

IHE-J 病理細胞診 WG 活動報告・予定 2006—2009

IHE-J 病理細胞診 WG

2006年度活動

1. 海外との連携

1月 米国 DICOM WG26 HL7 SIG会合

6月 スペイン WG26会合

7月 ハンガリー 欧州IHE-E USE CASE会合

8月 WG6へDICOM提案

米国 WG26 会合(APIII)バンクーバー

11月 米国 WG26 シカゴ CAP

3. 広報活動

日本病理学会、日本臨床細胞学会、日本テレパソロジー研究会

発表 日本医療情報学会 CARS2006 日本テレパソロジー研究会

IHE-J 病理細胞診 WG

2006年

2007年

2008年

2009年

組織診 SWF
DICOM
HL7
コネクタソン
実装デモ

細胞診

WSI (VM) 検討

剖検 検討
その他TMA

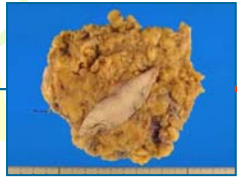
皮膚科
TB

2006/8/1

Image DICOM file

Patient

Sp1



Sp1Ba



Sp1BaS1



Sp1BaS2



Sp1Bb



Sp1BbS1



Requested Procedure 1

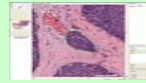
Requested Procedure 2

Study 1 : Specimen 1 (naevus 1)

