

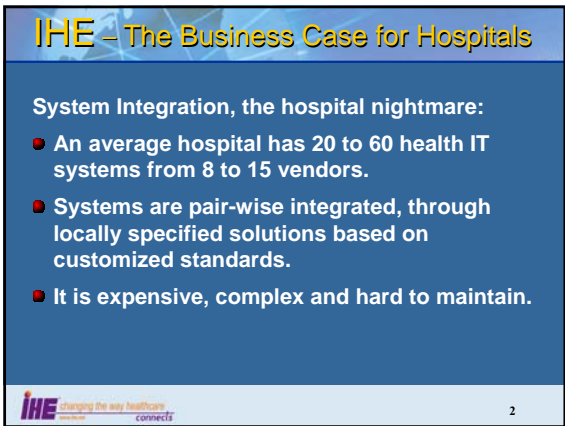


IHE Changing the Way
Healthcare Connects
in HOSPITALS

HIMSS Interoperability Showcase April 2008

IHE

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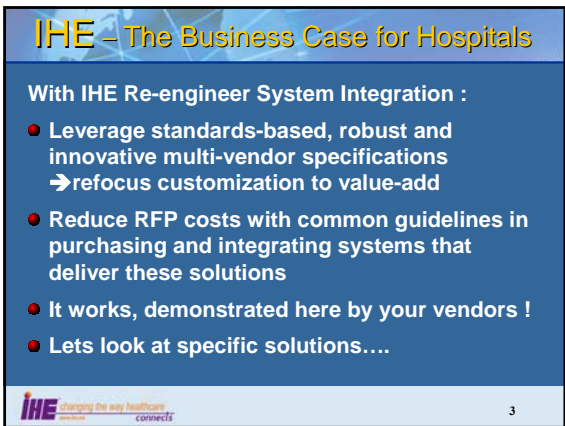
IHE - The Business Case for Hospitals

System Integration, the hospital nightmare:

- An average hospital has 20 to 60 health IT systems from 8 to 15 vendors.
- Systems are pair-wise integrated, through locally specified solutions based on customized standards.
- It is expensive, complex and hard to maintain.

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IHE - The Business Case for Hospitals


With IHE Re-engineer System Integration :

- Leverage standards-based, robust and innovative multi-vendor specifications
→ refocus customization to value-add
- Reduce RFP costs with common guidelines in purchasing and integrating systems that deliver these solutions
- It works, demonstrated here by your vendors !
- Lets look at specific solutions....

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Echo Workflow




- Need to solve the “drive-by echo” ?
Cardiologist to sonographer in CCU: “While you’re here, do a TTE on bed 3”
 - Unordered, unscheduled exam
 - Machine disconnected from network

- Stress echo, need more automation ?
After exam, sonographer creates new quad displays of stages and views
 - No intrinsic value add
 - Data is redundantly copied to storage

IHE Echo Workflow Profile



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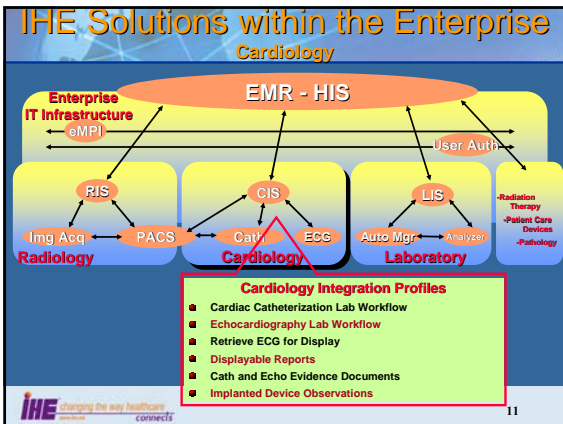
Stress Workflow

