



# Artisight

**Andrew Gostine, MD, MBA**  
Chief Executive Officer

# Agenda

- Artisight Platform
- AI Adoption Strategy
- AI Development Strategy
- Areas of Deployment
  - Procedural Locations
  - Patient Rooms
  - Clinics and Hospital Tracking

# AI-Enabled Sensor Platform

# Platform and Applications

Computer Vision



Voice Recognition



Ultra-Wideband RTLS



Non-Contact Vitals



LLM's



Clinic Coordination



OR Coordination



1:100 Fall Prevention



TeleHealth



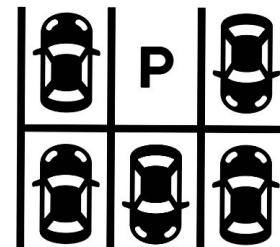
Intraop TeleConsult



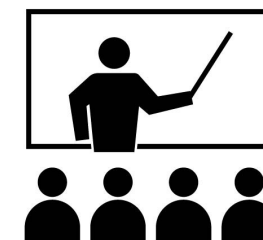
Remote Nursing



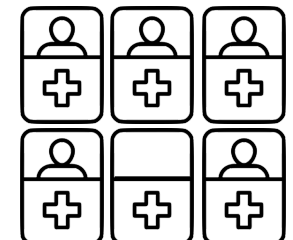
Smart Parking



Surgical Ed & QI



Capacity Mgmt



# Platform Installation

Operating Room of the Future

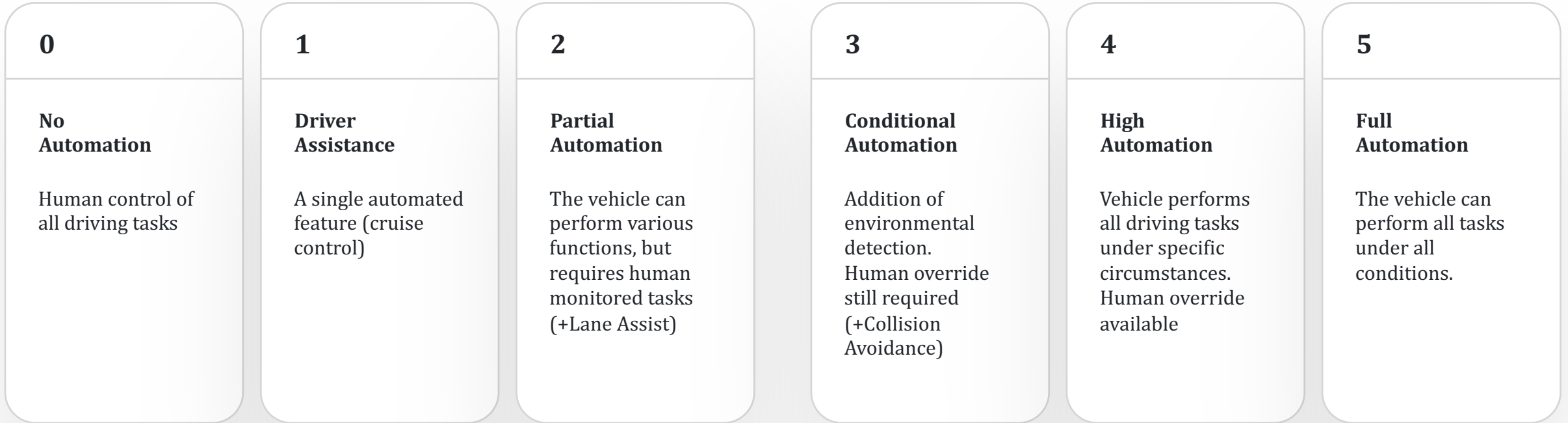


Patient Room of the Future



# AI Development Strategy

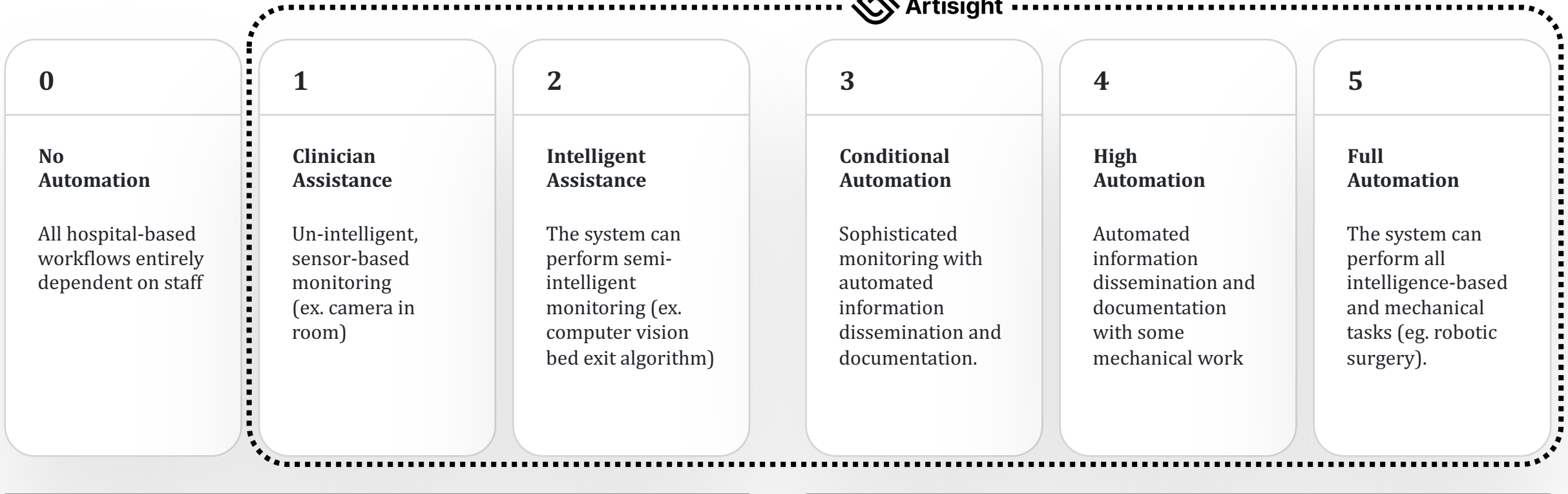
# Levels of Autonomous Driving



**Human-monitored environment  
with increasingly automated work**

**Automated work with increasingly AI-  
monitored environment**

# Levels of Autonomous Healthcare



Human intervention with increasingly automated monitoring or diagnosis

Automated monitoring or diagnosis with increasingly automated intervention

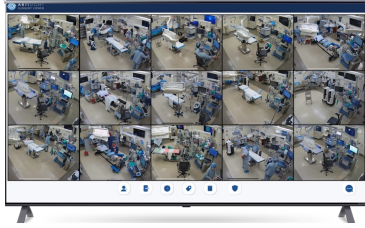
