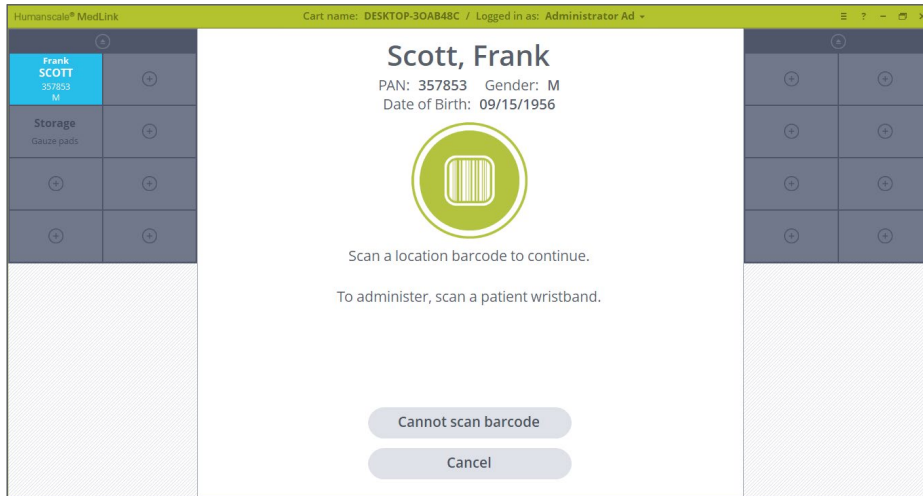


Figure 58 - Location Barcode Can't be Scanned

Depending how the system is configured, you will be taken to either the “Witness” override process, or the “PAN/MRN” override process.

- If the system is configured to use the Witness override process, you will be prompted to enter the login credentials of a colleague to see that you are opening a Drawer without the security of scanning a barcode.

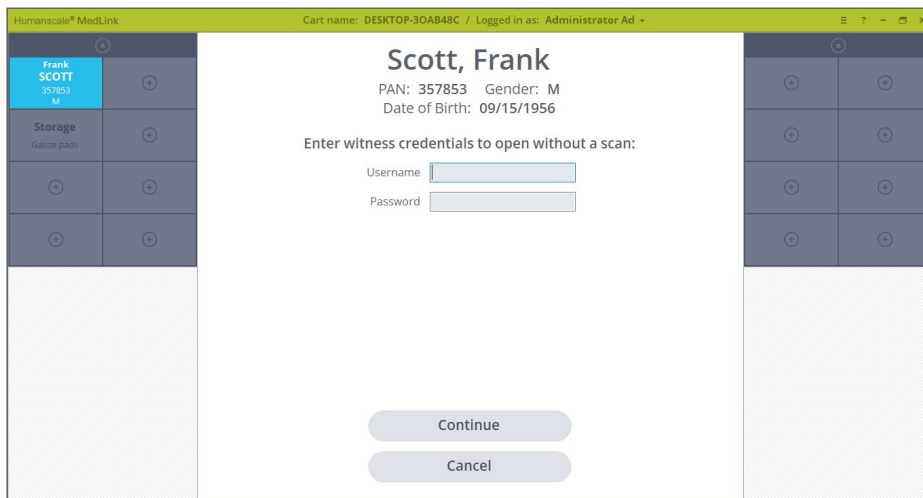


Figure 59 - Witness Credential

- If the system is configured to use the PAN/MRN override process, you will be prompted to enter the ID number associated with the Patient's Drawer you are trying to open.

NOTE: if the override process is set to PAN/MRN, it applies only to Patient Drawers where Patient data is sourced from an HL7 feed. Manually labeled Patient Drawers and storage Drawers will default to use the Witness override process as they do not have an associated PAN or MRN.

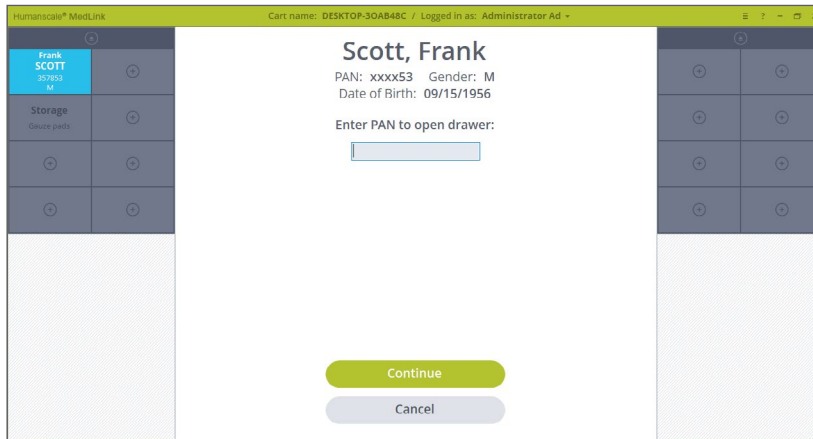


Figure 60 - PAN Credential

3. Once the credentials have been accepted or the PAN/MRN entered, on the next screen enter the reason you cannot scan the appropriate barcode.

This is also recorded in the reporting database so that override events can be reviewed with a view to reducing their occurrence.

