M7

Product Launch Meeting

Product Overview

MINDRAY M7

Clarity . Accuracy . Speed

Bring Your Crystal Ball to Point-of-Care

The Mindray M7 Diagnostic Ultrasound System is a powerful imaging tool to assist you in meeting your clinical challenges today and tomorrow. The M7 is designed for use in all point of care environments. It delivers premium imaging performance across a broad range of specialties. Providing accurate data with speed, the M7 enables clinicians to achieve enhanced level of diagnostic confidence and efficiency.

MINDRAY M7

- **System Performance Improvements**
- Image Quality Advancements
- Intelligent Workflow Improvements
- Data Management Improvements
- Mobile Trolley

System Performance Improvements

- **175%** increase in processing power versus M5
- Achievable through MINDRAY Proprietary Chip Technologies
- System Display
  - SHARP Next Generation LCD
  - Anti-glare coating
  - **25%** brighter than M5 display
  - Improves contrast resolution
- New power design and improve battery life **150%**

System Specification

- **Weight:** 14.3 lb (6.5 kg)
- **Dimensions:** 14.06” L x 14.21” W x 2.95”H (35.7 cm L x 36.1 cm W x 7.5 cm H)
- **Display:** 15” Diagonal LCD (NTSC or PAL)
- **Platform:** Windows XP Professional SP3
- **CPU:** INTEL Core 2 Duo
- **MEMORY:** 2GB DDR3 RAM
- **Hard Disk:** 160G SATAII HHD
- **Power:** System operates via rechargeable lithium-ion battery or AC power (universal power adapter, 100-240 VAC, 50/60 Hz input, 15 VDC output) , 1.5 - 3 hours battery life

System Specification

➢**Multi-Language Support:** English, French, German, Italian, Portuguese, Russian, Spanish, Polish, Czech, Turkish, Finnish, Danish, Icelandic, Norwegian, Swedish and Simplified Chinese. (Display and Input)

MINDRAY M7

- System Performance Improvements
- **Image Quality Advancements**
- Intelligent Workflow Improvements
- Data Management Improvements
- Mobile Trolley

Imaging Modes

- B
- M
- Free Xros M (Anatomical M)
- Color M (CM)
- Color Doppler
- Power (DirPower)
- Pulsed Wave Doppler
- CW Doppler
- Smart 3D
- Static 3D
- 4D
- iScape (panoramic imaging)
- TDI (Tissue Doppler imaging)

Image Quality Technologies

-HPRF

-THI

-Phase Inversion Tissue Harmonic Imaging

-iBeam™ Spacial compound imaging

-iClear™ Adaptive Speckle Suppression Imaging

-iTouch™ Intelligent Image Optimization

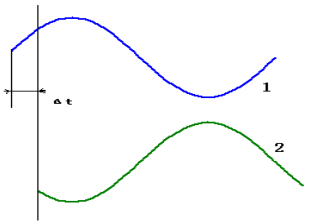
-iZoom™ Automatically expand the image to full screen

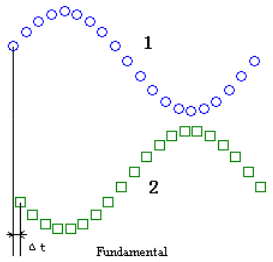
Image Quality Advancements

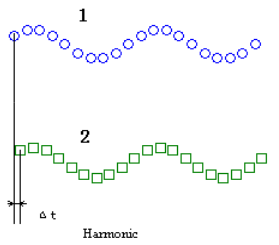
Phase Inversion Tissue Harmonic Imaging

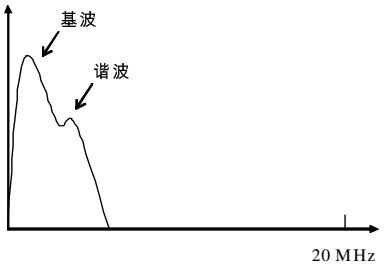
Patent technology to extract the nonlinear harmonic component without interference of fundamental wave

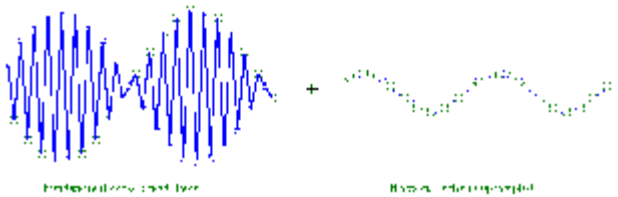
- Increase noise reject capability
- Better contrast resolution
- Better visualize tissue subtleties
- Support Linear, Convex and Phase Array Transducers











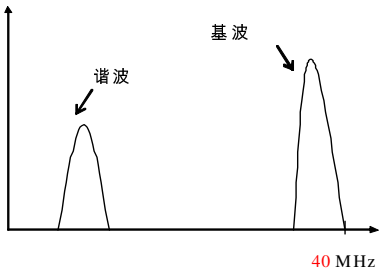
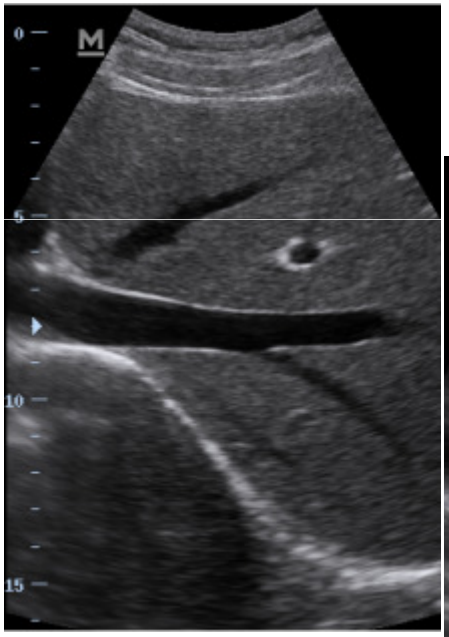


Image Quality Advancements

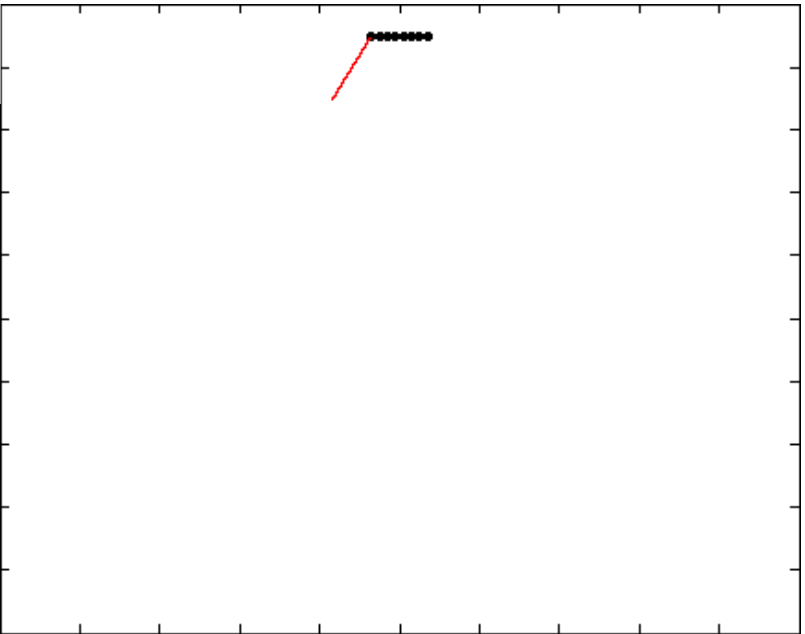
mindray

iBeam™ Spacial compound imaging

- New algorithm for compound imaging
- Support Linear, Convex Transducers



Before



After

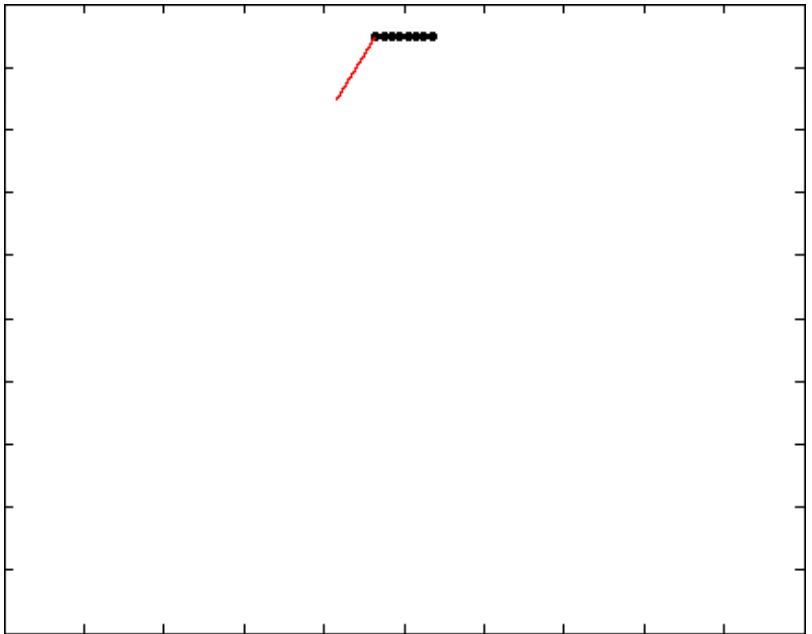


Image Quality Advancements

iClear™ Adaptive Speckle Suppression Imaging

- Reduce Speckle Noise
- Enhanced margin definition and tissue differentiation
- Improved Contrast Resolution

