



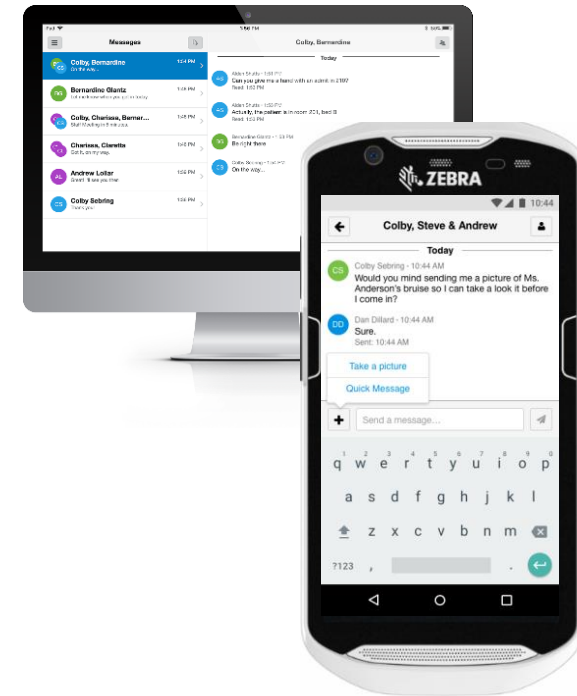
**CLINICAL COMMUNICATION & CERNER  
CAREWARE CONNECT  
SHARP HEALTHCARE**

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Christine Basiliere – VP Workforce Strategy  
Jonathan Anderson – IT Manager

# AGENDA

- LEARNING OBJECTIVES
- SHARP HEALTHCARE
- WHY CAREAWARE CONNECT AT SHARP?
- PROJECT GOVERNANCE
- CAREAWARE IMPLEMENTATION
- LESSONS LEARNED
- IMPORTANT CONSIDERATIONS
- USAGE STATISTICS
- END USER FEEDBACK
- QUESTIONS



# LEARNING OBJECTIVES

## **ATTENDEES WILL LEARN:**

1. Describe how the end user and patient experience can improve workflow with a strong clinical communications platform.
2. Define how a clinical communications platform can be utilized within their organization.
3. Apply design principles and implementation strategies in the development of their own implementation plan, including in times of a pandemic.

# SHARP HEALTHCARE

Treating people, not patients, and transforming the health care experience for our entire community

## Initial Cerner deployment between 2008 and 2010

Included: CPOE, Clinical Documentation, Lab, Rad, Rx, ED  
BCMA (2011- 2012), Infusion Suite (2016 – 2017)



## Largest private employer in San Diego:

- 18,000 Employees
- 2,700 affiliated Physician
- 3,000 volunteers

## 4 Acute-care Hospitals

- 1,822 licensed beds

## 3 Specialty Hospitals

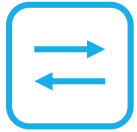
## 3 Affiliated Medical Groups

SAN DIEGO  
-based-



# WHY CAREAWARE CONNECT AT SHARP?

*To make our end users lives better*



Replace Dolphins for BCMA, Bridge & Smart Pump Programming



Robust Wireless phones



Secure Clinical Communication



Foundation for future Innovation and Delivery

# PROJECT GOVERNANCE

## LEADERSHIP TEAM

Janet Hanley – Project Sponsor  
 Crissy Basiliere – Project Sponsor  
 Bob Marzullo – IT Oversight

### **Core Team:**

Jonathan Anderson – IT Manager  
 Josh Bayer – IT Project Manager  
 Muhammad Chummun – Cerner PM  
 Rick Lemoine – Physician Champion

ENTERPRISE STEERING COMMITTEE  
 (All Site Representation)

### WORKGROUP #1

Technical:  
Infrastructure/Device

#### Device Deployment

#### EDA

#### Infrastructure: Server/Tele/NTS

- Device Deployment (pre-fielding, work packages, provisioning, etc.)
- Enterprise Device Architecture (Airwatch build, etc.)
- Infrastructure Readiness (Servers, PBX Integration, Wireless Remediation, VoIP, etc.)

