CLINICAL COMMUNICATION & CERNER CAREAWARE CONNECT
SHARP HEALTHCARE

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

4 Acute-care Hospitals
- 1,822 licensed beds

3 Specialty Hospitals

3 Affiliated Medical Groups

Largest private employer in San Diego:
- 18,000 Employees
- 2,700 affiliated Physician
- 3,000 volunteers

SAN DIEGO-based
WHY CAREWARE 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 #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

WORKGROUP #1
Technical: Infrastructure/Device
- Device Deployment
- Enterprise Device Architecture (Airwatch build, etc.)
- Infrastructure Readiness (Servers, PBX Integration, Wireless Remediation, VoIP, etc.)
- EDA

WORKGROUP #3
Clinical
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## CAREAWARE IMPLEMENTATION OVERVIEW

<table>
<thead>
<tr>
<th>CHULA VISTA CAMPUS</th>
<th>METROPOLITAN CAMPUS</th>
<th>Applications Deployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2019</td>
<td>February 2021</td>
<td></td>
</tr>
<tr>
<td>1,522 active users</td>
<td>3,928 active users</td>
<td>CONNECT NURSING</td>
</tr>
<tr>
<td>56 units/departments</td>
<td>119 units/departments</td>
<td>CONNECT MESSENGER</td>
</tr>
<tr>
<td>585 Zebra TC52</td>
<td>1,131 Zebra TC52</td>
<td>CONNECT VOICE</td>
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<tr>
<td>183 resolved issues</td>
<td>410 resolved issues</td>
<td>CAMERA CAPTURE</td>
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<tr>
<td></td>
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<td>BRIDGE BREASTMILK</td>
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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
# DOWNTIME PROCESS WORKOUT JOURNEY

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<th>Time</th>
<th>Event</th>
<th>Status</th>
<th>Notes</th>
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<tbody>
<tr>
<td>00:00</td>
<td>Start</td>
<td></td>
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</tr>
<tr>
<td>00:10</td>
<td>Step 1</td>
<td>Begin</td>
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</tr>
<tr>
<td>00:20</td>
<td>Step 2</td>
<td>Complete</td>
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</tr>
<tr>
<td>00:30</td>
<td>Step 3</td>
<td>Failure</td>
<td></td>
</tr>
<tr>
<td>00:40</td>
<td>Step 4</td>
<td>Restart</td>
<td></td>
</tr>
<tr>
<td>00:50</td>
<td>Step 5</td>
<td>Success</td>
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## Table:

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<tr>
<td>A</td>
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DOWNTIME PROCESS WORKOUT JOURNEY

Attention: CAC Users

CareAware Phone Functionality During a Downtime

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

In the event of a CoreNurse downtime, the following features are NOT available:
- Connect Nurse
- Camera Capture
- Staff Call
- Any attempts at new sessions/logins

What should staff do in the event of a CoreNurse downtime?
- Reference CoreNurse Downtime documentation procedures
- Messenger and Voice are still operational

In the event of a Wi-Fi/Network downtime, the following features are NOT available:
- Connect voice, possible limited use (call radio user working)
- Connect Messenger / Desktop Messenger
- Any attempts at new session/logins
- For BERO/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 to access unit phone numbers on Sharp computer.

For Questions or Additional Details: Contact your Clinical Informatics Office or TAC at [Contact Information].
DOWNTIME PROCESS WORKOUT JOURNEY

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://dedawebvpn/cac/

2. Tap here.

3. This page will load the phone numbers. 4. Use the ellipses to search with the “Find” feature.

For any questions please call the Clinical Informatics Team

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.

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

1. “Find in page” allows user to search the directory.

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.
– 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.
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!

“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.”

“I love being able to text.”

“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.”

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

“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.”