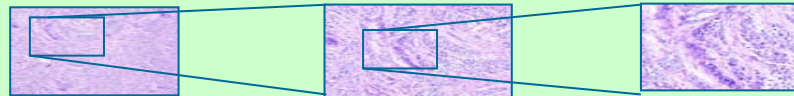
Series 1 : Sp1Se1: gross image



Series 2 : Sp1BaSI1Se1: large images



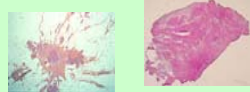
Series 3 : Sp1BaSI1Se2 : still images



Series 4 : Sp1BaSI1Se3 : large images



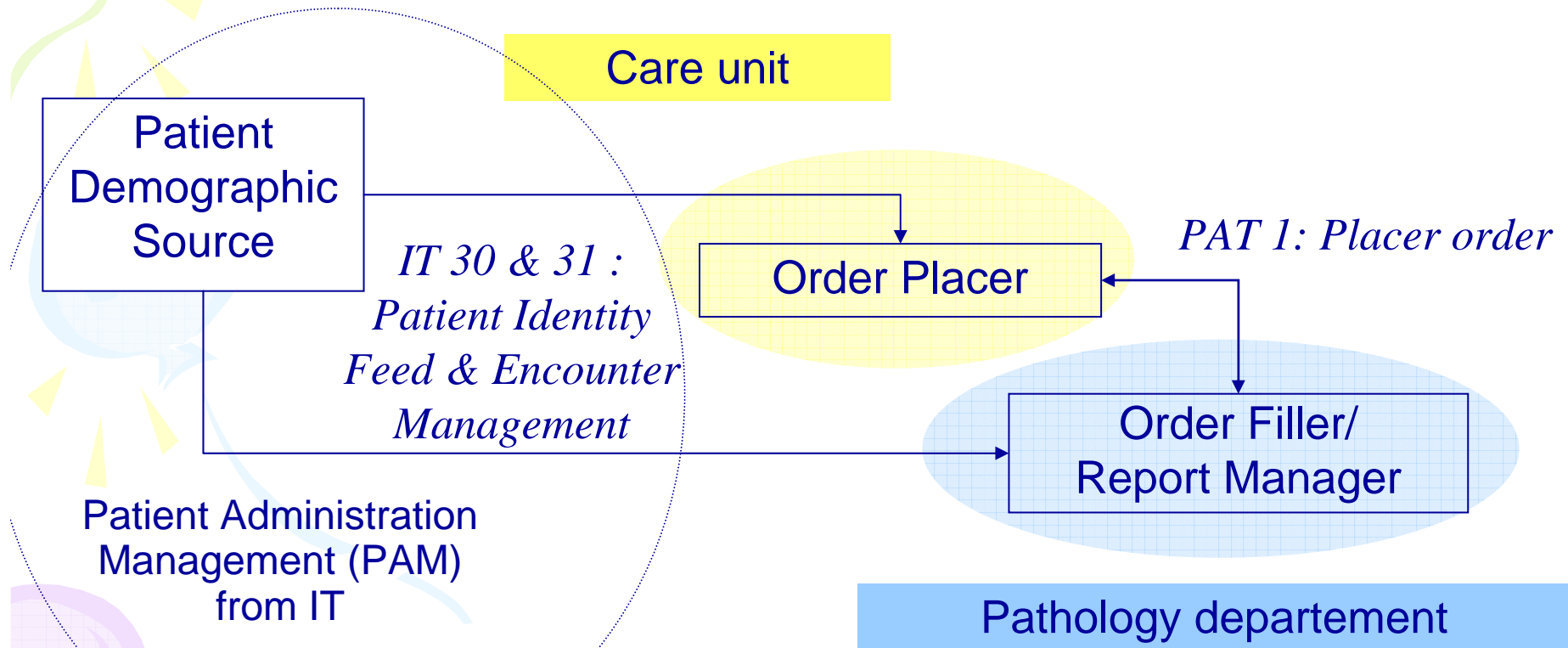
Series 5 : Sp1BbSI1Se1 : still images



Study 2 : Specimen 2 (naevus 2)

