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## Embracing Technology as the Extension of Nursing Practice to Enhance the Patient Experience

Liz Raabe  
*Nebraska Medicine*, lraabe@nebraskamed.com

Brandon Fleharty  
*Nebraska Medicine*, brfleharty@nebraskamed.com

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# Embracing Technology as the Extension of Nursing Practice to Enhance the Patient Experience

Liz Raabe  
Brandon Fleharty

# Frequently asked patient questions

Asking for a dining menu, or waiting on the phone to place the order

When their last pain medication(or any other PRN) was given?

What were my lab results?

Who is my doctor, nurse, case manager, respiratory therapist?

When is my MRI?

Why am I taking that medication?

What is my diagnosis or reason

What was my blood pressure this morning?

When do I get to go home?

How often are patients just bored.....

How long does it take you ask patients screening questions on admission?



# Quote from Study

In one study, 71% of patients felt the application provided useful information and 76% used it once a day. A larger percentage of patients were able to identify at least one physician on the application (56% vs 29%) and identify their role correctly (56% vs 16%). *The effect of tablet computers with patient portal application on hospitalized patients' knowledge and activation. JAMIA, 2015*

- 90% of patients reported that it helped them understand their medications better

*Inpatient Experiences with MyChart Bedside  
Telemed J E Health, 2017*



# Why Bedside?

## Patient value

- Labs
- Vitals
- Medications
- Diagnostic procedures
- Scheduled Appointments
- Care Team Members
- Education topic

## Organizational value

- Promote patient and family engagement
- Strengthen the patient-provider relationship & improve communication
- Allow for a more enjoyable hospital stay (entertainment)
- Improve patient satisfaction scores
- Meaningful Use
- Core Measures
- Reduce readmissions



# What is Bedside? Home Screen

## Reason for Admission

- Info button linking
- Medication List
- Info button linking

The screenshot shows the MyChart bedside app interface. At the top, the status bar displays the time (2:36 PM) and date (Wed Feb 13). The app header includes a 'Log out' button, the MyChart bedside logo (powered by Epic), and a help/question mark icon. The main content area is divided into a left sidebar and a main patient view. The sidebar contains navigation options: 'Nebraska Medicine', 'Welcome', 'Happening soon' (with sub-items for medications at 4 PM, 9 PM, and tomorrow), 'Taking care of me', 'Notes', 'My health', and 'To learn'. The main view displays the patient's name 'Craig' and a profile picture. Below the name, vital signs are shown: Blood Pressure (112/58), Temperature (98.6 °F), Pulse (88), and Respirations (18). The 'You are here for...' section lists 'Multiple myeloma' and 'and we're also treating...' with 'High cholesterol' and 'Pain'. The 'Your medications' section lists 'atorvastatin', 'piperacillin-tazobactam', 'sodium chloride', and 'and, if needed...' with 'ibuprofen (for Moderate Pain)' and 'prochlorperazine edisylate (for Nausea and Vomiting)'. Each medication entry has an information icon.

# Happening Soon - Schedule

## Happening Soon

- Schedule of events(Past and Future)
- Visualization of medications given (Scheduled & PRN)

The screenshot displays the MyChart bedside mobile application interface. At the top, the status bar shows the time as 4:18 PM on Friday, February 22, and a battery level of 88%. The app header includes the MyChart bedside logo, the text 'powered by Epic', and navigation icons for help and settings. A 'Log out' button is visible in the top left corner. The main content area is divided into a left sidebar and a main panel. The sidebar contains menu items: 'Nebraska Medicine' (with a heart icon), 'Welcome' (with a speaker icon), 'Happening soon' (with a calendar icon), 'Taking care of me' (with a group of people icon), 'Notes' (with a document icon), and 'My health' (with a network icon). The 'Happening soon' section is expanded, showing a list of scheduled events: 'Around 9 AM Medications', 'Around 4 PM Medications', 'Around 9 PM Medications', and 'Tomorrow Medications'. The main panel shows a calendar view for 'Today' (Feb 22), 'Tomorrow' (Feb 23), and 'Sunday' (Feb 24). A large white card titled 'Medications' is displayed for 'Tomorrow' at 'Around 9 AM'. The card lists three medications: 'ranitidine' (150 mg by mouth 2 times a day, ordered by Inpatient Attending Physician, MD), 'traMADol' (50 mg by mouth 2 times a day, ordered by Elizabeth C Reed, MD), and 'citalopram' (10 mg by mouth 1 time a day, ordered by Elizabeth C Reed, MD). A blue button at the bottom of the card reads 'Add something new to my schedule'.

