



User IHE Implementation Experiences

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MONTEFIORE



Outline

- Thames Valley Hospital
Planning Partnership, London, Ontario
- Montefiore Medical Center, NY USA

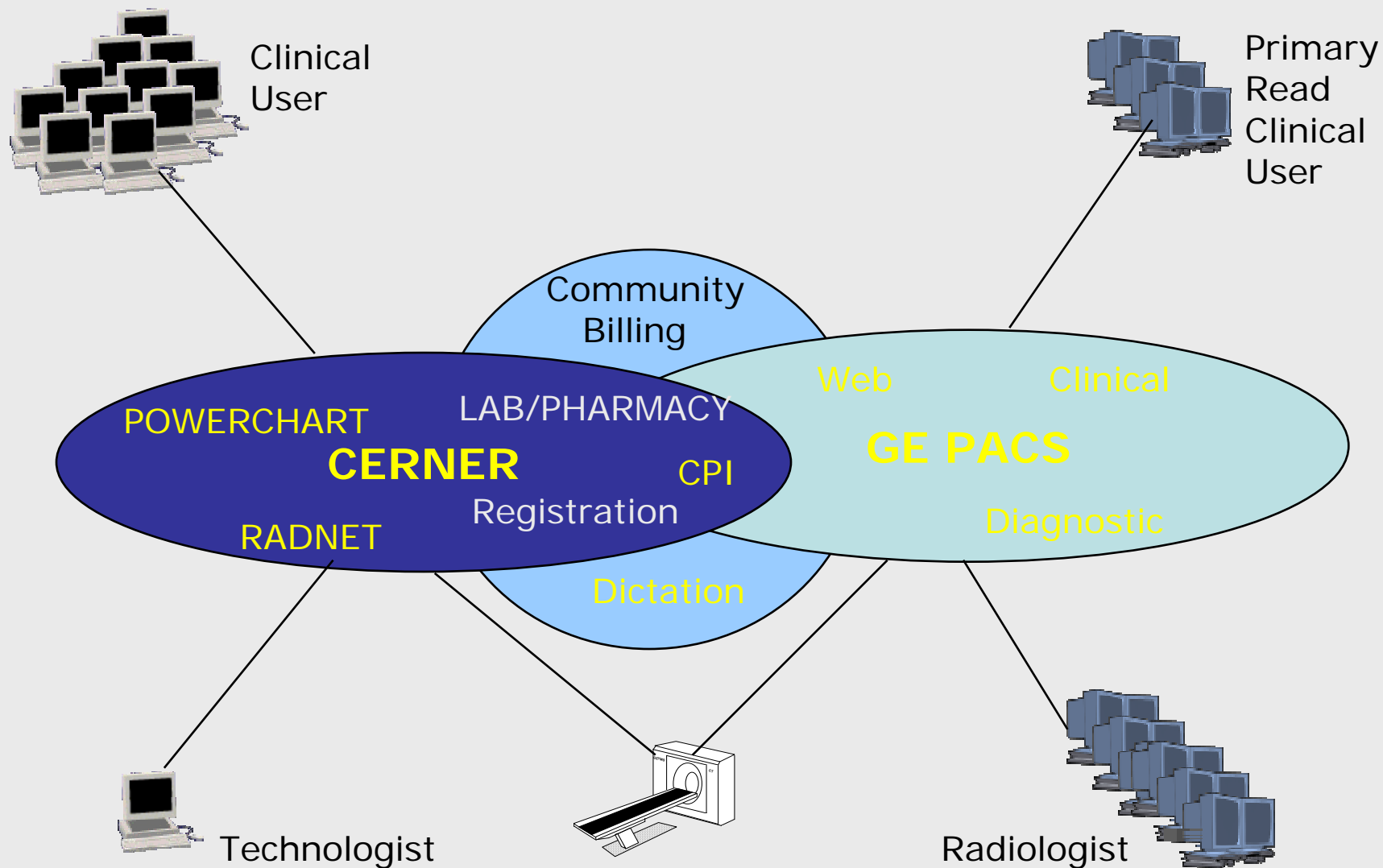
Thames Valley Hospital Planning Partnership

- 8 Corporations
 - 2 – London (50% volume)
 - 6 Community Facilities
- 750,000 Radiology exams annually
- >200 DICOM Connections
- ~55 Radiologists, ~10 Residents and Fellows, 8 NucMed Physicians
- Infoway Sponsored Project to create the South Western Ontario Image Repository

Project Vision

Improved **electronic access** to Radiology images and reports to increase **quality** and **timeliness** of patient care through collaborative regional partnerships and to enhance the **speed** of treatment decisions.