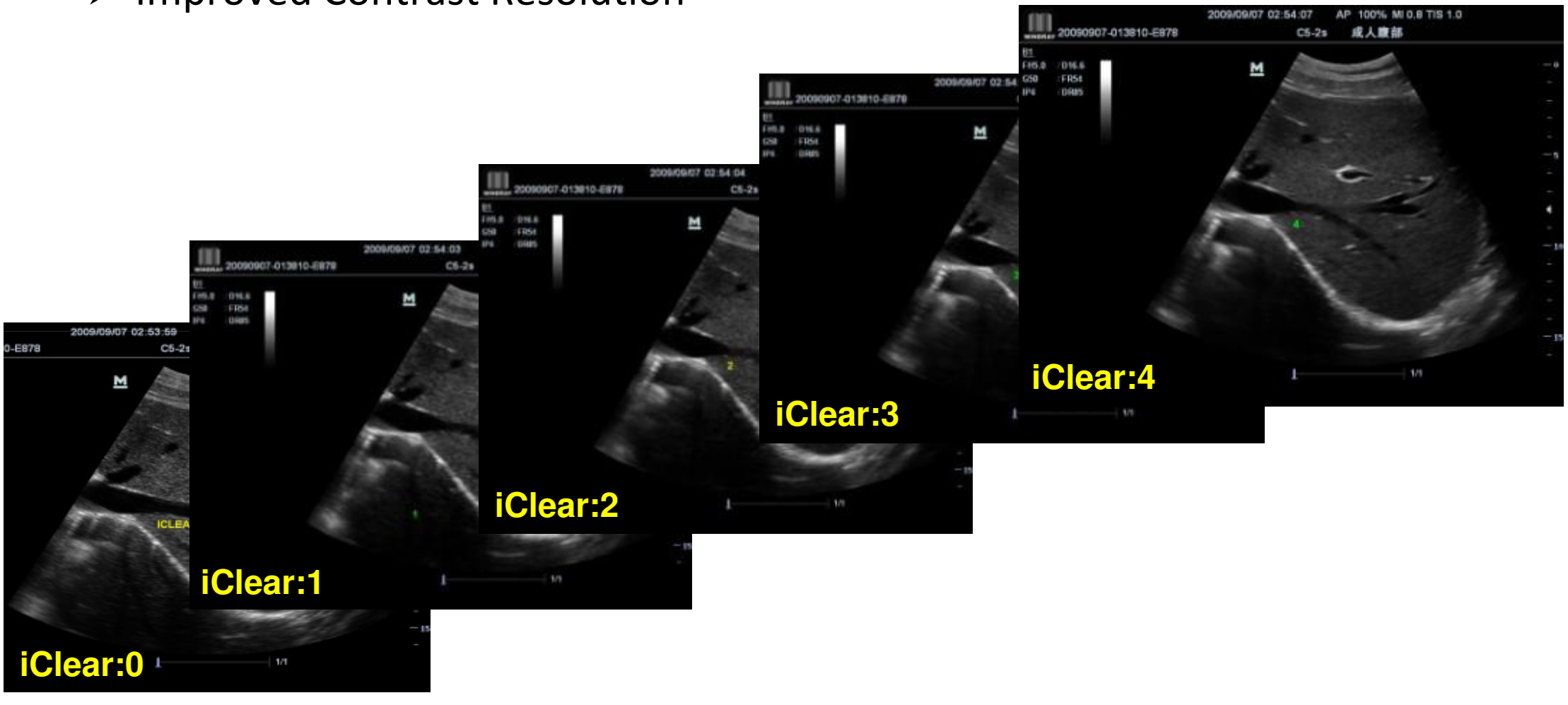


Image Quality Advancements

iTouch™ Intelligent Image Optimization

- B/THI：Gain, TGC, Dynamic Range
- PW/CW：Baseline, PRF
- Auto Focus Adjustment

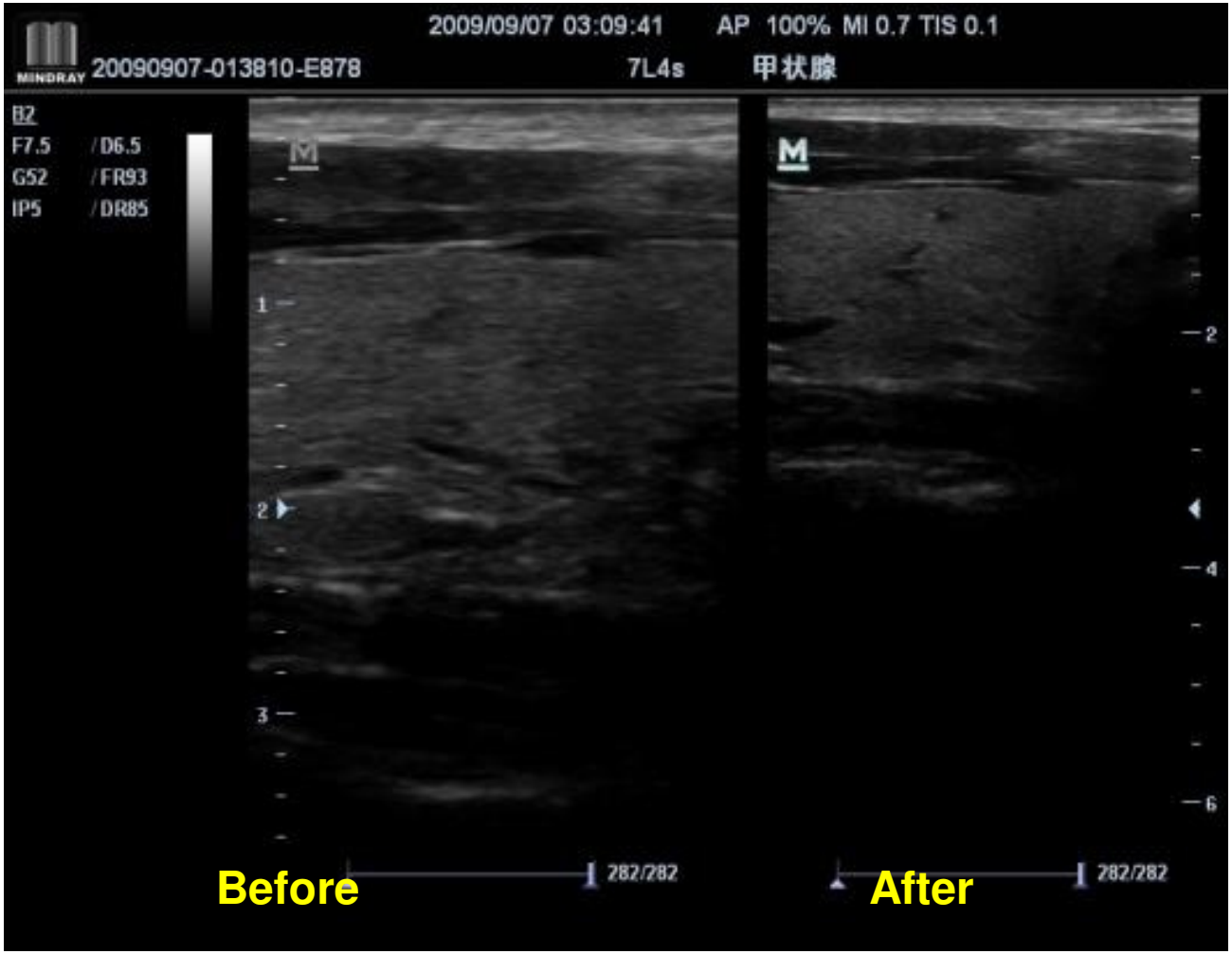
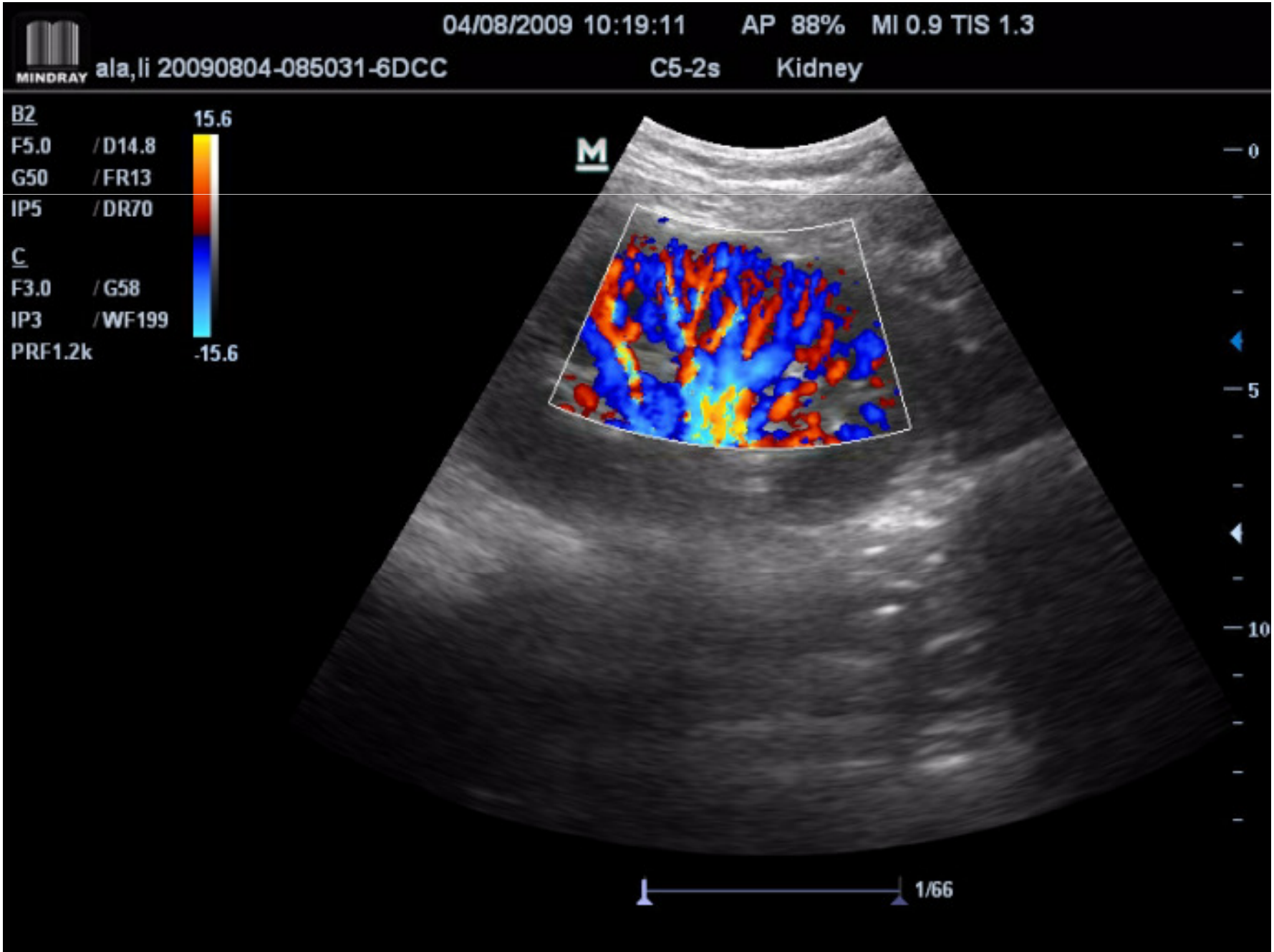


