STANDARDIZED PROCEDURE
ECHOCARDIOGRAPHIC STRESS TEST (TMSE)

These procedures are intended to describe procedures performed by Nurse Practitioners and/or Certified Nurse Midwives (depending on the clinical privileges granted to the individual practitioner) at UC San Diego Health.

I. Policy:
The nurse practitioner is authorized to initiate, perform, alter or discontinue a Stress Echo with Treadmill for UCSDMC patients. The nurse practitioner is able to function with remote supervision within UCSDMC Cardiac Non-Invasive Lab or any setting affiliated with UCSDMC Cardiology Service for which competencies have been validated.

II. Protocol:
A. Definition: Stress Echo with Treadmill (also referred to as ETI echo) is a procedure used to evaluate cardiovascular disease. This test will be done according to the policy and procedures of the Cardiac Non-Invasive Lab.

1. Database: May include but not limited to:
   - Subjective – Relevant history of past or present illness, surgical history, medication history, social history, family history, allergies, relevant review of systems, and relevant diagnostic procedures.
   - Objective – Physical exam relevant to pre-procedure screening of the cardiac diagnostic procedure, 12 lead EKG, baseline echocardiographic pertinent laboratory data including, but not limited to: cardiac enzymes, myoglobin, routine hematological and biochemical tests, and previous/relevant cardiac diagnostic tests.

B. Diagnosis: Assessment will be dependent upon data derived from subjective and objective data base. If diagnosis is not clear, a list of differential diagnosis will be provided. Diagnosis or diagnoses will be developed based upon and not limited to:
   - Subjective - Patient symptoms.
   - Objective - Heart rate, blood pressure, EKG, maximum predicted heart rate, exercise capacity and echocardiographic findings.

C. Plan:
   i. Evaluate patient during pre-procedure screening for contraindications to cardiac stress testing, and his/her ability to achieve target heart rate with exercise.
   ii. Educate the patient about the procedure.
   iii. Monitor patient, vital signs, electrocardiography and echocardiography findings during exercise and recovery phases of the test.
   iv. A preliminary impression will be documented on the preliminary report form for echocardiographic stress testing.
   v. Describe preliminary findings to the patient.
   vi. Report abnormal findings to a physician or referring provider.
   vii. Initiate follow-up evaluation for the patient when indicated.

D. Record Keeping: Each patient contact will be recorded on a UCSDMC
System approved form. Pre-procedure evaluation of outpatients will be documented on the outpatient procedure H&P short form. Preliminary impressions will be documented on the stress echo worksheet. Further documentation for emergency department or admitted patients may be done on the approved UCSDMC interdisciplinary report form.

III. Requirements for the Nurse Practitioner
All general policies for the experience, training, education, initial evaluation, and ongoing evaluation are in effect for this standardized procedure.

V. Guidelines for the Nurse Practitioner
A. Echocardiographic stress test patients may include, but are not limited to:
   • UCSDMC new patients referrals
   • UCSDMC established patient referrals
   • Outside referrals.

B. Echocardiographic stress test patients may include patients from ambulatory and inpatient settings.

C. Cardiology nurse practitioner may supervise echocardiographic cardiac stress tests involving exercise with treadmill.

VII. RESPONSIBILITY
Please contact the Advanced Practice Council if you need help. The administrative assistant for the Chief Nursing Officer can direct you. Call; 619-543-3438.

VIII. HISTORY OF PROCEDURE
Revised by the Committee of Interdisciplinary Practices: 2/26/2014, 9/28/2016
Reviewed by the Medical Staff Credentials Committee: 3/5/2014, 10/6/2016
Approved by the Medical Staff Executive Committee: 3/20/2014, 10/7/2016