### WORKGROUP #2

Sharp\_Cerner IT Application

- Application/System Setup
- Integration Testing
- iCommand Build/Programming

### WORKGROUP #3

Clinical

- Current/Future State Review
- Workflow Evaluation
- Data Collection Workbook (DCW) build & Conduct Meetings
- Determine Necessary Device Counts

### WORKGROUP #4

Physicians

- Engagement of Onsite Physicians
- Physician Champions
- Sign-up/App access
- Workflow Evaluation

### WORKGROUP #5

Metrics & Reporting

- Define KPI's and Measures of Success

### WORKGROUP #6

Education & Training

- Operational Strategy Transition
- Training Coordination
- Education Materials
- Communication Distribution as Needed

# CAREWARE IMPLEMENTATION OVERVIEW

## CHULA VISTA CAMPUS

October 2019



1,522 active users



56 units/departments



585 Zebra TC52



183 resolved issues



## METROPOLITAN CAMPUS

February 2021

3,928 active users

119 units/departments

1,131 Zebra TC52

410 resolved issues

## *Applications Deployed*



CONNECT NURSING



CONNECT MESSENGER



CONNECT VOICE



CAMERA CAPTURE



BRIDGE BREASTMILK

# CAREWARE IMPLEMENTATION LESSONS LEARNED

- **Considerations:**

- Training hurdles due to COVID-19 and staff burnout
- *Physician engagement & adoption*
- Education: Call transfers, *10 digit dialing (staff & patients)*, call forwarding to CareAware numbers
- Importance of StaffLink and clerk training: Production setup can occur ahead of time
- In-hand equipment available during Design gathering efforts
- Directory/Claimable Role build changed during go-live (COVID impacts)
- *Downtime evaluation and standard procedures documentation*
- Charging equipment footprint and space constraints



# CAREWARE IMPLEMENTATION LESSONS LEARNED

- **Successes:**

- 1:1 Data Collection Workbook (DCW) breakout sessions, each unit & department was interviewed by Clinical Informatics
- Resource binder availability for each unit, including fliers and bulletins
- Camera Capture is a huge incentive and quick win especially for the Wound Team
- System Policy developed for hospital based smart phones and messaging
- Gained system build knowledge and deep understanding of solution
- Ample go-live support and seamless coordination effort

# CAREWARE IMPLEMENTATION: METROPOLITAN CAMPUS

- **COVID-19 Required New Approach:**
  - Super User & Clerk Training – In Person
    - Super users prioritized for in person training
    - Adherence to social distancing guidelines and restrictions (6 feet apart, appropriate PPE, 10-person room capacity)
  - End User Training – Hybrid Model (Remote/Onsite)
    - Online training modules created and assigned to staff.
    - Onsite skills assessment stations – knowledge testing/validation.
  - Go-Live Command Center – Hybrid Model (Remote/Onsite)
    - Remote daily debrief huddles vs. In-Person
    - IT & Education staff remote/onsite – dual command centers
    - Outside resources on boarded for support (out of staffing support not available due to COVID)

# PHYSICIAN ADOPTION/ ENGAGEMENT

- Education Strategy:
  - One page flyer (paper/electronic)
  - Self Service education: 2 minute or less YouTube videos
  - Self Service setup – included a website for access code
  - Coupling with PowerChart Touch (another mobile app) is a great strategy as well as marketing key wins such as Care Team visibility.
- Provide just in time education & training as needed



## Connect Messenger for Providers

Connect Messenger allows Providers to exchange PHI securely and quickly.

### Key Features:



A SHC Organizational Directory with a multi-attribute search



Easily tag and identify favorite contacts



Group chat with optional pre-defined Quick Messaging



Send pictures as needed for visual representation



Make voice calls directly from messages and initiate message from PowerChart Touch



Immediate updates from the clinical team

### Easily Download to a Personal Cellphone

The application can be downloaded from your local app store by searching "CareAware Connect Messenger"

— or —

scan the appropriate QR Code.

Download the application from your Apple/Google App store:



\*Open the Camera app at your smartphone and look for the App Store prompt on your screen.

### How to Start on a Sharp Desktop PC

Providers can start messaging today on a Sharp PC by searching for and logging into CareAware Connect Messenger.

Access the [Cerner Mobile Application Website](#) from a Sharp computer and receive:

- one-time access code
- initial setup guide & instructions
- **timesaving** tips/tricks

For assistance, contact your Clinical Informatics Team or the Physician Help Desk at 858-627-5202.