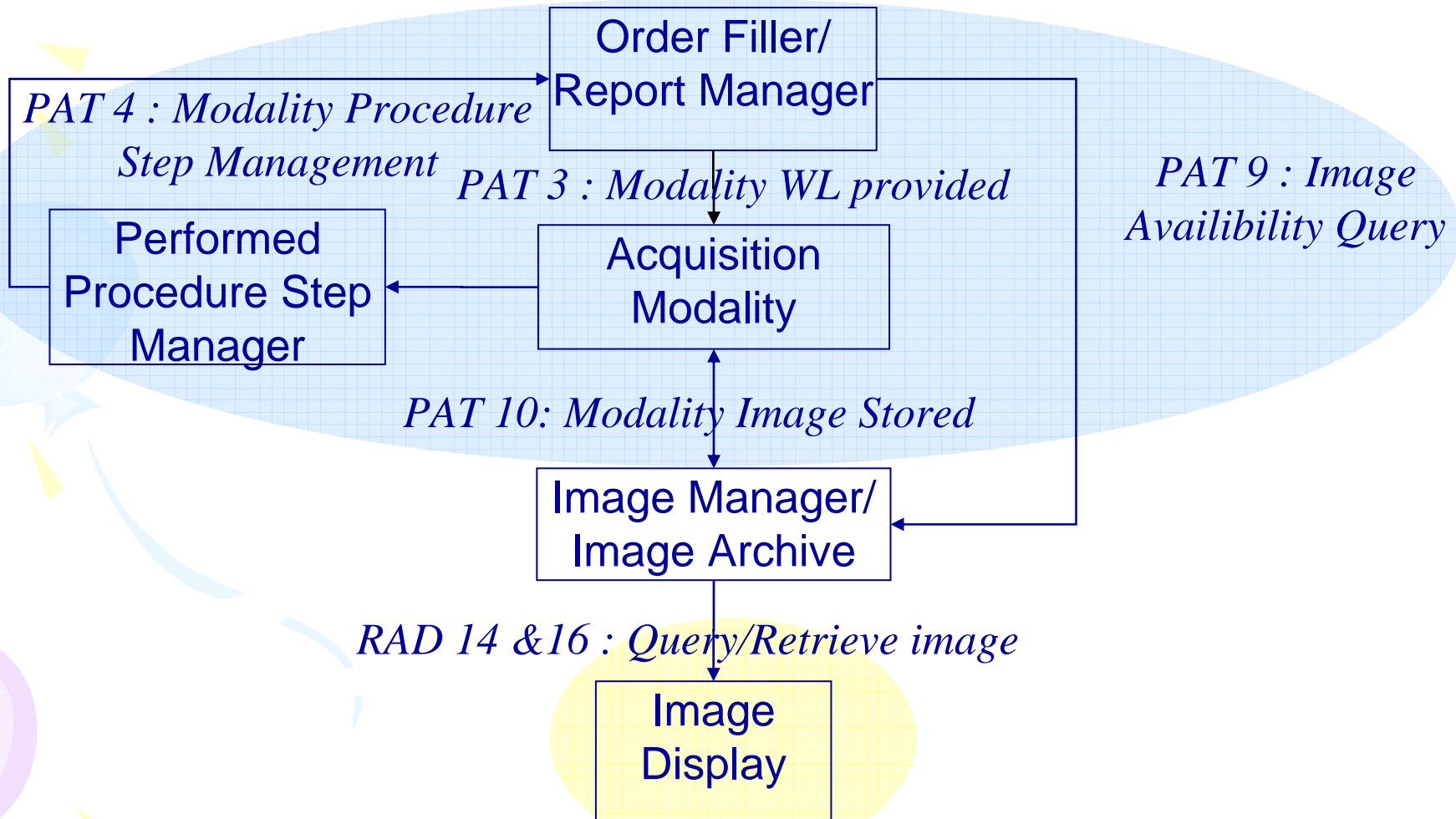
2006/8/1

Pathology Workflow : Specimen collection