Image Quality Advancements

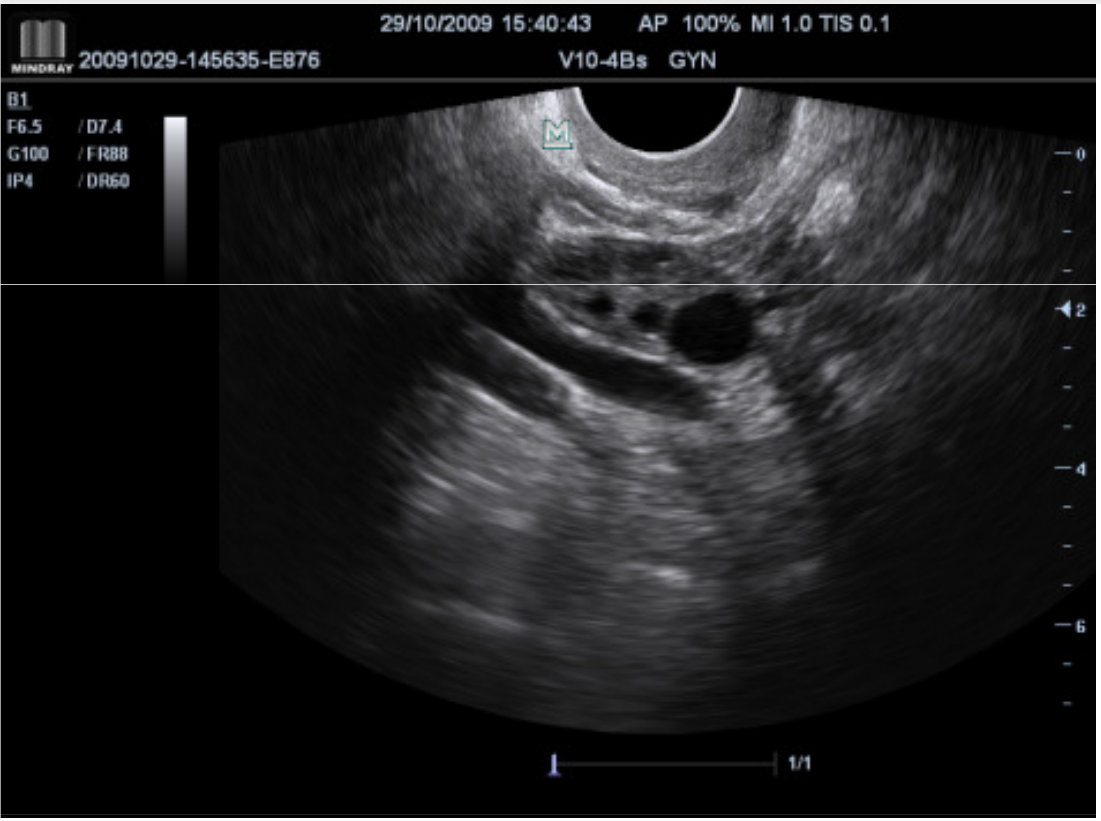
- Significant image quality improvements
- Up to **50%** increase in image quality vs. M5

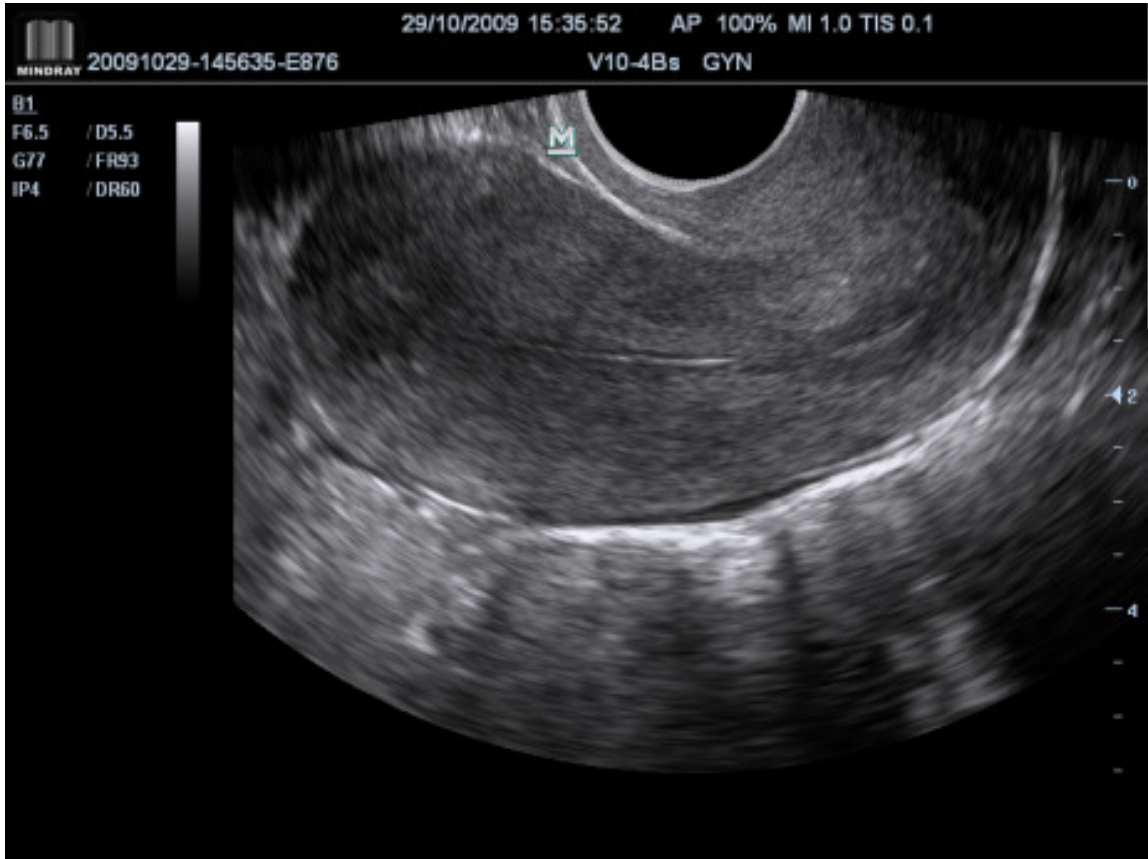
Emission	• Physical Channels Upgrade **100%** vs. M5 • Wave increasing **167%** reliability
Receiving	• Physical Channels Upgrade **100%** vs. M5 • SNR upgrade **20%** vs. Competitors
Transducer	• Support **192** element transducer • Frequency 2Mhz~15Mhz

