

PACS

1, 7 . 2, 7 . 3, 7 . 4 . 1 . 1 . 5 . 6

1 , 2 , 3 , 4 , 5 , 6 , 7 ,

Considerations for Dental Full PACS Preparation

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= Abstract =

A successful PACS installation requires a profound understanding of clinical environment of the specific hospital. Dental hospital has its own unique clinical environment. The basic radiographic machines and the display format for the clinicians are quite different. The purpose of this paper is to provide an understanding of the unique characteristics of the dental hospital to prepare dental full PACS. The characteristics of dental hospital in image archiving, image display and clinical environment, and other considerations were described.

(Hospital Information System)

1.

PACS(Picture Archiving and Communication System)

PACS 가

PACS

PACS

PACS

DB ,

. PACS

HIS

medical PACS

: , (120 - 752)

134

PACS

가

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2001

PACS

2. PACS

2.1.

PACS

ital radiography) photostimulable phosphor(PSP)
imaging plate CR(computed radiography)

가

CCD

DR

10 -

14 bit

display 8 - 14 bit

display range

dynamic

DR

가

15 , CR

7

20

가

DR

2 - 3

DR

CR

dynamic

PACS

range

DICOM

DICOM

BMP,

가

JPEG

DICOM

gateway가

2.1.1.

(full mouth intraoral radiography)

14

가

(intraoral radiography)

X

, X

X

template (

arm

1),

DICOM

gateway

X

28 - 32

가 41 mm x 31 mm

DR

CR

(No. 2) 7 , 7 14

CR

(periapical view)

가 가

CR

(bitewing view),

76 x 57 mm

(4

2.1.2.

)

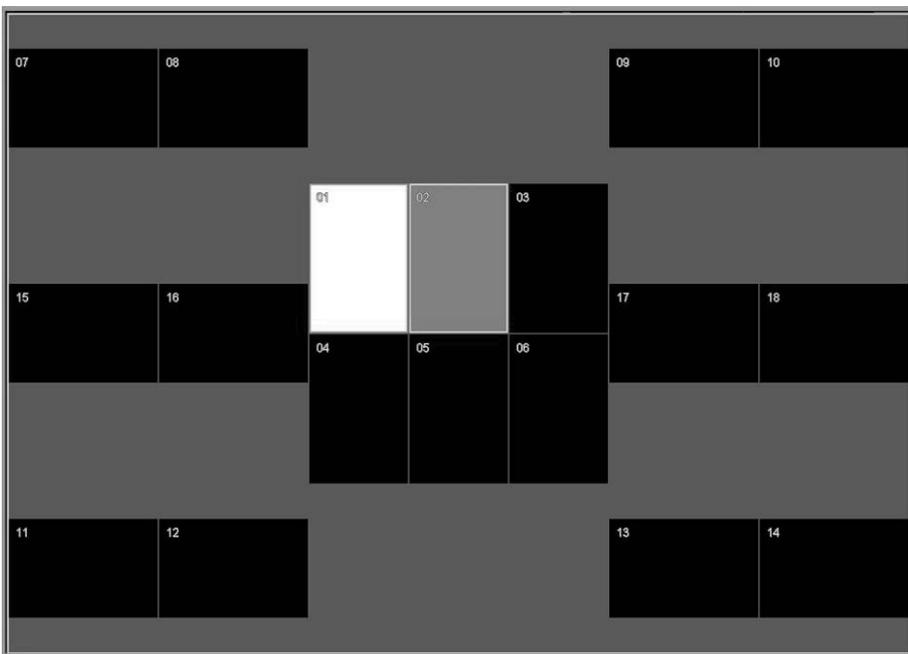
가

charge - coupled device(CCD)
oxide semiconductor(CMOS)

complementary metal
DR (direct dig -

: PACS

DR PSP imaging plate CCD CR 가 PSP imaging plate
 가
 CR DR 가 2.1.3.
 CR 가
 DR X
 DR X
 가 CR 가 152.4 cm (60
 inch)
 15 x 30 cm 가 6 x 12 inch DR PSP imaging plate CCD CR
 가 DR
 CR CCD 가
 가 Kodak Fuji CR Agfa CR 8 x 10 inch 10 x 12 inch PSP imaging plate
 CR
 CR 가
 med -
 ical CR 2.1.4.
 x 12 inch 10
 PACS 가 (transcranial



1. template

projection)

medical

가 5x7 inch
 가 imaging plate
 CR 가
 8x10 inch imaging plate 가

DICOM
 PACS DICOM
 DICOM conformance statement

가

2.1.5.

