



UCSF Benioff Children's Hospitals

UCSF Alarms

Kevin Spolini MSN RN
Manager of Clinical Informatics
UCSF Benioff Children's Hospital

12/8/2017



UCSF Benioff Children's Hospitals

Disclosures

November 18, 2017

I have no disclosures to make.

Creating the Patient Experience

UCSF Medical Center at Mission Bay

**UCSF Benioff
Children's Hospital**
183 Beds
Pediatric Care
Urgent/Emergency Care
Specialty Outpatient Care



**Women's Specialty
Hospital**
36 bed birthing center
Select women's
ambulatory services
Specialty Surgery

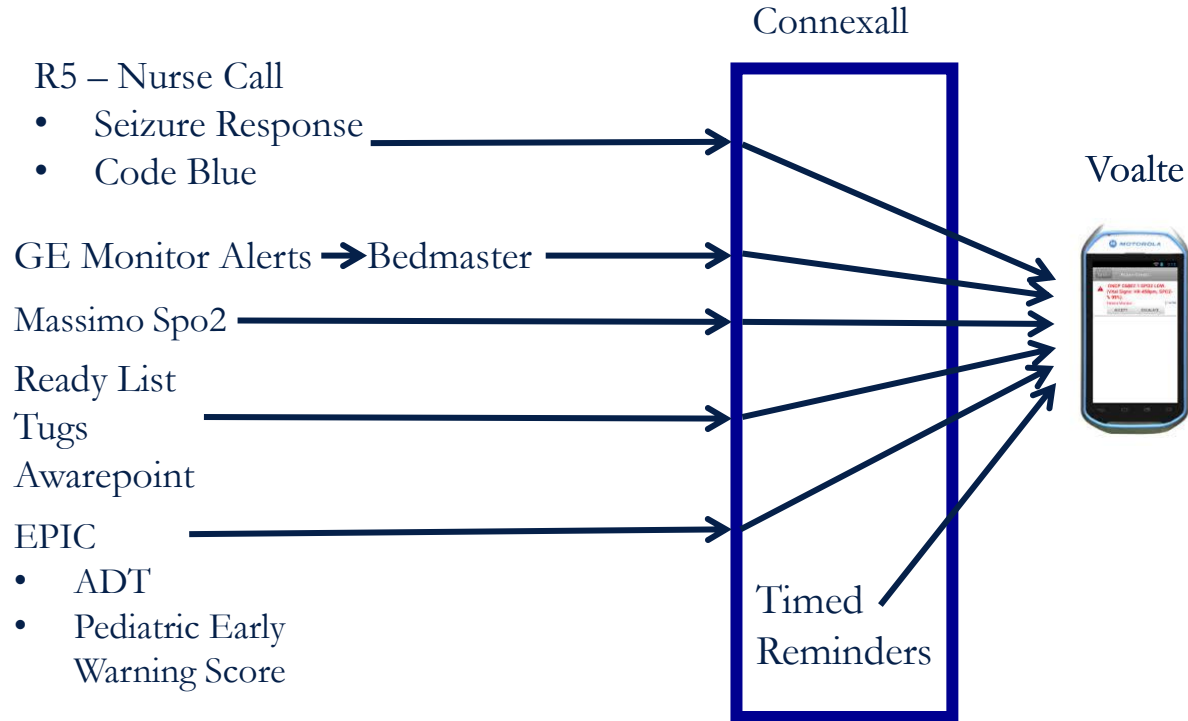
Medical Building
Helipad
Energy Center (central
plant)
Parking



Cancer Hospital
70 beds
First step to full cancer
services at Mission Bay
Select adult cancer
outpatient services



Connexall Install



Intensive Care Nursery

- Alarm overload at go live
- Staff were leaving their phones at the desk, or off, because of the number of alarms