and pathology study order



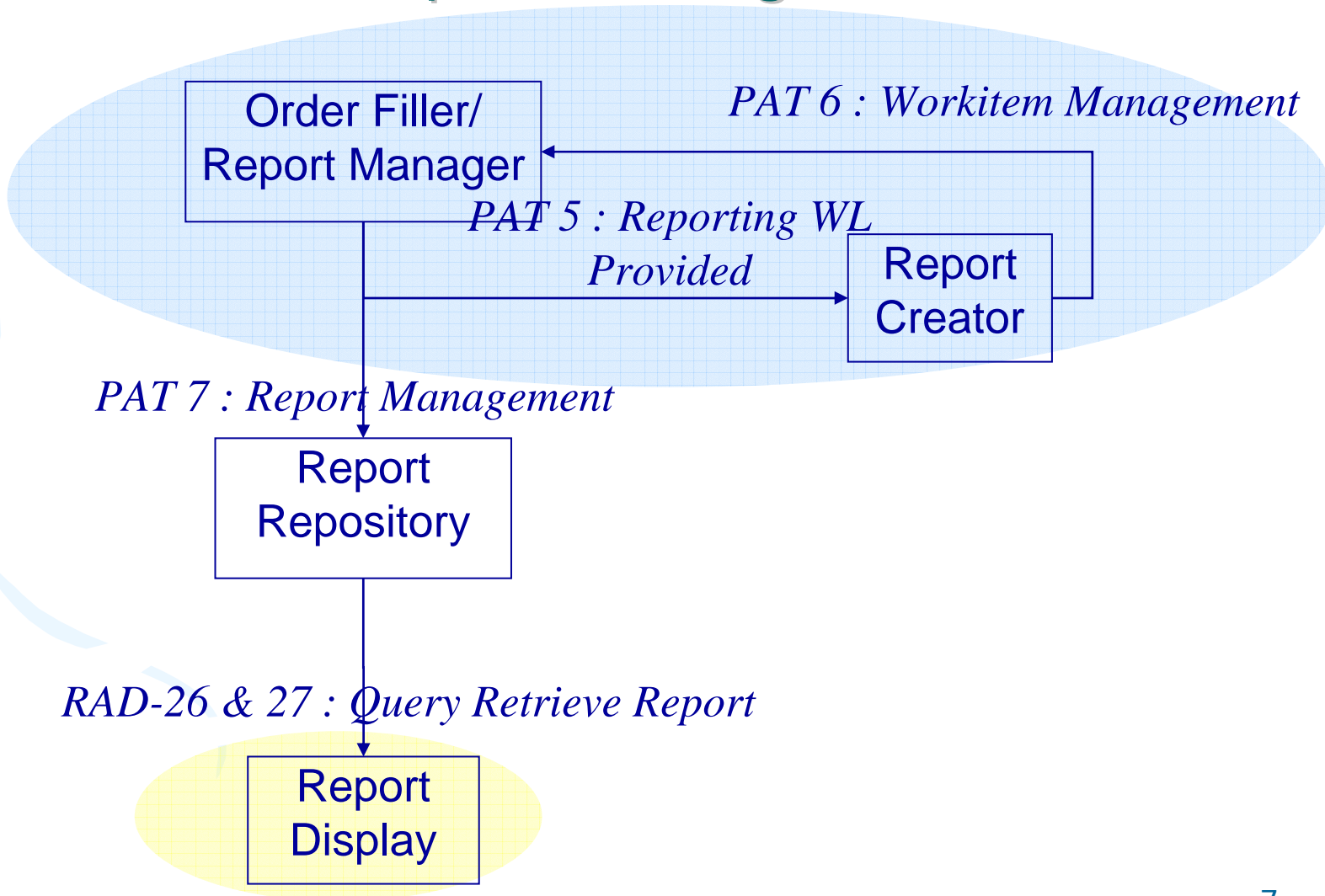
Pathology Workflow :