1) DICOM
 Non - DICOM

가

, 2) DICOM

digital imaging system 11 lp/mm , display dynamic range 12 bit , 3)

DICOM direct digital imaging system(CCD detector) CCD sensor system ,

30 cm

가 15x
 15x

30 cm PSP imaging plate

CR tem CCD
 5) DICOM

, 4) CCD sensor sys -

DR system

2.2.

2.1.6.

가

PACS

가

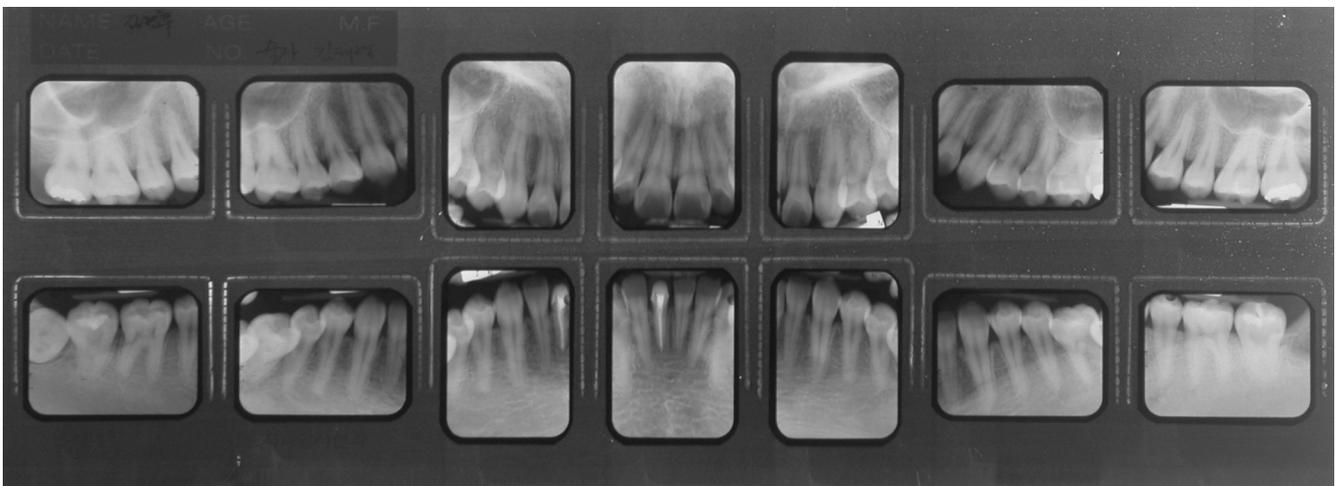
landscape monitor

1x1, 2x1, 3x2, 4x3, 5

x4

가

가



2.

: PACS

가

7x2, 5x2

가

가

가

. 1) dental unit chair

dental unit chair (arm type),

(2).

PACS

(

2

, 2) dental unit chair

compact PC

. 3) dental unit chair (arm type)

가

. 1) ,

14

(full mouth periapical view)

. dental unit chair

(

가

, 7x2 format)

. 2) 7x

가

2

dental unit chair

CT

가 가

arm

가

가

. 4)

가

3)

(web PC

PC UPS 가

)

가

. 4)

CT

가 main server

2.4.

2.4.1. (Cephalometric Analysis)

Cephalometric analysis

(dental unit chair)

가,

가

dental unit

chair

가

dental unit

chair

dental unit chair

X

. PACS가

chair

PACS

가

dental unit chair arm

PACS

가

가

. 1) PACS

display

가

가

Cephalometric analysis

. 2) Cephalometric analysis

software가

가 , 가 . 3) Cephalometric display (30 Scan), 2) 22×35 mm (Intraoral film size No. 0), 31×41 mm(Intraoral film size No. 2), 57×76 mm(Intraoral Occlusal film), 5×7 inch(TMJ Transcranial view film size), 15×30 cm (panoramic view film size), 8×10 inch, 10×12 inch, 10×14 inch, 14×17 inch 가가 .

2.4.2.

Photo

3.

가 photo PACS PACS

PACS - RFP(Request for Proposal)

[1].

photo

가 PACS

1999

가

PACS

가

PACS

PACS

가

PACS

PACS

. 1)

photo

main server system

, 2)

가

PACS

PACS

가

photo

가

가

, 3)

photo

medical PACS

PACS

가

가

2.4.3.

format

가

가

PACS

medical

가

가

film scanner

PACS

flow,

film scanner

PACS

가

PACS

가

PACS

film scanner

가

가

PACS - RFP [2]

가 PACS

. 1) Film Digitizer, Film

PACS

Scanner Digital Camera

flow,

PACS

PACS

1. . PACS-RFP . PACS
2001;7:1-8
2. YUMC-RFP. Yonsei University Medical Center. 1999

PACS 2003;9:9 - 15