# Taking Care of Me

## Care Team

- Photos and Bio

The screenshot shows the MyChart bedside mobile app interface. At the top, the status bar displays the time as 3:18 PM on Tuesday, February 26, and the battery level at 65%. The app header includes a 'Log out' button, the MyChart bedside logo, the Epic logo, and a help icon. The main content area is titled 'Nebraska Medicine' and features a navigation menu on the left with options: 'Welcome', 'Happening soon' (with a list of medication times: Around 8 AM, 9 AM, 4 PM, 9 PM, and Tomorrow), 'Taking care of me', 'Notes', and 'My health'. The main display shows a grid of care team members under the 'Active Members' filter, sorted by 'Newest first'. Each member's card includes a photo, a name, and a role. The visible members are: Elizabeth C Reed, MD (Attending Provider), Liz (Registered Nurse), Brittany A Ford, PA (Physician Assistant), Tony (Clerk/Patient Care), Vicki (Care Transition Nurse), and Frank (Day Respiratory). Each card also has a blue pushpin icon in the bottom right corner.

3:18 PM Tue Feb 26

Log out

MyChart bedside powered by Epic

Nebraska Medicine

All Members Active Members Sort: Newest first

Welcome

Happening soon

Around 8 AM Medications  
Around 9 AM Medications  
Around 4 PM Medications  
Around 9 PM Medications  
Tomorrow Medications

Taking care of me

Notes

My health

Elizabeth C Reed, MD  
Attending Provider

Liz  
Registered Nurse

Brittany A Ford, PA  
Physician Assistant

Tony  
Clerk/Patient Car...

Vicki  
Care Transition N...

Frank  
Day Respiratory...




# One Chart | Patient Sign Up


## Patient Portal Sign up


iPad 4:07 PM 75%


Log out MyChart bedside powered by Epic


Yesterday Medications  
Around 9 AM Medications  
Around 9 PM Medications  
Tomorrow Medications


 Taking care of me

 Notes

 My health

 To learn

 Let's Eat

 One Chart | PATIE...

### What is One Chart | PATIENT?

One Chart Patient offers you secure online access to your medical records. With MyChart, you can use the Internet to schedule appointments, see your test results and medical history, get medication refills, and message your care team securely.

[Go to One Chart | PATIENT now!](#)

<https://www.onechartpatient.com/mychart/>

# My Health

## Vital Signs & Results

- Trending

iPad 1:28 PM 85%

Log out MyChart bedside powered by Epic

Nebraska Medicine

Welcome

Happening soon

Taking care of me

Notes

My health

To learn

Let's Eat

Blood Pressure 97/71

Pulse 86

Temperature 99 °F

Respirations 33

Key Labs All Labs Sort: Newest to oldest

BUN	Jul 17 at 8:18 AM	17 mg/dL
Calcium	Jul 17 at 8:18 AM	10.1 mg/dL
CO2	Jul 17 at 8:18 AM	28 mmol/L
Creatinine	Jul 17 at 8:18 AM	1.18 mg/dL
Sodium Blood		



# To Learn

## Interactive Patient Education

- Content, Video, Teaching Sheets

3:25 PM Fri Mar 1

[Done](#) Your Hospital Stay at Nebraska Medicine


Welcome to Nebraska Medicine

### Coming to the Hospital

Our first priority is to provide you the care you need when you need it, with skill, compassion and respect. Please share with us your preferred language for learning. Tell your caregivers if you have concerns about your care or if you have pain. You have the right to know the identity of everyone involved in your care including: doctors, nurses, and all other care providers in our facility.

 [Patient Satisfaction: Hospital Visit Expectations](#)

 [Advance Directives](#)

 I have questions

 I understand



39%

3

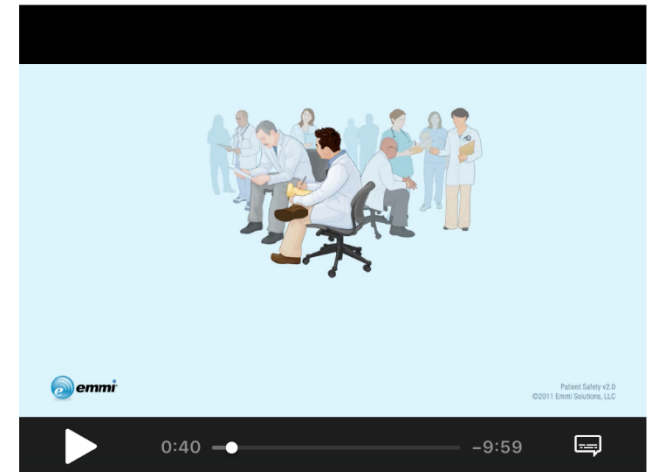



[Contents](#)