“Getting to [Level 5 Automation] is the goal for AVs, because the advantages of taking the driver completely out of the equation are clear and compelling. Not so in health care. In fact, quite the contrary, as the doctor-patient relationship is critical to outcomes. Moreover, augmentation systems are far easier to develop and deploy and can be ready to use in years, not decades.”

**Justin Norden, MD, MBA, MPhil**

NEJM, What AI in Health Care Can Learn from the Long Road to Autonomous Vehicles, March, 2022

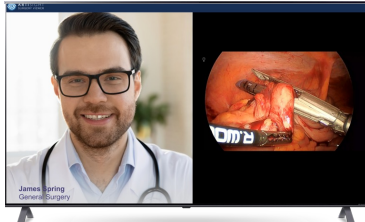


# Operating Room Applications



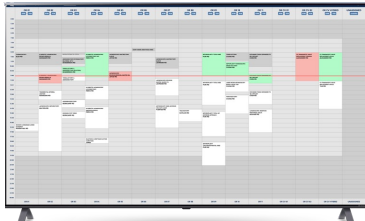
## Level 1: Artisight Operating Room Monitoring™

- Artisight sets up video and audio streaming to enable nurses and physicians to monitor patients and surgical procedure progress in the operating rooms. This eliminates blind spots in workflows and provides an increase in operating room throughput. Small increases in throughput yield large ROI's.



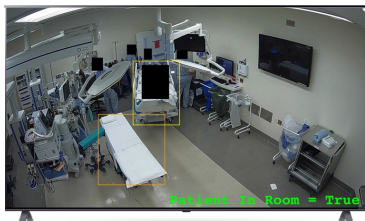
## Level 2: Artisight Intraoperative TeleConsultation™ and Artisight Translator Connect™

- Artisight sets up video and audio streaming to enable surgeons and anesthesiologist to talk to patients and staff from anywhere in the world. This reduces friction, enables new care models, increases contact between patients and clinicians, eliminates the need for bedside staff to perform clerical tasks, and improves patient outcomes.



