FP Essentials
Call for Authors – February 2026

Valvular Heart Disease

We are seeking an author or author group to write a manuscript for this edition of *FP Essentials* on the topic of valvular heart disease. This edition will cover four topics:

1. Aortic Stenosis
2. Infective Endocarditis
3. Mitral Regurgitation and Mitral Stenosis
4. Care of the Patient With Valve Replacement

The main text of the manuscript should be approximately 10,000 words in length, divided into four sections of approximately 2,500 words each, plus an abstract of approximately 200 words for each section. In addition, there should be key practice recommendations, a maximum of 15 tables/figures total, and up to 200 references to provide support for all recommendations and factual statements in the manuscript. References must be numbered sequentially by section, with each new section starting over at "1."

This edition should focus on what is new in each topic and should answer the key questions listed for each section. Each section should begin with an illustrative case, similar to the examples provided, with modifications to emphasize key points; each case should have a conclusion that demonstrates resolution of the clinical situation. The references provided here include information that should be considered in preparation of this edition of *FP Essentials*. However, these should be used only as a starting point in identifying the most current guidelines and references to include in the edition.

Needs Assessment
Family physicians encounter many patients with both diagnosed and undiagnosed cardiovascular disease, specifically valvular heart disease. They are uniquely poised to diagnose heart murmurs for the first time and at various times across their patients' lifespan, either with or without symptoms that may point to severe underlying cardiopulmonary or systemic disease. The benefit of longitudinal care allows for serial cardiac examinations and assessment of medical comorbidities over time that may contribute to the development of valvular heart disease in adult patients. Surveys of family physicians and residents consistently identify gaps in knowledge and confidence in diagnosing heart murmurs and associated valvular conditions, as well as how to manage patients who have undergone valve replacement. This edition of *FP Essentials* will provide family physicians with the most current and evidence-based approaches to the diagnosis and management of these important considerations related to valvular heart disease.

Section 1: Aortic Stenosis

Example Case

AK is a 74-year-old man with a past medical history of hypertension, hyperlipidemia, obesity class 1, and well controlled type 2 non-insulin requiring diabetes mellitus. He is retired and has always been physically active throughout his life. He lives in a rural area and avoids seeking care unless he has persistent issues since his doctor is an hour away. Within the last several months, even on short walks with his wife he has experienced decreased stamina, mild lightheadedness, mild chest pain that resolves with rest, and bilateral foot and ankle edema. On exam you hear a 3/6 midsystolic murmur at the right second intercostal space.

Key Questions to Consider

Definitions, Epidemiology, and Pathophysiology

- How is aortic stenosis (AS) defined?
- How common is AS? Who is most likely to get AS?
- What is the pathophysiology of AS?
- What are the risk factors for development of AS?
- Are patients with bicuspid or tricuspid aortic valves more likely to develop stenosis, and are these variations clinically relevant? What are the genetics of bicuspid aortic valve? What are the recommendations for screening family members of individuals with bicuspid aortic valve?

Clinical Presentation and Diagnosis

- What are the common presentation and clinical findings in patients with mild, moderate, and severe AS? What symptoms, if present, are considered "red flags"?
- What are the diagnostic criteria for AS?
- What medical comorbidities can cause AS and what medical comorbidities can AS cause?
- What are the current evidence-based diagnostic strategies for evaluation of AS?
- What is the role of point-of-care ultrasound (POCUS) in making an accurate diagnosis of AS? When should a POCUS diagnosis of AS be followed by a standard echocardiogram? To enhance the discussion, please add original images of POCUS here and in other related sections where possible.
- What are the recommendations for evaluating patients for angina that may be caused by AS?

Treatment

- What are the current evidence-based medical treatment recommendations for AS? Should diuretics or other medications be avoided in patients with AS?
- What is the role for balloon valvuloplasty?
- What are the indications and contraindications for aortic valve repair and replacement, specifically open-heart valve repair/replacement versus transcatheter aortic valve replacement (TAVR)?
- What are the risks of open-heart aortic valve repair and replacement and TAVR?
- What are the considerations for selecting mechanical aortic valve replacement vs bioprosthetic aortic valve replacement vs Ross procedure?

