Training Course in Sexual and Reproductive Health Research 2015

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

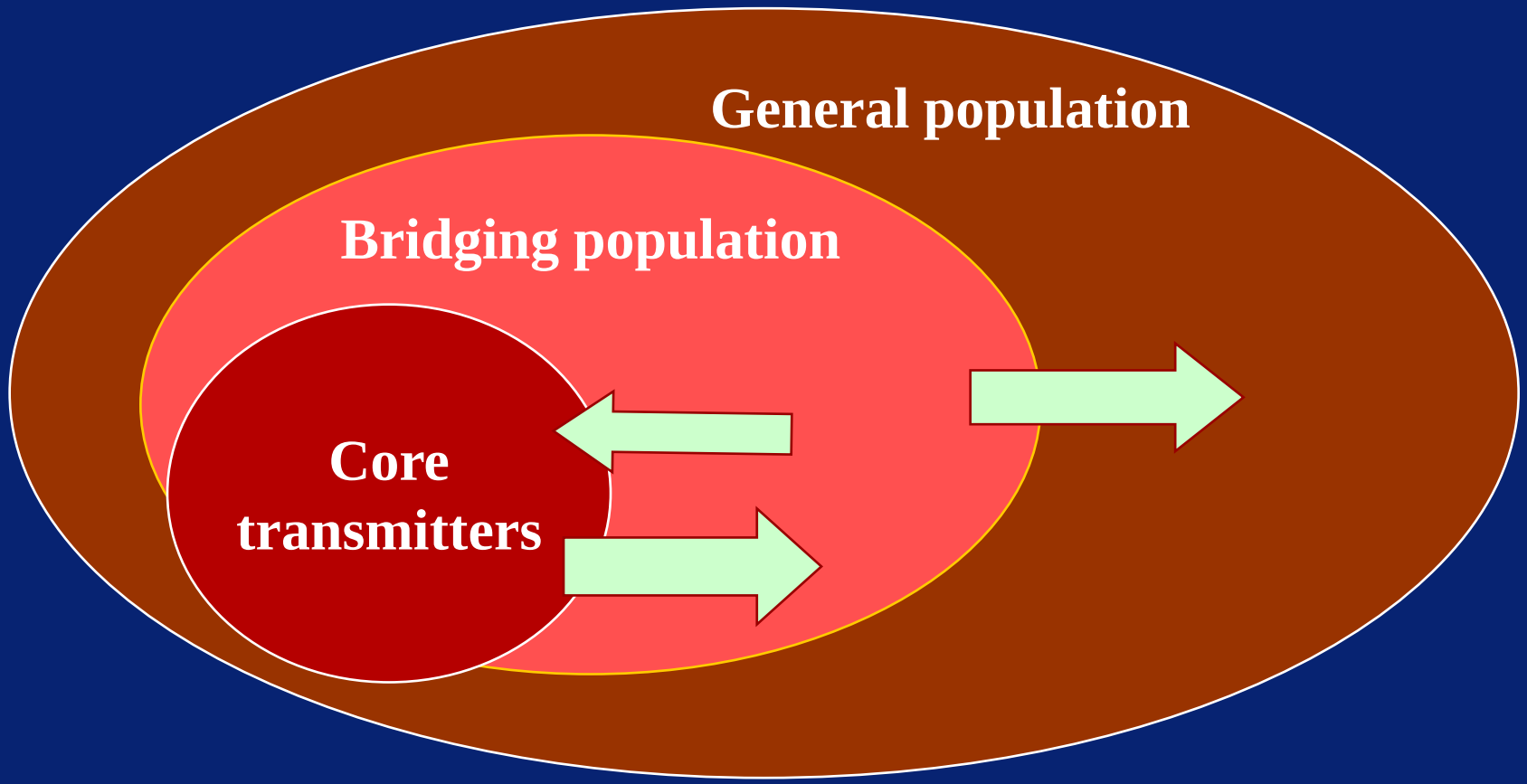
How to impact STIs ?

Ro = Decreasing reproduction rate !

