

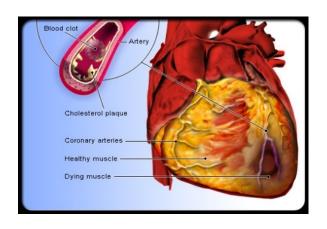


# A clinical perspective on early CVD detection and diagnosis

Professor David A Wood MSc FRCP FFPH FICS(Hon.)
FESC FACC FAHA

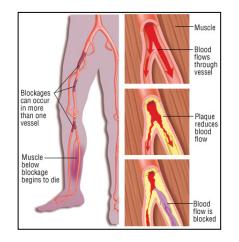
Director of Science, Strategy and International Relations
National Institute for Prevention and Cardiovascular Health
Adjunct Professor of Preventive Cardiology
University of Galway

#### Cardiovascular disease



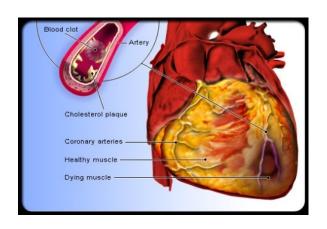
Coronary artery disease or ischaemic heart disease 'Heart attacks'

Cerebral artery disease 'Stroke'



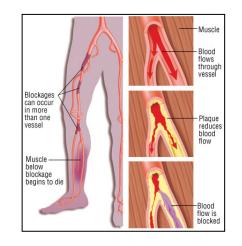
Peripheral artery disease 'Hardening of the arteries'

#### Cardiovascular disease



Coronary artery disease or ischaemic heart disease 'Heart attacks'

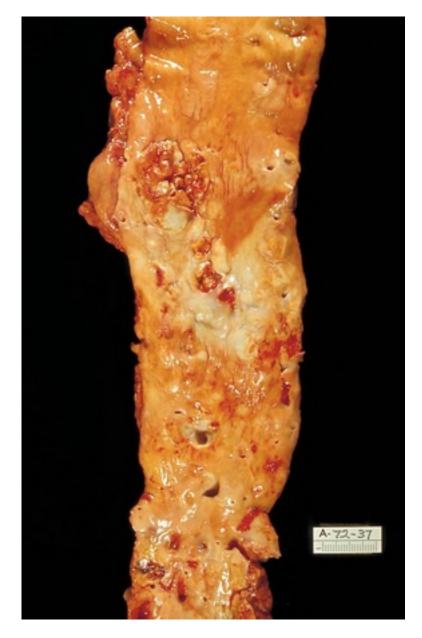
Cerebral artery disease 'Stroke'

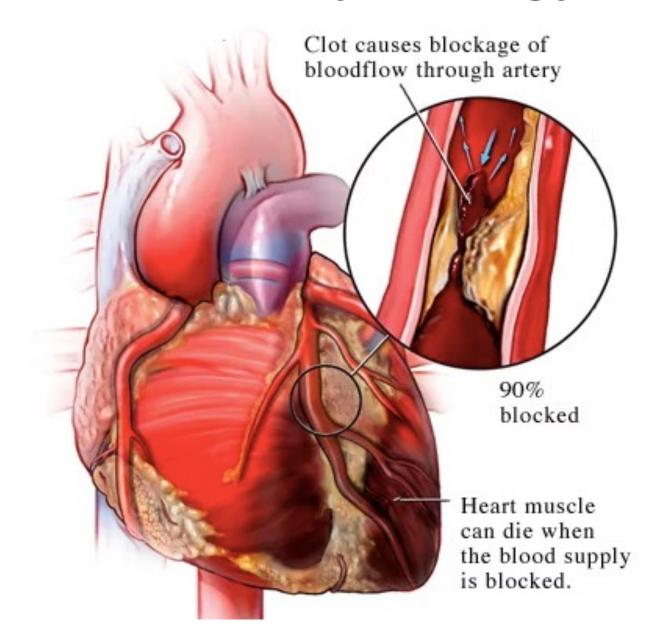


Peripheral artery disease 'Hardening of the arteries'



