SWAZILAND NATIONAL SEXUALLY TRANSMITTED INFECTIONS GUIDELINES

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FOREWORD

Sexually transmitted infections remain a priority to the Ministry of Health because of their correlation with HIV. Besides**,** improperly managed STIs play a major role in sustaining high levels of STI in communities and further cause long term complications.

It is essential that STIs are properly managed at the first point of contact with our health services using the syndromic management approach which was adopted by the country in 1996 because it had been found to be the most cost-effective and efficient approach.

This edition of the guidelines represents the updated version which should be used by all health institutions in Swaziland, and supersede any other guidelines that have been in use until now. For health facilities with access to laboratory facilities, it is recommended that care givers initiate the syndromic approach at first contact with the patients before moving into the etiological approach.

The Ministry and Government at large support proper utilization of this Guideline in the management of sexually transmitted infections.

MINISTER OF HEALTH

ACKNOWLEDGEMENTS

The revision of the guidelines has been made possible by the tremendous support and technical guidance from WHO country office**.** The Ministry acknowledges the contributions of the under listed people who formed part of the technical group that was developing this document. Without their tremendous and tireless commitment the guidelines would not be a success.

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CONTENTS

ABBREVIATIONS

AIDS	Acquired immuno deficiency syndrome
ART	Antiretro viral therapy
BCC	Behavioral change communication
Bid	Twice a day
BV	Bacterial vaginosis
FTA	Flouriscent treponema antibody
GUD	Genital ulcer disease
HIV	Human immunodeficiency virus
HBV	Hepatitis B virus
HPV	Human papilloma virus
HSV	Herpes simplex virus
HTC	HIV testing and counselling
IM	Intra-muscular
IUD	Intra-uterine disposal
IV	Intra-venous
LGV	Lymphogranuloma venereal
PID	Pelvic inflammatory disease
Po	Orally
Qid	Four times a day
RPR	Rapid plasma reagent
STAT	Immediate dose
STI	Sexually transmitted diseases
TPHA	Treponema pallidum heamagglutination assay
TV	Trichomonas vaginalis
Tid/Tds	Three times a day
IU	International Unit
UDS	Urethral discharge syndrome
VCT	Voluntary counseling and testing
VDS	Vaginal discharge syndrome
VIA	Visual inspection of the cervix with acetic acid

1.0 National STI case management

1.1 Rational of national management of STI case

Effective management is one of the cornerstone of STI control. It prevents the development of complications and sequel, decreases the spread of these diseases in the community and offers a unique opportunity for targeted education about HIV prevention and other STI's. Appropriate treatment of STI at the first contact between patient and health care provider is therefore an important public health measure.

The use of standardized national protocols is strongly recommended in order to ensure adequate treatment at all levels of health care delivery system. Standardized treatment facilitates training and supervision of health providers and this in turn delays the development of antimicrobial resistance in sexually transmitted infections (STI).

Etiological diagnosis: Ideally, the diagnosis of an STI is made by knowing exactly what organism is present by performing laboratory tests. Unfortunately this method of STI diagnosis is often expensive and requires sophisticated equipment and skilled personnel to carry out. This places constraints on time, resources, costs and access to treatment for the patients In addition, tests results are not available during the consultation, thus requiring patients to return in one or two days. This is not feasible in many settings. The risk of developing complications is high and the period of infectivity is prolonged by this delay in therapy.

Clinical diagnosis: This involves using clinical experience to match identified symptoms and signs to a specific STI. Even experienced specialists however, often misdiagnosed STI's when they rely only on the clinical experience. In South Africa, a study of 100 men and 100 women identified only one third of cases of chancroid or syphilis in men, one half of the cases in women and less than 10% of the mixed infections. (SADC: 2010)

1.2 Clinical Presentation

Genital Ulcer Syndrome (GUS)
Chancroid: raised rough edges, beefy
Herpes Simplex Virus(HSV): itchy, burning and tingling sensation, painful blisters, ulcer
Syphilis: (Primary stage) firm, painless lesions (chancre) and self limiting lasts up to 3 weeks.
(Secondary stage) non itchy pigmented lesions can show up on the palms of your hands and soles of your feet, all over your body, or in just a few places. You may also have mucous membrane lesions.
(Latent/late stage) gumma, affect the central nervous system

Genital Discharge syndrome (GDS)
Gonorrhea: yellowish discharge, foul odour, pain and frequency on micturation, dyspareunia.
Chlamydia: clear or cloudy discharge, dysurea, early in the morning the opening of the penis is often red and stuck together with dried secretions, urgency in micturation dyspareunia
Pelvic Inflammatory Disease: Lower abdominal pain, foul discharge, fever >38 degrees Celsius, dyspareunia.

Trichomonas vaginalis: discharge greenish yellowish frothy accompanied by a fishy foul smell. Dysurea, dyspareunia, frequency on micturation
Candidaisis: Curds like discharge, itchiness, erythematous mucous membrane on affected area.
Bacterial Vaginosis: erthymatous mucous membrane, grayish white discharge with unpleasant fishy odour.

Other STI's:
Human Papilloma virus (HPV) warts: raised or papillary skin colored growth with a cauliflower like appearance, soft to the touch usually painless but may itch.
Neonatal Conjunctivitis: thick, often sticky, muco-purulent discharge, hyparaemia
Syphilitic Warts: flat, extensive clustered lesions, mostly on moist areas.
Iguinal bubo: unilateral or bilateral swelling in the inguinal region, its fluctuant, painful.
Pediculosis pubis: whitish nits on the base of hairs accompanied by itchiness.
Genital Scabies: burrows, itchiness erthymatous lesions
Hepatitis B: Many people have no symptoms during the initial infection. Some develop a rapid onset of sickness with vomiting, yellowish skin, feeling tired, dark urine and abdominal pain. NB Screen all STI clients

1.3 Syndromic approach:

A syndrome is a collection of signs and symptoms.
The numerous and different STI pathogens produce a number of syndromes, hence a syndromic diagnosis is made when the patient's signs and symptoms are matched to a particular STI syndrome. Syndromic approach offers treatment for more than one pathogen so that antimicrobial therapy is effective against all the pathogens that commonly cause the syndrome

This approach to diagnosis and treatment reduces costs and increases access to treatment. This provides a more practical and cost-effective intervention for reaching the majority of patients with STI's, especially in resource-limited settings. Syndromic STI management has some advantages which include the following:

- Improved diagnosis;
- It can be administered by a wide spectrum of primary health care workers, including clinical officers, physician assistants, nurses and midwives
- It allows treatment of symptomatic patient at one clinic visit
- It is cheap, simple and cost-effective
- Treatment for mixed infections can occur

Challenges

- Over diagnosis and over treatment may result in increased drug cost
- Possible side effects of multiple drugs, alterations in vaginal flora, and a potential for increased drug resistance.
- The approach is not useful for detecting infections among asymptomatic individuals. Similarly, the syndromic approach for vaginal discharge is poorly predictive of the presence of cervical Chlamydia and/or gonococci infections.

The Ministry of Health recommends that all patients presenting with STIs are treated using the syndromic management approach

2.0 Essential components

For individuals seeking evaluation for STI, appropriate care consists of the following:

- History taking: demographic information including behavioral and medical risk assessment.
- Physical examination: particularly of genital area,
- Establishment of a syndromic diagnosis
- Curative or palliative therapy, using the most effective antimicrobial for the pathogen, at the first point of call by the patient
- Providing Health Promotion Package
- Clinical follow-up and referral

2.1 History Taking and Assessing STI and HIV Risk

2.1.1 Gathering Patient Information

Information gathering strategies:

- Explain that all information will be kept confidential
- Develop a rapport so the patient can feel relaxed and comfortable.
- Explore the patient's concerns by practicing active listening
- Use a dynamic discussion between you and your patient as the means for taking the history, which should include an assessment of the patients risk level.
- Take note of non verbal cues

2.1.2 Patient information to be gathered

Collect the following information during your patient centered discussion:

1. Name
2. Age
3. Physical address
4. Marital status
5. Presenting symptoms
6. History of presenting symptoms:
   - Discharge: duration ,consistency, odour, color and amount
   - Burning, urgency and/or frequency of micturation
   - Swelling and/or pain in the groin: Lesion: location (vaginal, anal and oral), pain, ulcer, blister, bruises, indurations, rash, cracking
   - Lower abdominal pain in women Painful vaginal intercourse (Dyspareunia)
   - Rectal discharge or pain
   - Difficulties with urination or defecation;
   - Itching and/or discomfort in the perineum, peri-anal, and pubic areas;
   - Non-itchy skin rashes or warty lesions.
7. Medical and gynecological history:
   - Ask all females if they have ever been screened for cervical cancer
   - HIV status and proof of status/ testing history
   - If HIV+ Last Viral load and CD4, whether or not on ART

- Any Chronic illness e.g. Diabetes
- Medication history
- Any known allergies

8. Social history:
   - Alcohol or other recreational drug use (including intravenous drugs).
   - How often quantities.

9. Taking sexual history

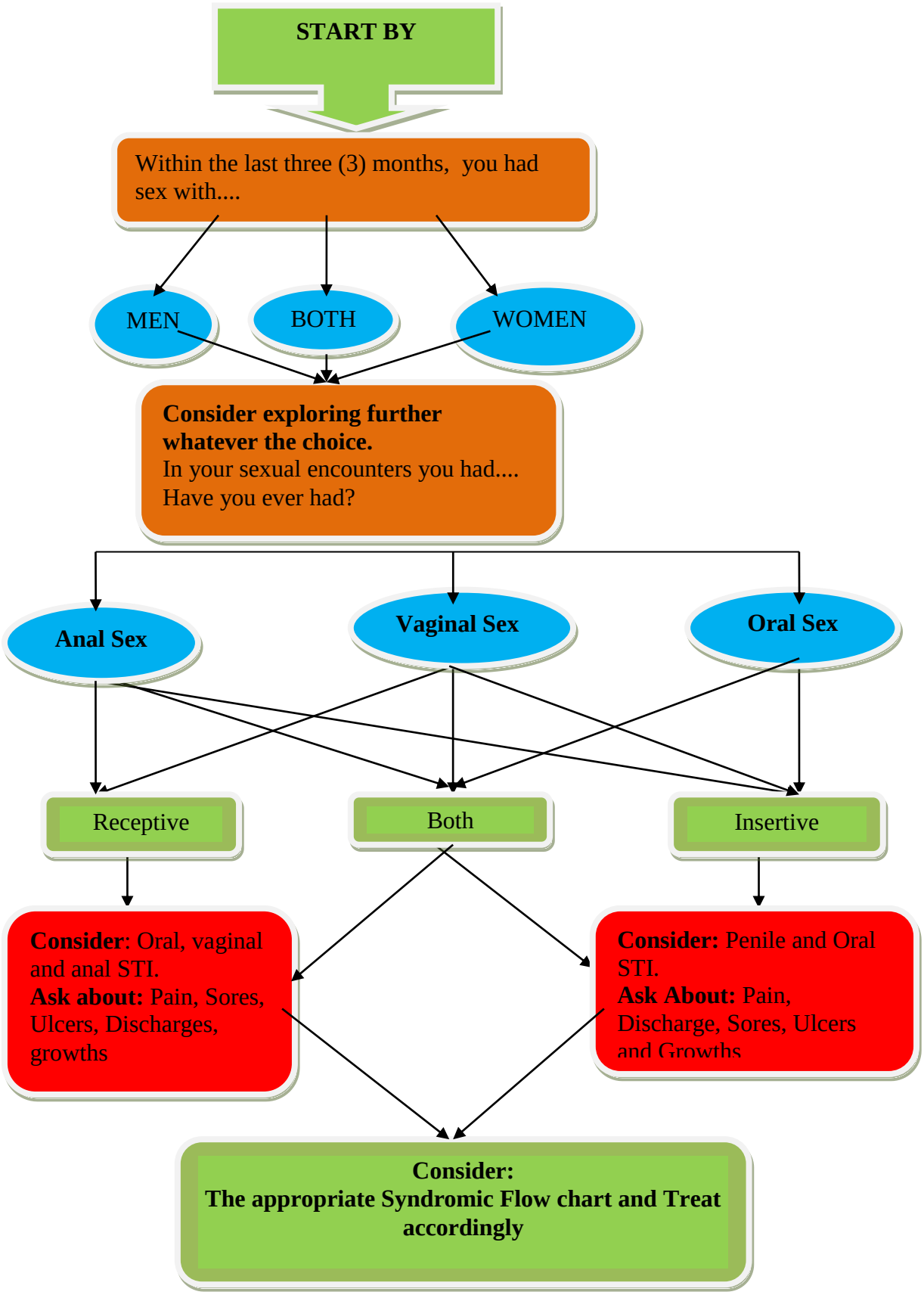
A sexual history must be acquired from patients before examining them and managing their sexual health problems. The patient must be assured that the information he/she provides to service providers is held in strict confidence. The service provider should do a behavioral risk assessment of the patient to explore the possibility of risk behaviors, including:

- Are you currently sexually active
- Last sexual encounter
- sexual exposure sites (oral, anal and vaginal),
- multiple concurrent partnerships or sexual networks,
- condom use with regular and/or casual sexual partners,

A thorough sexual history will guide appropriate risk reduction and prevention counseling. There are several barriers to open and frank discussions of sexual health issues between patient and service provider.

NB: See annex 1 a table on guidance for clinical history taking of STI patients

2.1.3 Steps to consider while taking a Sexual History



10. Past STI history

- Were you ever treated for STI's before
- When last were you treated for an STI?
- For which syndrome? Were you an index or contact?
- If index was your partner(s) treated?
- Did you take and finish your medication?

2.2 Physical examination

2.2.1 Preparation for the exam

- Explain what you will be doing and ask for consent.
- Prepare patient for exam by describing actions in advance.
- Ensure privacy.
- Make sure your patient is comfortable.
- Always follow the universal Safety Precautions...

2.2.2 Universal Safety Precautions

- Hand washing after any direct contact with patient.
- Safe collection and disposal of needles (hypodermic and suture) and sharps (scalpel blades, lancets, razors, scissors), with required puncture- and liquid proof safety boxes in each patient-care area.
- Wearing gloves
- Prompt and careful cleaning up spills of blood and other body fluids.
- Using a safe system for hospital-waste management and disposal

NB: See Annex 3 for Detailed Standard health care safety precautions

2.2.3 General guidelines for conducting the exam

- Examine in a private, well-lit room.
- The patient should undress from the chest down and lie on the couch/examining table.
- Cover the patient with a sheet - only expose the parts you are examining.
- Male patients may be examined while standing if necessary.
- Perform speculum and bimanual exam gently with minimum discomfort.
  Use language patient can understand to describe the physical findings.

2.2.4 Physical examination of the female

- During a general body examination look for rashes, swellings, and sores on chest, back, and abdomen.
- Inspect skin of palms, forearms, hands, lower abdomen, and inguinal areas.
- Inspect pubic hair for lice and nits
- Inspect and palpate external genitalia inspect perineum and anus. Note any discharge, ulcers, and or growths.
- Palpate neck, axillae, supra clavicular areas, epitrochlear areas, and area under the chin for enlarged lymph nodes, inguinal lymph nodes and femoral adenopathy
- Examine the pelvis for swelling and tenderness

- Be sure to describe the size, location, and appearance of any ulcers or warts.

2.2.5 Speculum examination for female

The patient should lie with her legs bent at the knees and the feet and knees separated.
A good, bright light source is necessary in order to inspect inside the vagina.

- Separate the labia and insert a warm, well-lubricated bivalve speculum and inspect the vaginal walls and the cervix.
- Look carefully for ulcers, warts, and cervical and vaginal discharge.
- If the patient has never undergone screening for cervical cancer, or has not been screened for 2 years or more, screening, i.e. a Pap smear or visual inspection of the cervix with acetic acid (VIA), should be undertaken at this time.
- If the materials and/or expertise for a cervical cancer screening test are not available, the patient should be encouraged to attend / referred to a clinic providing these services.

2.2.6 Bimanual examination of the female

- When inspection of the vagina and cervix is complete, remove speculum and insert index and middle fingers into the vagina.
- The exam is carried out with the two fingers inside the vagina and the other hand placed on the lower abdomen.
- Milk the urethra to exclude any discharges.
- Check for adnexal mass and tenderness
- Check for cervical motion tenderness by gentle moving cervix laterally.
- Withdraw the fingers smell and inspect the glove for discharge.

NB: Remember that if a patient has extensive, painful genital ulcers, it may not be possible to perform a speculum examination**.**

2.2.7 Physical examination of the male

- Inspect skin of the neck, chest, back, hands, palms, forearms, lower abdomen, inguinal areas and thighs. Look for rashes and sores.
- Palpate neck, axillae, supra-clavicular areas, epitrochlear areas, and area under the chin for enlarged lymph nodes.
- Inspect skin of the genitals, perineum and buttocks. Look for rashes and sores.
- Inspect pubic hair for lice or nits.
- Inspect penis including the meatus, with retraction of the fore skin.
- Look for genital ulcers, urethral discharge and other abnormalities.
- If a discharge is present, note whether it is coming from the urethra.
- If there is no obvious discharge, give urethra a gentle squeeze and massage forward to try and express discharge.
- Palpate scrotal contents. Note presence or absence of genital ulcers or buboes.
- Palpate groin, feeling for inguinal lymph nodes and buboes.
- Be sure to describe the size, location and appearance of any ulcers or warts.

3.0 Establishment of a syndromic diagnosis

A syndromic diagnosis is made when the patient's signs and symptoms are matched to a particular STI syndrome. Syndromic approach offers treatment for more than one pathogen so

that antimicrobial therapy is effective against all the pathogens that commonly cause the syndrome.
When using the syndromic approach of STI management, a diagnosis is made by taking a client's history and conducting an examination to verify their STI problem.

4.0 Health Promotion package

- Educate, ensure compliance, and counsel on treatment.
- Promote abstinence during the course of treatment.
- Promote and demonstrate condom use, and provide condoms.
- Stress the importance of partner treatment and issue one notification slip for each sexual partner, follow up partner treatment during review visits.
- Offer HIV counselling and testing, for negative test results repeat test after 8 weeks
- Offer male circumcision to uncircumcised partner
- Provide cervical cancer screening during follow-up visit

4.1 Health education and risk reduction counselling

A consultation for an STI is a unique opportunity to provide education and risk reduction counseling on the prevention of STIs and HIV to people most at risk of infections. Education encourages patient behavior change and is an integral part of syndromic STI case management. It must be an interactive process that involves assessing what your patient already knows about STIs and then building on that knowledge.

The aims of risk reduction counseling and education for STI patients are to:

- Help patients re-examine long-standing habits and situations that are putting them at risk
- Prevent further transmission to others
- Help patients remain free of infection in the future
- Promote partner notification, treatment and education
- Promote treatment adherence
- Enhance coping with the STI and its social consequences

If risk factors are identified, providers should encourage patients to adopt safer sexual behaviors. Counseling skills (e.g. respect, compassion, and a non-judgmental attitude) are essential to the effective delivery of prevention messages.

The main issues to discuss with an STI patient are:

- What STI the patient has, its implications and treatment, and the importance of complying with treatment
- The risk for acquiring & transmitting HIV infection
- The need to change sexual behavior
- Methods of lowering their risk of acquiring STIs and HIV, including abstinence/delaying sexual activity among youth, monogamy, and use of male and or female condoms
- Encouraging choices to change behavior
- Any barriers the patient perceives to changing behavior
- What changes the patient can and will make in their sexual behavior
- The importance of seeking health care promptly

- Talking about partners, and confirming the three essential decisions:
- to complete their treatment,
- to change any risk sexual behavior, and
- to see that their sexual partners are treated.

4.2 Condom promotion and supply

Condom promotion, demonstration and distribution are critical components of effective STI case management. The STI consultation provides an opportunity to promote and supply condoms, as patients should be more receptive to understanding their usefulness in decreasing their future exposure to STI/HIV.
Condom promotion to STI patients should include:

- Advice about using condoms (i.e., providing basic information about condoms as well as a dialogue with each client to identify and address potential barriers to condom use),
- Demonstration of correct use – including partner negotiation skills for condom use, and
- Provision of condoms to the patient and advice on further condom supply.