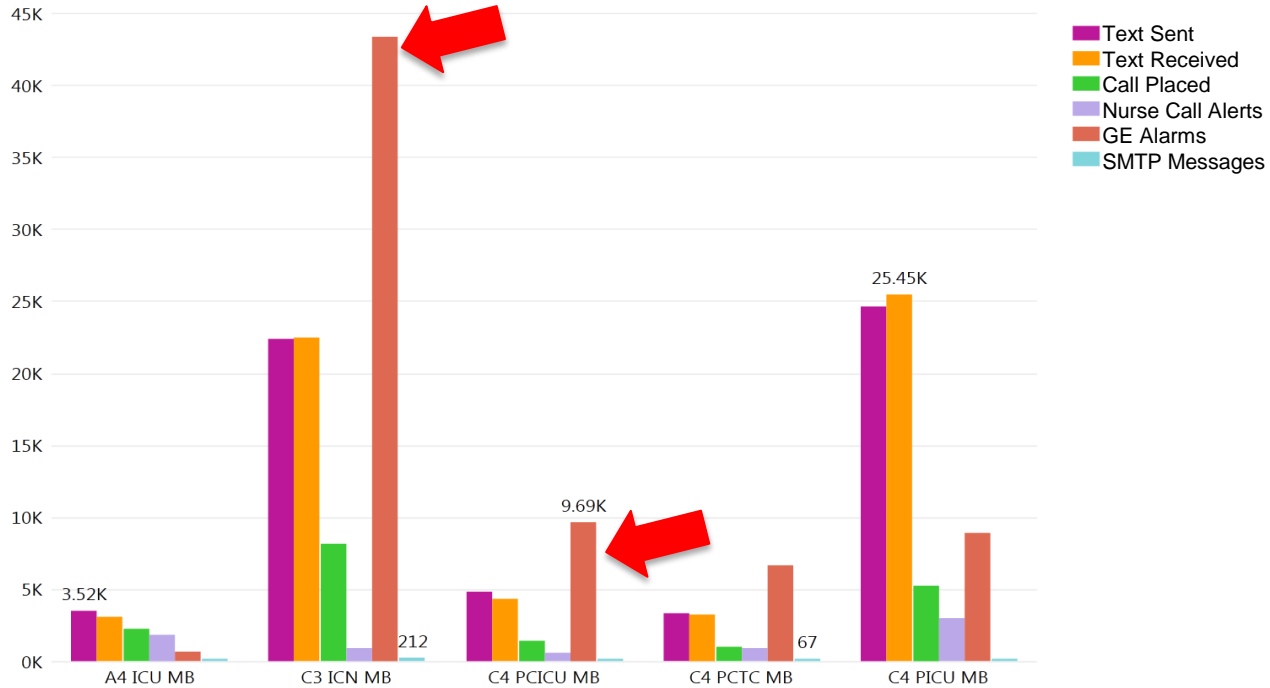
Alarm/Alert Management Program

Our goal is to reduce the alarms that come from our devices and, as applicable, those are sent to end user devices to ones that are meaningful and actionable.

Strategies to do this include:

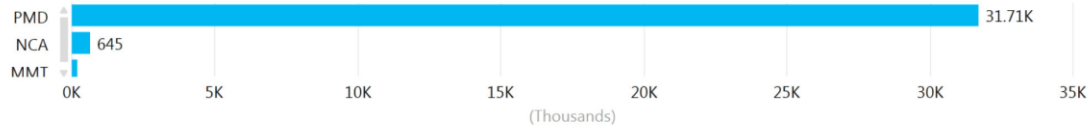
- Turning to informational or off alarms that are non-actionable
- Ensure default parameter alarms are appropriate
 - Ensure nurses are selecting the correct profiles and customizing settings per patient as appropriate (in pediatrics profiles are age based)
- Ensure monitor system settings are optimized for the patient population and patient
- Work with manufacturer to optimize technology