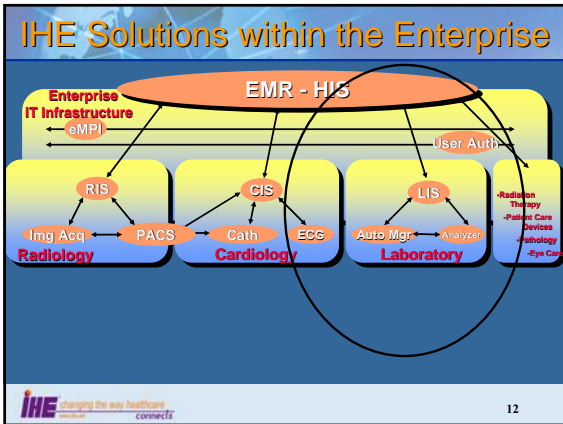


- ~85% of stress tests are multi-modality (ECG + imaging)
- ~0% of current architectures manage ECG and imaging workflow and results in an integrated manner
- Poor adherence to ACC/ASNC nuclear image display requirements

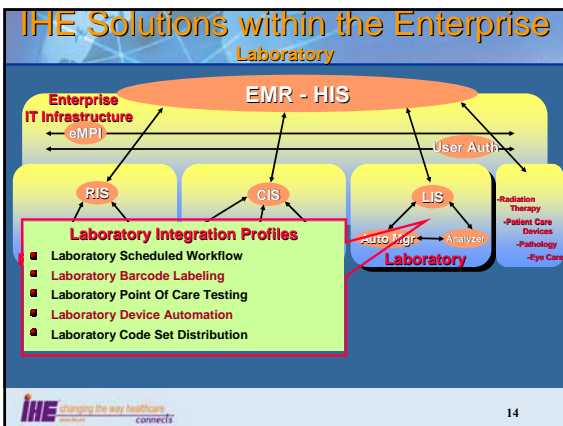
IHE Stress Testing Profile and IHE Nuclear Medicine Image Profile

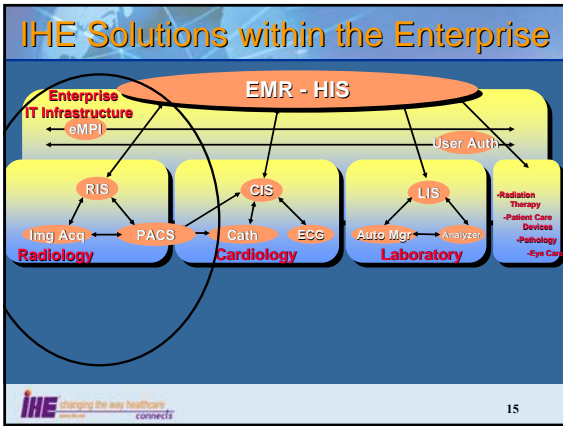

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- ### Laboratory Scheduled Workflow - Value Proposition
- **A comprehensive workflow approach**
 - Address specimen linkage
 - most lab specialties: Blood gases, Chemistry, Hematology, Immunology, Laboratory, Microbiology, Mycobacteriology, Mycology, Serology, Toxicology, Virology.
 - **Provides workflow improvement**
 - Increases continuity and integrity of clinical data
 - Decreases user need for manual tasks.
 - **Spans ordering, conformity of specimens, lab automation, results delivery.**
 - Externally placed order with identified specimens
 - Externally placed order with specimens unidentified or to be collected by the laboratory
 - Internally placed order with specimens identified by third party or collected by the laboratory
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Scheduled Workflow & patient Info reconciliation

Backbone of IHE Radiology:

- Integrates Registration, Scheduling, Acquisition Workflow and Image Content
- Preserve Order Continuity, improve Demographic Integrity, synchronized Worklists
- Reliable Storage, Improve Order Tracking
- Reduce Integration Effort at Site
- Combines use of HL7 and DICOM standards

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IHE Solutions within the Enterprise

