

# IHE-J 2005の概要 +

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IHE-J 技術検討委員会





# IHE-J2005 ベンダーワークショップ

- 9月8日(今日)
  - IHEおよびIHE-J
    - オリエンテーション、IHE-J2005概要
    - IHE入門
    - IHEに期待すること
  - コネクタソン、MESA、今後のスケジュール
  - テクニカルフレームワーク解説
    - 臨床検査部門
    - 放射線部門 PDI
    - ITインフラストラクチャー
- 9月9日(明日)
  - テクニカルフレームワーク解説
    - 放射線部門 ワークフロー系、コンテンツ系、レポート系、CPI
    - 循環器部門
  - 日本版拡張の解説
    - JAHISデータ交換規約
    - JJ1017 V3.0



# IHE-J 2005 の対象ドメイン

- Radiology (放射線部門)
  - 14 統合プロファイル
- Laboratory (臨床検査部門)
  - 5 統合プロファイル
- IT Infrastructure (ITインフラ)
  - 13 統合プロファイル
- Cardiology (循環器部門)
  - 5 統合プロファイル

# 放射線部門の統合プロフィール

## Patient Information Reconciliation

Reconcile worklists, status, and data objects for unknown patients and demographics changes

## Scheduled Workflow

Admit, Order, Schedule

Manage worklists, track status, perform & notify acquisition related step,

create, store, manage, retrieve & use images

## Presentation of Grouped Procs

Manage individual procedure image subsets from a multi-procedure acquisition for viewing & reporting

## Post-Processing Workflow

Manage worklists, track status, perform & notify image processing & CAD steps

## Reporting Workflow

Manage worklists, track status, perform & notify diagnostic reporting steps

## Charge Posting

Collect and post timely billable procedure details

## Teaching Files & Clinical Trials Export

**NEW**

## NM Image

Create, store, manage, retrieve & use NM image objects

## Consistent Presentation of Images

Manage, retrieve & use objects for hardcopy and softcopy grayscale presentation states