"All the information is there. The nurses text me all the info I need before I take an action. **This saves me time.**"

—Chula Vista Provider



"Some floor calls are merely FYIs that don't require action... and I simply reply "ok" and **that saves me time.**"

—Chula Vista Provider

# DOWNTIME PROCESS WORKOUT JOURNEY



A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	Wi-Fi	Client	Client Data	Site Single SOAD	Single SOAD	Site Dual SOAD	PBX	Cerner	Cloud -	WebSpher	iBu	Millenniu	Bridg	CAMM
Mobile App Login / PIN ReAuthentication	N	IF1	IF1	Y	Y	Y	Y	Y	IF1	Y	IF1	IF1	Y	Y
Bridge Medical	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y
Camera Capture	N	N	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	N
Connect Nursing	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Connect Nursing w/ BCMA	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Connect Nursing w/ Specimen Collect	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Connect Nursing w/ Mobile Vitals	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Connect Nursing w/ P2DA and Care Team	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y
Desktop Messenger - Desktop Application	Y	N	N	Y	Y	N	Y	Y	Y	Y	Y	IF1	Y	Y
Desktop Messenger - Published URL Citrix	Y	N	N	Y	Y	N	Y	N	N	Y	Y	IF1	Y	Y
Connect Messenger Texting - INTERNAL	N	IF1	IF1	Y	Y	Y	Y	IF1	IF1/IF10	Y	IF1	IF1	Y	IF10
Connect Messenger Texting - BYOD	Y	Y	Y	Y	Y	Y	Y	Y	IF1/IF10	Y	N	IF1	Y	IF10
Connect Messenger Care Teams - INTERNAL	N	N	N	Y	Y	N	Y	N	N	Y	IF1	N	Y	Y
Connect Messenger Care Teams - BYOD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y
Connect Messenger Directory Search - INTERNAL	N	IF1	IF1	Y	Y	N	Y	IF1	IF1	Y	N	IF1	Y	Y
Connect Messenger Directory Search - BYOD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	IF1	Y	Y
Connect Messenger Alerting (Discern) - INTERNAL IBUS	N	IF1/IF2	N	Y	Y	N	Y	N	N	Y	N	N	Y	Y
Connect Messenger Alerting (Devices) - INTERNAL IBUS	N	N	IF1	Y	Y	Y	Y	Y	Y	Y	N	IF1	Y	Y
Connect Messenger Alerting (Nurse Call) - INTERNAL IBUS	N	N	IF1	Y	Y	Y	Y	Y	Y	Y	N	IF1	Y	Y
Connect Messenger Alerting (Devices) - INTERNAL SOAD	N	N	IF1	Y	Y	N	Y	Y	Y	Y	Y	IF1	Y	Y
Connect Messenger Alerting (Nurse Call) - INTERNAL SOAD	N	N	IF1	Y	Y	N	Y	Y	Y	Y	Y	IF1	Y	Y
Connect Messenger Alerting (Discern) - BYOD IBUS	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y
Connect Messenger Alerting (Devices) - BYOD IBUS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	IF1	Y	Y
Connect Messenger Alerting (Nurse Call) - BYOD IBUS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	IF1	Y	Y
Connect Messenger Alerting (Devices) - BYOD SOAD	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	IF1	Y	Y
Connect Messenger Alerting (Nurse Call) - BYOD SOAD	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	IF1	Y	Y
Connect Voice Calling (authenticated) Connect-Connect	N	N	N	IF8	Y	N	Y	IF1	IF1	Y	IF1	IF1	Y	Y
Connect Voice Calling (authenticated) Connect-PBX	N	N	N	IF8	Y	N	N	IF1	IF1	Y	IF1	IF1	Y	Y
Connect Voice Calling (unauthenticated) Connect-Connect	N	IF3	Y	IF8	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Connect Voice Calling (unauthenticated) Connect-PBX	N	IF4	IF4	IF8	Y	N	N	Y	Y	Y	Y	Y	Y	Y
Connect Voice Calling Call Forwarding	IF7	IF7	IF7	IF8	Y	IF7	IF9	Y	Y	Y	Y	Y	Y	Y
Connect Voice Calling Call Backup	IF7	IF7	IF7	IF8	Y	IF7	IF9	Y	Y	Y	Y	Y	Y	Y
Connect Voice Calling Call Rollover	IF7	IF7	IF7	IF8	Y	IF7	IF9	Y	Y	Y	Y	Y	Y	Y
Staff Assignment - Stafflink	Y	N	N	Y	Y	Y	Y	IF5	Y	Y	N	IF6	Y	Y

# DOWNTIME PROCESS WORKOUT JOURNEY

**SHARP** CareAware Phone Functionality During a Downtime

There are multiple scenarios that may impact the functionality of the Zebra device.