4.3 Notification and management of sexual partner(s)

Notification and management of sexual partner(s) is one of the most important components of STI case management. It helps to break the cycle of transmission and prevent the development of potential STI complications. Both men and women with STI may be symptom-free, thus, partnering notification and management offers an opportunity to identify and treat people who otherwise would not receive treatment.

It also offers an opportunity to provide focused STI and HIV education to individuals who are by definition at high risk of infection. There is good evidence that partner notification is an effective means of detecting untreated STIs. Effective management cannot be achieved without partner notification and treatment.

4.3.1 Principles of partner management

Partner notification should be conducted in such a way that all information remains confidential. The process should be voluntary and non-coercive. The health care provider is also required to show respect and a non-judgmental attitude.
Management of sexual partners is based on knowledge of the index patient's diagnosis. The following strategies can help for the treatment of partners in addition to the strategy currently used in the country:

- Offer immediate treatment of all patient's sexual partners (i.e. provide same treatment as the patient even if the partner(s) have no sign of STI)
- It might also be possible to give prescription for his/her partner if the index case is not willing to bring his/her partner in for care especially for commercial sex-workers who usually have casual partners.
- In addition to the STI being treated, the partner should also be assessed for other STIs.

The strategy selected will depend on several factors, which include: the risk of infection, the seriousness of the disease, the likelihood of a person returning for follow-up, the availability of effective treatment, and the likelihood of spread if treatment is not given.

4.3.2 Approaches to partner management

4.3.2.1 Passive contact tracing *(also known as patient referral)*

In passive contact tracing it is the patient who takes responsibility for contacting partners and asking them to come for treatment. An infected patient is encouraged to notify partner(s) of their possible infection without the direct involvement of health care providers. News of STI can be especially damaging when a patient or partner hears of their partner's infidelity for the first time. Such events might lead to marital breakdown, divorce, verbal or physical abuse, loss of home or livelihood, or even ostracism from the social group. Because of these and other reasons, many patients might feel unwilling or unable to discuss the STI with partners, so the service provider's aim is to help the patient decide what to do. An index patient might approach partner(s) in several ways:

- By directly explaining about the STI infection and the need for treatment;
- By accompanying a partner to the health facility ;
- By giving each partner a card asking him or her to attend the facility.

The success of patient referral is absolutely dependent on index patient and partner motivation and the quality and appropriateness of counseling received by the index patient. Moreover, its success depends on the skills of the service provider: what you say to the patient, how you say it and, equally important, how you listen to the patient and respond to what he or she says. The service provider needs to:

- Explain that all the patient's partners need to be treated so that the patient is not re-infected and his/her partners don't suffer the consequences of untreated STI;
- Remind the patient how to avoid re-infection (abstain, be monogamous, use condoms, get all partners treated);
- Help the patient learn how to communicate with partners;

4.3.2.2 Active contact tracing (also known as provider referral)

This is where a member of the health team contacts the partners of a patient with STI. Provider referral can be expensive, and can be perceived as a threat to patient confidentiality if the patient is not informed in advance that this might occur.

4.4 HIV testing and counselling (HTC)

The underlying principles to increasing access to HTC in clinical settings are that:

- Patients/clients have a right to access HIV prevention, treatment, care and support services
- HTC should be a gateway to such increased access. Observe the
- The 5Cs confidentiality, consent, counseling, circumcision, correct results.

4.5 Male circumcision (MC)

The benefit of circumcision has not been shown against gonococcal or chlamydial infections in men. Similarly, women's risk for chlamydial and gonococcal infections has not changed due to male circumcision. However, in light of the high prevalence of genital ulcer syndrome and HIV infection in the SADC region, it is recommended that male circumcision procedure should be offered routinely as a part of STI care. Service providers should explain the benefits of male

circumcision to all sexually active uncircumcised male presenting to the health facility, whether as patient or partner.

4.6 Cervical cancer screening

Cervical cancer kills more Swazi women than any other cancer, and its incidence is on the rise. The human papilloma virus (HPV) is the main cause of cervical cancer, and women with HIV are at an elevated risk of developing this cancer. Therefore cervical cancer screening should be undertaken on all women presenting with STIs, and especially HIV positive women.

Ideally, all women who have been sexually active should be screened for cervical cancer every 2 – 3 year. And it is recommended that every women living with HIV should be screened at least every year. Women beyond child-bearing age should also still be screened regularly.

If a woman has never undergone screening for cervical cancer, or has not been screened for 2 years or more, screening should be undertaken during the speculum examination. Screening includes either:

- A Pap smear, or
- Visual inspection of the cervix with acetic acid (VIA)

If the materials and/or expertise for either of these tests are not available, the patient should be referred to a health care facility providing these services.
NB: If a woman has extensive ulcerations that impede speculum insertion, or if the woman is bleeding heavily on her menses, set another appointment which would be ideal for cervical cancer screening.

4.7 Follow up visit for patients with STI

The importance of a follow up visit is to ensure cure and to exclude incubating STIs. Some patients may not respond to the initial syndromic treatment hence re-assessment may be necessary. The response to treatment might not be as expected when patients with STI have concomitant HIV infection. Moreover, HIV counseling and confidential testing can be re-offered during a follow up visit, if testing was refused on the initial visit.

4.8 STI Reporting Systems

All health facilities (private and public) should record and report STI cases treated at their facilities using the national STI's guidelines. I.e. reports sent to the Health Management and Information System and monitoring and evaluation Unit as well.

5.0 Management of STI associated syndromes

Common STI syndromes are the following:

- Genital ulcer syndrome (GUS)
- Male Urethritis Syndrome (MUS)
- Vaginal Discharge Syndrome (VDS)
- Lower abdominal pain (LAP)

- Scrotal Swelling Syndrome (SSW)
- Inguinal Bubo (IB)
- Neonatal Conjunctivitis(NC)
- Mixed STI Syndrome (MSS)

5.1 Genital ulcer syndrome (GUS)

Description
Ulceration of the genitals is among the most common STI syndromes in men and women. The most common STIs presenting with genital ulcer(s) are genital herpes (caused by herpes simplex virus syphilis, and chancroid Individual ulcers may be caused by more than one pathogen (mixed infections). Other STIs causing genital ulcers include donovanosis and lymphogranuloma.

Etiology
The relative prevalence of causative organisms for genital ulcer disease (GUD) varies considerably in different parts of the world.

Common etiologies for genital ulcer syndrome
- Treponema pallidum
- Heamophillus ducreyi
- Herpes simplex type 2
- Calymmatobacterium granulomatis (Dononvanosis)

Clinical features
- Patients with GUS may present with single or multiple ulcers, with or without pain.
- Lymph nodes in the groin may also be enlarged and painful.
- Herpetic lesions that have a classical onset with a prodrome of itch.

5.1.1 Syndromic treatment for genital ulcer syndrome
- Benzathine Penicillin, 2.4 million units I.M stat
  PLUS
- Azithromycin, 1g, orally stat
  PLUS
- Acyclovir, 400mg orally TDS for 7 days

** In pregnant women who are allergic to penicillin: Give Erythromycin base/ stearate 500 mg orally QID for 14 days.

5.1.2 Treatment Options
Recommended treatment regimens
If ulcer(s) alone or ulcer(s) along with herpetic vesicles are visible*
Treat for syphilis, chancroid and herpes. Regimen should include:
- Benzathine Penicillin*, 2.4 million units I.M stat,
  PLUS
- Azithromycin, 1g orally stat; OR Ceftriaxone, 250mg I.M stat; OR Ciprofloxacin, 500mg orally BID for 3 days; OR Erythromycin, 500 mg orally QID for 7 days (to treat chancroid)
  PLUS
- Acyclovir, 400mg orally TDS for 7 days (to treat genital herpes).

NB: Penicillin-allergic patients treat with: Erythromycin 500mg 6 hourly for 14 days

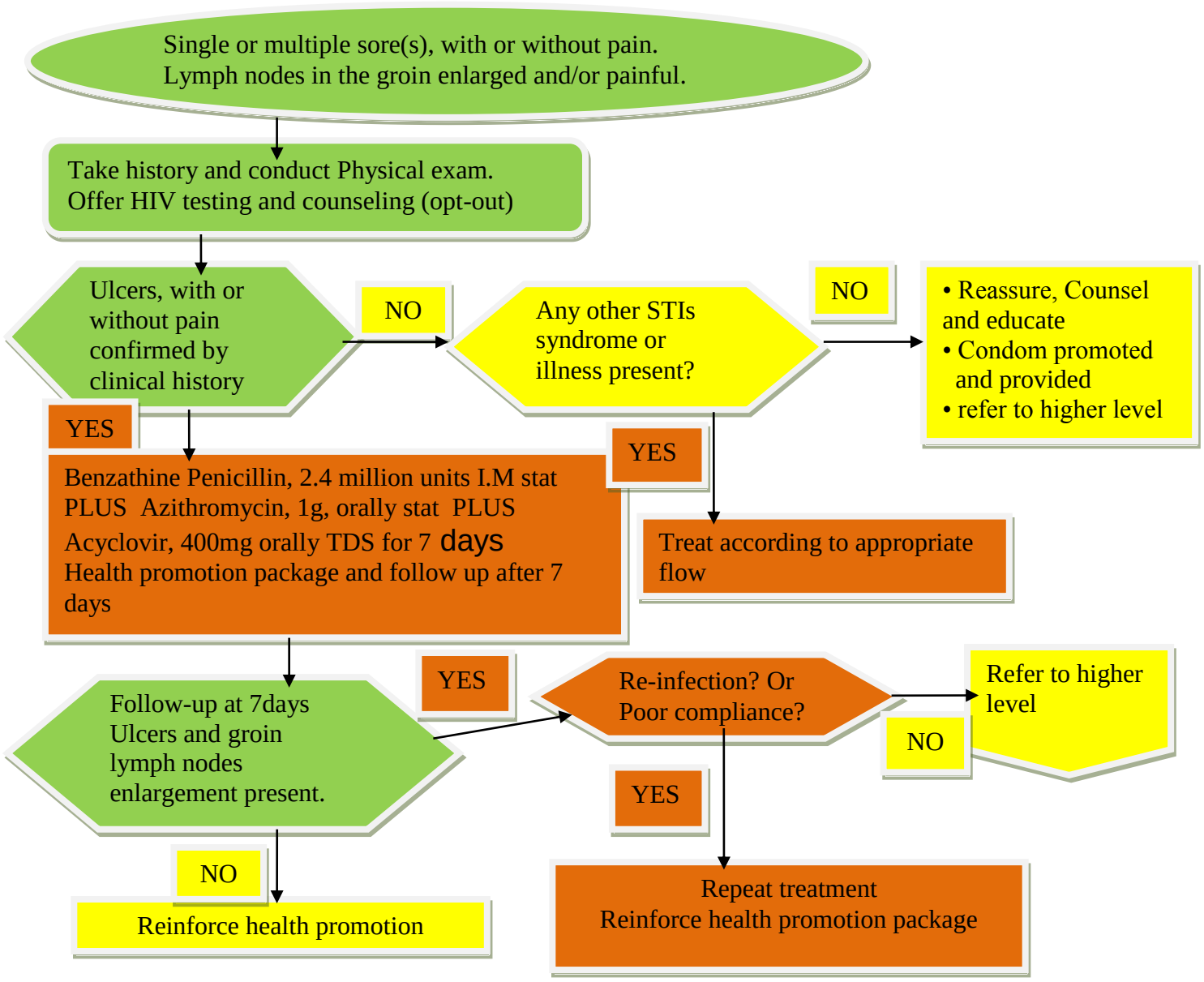
Recommended regimen for genital herpes:

- First episode: Acyclovir, 400mg orally TDS for 7 days;
- Recurrent episodes: Acyclovir, 400mg orally TDS for 5 days

The chronic and recurrent nature of the illness should be explained to the patient, who should be advised to avoid sexual contact until the lesions are completely healed. Further opportunities for prevention education should focus on reducing

The risk of transmission during both asymptomatic and symptomatic period by using condoms at all times. Circumcision for males and cervical cancer screening for females should be routinely offered

5.1.3 Flowchart for syndromic treatment of genital ulcer syndrome



Health Promotion Package for All Patients:
Educate, ensure compliance, and counsel
Promote abstinence during the course of treatment
Promote and demonstrate condom use, and provide condoms
Stress the importance of partner treatment and issue one notification slip for each sexual partner, follow up partner treatment during review visits
Offer HIV counselling and testing, for negative test results repeat test after 8weeks
Offer male circumcision to uncircumcised male patient/partner
Provide cervical cancer screening for female partners if indicated

5.2 Male Urethritis syndrome (MUS)

Description

Male patients complaining of urethral discharge and/or dysuria should be examined for evidence of discharge. Origin of the discharge needs to be identified: urethritis causes discharge from the meatus (the opening of the penis). In uncircumcised men, discharge from the glans of foreskin may appear to come from the meatus. If no discharge is visible, consider applying gentle pressure to the penis. It may be possible to secure discharge by holding the head of the penis between the thumbs and gently rolling the thumb up and down. It may be necessary to milk the urethra, start at the base of the penis, place one finger on the palm of the hand beneath the penis and one or two fingers on top of the base, applying gently pressure, repeat if necessary. If the patient is reluctant or afraid, he can milk his urethra himself.

Etiology

The major pathogens causing urethral discharge is Neisseria gonorrhea and Chlamydia trachomatis and sometimes Trichomonas vaginalis

5.2.1 Syndromic treatment for male urethritis syndrome

- Cefixime, 400 mg orally stat or Ceftriaxone, 250 mg I.M stat (to treat gonococcal infection)
  PLUS
- Azithromycin, 1 g orally stat (to treat chlamydial infections)
  PLUS
- Metronidazole, 2 g orally stat (to treat trichomonal infections)

5.2.2 Treatment Options for Urethral Discharge Syndrome

Recommended treatment regimens for gonococcal infection

- first-line: Cefixime, 400 mg orally stat, OR Ceftriaxone, 250 mg intramuscular (IM) stat.
- Second-line: Spectinomycin, 2 g IM stat, OR Gentamicin, 240 mg IM stat.

Recommended treatment regimens for chlamydial infection

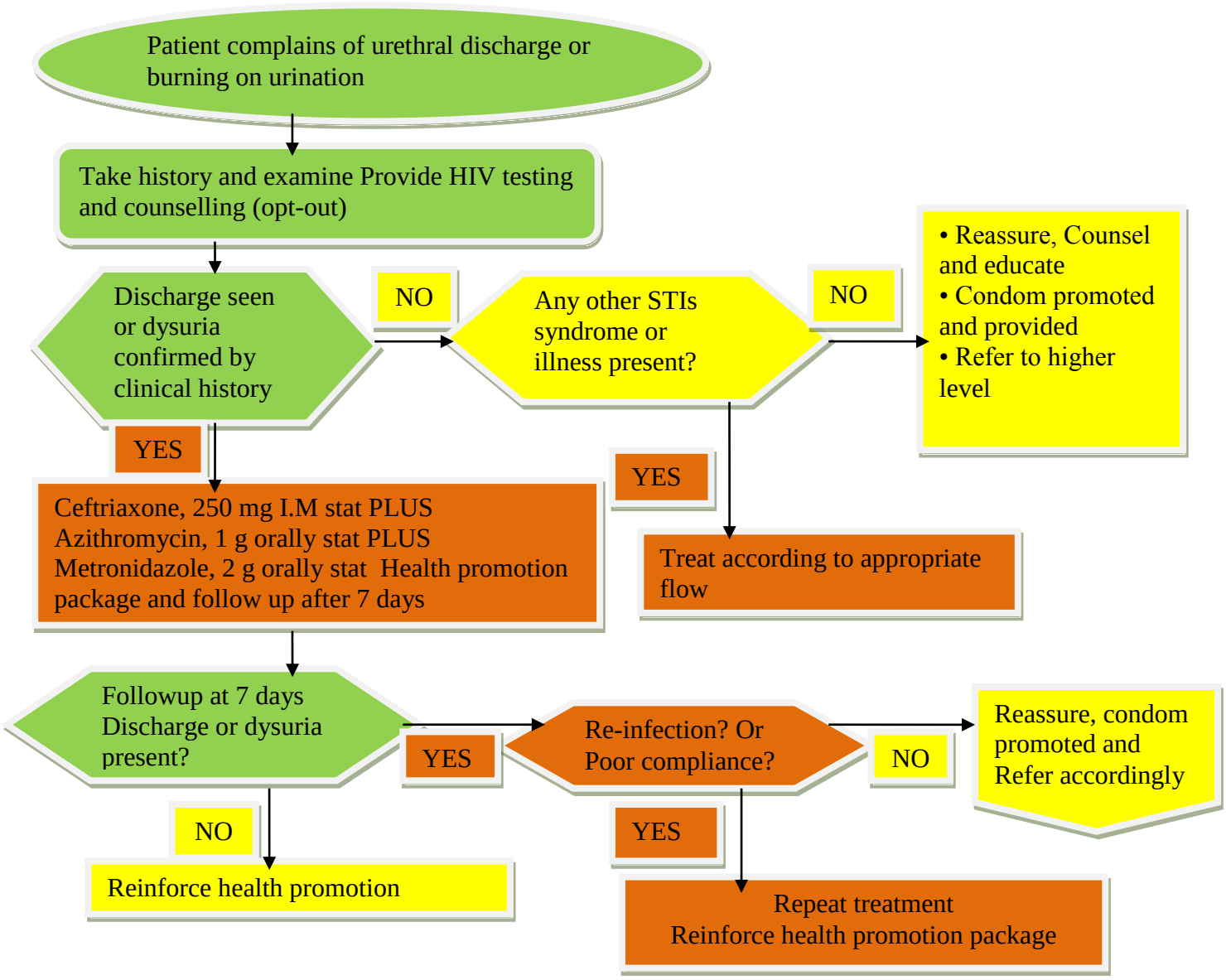
- first-line: Azithromycin, 1 g orally stat.
- Second-line: Doxycycline*, 100 mg orally BID for 7 days, OR Erythromycin, 500 mg orally QID for 7 days.

Recommended treatment regimens for trichomonal infection

- Metronidazole, 2 g orally stat

Patients taking Metronidazole should be cautioned to avoid taking alcohol while on the drug or up within 24-48 hoursafter the last dose. The patient should be made aware that the combination of Metronidazole with alcohol can cause severe abdominal cramps, nausea, vomiting and headaches.

5.2.3 Flowchart for syndromic treatment of male urethritis (MUS)



Health Promotion Package for All Patients:
Educate, ensure compliance, and counsel
Promote abstinence during the course of treatment
Promote and demonstrate condom use, and provide condoms
Stress the importance of partner treatment and issue one notification slip for each sexual partner, follow up partner treatment during review visits
Offer HIV counselling and testing, for negative test results repeat test after 8 weeks
Offer male circumcision to uncircumcised male patient/partner
Provide cervical cancer screening for female partners if indicated

5.3. Vaginal discharge syndrome (VDS)

Description
Vaginal discharge is a very common complaint among female patients. It is common for women to experience some types of normal discharge (physiological) which occur during mid-menstruation cycle, due to sexual activity or during pregnancy and lactation. This physiological vaginal discharge is different from the abnormal vaginal discharge syndrome
(VDS). A spontaneous complaint of abnormal vaginal discharge (in terms of increased quantity, and/or unusual color
or mal-odour)

Etiology
STI: N. gonorrhoea and C. trachomatis. can cause cervicitis
Vaginal pathology: T. vaginalis, Candida albicans, and bacterial
vaginosis .

Clinical features
The symptoms of vaginal discharge syndrome include:

- Increased secretions,
- Change in the color or consistency, foul odor,
- Itching and soreness,
- Painful urination
- pain during intercourse.