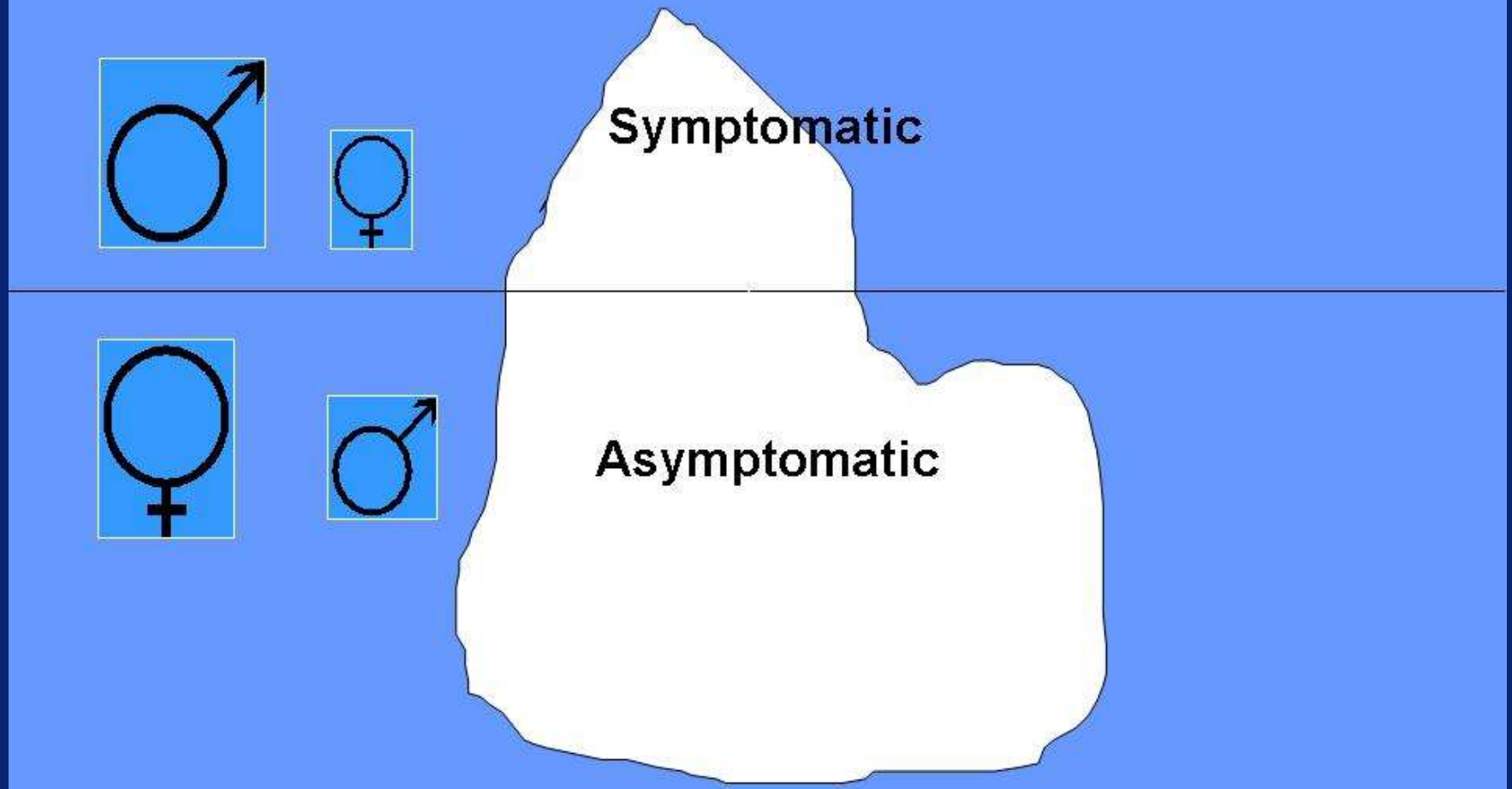
B x C x D

- **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