Radiology

Enterprise IT Infrastructure
eMPI

EMR - HIS

User Auth

RIS
Img Acq
PACS
Radiology

CIS
Cath
ECC
Cardiology

LIS
Auto Mgr
Analyzer
Laboratory

Radiation Therapy
Patient Care Devices
Pathology
Eye Care

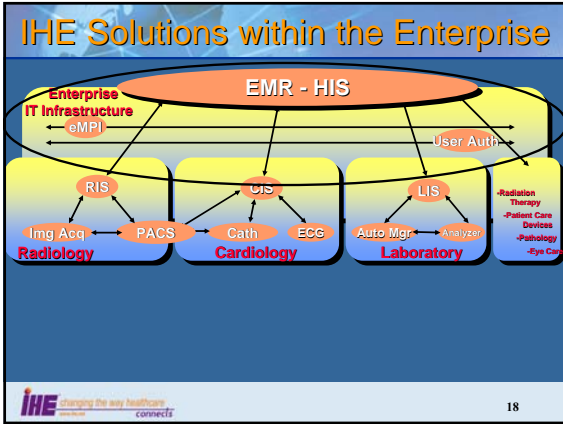
Radiology Integration Profiles

- Radiology Scheduled Workflow
- Patient Information Reconciliation
- Access to Radiology Information
- Portable Data for Imaging
- Consistent Presentation of Images
- Key Image Note
- Presentation of Grouped Procedures
- Evidence Documents
- Audit trail and Node Authentication (Rad option)
- Teaching Files and Clinical Trials Export
- Post-processing Workflow
- Reporting Workflow
- Charge Posting
- Simple Image and Numeric Reports
- Media Import Reconciliation Workflow

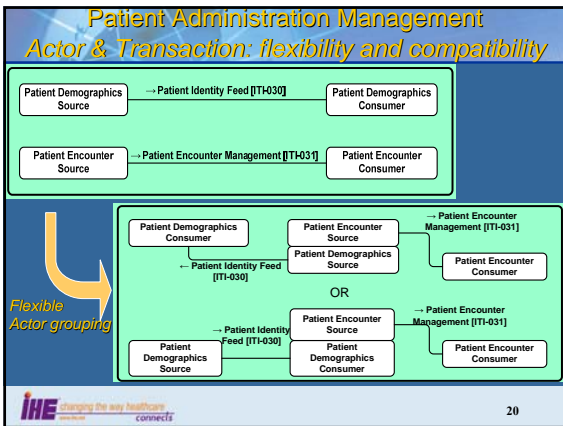
How to use IHE ?
→ IHE Radiology Handbook

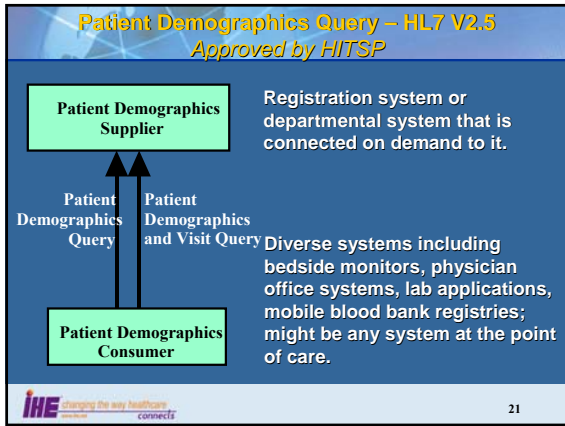
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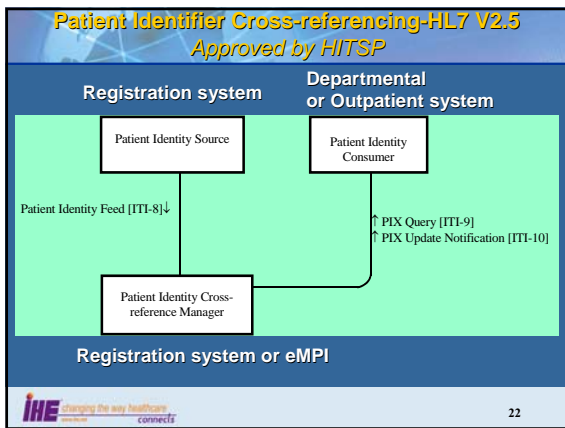
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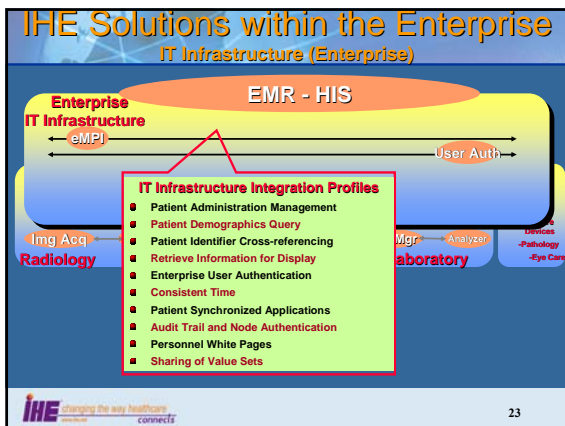


