

# PHILIPS

IHE Connect-a-thon 2010

**“Leveraging Device Data to meet meaningful use criteria”**

## Abstract

“Patient safety, given current legislative demands, has become a driver for connectivity requirements beyond workflow simplification and enhancing the value of the EMR; through efficient data transfer, current-state acquisition of device data and subsequent analysis, interpretation, and presentation will play a key role in showing meaningful use.”

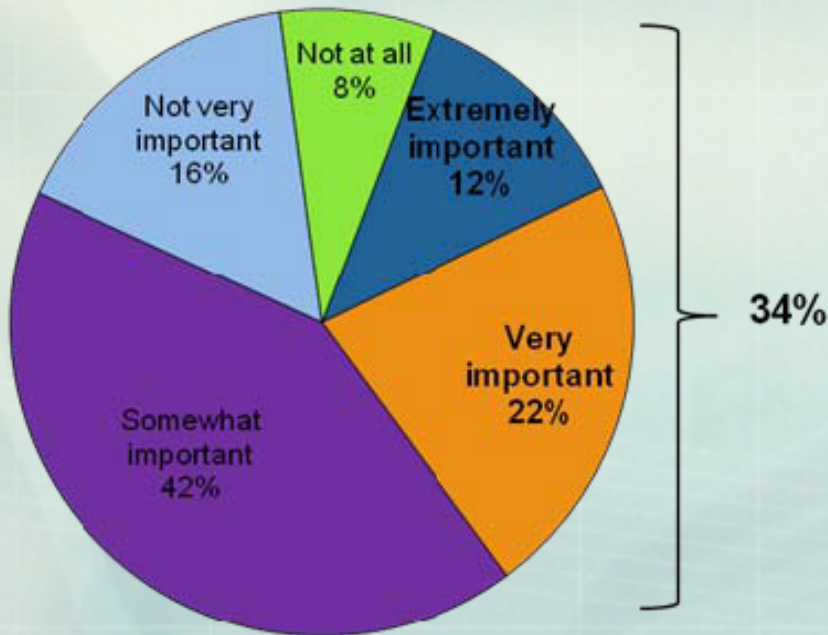
## State of the Union

- Device connectivity lacks, even after years of effort, standards-based connectivity technologies
- Industry perception of current state device data vs. EMR data
- EMR readiness to accept device data
- HITECH Act implies and requires device connectivity to meet key deliverables of ARRA:
  - Reduction in medical errors and inefficiencies
  - Positive impact on healthcare quality and safety
  - Promotion of “early health”
  - Assurance of adequate monitoring of patients in home care settings
  - Promotion of Telemedicine
- IHE Patient Care Devices domain will become relevant as it represents an opportunity to meet market and legislative demands delivering device data to the EMR

## Why Device Integration?

- Framework for an improved healthcare delivery system through interoperability:
  - Closed loop decision support extending beyond medication and smart alarms
  - Automated system diagnostics and performance measurement
  - Modular plug-and-play support
  - Full support for B-o-B environments
  - Full audit trail and analysis on adverse events
  - Comprehensive reporting
  - POC Data Archiving
  - Support for standardized terminologies

# Importance of HITECH on Healthcare Organizations' Strategic Goals



By Type of Organization; Hospitals by Size and Setting			
	Ext/Very Important	Smwt Important	Not Too/Not Important
Hospitals	37%	43%	20%
Non-hospital care providers	28%	41%	31%
Health plans*	37%	37%	26%
<b>Hospitals, by number of beds</b>			
Fewer than 200 beds	36%	39%	25%
200–499 beds	38%	47%	15%
500 or more beds	38%	41%	21%
<b>Hospitals, by number of facilities in network</b>			
Single hospital	40%	39%	21%
2–5 hospital network	44%	43%	13%
6 or more hospital network	26%	47%	26%
<b>Hospitals, by setting</b>			
Urban	34%	48%	18%
Suburban	36%	40%	24%
Rural	43%	38%	19%
Hospitals (n=426). Non-hospital care providers (n=214). Health plans (30).			

Source: Healthcare Informatics Research Series, *Trends in Financial Strategies and Technologies*, Vendome Group, 2009

# HITECH Act: Meaningful Use Drivers for Device Integration

**Table 2-2 Meaningful Use Matrix Device Connectivity Requirements**

Outcome	Year	Objective/Measure	Requirement
Improve quality, safety, efficiency, and reduce health disparities	2015	Goal is to achieve and improve performance and support care processes and on key health system outcomes	Medical device interoperability
			Implement clinical decision support for national high priority conditions
	2013	Goal is to electronically capture in coded format and to report health information and to use that information to track key clinical conditions	Conduct closed loop medication management, including eMAR and computer-assisted administration
			Use clinical decision support at the point of care (e.g., reminders, alerts)
Engage patients and families			Implemented ability to incorporate data uploaded from home monitoring devices
Improve care coordination	2013/2015	Goal is to facilitate the coordination of care across all providers serving a patient or a particular medical condition for the patient	Access comprehensive patient data from all available electronic sources on a timely basis

Source: HITSP Device Connectivity Technical Note - HITSP/TN905 - November 20, 2009 - Version 0.0.1

## Opportunity for Point-of-Care (POC) Strategies

- Beyond traditional device integration benefits:
  - Nursing shortage management
  - Nursing efficiency gains
  - Data transcription error reduction
  - Retroactive charting
- Consideration of new care delivery models and supporting device strategies & solutions
  - Current-state device data as the key enabler for outcomes
  - EHR as the key summary enabler for outcomes



Collaboration as the key enabler for an improved healthcare delivery system

- Strong IT involvement and focus on financial, clinical and care delivery outcomes
  - Ultimate goal to address patient safety

# Point-of-Care Strategies for Consideration

- Solution is patient centric with the care provider in mind
- Solution follows the patient throughout the continuum of care
- Solution is open, maintains patient context and works easily with devices and EMRs
- Solution allows a health care organization to switch out medical devices and replace an EMR without device strategy redesign
- Solution supports care provider through appropriate automation (device association/disassociation)
- Solution increases patient data security and prevents intrusion



## The Perfect State

- To configure and register a device to communicate with an EHR
- To associate patient identification and device information within an EHR
- To communicate detailed measurement information to the EHR
- To uniquely identify a device and related components, communicate device settings and detailed device information associated with each measurement value, to the EHR
- To communicate measurement intervals and device setting information within the EHR
- To query the device or device intermediary for additional information captured by the device that may not have been communicated to the EHR
- To communicate device and measurement information to the EHR when there is a lapse in EHR connectivity

Thank You!