Your Safety at Nebraska Medicine

### Understanding Your Surroundings

- If you feel uncomfortable with any situation or person, please ask for assistance. Your safety is our number one priority



 I have questions

 I understand

# Entertainment Applications

## Entertainment Applications

### Healing Arts

Pinterest  
The CW  
Kids Draw and  
Coloring  
HGTV  
Infinite Painter  
Spotify



### Games

Candy Crush  
Sudoku  
Solitaire  
Angry Birds  
Mahjong



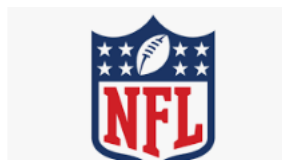
### News

Omaha World Herald  
Fox News  
CNN  
WOWT  
NY Times  
The Weather Channel  
Huffington Post  
KETV  
KMTV

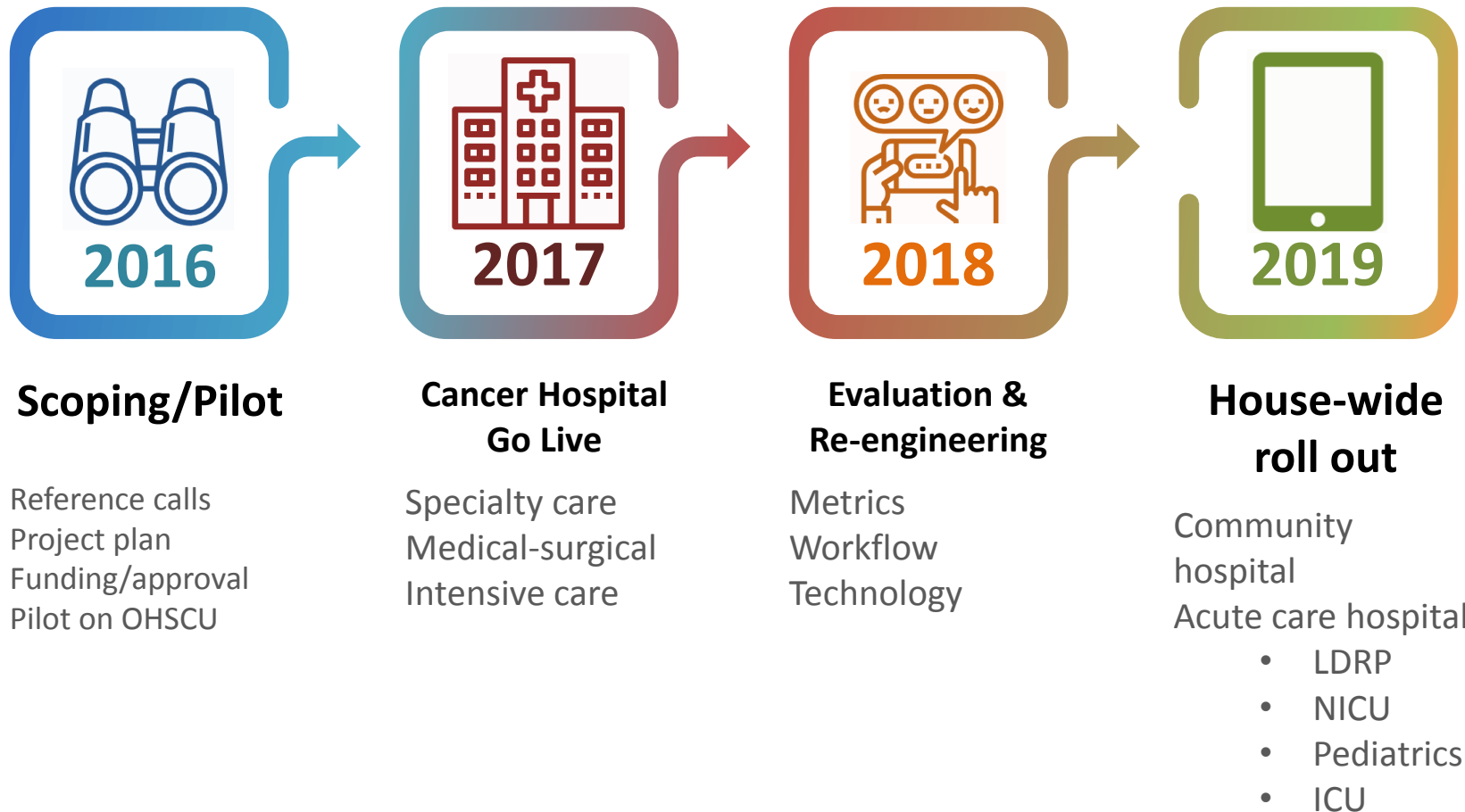


### Sports

Fox Sports Go  
BTN2Go  
ESPN  
NFL  
MLB At Bat  
NBA  
PGA



# Implementation Timeline



# How champions are made

## KNOWLEDGE

Provide resources to understand the why and what of Bedside.