Critical Care Nursing Units Since Go-Live



ICN Voalte Interruption Summary July 2015

Alerts Received by Type



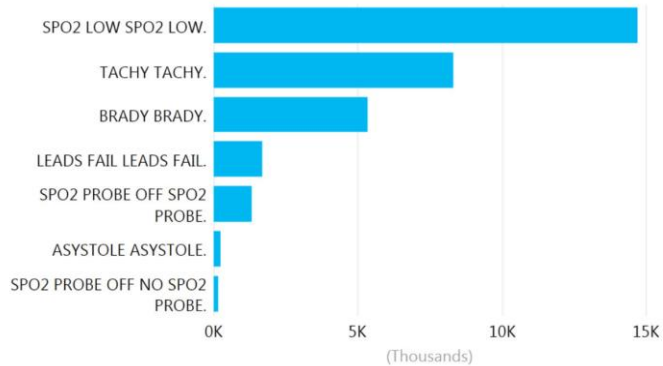
Text Messages Received



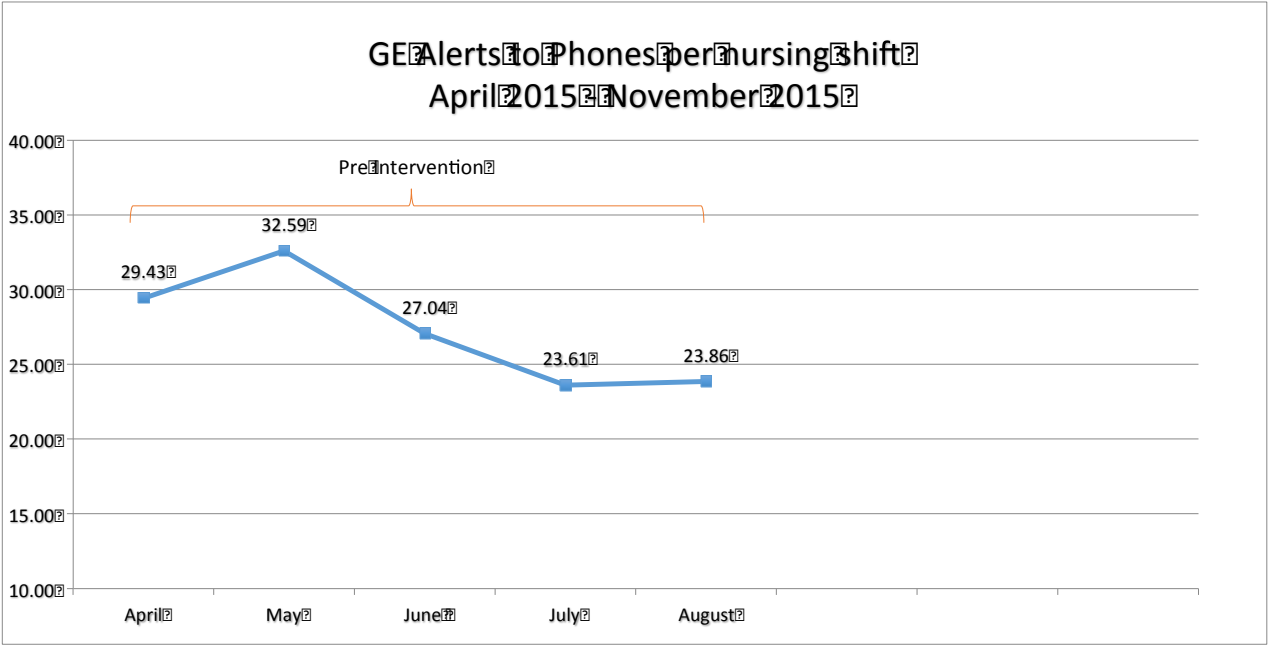
Text Messages Sent



GE Alerts sent to a Voalte Phone



Alert	Count of Alert
SPO2 LOW SPO2 LOW.	14,685
TACHY TACHY.	8,314
BRADY BRADY.	5,345
LEADS FAIL LEADS FAIL.	1,686
SPO2 PROBE OFF SPO2 PROBE.	1,301
ASYSTOLE ASYSTOLE.	233
SPO2 PROBE OFF NO SPO2 PROBE.	145
Total	31,709