Blocks and slides management / Image acquisition



Pathology Workflow

Report editing



Microscopic ROI Image	Proposal	VL	DICOM tag
Facility	M	Name of Facility Institution ID	(0008,0080)
PATIENT			
Patient	M	Patient's Name	(0010,0010)
	M	Patient ID	(0010,0020)
	M	Patient's Birth Date	(0010,0030)
	M	Patient's Sex	(0010,0040)
STUDY			
Accession	M	Unique identifier for the Study, Accession Number	(0020,000D)
		LIS assigned number, use DICOM acc num attribute	(0020,0010)
		Date sample obtained clinically	
		Time sample obtained clinically	
	O	Date Sample received in Pathology dept	(0008,0020)
	Time sample received in Pathology dept	(0008,0030)	
SERIES			
Part		Series UID	
	M	Accession Number	? Need to repeat (0040,050A)
	M	Specimen Sequence	Specimen Sequence (0040,0550)
	M	Part ID	Identifier A, B or 1, 2 etc (0040,0551)
	M	Name of Organ	Sequence of SNOMED Code and Local Code or (
		Collection Procedure	Biopsy, Operation, Smear,etc
Block	M(histology)	Block Number	Study Description (0008,1030)
		Fixation and processing	
		Description/localization	
Glass Slide	M	Slide Number	>Slide Identifier (0040,06FA)
	M	Stain Method	Series Description (0008,103E)
		Section Method	Parafine, Frozen, Stamp, etc.
		slide type, coverslip	
Other series stuff		Performing physician name	
	M	Operator's Name	Operators' Name (0008,1070)
	M	Operator's ID	Operator Identification Sequence (0008,1072)
	M	Observation Date	Acquisition Date (0008,0022)
		Observation Time	Acquisition Time (0008,0032)
	M	Modality	Modality (0008,0060)
		Manufacturer	Manufacturer (0008,0070)
		Station Name	Station Name (0008,1010)
IMAGE			
Image		Image UID	
		Magnification of Obj. Lens	Magnification
		NA of Obj. Lens	NA
		Illumination Method	BF, FL, PL (0022,0016)
		Light Source	Hal, Hg, Xe, LED, Laser
		Polarizer	Polarizer
		Excitation Filter	Excitation Filter
		Emission Filter	Emission Filter
	M	Image Number	Instance Number (0020,0013)
		Image Center Point Coordinates Sequence	Image Center Point Coordinates Sequence (0040,071A)
		>X Offset in Slide Coordinate System	>X Offset in Slide Coordinate System (0040,072A)
		>Y Offset in Slide Coordinate System	>Y Offset in Slide Coordinate System (0040,073A)
		>Z Offset in Slide Coordinate System	>Z Offset in Slide Coordinate System (0040,074A)
	M	Image Pixel Spacing	Image Pixel Spacing (0040,08D8)
	M	Number of PIXEL X	Rows (0028,0010)
	M	Number of PIXEL Y	Columns (0028,0011)
M	Compression	Lossy Image Compression (0028,2110)	
	Compression Ratio	Lossy Image Compression Ratio (0028,2112)	

