*Training Course in Sexual and Reproductive Health Research 2016*

**Module: Principles and Practice of Sexually Transmitted Infections Prevention and Care**

# *Controlling STIs: synergies between prevention and care*

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## *Objectives of an STI programme*

- **interrupt the transmission of infection;**
- **prevent development of complications and sequelae;**
- **reduce the risk of HIV infection.**

# Control of sexually transmitted infections

- Is feasible
- Leads to improved sexual and reproductive health
- Contributes to preventing HIV transmission

# How STIs disseminate?

Basic Reproductive rate

$$Ro = B \times c \times D$$

Transmission efficiency

Rate of sex partner change

Duration of infectiousness

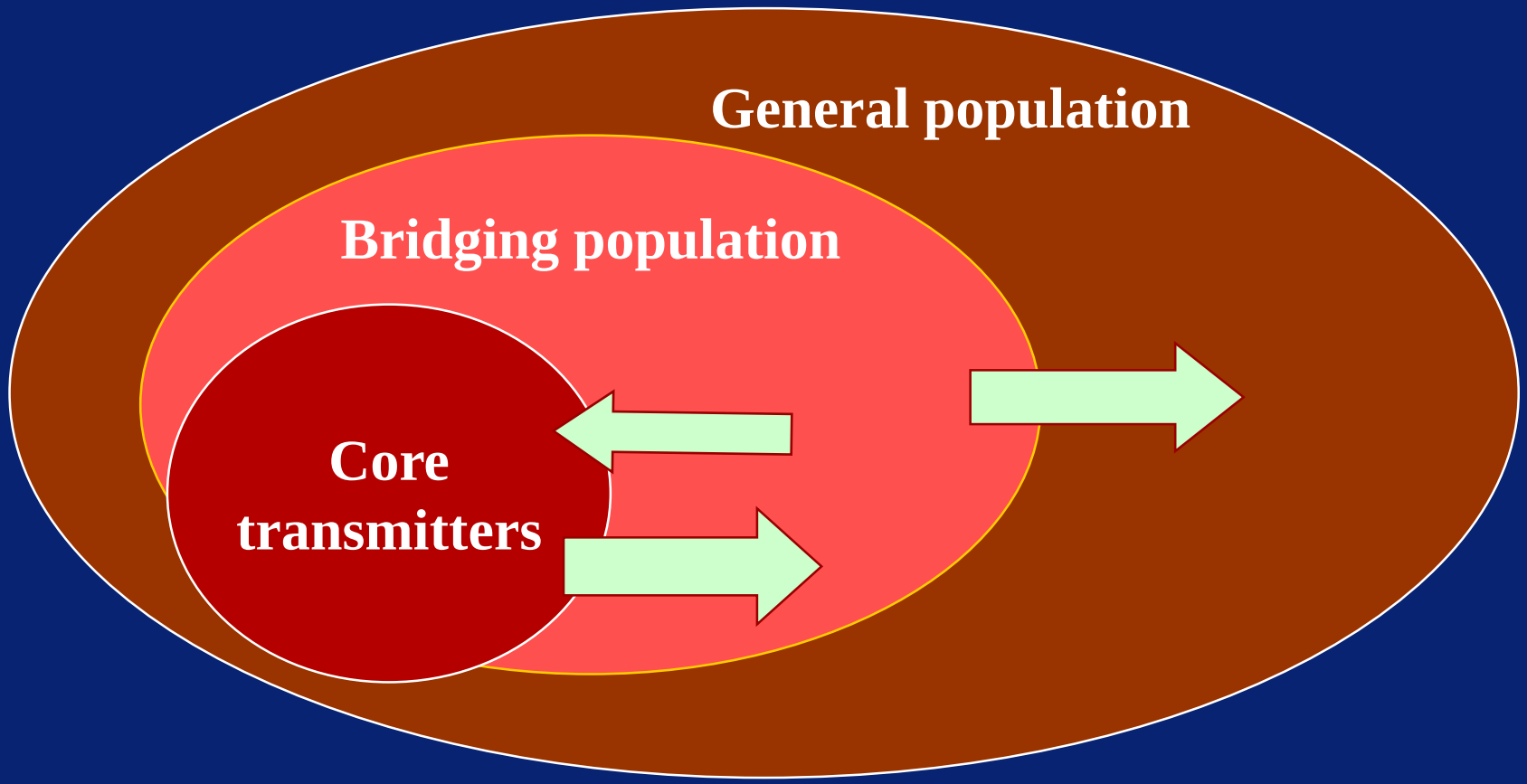
# How to impact STIs ?

Ro = Decreasing reproduction rate !