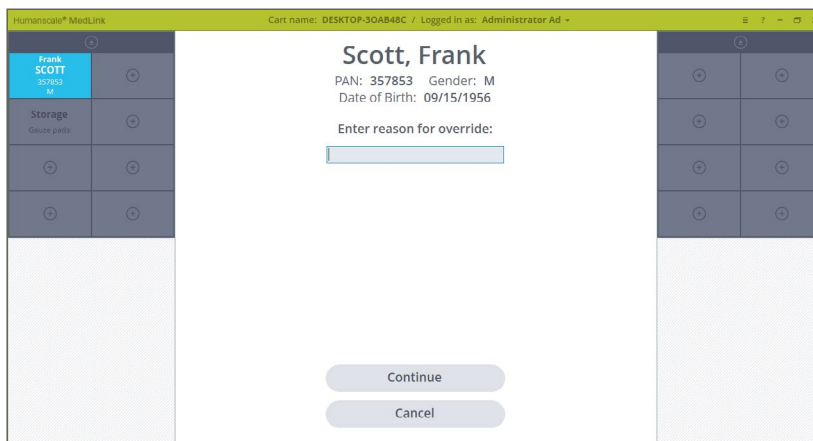


Figure 61 - Reason of Override

4. On clicking Continue, the Drawer unlocks, and you can continue to fill or administer medication as needed.

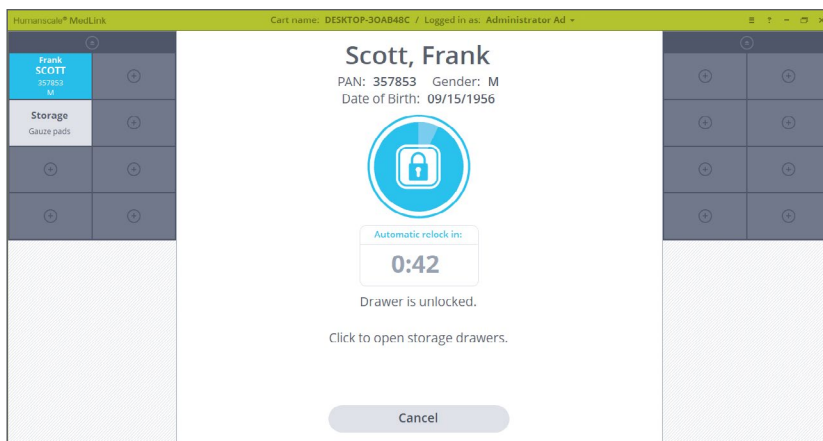


Figure 51 - Patient Drawer Unlocked

5.14 MANAGING DRAWERS

The Drawer selected screen can have a primary page and a secondary page, with the less often used functionality available on the secondary page.

Primary Screen Includes

- **Open** – this continues the existing Open process
- **Reassign** – this goes to the existing Reassign subpage
- **More...** – this button goes to the secondary page.

Secondary Screen Includes

- **Move Drawer** – this begins the existing Move Drawer process which is used to move the selected Drawer to a different location. This process applies to both Patient Drawers and Storage Drawers.
- **Add Extra Drawer** – this begins the Assign an additional Drawer to the same Patient process it can only apply to Patient Drawers. The option is hidden when other Drawer types are selected.
- **Move Drawer Contents** – this is used to move the contents of the current Drawer to a different Drawer (and potentially a different size Drawer). This process applies to both Patient Drawers and Storage Drawers

5.14.1 MOVE DRAWERS

At times, it may be necessary to rearrange Drawers within Cassettes. This action requires multiple Drawers to be opened at once, which is inherently a safety issue. For this reason, the following process is a configurable user permission that may be restricted to certain user groups.

The following process allows two Drawers of the same size to be swapped. Moving different size Drawers or rearranging more than two Drawers at the same time would need to be carried out as part of the normal process of ejecting the Cassette and reconfiguring it manually.

1. Select the first Drawer you wish to move on the Home screen. The Drawer highlights. Click on **“More...”** button. This takes you to the secondary page.

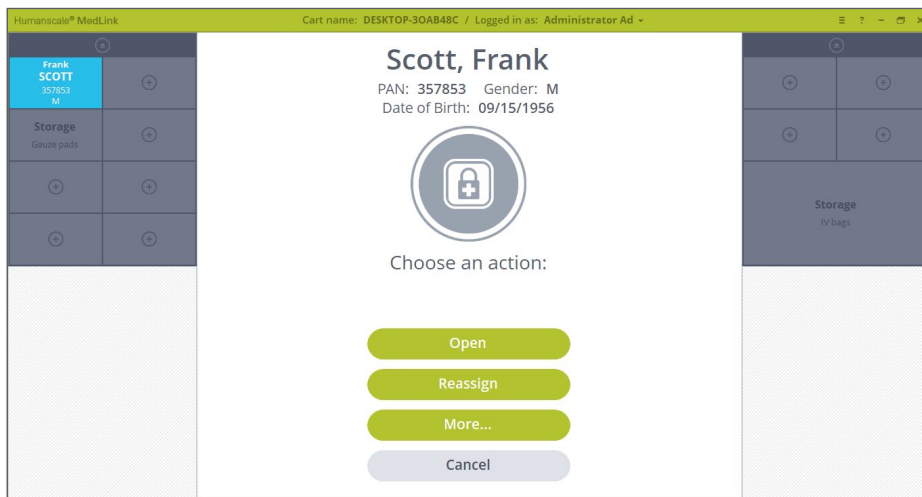


Figure 62 - Drawer Selected Primary Screen

2. Click on the **“Move Drawer”** button.

NOTE: If you are logged in as a user without the move Drawer permission enabled you will not see the move Drawer button.