- Tip sheets
- Training courses
- Research articles

## COMFORT

The more interactions with Bedside, the more comfortable nurses become.

- # of tablets distributed
- # interactions with Bedside patient
- # questions answered by team

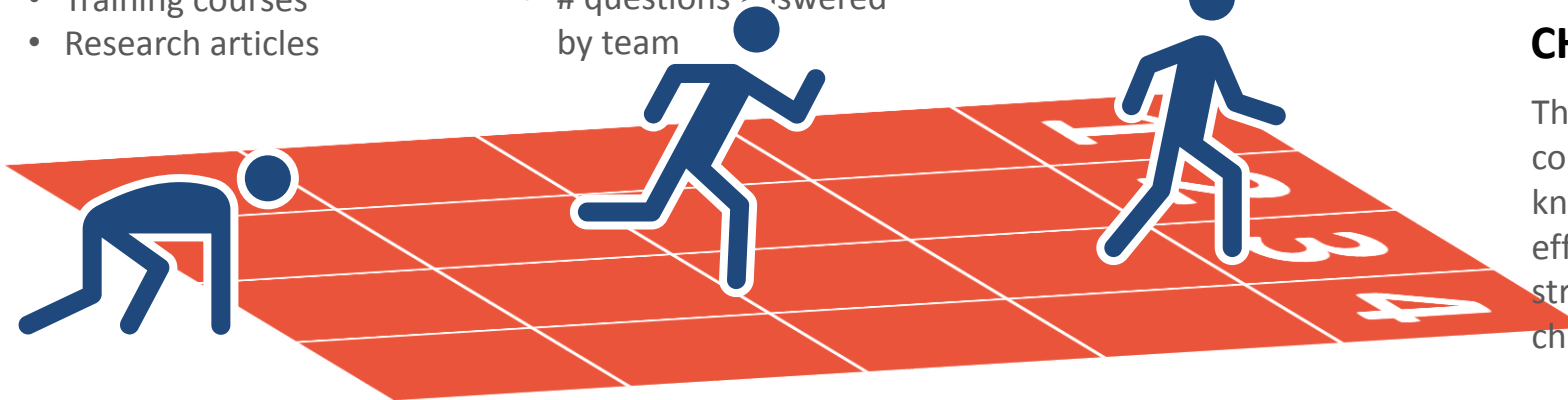
## EFFICIENCY

More interactions over time produces efficiency and confidence.



