

## Patient and Staff Digital Rounding (CipherRounds)

### Submitter

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### Primary Project Team Members

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### Special Thank You

<p><u>Hospital and Clinical</u>  <b>Toby Marsh</b>, Chief Nursing and                  Patient Care Services Officer  <b>Stacy Hevener</b>, Director,                  Quality and Safety, Patient Care Services  <b>Mary Reilly</b>, Director, Infection Prevention  <b>Kelly Grady</b>, Assistant Nurse Manager,                  Post-discharge Call Program  <b>Colleen Sky Baucom-Slavin</b>, Manager,                  Food and Nutrition (FNS)  <b>Kelley Sammarcelli</b>, Hospital Director,                  Environmental Services (EVS)</p>	<p><u>Information Technology</u>  <b>Ryan Houston</b>, Clinical Liaison,                  Applications Operations  <b>Julie Carson</b>, Analyst,                  Applications Operations DSG  <b>Mirela Pervan</b>, Analyst, EMR Testing  <b>Patricia Tanrioger</b>, Training Analyst                  Instructional Designer, IT Education  <b>Nathan P Mott</b>, System Administrator,                  Mobile Device Engineer, Client Engineering  <b>Ehis Imafidon</b>, Project Manager, Client Services  <b>Angela Brauner</b>, QA Release Analyst,                  Enterprise Application  <b>David Vaillancourt</b>, Supervisor,                  System Integration</p>
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### Summary

UC Davis Health (UCDH) nursing leadership required an automated digital solution to replace their manual paper rounding process which kept no historical archive, no standardization, and no reporting. Leadership rounding is similar to managing by way of walking around, checking on staff and patients, soliciting any issues, create recognitions, reviewing overall physical and mental health. After an extensive search, hospital leadership decided to implement CipherRounds to meet this need. The application is a vendor provided cloud hosted solution allowing leaders to walkaround the hospital with

an iPad Mini at hand. The app receives real-time data feed from our Electronic Medical Record (EMR), Epic, with patient Protected Health Information (PHI) enabling the nurse leaders to walk into a patient room and have all pertinent information ahead of time so a well thought out discussion can occur using the UCDH developed guides (scripts). A human resource staff file is uploaded daily to allow an integration with our current staff recognition application (Workstride's BEST Rewards); leadership recognition is streamlined reducing the need to access one more application at their desk.

During the course of the project, Environmental Services (EVS) as well as Food and Nutrition Services (FNS) agreed to utilize CipherRounds to increase accuracy of reported issues and timely response utilizing alerts and notifications. The successful implementation of this application during the pandemic is growing in popularity and more than 155 iPads have now been deployed with more than 200 users. Expansion to ambulatory (out-patient, primary, and specialty care services) is being requested with 100 additional iPads and users at over 20 different locations.

### Benefits

A number of benefits were brought with this solution:

- ✓ Higher HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) results.
- ✓ Decreased incidents, complaints, and grievances from both staff and patients.
- ✓ Improved staff satisfaction and morale due to increased rounding and increased workflow.
- ✓ Stored historical records and reports plus the ability to trend data.
- ✓ Rapid EVS response to ensure environmental safety is maintained to reduce falls.
- ✓ Ability for FNS to adjust meal plans acknowledging food allergies and dietary preferences.

### Cohesive Collaboration

Strong collaboration between hospital team members and IT:

- ❖ Brought together over 15 groups to accomplish the project's goals.
- ❖ Negotiated with nursing, EVS, and FNS leaders to create mutually beneficial workflows.
- ❖ Worked together during integration testing and to test different types of iPad cases to assure proper infection control and ease of holding the iPad. Together we chose an iPad case with 360 degree allowing portrait and landscape viewing, shockproof case, kickstand, stylus holder, and over the shoulder strap for carrying combined with a scratch resistant glass screen protector.
- ❖ Vendor, Clinical, and IT worked jointly to compose an eLearning course for new and existing staff. The course included video instruction, expectations, and guidelines for different types of rounders including charge nurses, nurse managers, executive staff, CAUTI/CLABSI workgroups, discharge planners, and direct report staff rounding. *Note: CAUTI stands for Catheter-Associated Urinary Tract Infection and CLABSI is Central Line Associated Blood Stream Infections.*