	April	May	June	July	August			
GE Alerts to Phones per Nursing Shift	29.43	32.59	27.04	23.61	23.86			

Initial Settings

- High Level Alarms
 - Delay before send = 0
 - Time to accept = 15
 - Delay after accept = 20
 - Asystole
 - Vfib/Vtach
- Med Level Alarms
 - Delay before send = See below
 - Time to accept = 20
 - Delay after accept = 20
 - SpO2 Low
 - Delay before send = 15
 - Tachy
 - Delay before send = 0
 - Brady
 - Delay before send = 0
 - Leads Fail
 - Delay before send = 20
 - No SpO2 Probe
 - Delay before send = 20

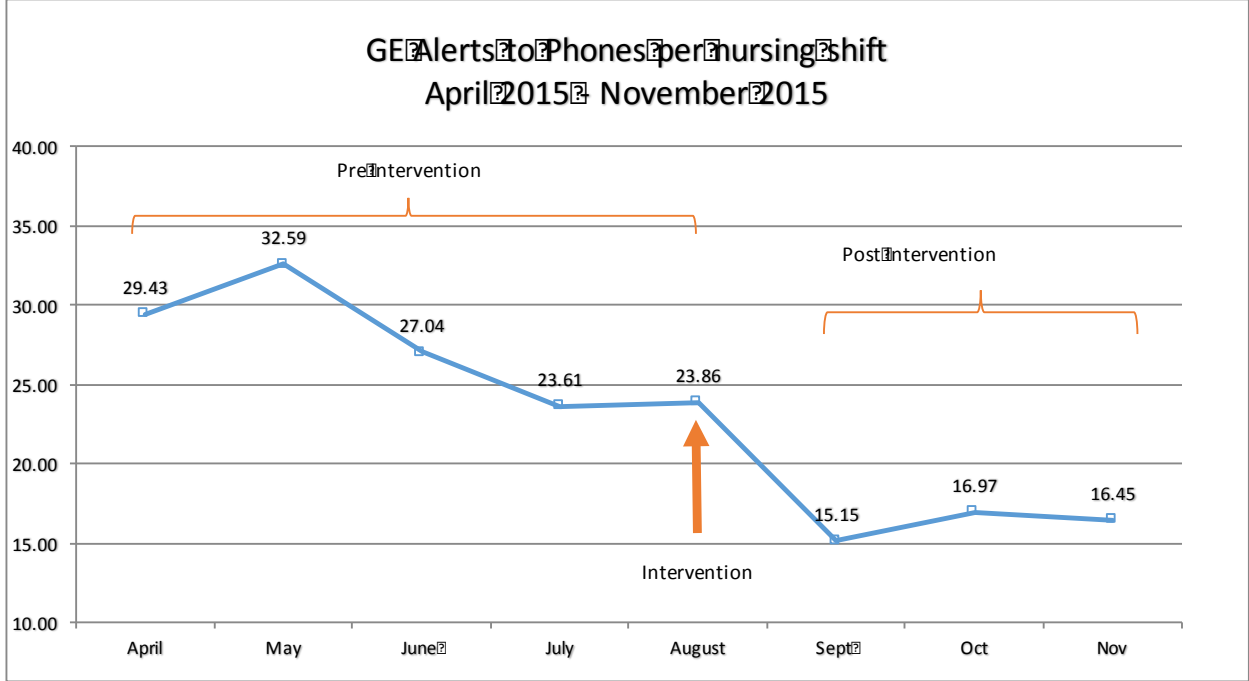
ICN Alarm Task Force

- Management
- Staff Nurses
- Clinical Informatics
- Clinical Systems
- Signoff by Medical and Nursing Leadership