- How often are medical and procedural treatments successful?
- When should patients with AS be referred to a cardiologist? When should patients with AS be referred to cardiothoracic surgery?

Prognosis

- What is the prognosis for patients with AS who receive only medical therapy and are considered not to be ideal procedural candidates or are not offered procedures?
- What testing and evaluation is recommended after treatment for patients with AS?
- What are the recommendations and precautions for physical activity and exercise in patients with AS?
- What are the risks of long-term complications from AS?
- What is the prognosis for patients with AS who undergo valve repair or replacement? Compare outcomes data for the various procedural options, including open heart valve repair/replacement and TAVR. What is the timeline for recovery?

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Section 2: Infective Endocarditis

Example Case

LS is a 26-year-old woman with current intravenous heroin use who presents with a several week history of intermittent fevers and chills, general fatigue, and mild shortness of breath on exertion. On physical examination, she has a temperature of 102.2°F, blood pressure 145/92, pulse 108, and pulse oximetry 95%. She has poor dentition with several tooth avulsions and visible decay and impaction, and a new 3/6 holosystolic ejection murmur auscultated best at the apex of the heart. She also has painless, flat red spots on the palms and soles as well as pinpoint purple spots on her mouth and eyelids.

Key Questions to Consider

Definitions, Epidemiology, and Pathophysiology

- How is infective endocarditis defined?
- How common is infective endocarditis? Who is most likely to get infective endocarditis?
- What is the pathophysiology of infective endocarditis?
- What are the risk factors for development of infective endocarditis? What are the indications for endocarditis prophylaxis?
- Which heart valves are most likely to be affected by infective endocarditis based upon causative source? What are the most common microbial pathogens?

Clinical Presentation and Diagnosis

- What are the common presentation and clinical findings in patients with mild, moderate, and severe infective endocarditis?
- What are the diagnostic criteria for infective endocarditis? Describe the Duke-International Society for Cardiovascular Infectious Disease criteria.
- What medical comorbidities can lead to infective endocarditis and what medical comorbidities can occur due to infective endocarditis?
- What are the current evidence-based diagnostic strategies for evaluation of infective endocarditis?
- What is the role of point-of-care ultrasound (POCUS) in making an accurate diagnosis of infective endocarditis? When should a POCUS diagnosis of infective endocarditis be followed by a standard echocardiogram?

Treatment

- What are the current evidence-based medical treatment recommendations for infective endocarditis? What are the preferred initial antimicrobial agents and recommended treatment duration?
- When and how often should blood cultures be repeated?
- What are the indications and contraindications for valve repair and replacement?
- What are the risks of valve repair and replacement?
- How often are medical and procedural treatments successful?

Prognosis

- What is the prognosis for patients with infective endocarditis who receive only medical therapy and are considered not to be ideal procedural candidates?
- What testing and evaluation is recommended after treatment for patients with infective endocarditis?

- What are the risks of long-term complications from infective endocarditis?
- What is the prognosis for patients with infective endocarditis who undergo valve repair or replacement?
- What is the risk for recurrent infective endocarditis? When should patients with a history of infective endocarditis receive antibiotic prophylaxis?
- How does treatment of substance use disorder (SUD) change the prognosis of someone undergoing treatment for BE/IE? When should treatment of SUD be offered in someone diagnosed with and undergoing treatment for infective endocarditis?

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Section 3: Mitral Regurgitation and Mitral Stenosis

Example Case

JH is a 64-year-old man who presents to his family physician with progressive shortness of breath and palpitations over the last week. He has a past medical history of well-controlled type 2 insulin dependent diabetes mellitus, hypertension, hyperlipidemia, obesity, and both nicotine and alcohol use. As a young child he had rheumatic fever, but he played college-level sports and until recently never experienced any limitations in physical activity. On physical examination, he has a 5/6 holosystolic ejection murmur, bilateral pulmonary rales, and 2+ bilateral lower extremity edema.

