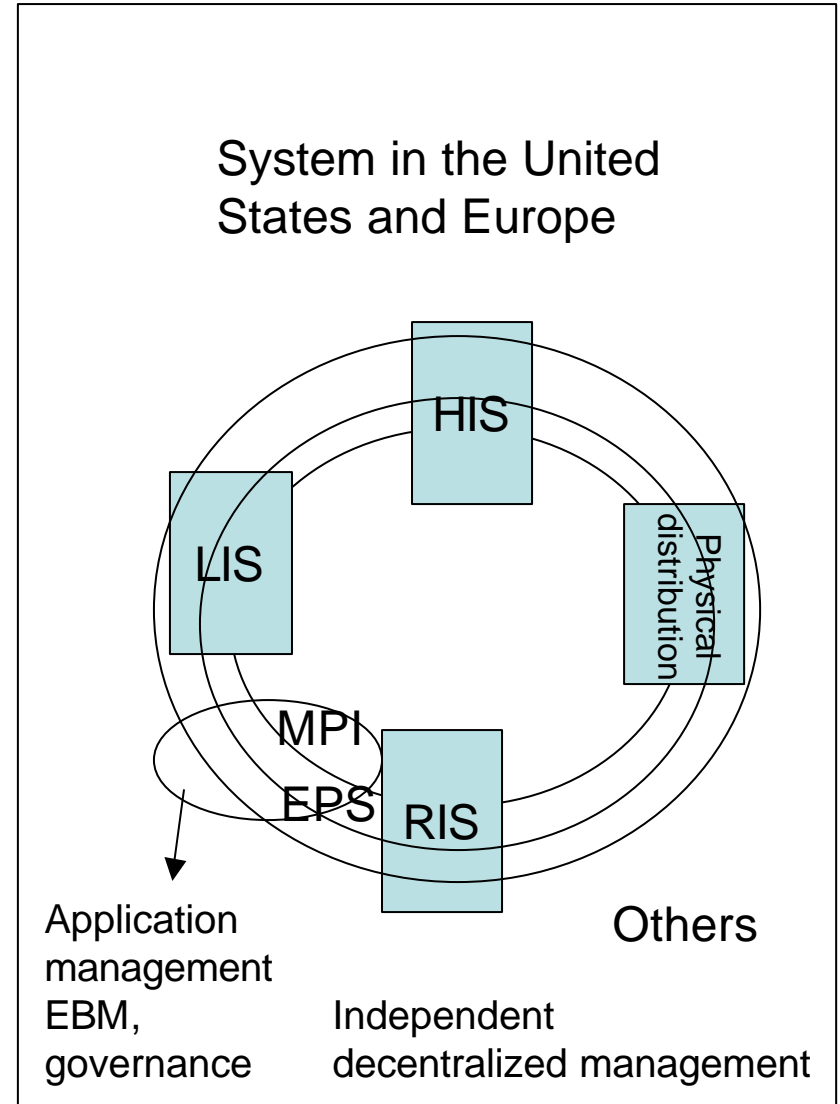