5.3.1 Syndromic treatment of vaginal discharge syndrome (VDS)

- Cefixime, 400mg orally stat or Ceftriaxone, 250 mg IM stat
  PLUS
- Azithromycin, 1g orally stat
  PLUS
- Metronidazole, 2g orally stat

If candida is evident give six days course on clotrimazole pessaries

5.3.2 Treatment Options for vaginal discharge syndrome

Vaginal discharge syndrome due to vaginitis and when risk assessment is negative. The treatment regimen should cover organisms causing bacterial vaginosis and candidal infections:

- Metronidazole** 2 g orally, single dose (to treat bacterial vaginosis)
  PLUS
- Clotrimazole 500 mg vaginal pessary once only (to treat candidiasis
  PLUS
- Clotrimazole cream applied locally 12 hourly for 7 days (for vulval itching or excoriation)

Vaginal discharge syndrome due to cervicitis, OR when risk assessment is positive, OR where speculum examination is not possible. The treatment regimen should cover organisms causing gonococcal, chlamydial and trichomonal infections.

Drugs to treat gonococcal infection are:

- First-line: Cefixime, 400mg orally stat, OR Ceftriaxone, 250mg IM stat.
- Second-line: Spectinomycin 2g IM stat, OR Gentamicin 240mg IM stat.

Drugs to treat chlamydial infection are:

- First-line: Azithromycin, 1g orally stat.
- Second-line: Doxycycline* 100mg BID for 7 days, OR Erythromycin 500 mg QID for 7 days.

Drug to treat trichomonal infection is:

- Metronidazole**, 2g orally stat.
- If vulval oedema, itching, excoriations or curd-like discharge present

ADD: Clotrimazole pessary 500 mg intra-vaginally stat

PLUS

- Clotrimazole cream applied BID for 7 days (to treat for candidiasis)

Recommended treatment regimen for vaginal discharge syndrome in pregnant woman

- Cefixime, 400mg orally stat, OR Ceftriaxone, 250 mg IM stat (to treat gonococcal infection)

PLUS

- Erythromycin 500mg orally QID for 7 days, OR Azithromycin 1 g orally stat (to treat chlamydial infections)

PLUS

- Metronidazole**, 2g orally single dose (to treat trichomonal infection and bacterial vaginosis).
- If vulval oedema, itching, excoriations or curd-like discharge present

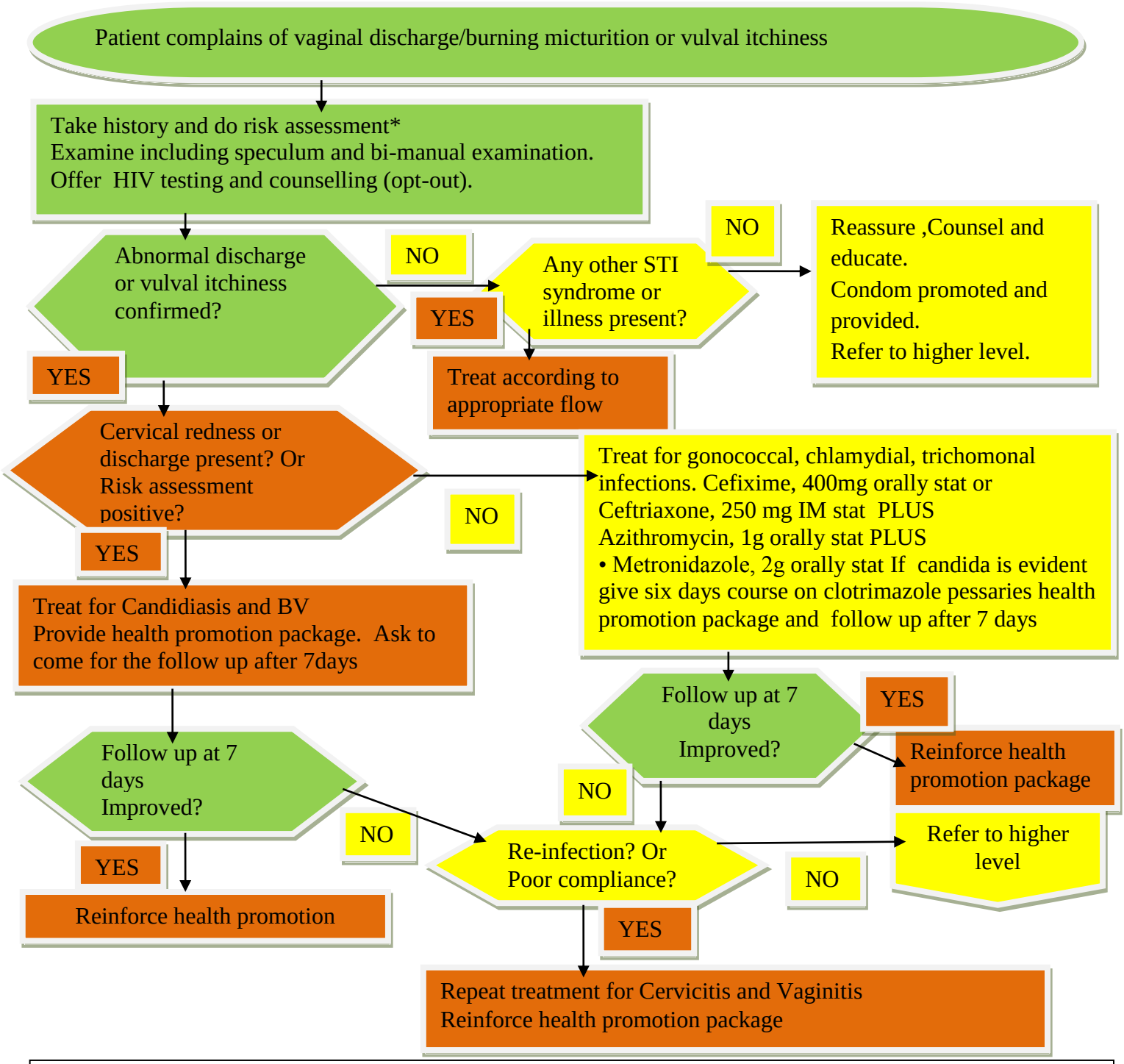
ADD: Clotrimazole pessary 500mg intra-vaginally stat

PLUS

- Clotrimazole cream applied 12 hourly for 7 days (to treat for candidiasis).
- * In individuals allergic /intolerant to Doxycycline: Give Erythromycin base/stearate 500 mg QID for 7 days

NB Patients taking Metronidazole should be cautioned to avoid taking alcohol while on these drugs and up to 24-48 hours after the last dose. The patient should be made aware that the combination of Metronidazole with alcohol can cause severe abdominal cramps, nausea, vomiting and headaches**.**

5.3.3 Flow chart for syndromic treatment of vaginal discharge syndrome



Health Promotion Package for All Patients:
Educate, ensure compliance, and counsel Promote abstinence during the course of treatment
Promote and demonstrate condom use, and provide condoms
Stress the importance of partner treatment and issue one notification slip for each sexual partner, follow up partner treatment during review visits
Offer HIV counselling and testing, for negative test results repeat test after 8 weeks and Offer male circumcision to uncircumcised male patient/partner. Provide cervical cancer screening during follow up visit.

5.4 Lower abdominal pain (LAP)

Description

All sexually active women presenting with history of lower abdominal pain should be carefully evaluated for the presence of salpingitis and/or endometritis – elements of pelvic inflammatory disease (PID). In addition, routine bimanual and abdominal examination should be carried out on all women with presumptive STI since some women with PID will not complain of lower abdominal pain. Symptoms suggestive of PID include: abdominal pain, dyspareunia, vaginal discharge, meno-metrorrhagia, dysuria, fever, and sometimes nausea and vomiting. Hospitalization of patients with acute PID should be seriously considered when:

- The diagnosis is uncertain,
- Surgical emergencies such as appendicitis and ectopic pregnancy cannot be excluded,
- A pelvic abscess is suspected,
- The patient is pregnant,
- The patient is unable to follow or tolerate the outpatient treatment,
- The patient has failed to respond to the outpatient treatment.

Risk factors: women with IUD have a higher risk of PID, particularly if the IUD was inserted recently.

Etiology

N.gonorrheae, C. Trachomatis and anaerobic bacteria are most frequently responsible of this syndrome.

Clinical features

Clinically, lower abdominal pain is a complex syndrome to identify. Several other important non-STI causes may produce similar symptoms and signs.

- In all suspected lower abdominal pain patients, speculum and bi-manual examination must be conducted.
- A complete set of signs and symptoms of lower abdominal pain would include cervical motion tenderness on bimanual examination, a complaint of lower abdominal or back pain, lower abdominal tenderness with or without guarding on abdominal examination, and
- The physical examination should assess the general condition of the patient. Fever may be present in severe cases. In all cases, pregnancy-related conditions, as well as an acute abdomen, should be excluded. High temperature, high pulse rate and low blood pressure, for example, should alert to the possibility of severe

pelvic infection or bleeding. These patients should be referred as a matter of urgency.

- On palpation, if signs of peritonitis such as lower abdomen guarding and rebound tenderness or if abdominal
- masses are present, the patient must be referred to the higher level.

5.4.1 Syndromic treatment of lower abdominal pain (PID)

- Ceftriaxone, 250mg IM stat
  PLUS
- Azithromycin, 1g orally weekly for 2 weeks
  PLUS
- Metronidazole, 400mg orally BID for 7 to 14 days

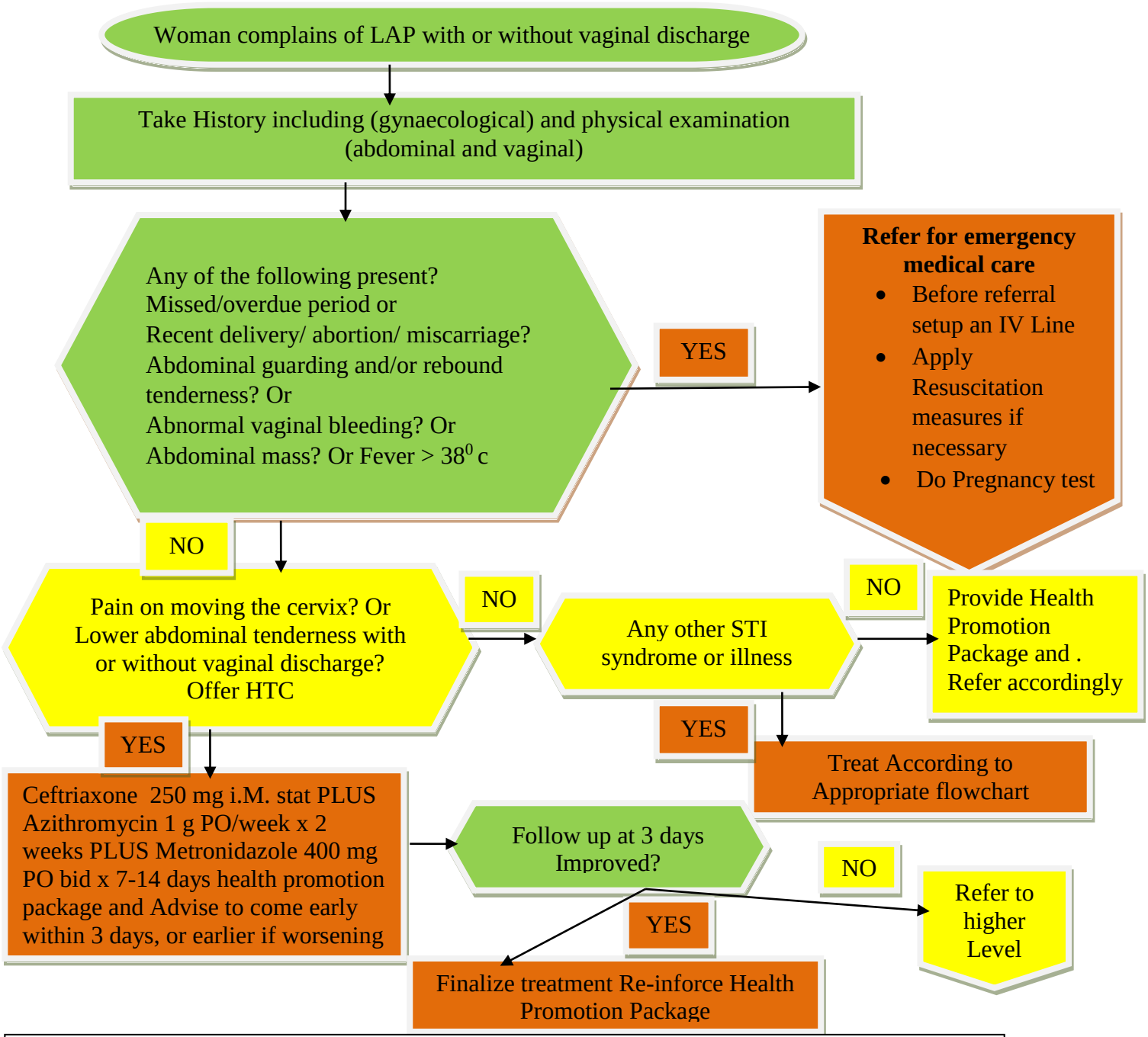
5.4.2 Recommended treatment regimen in non-pregnant women

- Ceftriaxone, 250mg I.M stat (to treat gonococcal infection)
  PLUS
- Azithromycin, 1g orally per week for 2 weeks, OR Doxycycline*, 100 mg orally BID for 14 days (to treat chlamydial infection)
  PLUS
- Metronidazole**, 400mg orally BID for 7 to 14 days (to treat anaerobic bacteria).
- In individuals allergic /intolerant to Doxycycline: Give Erythromycin base/stearate 500 mg orally QID for 14 days

** Patients taking Metronidazole should be cautioned against taking alcohol while on these drugs and up to 24-48 hours after the last dose. The patient should be made aware that the combination of Metronidazole with alcohol can cause severe abdominal cramps, nausea, vomiting and headaches.

Caution: PID can be a serious condition. The patient must be referred to the higher level if she does not respond to treatment within 3 days and even earlier in case there is worsening of her condition. Because of the high risk for maternal morbidity, fetal wastage, and preterm delivery. **NB:** pregnant women who have suspected PID should be referred to higher level for hospitalisation.

5.4.3 Flowchart for syndromic treatment of lower abdominal pain (PID)



Promotion Package for All Patients: Educate, ensure compliance, and counsel
Promote abstinence during the course of treatment
Promote and demonstrate condom use, and provide condoms
Stress the importance of partner treatment and issue one notification slip for each sexual partner, follow up partner treatment during review visits
Offer HIV counselling and testing, for negative test results repeat test after 8 weeks
Offer male circumcision to uncircumcised partner & Provide cervical cancer screening during follow-up visit

5.5 Scrotal swelling

Description
Inflammation of the epididymis usually manifests itself by acute onset of unilateral testicular pain and swelling, often with tenderness of the epididymis, vas deferens, and occasionally with erythema and oedema of the overlying skin.

Etiology
In men under 35 years, it is usually sexually transmitted. When epididymitis is accompanied by urethral discharge, it is commonly gonococcal and/or chlamydial in nature. A painful swelling of the scrotum that usually develops over 1 to 2 days is the most common presenting symptom of epididymo-orchitis. In older men, other general infections may be responsible: E. coli, Klebsiella, and Pseudomonas Aeruginosa. In pre-pubertal children, mumps epididymo-orchitis is usually noted within a week of parotid enlargement. It is important to consider other non-infectious causes of scrotal swelling. It may be seen following trauma or testicular torsion and this required immediate referral for surgical or urological opinion. History usually indicates sudden onset or recent trauma and examination shows unilateral involvement, rotated and elevated testis.

Clinical features
- The patient usually complains of unilateral pain and swelling of the scrotum with a urethral discharge which develops over 1-2 days
- On inspection, the scrotal sac appears distended and on palpation, both testis and the epididymis are swollen and tender

Differential diagnoses:
- testicular torsion
- testicular trauma
- strangulated inguinal hernia
- hydrocoele
- haematocele

5.5.1 Syndromic treatment of scrotal swelling
- Ceftriaxone, 250 mg intramuscular (IM) stat.
  PLUS
- Azithromycin, 1 g orally per week for 2 weeks
  PLUS
- Combined with bed rest and scrotal support until local inflammation and fever subside.

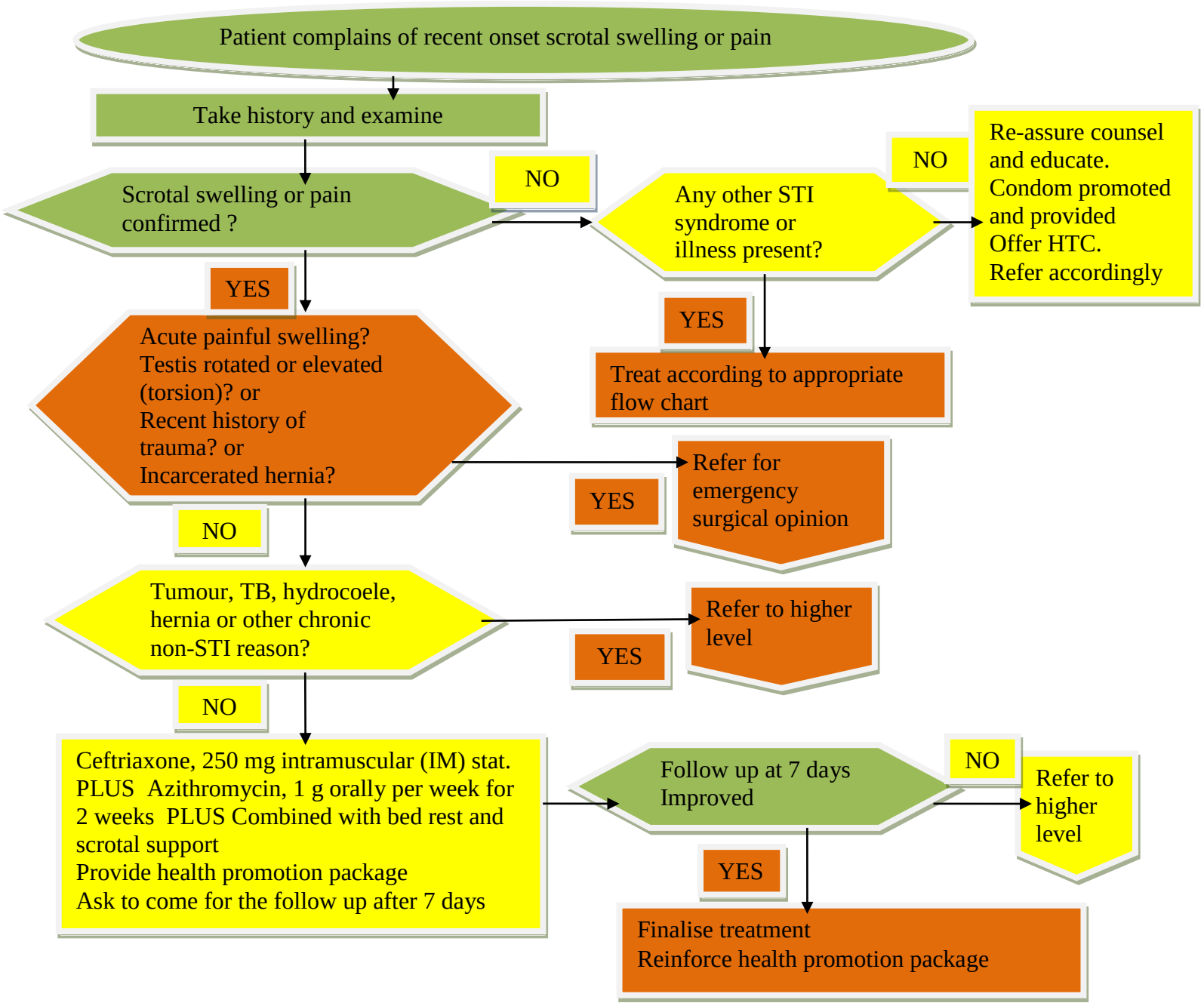
Monitor treatment response by scheduling a follow-up visit seven days after initial clinic visit.

5.5.2 Treatment options
for complicated gonococcal infection:
- First-line: Ceftriaxone, 250 mg intramuscular (IM) stat.
- Second-line: Spectinomycin, 2 g IM stat, OR Gentamicin, 240 mg IM stat.

for complicated chlamydial infection:
- First-line: Azithromycin, 1 g orally per week for 2 weeks.