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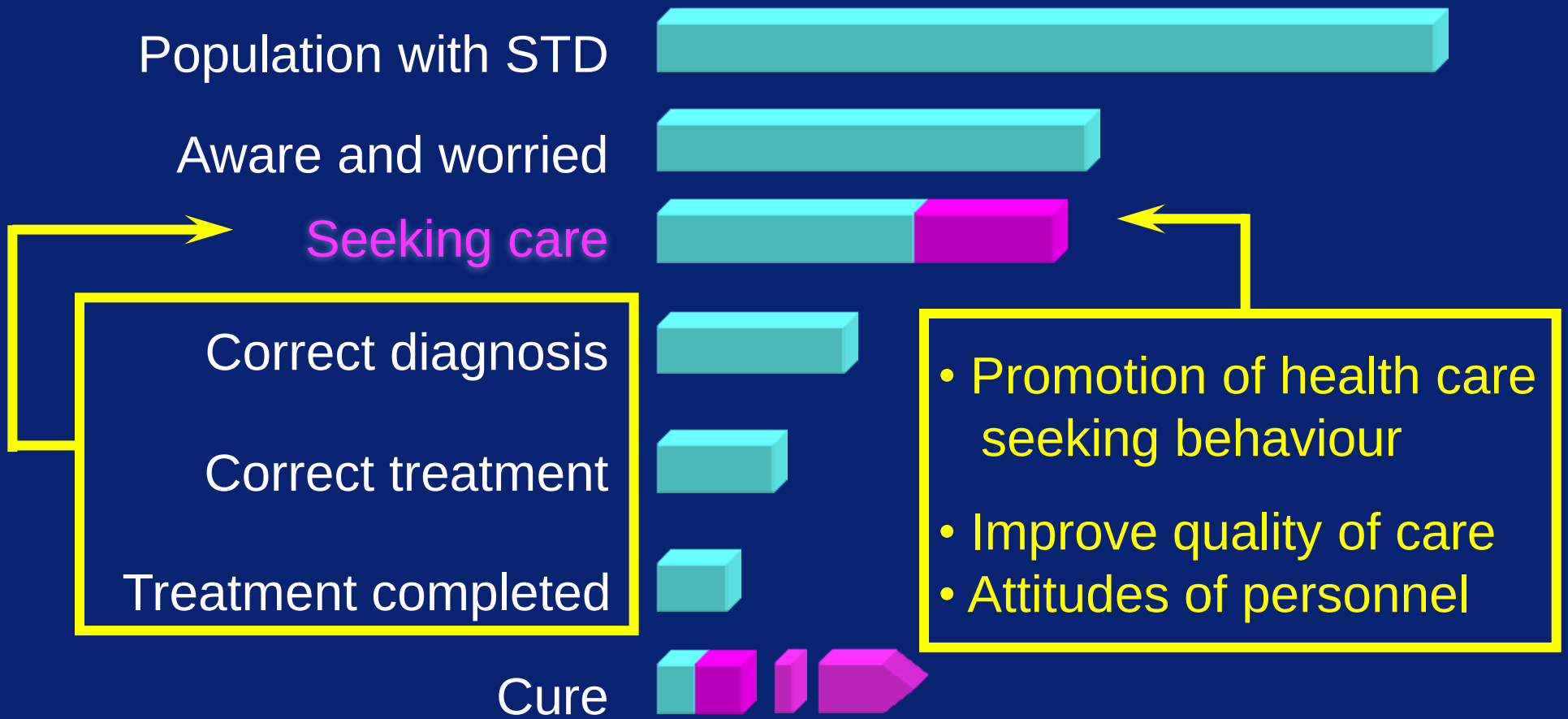