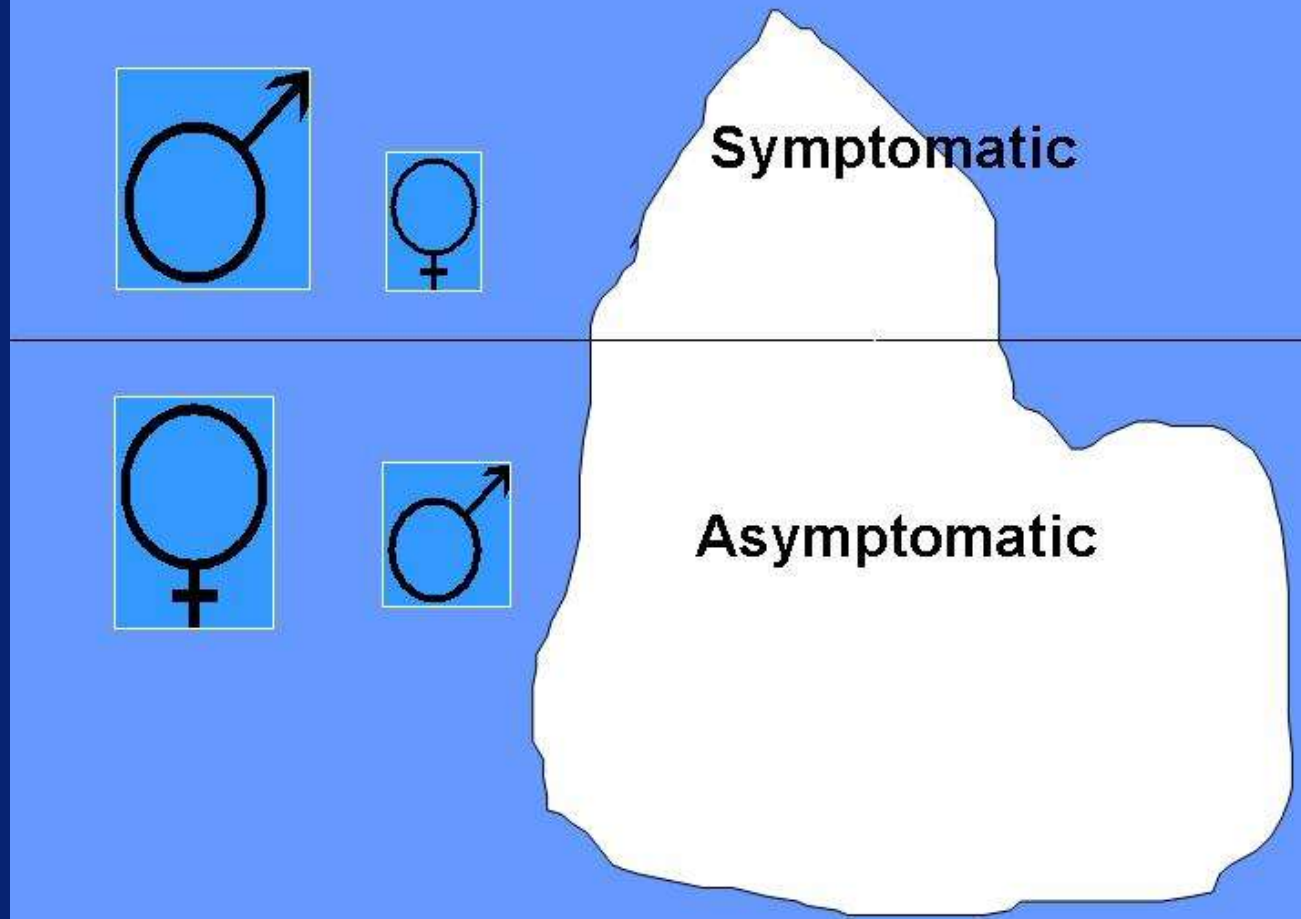
B x C x D

- **B** Barriers, AM and vaccines — *Enhance resistance and reduce susceptibility*
- **C** Behavioural interventions — *Reduction of number of sexual partners*
- **D** Case management and finding, screening, selected mass treatment, promotion of HCSB — *Shorten duration of infection*

# *STI transmission dynamics at population level*



# Sexually Transmitted Infections



# STIs are Preventable

- When used properly and consistently, condoms are one of the most effective methods of protection against STIs, including HIV infection.
- Although the female condom is effective and safe, it is not as widely used in national programmes because of its higher cost when compared to male condoms.