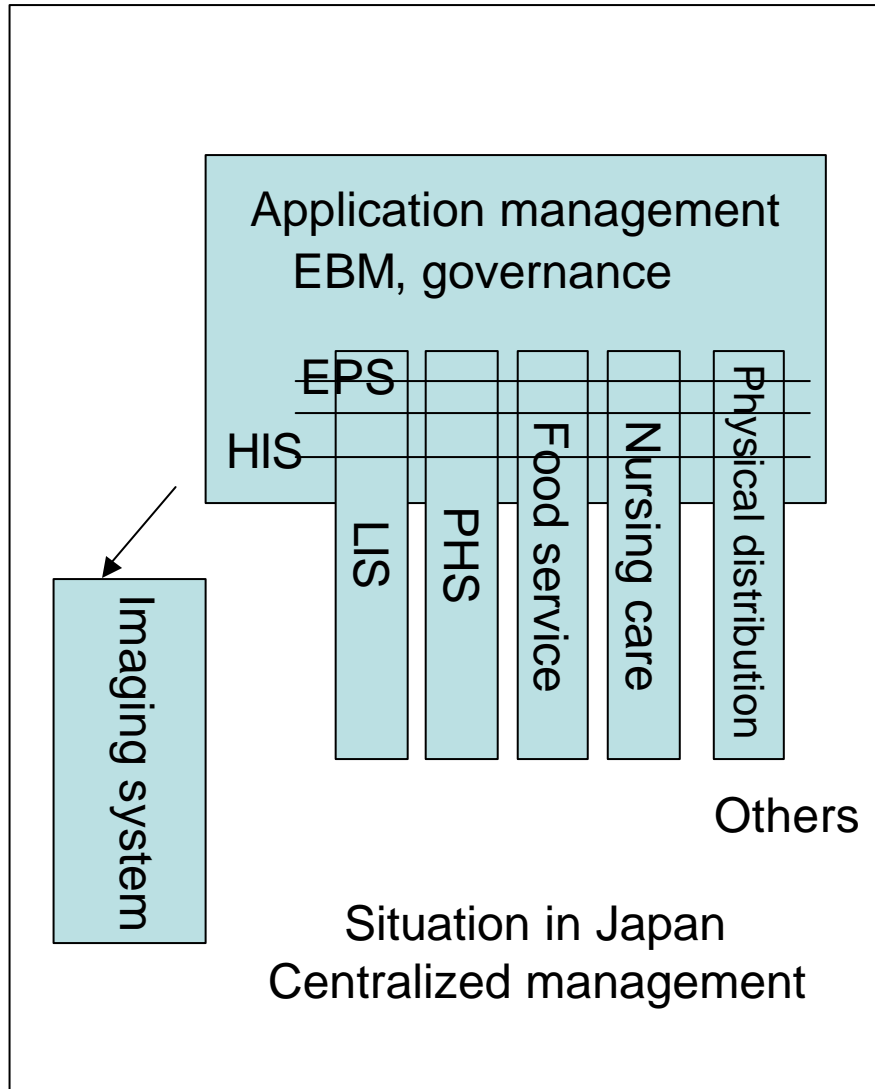