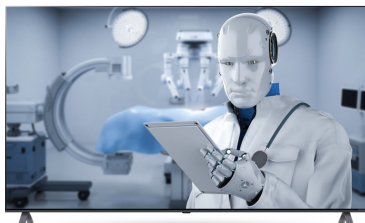
## Level 3: Artisight OR Coordination™

- Hospitals use Artisight's OR Coordination capabilities as an air traffic control system for the operating rooms. This software complements the remote monitoring of operating rooms to drive greater throughput and financial ROI.



## Level 4: Artisight Ambient Co-pilot™

- Artisight's computer vision and voice recognition services start ambiently monitoring the operating room and patients to complete clinical documentation and coordinate throughput semi-autonomously. This allows hospitals to start scaling the above solutions across the entire health system.



## Level 5: Artisight Full Ambient Artificial Intelligence™

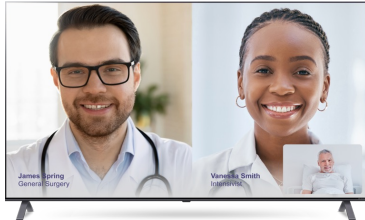
- Artisight's co-pilot evolves to coordinate and monitor OR's fully autonomously. The AI handles patient monitoring, procedure length predictions, nursing and physician documentation, and charge capture for billing documentation and collections. This results in maximum OR efficiency.

# Patient Room Applications



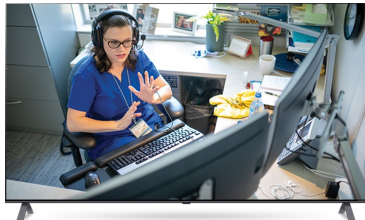
## Level 1: Artisight Remote Patient Monitoring™

- Artisight sets up video and audio streaming to enable bedside nurses to monitor their patients. This eliminates blind spots in patient monitoring to prevent patient harm. Results from Artisight's deployment at Guthrie: <https://www.healthcareitnews.com/news/guthrie-clinic-reduces-nurse-turnover-25-13-ai-platform>



## Level 2: Artisight TeleConsultation™ and Artisight Translator Connect™

- Artisight sets up video and audio streaming to enable bedside physicians to talk to their patients from anywhere in the world. Reduces friction, increases contact between patients and clinicians, and improves patient outcomes. Results from Artisight's deployment at WellSpan: <https://www.wellspan.org/news/story/wellspan-uses-ai-to-improve-patient-safety-address-nursing-burnout/N12897>



## Level 3: Artisight Remote Nursing Assistance™

- Hospitals use the Artisight platform and apps to enable bedside clinicians to work with remote clinicians. Remote clinicians make bedside clinicians 127% more clinical productive. This productivity gain reduces the number of clinical staff needed by 15.2%. Results from Artisight's integration with Epic Systems: <https://www.epicshare.org/share-and-learn/guthrie-virtual-nursing>



## Level 4: Artisight Ambient Co-pilot™

- Artisight's computer vision and voice recognition services start monitoring patients and documenting clinical care for the bedside staff. This allows hospitals to scale this service across the entire health system. Results from Artisight's AI co-pilot at Avera Health: <https://www.beckershospitalreview.com/digital-health/avera-health-plans-to-expand-virtual-nursing-to-37-hospitals.html>



## Level 5: Artisight Full Ambient Artificial Intelligence™

- Artisight's co-pilot evolves to fill the role of the remote nurse completely. The AI handles patient monitoring, patient predictions, nursing and physician documentation, and charge capture for billing documentation and collections. Results published in *Nature* by Artisight co-founder Eric Oermann, MD: <https://www.nature.com/articles/s41586-023-06160-y>

# The Last Mile of AI is Local



# Explainable AI



## Fall Prevention - Atrium Health

### Race Composition

Non-Hispanic White	60%
Hispanic	18%
Black or African American	13%
Asian	6%
Other	3%

### Sex Composition

Male/Female	53/47%
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### Age Composition

<18	4%
18-35	12%
35-55	18%
55-65	29%
>65	37%

### Time of Day Composition

10p-5a	25%
5a-10a	25%
10a-5p	25%
5p-10p	25%

# Privacy



dEpid/dt Consulting, Inc.  
Statistical De-Identification Privacy Solutions

October 21, 2019

Andrew Gostine, MD, MBA  
Chief Executive Officer  
Whiteboard Coordinator, Inc.  
2370 Dorina Drive  
Northfield, IL 60093