Second-line: Doxycycline*, 100 mg orally BID for 14 days, OR Erythromycin, 500 mg orally QID for 14 days.* In individuals allergic/intolerant to Doxycycline: Give Erythromycin, 500 mg, orally QID for 14 days.

5.5.3 Flowchart for syndromic treatment of scrotal swelling



Health Promotion Package for All Patients: Educate, ensure compliance, and counsel
Promote abstinence during the course of treatment
Promote and demonstrate condom use, and provide condoms
Stress the importance of partner treatment and issue one notification slip for each sexual partner, follow up partner treatment during review visits
Offer HIV counselling and testing, for negative test results repeat test after 8 weeks
Offer male circumcision to uncircumcised male patient/partner
Provide cervical cancer screening for female partners

5.6. Inguinal bubo

Description
Inguinal and femoral buboes are much enlarged and often pus-filled lymph nodes in the groin region. A bubo may occur in chancroid (caused by Haemophilus ducreyi) or lymphogranuloma venereum (LGV- caused by Chlamydia trachomatis types L1, L2 and L3).

Etiology
Chancroid + LGV

Clinical features

- Inguinal buboes can occur as unilateral or bilateral, single or multiple painful swellings. Other STIs (such as gonorrhoea,
- syphilis, herpes and HIV) may cause inguinal lymphadenopathy, which may typically be painful (herpes, gonorrhoea) or non-painful (syphilis, HIV).
- Non-STIs, such as acute infections of the skin on the pubic area, genitals, buttocks, anus, thighs, legs, feet and toes or tuberculosis infection may also cause inguinal lymphadenopathy.
- If during examination, genital ulcer(s) are seen along with inguinal buboes, the clinical management should follow the genital ulcer syndrome (GUS) protocol.

5.6.1 Syndromic treatment of Inguinal bubo

- Azithromycin, 1g orally stat and then 1g orally per week for 2 weeks (to treat both chancroid and LGV) OR Doxycycline, 100mg orally BID for 14 days (to treat LGV)
  PLUS
- Ciprofloxacin, 500 mg orally BID for 3 days OR Ceftriaxone, 250mg IM stat (to treat chancroid)

5.6.2 Treatment options

ingunal Bubo:

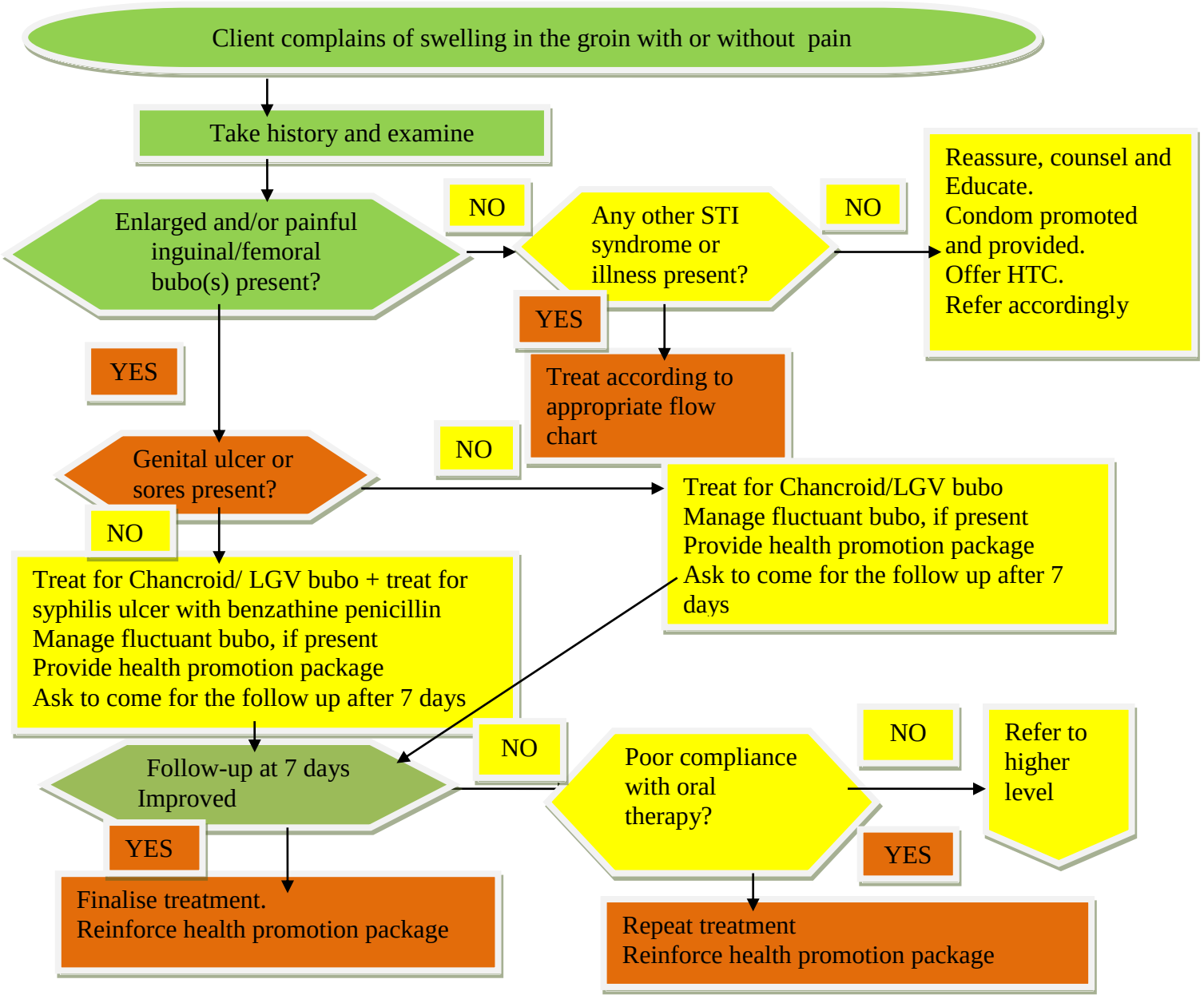
- Ceftriaxone, 250mg intramuscular (IM) stat OR Azithromycin, 1g orally stat and then 1 g orally per week for 2 weeks OR Erythromycin, 500mg orally QID for 14 days OR Ciprofloxacin, 500mg orally BID for 3 days.

LGV buboes:

- Doxycycline*, 100mg orally BID for 14 days* OR Azithromycin, 1g orally stat and then 1 g orally per week for 2 weeks OR Erythromycin, 500mg orally QID for 14 days.
- * In patients intolerant to Doxycycline, or in pregnant and lactating women: Give 3 doses of Azithromycin, 1 g orally per week or Erythromycin base/stearate, 500mg orally QID for 14 days

NB: For Fluctuant Buboes, refer for aspiration

5.6.3 Flowchart for syndromic treatment of inguinal bubo



Health Promotion Package for All Patients: Educate, ensure compliance, and counsel
Promote abstinence during the course of treatment. Promote and demonstrate condom use, and provide condoms
Stress the importance of partner treatment and issue one notification slip for each sexual partner, follow up partner treatment during review visits. Offer HIV counselling and testing, for negative test results repeat test after 8 weeks. Offer male circumcision to uncircumcised male patient/partner
Provide cervical cancer screening for female patient or partner

5.7. Neonatal conjunctivitis

Description
Neonatal conjunctivitis is the condition where the baby develops purulent conjunctivitis in one or both eyes within four weeks of birth. It is a medical emergency and unless treatment is initiated within 24 hours there could be permanent damage to the eyes resulting in blindness. STI-related infections are passed from the mother to the neonate during passage through the birth canal during the delivery.

Etiology
N. Gonorrhoeae
C. Trachomatis

Clinical features
New-born babies usually present with redness and swelling of eyelids or “sticky eyes” due to the discharge from the eyes. The symptoms and signs may occur within one week of the birth.

5.7.1 Syndromic treatment of Neonatal conjunctivitis
Prevention measures:

- Screen all pregnant women for Sexually Transmitted Infections during pregnancy and provide appropriate treatment;
- Routine application of tetracycline eye ointment (1%) to all new-born’s at the time of delivery;
- Provide health promotion package to parents.
- All new-born babies with conjunctivitis should be treated for both N. gonorrhoea and C. trachomatis because of the possibility of mixed infections. Clean the eyes with distilled water or saline.
- Persons caring for infected infants should always wash their hands carefully. Parents (mother and father or partner) should be examined and treated.

5.7.2 Treatment Options For the new-born

- Ceftriaxone, 50mg/kg body weight (max. 125mg) IM single dose, up to maximum of 125mg (to treat gonococcal infection)
  PLUS
- Erythromycin syrup, 50mg/kg body weight orally daily in 4 divided doses for 14 days (to treat chlamydial infection).

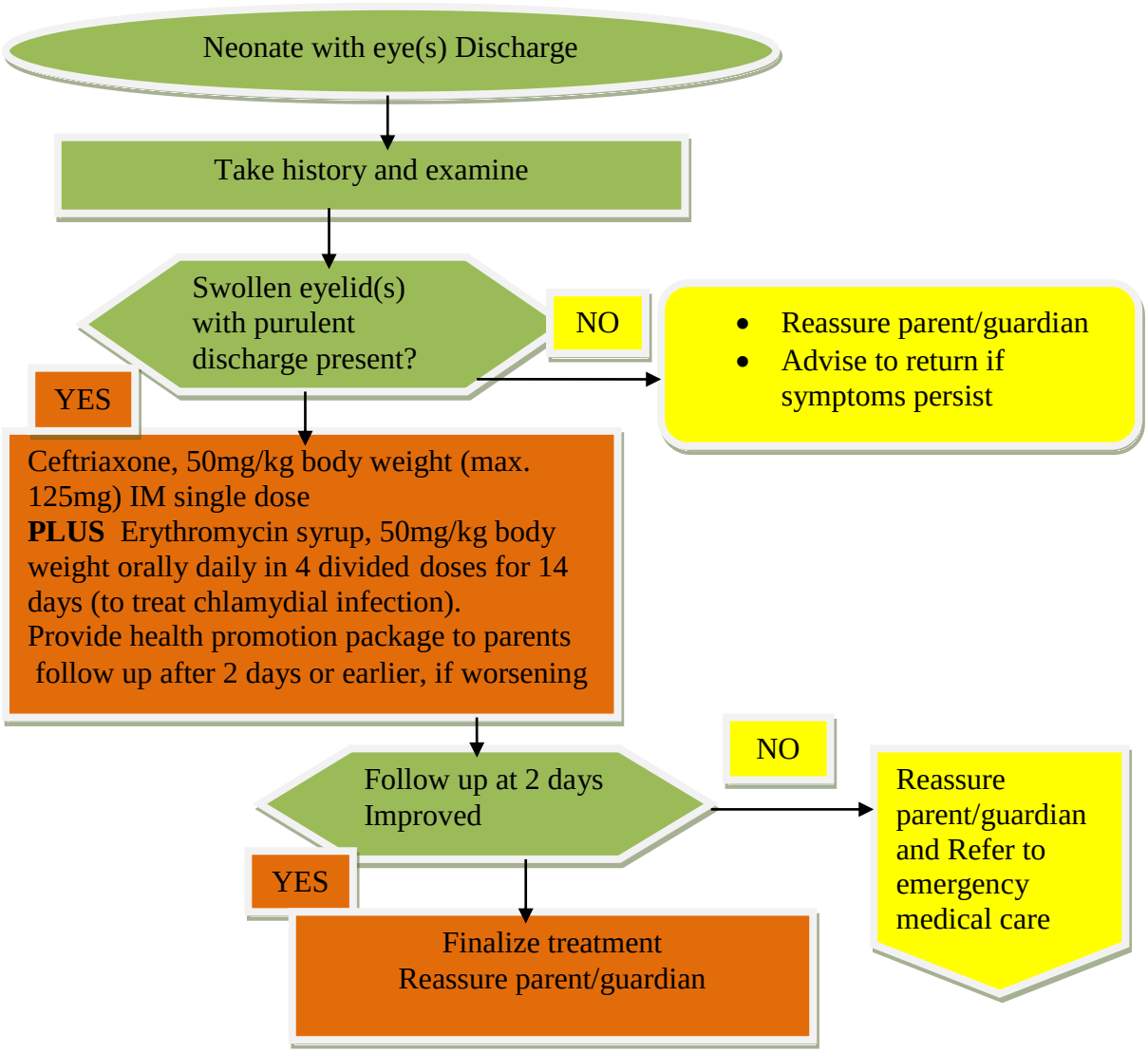
For mother (breast-feeding)

- Cefixime, 400mg orally stat OR Ceftriaxone, 250mg IM stat (to treat gonococcal infection)
  PLUS
- Azithromycin, 1g orally stat OR Erythromycin, 500mg orally QID for 7 days (to treat chlamydial infection).

For father or non-breast-feeding mother

- Cefixime, 400mg orally stat OR Ceftriaxone, 250mg IM stat (to treat gonococcal infection)
  PLUS
- Azithromycin, 1g orally stat OR Doxycycline, 100mg orally BID for 7 days (to treat chlamydial infection).

5.7.3 Flowchart for syndromic treatment of neonatal conjunctivitis



Health Promotion Package for Parents of Baby with Confirmed Neonatal Conjunctivitis:
Educate, ensure compliance, and counsel. Promote abstinence during the course of treatment.
Promote and demonstrate condom use, and provide condoms.
Stress the importance of partner treatment and issue one notification slip for each sexual partner, follow up partner treatment during review visits. If exposed to HIV infection;
Offer HIV counselling and testing, for negative test results repeat test after 8 weeks.
Offer male circumcision to uncircumcised parent. Provide cervical cancer screening for mother.

6.0 Mixed STI Syndromes

Definition:
Client presenting with more than one syndrome

Mixed Sexually Transmitted Infections	Ttreatment (new episode)
UDS + SSS	Ceftriaxone, 250mg IM stat + Azithromycin, 1 g orally per week for 2 weeks + Metronidazole, 2g orally stat + Supportive therapy: to reduce pain advice bed rest, scrotal elevation with a scrotal support (T-bandage) and analgesics.
UDS + Balanitis	Cefixime, 400mg orally stat / Ceftriaxone, 250 mg IM stat + Azithromycin 1 g orally stat / Doxy- cycline, 100mg orally BID for 7 days + Metronidazole, 2g orally stat + Clotrimazole cream, local application BID for 7 days.
UDS + GUS	Cefixime, 400mg orally stat / Ceftriaxone, 250mg IM stat + Acyclovir, 400mg orally TDS for 7days + Benzathine Penicillin*, 2.4mu IM stat+ Azithromycin, 1g orally stat /Doxycycline*, 100mg orally BID for 7 days + Metronidazole, 2 g orally stat.
VDS + LAP	Ceftriaxone, 250mg IM stat + Azithromycin, 1g orally per week for 2 weeks + Metronidazole, 400mg orally BID for 7-14 days. Clotrimazole pessary to be added, if vulval oedema, itching, ex- coriations or curd-like discharge present.
VDS + GUS (non-pregnant	Cefixime, 400mg stat / Ceftriaxone, 250mg IM stat + Metronidazole, 2g orally stat + Benzathine Penicillin*, 2.4mu IM stat Azithromycin, 1g orally stat /Doxycycline*, 100mg orally BID for 7 days + Acyclovir, 400mg orally TDS for 7 days. Clotrimazole pessary to be added, if vulval oedema, itching, excoriations or curd-like discharge present.
VDS + GUS (pregnant, breastfeed-ing)	Cefixime, 400mg stat / Ceftriaxone, 250mg IM stat + Metronidazole, 2g orally stat + Benzathine Penicillin*, 2.4mu IM stat + Azithromycin 1g orally stat / Erythromycin*, 500mg orally QID for 7 days + Acyclovir, 400mg orally TDS for 7 days. Clotrimazole pessary to be added, if vulval oedema, itching, excoriations or curd-like discharge present.
LAP + GUS	Ceftriaxone, 250mg IM stat + Metronidazole, 400 mg orally BID for 7-14 days + Benzathine Penicillin*, 2.4mu IM stat + Azithromycin, 1g orally per week for 2 weeks /Doxycycline*, 100mg orally BID for 7-14 days + Acyclovir, 400 mg orally TDS for 7 days.
SSS + GUS	Ceftriaxone, 250 mg IM stat + Benzathine Penicillin*, 2.4mu IM stat + Azithromycin, 1g orally per week for 2 weeks/Doxycycline*,100mg orally BID for 7-14 days + Acyclovir, 400mg orally TDS for 7 days * In Penicillin-allergic patients: Give Doxycycline (non-pregnant women) or Erythromycin (pregnant women) for 14 days instead of 7days

7.0 Management of other STIs and related clinical conditions

This section discusses the management of the most common STIs that are not presented as syndromes, as well as other STI-related clinical conditions. Details for the management of each infection or condition are provided. The following is a list of important other STIs not presenting as syndromes and STI-related conditions:

- Management of reactive syphilis test cases;
- STI screening in pregnant women;
- Balanitis and Balanoposthitis;
- Genital warts;
- Molluscum contagiosum;
- Pubic lice;
- Genital scabies;
- Vaccine preventable STIs (human papilloma virus(HPV); hepatitis B virus (HBV) infection;
- Partner notification and treatment.

7.1 Management of reactive syphilis test cases

In any health facility, there are instances when a client's blood sample is tested for syphilis – either as a routine practice such as screening of pregnant women or screening for syphilis in most-at-risk groups (for example, sex workers or new detainees in prison) or vulnerable populations (for example, victims of sexual abuse). Often, syphilis tests are done to rule out clinical suspicion of secondary syphilis in patients presenting with generalized skin rashes or lymphadenopathy, or to rule out latent syphilis in asymptomatic patients.

7.1.1 Serological tests for syphilis

There are two main types of serological (blood) tests for syphilis: non-treponemal tests (non-specific) and treponemal tests (specific).

7.1.2.Non-treponemal tests

The Rapid Plasma Reagin (RPR) and the Venereal Disease Research Laboratory (VDRL) tests detect the antibody to cardiolipin, a component of normal mammalian cell membrane. Therefore, these tests are sensitive but not specific for syphilis.

The advantage of these tests is that the results can be quantified and used for monitoring the treatment over time. Usually, these tests are positive 4-5 weeks after the occurrence of infection. A titre of 1:8 and above indicates probable active disease or recent infection (treated or untreated), although the RPR/VDRL can be negative in up to 30% of primary GUS cases.

If after three months post-treatment, the titre falls to a low level then cure can be assumed. However, if the titre rises four-fold after falling to a low level post-treatment, then relapse, complication or re-infection should be suspected. A low proportion of patients may remain positive even after successful treatment. These non- treponemal tests can also give false positive results due to a number of conditions not related to syphilis

7.1.3 Treponemal tests

Treponemal rapid diagnostic test (RDT/Tp), Fluorescent Treponemal Antibody test (FTA), the Treponema pallidum Haemagglutination Assay (TPHA) and the Treponema pallidum particle agglutination (TPPA) assay are specific tests which, if positive, indicate true infection. Once they are positive, they remain positive for life even after successful treatment. Therefore, they cannot be used for monitoring the patient's response to treatment.

7.1.4 Management

A patient who currently has no symptoms or clinical signs of syphilis but who tested positive on serological syphilis test is diagnosed as having latent syphilis. Cases of latent syphilis are further divided into early latent syphilis and late latent syphilis, depending on the duration of the illness. Treatment duration also differs accordingly. In situations where doubt exists regarding the correct classification of the stage of latent syphilis, overtreatment is warranted to avoid development of complications.

7.1.4.1 Treatment regimens for reactive syphilis test cases

Benzethine Penicillin, 2.4millionIU IM weekly, after testing for sensitivity, for 3 weeks.