M7 Abdominal Performance

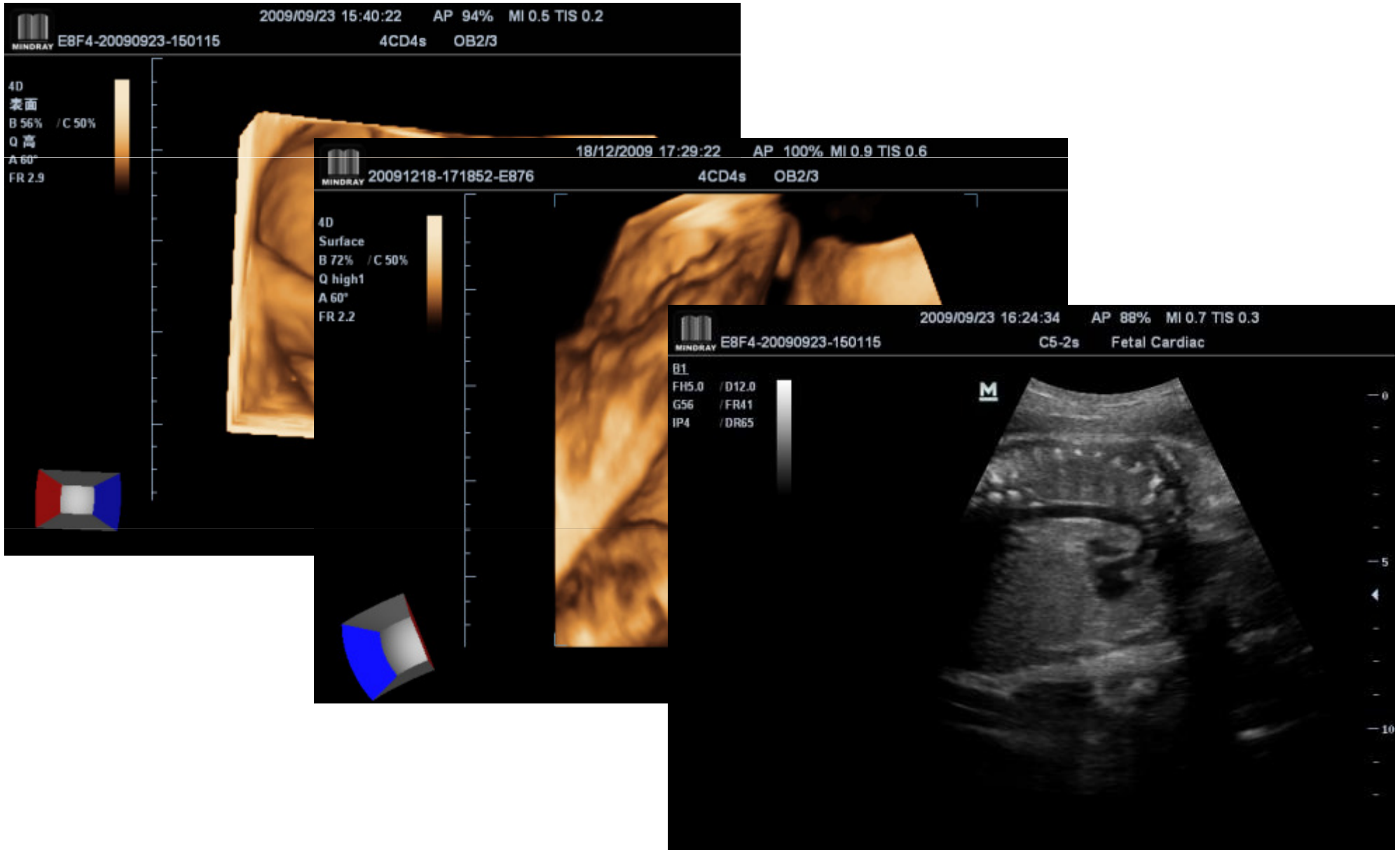


M7 OB/GYN Performance

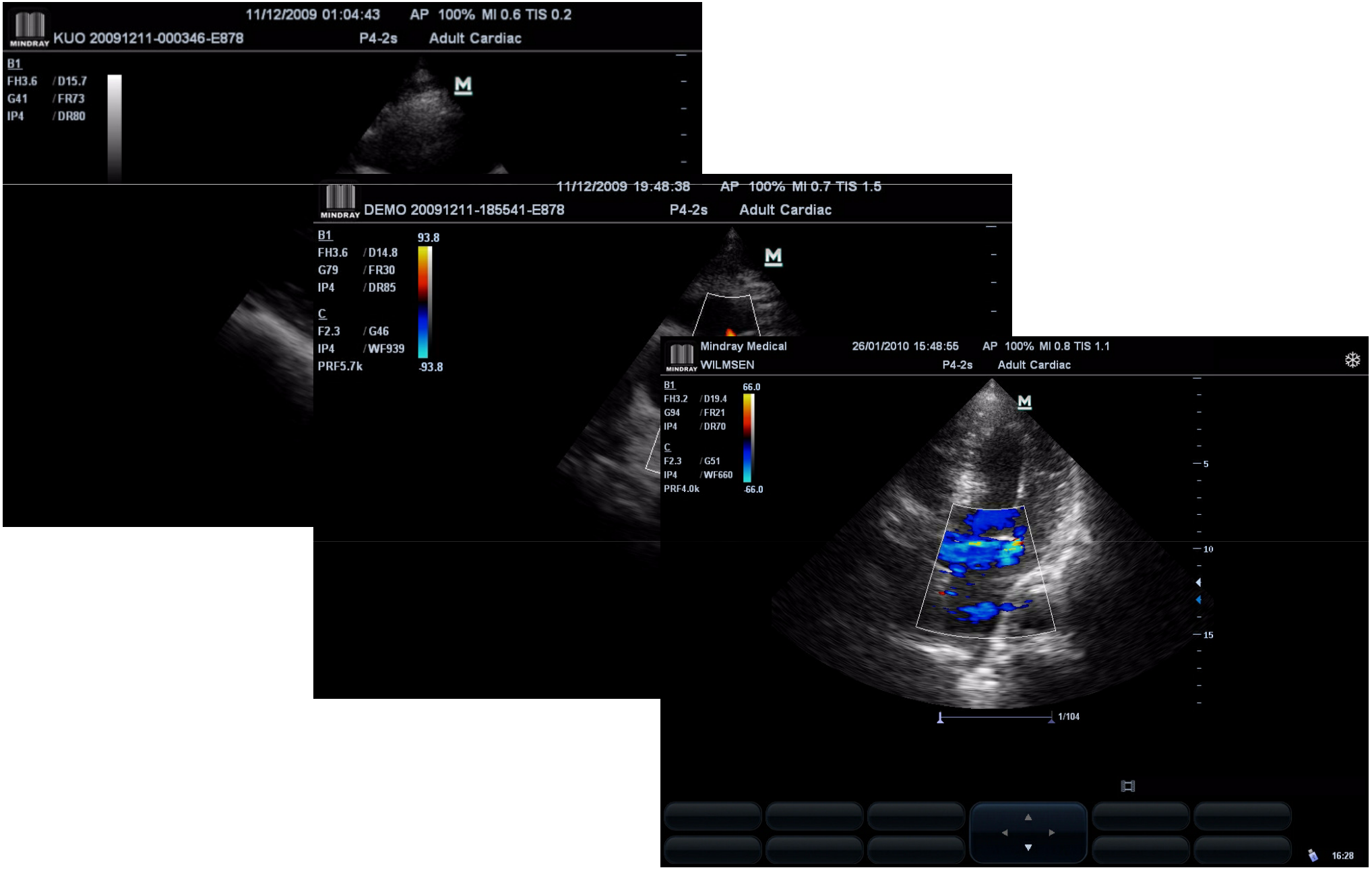




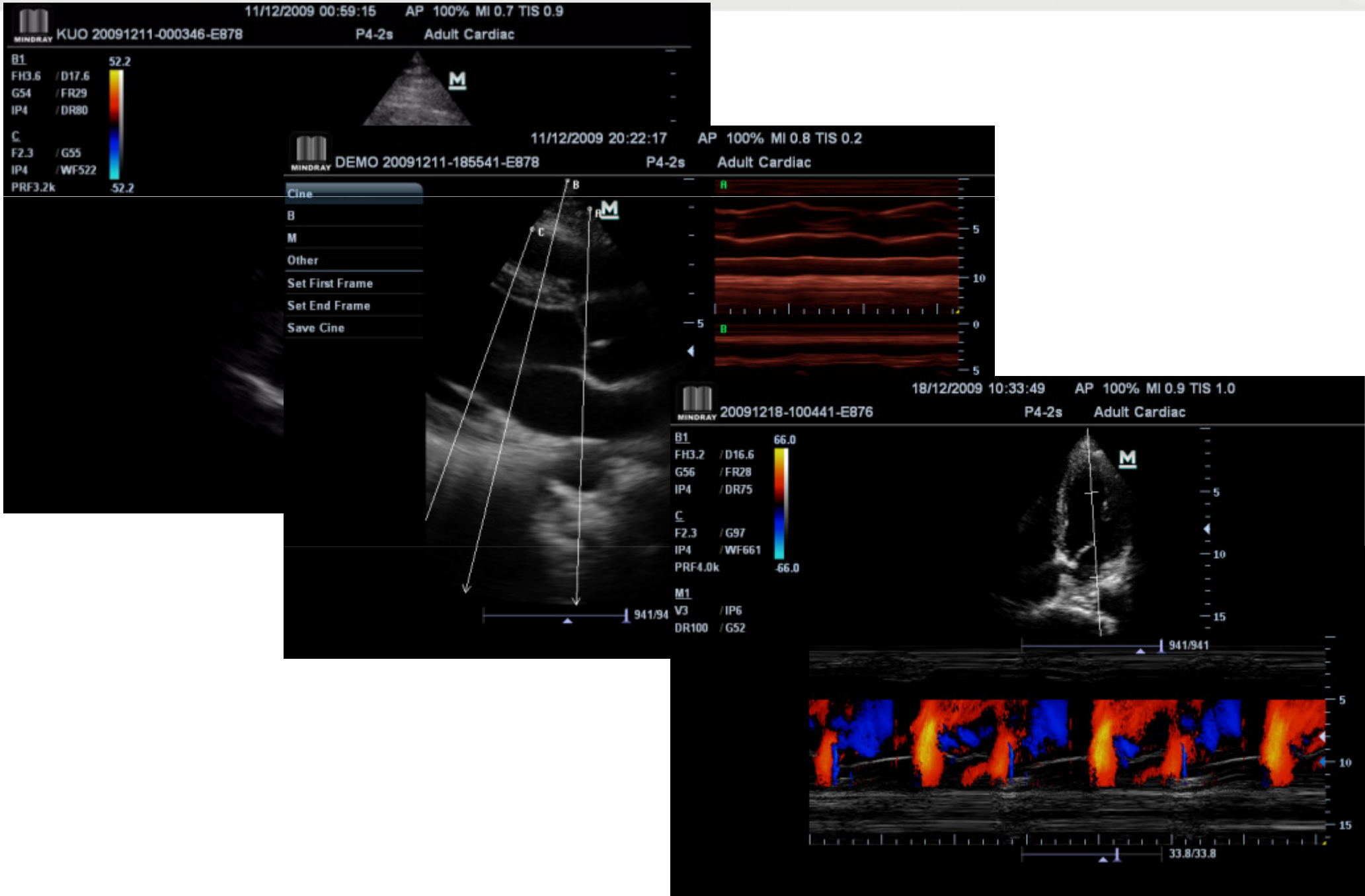
M7 OB/GYN Performance



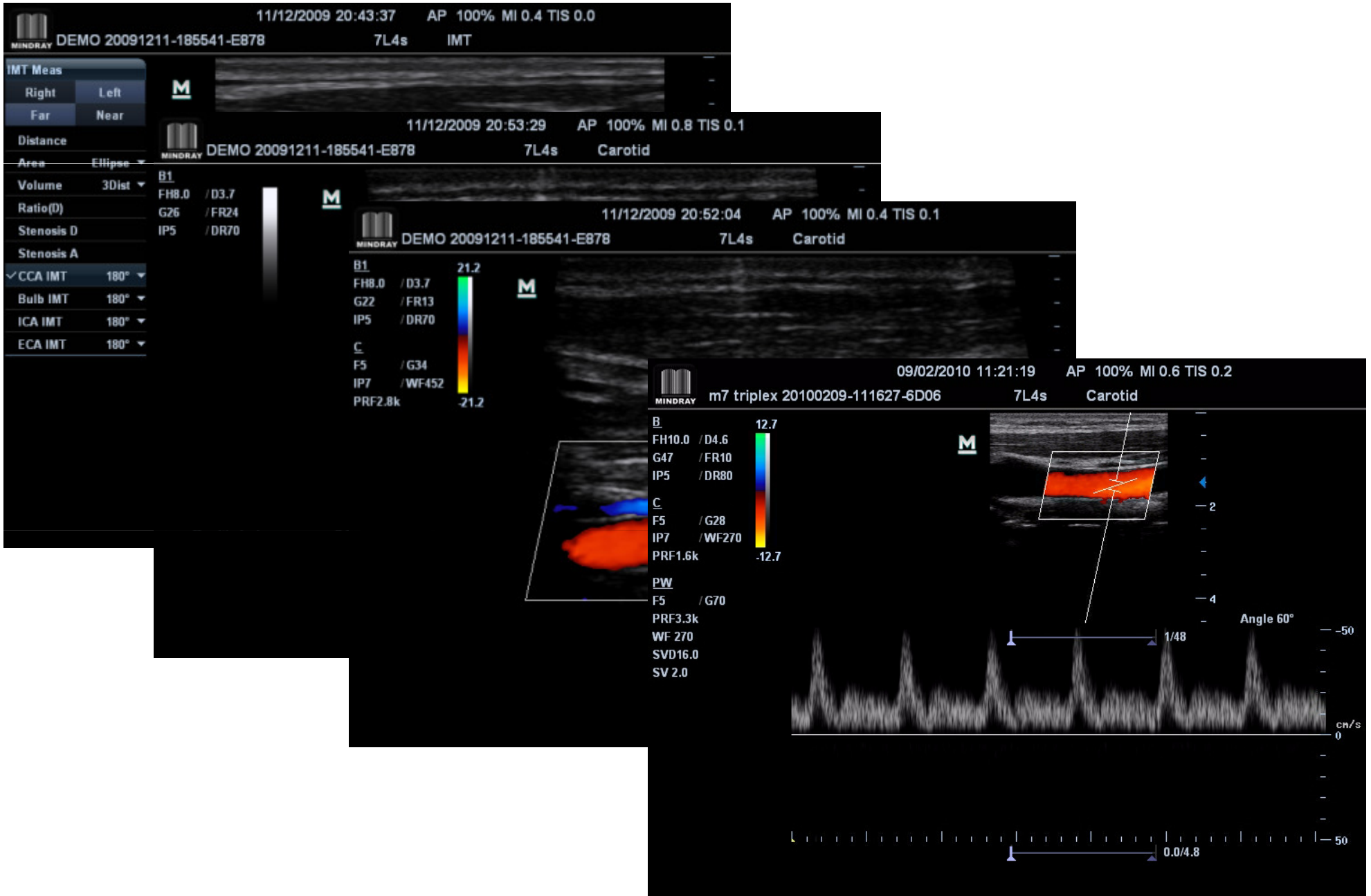
M7 Cardiac Performance



M7 Cardiac Performance

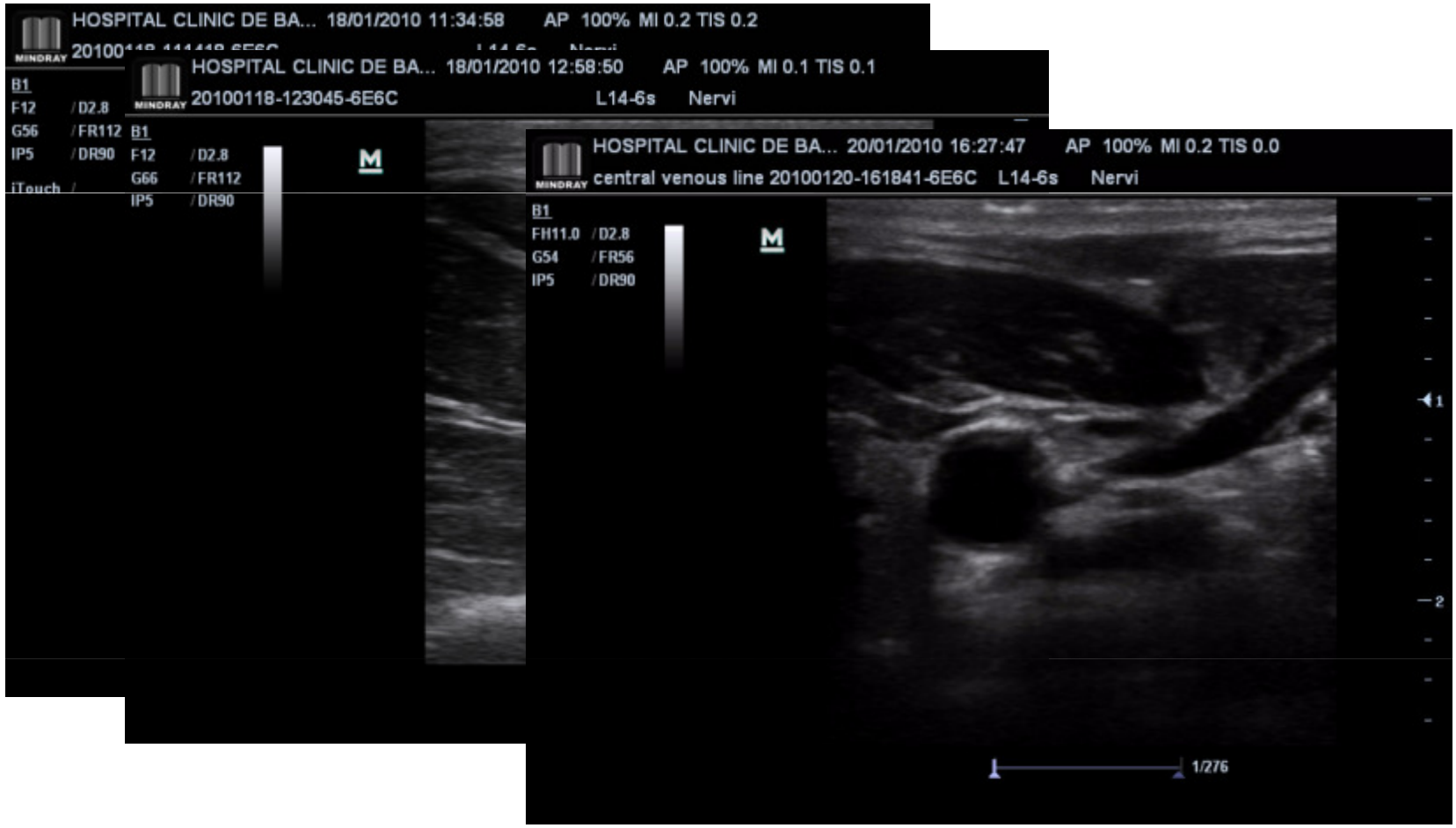


M7 Vascular Performance



M7 SM Performance

M7 Anesthesia Performance



Transducers

mindray

Transducer	Applications	Bandwidth	Depth	Biopsy Kit
C5-2s 	Abdomen, Gynecology and Obstetrics, vascular, musculoskeletal, pediatrics, regional nerve block, procedure and biopsy guidance.	2-5MHz R50mm broadband Convex array	38.8cm	Available NGB-015
7L4s 	Breast , Small parts, musculoskeletal, pediatrics, abdomen, vascular, venous access, nerve block, musculoskeletal, superficial and IMT	4-10MHz L38mm broadband Linear array	28.6cm	Available NGB-007
L14-6s 	Superficial, small parts, vascular, musculoskeletal, pediatrics, Nerve, venous access and biopsy guidance	6-14MHz 25mm broadband Linear array	28.6 cm	Available NGB-016
P4-2s 	Cardiac, abdominal, obstetrics, transcranial, pediatrics	2-4MHz 23mm broadband phased array	28.6cm	Available NGB-011