**In the event of a Cerner downtime, the following features are NOT available:**

- Connect Nursing
- Camera Capture
- Stafflink
- Any attempts at new sessions/logins

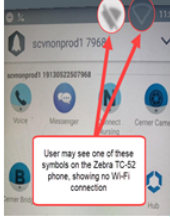
**What should staff do in the event of a Cerner downtime?**

- Reference Cerner Downtime documentation procedures
- Messenger and Voice are still operational

**In the event of a Wi-Fi/Network downtime, the following features are NOT available:**

In addition to the above applications, these are not available:

- Connect Voice: possible limited use (call rollover working)
- Connect Messenger / Desktop Messenger
- Any attempts at new sessions/logins
- For BYOD/Personal Devices:
  - Messages will send but will not be received until Network is back up



**What should staff do in the event of a Wi-Fi/Network downtime?**

- Use desktop downtime directory [redacted] to access unit phone numbers on Sharp computer.

For Questions or Additional Details: Contact your Clinical Informatics Office or TAC at [redacted] tc

**Attention: CAC Users**

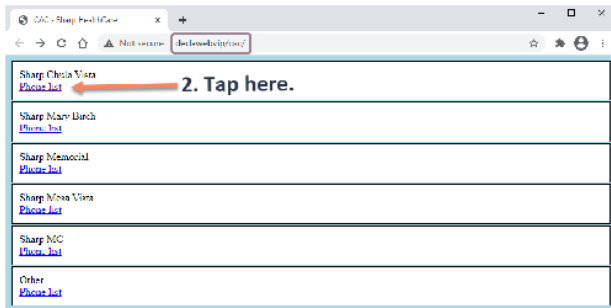


# DOWNTIME PROCESS WORKOUT JOURNEY

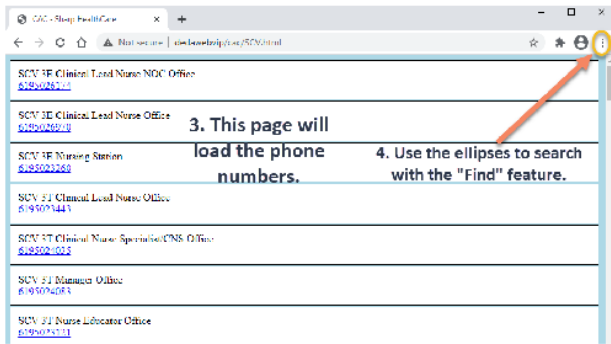
**SHARP Chula Vista Medical Center** Unit Clerk CareAware Downtime

In the event of a CareAware downtime, user extensions will be unavailable. The following website will allow Unit Clerks to reach the directory.

1. Go here: <http://dedawebvip/cac/>



2. Tap here.



3. This page will load the phone numbers.

4. Use the ellipses to search with the "Find" feature.


**ATTENTION: Staff**

*For any questions please call the Clinical Informatics Team*


**SHARP Chula Vista Medical Center** CareAware Downtime Directory

In the event of a CareAware downtime, user extensions will be unavailable. The following instructions will reach a directory for the various hospital desk numbers.

1. Tap "DT Only" icon from the home page.

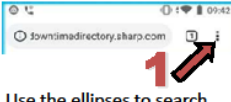


2. Tapping "Phone List" will open the directory.




**To Search the Downtime Directory**

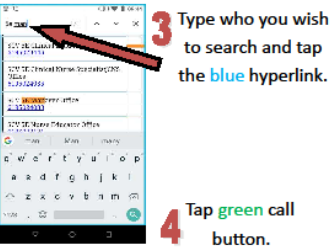
1. Use the ellipses to search.



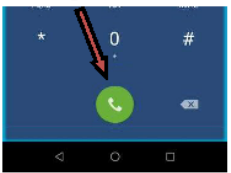
2. "Find in page" allows user to search the directory.