## Evidence Documents

Manage, retrieve & use objects to record study evidence

## Key Image Notes

Create, store, manage, retrieve & use objects to flag significant images

## Simple Image and Numeric Reports

Manage simple diagnostic reports with optional images, measurements

**NEW**

XDS for Imaging - Sharing of Imaging Information across health enterprises

Access to Radiology Information - Consistent access to images and reports

Portable Data for Imaging - Consistent access to images and reports on CD Media

**Modified**

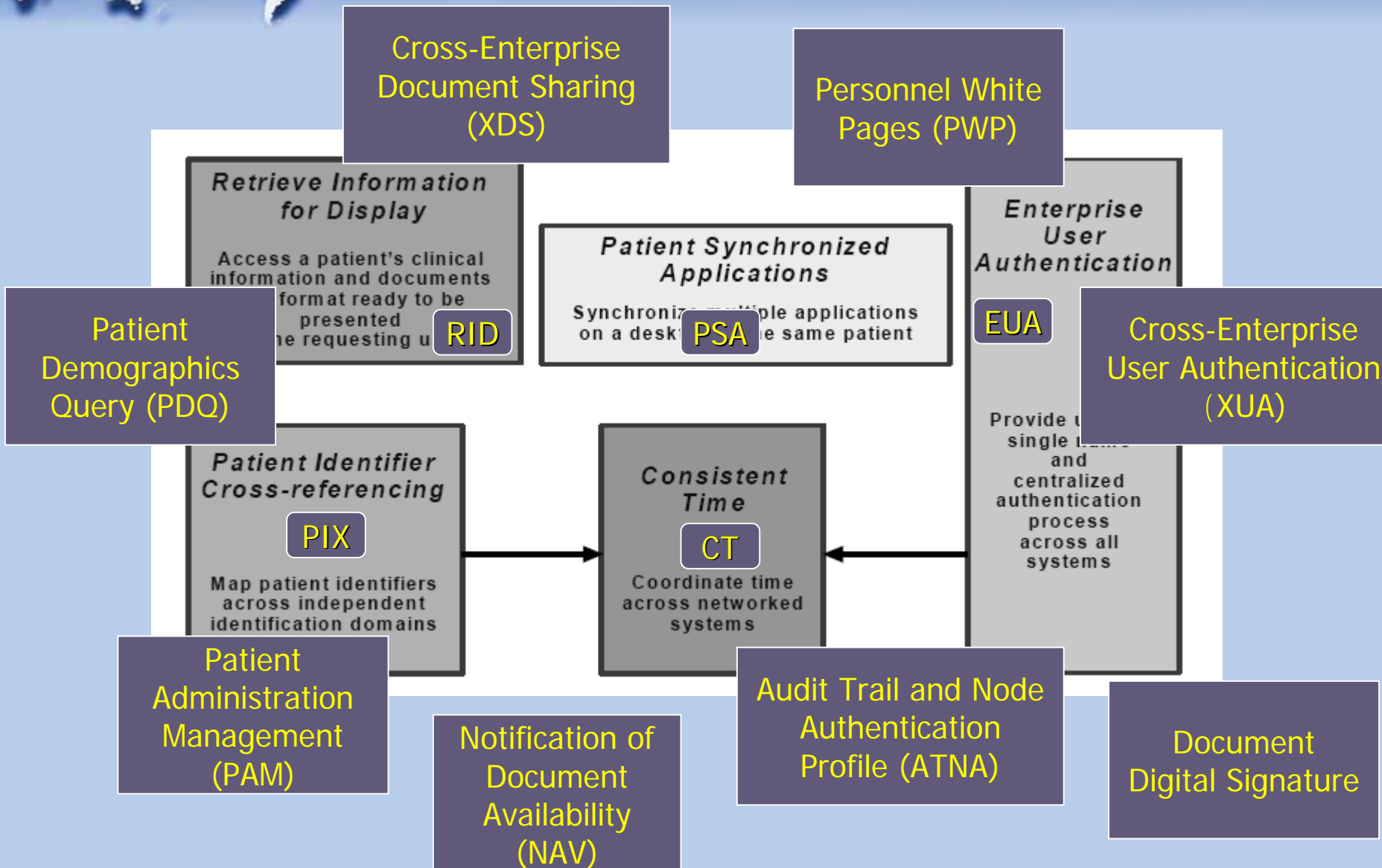
ITI ATNA – Radiology Option (Replaces Basic Security)