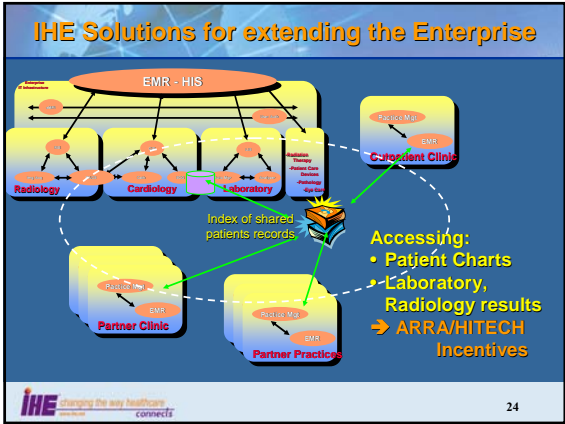
- ### Patient Administration Mgt (PAM)
- CCHIT plan for 2010
- Coordinates exchange of patient registrations, updates, and movements for all clinical areas
 - Information may be received and processed by consuming applications in any clinical domain
 - Optionally allows unambiguous updating of historic patient movement events
 - Demographic and encounter tracking works in both inpatient and ambulatory care settings
 - Standardizes on HL7 V2.5 and its conformance structures
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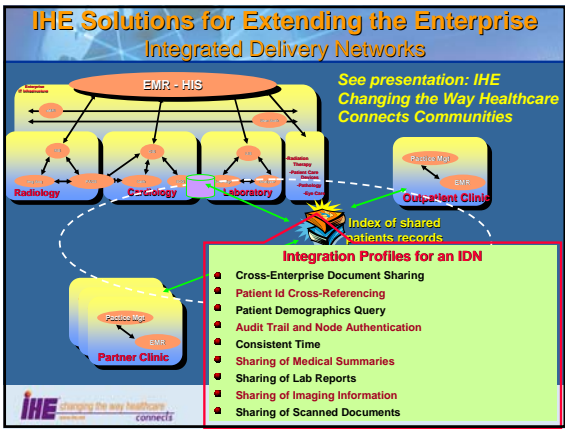












How can I participate?

As a Provider or Vendor Contributor

- Offer Clinical Use Case Input to Drive IHE Profile Development
- Become a member of relevant domain's Planning or Technical Committees
- Become a member of relevant Regional/National Committees
- Help to shape IHE's future direction

As a Vendor Participant

- Respond to Public Comments of Domain Supplements
- Attend the June Educational Workshop
- Participate in Connect-a-thons and Demonstrations

As a Provider/Consultant Participant

- Respond to Public Comments of Domain Supplements
- Attend the June Educational Workshop
- Attend Demonstrations and include IHE Integration Profiles in your RFPs and Integration Projects.

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What can you do?

- These Profiles are real specifications implemented by products in this Interoperability Showcase
- Learn about IHE, www.ihe.net
- Insist on relevant IHE profiles compliance in your RFPs and contract documents:
 - Select Integration Profiles, and Appropriate Actor(s)
 - **Ask vendors for their products "IHE Integration Statements".**
- Need more interoperability ?
 - Contribute to IHE Committees

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IHE Web site: www.IHE.net

- **Frequently Asked Questions**
- **Integration Profiles in Technical Frameworks:**
See Volume 1 of each TF for Use cases
 - Cardiology
 - Eye Care
 - IT Infrastructure
 - Laboratory
 - Patient Care Coordination
 - Patient Care Devices
 - Pathology
 - Pharmacy
 - Quality
 - Radiation Oncology
 - Radiology
- **Connectathon Result and Vendor Products Integration Statements:** www.ihe.net/Connectathon

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WWW.IHE.NET