Transducers

mindray

Transducer	Applications	Bandwidth	Depth	Biopsy Kit
P7-3s 	Cardiac, abdominal, obstetrics, transcranial, pediatrics	3-7MHz 21 mm broadband phased array	28.6cm	None
V10-4s 	Obstetrics, gynecology, urology, procedure and biopsy guidance	4-10MHz R10mm broadband Convex array	28.6 cm	Available NGB-004
V10-4Bs 	Obstetrics, gynecology, urology, procedure and biopsy guidance	4-10MHz R10mm broadband Convex array	28.6 cm	Available NGB-004
4CD4s 	Abdomen, gynecology, obstetrics	2-6MHz R40 mm broadband Convex array	28.6cm	None

Application Specific Calculations

Dedicated Software Package

Abdomen, Obstetrics, Gynecology, Cardiology, Small parts, Urology, Peripheral Vascular, Pediatrics, Nerve Blocks, and Emergency package

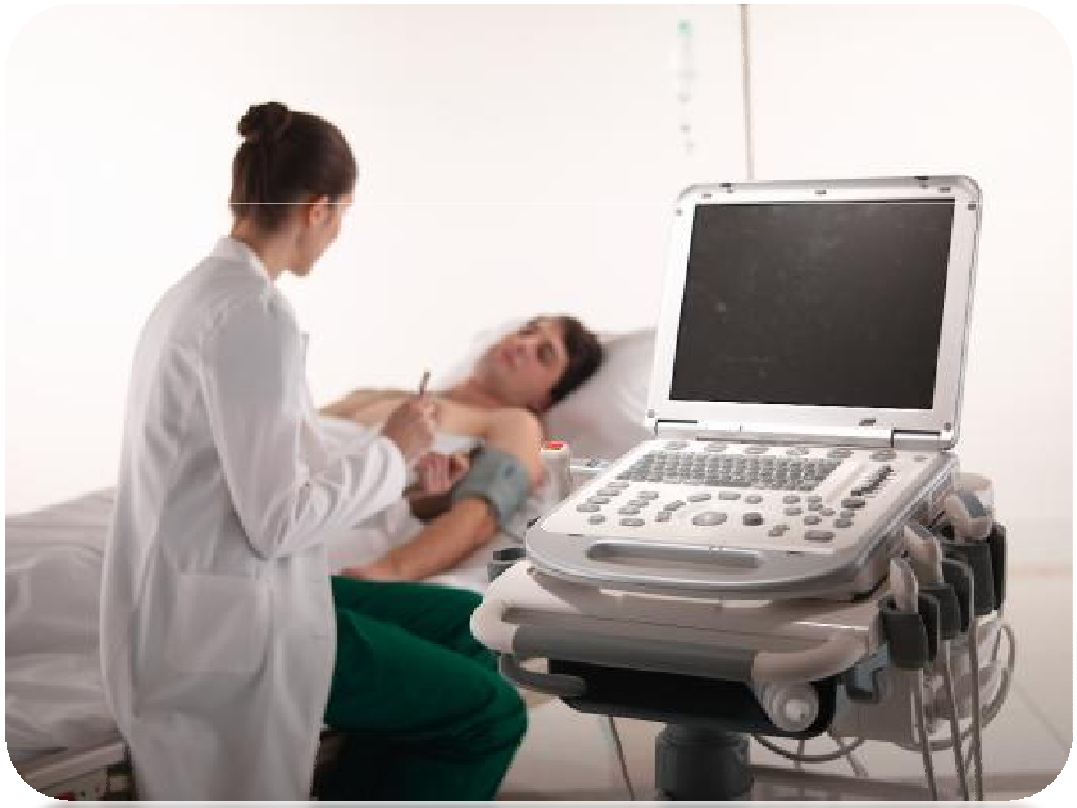
MINDRAY M7

- System Performance Improvements
- Image Quality Advancements
- **Intelligent Workflow Improvements**
- Data Management Improvements
- Mobile Trolley and Peripherals

Intelligent Workflow Improvements

New Control Panel Layout

- Label changes to User-Defined keys
  - improves workflow and ease of use
- New trackball design
  - Type: Capacitive
  - reduces yellowing and glare
- New White LED backlighting
  - Improves visibility by 25%



Intelligent Workflow Improvements

Intelligent Workflow Improvements

Patient Information

Optimize Workflow for Vascular

Flexible Design

Volume Adjust

Flexible Design

Intelligent Workflow Improvements

New Widget

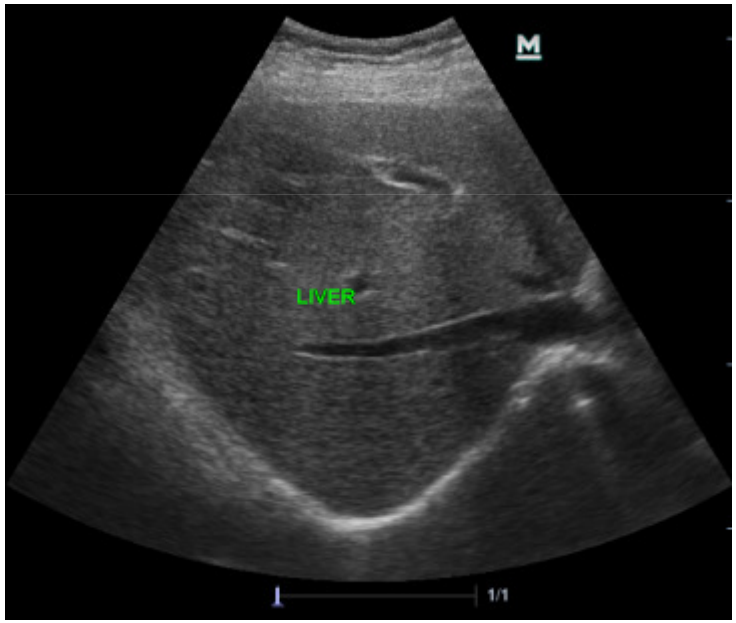
- Intelligent Cursor

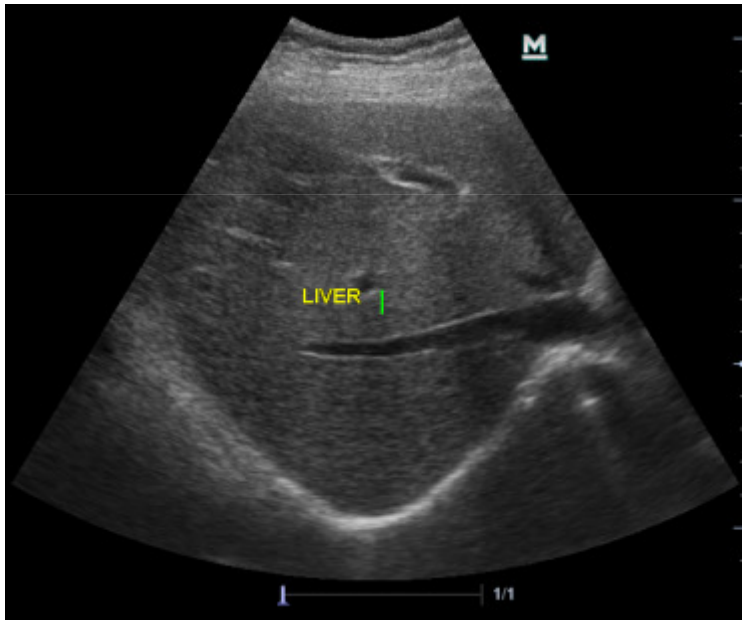
- Scroll Bar for ease of use

Intelligent Workflow Improvements

Comments (Annotations)

- Easier, Faster!
  - Press the <Comment> key, and the cursor becomes “|”.
  - Press any alphanumeric key, and the corresponding letter or numeral is displayed besides the cursor.
  - **Move the Cursor, End of Editing.**





Intelligent Workflow Improvements

Comments (Annotations)

- Home Position
  - "Set Home" for commands cursor positioning.
  - Auto Complete from Text Library Function
  - **Move the Cursor, End of Editing.**

- Add Arrow 
  - Press the <Arrow> key, Adjust the arrow, Press <Set> to anchor the arrow position.
  - Repeat the above steps to add more arrows if necessary.