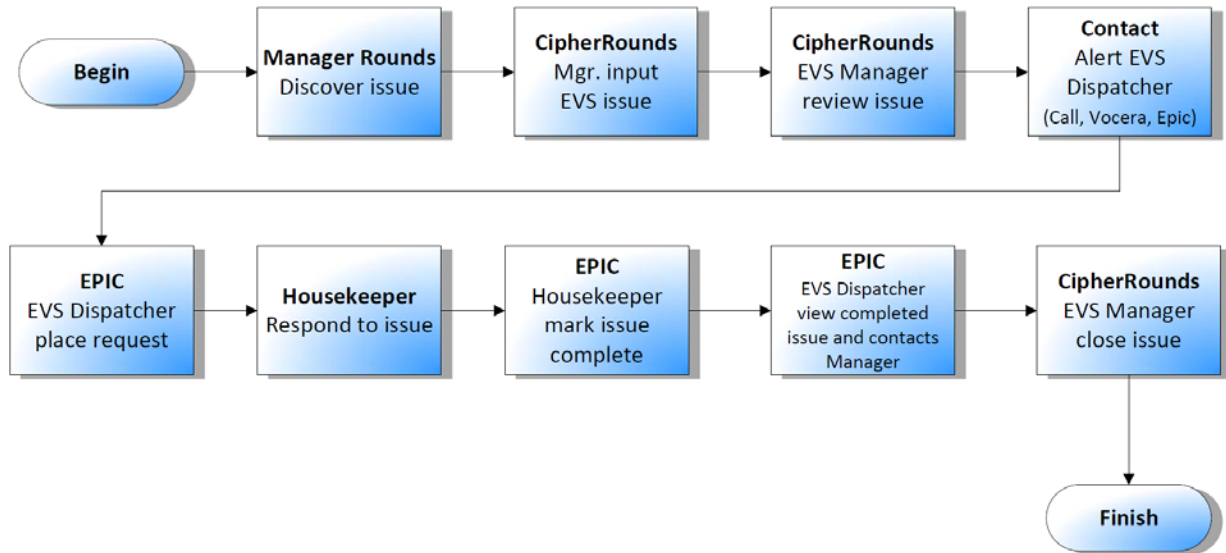
### Timeframe of deployment

IT Technical Evaluation	07/29/2019	IT Back-End Development	01/31/2020
Project Kick-Off	10/31/2019	Integration Testing	2/21/2020
Discovery Day	12/04/2019	Go-Live	03/19/2020
Definition and Planning	12/20/2019	Completed distribution of all iPads	04/08/2020
Approve Project Charter	12/27/2019		

**Additional Technology included:**

- Added 155+ iPads to UCDH Mobile Device Management (MDM) to allow easier enterprise changes to iPad iOS profiles, control system settings, and Wi-Fi access.
- Established VPN connectivity for HL7 ADT.
- Added Active Directory (AD) and Single Sign On (SSO) to authenticate users.
- Added reports and administration access using a workstation.