## CHAMPION

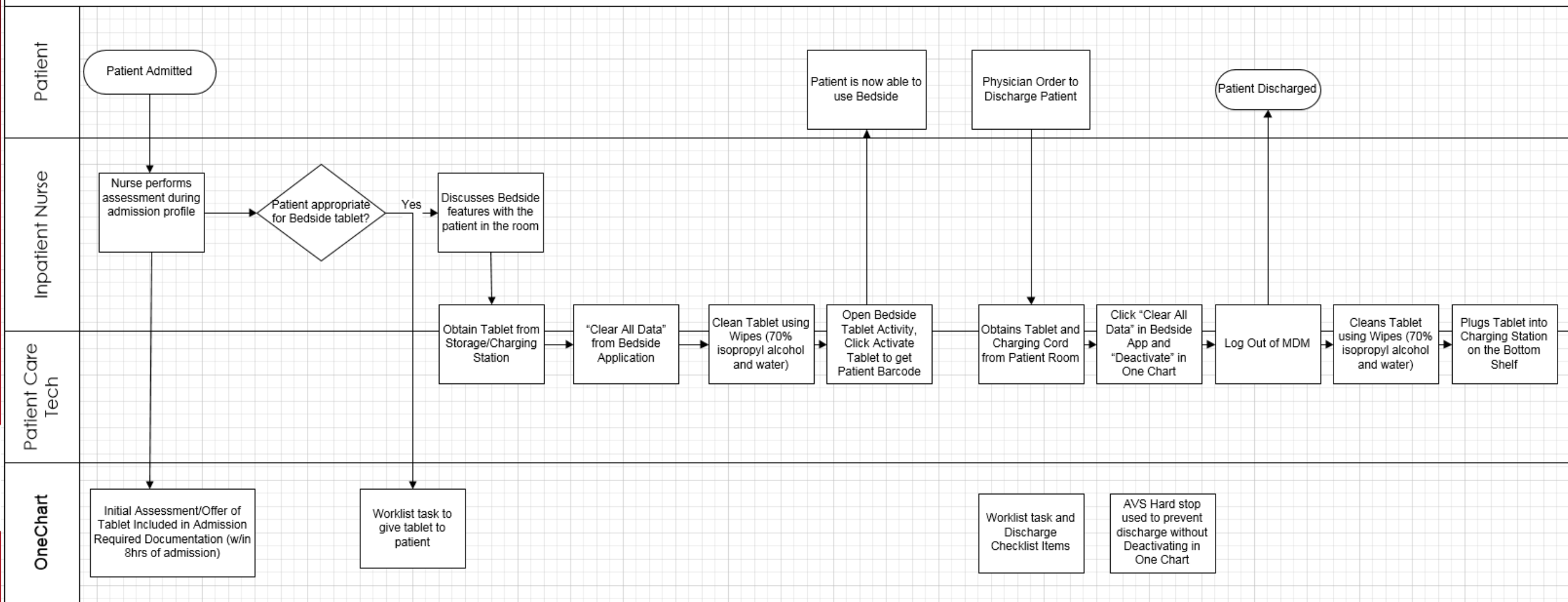
The unique combination of knowledge, comfort, & efficiency helps create strong nurse champions.