# Operational model of the role of health services in STD case management

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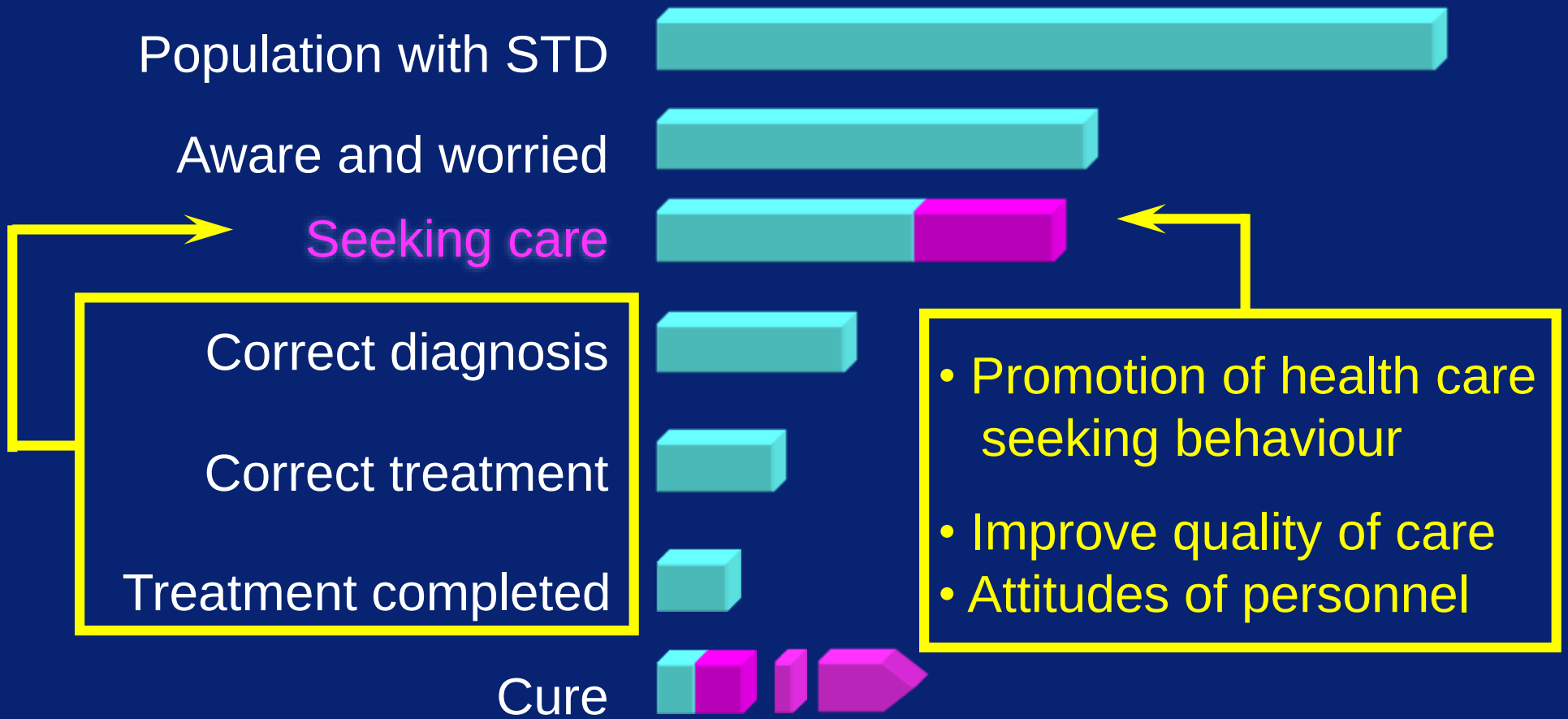
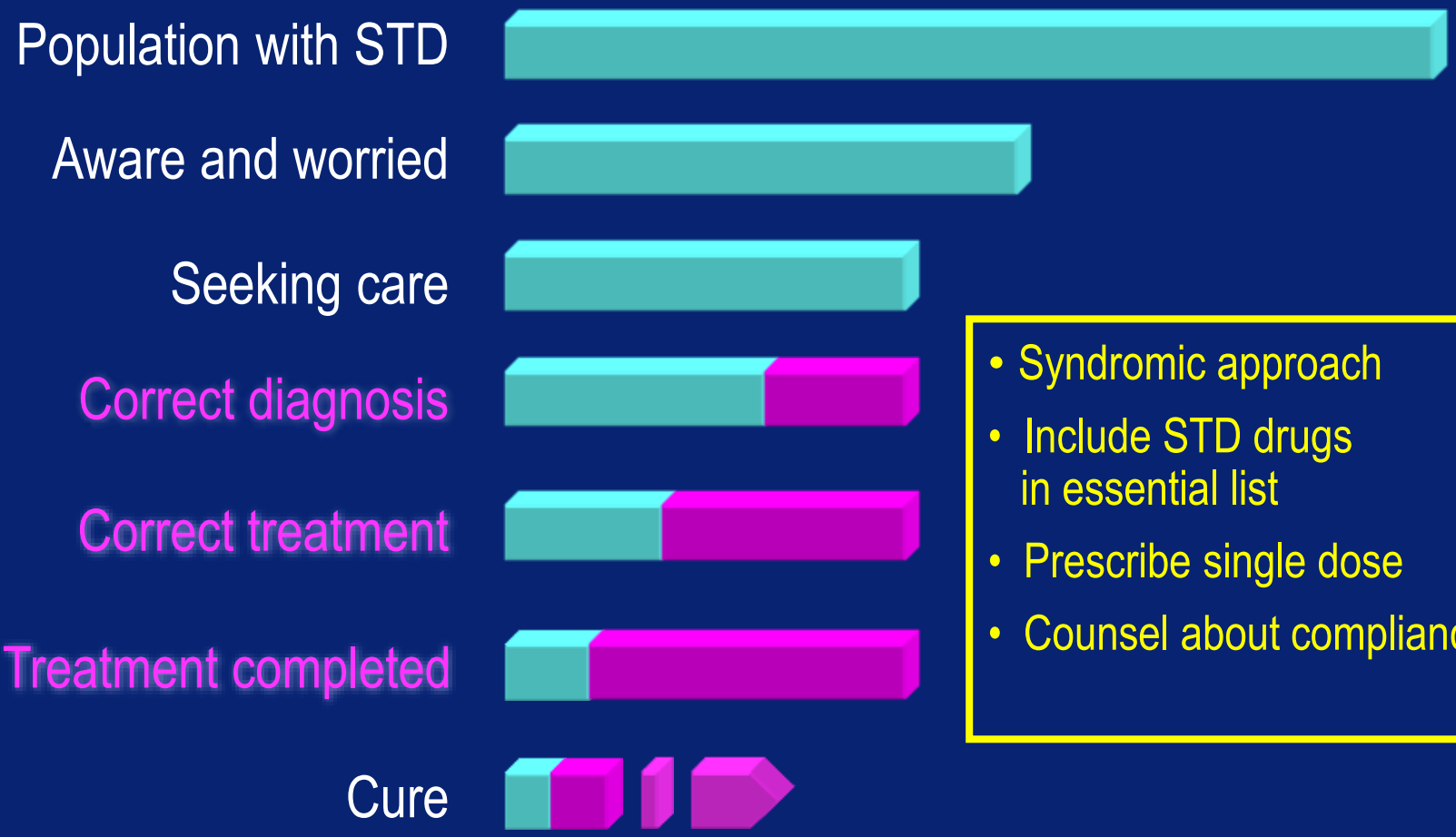
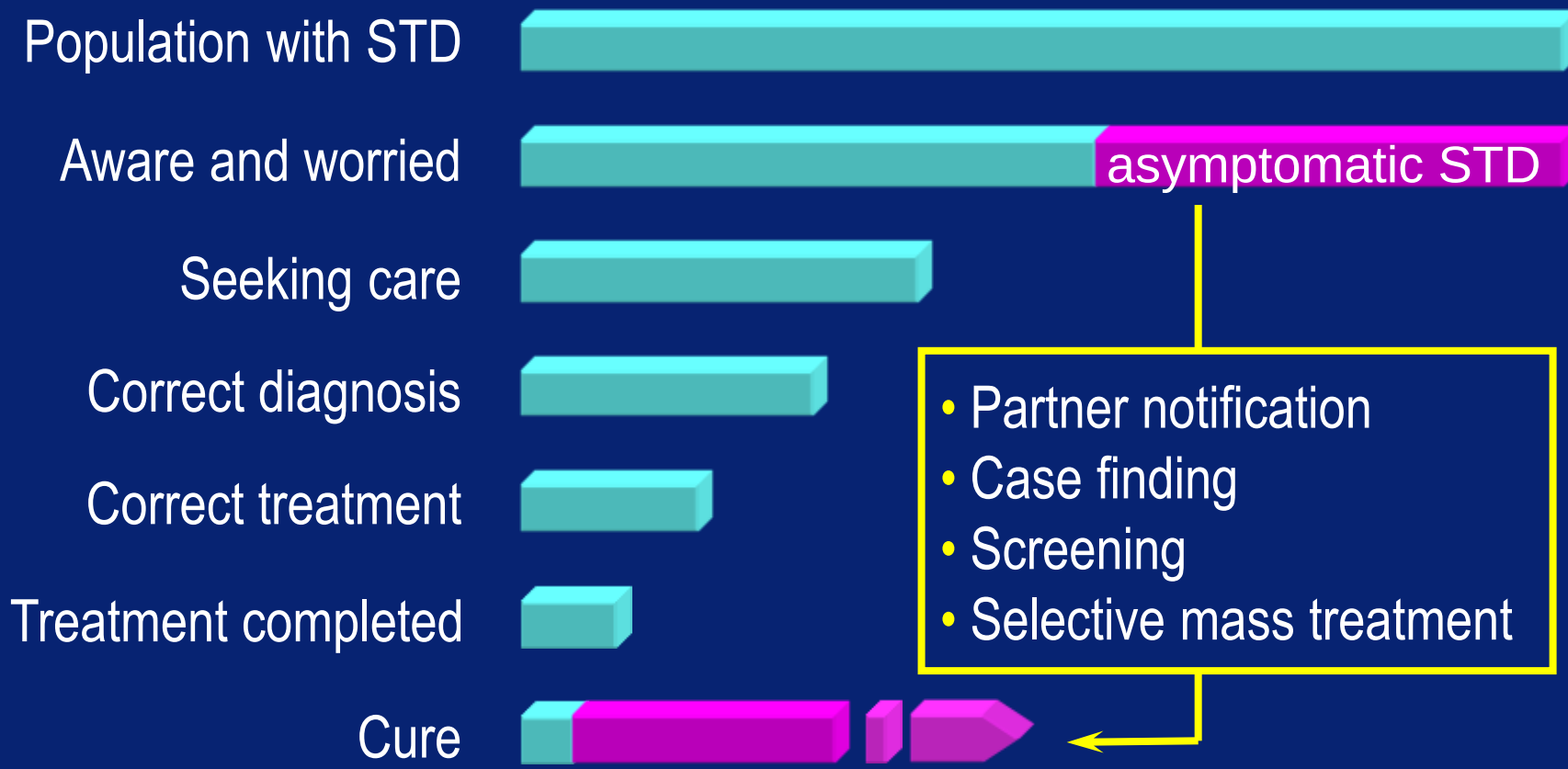


