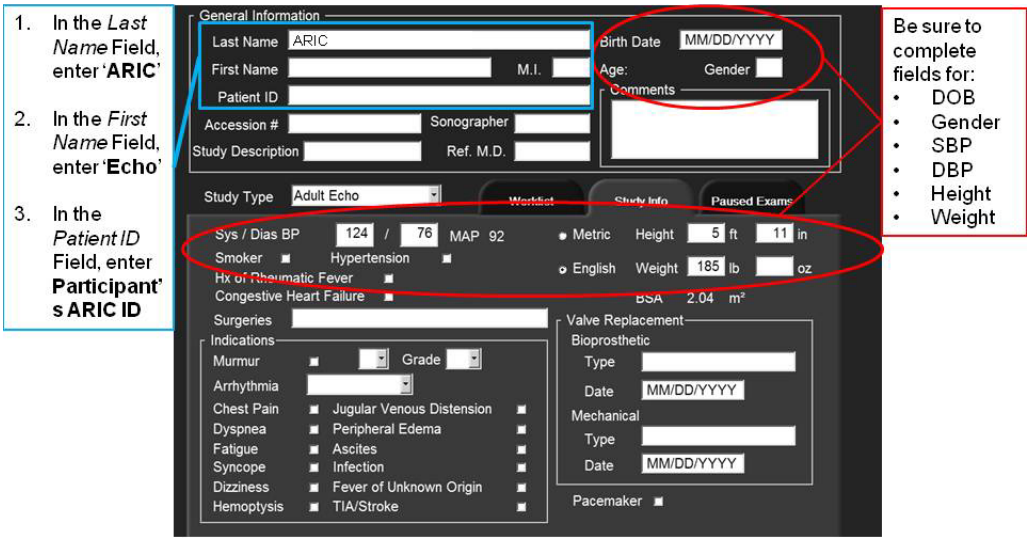
ARIC Echocardiography Protocol Pocket Guide

Study Set-up



General Guidelines for Image Acquisition

- **<u>For patients in sinus rhythm, at least three full cardiac cycles</u>** must be recorded for each protocol specified view**<u>. For subjects in atrial fibrillation, at least ten full cardiac cycles</u>** per view must be recorded.
- The echocardiographic exam should be performed in the order listed on the other side of this card.
- No measurements should be recorded on the images.
- For 2D imaging, throughout the course of the echo exam, both imaging depth and sector with should be continuously optimized to **<u>maintain a frame rate of 50-80 frames per second</u>**.

Echocardiography Reading Center Contact Information

Project Coordinator: Keri Schoonerman
Telephone: 1-617-525-6730
Fax: 1-617-582-6027
Email: echocore@rics.bwh.harvard.edu
Address: ARIC Study Cardiac Imaging Core Lab
PBB Ground Rm A-100
20 Shattuck Street
Boston, MA 02115
USA

A. Blood pressure	
☑ *Brachial blood pressure*	♦ Measure BP just prior to the echo examination
B. Parasternal Position	
☑ *Parasternal long axis*	♦ 2D imaging (at deep depth) ♦ 2D imaging (at shallow depth) ♦ Color Doppler of the mitral and aortic valves
☑ *Parasternal short axis – Aortic valve level*	♦ 2D imaging ♦ Color Doppler ♦ PW and CW Doppler of the RVOT
☑ *Parasternal short axis – Mitral valve level*	♦ 2D imaging
☑ *Parasternal short axis – Papillary muscle level*	♦ 2D imaging ♦ M-mode
☑ *Parasternal short axis – LV apex*	♦ 2D imaging
C. Apical Position	
☑ *Apical 4 chamber view*	♦ 2D imaging ♦ 2D imaging, zoomed on LV ♦ 2D imaging, focused on LA ♦ Color Doppler of mitral valve/LA ♦ PW and CW Doppler of mitral flow ♦ TDI of septal and lateral mitral annulus ♦ iRotate to 2-chamber view (2D imaging) ♦ iRotate to 3-chamber view (2d imaging) ♦ 3D full volume acquisition of LV ♦ 3D full volume acquisition of RV
☑ *Apical 4 chamber – focused on the RV*	♦ 2D imaging ♦ Color Doppler of tricuspid valve/RA ♦ CW Doppler of tricuspid regurgitation ♦ TDI of lateral tricuspid annulus
☑ *Apical 5 chamber view*	♦ 2D imaging ♦ Pulse wave of LVOT flow ♦ CW of transaortic flow
☑ *Apical 2 chamber view*	♦ 2D imaging ♦ Color Doppler MV/LA
☑ *Apical 3 chamber view*	♦ 2D imaging
D. Subcostal View	
☑ *Inferior vena cava*	♦ 2D imaging for 5-10 cardiac cycles