Clinical Architecture



Goal: Seamless Integration

Benefits of IHE

- Improve Quality and Patient Safety
 - Providing for positive transfer of information using non-proprietary methods
 - Eliminating manual data entry
- Improve the efficiency and effectiveness of clinical practice by:
 - Improved Information Flow
 - Advanced Multi-System Functions
 - Eliminate manual steps from common processes
- Systems Integration
 - Enabling the sharing of health information locally, regionally and nationally

Alignment of IHE and Project Vision

CDI Vision

Improved **electronic access** to Radiology images and reports to increase **quality** and **timeliness** of patient care through **collaborative regional** partnerships and to enhance the **speed** of treatment decisions.



IHE Benefits

Improve **Quality** and Patient Safety

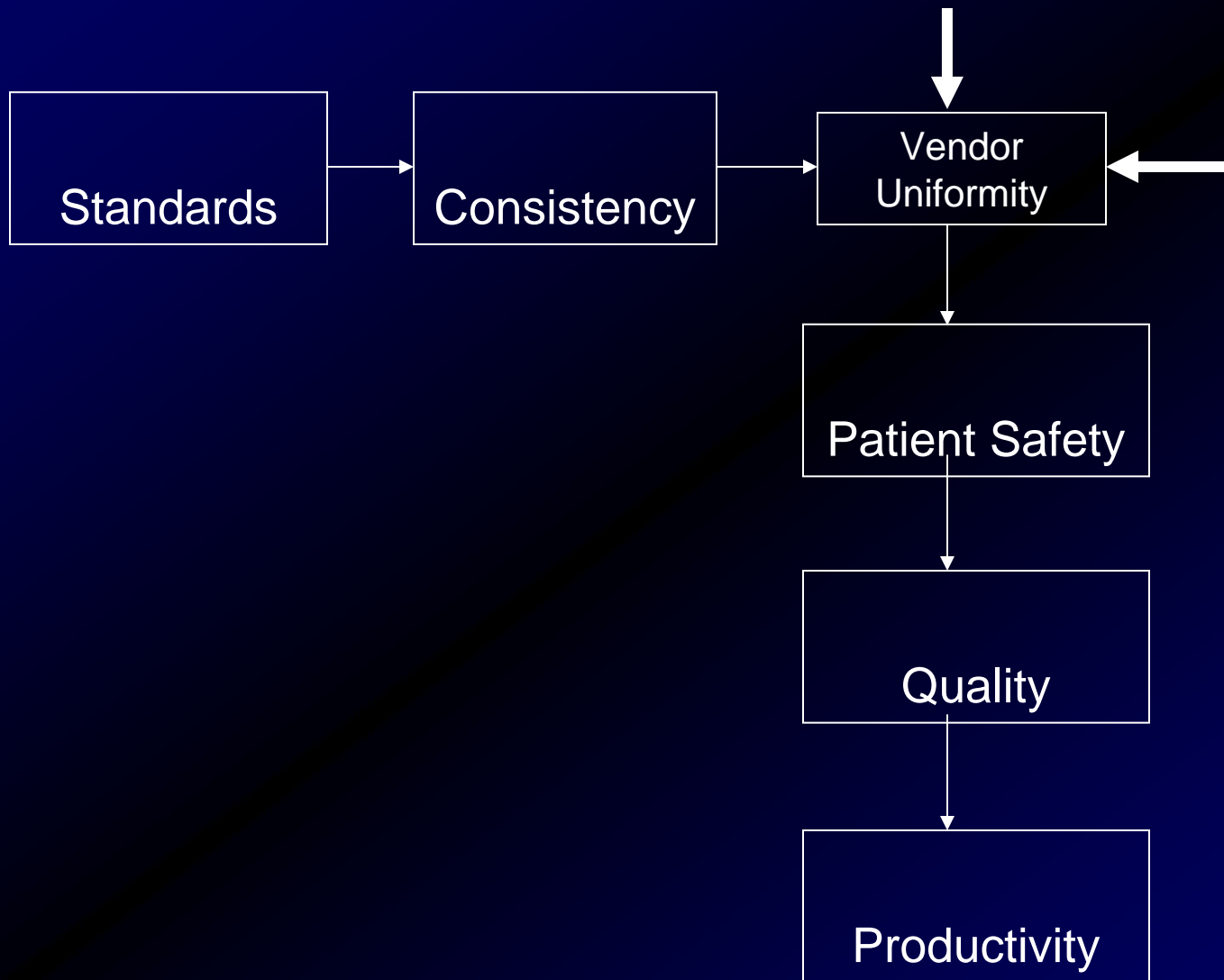
- Providing for positive transfer of information
- Eliminating manual data entry