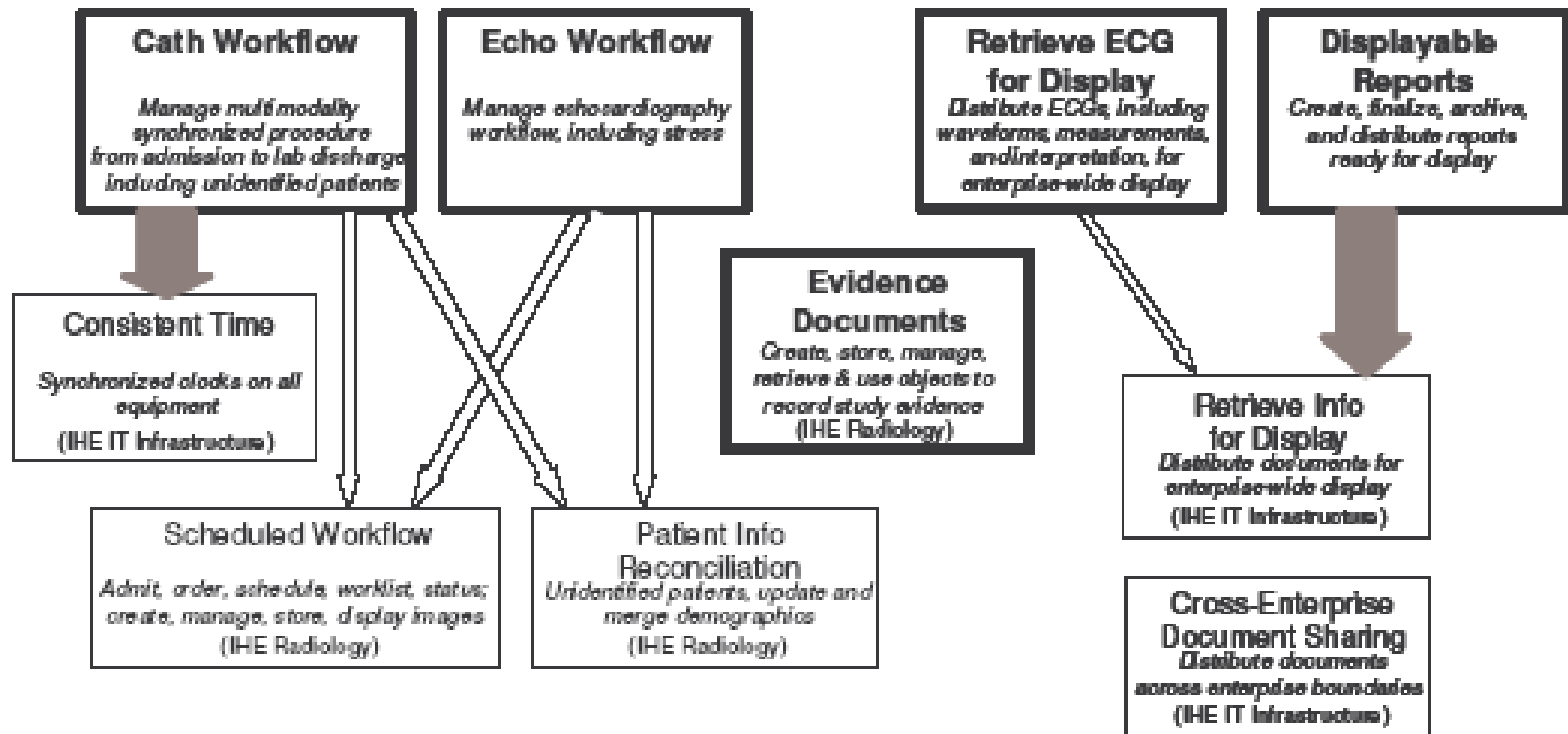
# 臨床検査部門の統合プロフィール

- 5つのプロフィール
  - Laboratory Scheduled Workflow (LSWF)
  - Laboratory Information Reconciliation (LIR)
  - Laboratory Point Of Care Testing (LPOCT)
  - Laboratory Device Automation (LDA)
  - Laboratory Code Set Distribution (LCSD)

# ITインフラストラクチャの統合プロフィール



# 循環器部門の統合プロフィール





# IHE の歴史 – そのルーツは

- 1982-1992: ACR-NEMA Image Standards
  - Despite ten years of developments, standards were not widely implemented
- 1992: Birth of DICOM marked with public demonstration at RSNA annual meeting
  - Galvanizes imaging community and industry support of standard



# DICOM デモ, RSNA '92





# DICOM デモンストレーションの結果

- Prove that public demonstrations can drive adoption of standards
- Establish an alliance between medical professionals, research community and industry
- Set precedent for substantive cooperation on standards adoption
  - Connectathon, Central Test Node



# 画像だけでは十分ではない!

- Several years of DICOM demonstrations help make it worldwide imaging standard
- Mid-1990s: awareness grows that exchanging images is not enough
- Need to manage patient information effectively, streamline workflows, provide access to prior studies, etc.
- Need to exchange information effectively throughout the enterprise



# 標準規格の動き

- DICOM adding workflow services (MWL, MPPS), new objects (SR)
- HL7 releasing successive 2.x versions
- Coalitions to implement: Andover Working Group, CorbaMed
- Adoption spotty, inconsistent
- Cost of integration high, expectations of success low



# 1997-1998: なにをすべきか

- RSNA calls together industry and SDO leaders for a series of meetings to try to establish momentum and direction
- Limited success in getting a coalition to stick: Too big a problem to get arms around?