IHE-J Draft Scenario

Rev. 1.0

IHE Planning Committee

IHE Base



Scheduled Workflow

Admit, order, schedule, acquire images, notify of completed steps

Patient Information Reconciliation

Unknown patients and unscheduled others

Consistent Presentation of Images

Hardcopy and softcopy grayscale and presentation state

Access to Radiology Information

Consistent access to images and reports

Key Image Notes

Exchange flagging significant images

Simple Image and Numeric Reports

Exchange simple reports with image links and, optionally, measurements

Presentation of Grouped Procedures

Viewing procedure based image subsets in a single acquisition

Legend

— Enhancing feature

	Y1	Y2	Y3	Y4	Y5
		→			
		→			
			→		
		→			
		→	→		
			→		
			→		
E					
P					

Fundamental Principles

- ? Illustrate applications that are beneficial for patients such as absence of waste, easy to comprehend, etc.
- ? For system users:
Indicate examples of application that assure performance of responsibilities with minimum operations.
 - 1) Indicate seamless system linkage.
 - 2) Indicate optimum application within a unit without need for inquiries involving other units, etc.
- ? As demonstration, create a scenario that actively shows information status.

IDEAL STATUS OF THE

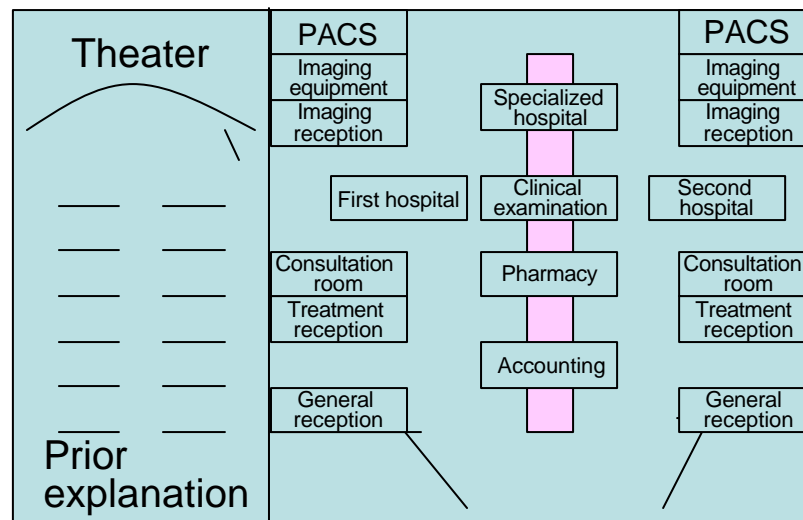
An environment that allows completing all tasks using a terminal close at hand

- ? Patients: Capable of receiving medical service that is not wasteful.
- ? Receptionist, nurses: Grasp status of progress in work in a precise manner and implement direct and indirect work in a timely and appropriate manner
- ? Physicians: Through providing and utilizing complete information, implement high quality medical services.
- ? Technicians: Reference past information and clinical information using modality and implement best practices in imaging responsibility and dispatching responsibility.
- ? Physicians undertaking image interpretation: Maximize utilization of information appended to the PACS image in the report allowing additional or amended orders from any of

Presentation Setting

- ? Establish at 2 hospitals
- ? Conform to the flow of patients
- ? Indicate the movement of information
- ? Tour guide format
Once every hour for 30 minutes
Two itinerant groups
- ? Free study tours
Tour guide pamphlet
- ? Collect application questionnaire