Tim Koby PhD, MBA  
Chief Science Officer  
Whiteboard Coordinator, Inc.  
2370 Dorina Drive  
Northfield, IL 60093

Artisight, Inc. d/b/a  
Whiteboard Coordinator, Inc.  
2370 Dorina Drive  
Northfield, IL 60093

Dear Dr. Gostine and Dr. Koby:

As you know, Artisight, Inc. d/b/a Whiteboard Coordinator, Inc. (hereafter Whiteboard) has engaged my services to conduct statistical disclosure review and analyses of Whiteboard's Permanent Video Database (with data elements as described in Appendix A, the "Data") in order to: (1) determine whether this Data could be considered "statistically de-identified" under the Expert Determination method<sup>1</sup> found at Section 164.514 of the HIPAA privacy rule, promulgated pursuant to the Health Insurance Portability and Accountability Act of 1996 ("HIPAA Privacy Rule");<sup>2</sup> and (2) identify any statistical disclosure control conditions or assumptions which would be necessary to support the foregoing.

I. Overview. This letter includes a summary of the results of my statistical disclosure review and analyses and my Expert Determination regarding the statistical de-identification of the Data. You may share this letter with any interested parties, including for purposes of providing them with information on Whiteboard's HIPAA de-identification activities described herein or informing them of my Expert Determination that the proposed Data complies with the statistical de-identification provisions in Section 164.514 of the HIPAA Privacy Rule<sup>1</sup>. This letter will also serve as my verification to you that (i) I am an expert possessing substantial knowledge of the theoretical, statistical and scientific principles and methods of statistical disclosure control, (ii) I have considerable practical experience in the application of such statistical disclosure limitations,

<sup>1</sup> The term "Expert Determination" was first introduced by the Department of Health and Human Services Office of Civil Rights in their November 26, 2012 document "Guidance Regarding Methods for De-identification of Protected Health Information in Accordance with the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule". The implementation specifications for this method are found at 45 CFR Section 164.514 (b)(1)(i-ii). Prior to the use of this new term, de-identification achieved in compliance with the requirements of Section 164.514 (b)(1)(i-ii) was commonly referred to as "statistical de-identification".

<sup>2</sup> Section 164.514 (b)(1)(i-ii) of the HIPAA Privacy Rule specifies that health information is not individually identifiable if "A person with appropriate knowledge of and experience with generally accepted statistical and scientific principles and methods for rendering information not individually identifiable: (i) Applying such principles and methods, determines that the risk is very small that the information could be used, alone or in combination with other reasonably available information, by an anticipated recipient to identify an individual who is a subject of the information; and (ii) Documents the methods and results of the analysis that justify such determination."

October 21, 2019  
Page 5

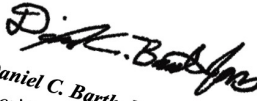
environment of "reasonably available" data which could be used in data intrusion attempts. Finally, so as to confirm that the conclusions of these de-identification determination analyses supporting these findings will still hold in the future and have not been altered by important changes in demographic characteristics that constitute the quasi-identifier variable sets, it is recommended that re-analysis for statistical disclosure risks be performed every three years, so long as the Data is still being used.

IV. Conclusion. So long as (a) the Data to be used is limited to only those data elements set forth in Appendix A; and (b) the general conditions and assumptions set forth in Part III hereof remain satisfied, it is my professional finding that the risk is very small that the Data to be used, alone or in connection with other reasonably available information by the anticipated recipients, to identify an individual who is a subject of such data, and accordingly it is my opinion that the Data meets the requirements for Expert Determination of statistical de-identification as set forth in Section 164.514 of the HIPAA Privacy Rule, thereby satisfying the conditions set forth in Sections 164.514 (a)-(b)(1) of the HIPAA Privacy Rule.<sup>3</sup>

This Expert Determination remains effective until October 21, 2025, unless there are any substantive changes in the external data environment, changes in regulatory definition of Expert Determination of statistical de-identification, changes in the availability of technologies that importantly facilitate the conduct of re-identification attacks, changes in the data elements contained in this Data stream, or changes to the de-identification policies, procedures and practices that are used to manage and control re-identification risks for this Data in which case a new evaluation of statistical de-identification will be required. Continued annual reviews of these considerations will be a part of this ongoing Expert Determination de-identification process.