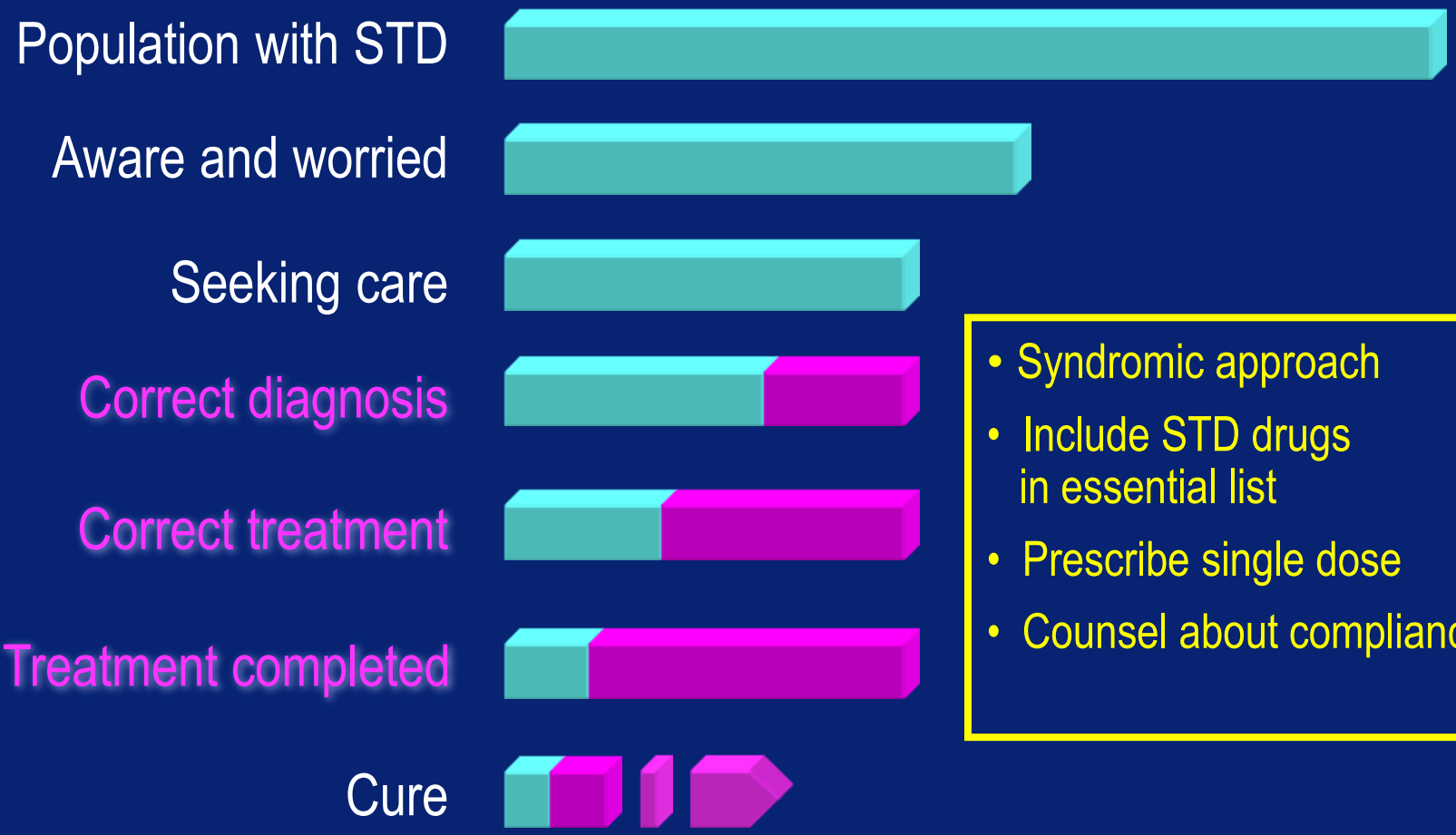
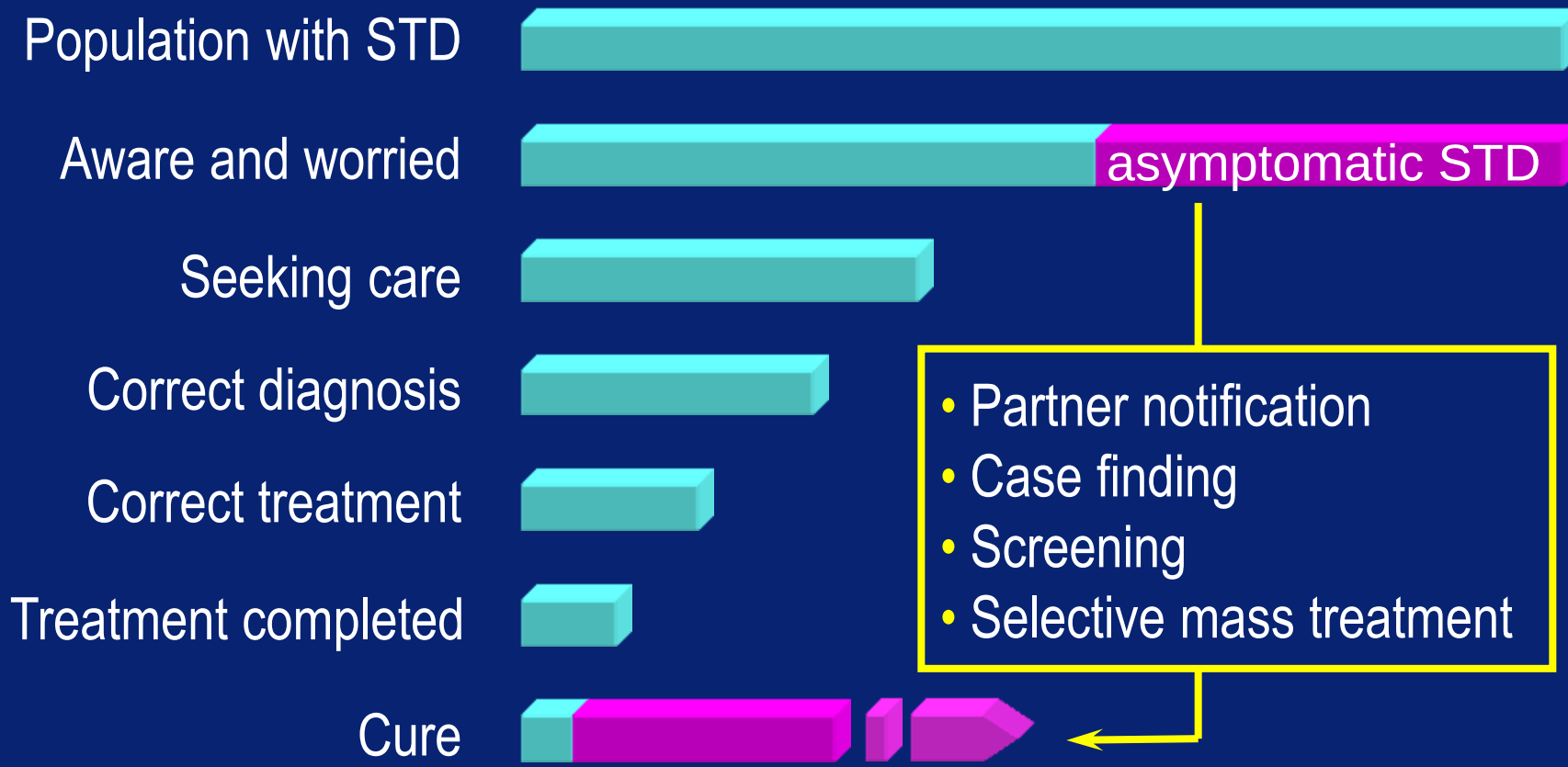