Layout Image



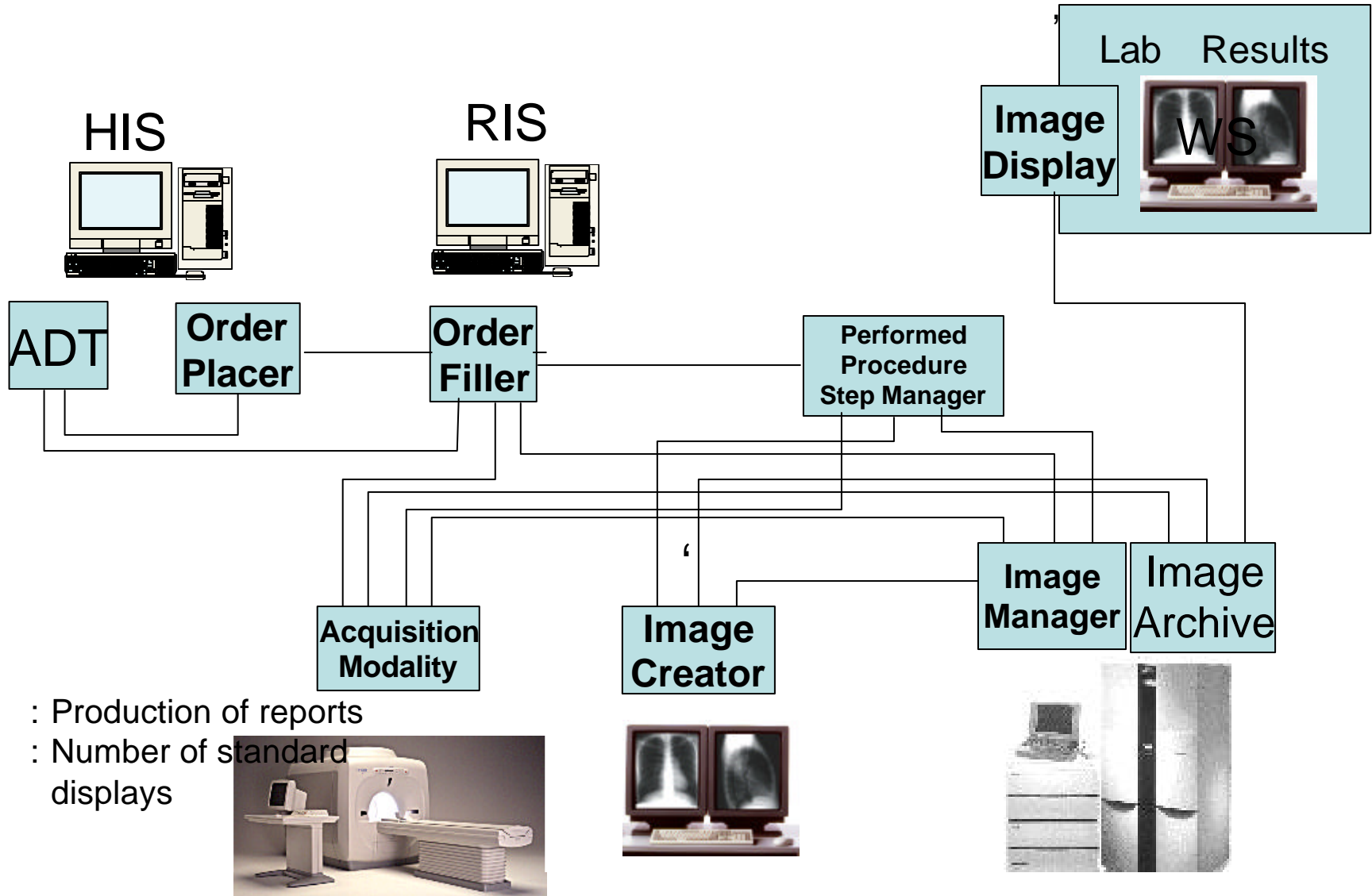
Scenario Elements

- ? Element 1: Order addition - IHE2
- ? Element 2: Imaging with unknown ID or name - IHE2
- ? Element 3: Simultaneous imaging of a plurality of orders - IHE4
- ? Element 4: Completion of examination and report for each patient - IHE5
- ? Element 5: Reference clinical examination using PACS and Mod

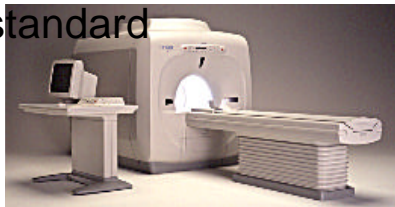
IHE

- 1 Scheduled WF (Common to all)
- 2 Patient Information Reconciliation
- 4 Presentation of grouped procedure
- 5 Access to Radiology Information