# Operational model of the role of health services in STD case management

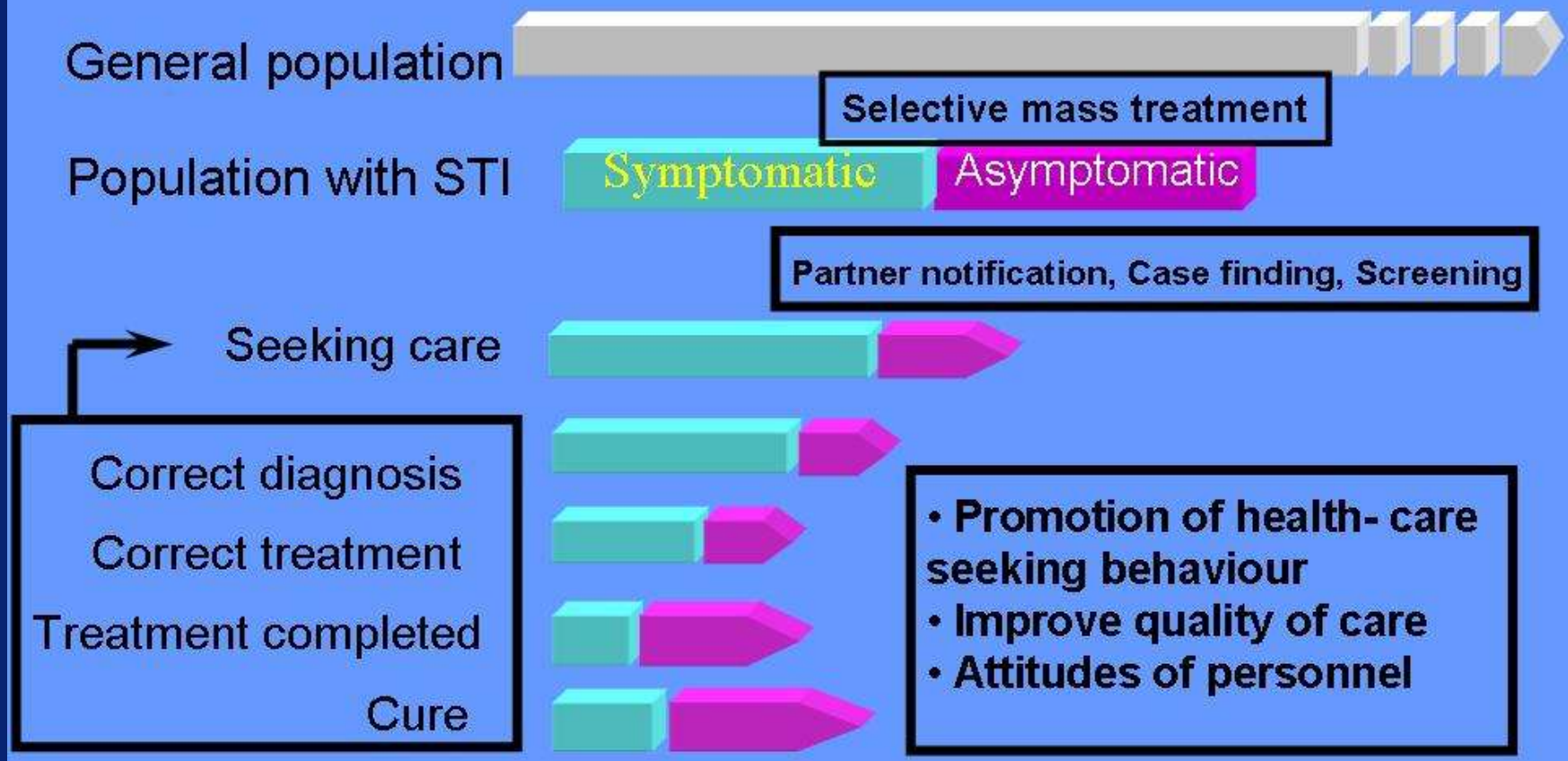



- Syndromic approach
- Include STD drugs in essential list
- Prescribe single dose
- Counsel about compliance