Key Questions to Consider

Definitions, Epidemiology, and Pathophysiology

- How are mitral regurgitation (MR) and mitral stenosis (MS) defined?
- What is the difference between primary and secondary MR?
- How common are MR and MS? Who is most likely to get MR and MS?
- What is the pathophysiology of MR and MS?
- What are the risk factors for development of MR and MS?

Clinical Presentation and Diagnosis

- What are the common presentation and clinical findings in patients with mild, moderate, and severe MR and MS?
- What are the diagnostic criteria for MR and MS?
- What medical comorbidities can cause MR and MS and what medical comorbidities can MR and MS cause?
- What are the current evidence-based diagnostic strategies for evaluation of MR and MS?
- What is the role of point-of-care ultrasound (POCUS) in making an accurate diagnosis of MR and MS? When should a POCUS diagnosis of MR and MS be followed by a standard echocardiogram?

Treatment

- What are the current evidence-based medical treatment recommendations for MR and MS?
- What are the indications and contraindications for mitral valve repair and replacement, specifically open-heart valve repair/replacement versus transcatheter mitral valve replacement (TMVR)?
- What are the risks of open-heart mitral valve repair and replacement and TMVR?
- How often are medical and procedural treatments successful?
- What is transcatheter mitral valve repair (TMVR, or MitraClip)? When is it indicated?
- When should patients with MR and MS be referred to cardiology? When should patients with MR and MS be referred to cardiothoracic surgery?

Prognosis

- What is the prognosis for patients with MR and MS who receive only medical therapy and are considered not to be ideal procedural candidates or are not offered procedures?
- What testing and evaluation is recommended after treatment for patients with MR and MS?
- What are the risks of long-term complications from MR and MS?

- What is the prognosis for patients with MR and MS who undergo valve repair or replacement? (compare outcomes data for open heart valve repair/replacement versus TMVR)

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Section 4: Care of the Patient With Valve Replacement

Example Case

HG is a 90-year-old man with a past medical history significant for aortic stenosis status post recent transcatheter aortic valve replacement (TAVR), renal transplant secondary to chronic hypertensive nephropathy, chronic obstructive pulmonary disease, and bilateral hip and knee osteoarthritis who sees you for a routine follow-up visit. He is curious to know his limitations after the TAVR, what symptoms he should watch for, what dietary modifications he needs to make, and if he really needs to take the additional medications that were prescribed for him on hospital discharge.

Key Questions to Consider

- What are the common complications of open-heart valve repair/replacement versus the transcatheter approach?
- How long does it take on average to recover after a heart valve procedure (e.g., annuloplasty, valvuloplasty [balloon valvuloplasty, balloon valvotomy, percutaneous balloon valvuloplasty]) - either open heart or transcatheter procedures?
- What is the role of the family physician in caring for the hospitalized patient who has undergone a heart valve procedure? What is their role in outpatient follow-up?
- What are the recommended dietary restrictions after a heart valve procedure?
- When can a patient resume normal daily activities after a heart valve procedure, including driving a car?
- What are the recommendations for exercise and cardiac rehabilitation after a heart valve procedure - open heart vs transcatheter?
- What is the current evidence-based medical therapy for patients who have undergone a heart valve procedure, either repair or replacement? What are the indications and recommendations for anticoagulation in patients with prosthetic valves?
- Which patients require lifelong anticoagulation, and what are the preferred agents?
- When should anticoagulation be interrupted for surgical procedures, and what bridging (if any) is recommended for patients with heart valves?
- What are the success and failure rates of heart valve procedures - open heart vs transcatheter, repair vs replacement? How long do various types of prosthetic heart valves typically last? What is recommended for monitoring the function of prosthetic heart valves over time?
- What are the clinical signs and symptoms of valve failure after a procedure - open heart vs transcatheter, repair vs replacement?
- What symptoms or signs warrant urgent referral after valve replacement?
- What are the current evidence-based guidelines for patients to reduce their risk of subsequent cardiac and pulmonary disease after a heart valve procedure?
- What are the current recommendations for ongoing support and follow-up after a heart valve procedure, from both physical and emotional standpoints?
- What are the current recommendations for dental care and antibiotic prophylaxis after a heart valve procedure?

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