# Tablet Distribution Workflow

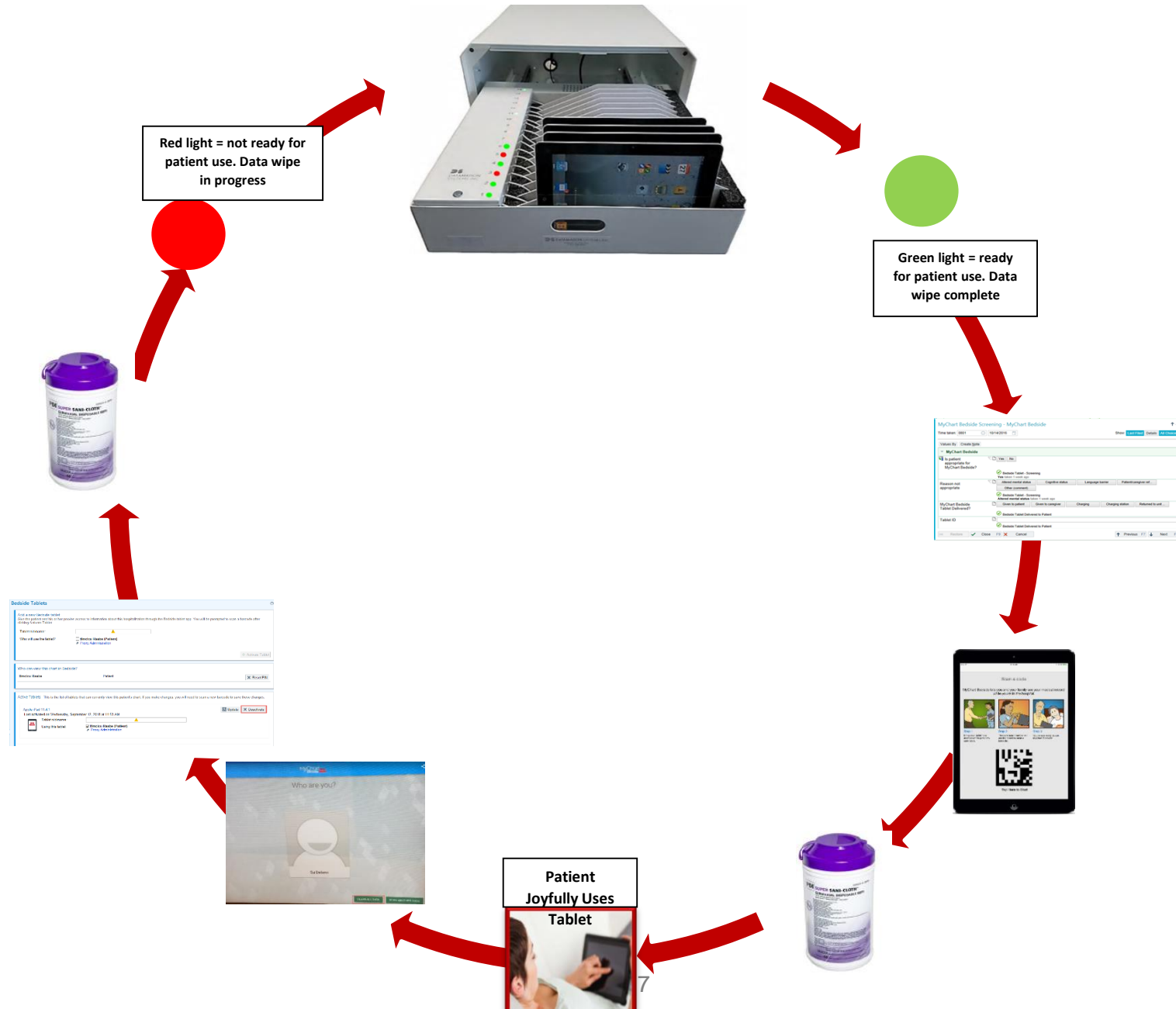
## Tablet Distribution

Inpatient, Nurse: IPRN  
Patient Care Tech: IPCT

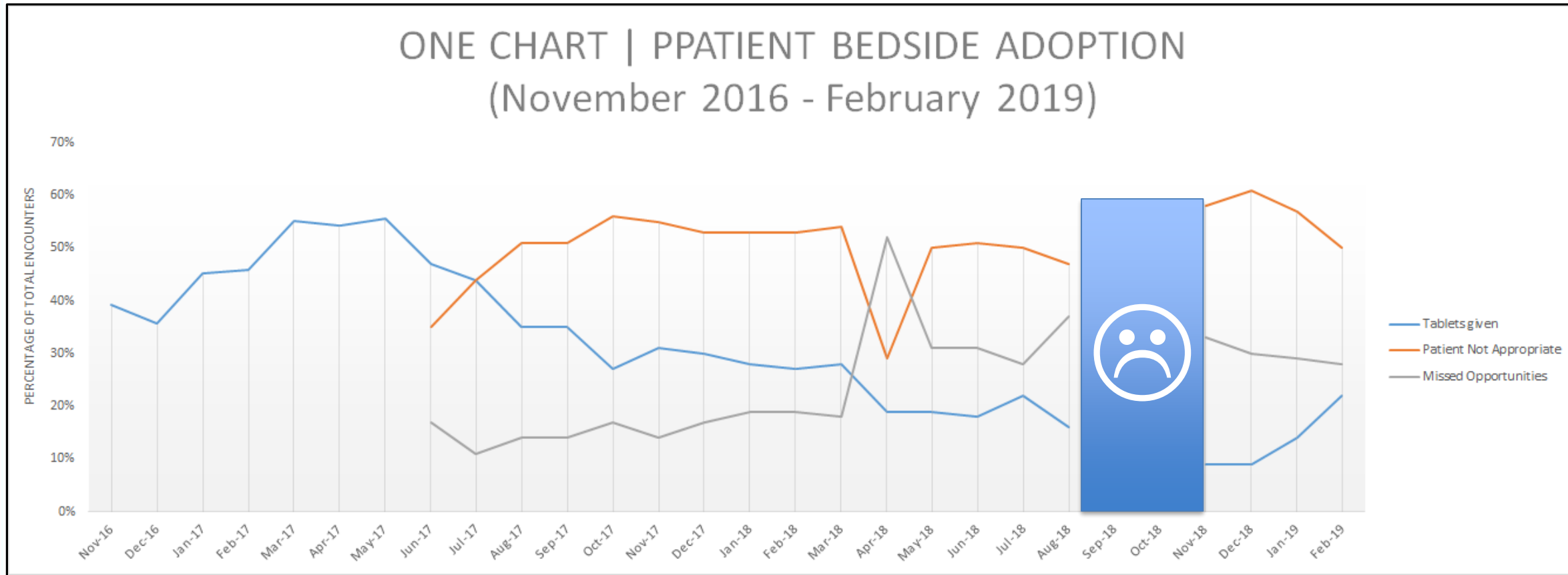




# Tablet & Cleaning Distribution Workflow

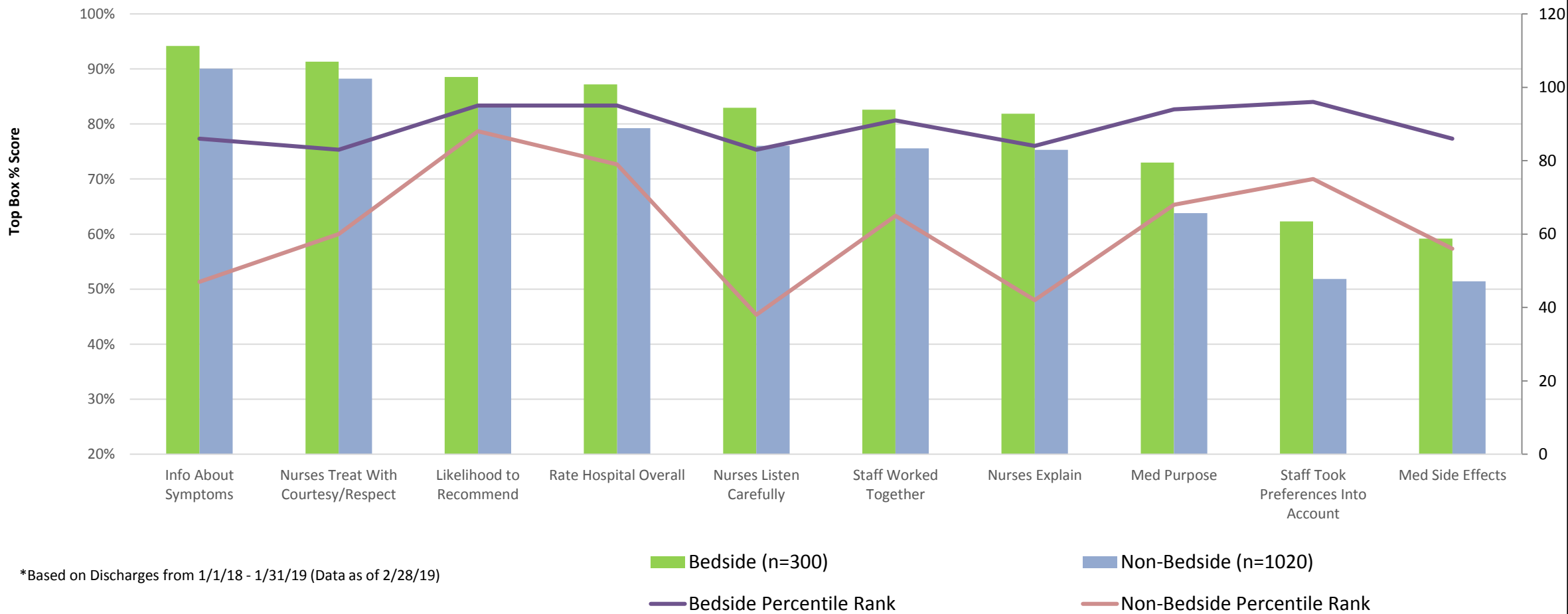


# Process Metrics



# Outcome Metrics - HCAHPS

Werner Hospital Patient Satisfaction Scores  
(Bedside Users vs Non-Bedside Users)\*



# Outcome Metrics Patient Portal

ONE CHART PATIENT ACTIVATIONS  
(NOVEMBER 2016 - FEBRUARY 2019)

