#### **S NIFI** health DIGITAL WHITEBOARD | IMPACT STUDY

## **Digital Whiteboards** are proven valuable

Whiteboards are a longstanding communication tool for hospital staff, patients and families. Digital whiteboards retain the benefits of the traditional boards while overcoming the challenges. Handwritten marker boards are timeconsuming to keep updated, accurate, and legible. Digital whiteboards can integrate with an electronic health record (EHR) to update automatically, accurately, in an easier to read format.



A model for hospital tech – doing a task better, faster, at less cost, with more connection between patients & staff

#### **COMPARING TRADITIONAL & DIGITAL WHITEBOARDS**

TIME SAVINGS

reduce the time

clean boards,

information.

and hand scribe

A cohort study conducted at a 100-bed acute care hospital in Texas measured the outcomes of implementing a digital whiteboard solution. The evidence showed digital whiteboards provide advantages in all measured categories.

#### ACCURACY

**EHR** integrations resulted in improvements to information accuracy, completeness and consistency.

#### SATISFACTION

Patients loved Automated updates the aesthetic of needed to collect digital whiteboards data, find markers, and found the information trustworthy and easier to read.

#### **EDUCATION OUTCOMES**

Displaying the status of assigned video education increased both assigning and completion rates.

#### VALUE

Digital whiteboards provide a meaningful return on investment through longevity, low maintenance costs, efficiencies and outcome gains.

### Digital whiteboards overwhelmingly outperformed traditional whiteboards and were highly approved by patients and staff.

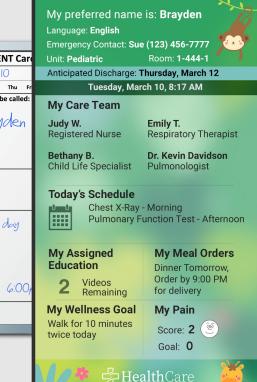
**CONTACT US TODAY:** info@sonifihealth.com | sonifihealth.com

## Sonifi health digital whiteboard | impact study

# Automations improve information accuracy

A digital whiteboard that is integrated with the hospital EHR refreshes every several minutes to present the most current data available in the medical record and other associated hospital systems. Prior to installing the digital whiteboard solution, the facility audited the consistency and accuracy of its handwritten data on traditional whiteboards. Twenty-two patient room audits were conducted and the results found inconsistencies particularly in the areas of patient goals, pain management and expected discharge dates.





### Automatic, real-time updates

#### WHITEBOARD COMPLETION RATE COMPARISON

	TRADITIONAL	DIGITAL*
Day / date	95%	100%
Room phone number	80%	100%
Nurse	100%	100%
Physician	95%	100%
Patient care technician	100%	100%
Other provider (e.g. CNL, surgeon)	55%	100%
Goal for today	65%	100%
Expected discharge (date/time)	30%	100%
Pain score & goal	30%	100%

\*Data accuracy on digital whiteboard solution is dependent on the accuracy of data in the EHR for each patient. Additional staff training may be required to support these outcomes.

## What patients say about...

#### TRADITIONAL WHITEBOARDS

- I can't read it
- There is often bad handwriting
- It is not always correct or complete
- It looks dirty & smudged

#### DIGITAL WHITEBOARDS

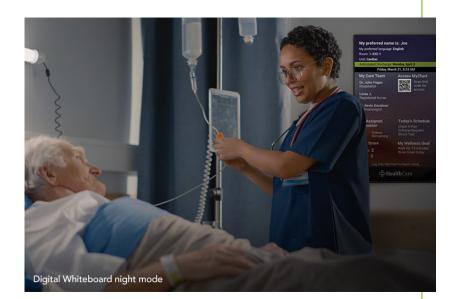
- I can see & read it!
- I love that people know & call me my preferred name
- The background is soft & comforting
- I'm informed & don't forget things

#### **CONTACT US TODAY:** info@sonifihealth.com | sonifihealth.com

## EHR integration saves staff meaningful time

One of the biggest advantages of a digital whiteboard solution is workflow efficiency. Integrations with the existing medical record and key hospital systems (e.g. nutrition, scheduling) are leveraged to automate the whiteboard updates, eliminating redundant work for staff. There is no need for double entries or handwritten updates on the boards.