Operational model of the role of health services in STD case management

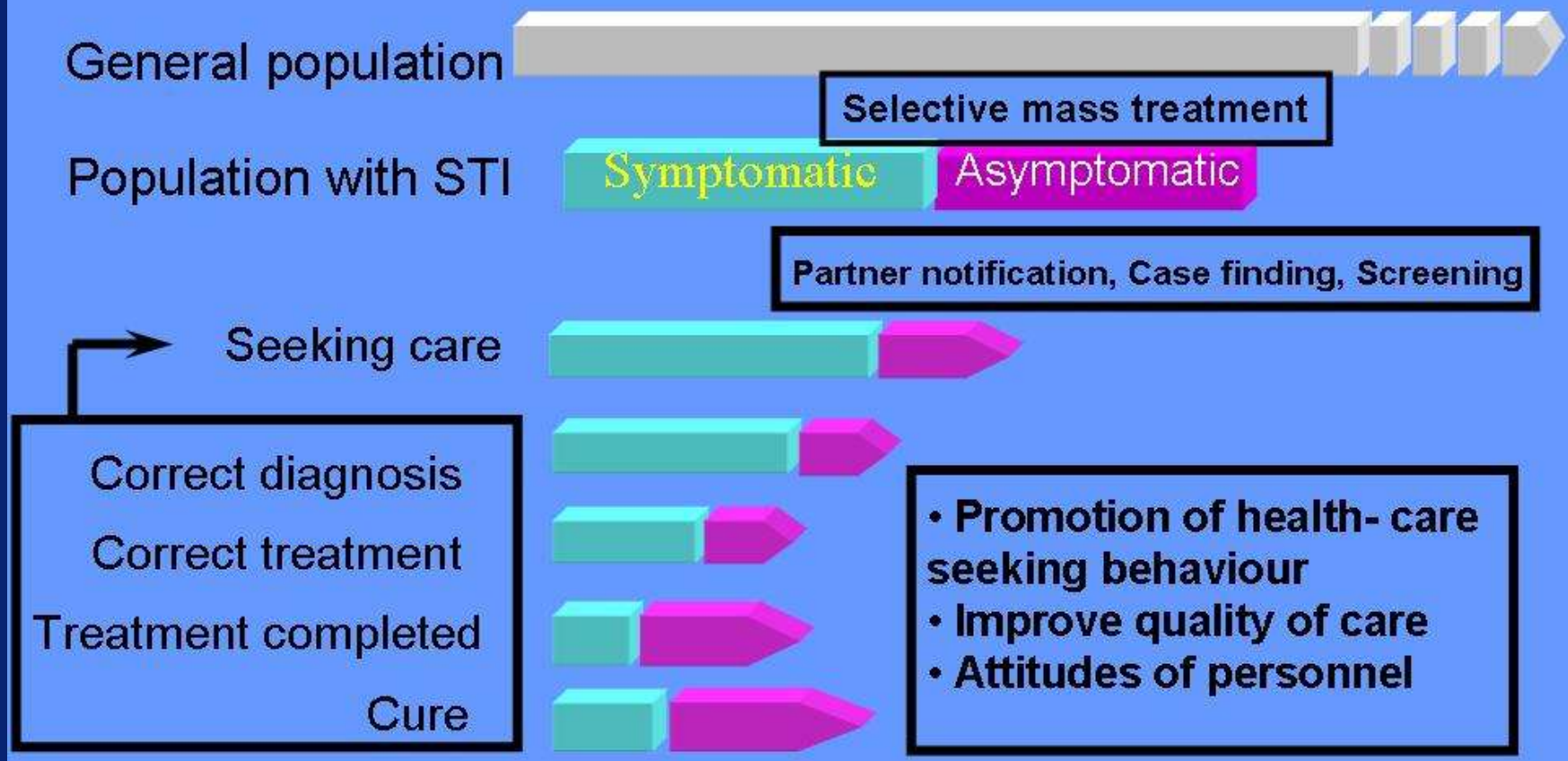


- Syndromic approach
- Include STD drugs in essential list
- Prescribe single dose
- Counsel about compliance

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

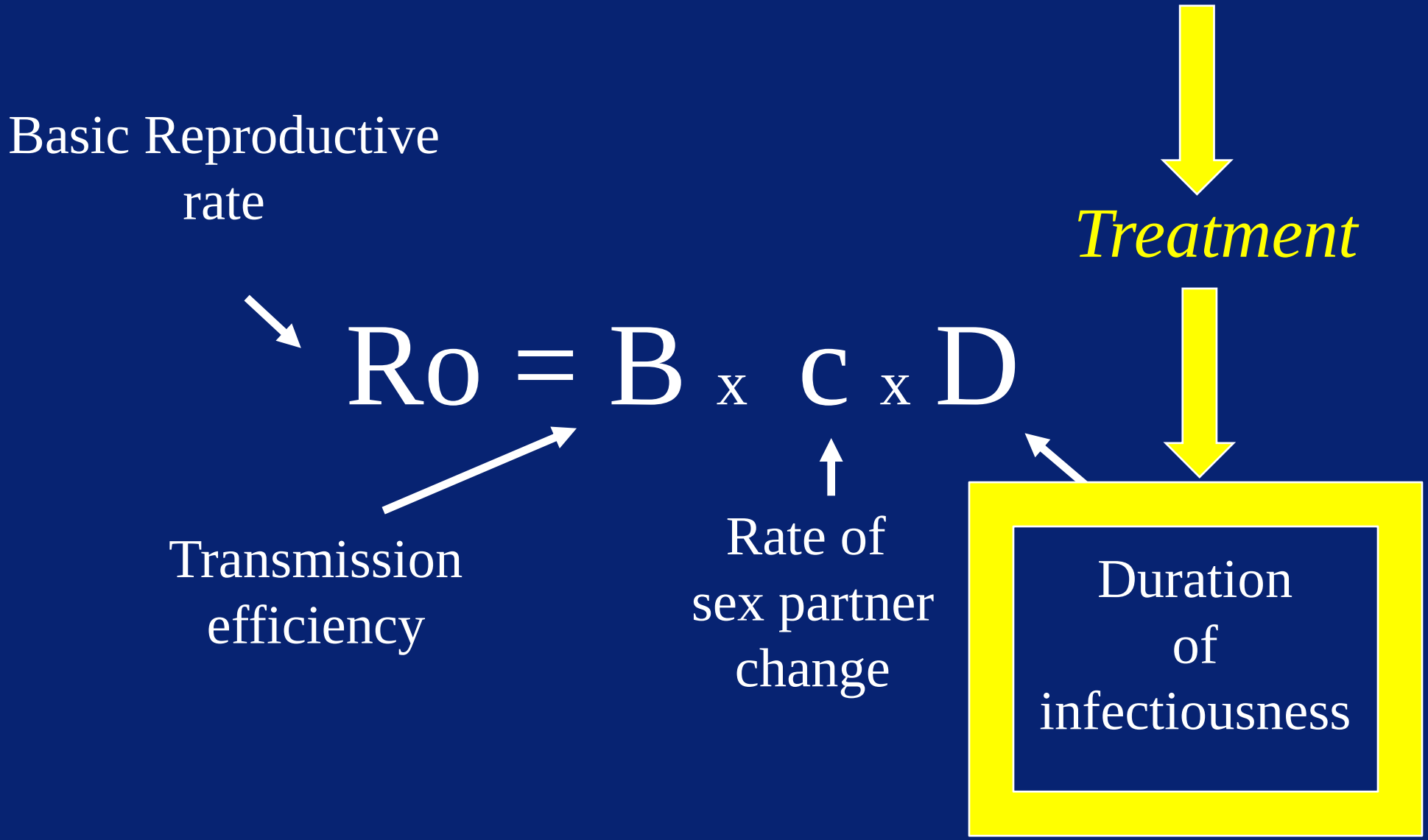
- promoting safer sex behaviour
- strengthening condom programming
- promoting health-care-seeking behaviour integrating STI control into PHC and other health care services
- providing specific services for populations at increased risk
- comprehensive management of symptomatic cases, using the syndromic 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