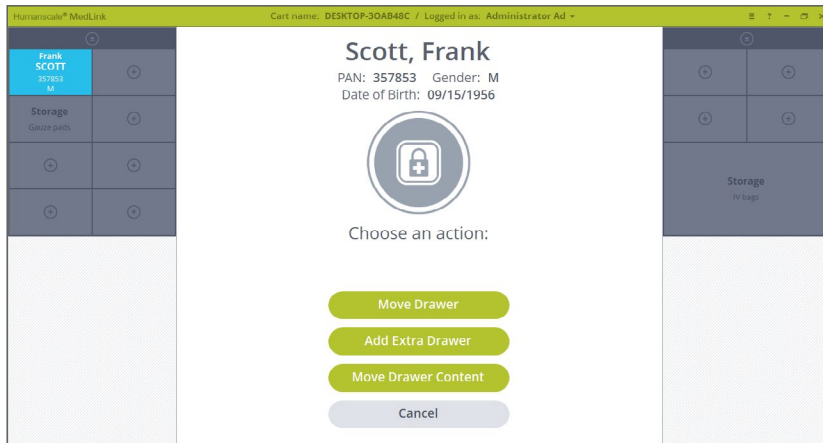


Figure 63 - Drawer Selected Secondary Screen

3. If you have not already done so, you will be prompted to scan a Location barcode. The Drawer swapping process should only be carried out in a designated area such as a medication store room, therefore scanning the Location barcode is needed.
4. The first Drawer selected stays highlighted, and you will be promoted to choose a second Drawer where you want to move the first drawer to.

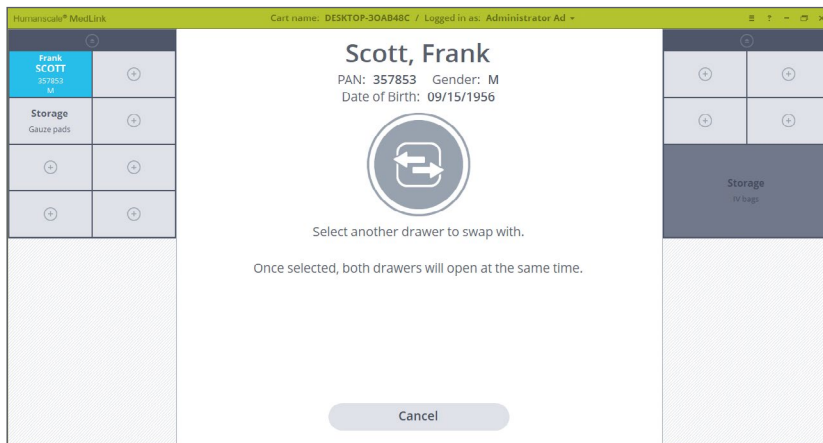


Figure 64 – Select Another Drawer

5. Click on another Drawer of **matching size**. The second Drawer also highlights, and both Drawers will be unlocked.

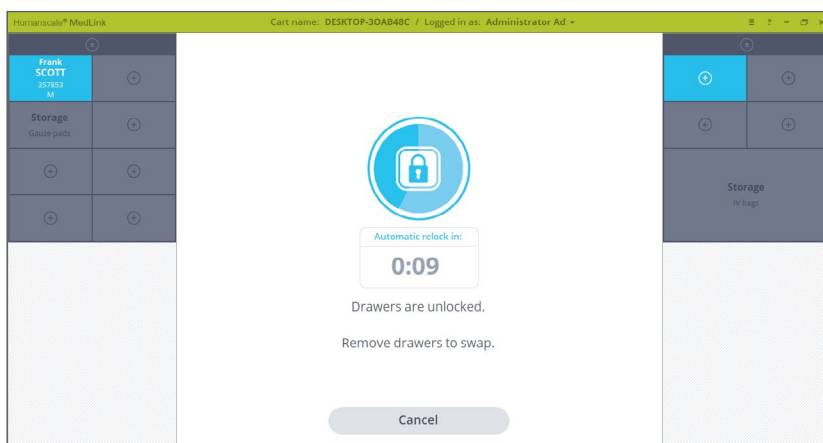


Figure 65 – Both Drawers are Unlocked

- Remove one Drawer at a time. The graphics update on screen to show the Drawer being removed. With both Drawers removed, move the position of the Drawers, and return them to the Cassettes.

The graphics update on screen and the system continues to display the prompt until both Drawers are returned.

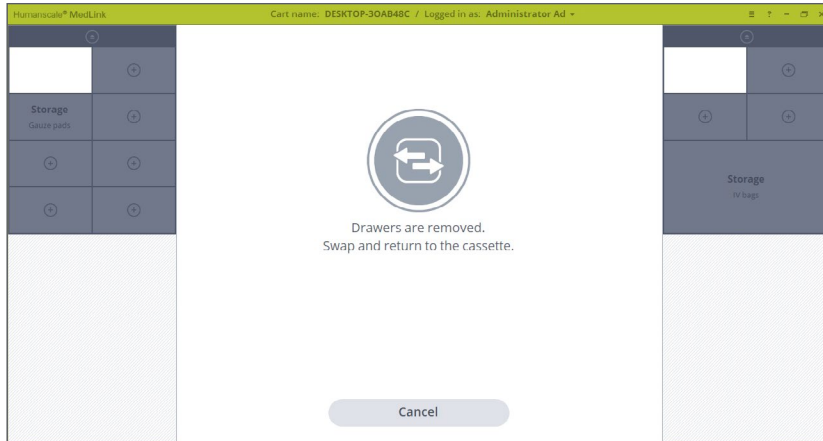


Figure 66 – Both Drawers are Removed

- Once both Drawers have been returned the display will return to the Home screen, with the Drawers displayed in their new positions.