# Operational model of the role of health services in STD case management



# Guidance in the Context of Health Services and STI Management



# The Public Health Approach to STD Control

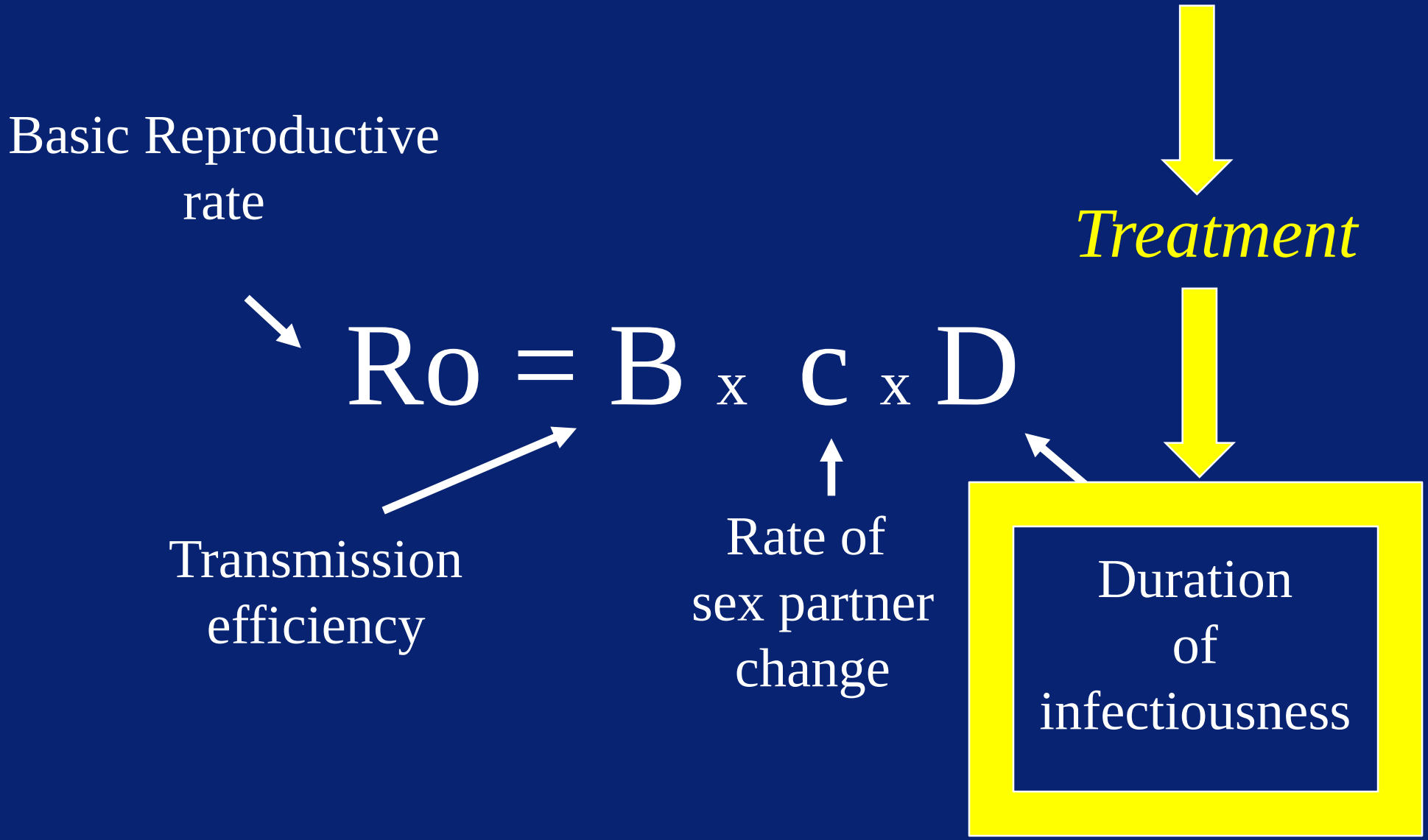
- promoting safer sex behaviour
- strengthening condom programming
- promoting health-care-seeking behaviour integrating STI control into PHC and other health care services
- providing specific services for populations at increased risk
- comprehensive management of symptomatic cases, using the syndromic approach
- prevention and care of congenital syphilis and neonatal conjunctivitis
- early detection of asymptomatic infections through partner notification and screening programmes

# HIV/STI synergy in prevention

- Sexual transmission: behaviour change, Condoms, STI control, circumcision
- Mother to child transmission
- Injecting drug use
- Positive prevention for people living with HIV/AIDS
- Health care settings incl. blood safety