3. Type who you wish to search and tap the blue hyperlink.



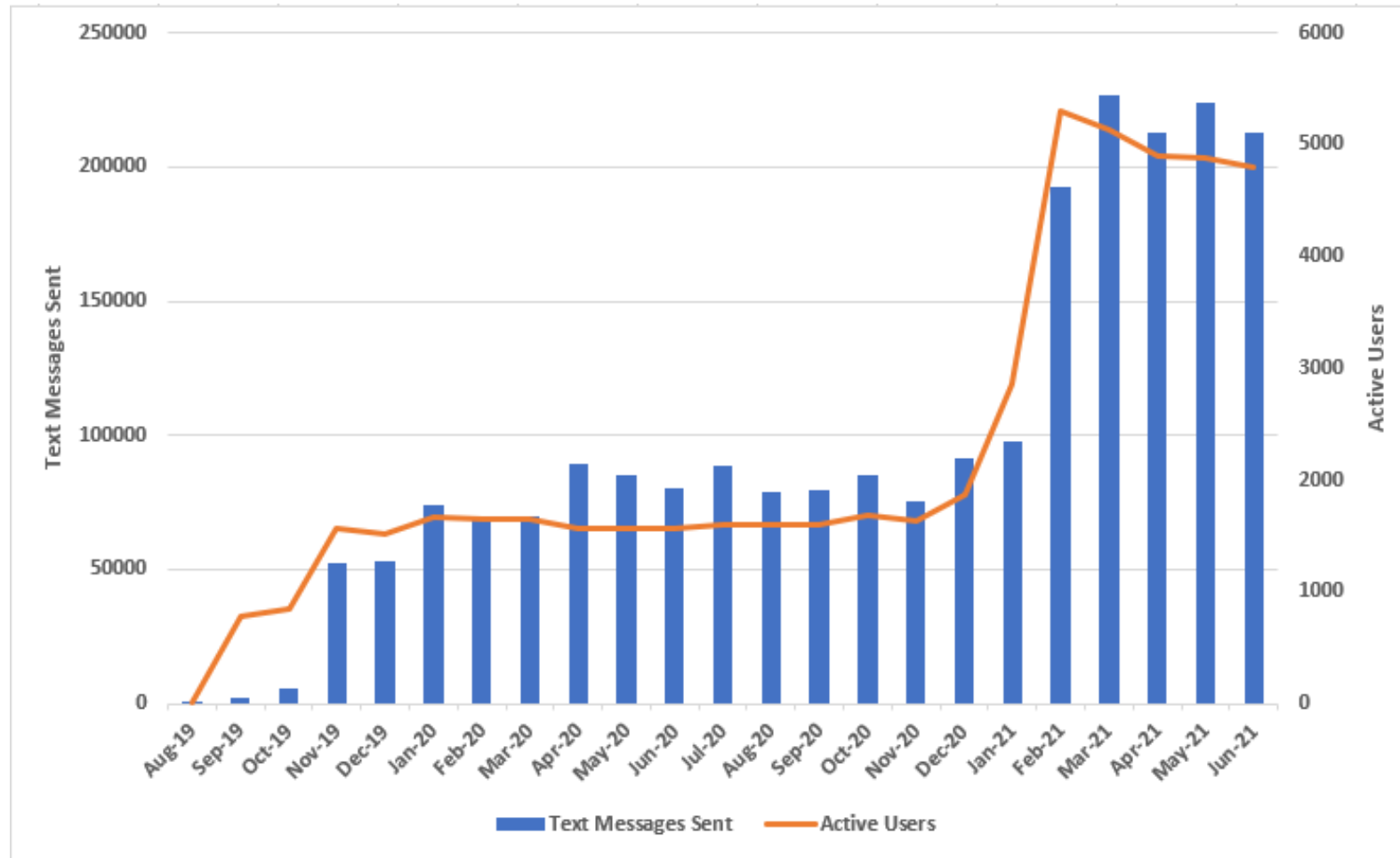
4. Tap green call button.