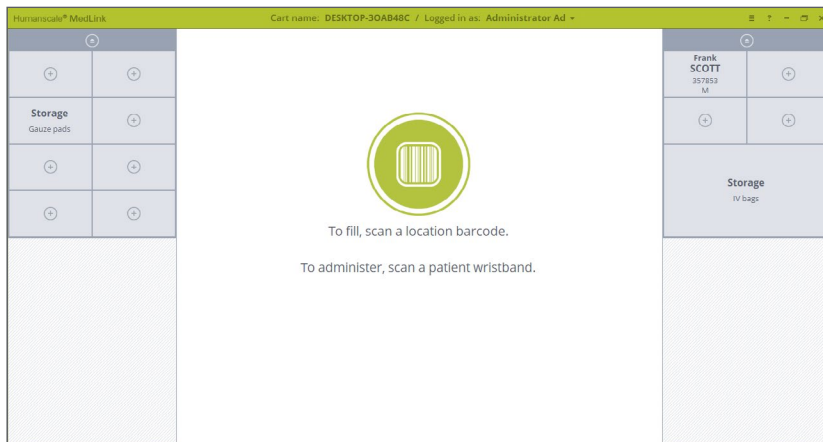


Figure 67 – Both Drawers are Returned to the new position

5.14.2 ADD EXTRA DRAWER

This process is initiated from the secondary page in the Drawer Selected options. It allows you to assign multiple Drawers to a single Patient. This functionality streamlines the process and bypasses having to reselect the Patient from the Patient List screen. This Add Extra Drawer process applies only to Patient Drawers.

1. You initiate the process by selecting a Patient drawer that you would like to add extra drawer to and go to the secondary Drawer Selected Screen.
2. On the secondary Drawer Selected Screen press **"Add Extra Drawer"** button.

At this point a Patient Drawer is already selected. You are prompted to scan a Location Barcode to continue (or enter the Override process).

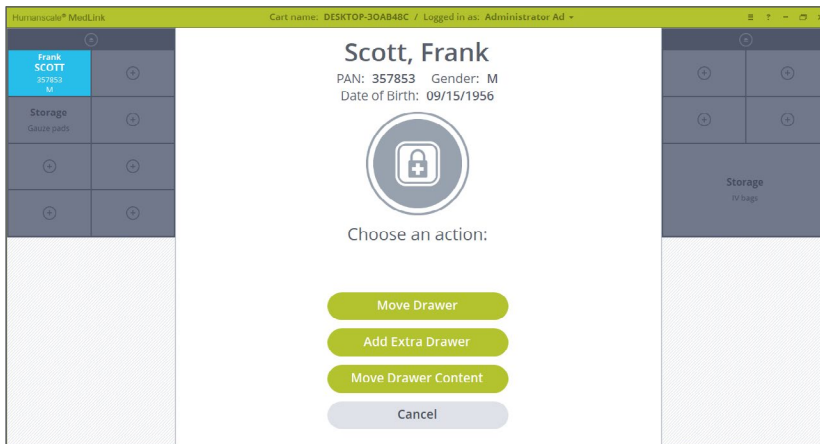


Figure 63- Drawer Selected Secondary Screen

3. You are prompted to select the drawer that you would like to add to the selected Patient. Only Unassigned drawers can be selected.

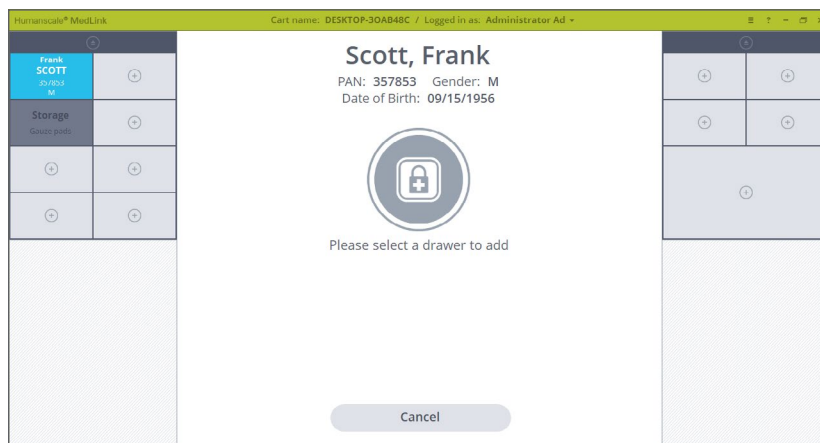


Figure 68 – Select Extra Drawer

4. Click on the drawer that you would like to add. Only the selected Drawer unlocks.

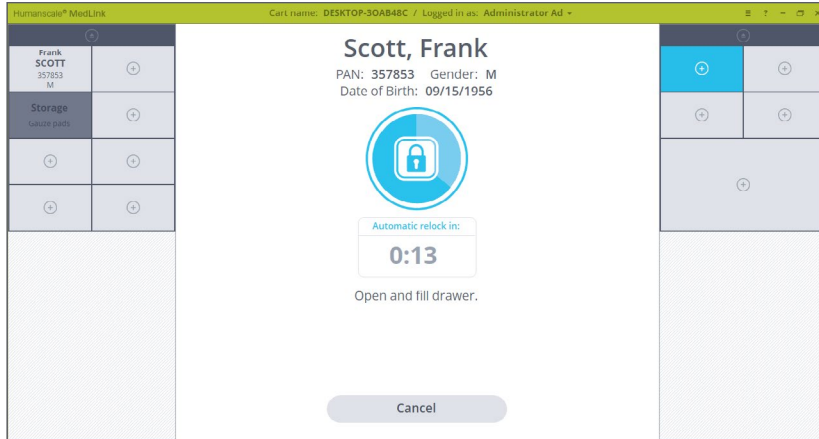


Figure 69 – Open Extra Drawer

5. The display changes to prompt you to open the Drawer and insert any medication. The display indicates the Patient details (the same Patient whose Drawer was originally selected to start this process).

