Top Ten Things To Know
Diagnosis and Management of Patients With Valvular Heart Disease

1. This guideline for adult patients with valvular heart disease (VHD) updates the 2008 VHD focused update and the 2006 full version revision. It incorporates new evidence and removes outdated or irrelevant recommendations.

2. VHD may present in many ways and include a murmur, symptoms, or findings on imaging done for other reasons.

3. The initial evaluation should include a detailed history and physical examination, chest x-ray, electrocardiogram, and a comprehensive transthoracic echocardiogram (TTE) that includes 2-dimensional imaging and 2 Doppler interrogation. Additional testing may also be needed.

4. The severity of the valve disease is based on physical exam findings and TTE data and the indications for intervention are based on the following:
   - presence or absence of symptoms,
   - severity of VHD,
   - response of the left and/or right ventricle to the volume or pressure overload caused by VHD,
   - effect on the pulmonary or systemic circulation, and
   - a change in heart rhythm.

5. These guidelines offer a new 4-stage classification for the progression of VHD:
   - A (at risk)
   - B (Progressive)
   - C (Asymptomatic severe)
   - D (symptomatic severe)

6. Reasons for valvular intervention include to improve symptoms, to prolong survival, and to reduce the risk of complications.

7. A risk assessment scheme is included for patients under consideration for intervention or surgery and includes considerations to aid in the decision to intervene and the type of intervention chosen. Ultimately the decision should be based on an individual risk-benefit analysis. Considerations include the following:
   - Procedure risk/operative mortality,
   - Intermediate-term mortality,
   - Ability of procedure to alter natural disease course,
   - Long-term consequences of the intervention,
   - Patient frailty and comorbidities,
   - Major organ system dysfunction, and
   - Procedure-specific impediments.

8. The indications and timing for surgical and transcatheter aortic valve replacement are covered in these guidelines. This section includes tables defining the stages of valvular aortic stenosis and timing of intervention as well as decision pathways for aortic valve replacement, and recommendations for the choice of surgical or transcatheter intervention.

9. VHD requires a multidisciplinary team and approach for its diagnosis and management. Indications for a multidisciplinary Heart Valve Team and a Heart Valve Center of Excellence are discussed as parts of this team.

10. Finally, VHD patients will require close follow-up, the frequency of which will depend on the lesion and its severity and will include a history and physical exam and an understanding of the natural history of the valve lesion being followed.