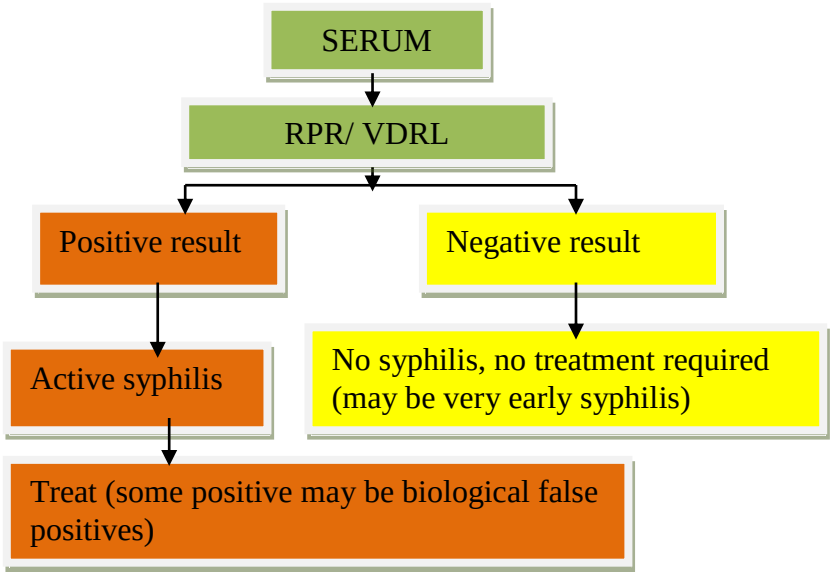
Alternative regimens for penicillin hyper- sensitive patients:

- Doxycycline, 100mg orally BID for 30 days (non-pregnant women).
- Erythromycin, 500mg orally QDS for 30 days (pregnant women).

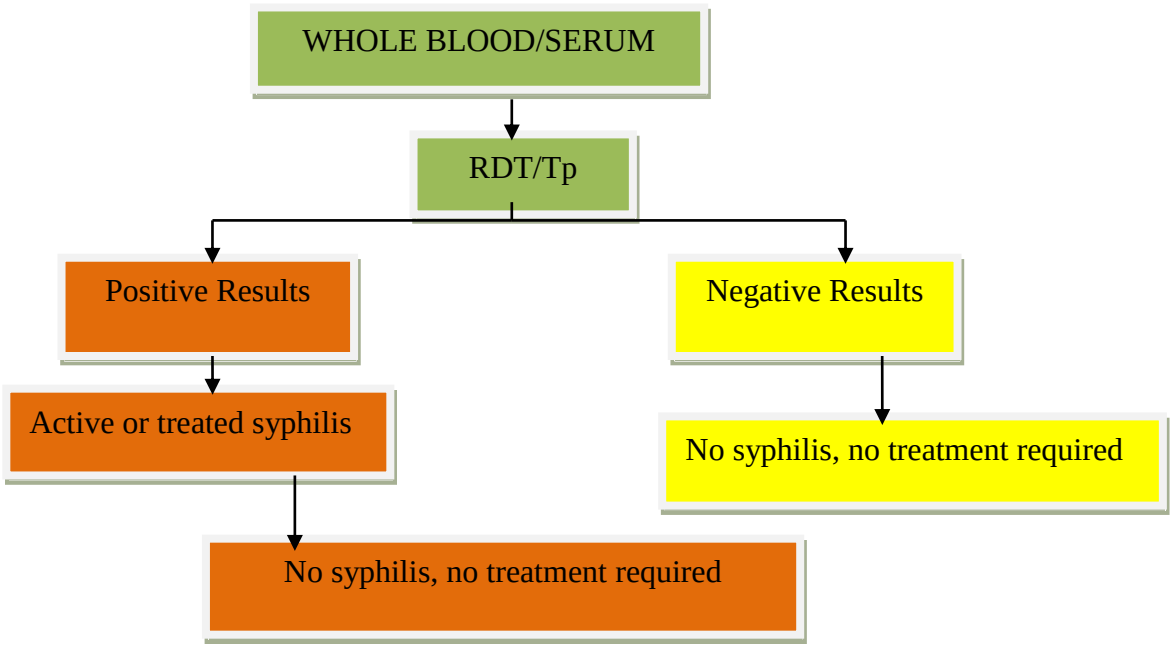
Note that Jarish Herxheimer reaction (mild fever, body aches and initiation of symptoms within 2 to 12 hours of injection) can occur with penicillin injection. This should be treated with Paracetamol, 500 mg to 1 g orally QDS on 1st day. The patient should be warned of the possibility of the reaction.

7.1.5 Syphilis testing and treatment algorithm

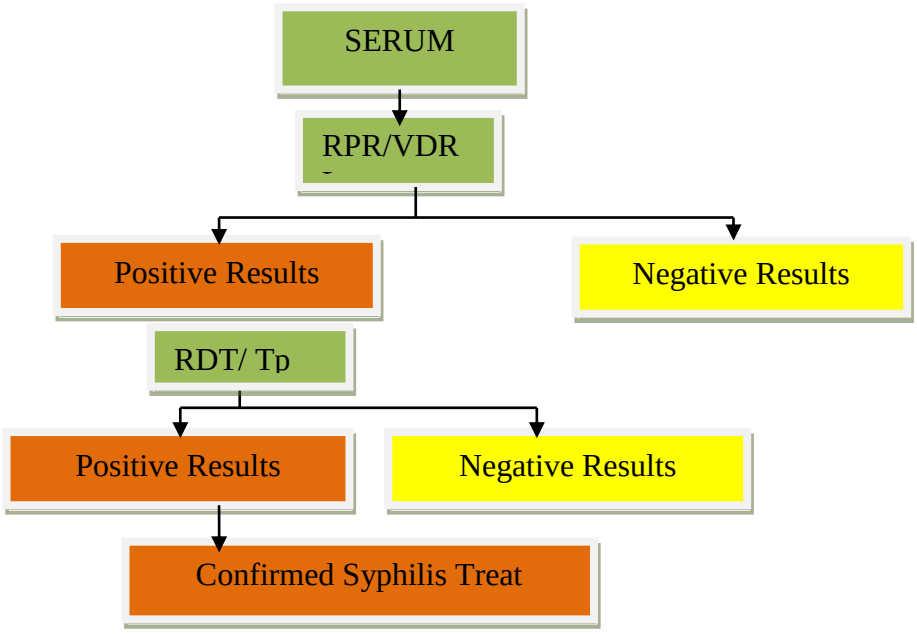
7.1.5.1 Option 1: Where RPR or VDRL testing



7.1.5.2 Option 2: Where RDT/Tp testing available



7.1.5.3 Option 3: Where RDT/Tp and non-treponemal testing



Tp = Treponemal result; NTp = Non-treponemal result

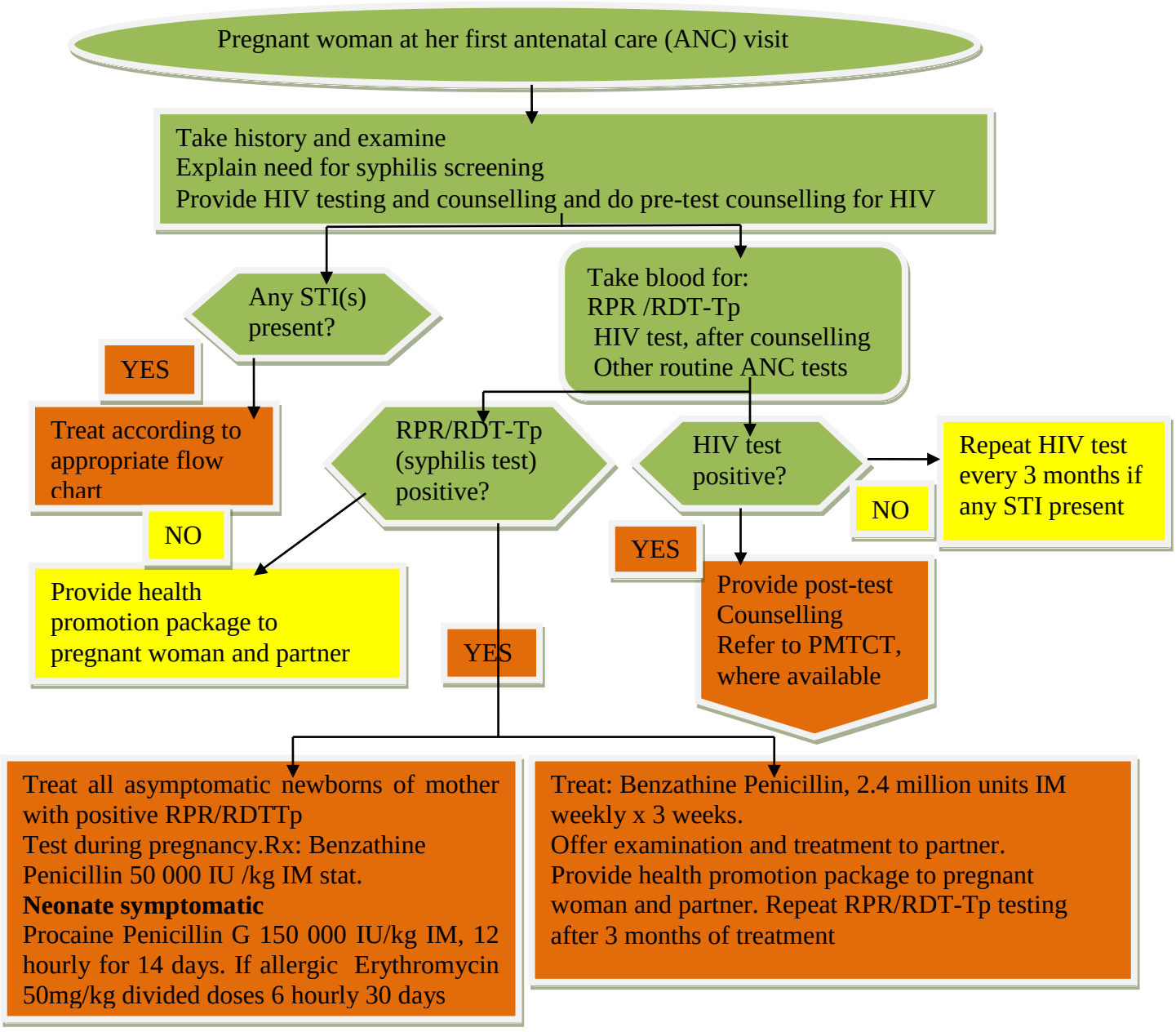
7.1.6 Syphilis in pregnancy

The clinical symptoms of syphilis are not altered by pregnancy. Since asymptomatic adult syphilis infection is common, all pregnant women should be screened for syphilis. This can reduce the complications of congenital syphilis. A rapid plasma reagent (RPR) test should be routinely done on pregnant mothers at first contact with the health care provider and treatment should be instituted if the RPR result is reactive and the partner should be treated as well. If RPR test is negative repeat after 3 months

7.1.6.1 Treatment regimens for Syphilis in pregnancy

Mother: Benzathine Penicillin, 2.4 million units IM weekly x 3 weeks Or Ceftriaxone, 1g IM OD for 8 to 10 days Erythromycin base/ stearate 500 mg orally QID for 14 days.
Neonate asymptomatic : Benzathine Penicillin 50 000 IU /kg IM stat
Neonate symptomatic
Procaine Penicillin G 150 000 IU/kg IM, 12 hourly for 14 days
If allergic Erythromycin 50mg/kg divided doses 6 hourly 30 days

7.1.6.2 Flowchart for syphilis screening of pregnant women



Health Promotion Package for All Pregnant Mothers: Educate, ensure compliance, and counsel; promote couple-counselling, if applicable: Explain the risk of vertical transmission of syphilis and HIV; and transmission of other STIs during vaginal delivery. Repeat STI screening including HIV and syphilis at 36 weeks and at delivery. Promote consistent condom use particularly during pregnancy, demonstrate condom use, and provide condoms. Stress the importance of partner treatment and issue one notification slip for each sexual partner, follow up partner treatment during review visits. Offer HIV counselling and testing to partner

7.2 Balanitis and balanoposthitis

Description

Balanitis refers to the inflammation of the penile glans, whereas balanoposthitis is inflammation of the glans, foreskin and/ or shaft. It is commonly caused by Candida albicans or mixed bacteria. The main complication of balanitis is phimosis, in which case the foreskin adheres to the inflamed and swollen glans penis and cannot be retracted.

Clinical features

- The common presentation is that of itch and swelling of the glans and foreskin. Sometimes pain may be reported.
- Patient may have a history of recent high-risk sexual practice, such as unprotected sex.
- A history of vaginal discharge in the partner may also be reported.

The physical examination may reveal signs of inflammation (such as red colour of skin, oedema, heat and tenderness).
The texture of the skin will also be altered, with white patches or streaks in typical cases of candidal infection. Presence of genital ulcerations and urethral discharge should be sought, and if present should be treated according to the appropriate syndromic algorithms.

Secondary bacterial infection may occur, causing superficial ulcers or erosions. Service providers should be aware that balanitis/balanoposthitis is commonly associated with diabetes mellitus and therefore should be ruled out by doing a urinalysis for glycosuria in chronic or recurrent cases.

7.2.1 Management

Partners should be examined for the presence of vaginal discharge. Routinely offer male circumcision to uncircumcised male patients as part of the health promotion package. In refractory cases, circumcision may be necessary to prevent recurrence. If the condition is so severe that the foreskin cannot be retracted (phimosis such cases should be referred to higher level for proper management.

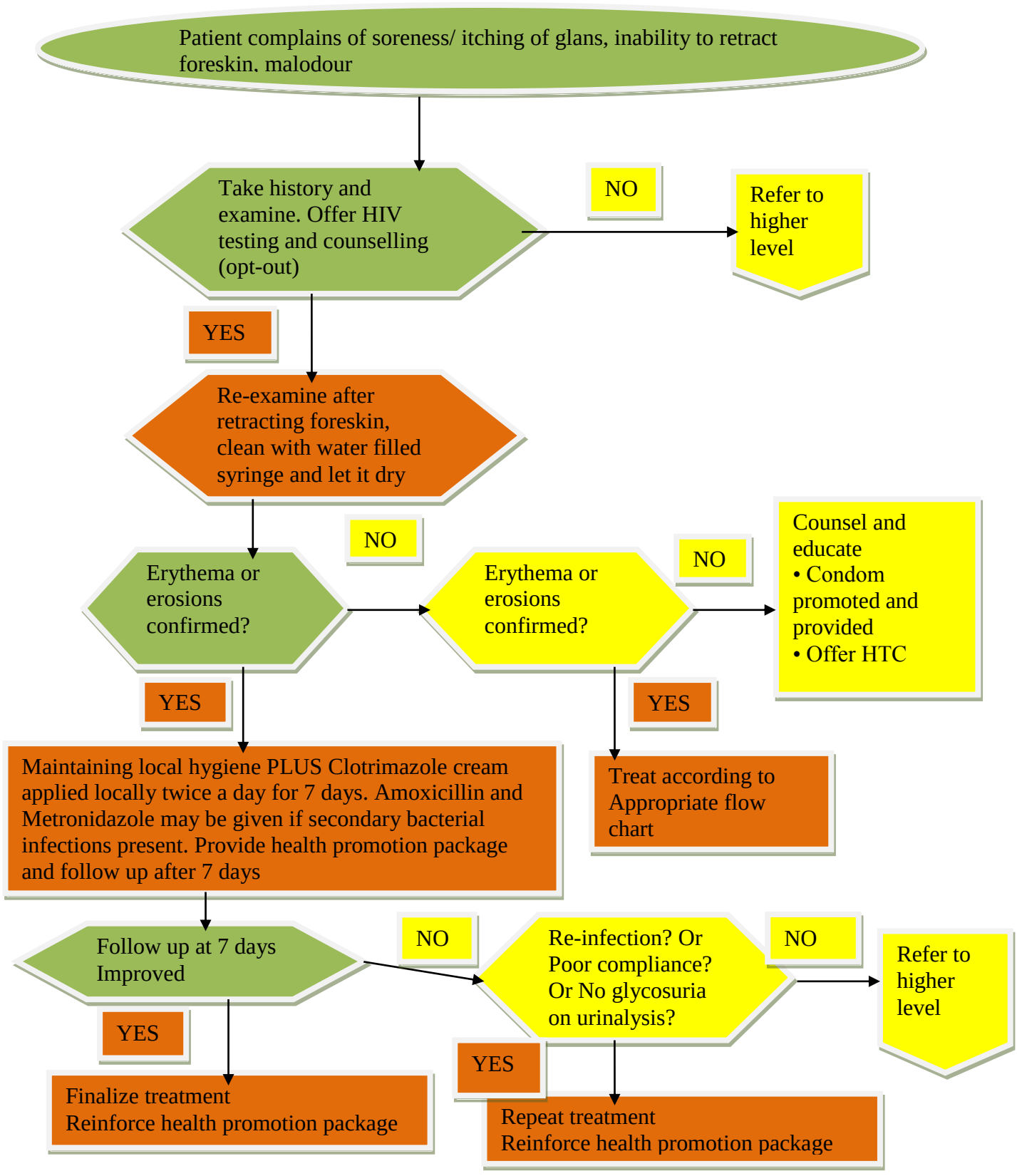
7.2.1.1Recommended treatment regimens

The treatment of balanitis or balanoposthitis consists of:

- Maintaining local hygiene by retracting the foreskin, if possible, when washing.
- Instruct patient to wash the affected area daily with weak saline solution (one teaspoon of salt dissolved in one litre of lukewarm water) and avoid soap while inflammation is present.
  PLUS
- Local application of an antifungal cream such as Clotrimazole cream applied locally twice a day for 7 days.
- Amoxicillin and Metronidazole may be given if secondary bacterial infections present.

Patients with recurrent or severe balanitis or balanoposthitis should be screened for the presence of diabetes mellitus, by doing a urinalysis for glycosuria. If the test is positive, the patient should be referred to the higher level for further management

7.2.1.2 Balanitis and balanoposthitis flow chart



7.3 GENITAL WARTS

Description
Genital warts may not cause symptoms and can regress naturally. Under normal circumstances syphilitic warts are flat or papillary in shape. Sometimes they may be large and extensive among patients who have concomitant infection with HIV. It is also important to exclude secondary syphilis as these lesions sometimes could mimic one another.

Etiology
Human Papilloma Virus (HPV type 6 and 11)

7.3.1 Recommended management of genital warts
- The primary goal for treatment of genital wart is to eliminate the symptoms caused by the visible warts.
- Eradication of the virus and elimination of infectivity is difficult to achieve.