# *"SkyBird" Meetings*

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# IHE のはじまり

- Alliance formed between RSNA and HIMSS
  - Work together toward coordinated implementation of standards in our domains
  - Text and images working together
- 3-5 year project
  - Develop specs for demonstrations and put in public domain



# *IHE Comes Together*

- Oct. '98: Discussion gels into industry committee to prepare spec for demo
  - Start planning for Connectathon in Oct. '99 and Demos at RSNA '99 and HIMSS 2000
  - Demonstration to show what could be done with established standards
  - Begin by agreeing upon process steps in a typical patient encounter





# IHE Comes Together

## HIMSS/RSNA Workshop Integration of the Health Care Enterprise (IHE)

October 13-14, 1998  
Chicago, IL - O'Hare Courtyard by Marriott

### COMPANIES:

1. AGFA
2. Cerner
3. Eclipsys
4. Fuji
5. GE
6. HBOC
7. Hewlett-Packard
8. IDX
9. Merge
10. Philips
11. Picker
12. SMS
13. Siemens
14. Staff
15. RSNA ECC Committee

### PARTICIPANTS:

Gerish Hagan, Mauricio Londono  
Paul Helmuth  
Kendall Stanley  
John Strauss  
Charles Parisot, Steve Roehm  
Beth Friedman, Ron Gesell  
Jack Harrington, Nancy Hinckley  
Debra Stenner, Ron Keen  
Jay Gaeta  
Yasser Alsafadi, Keas Smedema  
Tim Cramer  
Jack Toner  
Nicholas Wirsz  
John Page, HIMSS;  
Chris Carr, RSNA;  
Steve Dr w, RSNA;  
Del Stauffer, RSNA  
Robert Greenes, MD  
Gilbert Jost, MD



# 最初のIHEデモンストレーション

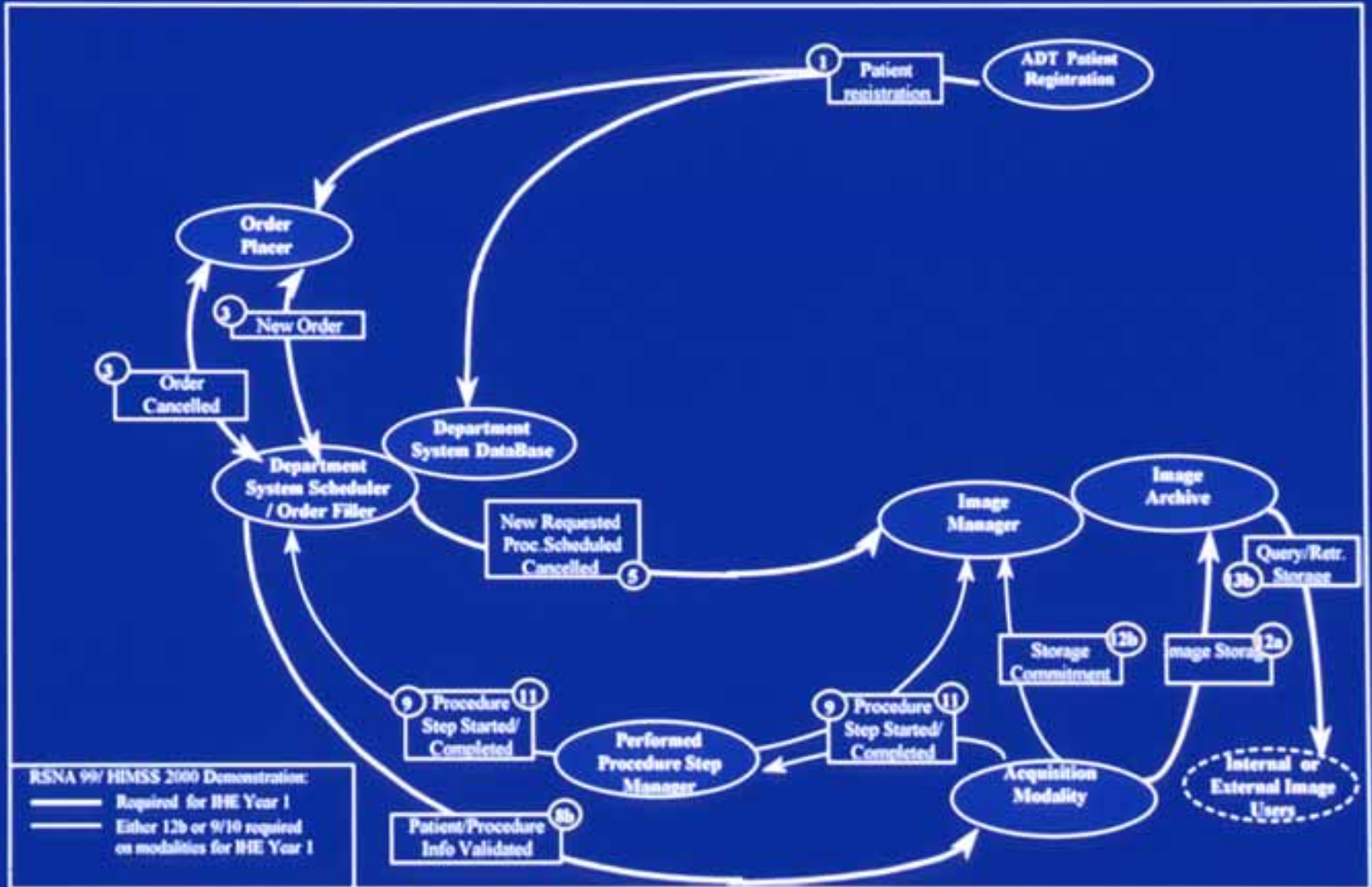
- Based on one proto-Integration Profile:  
Radiology Scheduled Workflow
- 24 vendors demonstrating 47 systems
- Oct. '99 first Connectathon
- RSNA '99 first IHE demo