Categorization of Functions in IHE



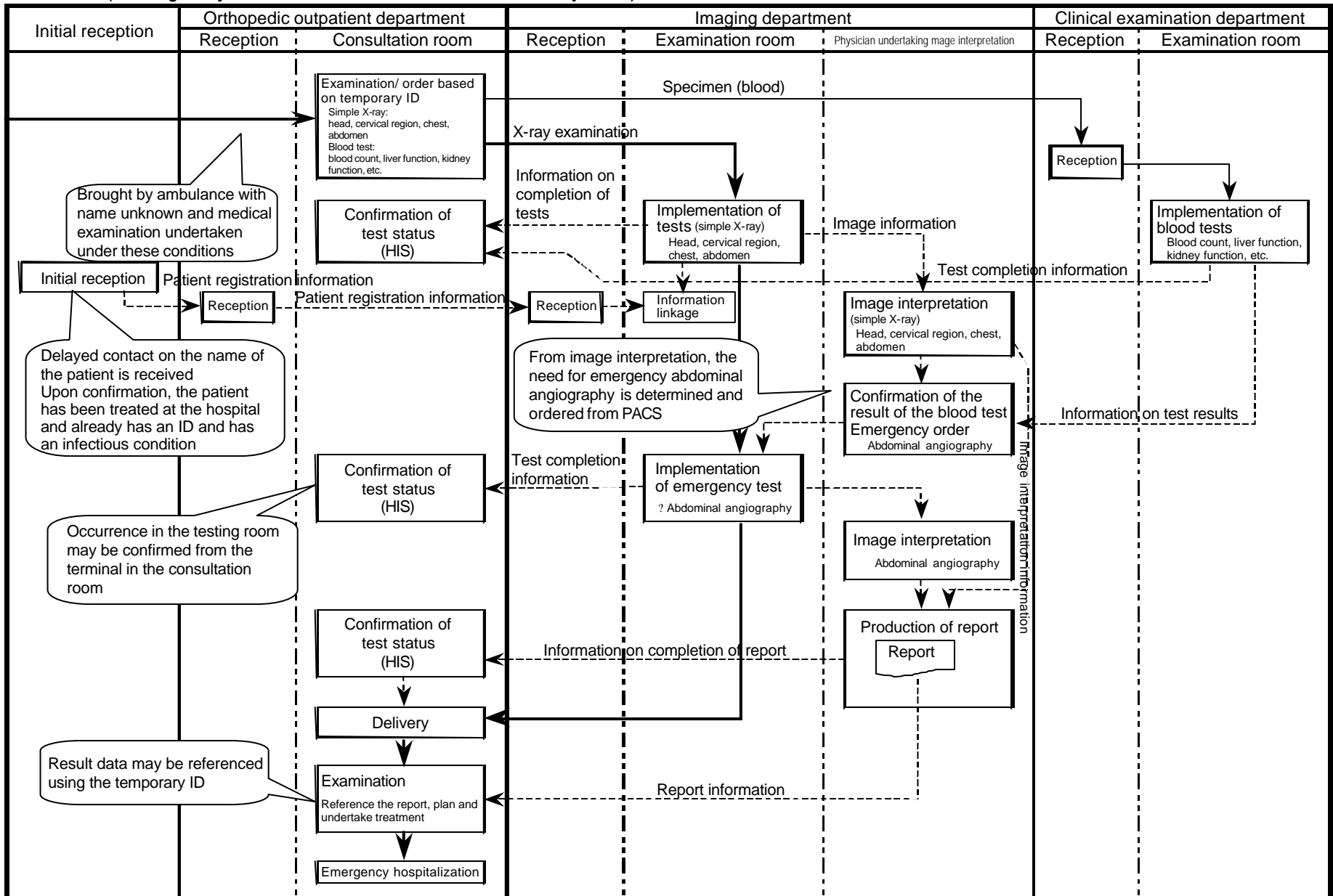
- : Production of reports
- : Number of standard displays



Case 1 (Emergency Treatment of External Traffic Injuries)

- ? Arrive directly at the orthopedics outpatient department by ambulance
- ? While ID and name are not known, the orthopedic physician has ordered emergency simple X-ray of the **head, cervical region, chest and abdomen** and **emergency blood tests (blood count, liver function, kidney function, etc.)** using a **temporary ID (HIS)**.
- ? **The ID and name were determined** while the examination technician is **performing continuous imaging of a plurality of body parts** using simple X-ray **(from HIS)**. **(The timing may be prior to, during or after filming)** (Elements 2 and 3).
- ? All information is amended automatically and displayed so that elements that have changed and how they have changed may be determined. **(Once determined at one location, this may then be used at all locations.)**
- ? Completion of the X-ray examination
- ? Infection, order and others may be viewed at the **X-ray WS**. There are variations (Element 5).
- ? Around when the examination is completed, where the patient is and whether or not the report has been completed is confirmed from the HIS of the orthopedics department (Element 4).
- ? The physician undertaking image interpretation instructs emergency abdominal angiography from PACS based on opinions formed from the image (Element 1). **Specimen test may be confirmed from the PACS WS.**
- ? A report and the images are sent to the orthopedic department (Indicate that information may be referenced by the orthopedic physician using the temporary **ID**)

Case 1 (Emergency Treatment of External Traffic Injuries)