**ATTENTION: Staff**

*For any questions please call the Clinical Informatics Team*

# SECURE MESSAGING ADOPTION



# Top 5 by Position Texting Volume:



Nurse



HCA (Unit Clerk)



Lab



Pharmacy



Women's Health Nurse

## SHARP CHULA VISTA CAMERA CAPTURE USAGE

**11,185**

Total Images

for

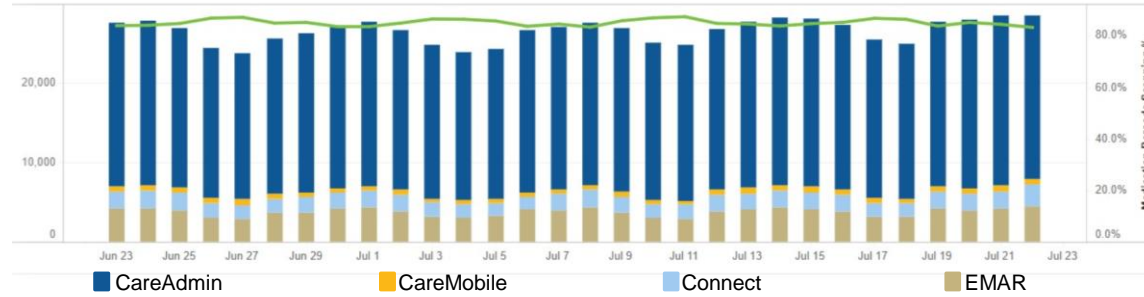
**1,460**

Total Users

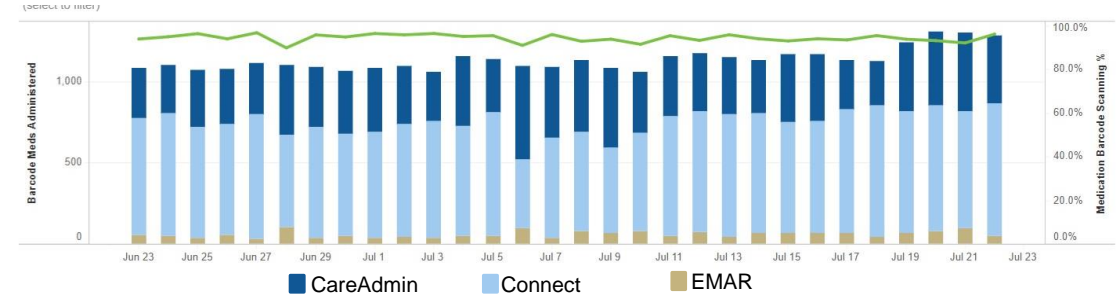


# NURSING MOBILITY

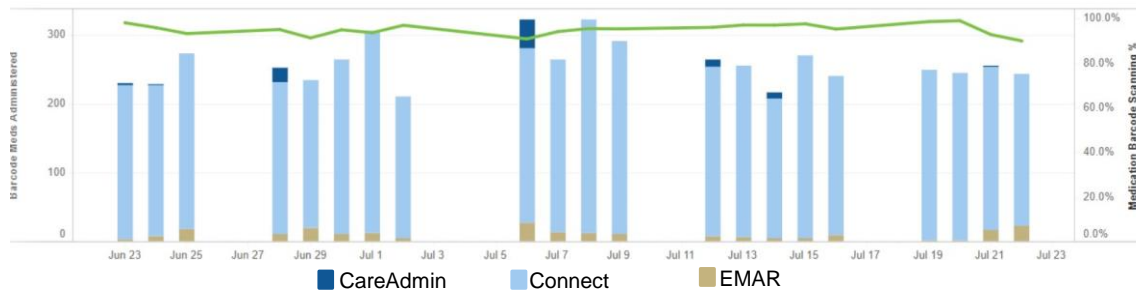
Medications scanned by Connect Nursing



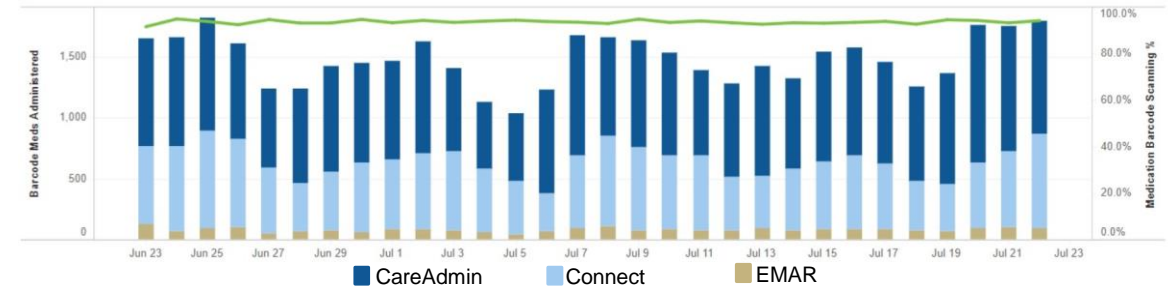
Mesa Vista: Scans by device



Memorial Infusion:: Scans by device



Mary Birch:: Scans by device



# ADDITIONAL CONSIDERATIONS

- Informatics Team
  - Pivotal role in implementation efforts. Liaison between IT and Clinical Operations
  - Lead all data gathering efforts for Data Collection Workbook aka Unit/department interviews
    - How many staff members do you have at your busiest time of day? i.e., what does a full staffing board look like?
    - Which staff members currently carry phones?
    - Do your staff need to be easily reachable by an outside phone number
    - Where should phone calls roll over to, how is that staffed?
- Device/app updates – what to consider in communication plan
- Operational Steering Committee planning depending on Facility rollout timeline/strategy

# OPERATIONAL STEERING COMMITTEE

## **Purpose:**

The purpose of the CareAware Connect Steering Committee is to optimize the CareAware communication (CA) platform, facilitate alignment of system rollouts of the platform and promote adoption of system wide best practices. Further, the Steering Committee will review identified issues, concerns and recommendations and determine appropriate actions to address the issue/concern related to clinical workflows. The purpose is to optimize communication and support Sharp's mission and business plan.

## **Importance:**

This committee is important for strengthening adoption, enhancing standardization of workflows and ensuring maximal performance of the CAC platform to support and improve communication and clinical workflows within the clinical teams.

# CLINICAL COMMUNICATION GAME CHANGERS

- Eliminates non-HIPAA compliant personal cellphone use for messaging Providers, Administration and Clinical Staff.
- Combines voice, messaging, barcoding, camera and certain elements of the patient chart for quick access to patient information and rapid communication to staff caring for the patient.