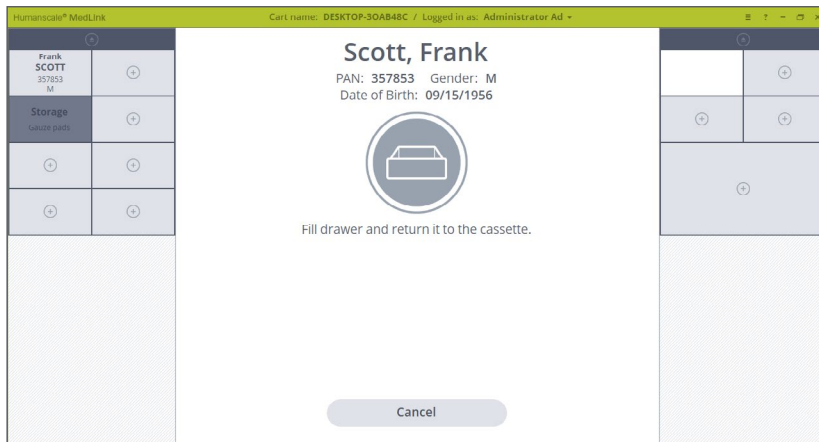


Figure 70 – Extra Drawer is Open

6. The display returns to the Home screen, with the new Drawer front indicating it is now Assigned to the same Patient.

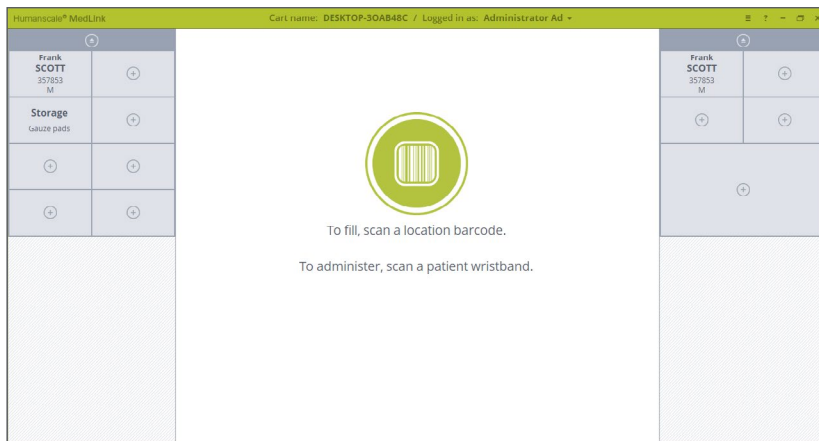


Figure 71 –Extra Drawer is Assigned71

5.14.3 MOVE DRAWER CONTENT

This process is initiated from the new secondary page in the Drawer Selected options. Its purpose is to allow the content of a Drawer to be moved to another Drawer. This may be useful if a nurse is running out of space to store a Patient’s medication and wishes to move the medication to a larger sized Drawer. The Move Drawer Content process applies to Patient and Storage drawers as well.

1. You initiate the process by selecting a Drawer that you would like to move the content of and go to the secondary Drawer Selected Screen.

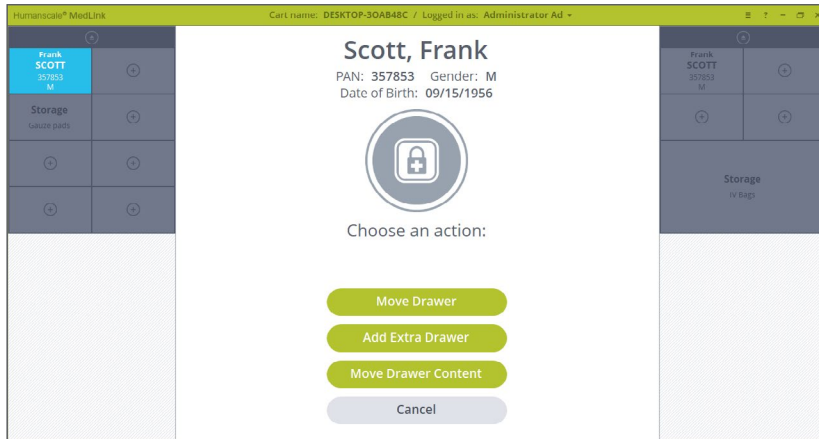


Figure 72 – Drawer is Selected to Move Content of

2. On the secondary Drawer Selected Screen press **“Move Drawer Content”** button.

If you selected a Patient Drawer you are prompted to scan a Location Barcode to continue (or enter the Override process).

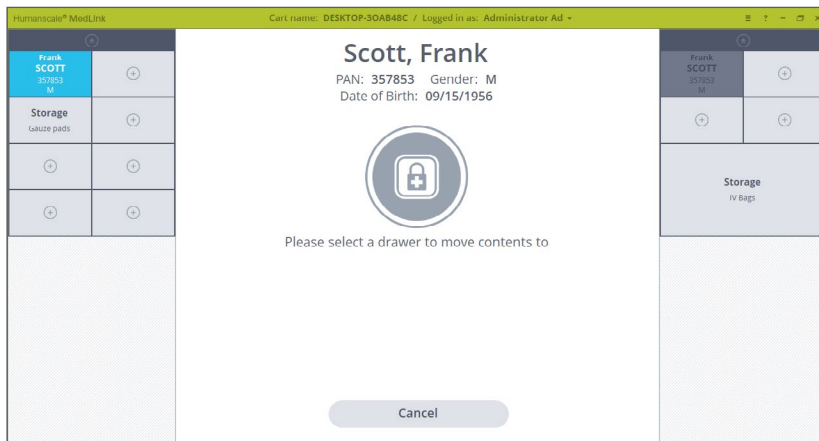


Figure 73 – Select Drawer to Move Content to

- You are prompted to select the drawer where you would like to move the content of the first selected drawer to. Click on a different size drawer. Both Drawers will unlock.