2006/8/1

Gross Image of Organ
Facility

Proposal

VL

DICOM tag

M	Name of Facility	Institution ID	(0008,0080)
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Patient

M	Patient's Name	Patient's Name	(0010,0010)
M	Patient ID	Patient ID	(0010,0020)
M	Patient's Birth Date	Patient's Birth Date	(0010,0030)
M	Patient's Sex	Patient's Sex	(0010,0040)

Accession

	STUDY		
M	Accession Number	Study ID	(0020,0010)
M	Accession Date	Study Date	(0008,0020)
M	Accession Time	Study Time	(0008,0030)

Specimen

M	Specimen Accession Number	Specimen Accession Number	(0040,050A)
M	Specimen Sequence	Specimen Sequence	(0040,0550)
M	Specimen ID	>Specimen Identifier	(0040,0551)
M	Name of Organ		
	Collection Procedure	Biopsy, Operation, Smear,etc	

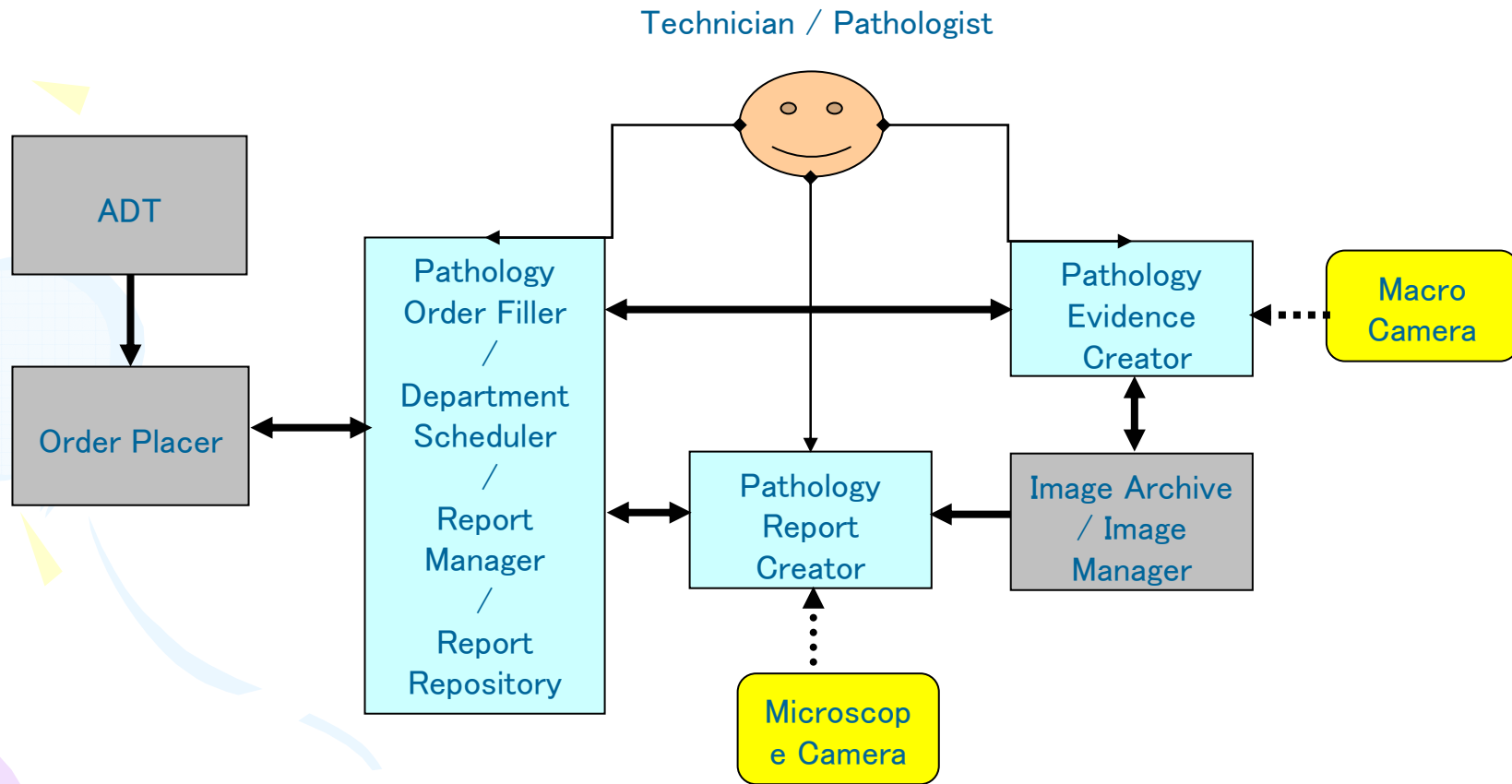
Image

	IMAGE		
M	Observer's Name	Operators' Name	(0008,1070)
M	Observer ID	Operator Identification Sequence	(0008,1072)
M	Observation Date	Acquisition Date	(0008,0022)
	Observation Time	Acquisition Time	(0008,0032)
M	Modality	Modality	(0008,0060)
	Manufacturer	Manufacturer	(0008,0070)
	Station Name	Station Name	(0008,1010)
M	Image Number	Instance Number	(0020,0013)
	Image Pixel Spacing	Image Pixel Spacing	(0040,08D8)
M	Number of PIXEL X	Rows	(0028,0010)
M	Number of PIXEL Y	Columns	(0028,0011)
M	Compression	Lossy Image Compression	(0028,2110)
	Compression Ratio	Lossy Image Compression Ratio	(0028,2112)