dEpid/dt Consulting Inc.,

By:

  
Daniel C. Barth-Jones, M.P.H., Ph.D.  
President, dEpid/dt Consulting, Inc.  
and

Assistant Professor of Clinical Epidemiology  
Department of Epidemiology  
Mailman School of Public Health  
Columbia University

# The Only KLAS Ranked Smart Hospital Vendor





**Emerging Company Spotlight**

**Artisight Smart Hospital Platform 2024**

Improving Patient Care with an AI-Driven Virtual Care Platform

Emerging Insights Report | July 2024

## Artisight Smart Hospital Platform Customer Experience: An Initial Look

### Distribution of Overall Performance Score

Based on individual respondents, not unique organizations

▼ # of individual respondents

Dissatisfied (<70.0)	Satisfied (70.0-89.9)	Highly satisfied (90.0+)
0	0	10

► Respondent score (100-point scale)

### Artisight Smart Hospital Platform Performance Overview

All standard software performance indicators

Overall performance score (100-point scale) (n=7) 2024 Best in KLAS software average: 79.6

**93.4\***

0.0 100.0

Software grading scale (1-9 scale)

A+ = 8.55-9.0	B+ = 7.65-7.91	C+ = 6.75-7.01	D+ = 5.85-6.11	F = <5.22
A = 8.19-8.54	B = 7.29-7.64	C = 6.39-6.74	D = 5.49-5.84	
A- = 7.92-8.18	B- = 7.02-7.28	C- = 6.12-6.38	D- = 5.22-5.48	

Note: Percentages are calculated based on individual respondent counts, not unique organizations.

### Outcomes Expected by Customers

<input checked="" type="checkbox"/> Achieved	<input checked="" type="checkbox"/> Unexpected outcome
<input type="checkbox"/> Pending	<input type="checkbox"/> Not achieved

- Increased nurse satisfaction
- Improved patient safety
- Fewer sitters required

### Adoption of Key Functionality

Number of interviewed organizations using functionality (n=7)

<b>AI services:</b> Includes localization training, fall-risk AI services, and surgical video anonymization	7
<b>Patient room:</b> Includes nurses' station, remote observer/remote sitter, remote/virtual nursing, and telehealth	7
<b>Ambient listening:</b> Voice recognition/NLP services (command-based workflows such as enabling privacy mode, requesting a remote nurse, or triggering a staff duress alert)	6
<b>Professional services/change management:</b> Artisight's PMO process leads customers through business, clinical, and technical workflows and their overall implementation, expansion, and ongoing client success activities	4

### Time to See Outcomes

Immediately	Over 12 months	5	1	1
Within 6 months	No outcomes yet			
6-12 months				

0% 100%

# Patient Room

# Patient Room

A large interactive panel mounted on the wall. At the top center is a camera. Below it is a screen showing a video call with two doctors: James Spring, Neurosurgeon, and Jack Gostine, Intensivist. A small inset shows a patient. To the right is a whiteboard with patient information for room 3541, including today's date, care team, goals, and a rounding schedule.

3541

Today's Date: \_\_\_\_\_  
Care Team For: \_\_\_\_\_  
Nurse: \_\_\_\_\_  
Tech: \_\_\_\_\_  
Physician: \_\_\_\_\_

Today's Goals

Pain Goal: \_\_\_\_\_ Pain Level: \_\_\_\_\_  
Medication: \_\_\_\_\_  
Last Dose: \_\_\_\_\_  
Next Dose: \_\_\_\_\_

- vital signs every 4 hours
- heart monitor
- 2L nasal cannula
- regular diet
- cardiac drip

