



## **Hospital Video Auditing:** The New Standard in Patient Safety.

*“Auditors can now pinpoint risks and provide video documentation of events—giving us the level of information necessary to minimize errors, reduce risk and lower costs across the institution.”*

*—Alan Lisbon, M.D., FCCP, Vice Chair for Critical Care, Department of Anesthesia and Critical Care,  
Beth Israel Deaconess Medical Center and Associate Professor of Anesthesia, Harvard Medical School*

# Patient Safety is your hospital's most important initiative.

The CDC statistics are staggering: two million patients fall victim to hospital infections annually, with 90,000 dying as a result—but what's most alarming is that many of these deaths are preventable. And the resulting costs, ranging \$17 billion to \$29 billion annually according to the Institute of Medicine, are all but avoidable. It's a healthcare crisis where the public is demanding better care and hospitals are demanding actionable tools with measurable data.

An innovative new auditing tool and service from Arrowsight Medical introduces a system of video and clinical alarm-based compliance audits. Hospital Video Auditing (HVA) satisfies the pressing need for increased safety and improved quality, while lowering overall costs due to negligence or oversight. The service's daily, weekly or monthly compliance scorecard reports deliver quality analytics tied to actual video events.

HVA technology monitors the most critical points of care across a wide range of clinical and non-clinical processes. From hand-hygiene guidelines, central-line safety, alarm response timeliness and ventilator safety protocols to surgical-infection prevention and a host of others, HVA is at every point of care critical to your patients' well being. And the service is ongoing instead of annual, so your hospital's performance is measured with every patient, everyday of the year.

All told, HVA delivers a set of tools that enable better auditing, enhanced compliance and consistent, sustainable data required by your own guidelines, and internal and external regulators and reporting agencies. Equally remarkable, the service assists in training staff and caregivers on best practices and instituting new processes. That's why the new standard in patient safety is your quality advantage.



HVA introduces an ongoing, performance-based system that:

- **Ensures compliance:** Increases adherence to patient safety protocols and procedures.
- **Reduces medical errors:** Promotes best practices on a wide range of clinical and non-clinical processes.
- **Decreases risk:** Reduces preventable errors by monitoring critical points in the patient-care process.
- **Improves staff processes:** Provides hospitals with a tool for training and coaching on best practices.
- **Institutes new patient-safety benchmarks:** Introduces new tools for monitoring, measuring and maintaining the highest levels of quality care.

“ **Not only does hospital video auditing provide assurance that best practices, as outlined by JCAHO, IHI, and advocated by CMS and Leapfrog, are instituted; the service complements existing care initiatives and hospital technologies.** ”

– Mark Aronson, M.D., Professor of Medicine,  
Harvard Medical School, Vice Chair, Quality Department  
of Medicine, Beth Israel Deaconess Medical

“Monitoring, measuring  
and maintaining healthcare's  
highest levels of patient safety and  
quality performance have always  
been the goals. Now, we will  
have the tools.”

– Dr. Charles Safran, M.D.,

FACP, Associate Clinical Professor  
of Medicine, Harvard Medical School,  
Past-Chairman, American Medical  
Informatics Association



HVA monitors a wide range of clinical and non-clinical processes, including:

#### **Infection Safety:**

- Compliance with hand-hygiene policies and protocols
- Consistent use of isolation procedures
- Use of sterile barriers and other infection control steps during invasive procedures
- 'Traffic' flow through high-risk areas (OR rooms, reverse isolation rooms)

#### **Critical Care/ICU Safety:**

- Central line insertion safety procedures (IHI 'central line bundle')
- Processes to prevent ventilator-acquired pneumonias (IHI 'ventilator bundle')
  - Optimal management of ventilator circuits
  - Positioning of Head-of-bed
  - Performance of daily ventilator 'wake up'
  - Performance of daily RISB-rapid-shallow-breathing index
- Rotation of patients to limit skin breakdown
- Correct and continuous use of Sequential Compression Devices (effectiveness of DVT prophylaxis interventions)

#### **Timing and Responsiveness to Alarms and Events:**

- Telemetry alarms
- Infusion pump alarms
- Code Team and Rapid Response Team (Medical Emergency Team) response times

#### **Fall Reduction and Prevention:**

- Adherence to fall-reduction strategies/protocols
- Response times to bed alarms
- Screen for inactivation or 'silencing' of bed alarms
- Performance of "sitters"
- Compliance with restraint policies