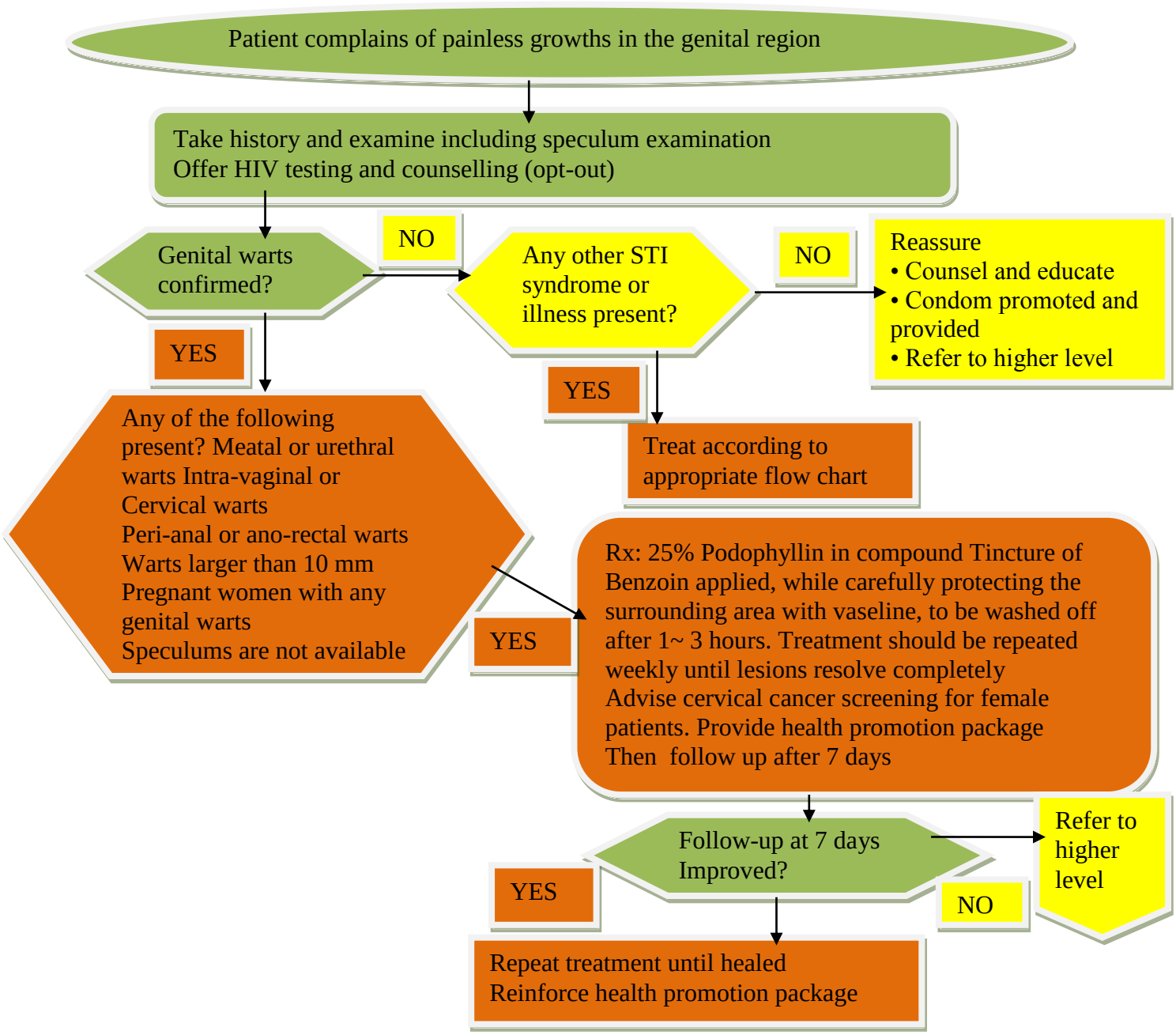
7.3.2 Treatment for gential warts
Chemical cauterization:
- 25% Podophyllin in compound Tincture of Benzoin applied to the warts while carefully protecting the surrounding area with vaseline, to be washed off after 1~ 3 hours.
- It is recommended that Podophyllin, 0.5 ml or less per session, be applied and/or 10 cm2 or less of warts per session be cauterised.

Treatment should be repeated weekly until lesions resolve completely.
- Podophyllin application should be done under medical supervision. Patient should be warned against self-medication.
  OR
- Podofilox (Podophyllotoxin) 0.5% solution or gel applied BID for 3 days, followed by 4 days of no treatment,
- with the cycle repeated up to 4 times. Not more than 0.5 ml of Podofilox should be applied per day.
  OR
- Trichloroacetic acid (TCA) 80 to 90% can be applied carefully to the warts, excess of TCA may be removed by

applying ordinary salt or sodium bicarbonate. TCA application should be done at weekly intervals for a maximum of 6 weeks.

NB: Cervical, meatal and urethral warts should be managed by experts

7.3.2.1 Flowchart for management of Genital warts



Health Promotion Package for All Patients: Educate, ensure compliance, and counsel
Promote abstinence during the course of treatment. Promote and demonstrate condom use, and provide condoms
Stress the importance of partner treatment and issue one notification slip for each sexual partner, follow up partner treatment during review visits. Offer HIV counselling and testing, for negative test results repeat test after 8 weeks. Offer male circumcision to uncircumcised man
Provide cervical cancer screening to female patients or partners

7.4 MOLLUSCUM CONTAGIOSUM

Description
Molluscum contagiosum is caused by a type of Pox virus. Transmission occurs most commonly through sexual or non-sexual contact, and is enhanced by friction or micro-trauma.

Clinical features
The typical eruption appears as a pearly white dome-shaped papule with central umblication from which caseous material can be expressed. These lesions mostly appear at the point of contact (such as the genital area). Individual lesions usually regress without treatment in 9-12 months. Generalized lesions, especially multiple lesions on face, may indicate immuno-suppression due to underlying HIV infection.

7.4.1Management
Treatment regimen
Excision curettage: Each lesion should be thoroughly opened with a fine sterile needle. The contents should be expressed and the inner wall touched with either Phenol/ Silver Nitrate/ 30% Trichloroacetic acid or Iodine solution.
OR
Apply Podophyllotoxin 0.5% to the individual lesion BID for 3days.
OR
Imiquimod 5% cream.
OR
Cryotherapy with liquid nitrogen.

7.4.1.1 Cases for referral
Patients with generalized lesions should be encouraged to undergo HIV testing and counselling, if their sero-status is unknown. These patients should be referred to the higher level for further management.

7.4.1.2Health Promotion Package for All Patients:
- Educate about personal hygiene, ensure compliance, and counsel
- Promote and demonstrate condom use, and provide condoms
- Stress the importance of partner treatment and issue one notification slip for each sexual partner, follow up partner treatment during review visits
- Provide HIV counseling and testing, for negative test results repeat test after 3 months
- Offer male circumcision to uncircumcised man/partner
- Provide cervical cancer screeningto female patient or partner

7.5 Management of survivors of sexual violence

Definition
Sexual violence is defined as “any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic women’s sexuality, using coercion, threats of harm or physical force, by any person regardless of relationship to the victim, in any setting, including but not limited to home and work”.

Clinical features

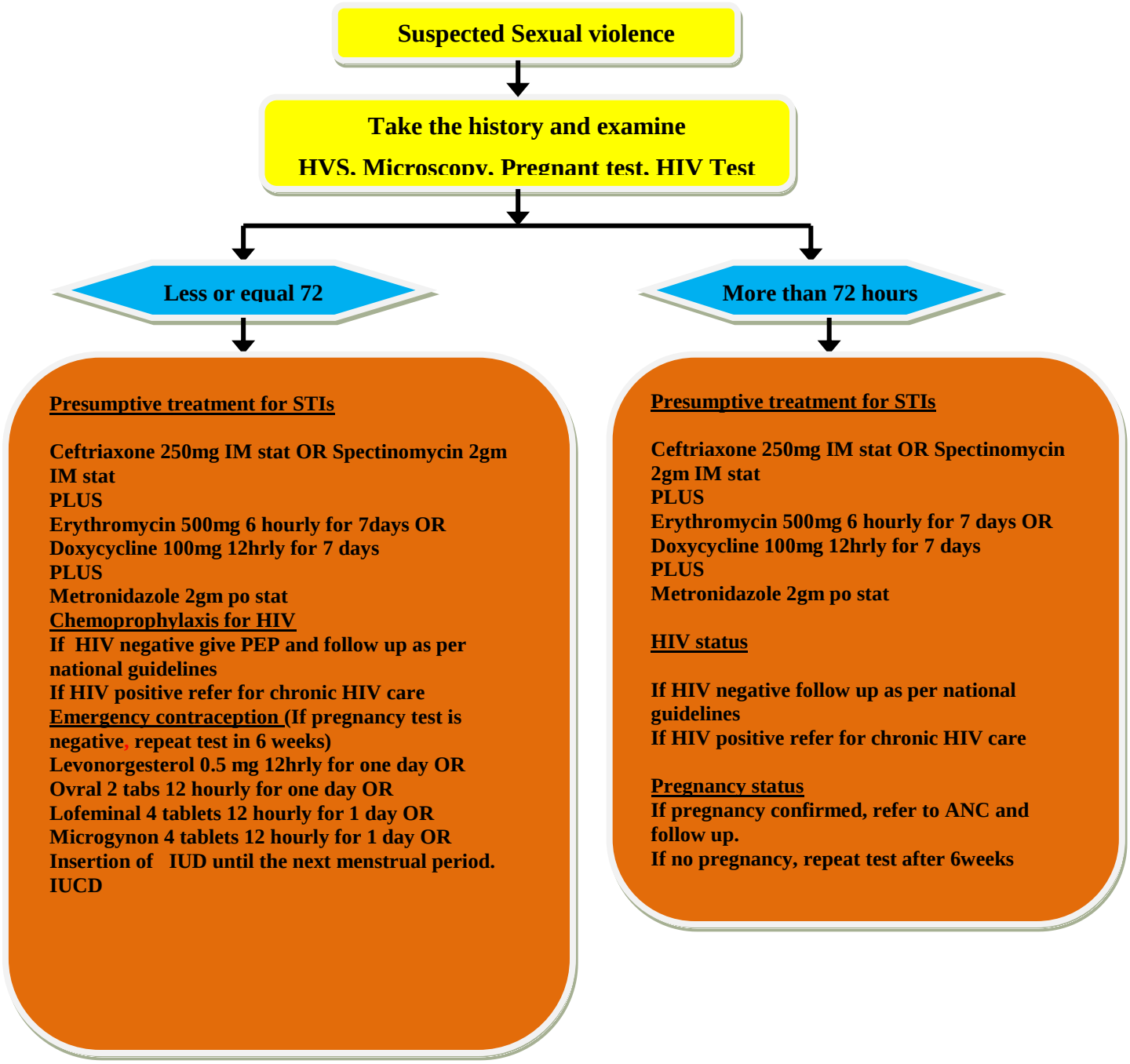
Survivors of sexual assault have experienced a traumatic event and should be rapidly evaluated to determine whether they need emergency medical, psychological or social intervention. It is important to remember that the trauma of the event may make parts of the examination difficult. Explain carefully the steps that will be taken and obtain written informed consent from the patient before proceeding with examination, treatment, notification or referral.

Key points
Sexual violence is common but is **frequently not talked about** by the person concerned—health care workers should maintain a high index of suspicion. They should ask about experience of sexual violence or abuse.
Women or children who have been sexually abused may need **shelter** and **legal protection.** Psychosocial management includes **counseling** and **supportive services**, which should be available on-site or by referral.
Medical management includes prevention of pregnancy and infection, in addition to care of injuries. **STI and HIV Post Exposure Prophylaxis** and **emergency contraception** should be available.
Forensic examination should be available to document evidence if the person chooses to take legal action. Staff should be trained in how to take forensic specimens, or referral links should be made.
Referral should be available if services cannot be provided on-site.

THE HVS PERFORMED AT PRESENTATION IS DONE FOR LEGAL/FORENSIC REASONS AND NOT PRIMARILY TO SCREEN FOR STIs AND GUIDE ANTIBIOTIC ADMINISTRATION.

PEOPLE WITH A "NORMAL" HVS SHOULD STILL BE OFFERED STI PROPHYLAXIS.

7.5.1 Flowchart for management of survivors of sexual violence



- Advise on legal protection issues
- Psychological support both at time of crisis and long term
- Always treat physical injuries including administration of Tetanus toxoid.

*** If pregnancy is proven to have resulted from the abuse theraputic termination of pregnancy has to be considered after consultation with the relevant authorities

7.6 Genital Scabies

Definition
Genital scabies is caused by the Scabies mite (Sarcoptes scabiei), and is transmitted by close contact with an infected case, either sexual or non-sexual.

Clinical features
The main complaint with genital scabies is itching especially at night-time. On physical examination, erythematous papules can be seen mainly on the flexure surfaces of the body, such as the axillae, elbow, and wrist, inter-digital spaces, around the umbilicus, inner thighs and back of the knee. Finding burrows tunneled by the female mites in the inter-digital spaces is diagnostic of scabies infection.

7.6.1 Management
Recommended treatment regimens in adults
Benzyl Benzoate (BB) 25% lotion, to be applied all over the body below the neck, after a bath, for two consecutive nights. Patient should bathe 24 hours after the second application, and have a change of clothing. Bed linen is to be washed properly and dried under sunlight. A second course of drug application may be given after 7~10 days, if required.

OR

Gamma Benzene Hex chloride (GBH) 1% lotion or cream applied as a very thin film all over the body below the neck at night without taking a bath, to be washed off thoroughly next day morning, after 8~10 hours. The application of the drug should be repeated after 7days, if required. Clothes should be washed properly and dried under sunlight.

OR

Permethrin 5% cream to be applied all over the body as a thin film and washed off after 8~10 hours. A second application is sometimes required.

OR

Sulphur 6% in petrolatum applied to the entire body from the back down for 3 nights after a bath. Patients may bath before re-applying the drug and should bath 24 hours after the final application.

OR

Crotamiton 10% cream to be applied to the entire body from the neck down at night for 2~5 nights and washed off thoroughly by taking a bath 24 hours after the last application.

Treatment in infants, children younger than 10 years, pregnant or lactating women
Gamma Benzene Hexachloride is contra-indicated in pregnant women, lactating mothers, infants and patients of scabies with secondary infection or with eczematisation, as it increases the risk of absorption, leading to systemic toxicity, resulting in seizures and aplastic anaemia. It should be applied with caution in the elderly. It should not be applied near the eyes.
The recommended regimen is:

- Crotamiton 10% cream/ sulphur 6% in petrolatum/ Permethrin 5%cream to be applied as above.
- Special instructions
- Sexual and close household contacts must be treated simultaneously, even those who are not complaining of any itching or do not have any skin lesions;

- Itching may persist for few weeks after adequate therapy. Oral antihistamine should be given for the relief of itching;
- A second course of local application is needed if there is no clinical improvement.

7.6 2 Cases for referral
If severe secondary infection, fever or swollen tender lymph nodes occur, refer to higher centre.

Health Promotion Package for All Patients:

1. Educate about personal hygiene, ensure compliance, and counsel
2. All clothing, including bed linen, used by the patient and his contacts should be washed properly and well dried in sun light.
3. Sexual and close household contacts must be treated simultaneously, even those who are not complaining of any itching or do not have any skin lesions.
4. Stress the importance of partner treatment and issue one notification slip for each sexual partner, follow up partner treatment during review visits
5. Provide HIV counseling and testing, for negative test results repeat test after 3 months
   - Offer male circumcision to uncircumcised man/partner
   - Provide cervical cancer screening to female patient or partner

7.7 Pediculosis pubis

Description:
Pediculosis pubis or pubic lice infestation is caused by the pubic louse (Phthirus pubis). It can be transmitted during sexual contact.

Clinical features:
The symptoms and clinical signs of the infection include severe itching around the pubic area, often resulting in scratching. The scratch markings on the skin may become secondarily infected with bacterial infections. Although the lice and nits remain mostly confined to pubic and peri-anal areas, they may spread to thighs, axillae, chest, eyelashes eyebrows and other areas. The diagnosis is established by clinical examination, as the parasite (adult or nits) is visible to the naked eye. The mature lice are brown or bluish grey in colour and approximately the size of pinheads.

7.7.1 Management Recommended treatment regimens in adults
Benzyl Benzoate (BB) 25% emulsion or lotion to be applied to all over the body below neck. Leave this on for 24hours, and then wash thoroughly.
OR
Permethrin, 1% lotion, to be rubbed thoroughly with fingers into the infested and adjacent hairy areas and washed off after 10 - 20 minutes.

7.7.2 Treatment in infants:
children younger than 10 years, pregnant or lactating women Gamma Benzene Hexachloride is contra-indicated in pregnant women, lactating mothers, infants and patients of pediculosis with secondary infection or with eczema, because it increases the risk of absorption, leading to

systemic toxicity, and resulting in seizures and aplastic anaemia. It should be applied with caution in the elderly. It should not be applied near the eyes.

7.7.3 The recommended regimen is:
Permethrin 1% cream to be applied, as above.
Treatment for Pediculosis of eyelashes or eyebrows
Apply occlusive ophthalmic ointment or Vaseline to the eyelid margins daily for 10 days to smother lice and nits.

7.7.4 Special instructions
Re-treatment is indicated after 7 days if lice are found or eggs are observed at the hair-skin junction;
Advise that the genital area should be shaved;
Clothing or bed linen that may have been contaminated by the patient within the past two days should be washed and thoroughly dried;
Sexual and close household contacts must be treated simultaneously, even those who are not complaining of any itching or do not have any sign of parasite.

7.7.5 Cases for referral
If severe secondary infection, fever or swollen tender lymph nodes occur, refer to higher centre.

Health Promotion Package for All Patients:

1. Educate about personal hygiene, ensure compliance, and counsel
2. All clothing, including bed linen, used by the patient and his contacts should be washed properly and well dried in sun light.
3. Sexual and close household contacts must be treated simultaneously, even those who are not complaining of any itching or do not have any skin lesions.
4. Stress the importance of partner treatment and issue one notification slip for each sexual partner, follow up partner treatment during review visits
5. Provide HIV counseling and testing, for negative test results repeat test after 3 months
   - Offer male circumcision to uncircumcised man/partner
   - Provide cervical cancer screening to female patient or partner

7.8 Human papilloma virus infection

Definition
Cervical cancer is one of the leading causes of cancer death in developing countries worldwide. The primary underlying cause is infection with one of more high-risk types of the human papilloma (HPV) virus, a sexually transmitted virus. HPV type 16 and 18 has been associated with 70% of all cervical cancers reported. The virus has also been implicated in other genital cancers: the attribute risk for 40% of penile cancer, 42% of anal cancer in men and 46% of vulvae and vaginal cancer is HPV type 16 and 18 infection. Low-risk HPV types 6 and 11 are rarely associated with cancer, but commonly cause ano-genital warts.

Clinical features
The key determinants of HPV infection for both men and women are sexual behaviors, including

young age at sexual debut, high number of sexual partner(s), and having a partner who has multiple partners.
Smoking is a potential risk factor for cervical cancer. Most HPV infections (low- or high-risk) resolve spontaneously. However, high-risk HPV infections that persist may lead to the development of precancerous and invasive cancer.
It usually takes 10-20 years for precursor lesions caused by HPV to develop into invasive cancers.

7.8.1 Preventive measures

Effective prevention interventions against ano-genital cancer include screening for and treatment of pre-cancer and invasive cancer.

All women and men presenting at health facilities should be offered a complete ano-genital examination to determine whether they have this HPV-related cancer.
It is recommended that all sexually active women should have regular cervical cancer screening in accordance with the national guidelines.
In patients with genital warts, cervical cancer screening should be done as a priority.
Male circumcision should be offered to all uncircumcised male patients and partners. Smoking cessation interventions should be implemented at the individual and community levels.
Highly effective vaccines against high-risk types of HPV have recently become available.

7.9 Hepatitis B virus infection

Definition

Hepatitis B is an infectious disease caused by the hepatitis B virus (HBV) which affects the liver. Transmission of hepatitis B virus results from exposure to infectious blood or body fluids. It is 50 to 100 times more infectious than HIV and can cause both acute and chronic infections. Hepatitis B virus infection can be transmitted through sexual intercourse. Other modes of transmission include vertical infection from mother to child during birth, blood transfusion with infected blood or blood products and through piercing of skin by contaminated needles or sharp instruments.

Clinical features

Many people have no symptoms during the initial infection. Some develop a rapid onset of sickness with vomiting, yellowish skin, feeling tired, dark urine and abdominal pain. Often these symptoms last a few weeks and rarely does the initial infection result in death.

Acute infection with hepatitis B virus is associated with acute viral hepatitis – an illness that begins with general ill-health, loss of appetite, nausea, vomiting, body aches, mild fever, and dark urine, and then progresses to development of jaundice. The illness lasts for a few weeks and then gradually improves in most affected people. A few people may have more severe liver disease (fulminant hepatic failure), and may die as a result. The infection may be entirely asymptomatic and may go unrecognized

Chronic infection with hepatitis B virus following primary hepatitis B infection in adults is usually sub-clinical and self-limiting. However, about 6-10% of infected patients may become chronic carriers, and about 25% of them may develop chronic active hepatitis. In about 15-30% of chronic hepatitis cases, cirrhosis of the liver may develop, which may involve a risk of developing hepato-cellular carcinoma.

7.9.1 Preventive measures

- Hepatitis B vaccination for all children should be included as part of the national immunization schedules;
- Testing to verify effective immunization is recommended and further doses of vaccine are given to those who are not sufficiently immunized
- All service providers should be immunized to prevent occupational transmission of Hepatitis B infection;
- Sexual partners of the infected person should be screened with an HBsAg test and should be given Hepatitis B vaccine if they are not immune;
- Vaccination should also be considered for people at high risk of Sexually Transmitted Infections including men who have sex with men, intravenous drug users, sex workers and people who have been newly diagnosed with HIV.