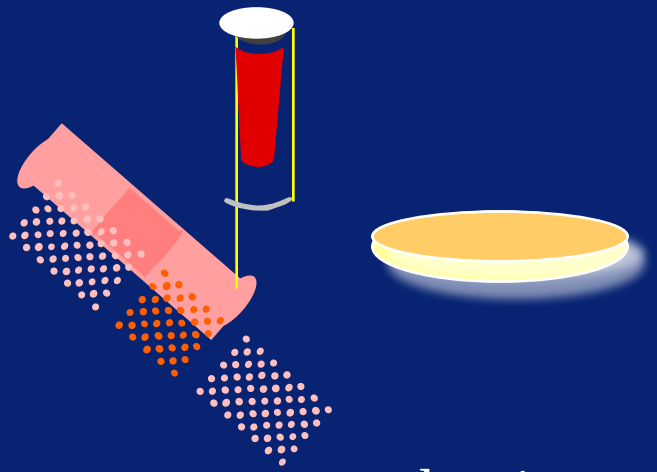


Clinical Diagnosis Approach

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

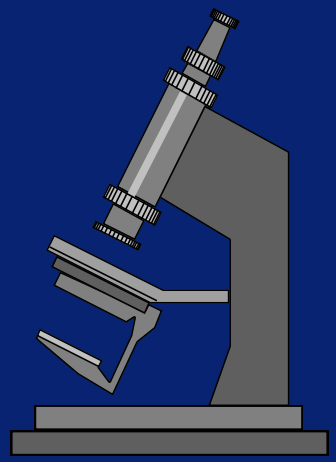


Identify the organism causing the symptoms with laboratory tests and microscopy

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

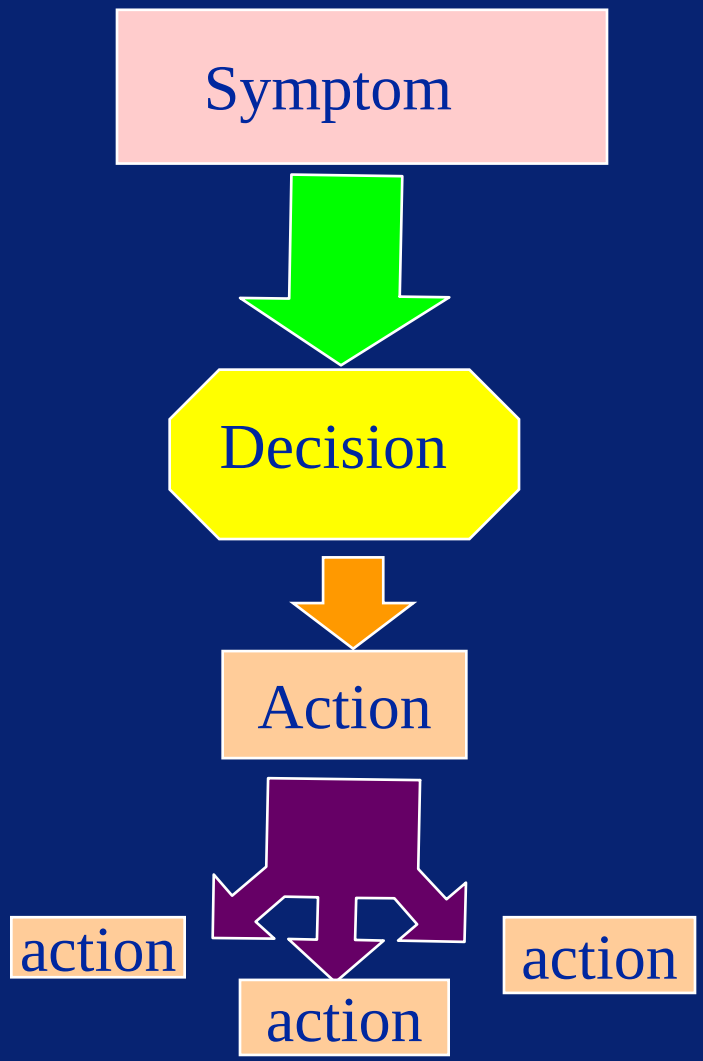
- even rapid tests (RPR) require equipment to obtain and separate venous blood

- dependent technician & lab accuracy



New tests may change this!