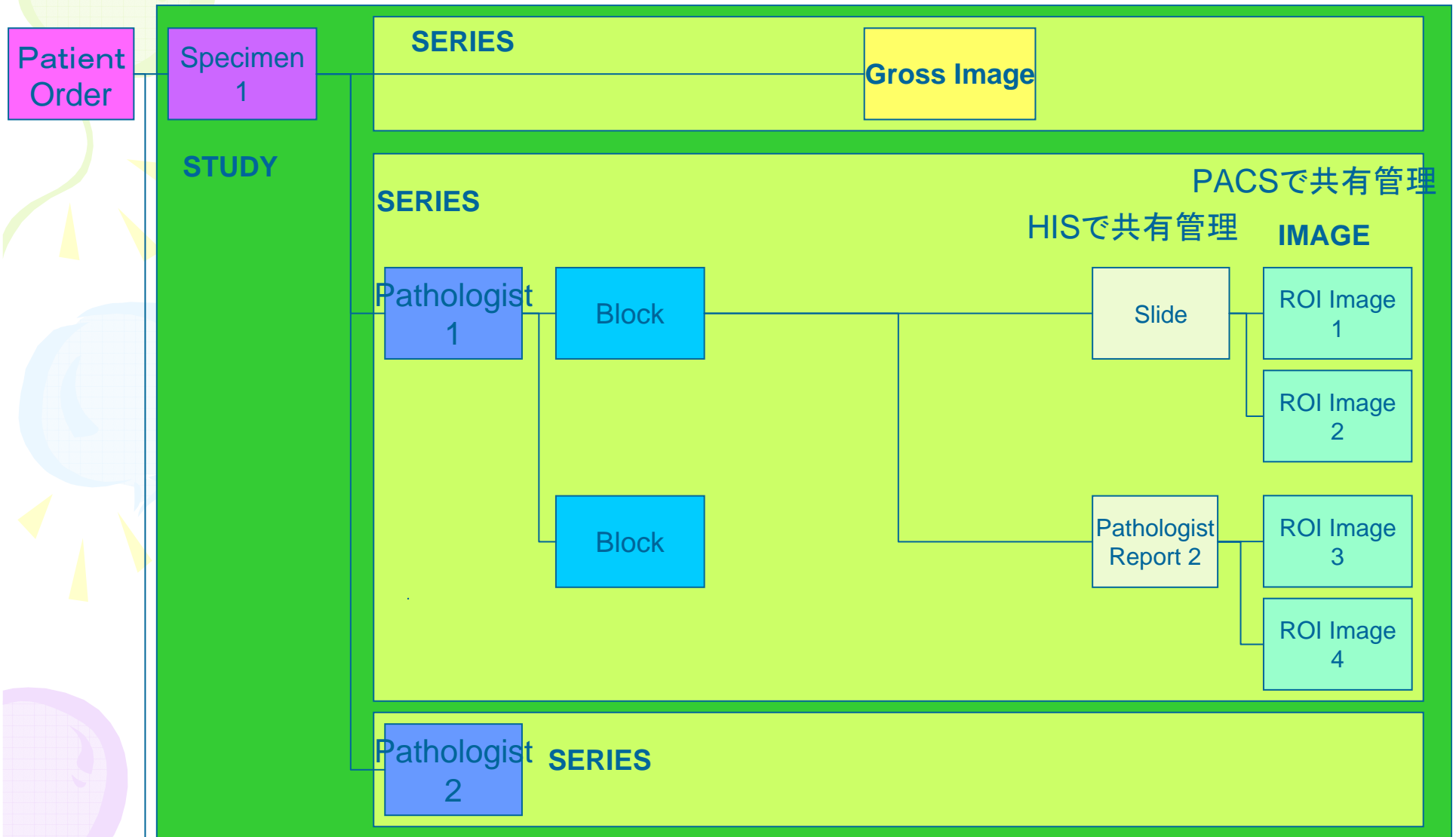
- ACQUISITION CONTEXT (to see with Microscopes Vendors+++)
- Lens name
- Mag value
- N.A. of lens (effective resolution)
- Optical adapter
- Transmission medium : oil, water, etc
- Refraction index of the medium (numeric)
- Illumination type (fluorescence, bright field, etc)
- Excitation (wavelength of the laser) (repeated item)
- Emission
- Light source (tungstene, laser, led, halogen, etc)
- Light Path Filter
- Light intensity (voltage value)
- Polarizer Y/N (for amyloid analysis for example)
- Polarizer position
- Analyser/polarizer (crystal diagnostic in joint effusion, for example)
- Condenser type
- Condenser aperture
- Calibration image
- EQUIPMENT MODULE
- Name of the microscope
- Name of camera
- de-Bayering algorithm
- Camera cable
- (Add these items or repeat the general module equipment)
- SPECIMEN MODULE IDENTIFICATION
- Specimen preparation
- Specimen fixation
- Microscope slide type, thickness
- Coverslip type, thickness if glass
- Staining (sequence of stains), allow multiple