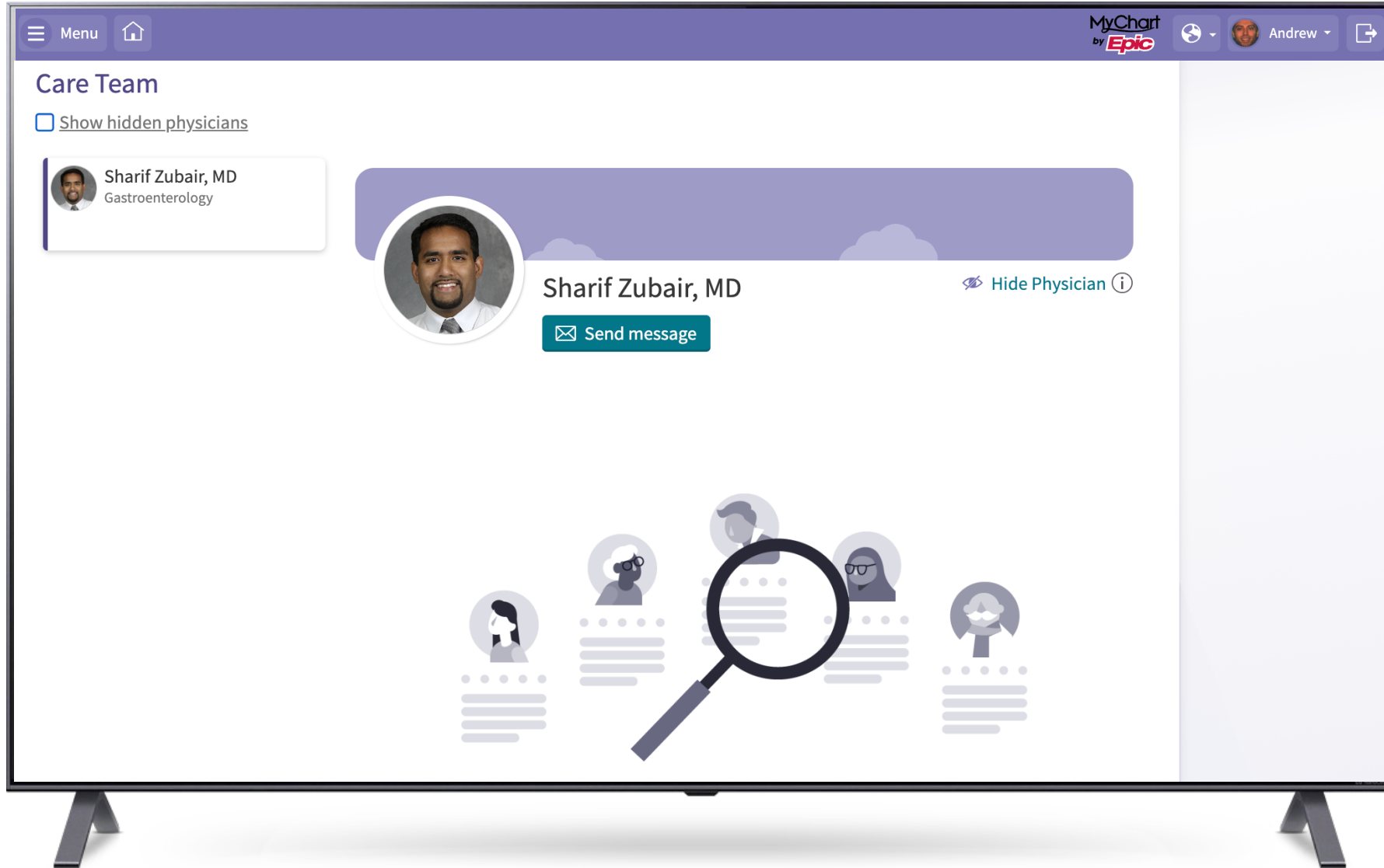
2D echo ✓

Rounding:

8 9 10 11 12 1      4 5 6



# Epic MyChart Bedside Hosted by Artisight



# Epic Native Applications

**Epic** Artisight Chart Patient Lists In Basket UpToDate Prep for Procedure Pended Cas

Smith, Kevin

Kevin Smith  
38 yo Male

Language: English

Code: Not on file (No AD Docs)  
Pre-Arrest Interventions: Not on File

Search (Ctrl+Space)

Disability Accommodations: None

Last refreshed: 2/15/2024 12:33:41 PM

Legend Filter Refresh New Encounter

Encounter Hospital Account Episode Order

Episode	Priv?	Date	Time	Locatio
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# TeleMonitoring



# TeleConsult



**James Spring**  
General Surgery

**Vanessa Smith**  
Intensivist



# Translation Services



3541

Today's Date:  
Care Team For:  
Nurse:  
Tech:  
Physician:

Today's Goals

Pain Goal: Pain Level:  
Medication:  
Last Dose:  
Next Dose:  
- vital signs every 4 hours  
- heart monitor  
- 2L nasal cannula 20 echo  
- regular diet  
- cardiac drip

Rounding:  
8 9 10 11 12 1 4 5 6