# デモンストレーション RSNA '99



# 最初の統合プロフィール SWF

RSNA 99-HIMSS 2000 - Year One IHE System Transactions





# IHE の成長

- Participation
  - Year 1: 24 vendors, 47 systems
  - Year 2: 33 vendors, 68 systems . . .
  - Year 6: 43 vendors, 110 systems
- Technical Scope
  - Year 1: One Integration Profile
  - Year 2: Seven Integration Profiles
  - Year 6: 36 Integration Profiles



# IHE の成長

DOMAINS

RADIOLOGY: 1998

REGIONS

IT INFRASTRUCTURE: 2002

LABORATORY: 2003

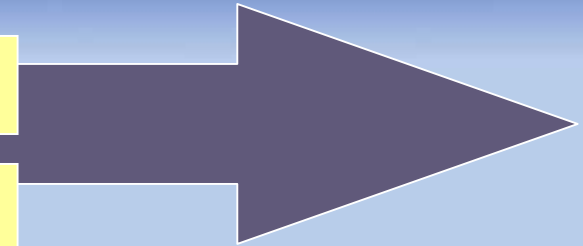
CARDIOLOGY: 2004

NUCLEAR MEDICINE: 2004

EYECARE: 2005

RADIATION ONCOLOGY: 2005

PATIENT CARE COORD: 2005





# IHE の成長

## REGIONS

North  
America  
1998

Canada

Europe  
2000

France

Italy

Norway

Spain

Nether-  
lands

UK

Asia-  
Oceania  
2001

Japan

Korea

Taiwan

China



# HIMSS 2005



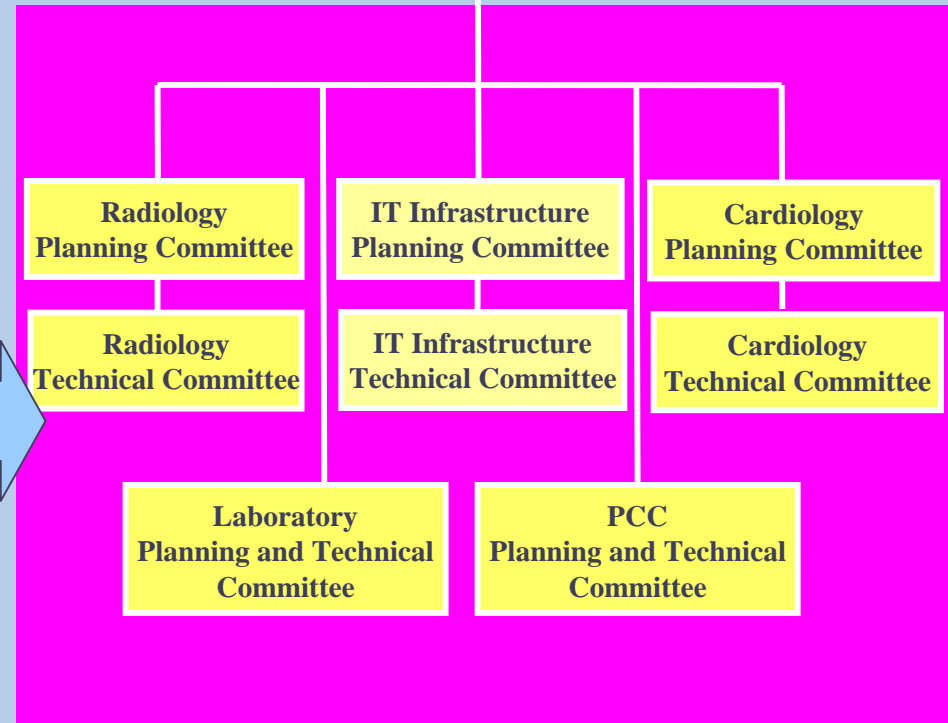
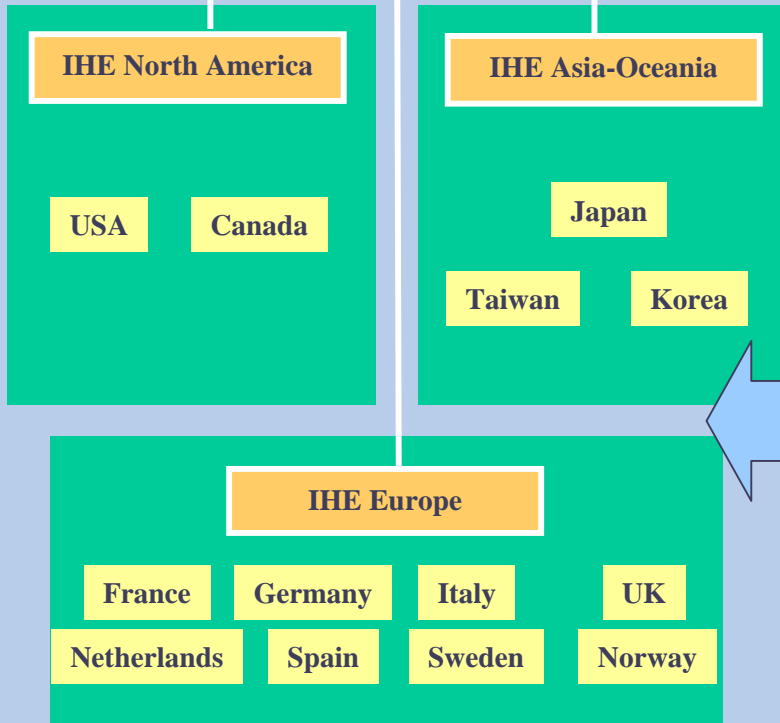


# IHEの組織構造

IHE (International) Strategic Development Committee

Regional Deployment

Global Development



Professional Societies / Sponsors

- |       |       |         |         |     |       |           |
|-------|-------|---------|---------|-----|-------|-----------|
| ACC   | GMSIH | COCIR   | SIRM    | ESC | JAHIS | METI-MLHW |
| HIMSS | SFR   | EAR-ECR | BIR     |     | JIRA  | MEDIS-DC  |
| RSNA  | SFIL  | DRG     | EuroRec |     | JRS   | JAMI      |

Contributing and participating Vendors



# IHE-J 2005 の日程

- 9/8,9           ベンダワークショップ
- 9/20           米MESAツールリリース
- 10/15          申し込み締め切り
- 11/?           日本版MESA? ツールリリース
- 11/16          参加ベンダワークショップ
- 12/25          MESAログ提出締め切り
- 1/30~2/3       コネクタソン(場所未定)
- 4/             JRC2006 デモンストレーション



Providers and Vendors  
Working Together to Deliver  
Interoperable Health Information Systems  
in the Enterprise  
and Across Care Settings

WWW.IHE.NET

ご静聴ありがとうございました

何か、ご質問は？