Program:

Module 1:
• Definition and Classification
• Epidemiology of Heart Failure
• Pathophysiology of Heart Failure
• Specific Diseases causing Heart Failure and practical case studies

Module 2:
• Diagnosis and Investigation of HF and Practical Case Studies
• Treatment of Heart Failure and Practical Case Studies
HeFSSA is a non-profit medical society with the following objectives:

To promote research in all aspects of cardiovascular disease leading to heart failure with a special focus on conditions relevant to the population of South Africa.

To promote collaboration among those involved in research and treatment of conditions leading to heart failure in South Africa.

To promote development and monitoring of guidelines for diagnosis and management of heart failure in South Africa.

To promote public awareness of the prevention and treatment of conditions leading to heart failure in South Africa.

To seek to form alliances with other like-minded individuals or organizations both on the African continent and elsewhere.

Become a member and visit www.hefssa.org regularly to stay abreast of developments in heart failure.
Thank You to Our Corporate Supporters!
Definition of Heart Failure

Imbalance between volume of blood supplied and the tissue requirements

Heart Failure is a clinical syndrome with the following features:

1. Symptoms of heart failure (like breathlessness at rest or during exercise, ankle swelling and fatigue

2. Signs typical of heart failure (tachycardia, tachypnoea, pulmonary rales, pleural effusion, peripheral oedema

3. Objective evidence of cardiac dysfunction (at rest)
# Classification of Heart Failure by Structural Abnormality (ACC/AHA)

<table>
<thead>
<tr>
<th>Stage A:</th>
<th>At risk for HF, but no structural heart disease or signs/symptoms of HF</th>
<th>e.g. HT, CAD, DM, Cardiotoxins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage B:</td>
<td>Structural heart disease, but no symptoms of HF</td>
<td>e.g. LVH, prior MI, asymptomatic valve disease</td>
</tr>
<tr>
<td>Stage C:</td>
<td>Structural heart disease, with prior or current symptoms of HF</td>
<td>e.g. SOB, fatigue due to LV systolic dysfunction</td>
</tr>
<tr>
<td>Stage D:</td>
<td>Advanced heart disease and severe symptoms at rest despite max therapy. Refractory HF</td>
<td>Unable to safely discharge without specialised support, e.g LVAD</td>
</tr>
</tbody>
</table>

Hunt SA et al J Am Coll Cardiol 2001; 38:2101
## Classification of Heart Failure by Symptoms

**New York Heart Association (NYHA)**

<table>
<thead>
<tr>
<th>Classes</th>
<th>Description</th>
<th>1 year Survival Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade I</td>
<td>Early failure, no symptoms with regular exercise or restrictions</td>
<td>&gt; 95%</td>
</tr>
<tr>
<td>Grade II</td>
<td>Ordinary activity results in mild symptoms, but comfortable at rest</td>
<td>80 - 90%</td>
</tr>
<tr>
<td>Grade III</td>
<td>Advanced failure, comfortable only at rest; increased physical restrictions</td>
<td>55 - 65%</td>
</tr>
<tr>
<td>Grade IV</td>
<td>Severe failure; patient has symptoms at rest</td>
<td>5 - 15%</td>
</tr>
</tbody>
</table>

Heart failure is a chronic progressive disease.
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How big is the problem?

- Four percent of the total Western population has heart failure. *(No data available for SA population)*

- With patients over 65 years old, the prevalence is 10%.

- Lifetime risk of developing heart failure is one in five for a person aged 40 years.

- Forty percent of patients die within a year of diagnosis and 60% die within five years.

- ‘Heart of Soweto Study’ : Of 6000 newly-referred patients seen at the cardiac clinic, more than 50% had symptoms and signs of heart failure,
Prevalence of Heart Failure in Western Countries (US)

Figures from the US

(This is a 1st world scenario)

Total number - 5.3 million people

New cases diagnosed - 660,000/year

This number is increasing annually and reaches 10/1000 after the age of 65.

Mortality (2004) - >284,000 people

80% of patients hospitalised >65 years old
Causes of CVD in Sub-Saharan Africa vs. Europe