#### **OR and Surgical Safety:**

- Timing of peri-operative antibiotic prophylaxis (CMS Quality Improvement Program)
- 'Traffic' in OR rooms during procedures
- Turnover times and room readiness
- Pre-procedure anesthesia equipment and circuit checks
- Tissue specimen transfers and specimen 'chain-of-custody'

#### **Pharmacy Process Safety:**

- Safety and protocol compliance for batch processing (e.g., TPN, CVVH solutions)
- Safe performance of serial dilutions in high-risk drugs

Audited video is summarized in formal video audit reports that are delivered daily, weekly or monthly. Reports provide hyperlinks to video examined by auditors. By clicking the hyperlinks you have immediate access to actual video of each incident.

Top line statistical scores for each medical unit, including a summary of scores from all rooms in a unit.

### Overview Table

Unit	Current Period Compliance 11/06/2005-11/12/2005	Previous Period Compliance 10/31/2005-11/05/2005	Average Compliance 10/16/2005-11/12/2005
<b>Unit Rating #1</b>			
SICU ↑	92%	89%	87%
<b>Average Score</b>	<b>92%</b>	<b>89%</b>	<b>87%</b>
<b>Unit Rating #2</b>			
OR ↓	84%	80%	82%
<b>Average Score</b>	<b>84%</b>	<b>80%</b>	<b>82%</b>
<b>Total Average Compliance - All Units</b>	<b>88%</b>	<b>84%</b>	<b>85%</b>

Category summary scores for each unit, including a summary of scores by category within each multi-room unit.

### Audit Category Summary

Unit	Category Procedure	Current Period Compliance 11/06/2005-11/12/2005	Previous Period Compliance 10/31/2005-11/05/2005	Average Compliance 10/16/2005-11/12/2005
<b>Unit Rating #1</b>				
SICU	↑ ↓			
	Central Line-Hand Hygiene	100%	95%	93%
	Central Line-Barrier Protection	96%	94%	91%
	Central Line-Use of Chlorohexidine Agent	97%	93%	93%
	Central Line-Sterile Dressing	93%	79%	80%
	Central Line-Assistant Present	90%	64%	80%
	Ventilator Safety-Alarm Response Time	89%	88%	86%
	Ventilator Safet-Proper Physician Actions Upon Alarm	86%	79%	86%

Breakdown of scores within a category on a room-by-room basis.

### Audit Category Details

Sort by Category, Unit, then Audit Procedure

Category	Unit	Audit Procedure	Current Period Compliance 11/06/2005-11/12/2005	Previous Period Compliance 10/31/2005-11/05/2005	Average Compliance 10/16/2005-11/12/2005
<b>Central Line-Hand Hygiene</b>					
	SICU	↑ ↓			
		Room 1	99%	100%	96%
		Room 2	100%	90%	90%
<b>Average Category Score</b>			<b>100%</b>	<b>90%</b>	<b>93%</b>
<b>Central Line-Barrier Protection</b>					
	SICU	↑ ↓			

Hyperlinks to video examined by auditors. By clicking the hyperlinks you have immediate access to actual video of each incident.

### Audit Procedures

Unit	Audit Procedure	Dates
SICU ↑	Sun 11/6/2005	Ved 1/9/2005 Thu 11/10/2005 Fri 11/11/2005 Sat 11/12/2005
Central Line-Hand Hygiene	Room 1	Rating #2 Rating #1 Rating #1 Rating #1
Central Line-Hand Hygiene	Room 2	Rating #1 Rating #1 Rating #1 Rating #1
Central Line - Barrier Protection	Room 1	Rating #1 Rating #1 Rating #1 Rating #1
Central Line - Barrier Protection	Room 2	Rating #1 Rating #1 Rating #2 Rating #1

Notes:  
Proper barrier protection  
10:05:17 AM -  
10:06:17 AM

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## About Arrowsight



Arrowsight, a Web-based Application Services Provider, is the leading developer of remote viewing services and software. Arrowsight has helped improve practices, compliance and employee morale in safety sensitive industries, such as food processing, food services and manufacturing. Arrowsight technology is also being used at leading companies including Plumrose USA, Limited Brands and leading McDonald's franchisees. More available at: [www.arrowsight.com](http://www.arrowsight.com).

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