# STI treatment is treatment for prevention

# Impacting STIs dissemination

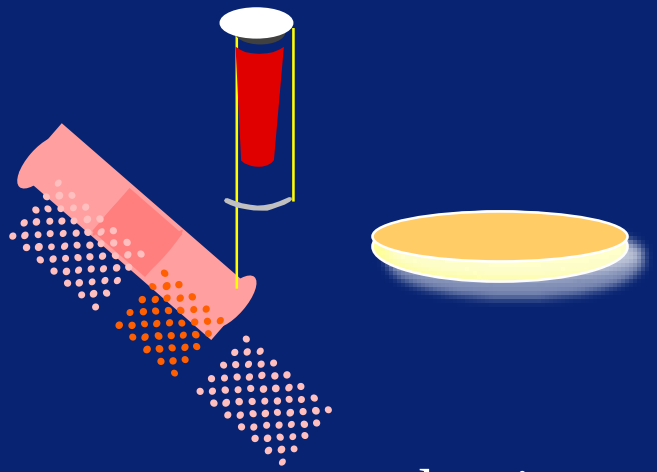


# Clinical Diagnosis Approach

*Identify the STD causing symptoms based on clinical experience*

- even experienced STD providers often misdiagnose STDs
- miss mixed infections
- difficult for surveillance

# Etiologic Diagnosis Approach

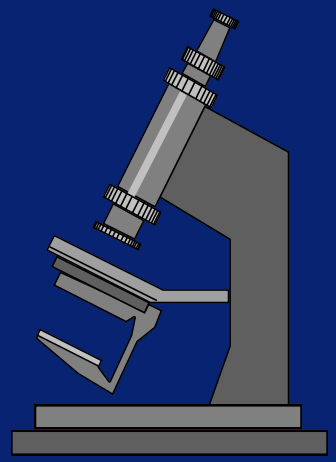


*Identify the organism causing the symptoms with laboratory tests and microscopy*

- tests can be time consuming and expensive
  e.g. cultures cost $12 - $40 & take up to six days

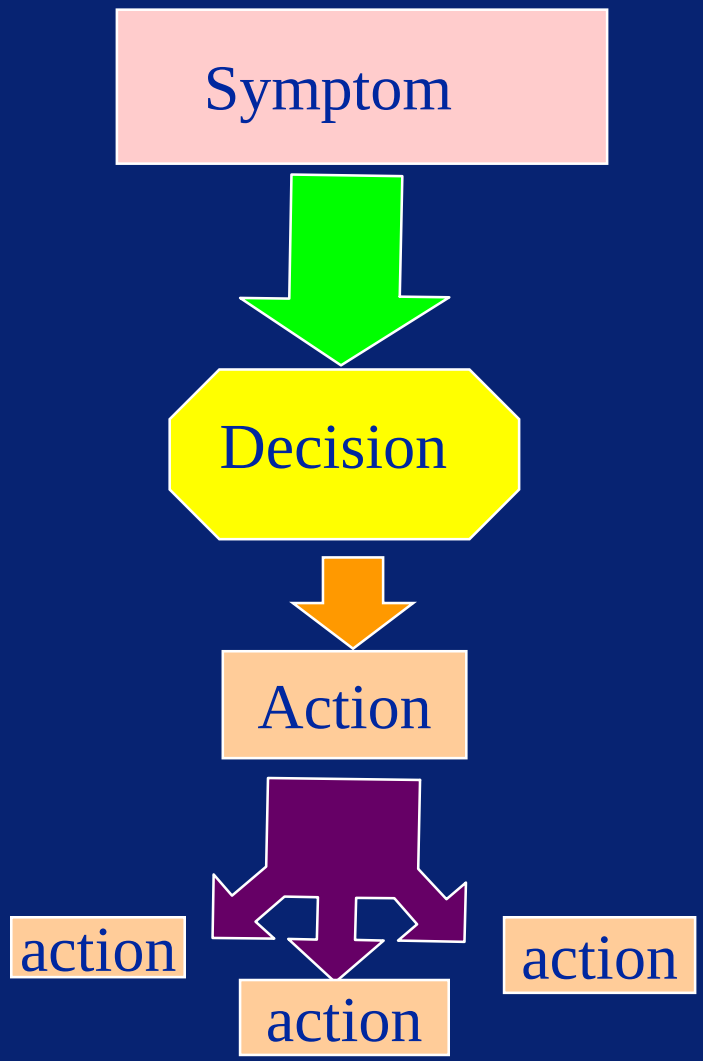
- even rapid tests (RPR) require equipment to obtain and separate venous blood