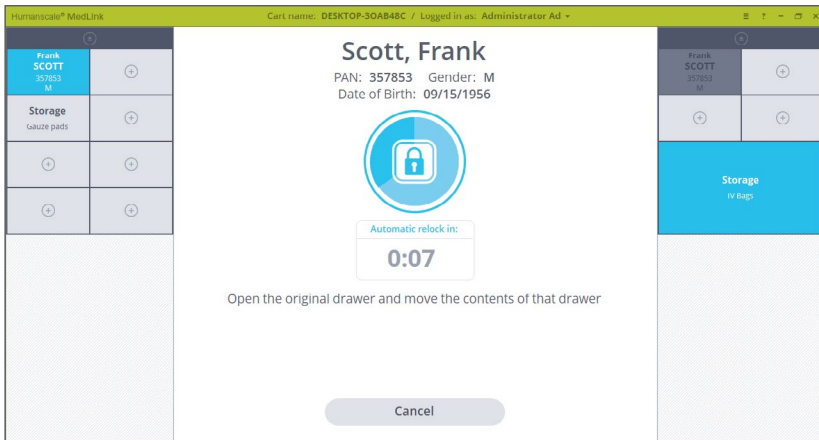


Figure 74 – Both Drawers are Unlocked

- Open both Drawers. The display changes to prompt you to open the content of the Drawers and close them.

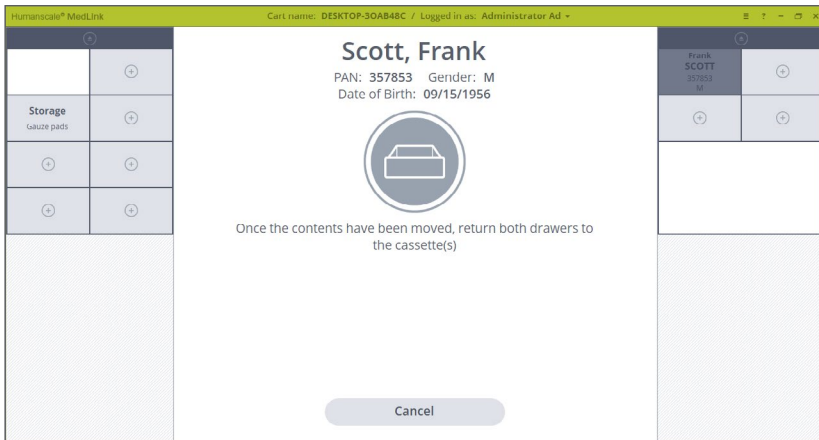


Figure 75 – Both Drawers are Open

- After closing both Drawers the display returns to the Home screen displaying the Drawers at their new position.

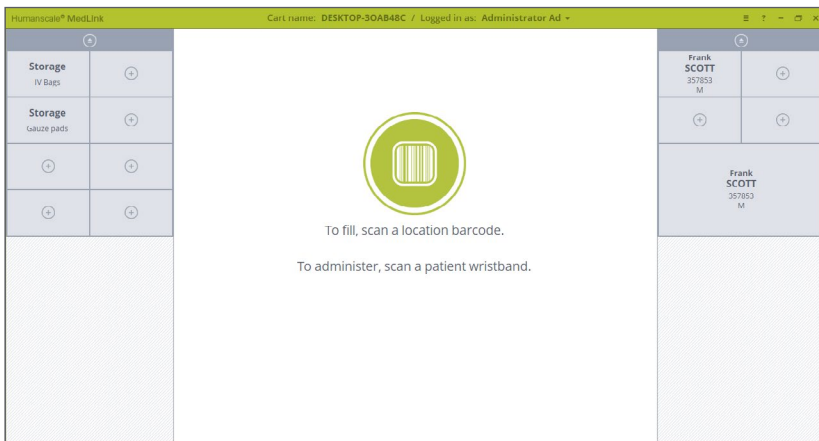


Figure 76 – Home Screen with Drawer Content Moved

5.15 TEMPORARY PATIENT ASSIGNMENT

The Temporary Patient Drawer Assignment process is triggered during the AutoScan™ (Barcode-Assisted Drawer Assignment) process when the scanned Patient barcode is not found in the ADT feed. The system is unable to fully link a Patient to a Drawer, so this process allows a Drawer to be temporarily Assigned to the Patient using their barcode - and importantly, allowing Scan to Open functionality for that Drawer – until the Patient is detected in the ADT feed.

1. This process is initiated by scanning a Patient barcode who is not recognized in the ADT feed. A warning screen is displayed, and you are prompted to create a Temporary Patient. **Click Continue button.**

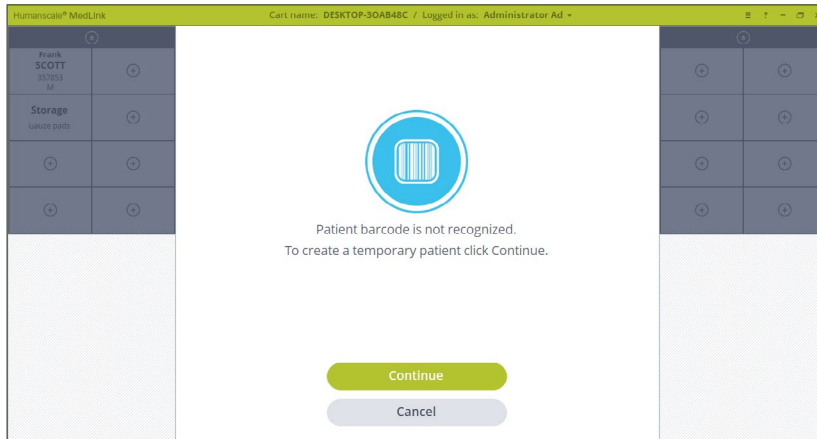


Figure 55 – Patient Is not detected on cart

2. Fill out the Temporary Patient form and click Save button.

Note: The scanned barcode is registered. The system checks the barcode against the ADT feed and when Patient is recognized in the database the status changes from Temporary Patient to regular Patient.

