**S3. Online Supplement 3**



**Pediatric Echo Z-Score and ECG Database Project Auxiliary Site Application Form**

Institution: Address:

Site Principal Investigator (PI)

* Must be a pediatric cardiologist with echo expertise
* Must review all submitted echocardiograms
* Must assure completeness and quality of all submitted studies
* Must designate an Alternate PI (pediatric cardiologist with echo expertise) trained in all suspects of the protocol to serve in the event the PI is absent

Site PI Name: Site PI Email:

Alternate PI Name: Alternate PI Email:

Assistant Name: Assistant Email:

Phone Number:

Does your institution capture and store echo images in DICOM (Digital Images and

Communication in Medicine) format?

Yes No

If yes, how long has your institution captured and stored echo images in DICOM format?

<1 yr 1 – 3 yrs 3 – 5 yrs >5 yrs

How many echocardiograms did the echo lab perform in 2011?

How many of these studies were performed offsite?

Will your Information Technology (IT) Department allow installation of software to de-

identify DICOM images and to establish connectivity between the local echo storage system (PACS or Picture Archiving and Communication System) and the PHN Data Hub?

Yes No

If yes, please provide the name and contact information for the primary IT representative who will facilitate software installation and establishment of connectivity between your institutional PACS and the PHN Data Hub:

Site IT Rep Name: Site IT Rep Email: Site IT Rep Phone:

Does your echo lab protocol for all complete studies include the following components?

* Minimum clip length of 2 beats

Yes No

* Parasternal or subxiphoid short-axis clip at the level of the mitral papillary muscles for left ventricular (LV) wall thickness, cavity diameter, and area measurements

Yes No

* Parasternal long-axis clip of the LV outflow tract for assessment of aortic annular, aortic root, and ascending aortic diameters

Yes No

* Parasternal long-axis clip of the mitral inflow for mitral anteroposterior annular diameter

Yes No

* Parasternal long-axis clip of the tricuspid inflow for tricuspid anteroposterior annular diameter

Yes No

* Parasternal short-axis clip of the right ventricular outflow tract for pulmonary annular diameter

Yes No

* Parasternal short-axis, high left parasternal, and/or suprasternal notch short-axis clips for main, right, and left branch pulmonary artery diameters

Yes No

* Apical 4-chamber clip at the cardiac crux for LV endocardial and epicardial long- axis dimensions and for mitral and tricuspid lateral annular diameters

Yes No

* Suprasternal notch long-axis clip for transverse aortic arch and aortic isthmus diameters

Yes No

Among all the patients evaluated by the echo lab, how frequently (%) are the following data available in the medical record?

* Age %
* Height %
* Weight %
* Gender %
* Race %
* Ethnicity %

Has the echo lab ever participated in a clinical trial that required transmission or

submission of echo images to a core laboratory for analysis? Please list all studies and use additional pages if necessary.

Yes No

Study Title: Core Lab Location: Local PI: Study Dates:

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Does your institution capture and store ECG data in MUSE Cardiology Information

System (GE Healthcare, Milwaukee, Wisconsin)?

Yes No

If yes, does your MUSE system allow export of ECG data in XML format?

Yes No

If no, what system are you using?

Does this system export ECG data in XML format?

Yes No

In addition to the application form, each site must submit six de-identified samples of complete studies from normal patients. Samples should include one from each of the following age groups:

* <1 month old
* 1 month old – <3 years old
* 3 – <6 years old
* 6 – <12 years old
* 12 – <16 years old
* 16 – 18 years old

The core laboratory will evaluate the samples for completeness and quality of images. Documentation of the patient’s age, weight, and height should accompany each sample study to ensure that all age groups have been covered by the six submitted representative normal studies.