**Figure 1. EVS Workflow**



**Figure 2. FNS Workflow**

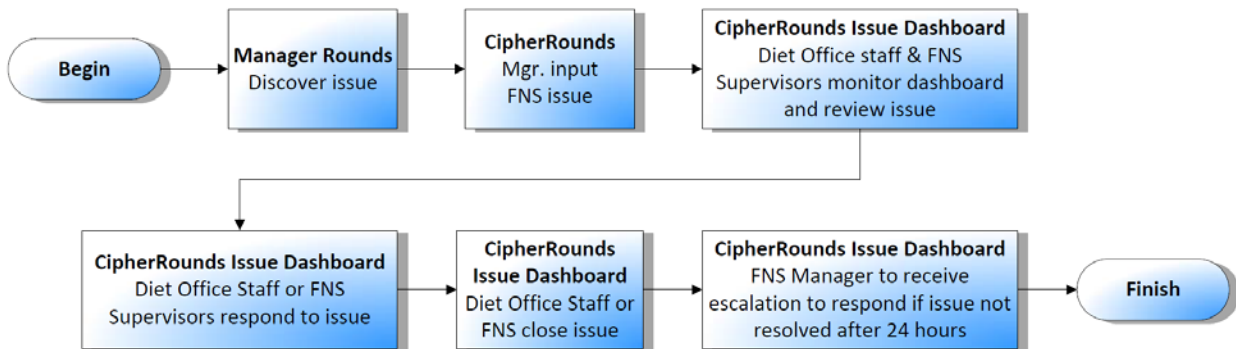


Figure 3. Data Flow Diagram

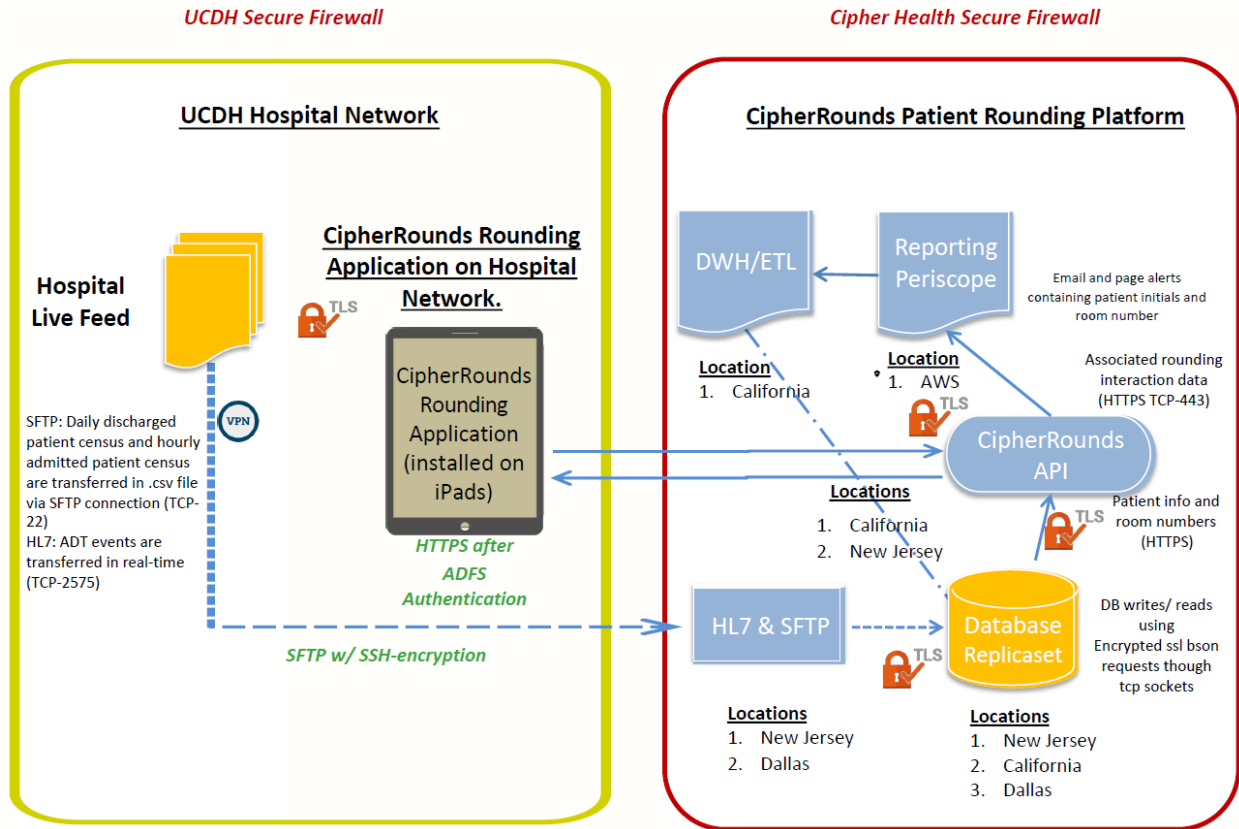