Intelligent Workflow Improvements

Body Marks (Pictograms)

- The system can be configured with body mark libraries (**128** total) including Abdomen, Cardiology, GYN (Gynecology), OB (Obstetrics), Urology, SMP (Small Part), Vascular, EM (Emergency) and Nerve.
- Users can configure body marks for specific exam modes, **Customize** the body marks and **import/ export** the body marks.)

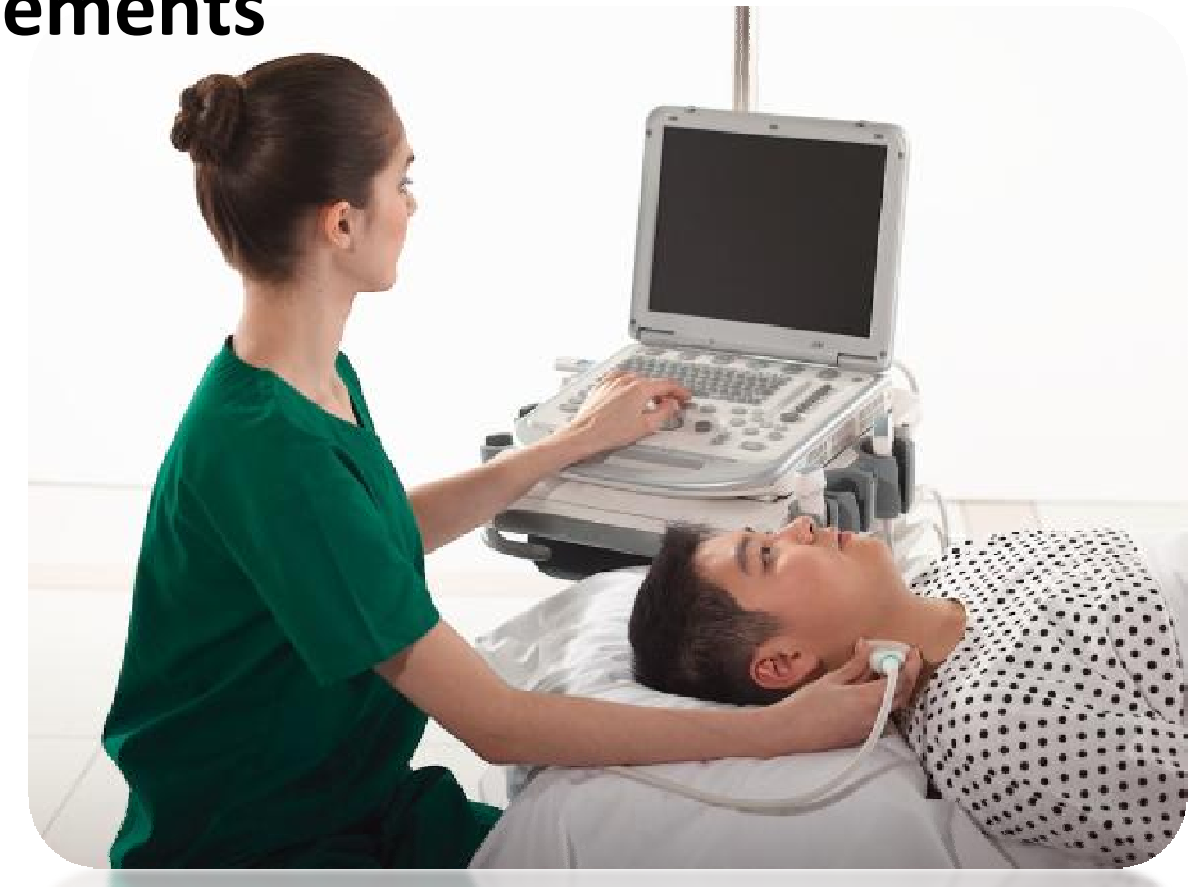
Intelligent Workflow Improvements

iZoom™ Automatically expand the image to full screen

- Full screen display: 1024 x 768
- One Button to get larger image, bigger fonts and increase ease of use.
- According to the region to be zoomed, the system supports two types of full-screen zooming:

MINDRAY M7

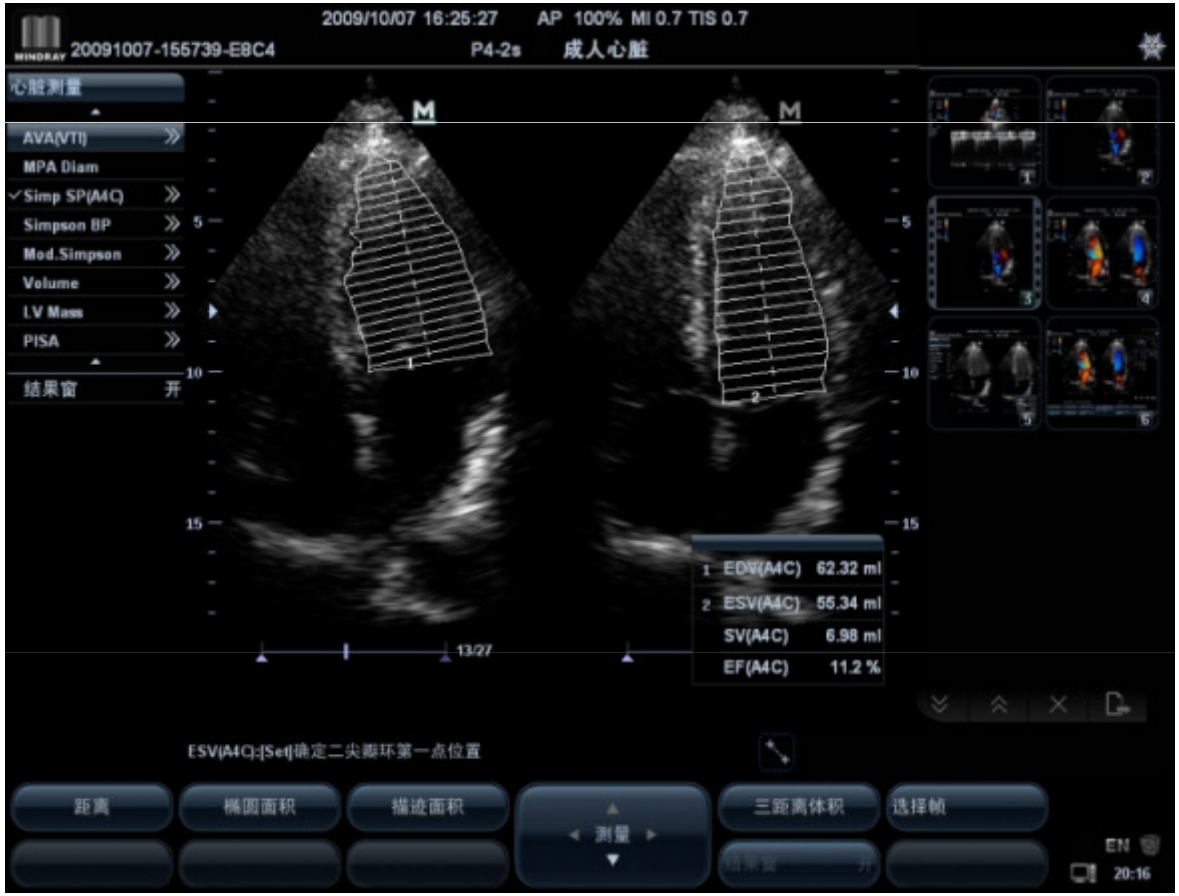
- System Performance Improvements
- Image Quality Advancements
- Intelligent Workflow Improvements
- **Data Management Improvements**
- Mobile Trolley



Data Management Improvements

Cine Review Enhancement

- Cine Compare
  - The system supports to make a comparison of different frames in one cine file, and you can perform measurement, comments adding and body marks on the frame.
  - Tips: cine compare can only be performed on single-format 2D images only



Data Management Improvements

Live Capture

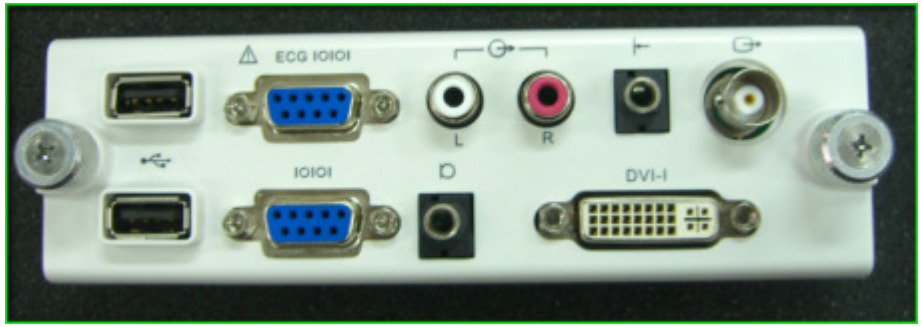
- Live capture refers to save images or cines in image scanning status, and after the storage, the system continues image scanning.
- Types: retrospective and prospective saving.