An observation-based and self-reported time study revealed that digital whiteboards save nearly 9 hours per day for a 22-bed unit when measuring the time required for nurses and patient care technicians to update the whiteboards. This time can be reallocated to more meaningful interactions with patients. Furthermore, **patients who would have been at the end of the rounding cycle receive information 90 minutes sooner with the digital solution.** 



## Staff can save **9 hours per day** by not manually updating whiteboards

	rage time spent updatir raditional whiteboards	ng	c	Daily time saving digital whiteboard	
	1 min, 7 sec updating each board	INITIAL	JPDATE	<b>49</b> minutes per day	
1	<b>8 mins</b> updating vital signs	PCT RO	UNDS	<b>360</b> minutes per day	
	<b>2.72 mins</b> updating each board	RN RO	UNDS	<b>120</b> minutes per day	

Per 2018 SONIFI Health and Texas hospital study, August – October 2018.

**CONTACT US TODAY:** info@sonifihealth.com | sonifihealth.com

## SoNIFI health DIGITAL WHITEBOARD | IMPACT STUDY

# Visual prompts improve education outcomes

The digital whiteboard displays a reminder of the current number of video education titles that have been assigned to a patient but not yet completed. Education outcomes data was collected from two Medical/Surgical Units at the studied hospital, before and after the go-live, to measure the impact of this visual prompt. One unit acted as the control group and the other as the study group.

The results indicate that compared to a control group measured during the same period, **the continuous education prompt provided by digital whiteboards contributed to an increase in the number of assignments made by staff and the percent of education viewed and completed by patients.** 

### Staff assign more education titles & patient completion rates increase



#### **EDUCATION UTILIZATION**

(5-week averages)

	PRE VS POST IMPLEMENTATION	DIGITAL WHITEBOARD GROUP COMPARED TO CONTROL GROUP
Video assignments Per discharge	+ 202%	+ 59%
Completed views Per discharge	+ 10%	+ 20%

Assigned to completed ratios **INCREASED BY** 

#### CONTACT US TODAY: info@sonifihealth.com | sonifihealth.com

## DIGITAL WHITEBOARD | IMPACT STUDY

## Technology approach yields positive ROI

Although one may perceive the cost of a digital whiteboard solution to exceed that of its analog alternative, the more frequent replacement rate and supply costs associated with a traditional whiteboard prove otherwise. This study found the **direct product costs to be comparable** across a five-year period. When the staff time savings correlated with an EHR-integrated whiteboard are also considered, a hospital's return on investment is significant.

DIRECT PRODUCT COST ESTIMATES	TRADITIONAL WHITEBOARD	DIGITAL WHITEBOARD <sup>*</sup>
Year 1 investment per bed*	\$500	\$1,300
Replacement rate per 5 years	Twice	Zero
<b>5 year cost per bed</b> (Aquisition, installation, supplies, maintenance & replacements)	\$1,250	\$1,500

\*Based on 100-bed implementation model & self-reported costs from hospital studied in Texas.

## A standard 100-bed digital whiteboard implementation can be expected to deliver a positive return on investment in Year 1.

<b>STAFF PRODUCTIVITY SAVINGS</b> Financial impact of time reallocated to direct patient care	DIGITAL WHITEBOARD Removal of manual whiteboard updates during staff rounding
STAFFING	
Hourly FTE salary Average for PCT + RN	\$20.00
<b>Time savings</b> Per bed, per day	21.82 mins
<b>FTE salary savings</b> Per bed, per day	\$7.27
5 year staff salary dedicated to board updates (100 beds)	\$1,281,301
<b>Annualized cost savings</b> (5 year average)	\$256,260.20

\*Based on 100-bed implementation model & self-reported costs from a hospital studied in Texas in 2018.