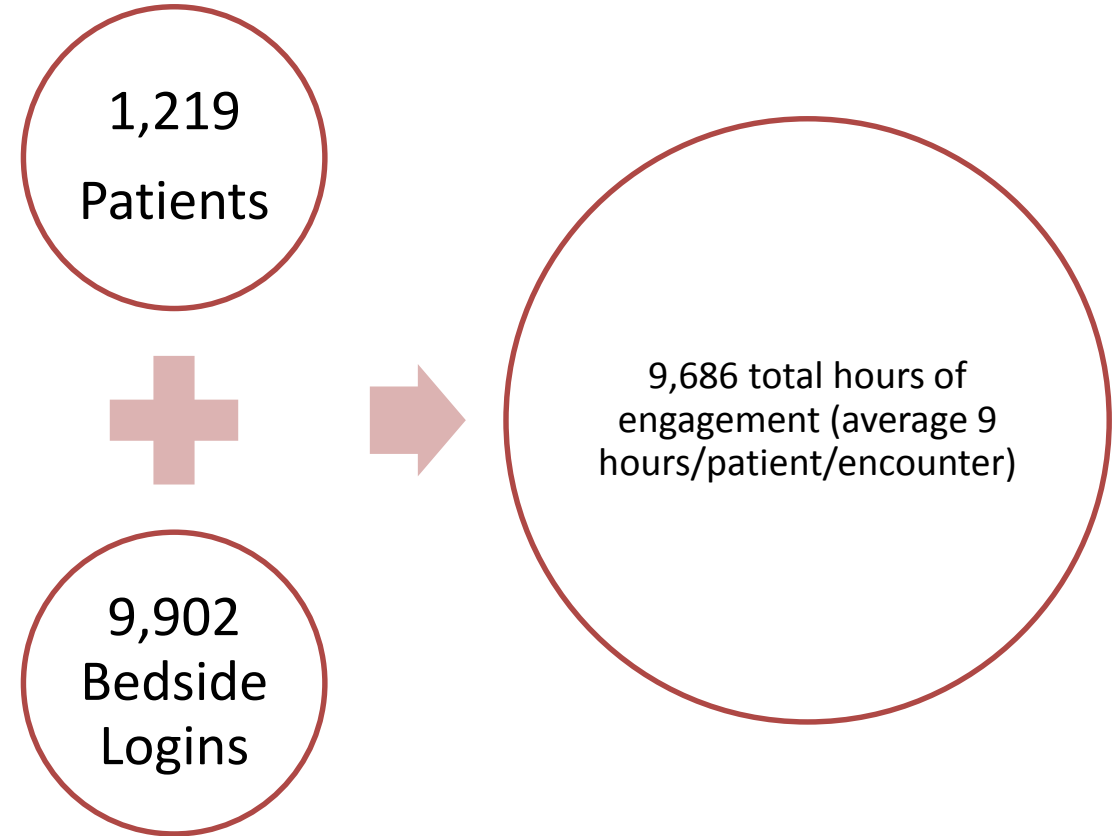


# Outcome Metrics – Patient Engagement

## Activity usage (most to least)



## Hours of engagement (Jan 2018 – February 2019)



# Lessons Learned



eful



# Motivation – Provider Feedback

Having that education at the fingertips of patients, is a big advantage for the care team, says **Heidi Tonne**, nurse manager.

“Patients are able to read through patient education like it’s a book, and can click on different links within it to get more information, if they want,” Tonne says. “It’s a very intuitive application.”

**Julie Fedderson, MD**, chief quality and outcomes officer and One Chart | Patient steering committee member, couldn’t agree more.

“Hospitals are places that can seem very impersonal, especially for a patient experiencing the loss of control that comes with having an illness,” she says. “This technology allows patients the opportunity to be a part of their care, and helps physicians to identify what patients really want to know and have communicated to them.”

**Sonja Kinney, MD**, One Chart | Patient steering committee member, adds that Patient **Bedside** is a valuable patient engagement tool and is excited about its implementation.

“Having this new level of patient access to an updated list of their primary medical problems, medications and primary care team members (with pictures) is taking a huge step forward for all of us,” she says. “I think this tool will go a long way toward us providing the care we would want for our own family.”



# Frequently asked patient questions

Asking for a menu

When their last pain medication(or any other PRN) was given?

What were my lab results?

Who is my doctor, nurse, case manager, respiratory therapist?

When is my MRI?

Why am I taking that medication?

What is my diagnosis or reason

What was my blood pressure this morning?

When do I get to go home?

How often are patients just bored.....





# Motivation – Patient/Family Feedback



“One feature I really like is I can see what my treatment is, see my vitals, lab results, list of medications they have me on, get education about what the medications are, etc.,” he says. “It lets me know more about what’s going on in my care and I can stay up-to-date and engaged in my care.”



# Motivation – Patient/Family Feedback

The screenshot shows the MyChart bedside mobile application interface. At the top, the status bar displays the time as 3:51 PM on Friday, February 22, and the battery level at 90%. The app header includes a 'Log out' button, the MyChart bedside logo, and the Epic logo. The main content area is titled 'Wednesday Yesterday Today' with dates 'Feb 20', 'Feb 21', and 'Feb 22' respectively. A central card displays medication information for 'Around 2 AM', listing 'prochlorperazine edisylate' with a dosage of '5 mg into the vein every 8 (eight) hours as needed for nausea, vomiting'. It also notes 'Ordered by Beacon, Physician, MD' and a status update: 'New Bag/Syringe at 2:00 AM -- Liz'. A sidebar on the left contains navigation options: 'Nebraska Medicine', 'Welcome', 'Happening soon' (with a list of medication times), 'Taking care of me', 'Notes', and 'My health'. A blue button at the bottom of the main card reads 'Add something new to my schedule'.



# Questions?



# Contact Information

**Liz Raabe**

LRAABE@NEBRASKAMED.COM

**Brandon Fleharty**

BRFLEHARTY@NEBRASKAMED.COM