Issues to be Reviewed and Display for Demonstration Purposes

? Case 1

- 1 JD: JD upon X-ray examination ? AA upon commencement of CT

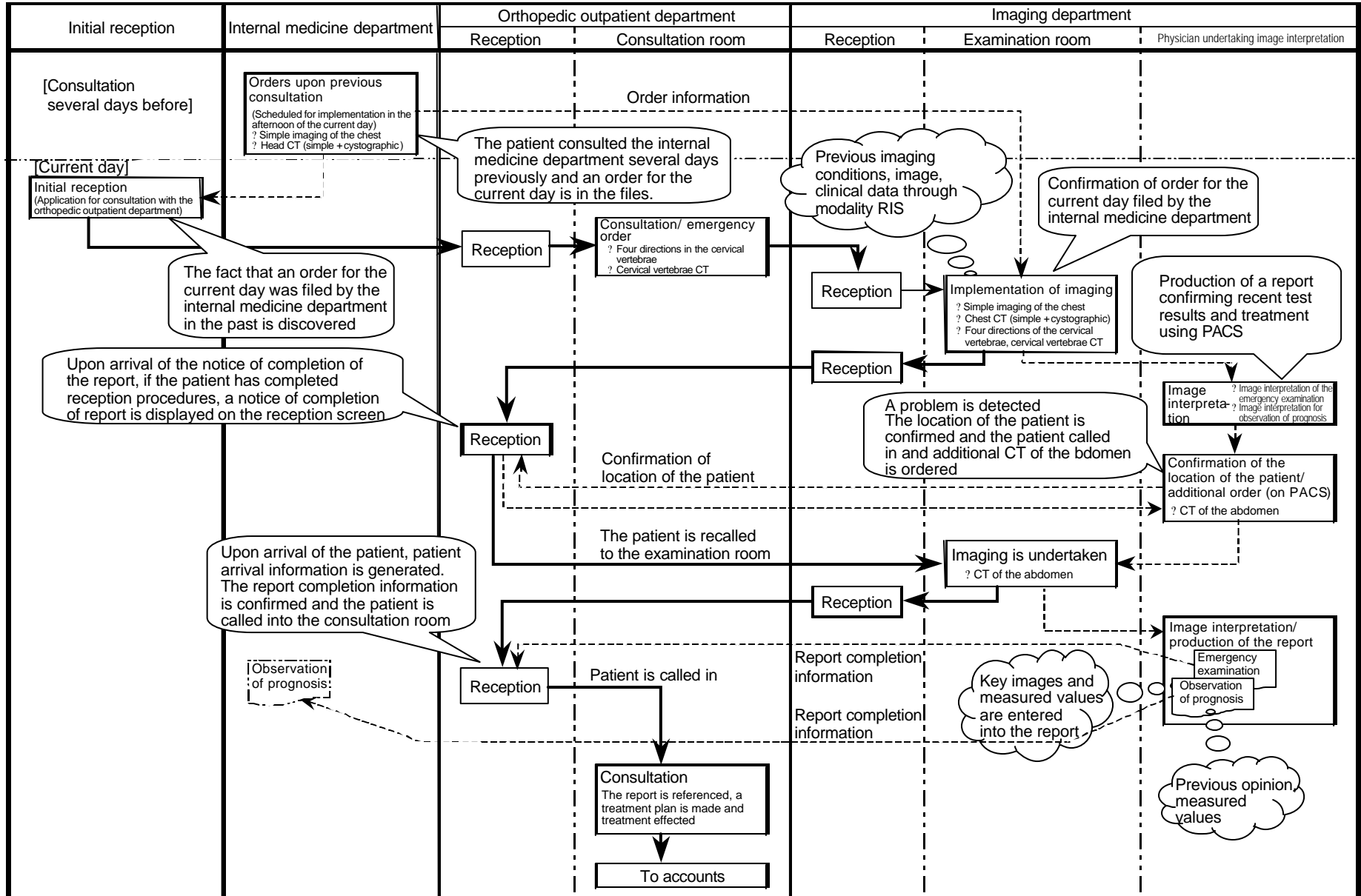
Display: Consideration needs to be given to JD showing AA