7.9.2 Treatment

Acute hepatitis B infection does not usually require treatment and most adults clear the infection spontaneously. Early antiviral treatment may be required in fewer than 1% of people, whose infection takes a very aggressive course (fulminant hepatitis) or who are immuno-compromised. On the other hand, treatment of chronic infection may be necessary to reduce the risk of cirrhosis and liver cancer.

The World Health Organization recommended a combination of tenofovir (TDF) and entecavir as first line agents. Those with current cirrhosis are in most need of treatment. The use of interferon, which requires injections daily or thrice weekly, has been supplanted by long-acting PEGylated interferon, which is injected only once weekly.

8.0 STIs in men who have sex with men

STIs in men who have sex with men (MSM) are no different from STIs in the rest of the population, but the types of sexual practices determine the site where STIs occur. STIs in MSM can be transmitted by penile-anal contact, oro-anal contact, or fingering. Ano-genital symptoms can result due to penile-anal contact. Symptoms due to peri-anal ulcers (for example, herpes, chancroid and syphilis) and warts can cause pain, tenesmus, bleeding, and discharge. Oro-anal intercourse can lead to the transmission of a wide variety of other organisms normally transmitted by the feaco-oral route.

These include hepatitis A virus, shigella, salmonella, and giardia, resulting in gastro-intestinal symptoms. Anal intraepithelial neoplasia and invasive carcinoma may follow infection with high-risk subtypes of human papilloma virus. Oral and peri-oral symptoms can result because of oro-genital sexual activity. Oral STIs usually are asymptomatic. Neisseria gonorrhoea and Chlamydia infect the pharyngeal mucosa readily, but rarely cause pharyngeal infections. Syphilis, chancroid and herpes may cause ulcers on the tongue, oral mucosa, palate or lips. Warts may develop in and around the mouth.

8.1 Management of STIs in men who have sex with men

In general, the clinical management of STIs in MSM is the same as outlined elsewhere in this document earlier. The service provider should conduct rectal and oro-pharyngeal examinations when providing care to MSM. Additional infections common in MSM that are not covered in the flow charts include oral or pharyngeal and ano-rectal STIs, and are described below. Service providers should be aware that oral and anal STIs can also occur in female patients practicing oral or anal sex. Therefore, as a standard of care every patient (irrespective of sex or gender) should be examined thoroughly to exclude STIs in these sites.

8.1.1 Management of sexually transmitted pharyngitis

Clinically, it is difficult to diagnose gonococcal or chlamydial pharyngitis reliably. Additionally, service providers should be aware that pharyngeal gonorrhoea can be more difficult to clear than urethral infections. Other oro-pharyngeal STIs (such as herpes and warts) can often be detected by physical examination and can be managed according to the treatment guidelines. It is recommended that whenever a MSM patient is suffering from significant pharyngitis, and a history of unprotected oral sex makes pharyngeal gonococcal or chlamydial infection a likely risk, the patient should be treated syndromically

8.1.2 Treatment for sexually-transmitted Pharyngitis

Cefixime, 400 mg orally stat (to treat gonococcal infection)
PLUS
Azithromycin, 1 g orally stat (to treat chlamydial infection)

8.1.3 Management of sexually transmitted ano-rectal infections or proctitis

Proctitis is an inflammation of the rectal wall and is the most common reaction to an ano-rectal STI (due to gonorrhoea, syphilis, chlamydia or herpes). Anyone whose immune system is impaired is at increased risk of developing proctitis, particularly from infections caused by the herpes simplex virus or cytomegalovirus, or from reactivation of an earlier infection.

Proctitis may be caused by Salmonella spp, Shigella spp, or Entamoeba histolytica as a part of gastroenteritis, which may manifest as diarrhoea with fever, anorexia, and abdominal cramps. Antibiotics that destroy normal intestinal bacteria and allow other bacteria to grow in their place may also cause proctitis. Herpes proctitis may be mistaken for the rectal manifestation of ulcerative colitis or Crohn's disease.

Proctitis typically causes painless bleeding or the passage of mucus (sometimes mistaken for diarrhoea) from the rectum. There may also be ineffectual straining to defecate ("tenesmus"), sometimes mistakenly described as "constipation" by patients. The anus and rectum may be intensely painful, with external and internal ulceration, when the cause is gonorrhoea, herpes, or cytomegalovirus infection. A proctoscopic examination (which should be done, if feasible) will reveal rectal pus, bleeding or ulceration.

All cases of proctitis in MSM should be treated for gonorrhoea and chlamydia infections. Symptoms of diarrhoea, bloody stools, abdominal cramping, nausea, and/or bloating may indicate giardia infection or amoebic dysentery. Most bacterial diarrheal diseases resolve spontaneously with oral rehydration and anti-diarrheal medication. Ano-rectal infections are a potent co-factor for HIV transmission. The service provider should counsel the patient on consistent and correct use of condoms during anal or oral sex to prevent STIs and HIV infections.

8.1.4 Treatment for sexually transmitted proctitis

Cefixime, 400 mg orally stat (to treat gonococcal infection)
PLUS
Azithromycin, 1 g orally stat (to treat chlamydial infection)

If symptoms of diarrhoea, bloody stools, abdominal cramping, nausea, and/or bloating are present: Add treatment for diarrhoea according to local epidemiology, including oral rehydration.

9.0 STIs in mobile populations

SADC governments are concerned that the movement of people between Member States is a major factor in the spread of HIV and other STIs. (34) Today there is increasing recognition that mobile populations (including truck drivers or transport workers, migrant workers, domestic workers, farm workers, military personnel and refugees) are more vulnerable to STIs and HIV than non-migrating populations. They may have little or no access to health information, health services and means of STI or HIV prevention (such as condoms) or treatment of STIs. They may also be at higher risk due to additional factors such as discrimination, exploitation, harassment, and scant legal or social protection in the host community.

9.1 Management

STI clinical management in mobile populations is the same as outlined in the previous sections. Since the chances of loss to follow-up are stronger, single dose treatment administration under health worker supervision should be considered to ensure treatment compliance. Low-cost pre-packaged STI treatment kits (containing antibiotics for men with urethritis due to gonococcal, chlamydial and trichomonas infection, condoms and information on HIV and STI prevention) could be distributed. Other non-drug measures should also be implemented, such as:

- Development of work place programmes that cover STI treatment, peer education, condom distribution, dissemination of information, education and communication materials, HIV and AIDS awareness programmes and voluntary HIV counselling and testing;
- Incorporating HIV AND AIDS and STI topics into the general occupational health/safety training of workers;
- Ensuring condoms are available at every stage along migrants 'journeys (at places of origin, transit, destination and return);
- For transport workers or truck drivers, setting up "stop-over clinics" along major transport routes/highways and borders so that they can access STI treatment; and
- Encouraging policies that allow migrants to access free medical treatment at host countries primary healthcare facilities.

10.0 STIs in prisoners and detainees

Addressing STIs as new detainees arrive can mitigate the possibility of transmission of STIs within detention and prison facilities.
In general, it is recommended that all new prisoners or detainees should have a thorough health assessment upon intake, and that identified STIs should be treated immediately.

Additionally, the new detainees should be offered HIV counseling and testing;
Condoms should be available in prisons and should be distributed\ among detainees to prevent infections. STI management and treatment in prisoners or detainees is the same as outlined in the previous sections.

10.1 Preventing STIs in victims of sexual abuse

Preventing STIs in victims of sexual abuse requires a detailed history of abuse or assault and complete examination of the victim and (if possible) the alleged offender. There is a high risk of STIs in victims of sexual abuse when:

The alleged offender is known to have an STI or to be at high risk for STIs; and/or Symptoms and signs of an STI are detected in history and physical examination.The scheduling of examinations should be based on the history of assault or abuse. The following recommendation for scheduling examinations should serve as a general guide (35): the incident is recent, a follow-up visit (approximately one week after the last sexual exposure) is needed to repeat the physical examination and to collect additional specimens, in order to allow sufficient time for infections to incubate.

Similarly, to allow sufficient time for antibodies to develop, an additional follow-up visit at approximately 12 weeks after the last sexual exposure is also necessary to collect blood for RPR or RDT-Tp test and HIV testing (after pre-test counselling with consent).
A single examination may be sufficient if the person has been abused over an extended period of time, and/or the last alleged episode of abuse has occurred
sometime before the patient presents for medical evaluation. STI prophylaxis or presumptive treatment for person who has been sexually assaulted or abused is described in the table below:

10.1.1 Presumptive treatment for Sexually Transmitted Infections in sexual abuse victims

- Cefixime, 400 mg orally stat
  PLUS
- Azithromycin, 1 g orally stat
  PLUS
- Metronidazole, 2 g orally stat

Include other measures:
Tests for syphilis (RPR/RDT-Tp/VDRL) and HIV test;
In female cases provide pregnancy test and emergency contraception, such as 4pills containing combination of levonorgestrel (a progesterone-like hormone) and ethinylestradiol (an estrogen). The first two pills should be taken as soon as possible (not more than 72 hours) after the unprotected intercourse. Two further pills should be taken 12 hours, but not more than 16 hours, after the first 2;
Post-exposure prophylaxis for HIV infection according to national guidelines;
Provide Hepatitis B vaccine, if not already immune.

11.0 STIs in children and adolescents

STIs in neonates and very young children (0 to 10 years) several common STIs can be transmitted from mother to baby before or during birth, and can pose a significant health threat to the newborn (neonate). For this reason, it is especially important to detect and appropriately manage STIs in pregnant mothers as early as possible. The clinical signs of STIs in neonates vary depending on the etiologic agent and severity of maternal infection, and can range from very mild to very severe. Some of the most common neonatal STIs are discussed below.
Management of STIs in neonates and very young children (0 to 10 years)

11.1 Congenital syphilis

Congenital syphilis may occur if the pregnant mother has syphilis. However, the risk is minimal if she has been given penicillin during pregnancy.

- All infants of RPR/RDT-Tp/VDRL-positive mothers should be examined at birth and at monthly intervals for 3 months until it is confirmed that serological tests are, and remain, negative. Any antibody carried over from mother to baby usually disappears within 3 months of birth.
- It is recommended that all infants born to RPR/RDT-Tp/VDRL- should be treated with a single IM dose of Benzathine Penicillin, 50, 000 IU/kg, whether or not the mothers were treated during pregnancy (with or without penicillin).
- Hospitalization is recommended for all symptomatic babies born to mothers who were RPR/RDT-Tp/VDRL-positive.
-

Congenital syphilis is divided into early (first 2 years of life) and late (becomes apparent later in life).

Symptoms and signs of early congenital syphilis More commonly, a child aged 2 to 12 weeks is brought in with a history of failure to thrive and having a generalised bullous or papulosquamous rash. The rash may cover the entire body but usually affects the buttocks, thighs, face, palms and soles. Occasionally, flat grey condylomata lata lesions may be seen in body folds. There may be generalised lymphadenopathy, enlargement of liver and spleen and anaemia. Since the infection is systemic, any organ of the body may be affected.

Diagnosis of latent (early or late) congenital syphilis the diagnosis of latent (early or late) congenital syphilis is usually made during routine testing of an asymptomatic child whose mother has a positive syphilis blood test. Such cases should be referred to a higher level for thorough examination, including cerebrospinal fluid examination to rule out latent neurosyphilis.

11.2 Management

Recommended regimens for early congenital syphilis (up to 2 years of age) Symptomatic infants and asymptomatic infants (up to two years of age) should be treated for early congenital syphilis:

- Aqueous Penicillin, 100,000~150,000 IU/kg/day IV in 2 divided doses daily for 10 days administered as 50,000 IU/kg/dose IV every 12 hours, during the first 7 days of life and every 8 hours thereafter for a total of 10 days. OR
- Procaine Penicillin, 50,000 IU/kg IM in a single daily dose for 10 days.

Antimicrobials other than penicillin (such as Erythromycin) are not recommended for congenital syphilis, except in cases of allergy to penicillin. Tetracyclines should not be used in young children.

Recommended regimens for late congenital syphilis (more than 2 years duration)

- Aqueous Penicillin 200, 00 to 300,000 IU/kg/day IV or IM in divide doses (50,000IU/kg/dose every 4-6 hours) for 10-14 days.

For penicillin hypersensitive patients (after the first month of life):

- Erythromycin base / stearate, 7.5-12.5 mg/kg/day orally QID for 30 days.

11.3 Neonatal Herpes

Neonatal herpes Neonatal herpes may occur after birth in a neonate whose mother had active herpes lesions in her genitalia during labour. Signs and symptoms may include severe mucosal or skin rash, aseptic meningitis, encephalitis and it is frequently fatal. Suspected neonatal herpes case should be referred immediately to the higher level. Caesarean section for a pregnant mother having genital herpes lesions during the third trimester of pregnancy or at the time labour should be advised as a preventive measure.

11.4 Neonatal conjuctivitis

Neonatal conjunctivitis syndrome or Ophthalmia neonatorum Neonatal conjunctivitis syndrome or Ophthalmia neonatorum is one of the most common features of both N. gonorrhoeae and C. trachomatis neonatal infections.

- Routine application of tetracycline(1%) eye ointment to the eyes of all new-borns at the time of delivery is recommended as a preventive measure.

11.5 Management of STIs in very young children (beyond neonatal period and up to 10 years of age)

The identification of a sexually transmissible agent in a child beyond the neonatal period, in the vast majority of cases, is suggestive of sexual abuse. However, exceptions do exist: for example, rectal or genital infection with C. trachomatis in very young children may be caused by peri-natally acquired infection, which may persist for up to 3 years. In addition, bacterial vaginosis and genital warts have been identified in both abused and non-abused children.

- When the only evidence of abuse is the isolation of an organism or the detection of antibodies to a sexually transmissible agent, findings should be carefully confirmed and considered.
- Service providers who suspect abuse must consider referral to specialized counselling, psychological and social support services for the complete management of these patients.

- STI prophylaxis or presumptive treatment for gonorrhea and chlamydia in a sexually abused child is not recommended, since very young girls appear to be at lower risk of ascending infection than adolescents or adult women. However, in light of increased risk for HIV transmission, these children should be referred to the higher level for child-centred psychological counselling, as well as for further clinical management.
- STIs in pre-adolescents and adolescents (children 10 years and older) There are differences in the epidemiology of STIs in adolescents and adults, because adolescents are regarded as being more biologically susceptible to infection and at increased risk of morbidity. However, in the majority of cases, the presentation of STIs is similar to that seen in adults. The most important differences are as follows:
- At the time of puberty and adolescence, the female genital tract undergoes changes in response to increasing levels of ovarian hormones.
  Along with anatomical and physiological changes, the vaginal epithelium begins to secrete mucus. The mucus secretion causes the adolescent girl to develop a white vaginal discharge, which is physiological. Generally, therefore, vaginal discharge is a poor predictor of the presence of either gonococcal or chlamydial infection.
- In pre-pubescent girls, the columnar epithelium of the endo-cervical canal extends to the vaginal portion of the cervix. This cervical ectropion, which is normally present in 60–80% of sexually active adolescents, is associated with an increased risk of C. trachomatis infection and N. gonorrhoea. Exposure to oncogenic high- risk types of human papilloma virus enhances the risk of dysplasia and carcinoma at an early age.
- Additionally, because cervical mucus production and humoral immunity are absent until ovulation begins, the risk of PID or cervical infections is higher in the sexually active adolescent exposed to infection as opposed to the adult woman.

11.6 Management of STIs in pre-adolescents and adolescents (children 10 years and older)

The management of STIs in pre-adolescents and adolescents is similar to that of adults. The paediatric doses of drugs are provided in Table 1.

Lower abdominal pain or pelvic inflammatory disease in pre-adolescents and adolescents approximately 85% of gonococcal infection in females will be asymptomatic. However, there may be vulval itching, minor discharge, urethritis or proctitis. In pre-pubescent girls, a purulent vulvo-vaginitis may occur. Similarly, C. trachomatis infection is asymptomatic in the majority of cases. Symptoms that may occur are inter-menstrual bleeding, post-coital bleeding and an increase in vaginal secretions.

Vaginal discharge syndrome in pre-adolescents and adolescents C. albicans is uncommon in adolescents prior to puberty. If present, the adolescent may have a discharge, vulval itching, dyspareunia (painful intercourse), a peri-anal soreness or a fissuring at the introitus. Attacks of candida vulvitis may be cyclical in nature and correspond to menstruation.BV does not produce a vulvitis, and the adolescent will not complain of itching or soreness.

Genital ulcer syndrome in pre-adolescents and adolescents Presentation of GUS is the same in adolescents and adults. The stages of syphilis and serological responses are the same as in adults.

Genital warts in pre-adolescents and adolescents Warts present as condylomatous, papular or flat lesions, much the same as in adults. In most children, warts disappear spontaneously over months to three (3) years.

Other considerations in pre-adolescents and adolescents Adolescents often lack information about existing services, such as where they are, what times they operate, how much they cost, etc. Even if they know about these services they are often reluctant to seek help for diagnosis and treatment. They are often embarrassed and worried about social stigmatization. They also fear negative reactions from service providers and are concerned about a lack of confidentiality. Initiatives to make health services more adolescent-friendly and more responsive to their particular need should be considered;

Service providers dealing with children and adolescents must show respect and maintain confidentiality.

11.6.1 Table 1: Paediatric dosage for the common STI drugs

Primary indication	**First -line STI drugs**	**Alternative STI drugs**
Genital herpes (HSV-2	Initial episode: For 2 years and above: Acyclovir 200 mg 5-hourly for 7 days For under 2 years: Acyclovir 100 mg 5-hourly for 7 days Recurrent episode: For 2 years and above: Acyclovir 200 mg 5-hourly for 5 days For under 2 years: Acyclovir 100 mg 5-hourly for 5 days	

	Suppressive therapy: For 2 years and above: Acyclovir 200 mg orally BID (max. 1 year) For under 2 years: Acyclovir 100 mg orally BID (max. 1 year)	
GUS (chancroid)	Less than 45 kg: Azithromycin 20mg/kg (max. 1 g), orally stat More than 45 kg: Azithromycin 1 g, orally stat	Ceftriaxone 20-50 mg/kg IM stat
GUS (syphilis)	Benzathine Penicillin 600,000 -1.2 MU (50,000 units per kg) intramuscular injection stat	Erythromycin 50 mg/kg, QID in divided doses for 14 days Procaine Penicillin, 50,000 IU/ kg IM OD for 14 days
UDS, cervicitis (gonorrhoea)	Less than 45 kg: Ceftriaxone 125 mg, IM stat More than 45 kg: Ceftriaxone 250 mg, IM stat	
UDS, cervicitis (chlamydia)	Less than 45 kg: Azithromycin 20mg/kg (max. 1 g), orally stat More than 45 kg: Azithromycin 1 g, orally stat	Less than 45 kg: Ceftriaxone 125 mg, IM stat More than 45 kg: Ceftriaxone 250 mg, IM stat
Vaginal candidiasis	Fluconazole 150 mg orally stat	Clotrimazole 500 mg vaginal pessary stat
Bacterial vaginosis, trichomoniasis	Less than 45 kg: Metronidazole 15 mg/kg orally TDS for 7 days More than 45 kg: Metronidazole 2 g, orally stat	Tinidazole 50-75 mg orally stat
Genital warts	Trichloroacetic acid 50 to 70%	Cryotherapy
Scabies	Permethrin 5% cream	Benzyl Benzoate 25% lotion (12.5% in young children
Pubic lice	Permethrin 1% cream	Benzyl Benzoate 25% lotion (12.5% in young children)

11.7 STIs in people living with HIV

A strong relationship exists between STIs and HIV infection (36):

- STIs and HIV infection are associated with the same risk behaviors: unprotected sexual intercourse with multiple partners. Therefore, the same measures that prevent STIs also prevent sexual transmission of HIV infection;
- The presence of STIs has been found to facilitate the acquisition and transmission of HIV infection. Diseases that cause genital ulcers (such as syphilis, chancroid and genital herpes) can increase the risk of HIV transmission by up to 10-fold, and diseases causing discharge (especially gonorrhoea, chlamydial infection and trichomoniasis) can increase that risk by up to four-fold. Thus, early diagnosis and effective treatment of STIs can contribute significantly towards the reduction in HIV transmission; and
- There is mounting evidence that some STI pathogens are more virulent in the presence of HIV related immune-deficiency. This might have consequences for treatment

recommendations for STIs, although more studies need to be carried out before changes can be proposed.