Changes

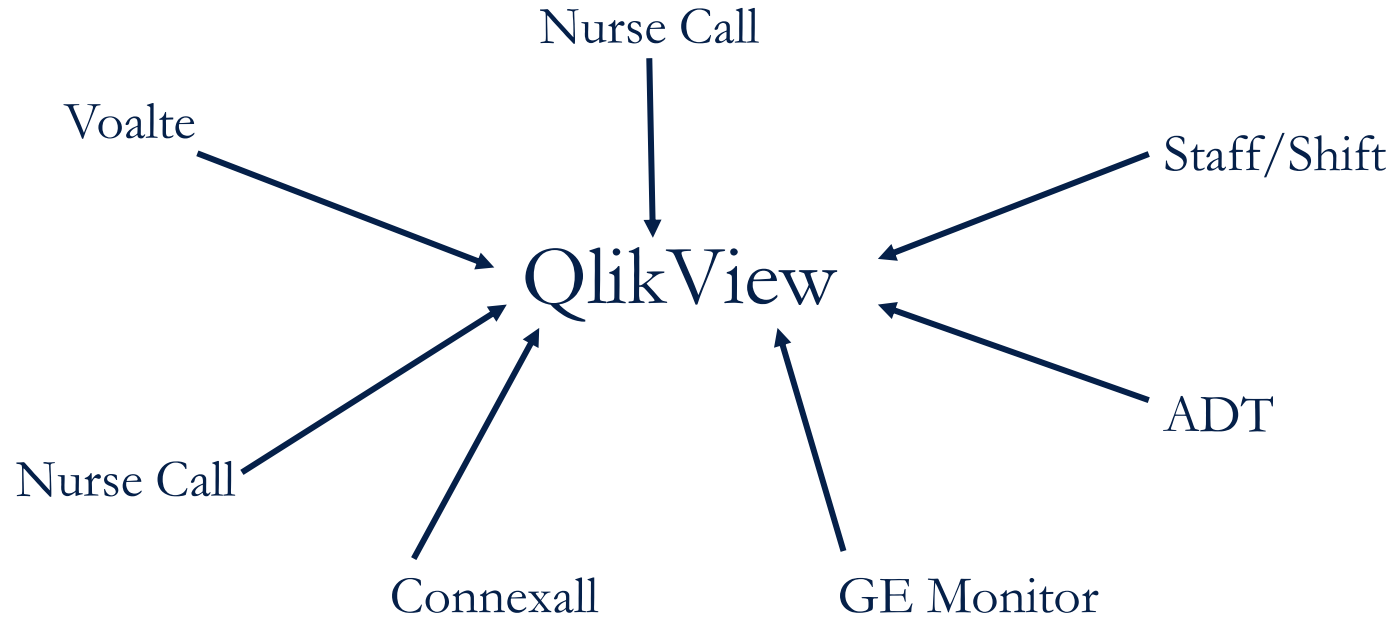
- Eliminate Asystole, Vfib/Vtach, Tachy, Leads Fail, SpO2 Probe Off, No SpO2 Probe, Vbrady alerts to Voalté phone
- Timing changes to Brady and SPO2 low alerts
 - Brady
 - Keep no delay before sending
 - Time to accept to 30 seconds
 - Delay after accept to 60 seconds
 - SPO2 Low
 - Increase delay before sent to 25 seconds
 - Time to accept to 30 seconds
 - Delay after accept to 60 seconds

GE Alerts to Phones per Nursing Shift April 2015 - November 2015



	April	May	June	July	August	Sept	Oct	Nov
GE Alerts to Phones per Nursing Shift	29.43	32.59	27.04	23.61	23.86	15.15	16.97	16.45

Where to go from here?





UCSF Benioff Children's Hospitals