2006/8/1

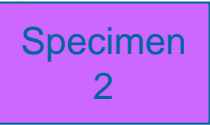
出来るだけ単純化されたWF



IHE-J Definition in Optical Microscopy



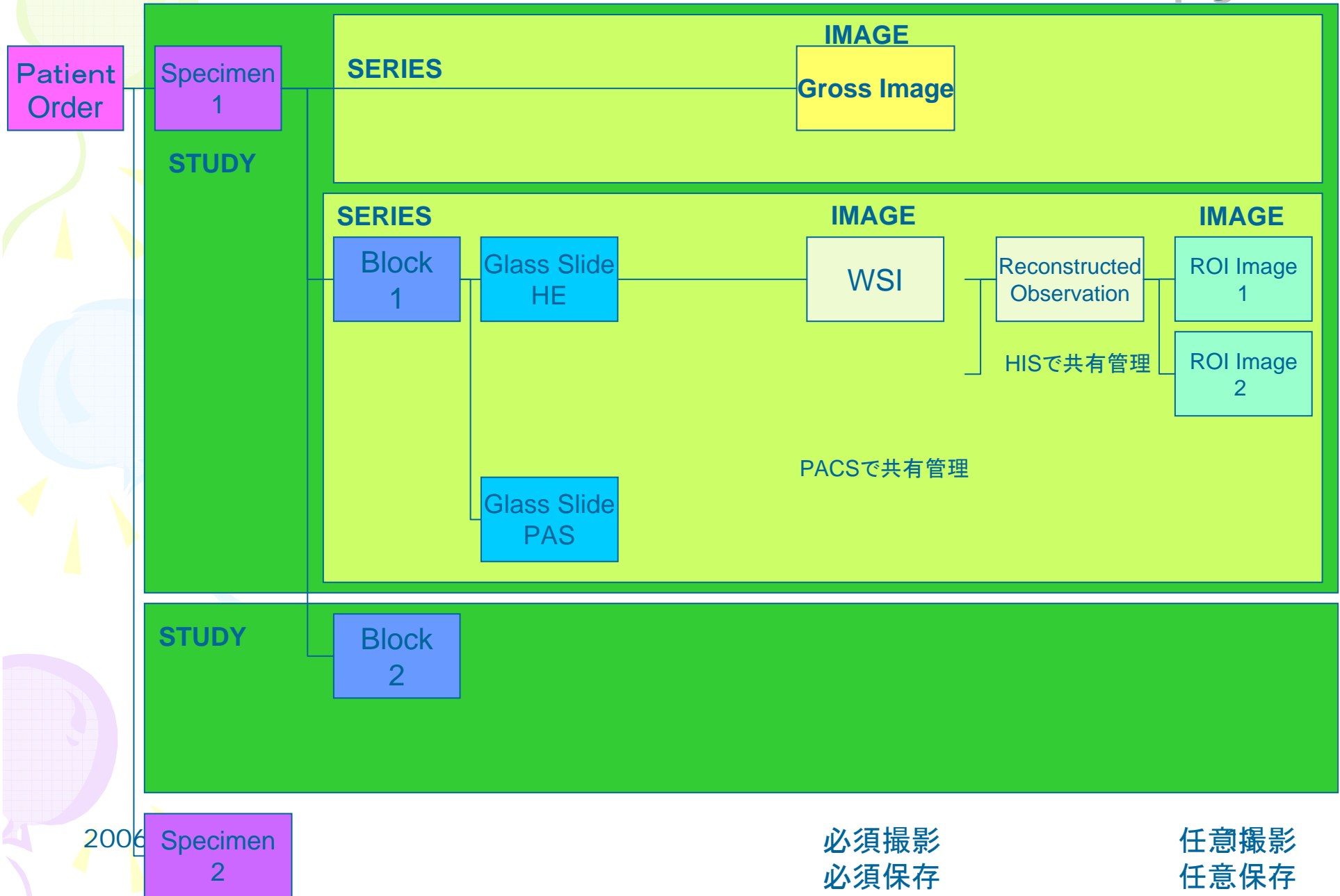
2006



必須撮影
必須保存

任意撮影
任意保存

IHE-J Definition in WSI Microscopy



2006