Data Management Improvements

mindray

Task Management

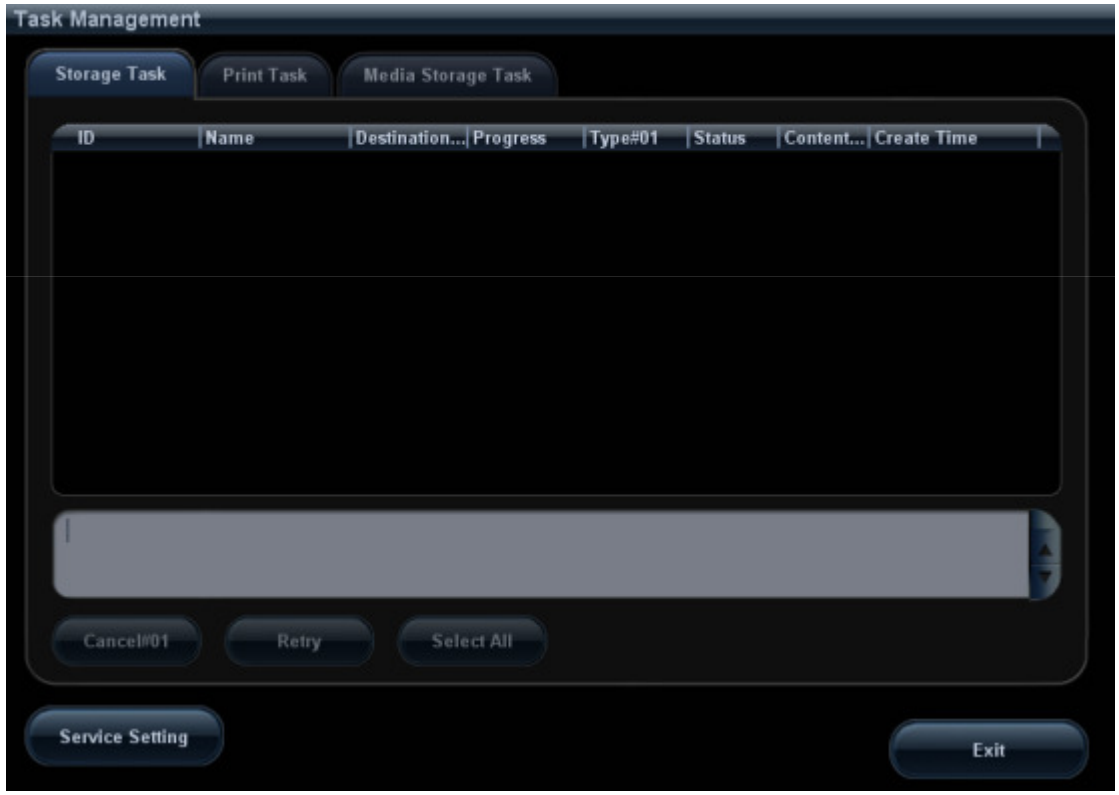
- iRoam™, 802.11b/g wireless data transfer solution
  - USB
    - PC format transfer: JPG/ AVI, BMP/ AVI, TIFF/ AVI.
    - DCM format transfer
    - Export report in RTF format.
  - Ethernet
    - Network Storage
    - Network Printer
  - iDock (IOM-21)
    - USB, ECG, Serial, Audio Out L/R, Mic In, Remote control, Composite Video out, DVI-I Out



Data Management Improvements

Connectivity Enhancement

- **Support Backstage Task**
- The system supports three types of task management:
  - Storage Task: displays the DICOM storage task.
  - Print Task: displays the DICOM print task
  - Media Storage Task
    - DICOM media storage task
    - Backup task (system-relevant format)
    - Send to external devices
    - Network Storage task.



Data Management Improvements

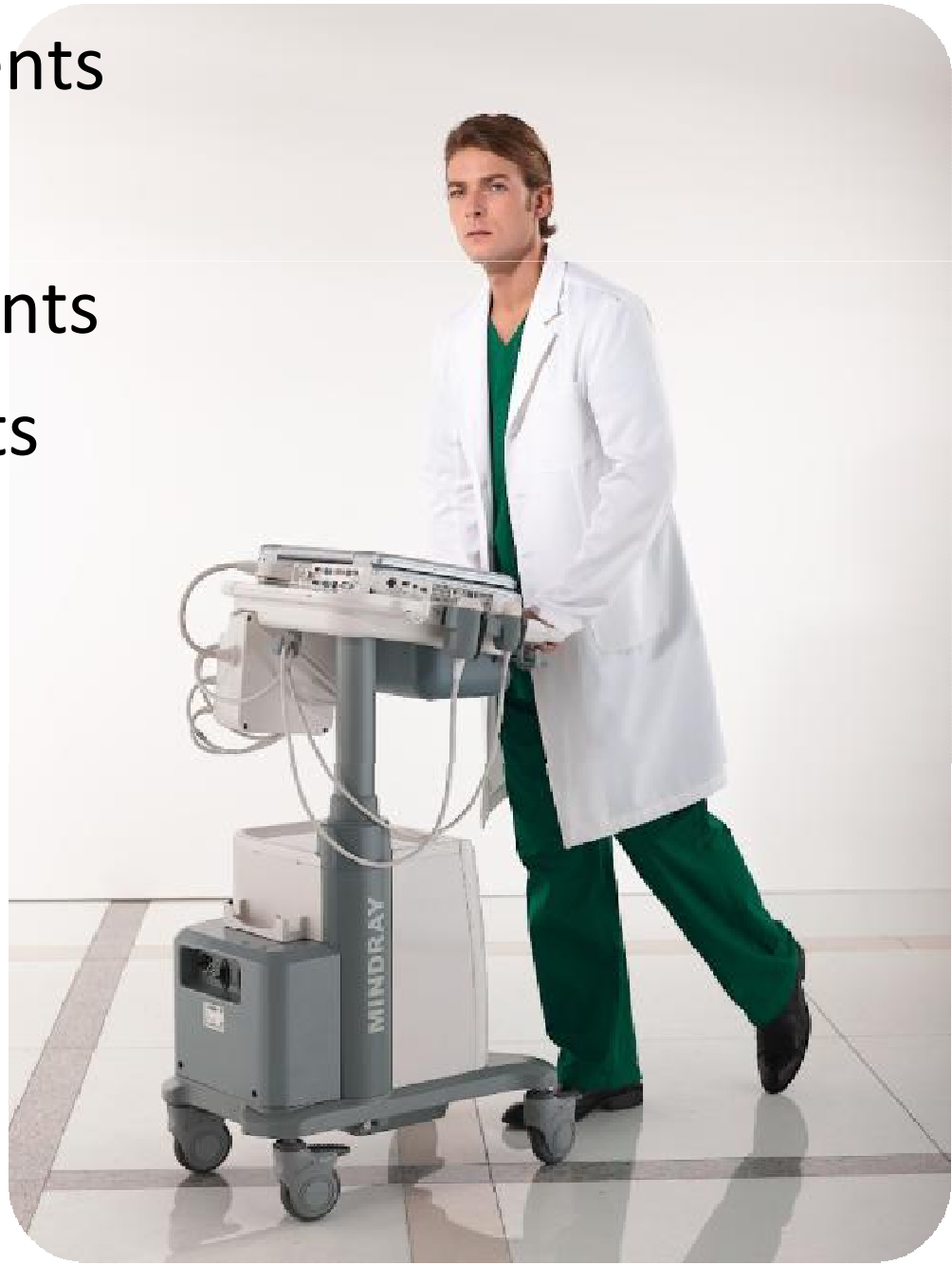
DICOM 3.0 Compatible

- DICOM Basic
  - DICOM connection verify, DICOM task management, DICOM storage, DICOM print, DICOM storage commitment, DICOM media storage (DICOMDIR review)
- DICOM Worklist
- DICOM Query/Retrieve
- DICOM MPPS (Modality Performed Procedure Step)
- Structured Report (SR)
  - DICOM OB/GYN S/R
  - DICOM VAS S/R
  - DICOM CARDIAC S/R

DICOM℠
Digital Imaging and Communications in Medicine

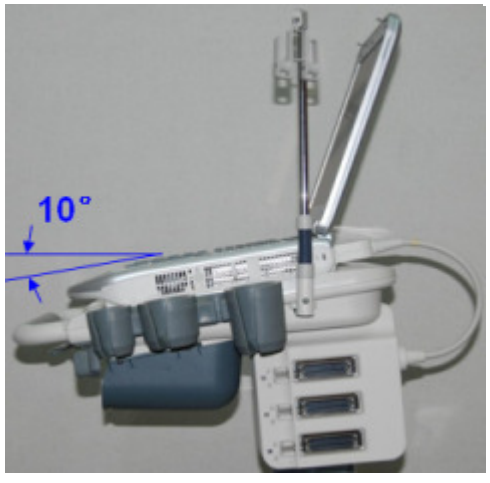
MINDRAY M7

- System Performance Improvements
- Image Quality Advancements
- Intelligent Workflow Improvements
- Data Management Improvements
- **Mobile Trolley**



Mobile Trolley

- Patent Design
- All-In-One Design
- Ergonomic and ease of Use
- Customer Oriented



Mobile Trolley

Patent Design

Open/Close Drawer Design

Quick Lock / Unlock Desig

Mobile Trolley

Transducer Holder x 6

Probe extend module

Compartment for placing

1. ECG module and B/W printer
2. Color Printer
3. DVD RW

Mobile Trolley

Thank you!

mindray