Improve **Efficiency**

- Eliminate manual steps from common processes

Enable **sharing** of health information locally, **regionally** and nationally

Drivers behind IHE Implementation

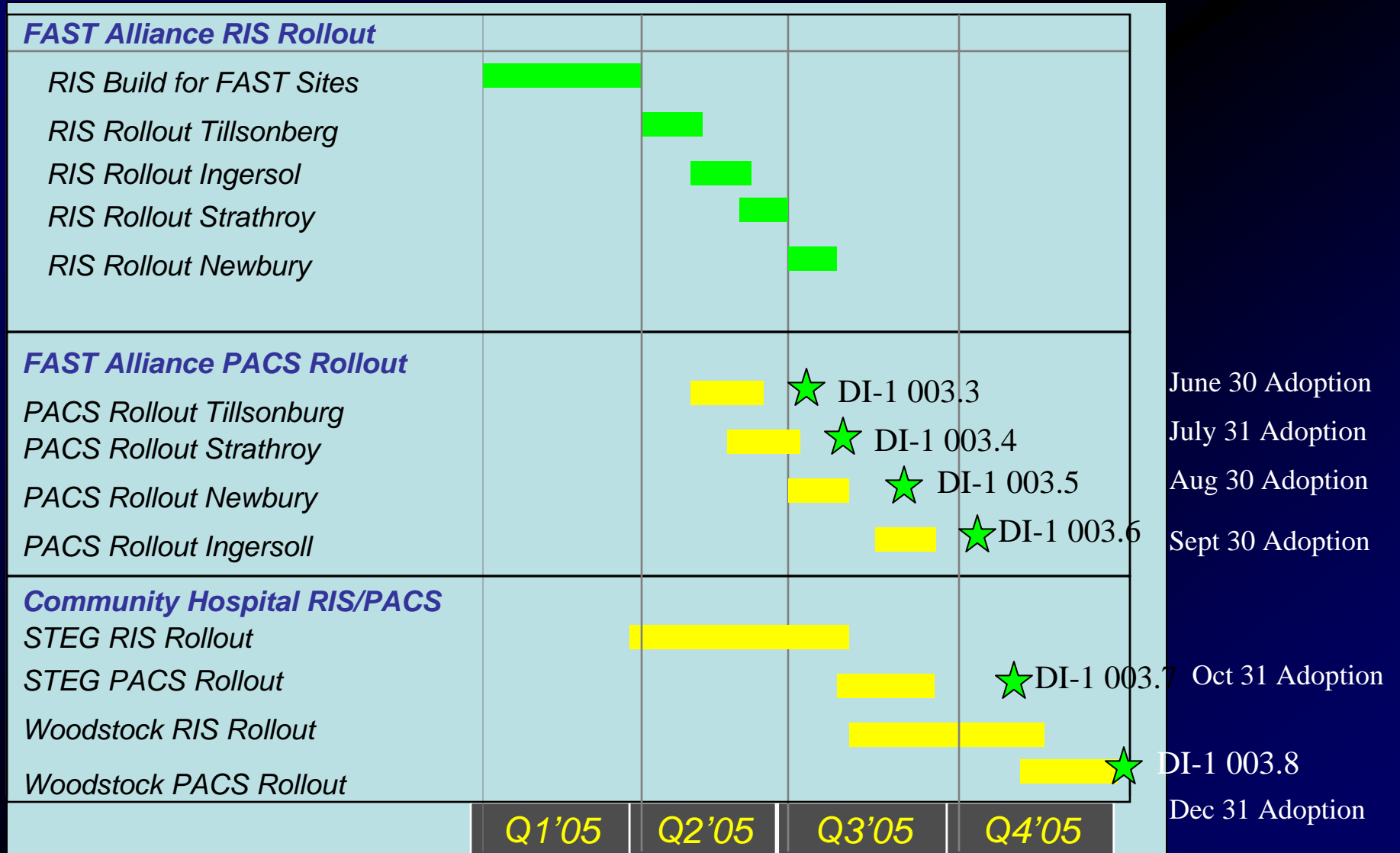


Replication of Effort

- After one site is properly implemented
- Additional sites are configured, trained and brought live in a rapid fashion.
- IHE functionality is very scalable



Rapid Roll-out of Successive Sites



Profiles Implemented

- Scheduled Workflow (SWF)
- Patient Information Reconciliation (PIR)
- Consistent Presentation of Images (CPI)
- Charge Posting (CHG)

The more effort invested in
examining, optimizing and
streamlining workflow for IHE,
The better the final result

Actors + Transactions  Expected
Workflow

Who owns it?