Figure 4. Staff recognition program

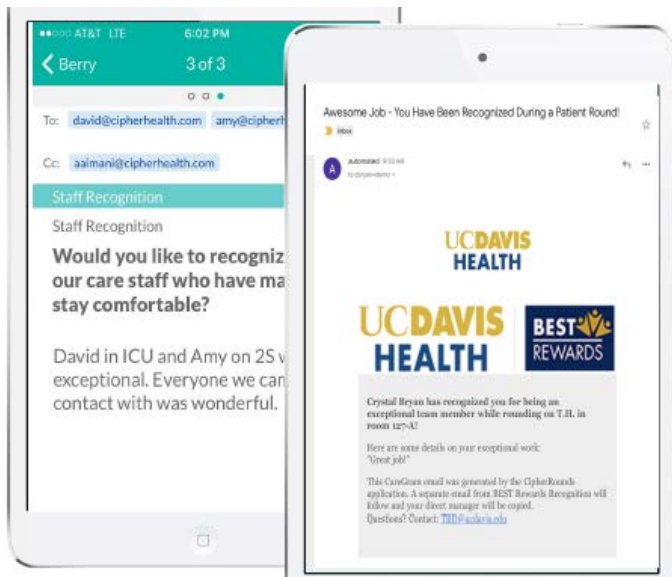
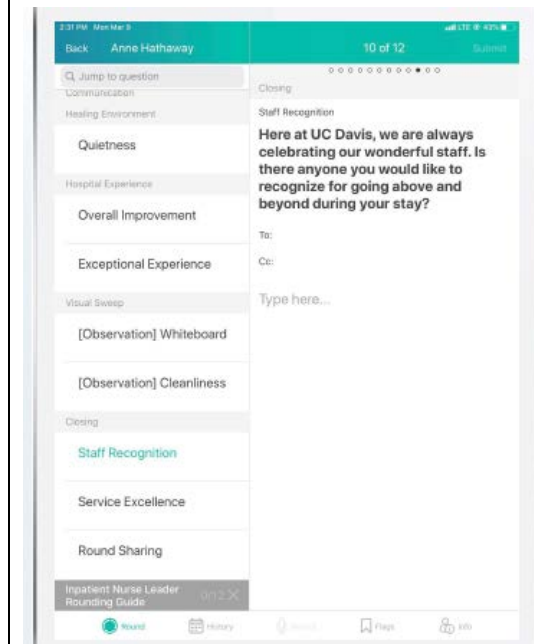
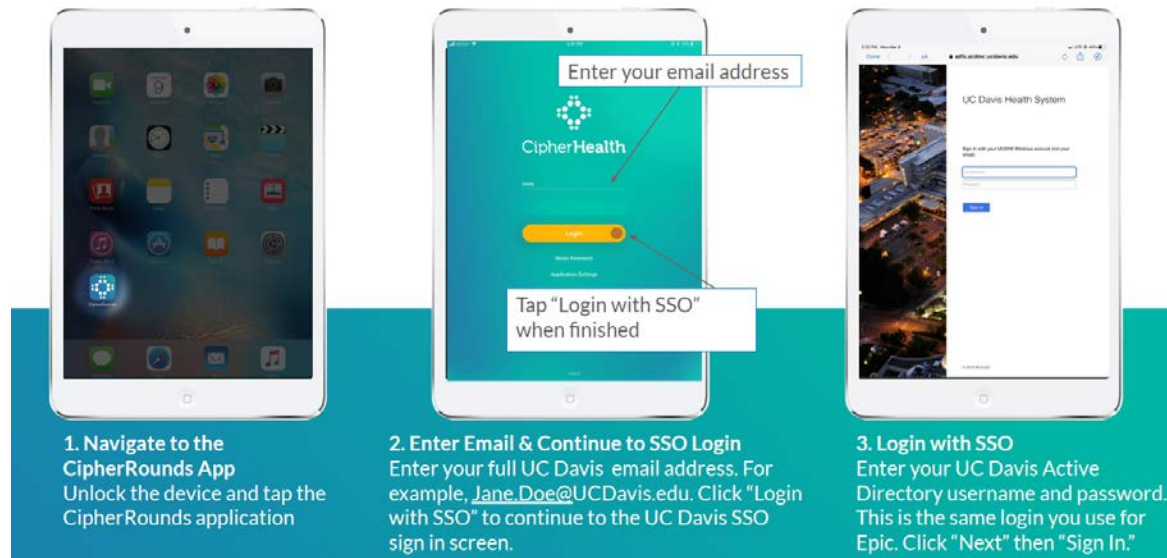