- 2 Reference LAB results: Referencing information after AA is possible
- 3 Unscheduled application: Simultaneous CT imaging of a plurality of body parts
Share function with RIS through modality
Order Filler and Acquisition Modality
- 4 Order through PACS: Order placer, order filler
- 5 Tracking DIC performs status management (DMA)

CASE 2 (consultation at a priority of departments and observation of prognosis)

- ? Consultation through general reception, desire for initial consultation with the orthopedic department
Schedule for afternoon consultation with the internal medicine department and for simple X-ray of the chest and (simple + cystographic) CT examination of the chest discovered
- ? To the orthopedic department
- ? Emergency order of cervical vertebrae CT of four cervical vertebrae directions made by the orthopedic department
- ? The imaging department receives this order and confirms the emergency order from the orthopedic department and the prior order from the internal medicine department.
- ? The imaging technician references the prior imaging conditions and clinical information and performs simple X-ray examination for the order from the internal medicine department and orthopedic department in succession. After this, CT examination is completed immediately (**Element 3**).
- ? **The patient is brought to the examination room.**
- ? The physician undertaking image interpretation detects a problem. After confirming the location of the patient through PACS (**Element 4**), order is added for abdominal CT (**Element 1**). (**For the case in which the technician makes the discovery, refer to "Highly Innovative Application."**)
- ? The patient goes to the consultation room reception but returns once again to the imaging room.
- ? After additional CT examination, the patient goes to the orthopedic outpatient department. RIS conveys the information that the patient has left the department.
- ? The physician undertaking image interpretation undertakes interpretation of the emergency examination first and after this, undertakes image interpretation for observation of prognosis with respect to the internal medicine department's order.
- ? The physician undertaking image interpretation produces a report confirming recent test results and treatment using PACS (**Element 5**).
- ? The physician undertaking image interpretation provides notice that the report is completed.
- ? The orthopedic outpatient department confirms that the images and reports are ready using the

Case 2 (Consultation at a plurality of departments and observation of prognosis)



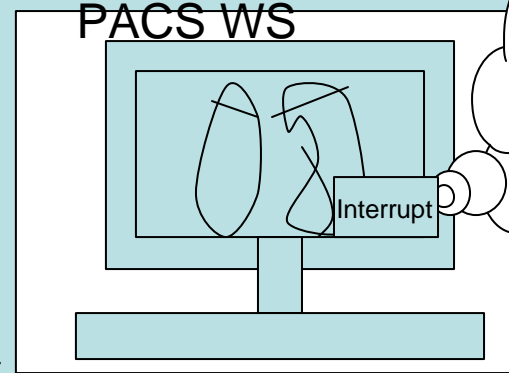
Application by a technician



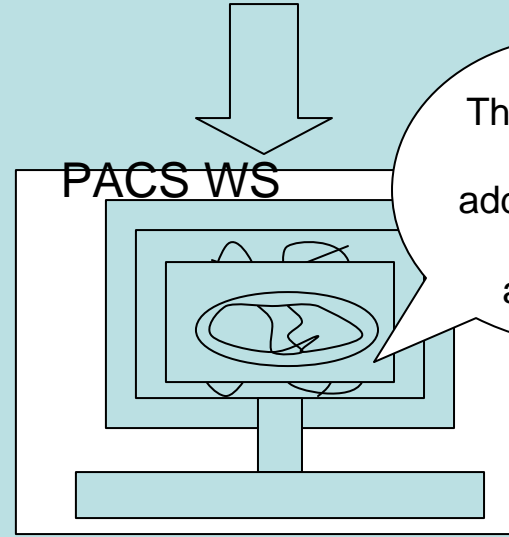
Previous imaging conditions
Previous image + R
Cl, accounts input

Mod WS

Application involving image interpretation by a physician in the radiology department



The technician requests the physician to view the CT image



The physician requests additional slice at the abdomen



Scenario

- ? This is an example of application and changes may be made.
- ? Better examples of application may actively be added.
- ? The fundamental 5 elements are not changed in principle.
- ? Modality is not specified. May be changed.