Non-IHE Equipment

- Need coping strategies
- Need a clear plan of action for each device

Take Home Tip

Salvation = (SWF + PIR)

Montefiore Medical Center

- 1,400 bed tertiary care university hospital
- 2 major inpatient facilities 5 Km (3 miles)
- Multiple off site clinics, practices and offices
- Major data center 30 miles away

Montefiore Radiology

- 450,000 exams annually
- 2 major inpatient facilities
- 8 outpatient facilities
- 11 CT, 7 MRs, 14 US, 23 CR, 5 DR
- 50 attendings & 50 residents & fellows



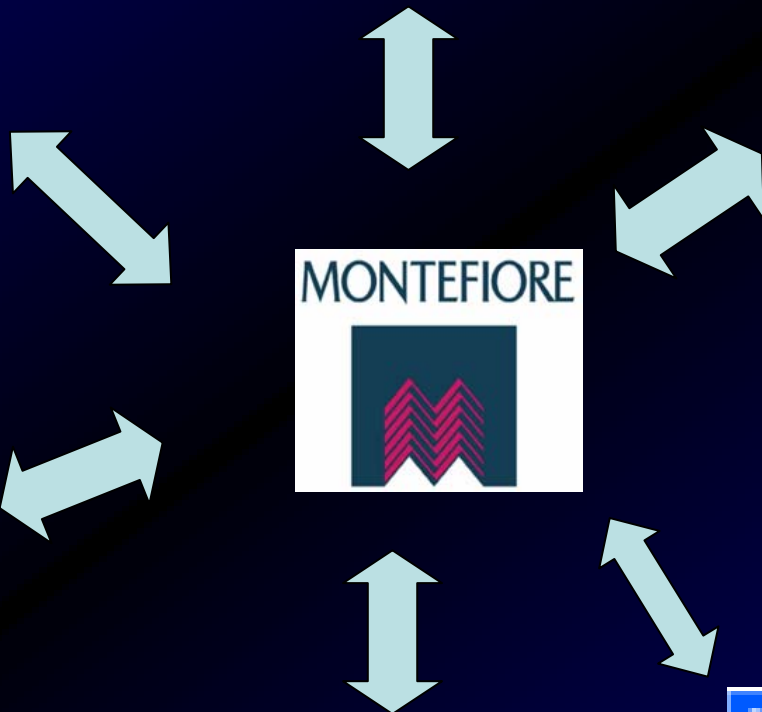
SIEMENS

AGFA *Agfa*



PHILIPS

 **Dynamic Imaging**



First Wave

IHE Radiology Profiles

- Scheduled Workflow (SWF)
- Patient Information Reconciliation (PIR)
- Simple Image & Numeric Reports (SINR)
- Access to Radiology Information (ARI)
- Consistent Presentation of Images (CPI)
- Presentation of Grouped Procedures (PGP)

First Wave IHE ITI Profile

- Consistent Time (CT)

Reduced Errors with IHE

- Reduced errors
 - Unified usage of worklists rather than free typing of patient names and identifiers
 - IHE storage commitment step reduces risk of examinations not being archived

Reduced Errors with IHE

- Patient information reconciliation IHE profile enabled us to correct human errors and the problems regarding
 - unknown patient
 - missing orders
- Performed procedure step allows real-time feedback to orders & scheduling system

The Human Factor

- People make mistakes - that is human nature
- IHE helps us avoid, catch & easily correct those errors

Patient Safety

- The more standardization between vendor transactions, the better the patient's interests are served
- Standardizing display (CPI), document exchange formats (CDA), access to all patient information across multiple systems
- Standardizing audit trails
- Consistent Time

Patient Safety

- System authentication and security
- Cross enterprise or even inter-enterprise patient data exchange greatly enhances patient care

Improved Workflow & Throughput

Better, Faster & More Cost
Efficient

Summary

- Thames Valley Hospital
Planning Partnership, London, Ontario
- Montefiore Medical Center, NY USA