- Camera Capture has nearly eliminated a manual process for uploading Wound photos.
- Can untether barcoding workflows from the PC (e.g., Smart pump programming workflows where patient's bed is in between the pump and PC).
- Sepsis alerts can route to a Sepsis Nurse providing patient context and critical information
- A message vs a page to On Call MD allows for more information to be relayed and for a direct call back of the user when not urgent.

# CLINICAL COMMUNICATION GAME CHANGERS

- Texting allows for fewer phone call interruptions for routine updates and questions. Reduces in room interruptions when providing patient care or in a procedure.
- MD to MD messaging regarding consults can help speed up patient assessment time.
- Less call routing through the Operator or Clerk. A robust directory allows for nearly anyone to be called or messaged if known by Role (e.g., Charge Nurses) or individual name. Specific Care Team members can also be identified and messaged by patient lookup.
- Creates a streamlined and efficient approach to patient care and coordination. Pharmacy, Lab, Case Management or Therapists for example can send updates from a desktop or Mobile device reducing phone call interruptions.
- A user can quickly transition to a phone call from a message string when needed.

# END USER FEEDBACK

*"I love it on my computer...I can just text away!"*

*"Very user friendly" ... "It's going to help in so many places like L&D. The texting is nice. I don't have to go to the room and interrupt the nurse."*

*"Camera Capture is a HUGE improvement on our current process for taking wound photos."*

*"Texting between NA and RN has helped cut down on unnecessary phone calls. NA texted an RN earlier that PT XXX was needing something minor. RN found it very helpful and a patient satisfier."*

*"Personally, I really enjoy the desktop messenger. I've been using it to communicate with the resource and charge when I'm doing audits."*

*"I love being able to text."*

*"CareAware Connect has improved the efficiency of what we do because we can communicate easily. We have gone from F to A!"*

*"It's so nice that I can send messages to a group of nurses at one time. The ability to see a patient's Care Team and family member's numbers in one screen is awesome. I wouldn't have known how to do any of this without you!"*

*"This is going to save so much time and keep us better connected."*

*"I have been receiving calls from users with positive feedback that they like the new devices."*



Questions