In 1931, Paul Dudley White noted that there was no specific treatment for coronary heart disease. He described the treatment of high blood pressure as "difficult and almost hopeless". Inexpensive medication is available to treat nearly all cardiovascular diseases, including high blood pressure.

Improvements in surgical techniques have led to safer operations. Effective devices have been developed, such as pacemakers, prosthetic valves, and patches for closing holes in the heart. Other developments have led to a wide array of interventions that often make surgery unnecessary.

Together, these advances in treatment improve quality of life and reduce premature death and disability. They also add to the rising costs of health care. Increasingly, high-technology procedures are chosen over less expensive, but nevertheless effective, strategies.

In 2001, only 24% of people aged 70 years or below in the USA who achieve blood pressure goal of less than 140/90 mmHg, or blood cholesterol goal of less than 5.0 mmol/l are receiving medication treatments. Percentage reduction in two-year risk of heart attack, stroke or death from CVD in patients with previous coronary heart disease or stroke is seen in selected countries.

Types of treatment

Selected medication, devices and operations

Medication used in treatment of

1. High blood pressure
2. Coronary heart disease
3. Heart failure
4. Arrhythmia (heart rhythm disorders)
5. Blood clotting disorders

Devices

1. Pacemakers
2. Implantable defibrillators
3. Coronary stents
4. Prosthetic valves
5. Artificial heart

Operations

1. Coronary artery bypass
2. Balloon angioplasty
3. Valve repair and replacement
4. Heart transplantation
5. Artificial heart operations

Trends in cardiovascular operations and procedures in the USA

Number of operations and procedures 1981–2001 thousands

- heart catheterization
- open heart surgery
- coronary artery bypass surgery
- carotid endarterectomy
- cardiac pacemakers

In the USA, only 24% of people aged 20 years and above with blood cholesterol of 240 mg/dl or above are receiving drug treatment.