# **Examination Information (continued)**

## **Examination Content Outline**

## 1. Patient Safety Considerations

- A. Contraindications
- B. Complications of Transesophageal Echocardiography
- C. Mechanical and Electrical Safety
- D. Infection Control

## 2. Echocardiographic Imaging: Acquisition and Optimization

- A. Principles of Ultrasound
- B. Transducers
- C. Structural Imaging
- D. Principles of Doppler Ultrasound
- E. Image Troubleshooting and Optimization

## 3. Normal Cardiac Anatomy and TEE Imaging Plane Correlation

- A. Imaging Plane Orientation
- B. Cardiac Anatomy Correlation Imaging Planes
- C. Cardiac Valves
- D. Major Vessels
- E. Other Structures

#### 4. Global Ventricular Function

- A. Normal Left and Right Ventricular Systolic Function
- B. Abnormal Left Ventricular Systolic Function
- C. Right Ventricular Function
- D. Quantitative Evaluation of Ventricular Function

# 5. Regional Ventricular Systolic Function & Recognition of Pathology

- A. Myocardial Segmental Anatomy
- B. Imaging Planes and Segmental Anatomy
- C. Normal and Abnormal Segmental Function Recognition
- D. Recognition of Ventricular Pathology

### 6. Basic Recognition of Cardiac Valve Abnormalities

- A. Normal Valve Anatomy
- B. Acquired Valve Diseases
- C. Valve Pathology Recognition

# 7. Identification of Echocardiographic Findings in Non-Cardiac Surgery

- A. Tumors
- B. Thrombi
- C. Devices and Foreign Bodies
- D. Aortic Pathology
- E. Other

### 8. Basic Perioperative Hemodynamic Assessment

- A. Evaluation of Hypotension and Cardiovascular Instability
- B. Basic Perioperative Hemodynamic Assessment
- C. Hemodynamic Pressure Estimation
- D. Doppler Valve Profiles
- E. Basic Diastolic Function

## 9. Basic Recognition of Congenital Heart Disease in the Adult

- A. Atrial Septal Defects
- B. Ventricular Septal Defects
- C. Persistent Left Superior Vena Cava
- D. Bicuspid Aortic Valve

#### 10. Surface Ultrasound for Vascular Access

- A. Normal Anatomy and Imaging Planes
- B. Atypical Anatomical Orientations
- C. Technique for Central Venous Cannulation
- D. Intravascular Pathology

## **Reference Statement**

NBE does not endorse or recommend any third-party review course or material. Any text in cardiovascular techniques and evaluation, cardiac patient care and management may be used. Current standards and guidelines endorsed by professional societies are also appropriate.