Syndromic Diagnosis Approach

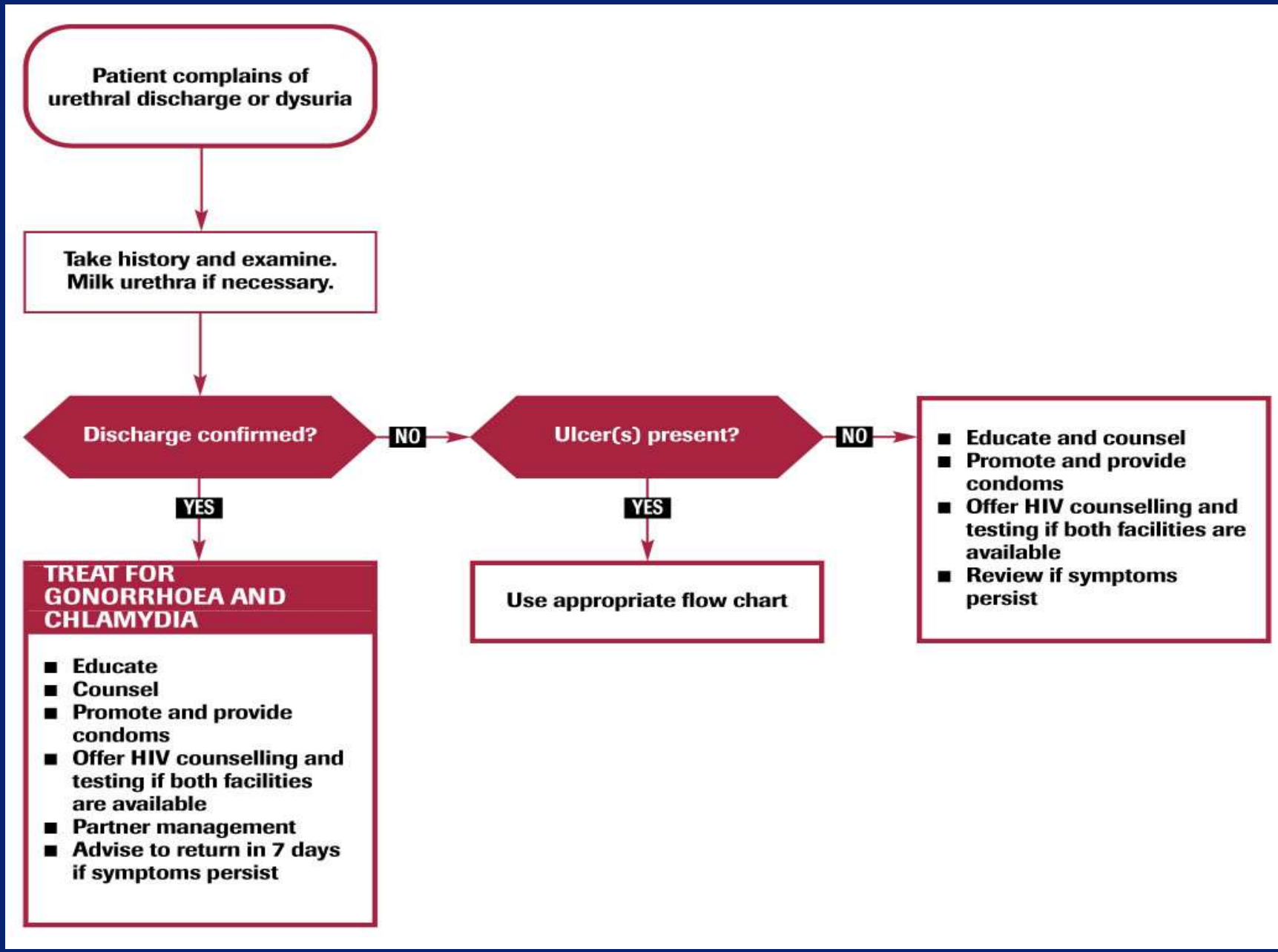


Identify all possible STDs that could cause syndrome and give recommended treatment based on epidemiologic and laboratory data

- 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

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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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Thank you