A screenshot of the 'Temporary Patient' form in the MedLink software interface. The header bar is the same as in Figure 55. The form title is 'Temporary Patient'. It contains several input fields: 'First Name*', 'Middle Name', 'Last Name*', 'Date of Birth' (with a calendar icon), 'Gender' (a dropdown menu), and 'Recorded Barcode #' (pre-filled with '951357'). Below the fields is a note: '*fields required.'. At the bottom of the form, there are two buttons: a green 'Save' button and a grey 'Cancel' button. The side panels with the drawer grid are visible, with the top drawer highlighted and showing patient information.

Figure 77 – Temporary Patient Form

- The drawer will open to fill the medication. Once it is closed the Home Screen will be displayed.

The Temporary Patient drawer is marked with a question mark icon on the drawer label. The Temporary Patient can be used as regular Patient or Storage drawer.

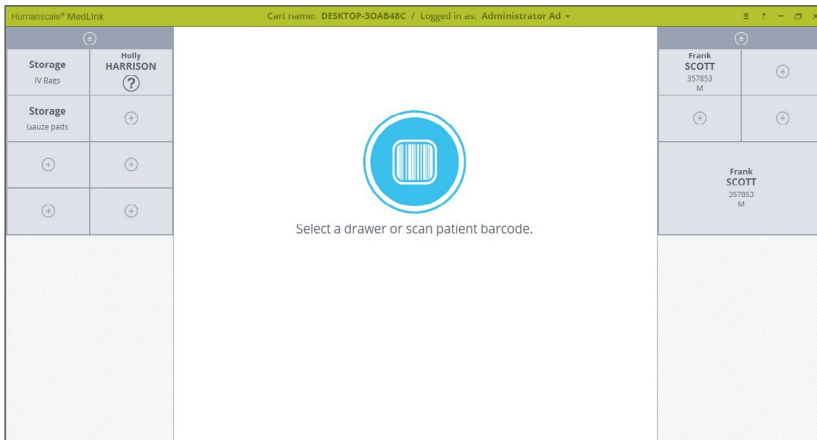


Figure 78 – Home Screen with Temporary Patient

- If Temporary Patient drawer is selected the prompt window will display a Temporary Patient (question mark) icon.

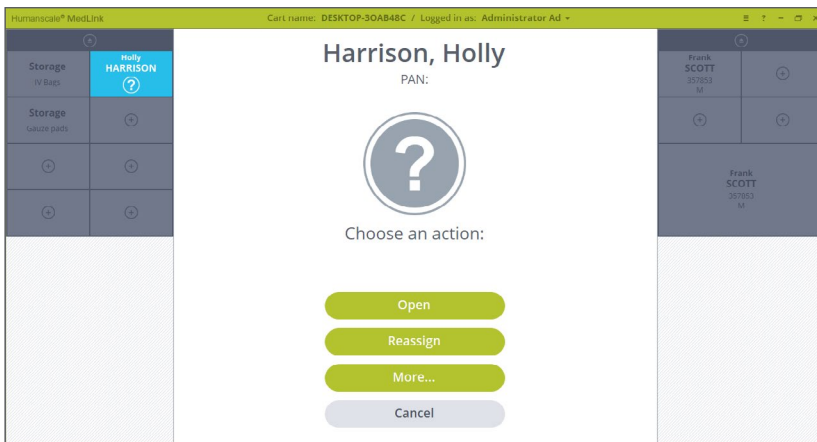


Figure 79 –Temporary Patient Drawer is Selected

5.16 EJECTING A CASSETTE

Cassettes can be ejected from the housing for transfer to another cart, refilling in a central pharmacy, or moving to a different position on the same cart.

NOTE: The ability to eject a Cassette is a configurable user permission. If you cannot eject a Cassette following this process, consult your system administrator or Humanscale MedSync™ specialist.

1. Click the icon on top of the Cassette to eject that Cassette.

Note that all Drawers on the chosen Cassette must be locked first.

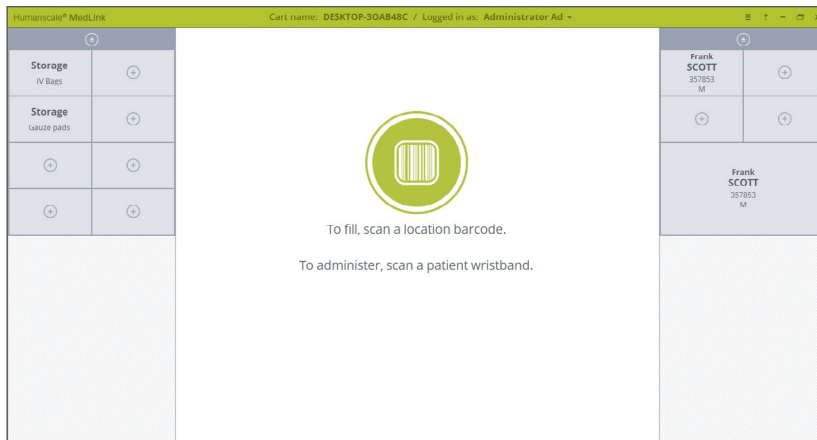


Figure 80 –Home Screen

2. The Cassette handle pops out of the housing, allowing you to pull the Cassette out and remove it. The screen updates to show the Cassette has been removed.