- dependent technician & lab accuracy



*New tests may change this!*

# Syndromic Diagnosis Approach

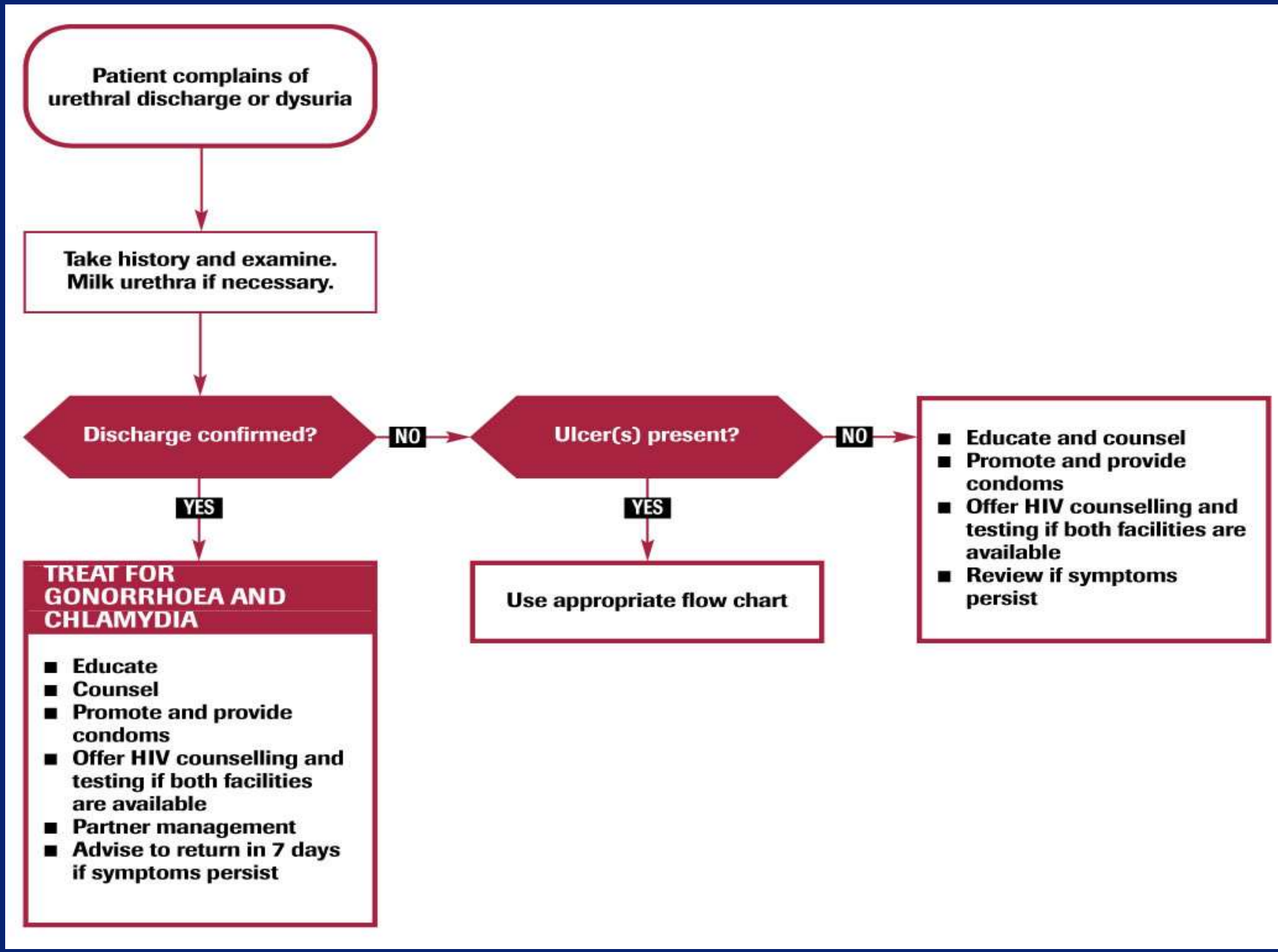



*Identify all possible STDs that could cause syndrome and give recommended treatment based on epidemiologic and laboratory data*

- Immediate treatment
  - decrease transmission
  - decrease complications
- Can do syndrome surveillance

- Need to weigh the ability to treat as many infected as possible (sensitivity) with the risks of overtreatment (specificity)
- resistance & stigma

# Example: Urethral discharge



# Criteria for selection of STI drugs

**Criteria for the selection of STI drugs**

**Drugs selected for treating STI should meet the following criteria:**

- high efficacy (at least 95%)
- low cost
- acceptable toxicity and tolerance
- organism resistance unlikely to develop or likely to be delayed
- single dose
- oral administration
- not contraindicated for pregnant or lactating women.

**Appropriate drugs should be included in the national Essential Drugs list and in choosing drugs, consideration should be given to the capabilities and experience of health personnel.**

# Strategic areas of action

- Link HIV and STI prevention
- Improve access to quality STI care
- Promote early and effective health care seeking behaviour
- Target vulnerable populations

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*Antonio Gerbase - GFMER*

# *Controlling STIs: synergies between prevention and care*

*Thank you*