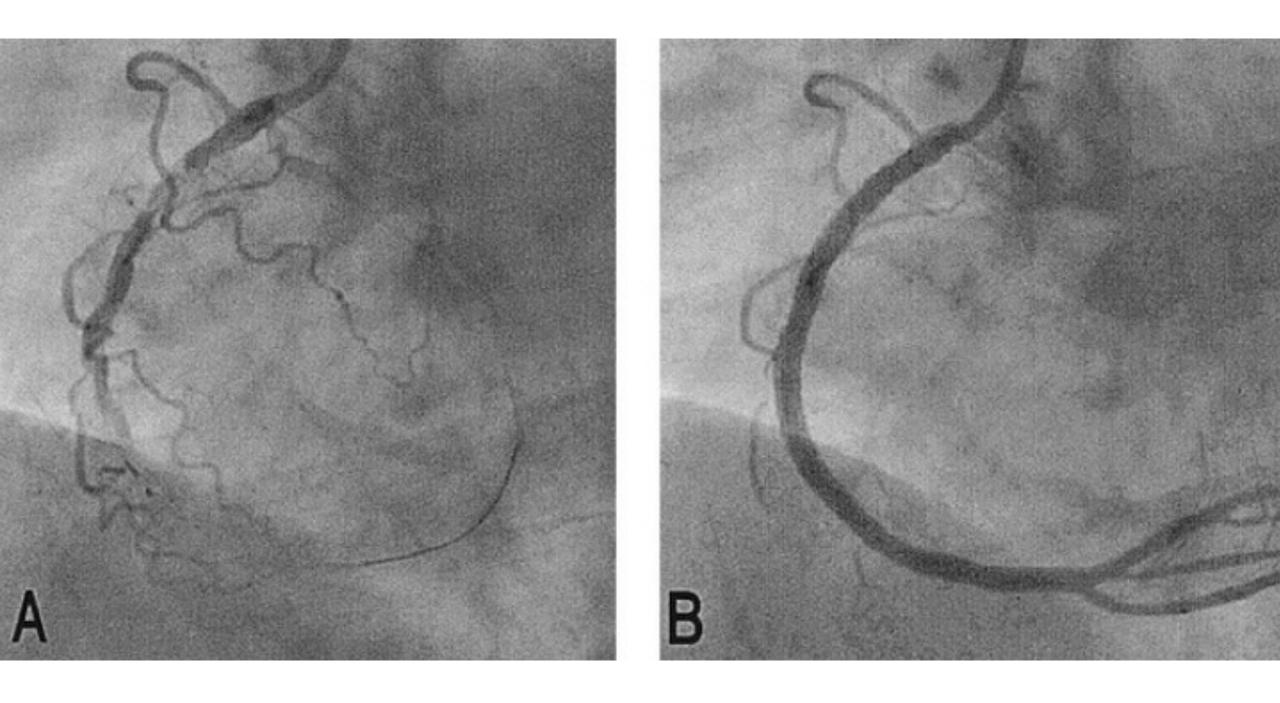
#### Atherosclerosis is the common pathology











#### **Case fatality**



The principle reason to screen for disease before it becomes symptomatic

### Screening the asymptomatic population



What are the principles?

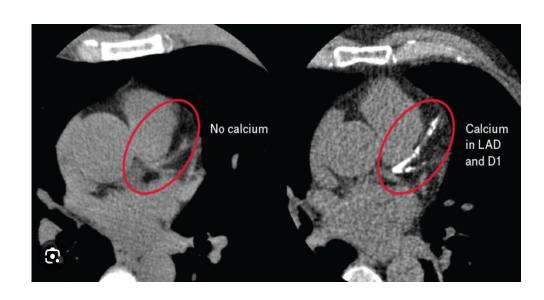
Screening is the process of identifying individuals in the population who have asymptomatic disease (early detection) or are at high risk of developing the disease.