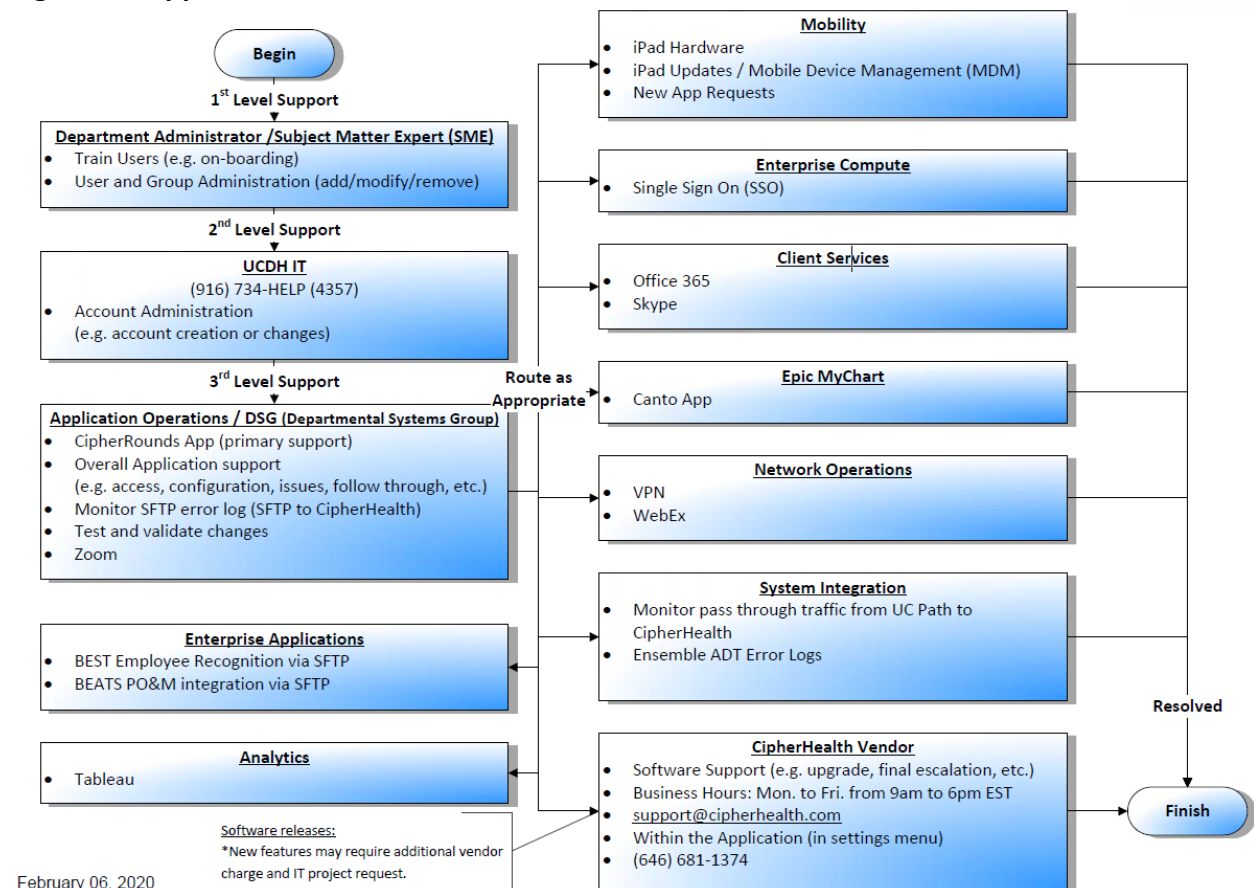
Figure 5. Patient Rounding Guide



**Figure 6. eLearning SSO**



**Figure 7. Support Matrix**



**Measurement of Success**

Project success was measured by low support calls, increased adoption rate, request for more iPads, and discussions of future implementation growth.