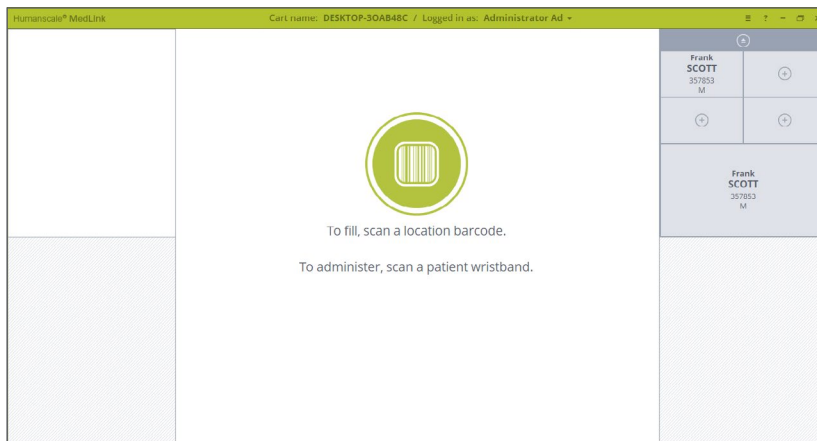


Figure 81 –Cassette is Ejected

Pharmacy Mode

If your workflow involves transporting Cassettes to a central pharmacy for refilling away from the department, you will need to configure a cart in the pharmacy to use to fill medication into the Drawers.

To do this, enable the “Pharmacy Mode” setting for your PC or laptop. This setting is in the Carts section of the MedSync™ Configuration menu.

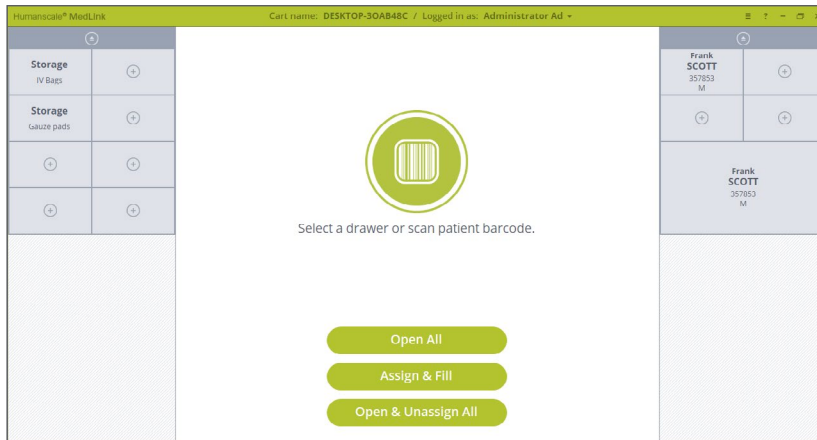


Figure 82 – Pharmacy Home Screen

With pharmacy mode enabled the MedSync™ Home changes to display the following additional buttons.

- **Open All** - Open all allows you to select a Cassette and opens all Drawers for that Cassette with a single click. This should be used for rapidly emptying unused medication from Drawer without changing Drawer assignments.
- **Assign & Fill** - Allows you to assign and fill Drawers without requiring barcode scanning.
- **Open & Unassign All** - Allows you to select a Cassette, all Drawers for that Cassette will be unlocked. As you remove each unlocked Drawer to remove items from that Drawer, the Drawer is automatically set to Unassigned.

In addition to these extra controls, pharmacy carts do not use any auto close timeouts for unlocked Drawers or application inactivity. These modifications to the standard functionality allow for a more efficient workflow in a pharmacy setting, however they do inherently increase the risks involved. Pharmacy users should be fully trained and understand the processes fully before using the system.

Help and Troubleshooting

At any time, clicking on the **question mark icon in the title bar** opens the help screen. The help screen displays Support and Contact information with links to documentation. Help also displays the Software and Firmware versions. This information may be used when troubleshooting an issue.

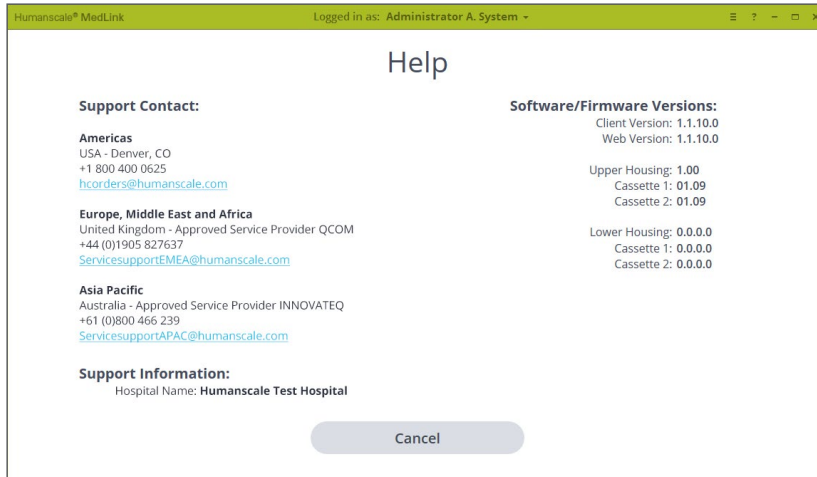


Figure 83 – Help Screen

Legal Notices

MedSync™ is not a clinical decision support system and must not be used as such. MedSync™ is not intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease. It does not replace existing medication administration protocols, including any Positive Patient Identification procedures to ensure the correct medication is being administered to the correct Patient in the prescribed dosage and delivery method. When placing medication into MedSync™ Drawers, the medication must be in its original packaging or contained within separate closed packaging.

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