- A validated screening test to either detect disease or the risk of developing the disease
- An intervention which will favourably modify the clinical course of established disease or reduce the risk of developing the disease

#### A validated screening test to either detect:

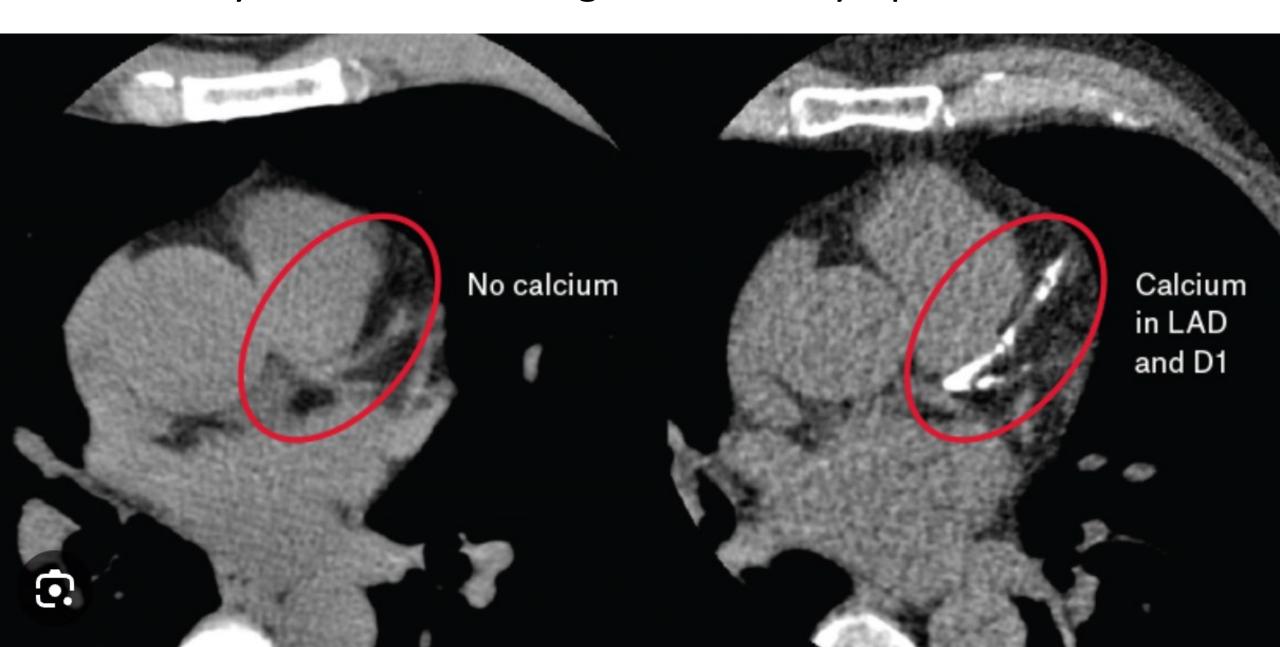
Asymptomatic disease

High risk of developing symptomatic disease

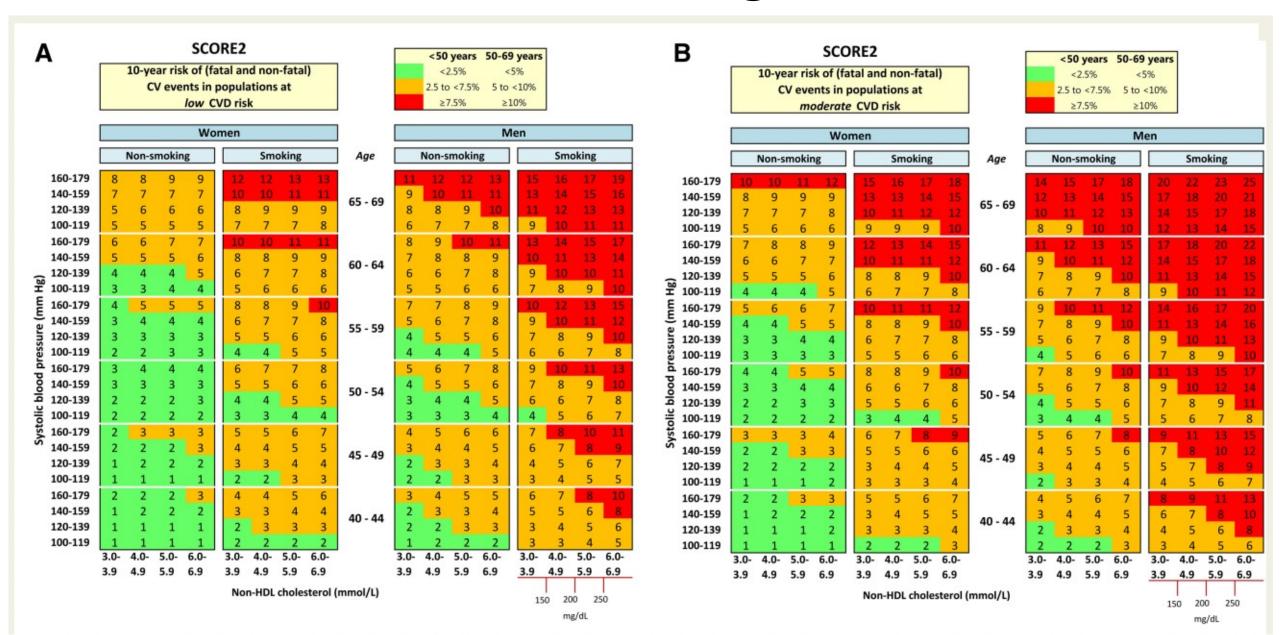




#### Coronary calcium screening to detect asymptomatic disease



#### SCORE 2 chart to detect high risk individuals

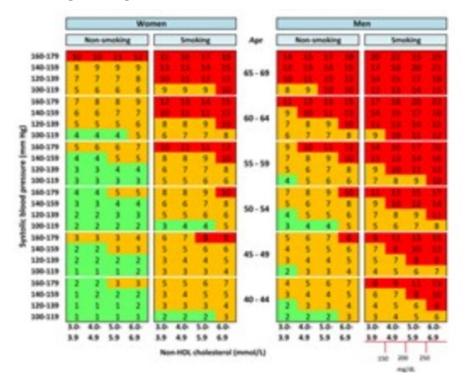


An intervention which will favourably modify:

Clinical course of the asymptomatic disease



Risk of developing symptomatic disease

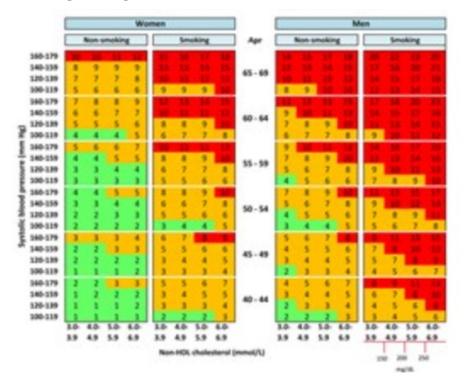


An intervention which will favourably modify:

Clinical course of the asymptomatic disease



Risk of developing symptomatic disease

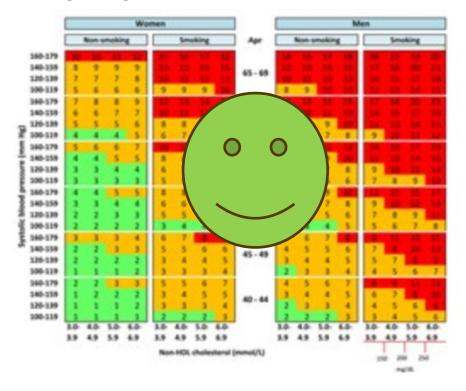


An intervention which will favourably modify:

Clinical course of the asymptomatic disease



Risk of developing symptomatic disease





## Patients with established CVD and those screened individuals at high risk of developing CVD

Interventions which will favourably modify the clinical course of established disease or reduce the risk of developing the disease





## Patients with established CVD and those screened individuals at high risk of developing CVD

Interventions which will favourably modify the clinical course of established disease or reduce the risk of developing the disease

#### **Interdisciplinary Teams**

 An interdisciplinary team is a group of practitioners from different professional backgrounds who work together to achieve jointly established goals for patients/clients





DELIVERING THE RIGHT CARE, AT THE RIGHT PLACE, AND AT THE RIGHT TIME

Outcomes
from a digital
Cardiovascular
Prevention &
Rehabilitation
programme
delivered during
the COVID-19
pandemic, 2020





#### NTERCEPT



## Patients with established CVD and those screened individuals at high risk of developing CVD

Reduction in overall cardiovascular risk

Improved quality of life

Increased life expectancy



'Being healthy is better than being sick or dead. This is the sole argument for prevention. It is sufficient.'

**Professor Geoffrey Rose**