11.7.1 Management of STIs in people living with HIV

The following is recommended in suspected or confirmed HIV and STI co-infection in patients:

- HIV counseling and testing should be offered routinely for all STIs patients. HIV testing may be considered as a priority in patients with severe or treatment-failure cases of STIs, and should be done only after obtaining their consent, with proper pre-and post-test counselling and whilst ensuring confidentiality.
- The treatment regimens for various STIs are the same in STI-HIV co-infected cases, as well as for non HIV/STI cases.
- In some cases of STIs in the presence of HIV infection, larger doses and longer treatment duration of the drugs listed under the various STI syndromes and conditions may be required. Those patients should be followed up regularly for longer duration.
- Excessive use of anti-microbials should be avoided, since this is likely to lead to more rapid development of antibiotic resistance. Therefore, clinical judgment on proper and early referral is required.
- Although counseling of individual patients on risk reduction and prevention of transmission to partners should be done with all STIs patients, this is of vital importance for those infected with HIV.

11.7.2 Genital ulcer syndrome

Genital ulcer syndrome and HIV infection Patients with GUS should be encouraged to be tested for HIV infection because of the frequent association of the two diseases, and the implications for clinical assessment and management.

- Treatment for GUS in HIV infected patients is the same as for non-HIV patients. However, careful follow-up is necessary to ensure adequacy of treatment. These patients are more likely to experience extensive and more severe forms of ulcerations, treatment failure and ulcers heal more slowly. Increased dose and a more prolonged duration of therapy might be necessary.
- Patients should followed up weekly until there is complete clearance of lesions.
- Patients should be counseled that GUS facilitates the transmission of HIV.
- Because data are limited concerning the therapeutic efficacy of Ceftriaxone and Azithromycin in chancroid, some specialists suggest using Erythromycin 500 mg orally QID for 7 day regimen for treating chancroid ulcers in HIV-infected persons;
- In HIV patients with Donovanosis, Gentamicin, 1mg/kg intravenous (IV) TDS should be added if improvement is not evident within the first few days of therapy.

11.7.3 Herpes and HIV infection

Herpes and HIV infection Persistent and/or severe muco-cutaneous ulcerations involving large areas of peri-anal, scrotal or penile skin is indicative of HIV co-infection.

- Doses and duration of treatment with acyclovir should be increased;
- The recommended regimen is Acyclovir, 400mg orally 3–5 times daily until complete clinical healing of lesions.

11.7.4 Urethral discharge syndrome and HIV infection

Urethral discharge syndrome and HIV infection gonococcal, chlamydial and other non-gonococcal urethritis may facilitate HIV transmission, and patients should be made aware of this fact during counselling. Treatment is same as in a non-HIV patient.

11.7.5 Candidiasis and HIV infection

Candidiasis and HIV infection Candidiasis affecting multiple sites, including oral cavity, vulva and vagina, glans, and prepuce often occurs in HIV disease. Relapses of candidiasis are frequent. Prolonged treatment and suppressive therapy with imidazoles is often required.
Fluconazole, 150 mg orally as a single dose weekly for 6 months OR
Clotrimazole, 500mg intra-vaginally weekly for 6 months.

11.7. 6 Genital warts and HIV infection

Genital warts and HIV infection there is high prevalence of genital warts in persons with HIV. The warts may be multifocal, extensive and poorly responsive to treatment, and there is a greater likelihood of malignant transformation.

12.0 BEHAVIOUR CHANGE COMMUNICATION FOR STIs MANAGEMENT

Behaviour change communication programmes that address STIs are designed to promote behaviours that prevent STI transmission in the community. It involves STI education for the individual patient/client, as well as for the entire community. The overall goal of most behaviour change communication programmes for STI prevention is to promote behaviours that prevent the spread of STIs in the community. These include:

- Prompt care seeking for STI symptoms at appropriate health facilities;
- Following treatment recommendations as prescribed by the service provider;
- Communicating with partners about the need to be treated;
- Practicing safer sex including consistent use of male and female condoms;
- Delaying sexual activity among adolescents; and
- Reducing the number of sexual partners.

12.1 Behavior change messages

Behavior change messages are similar to those for HIV, but should emphasize information about the complications and treatment of STIs. Upgrading service providers' knowledge and communication skills is usually a prerequisite to successful BCC interventions.
In order for the behavior change communication to be effective, there should be emphasis on:

- Increased knowledge: Behavior change communication should ensure that people have the basic facts about STIs in a language, visual medium or other media that they can understand and relate to. Effectiveness will motivate the target group to change their behaviors in positive ways.
- Promotion of services for prevention and treatment: Health-seeking behavior should be a priority in all behavior change communication activities so that the individuals go for preventive health checkups, early treatment and regular follow-ups. The health facility should collaborate with private practitioners, informal health sector such as traditional health practitioners, as they may be the preferred health providers for many STI patients, by establishing referral linkages or providing necessary trainings to them to ensure quality patient management.

- Stimulation of community dialogue: Facility staff should collaborate with groupings such as NGOs, CBOs, faith-based organizations and workplaces in the catchment area to enhance the promotion of healthy sexual behavior, early health-seeking behavior and improve outcome of partner notification and tracing. There should be encouragement of group and focused group discussions about the underlying factors, such as risk behaviors, risk settings and the environments that increase risk for STIs. Community dialogue will create a demand for information and services.
- Promotion of advocacy: Through advocacy, behavior change communication can ensure that policy makers and opinion leaders understand the necessity for STI interventions and approach them seriously. Advocacy should take place at all levels, from the primary to the tertiary level.

12.2 Stake holder duties

The health facility should sensitize and receive support on STIs and HIV AND AIDS issues from community health committees, civil society organizations, schools, workplaces and political leaders in the catchment area. Managers of cross-border province or district health facilities should promote communication and sharing of surveillance information and management protocols for strengthening inter-country collaboration.

- Reduction of stigma and discrimination: Communication on STIs should address stigma and discrimination, and attempt to influence social responses from local government and policy makers.
- Facility staff should collaborate with social welfare departments (for example, to gain social assistance) and with other health- related public sectors, as appropriate.

13.0 QUALITY ASSURANCE:

Definition:
Quality assurance is a formal methodology designed to assess the quality of products or services that are provided. It includes formal review of care to identify problems in implementation, take corrective actions to remedy any deficiencies identified, and evaluate actions taken to rectify them. STI clinical quality assurance is a way of monitoring and evaluating the quality of STI services that are provided at health facilities to ensure that the services are in accordance with established guidelines, policies, norms and standards. It is a critical responsibility of administrators and supervisors of STI services and requires the cooperation and participation of all healthcare facility staff.

To achieve quality STI care services, each health facility can adopt the following approaches: Effective clinic operations and management, including:

- Adequate infrastructure; - Compliance with clinical management guidelines; Medicine, equipment's and commodity management; - Staff trainings in STI management; and - Client-friendly services (for example, adolescent- and youth-friendly).);
- Linkages and referrals to specialists, emergency services, HIV care, reproductive health and other support services;
- Promoting prevention activities, such as correct and consistent use of male condoms and female condoms, behavior change communication for safer sexual practices, partner

management, HIV testing and counseling, male circumcision and cervical cancer screening;

- Strong links with catchment population through community outreach activities;
- Collaboration in STI reporting, monitoring and evaluation;
- Periodic quality care audits;
- Ongoing supportive supervision of staff; and
- Operations research

12.1 Quality assurance approaches in STI care services

12.1.1 Clinic structure

In order to make clinics more accessible and increase attendance by the target population, they should be open during times when the target population can conveniently access the services. Health facility buildings should be properly maintained to ensure a comfortable, safe and hygienic environment;

- The internal structure of the clinic should, at a minimum, include the following to ensure physical privacy, auditory privacy and confidentiality of patient interviews and information:
- Waiting and registration area, - Consultation room, - Counselling room, and - Toilet facility.
- The consultation room and the counseling room should have doors, and their walls should be thick enough to ensure both auditory and visual privacy. In order to further ensure privacy, patients should wait in the waiting and registration area, not in the consultation room or directly outside the door.
- In the consultation room, the examination table should be positioned to provide adequate space at the end of the table to appropriately view the genitalia during speculum examination. An examination light should always be available for use in the consulting room;.
- In areas where a separate counseling room is not available, counseling should be provided in the consultation room.

12.1.2 Staff training and skills

All staff should have appropriate qualifications and training to perform their assigned tasks. Service providers should be able to perform all the basic clinical procedures (including speculum and bimanual examinations) that are necessary to diagnose and manage STI patients.

- Each clinic should have staff withthe proper training and skills to adequately perform the following functions:
- Clinic administration, patient registration, record-keeping and reporting; - Sexual and reproductive health history taking; clinical examination; patient management, including health promotion counselling and education; partner notification; and patient referral; - Syphilis and HIV testing; - Maintenance of clinical standards for STI management; and Procurement and maintenance of clinic supplies and medicines.
- Each health facility should have enough qualified staff to ensure a smooth flow of patients through the facility, and to allow staff to give each patient enough time and attention without creating excessive waiting times for other patients;
- Each facility should implement a plan for ongoing technical support and supervision of staff. The plan should be based on protocols, which specifically address the following key areas:

Effective interpersonal communication; - Ensuring an ethical standards; - Protecting patient confidentiality and privacy; and, - Adherence to appropriate clinic standards of practice and policies. Interpersonal communication Risk reduction counselling and a patient-centered approach relies on effective interpersonal communication. It is vital for exchanging behavior-related information, for example, between service providers and patients. Proper channeling of the information between the service provider and patient is important if the patient is to trust the service provider's ability to solve the problem and the service provider is to gain a thorough understanding of the patient's illness. Interpersonal communication skills are best conveyed through practical training sessions in which participants interview simulated patients, and then review their performance on video or receive feedback from fellow participants.

12.1.3 Ethical standards:

- All treatments, procedures, testing and counseling for all patients should be performed to the highest professional and ethical standards, within the limitations of the service.
- The staff should ensure, above all, that they do no harm to the patient;
- In all respects, the basic human rights of each patient must be respected and receive the utmost importance.
  Confidentiality is a cornerstone of high-quality sexual health clinical care.
- In all cases, the information contained in the medical records of patients using the service is confidential (should not be communicated to third parties outside the clinic service) and should never be in public view (for example, to patients in the waiting area).

Only the patient's first name or registration number should be used when discussing cases or when calling a patient from the waiting area;
Patients should be informed about how the clinic handles the sexual behavior data that are collected, including the circumstances under which such information may be disclosed, whether it may be disclosed as aggregate or individual information, whether personal identifiers may be disclosed, and how and by whom such information may be used.

12.1.4 Standard treatment guidelines

- It is essential that the STI treatment recommendations should be standardized and that staff comply with STI clinical management guidelines.
- The treatment recommendations should be adapted, based on the local epidemiological and antimicrobial sensitivity information.
- Flow charts that describe the standardized approach should be readily available for the clinic staff and should be on display in each room where treatments are prescribed to patients;
- Each clinic should also ensure that all essential patient management medicines, equipment's and consumables are adequate in quantity based on the patient load and maintained in good working order.

12.1.5 Allergic reactions management

- All clinics that administer antibiotic medications (particularly via intramuscular or intravenous injections) should be adequately equipped with emergency resuscitation drugs and equipment's, and should be prepared for emergency management of an allergic or anaphylactic reaction.

- A wall chart that outlines emergency management of anaphylaxis should be displayed prominently in the area where injections are given and in the area where patients will be observed following an injection;
- Patients with anaphylactic reactions should be provided prompt treatment and should be transferred to the nearest hospital or other appropriate facility as soon as it is safe to do so.

12.1.6 Precautions with penicillin administration

Precautions with penicillin administration The recommended and most effective treatment for syphilis is Benzathine Penicillin; all patients who present with genital ulcer syndrome and/or positive syphilis serology should be treated with penicillin, unless it is clear that the patient is allergic to the drug. Before treating a patient with penicillin, clinic staff must ask the patient whether he or she has a history of allergic reaction to penicillin. If the patient answers "yes," staff should explore the issue by asking the following questions:

- What was the patient's age the time of the reaction?
- What were the characteristics of the reaction?
- How long after beginning penicillin therapy did the reaction begin?
- How was the penicillin administered?
- What other medications was the patient taking and at what time?
- What happened when the penicillin was discontinued?
- Has the patient taken any antibiotics similar to penicillin (Amoxicillin, Ampicillin or Cephalosporins) and, if so, what were the reactions?

The patient can be said to have a strong history of penicillin allergy when he or she reports reactions such as anaphylaxis, angioedema/urticaria, pruritic rash and bronchospasm. Symptoms such as maculo-papular rash, gastrointestinal upset or other unknown reactions are less predictive of an allergy. If the history of penicillin hypersensitivity is unknown or not elicited, administer an intradermal injection of 0.03ml of penicillin (test dose) on the left forearm of the patient. Observe the patient for 30 minutes. The appearance of wheals and redness indicates a positive sensitivity test. Staff should be prepared to manage anaphylactic reaction even with the test dose.

12.2 Quality assurance approaches in STI care services

STI clinical quality assurance is a way of monitoring and evaluating the quality of STI services that are provided at health facilities to ensure that the services are in accordance with established guidelines, policies, norms and standards. It is a critical responsibility of administrators and supervisors of STI services and requires the cooperation and participation of all healthcare facility staff.

12.2.1 Service availability

In order to make health facilities more accessible and increase attendance by the target population, they should be open during times when the target population can conveniently access the services.

12.2.2 Staff training and skills

All staff should have appropriate qualifications and training to perform their assigned tasks. Service providers should be able to perform all the basic clinical procedures (including speculum and bimanual examinations) that are necessary to diagnose and manage STI patients.

12.2.3 Standard treatment guidelines:

- It is essential that the STI treatment recommendations should be standardized and that staff comply with STI clinical management guidelines.
- Flow charts that describe the standardized approach should be readily available for the clinic staff and should be on display in each room where treatments are prescribed to patients;
- Each clinic should also ensure that all essential patient management medicines, equipment's and consumables are adequate in quantity based on the patient load and maintained in good working order.

12.2.4 Documentation and reporting

TO DISCUSS WITH EPIDIMIOLOGIST

12.2.5 Technical support and supervision

Facility managers should ensure, periodically at a regular interval, that technical support and supervision is provided to clinic staff and their day-today activities.

12.2.6 Referral network establishment

- Patients whose health problems cannot be addressed or managed appropriately by the services available at the facility should be referred to a higher-level service, such as a secondary or tertiary care hospital. Such higher-level referrals may include STI specialist care, general medical care, obstetrics/gynaecological care, HIV/ART care services and other support services;
- The health facility should compile a list of recommended providers for referrals that includes names, addresses, telephone numbers and operating hours.

12.2.7 Monitoring and evaluation

Monitoring is the regular, methodical process of collecting data to determine the progress and achievements of a programme. The type of information collected may vary, but it is important that only the data required to obtain information that is needed for improving the overall quality of STI services should be collected. Specific monitoring parameters that can be collected fall into four (4) main categories:

- Service delivery;
- Staff performance;
- Client satisfaction and response;
- Resource needs and allocation.

Evaluation involves analysing and assessing a programme, or part of a programme, to determine its quality and progress toward achieving its goals and objectives. Evaluations helps self-evaluate and subsequently improve own practices and the overall programme. Periodic quality-of-care audits and assessments of drug and supply management are examples of programme evaluation.

12 2.8 Operations research

For more effective STI programming, data are needed to determine whether the STI case management services offered at the facility are effective in reducing STI prevalence among people using the services and whether STI patterns have changed in response to the intervention. The data collected may be related to clinical diagnosis, treatment, laboratory and behavioural characteristics that can be collected at periodic intervals from a cohort or a sample of persons attending STI clinics. For example, such studies could help to determine whether preventive and curative services have any effect on the prevalence of Sexually Transmitted Infections syndromes and other STI conditions among facility attendees.

12.2.9 Management of STI medications and commodities

The trust in STI management gained through proper clinical examination and patient counselling could be severely eroded when STI drugs or condoms are out of stock or equipments malfunction when the patient uses the health facility. Unfortunately, shortages of drugs, equipments, test kits and other essential commodities are common in developing countries, including in the SADC region. There are many public health consequences of improper management of medications and commodities. For example, in case of drug stock-outs, the patient has to return at a later stage to collect drugs, but remains infective to others in the meantime. As a result, patients are treated inadequately and there is a growing likelihood of drug resistance and an increase in the pool of asymptomatic and symptomatic STI cases in the community. Patients sometimes consult informal practitioners who cannot assure the quality of care. It is therefore imperative to strengthen STI drug and commodity management systems at health facilities in the SADC region.

Indicator matrix for the SADC STI monitoring and evaluation core indicators
STI Framework monitoring and evaluation logic model

13.0 STI SURVEILLANCE

STIs surveillance is an epidemiological exercise by which the spread of STIs are monitored in order to establish patterns of progression. The main functions of STI surveillance is to record, observe, analyze, predict and understand STI trends to reduce the harm caused by STIs, and to increase the knowledge about the factors that contribute to such trends. It is an essential component for the STI and HIV prevention programs. Accurate data enable strategic planning and provide information for advocacy, programme design, prioritization of interventions, monitoring and evaluation, and to improve the quality of patient care and overall programme effectiveness. The following section provides practical guidance for Member States on strengthening the STI surveillance system to obtain meaningful data on STIs that can directly facilitate effective planning, execution and monitoring of STI control and prevention efforts at facility, provincial or district, and national levels. Currently, STI surveillance at the regional level is non-existent. The section also describes common core surveillance indicators that can provide a regional picture that is needed for the periodic review of policies, guidelines and protocols on STI-related issues in the SADC region.

13.1 Prevalence assessment and monitoring:

The primary purposes of STI prevalence assessment and monitoring are to identify population subgroups with high prevalence of Sexually Transmitted Infections, and to monitor trends in STI

prevalence among defined populations (for example, women who are routinely screened for syphilis during antenatal care).

Prevalence data are of great use in STI programme planning, management and evaluation because they can be used to:

- Identify subgroups that are at high risk for HIV infection (as evidenced by high rates of Sexually Transmitted Infections);
- Guide funding and resource allocation for STI and HIV prevention programmes;
- Monitor the effectiveness of STI and HIV prevention programmes; and
- Develop national estimates of Sexually Transmitted Infections.
- Most Member States routinely collect data on the prevalence of syphilis among pregnant women.

13.2 Core components of STI surveillance system

The core components of a good STI surveillance system (Figure 5.1) that provides the necessary information for effective control programs are (37):

- Case reporting;
- Prevalence assessment and monitoring;
- Assessment of etiology of infections;
- Monitoring of anti-microbial resistance;
- Special studies.

13.2.1 Case reporting

Case reporting is the process whereby service providers or laboratories report cases of disease to public health authorities. STIs may be reported syndromically or etiologically, depending on the availability of laboratory tests in clinical care settings.

The case reporting system can be universal (using integrated disease morbidity reports) or sentinel site-based (providing more detailed data on patients). The method of reporting depends on how services for prevention and control of STIs are delivered and organized. Case reporting has several purposes:

Assessing disease burden by providing incidence of recently acquired infections;
Monitoring trends in incidence of recently acquired infections;
Providing information required for management of patients and their sex partners;
Providing information on major STIs, to assist in planning programme efforts; and
Providing data for managing health services (for example, pharmaceutical distribution).
All healthcare facilities in the SADC region generate information for the respective Member State national health information systems. In many Member States, STIs conditions are tallied in aggregate fashion for reporting purposes, and individual syndromes are not specified.

While, this may be useful in describing the STIs as a disease-burden in relation to other causes of ill health, this information is insufficient for guiding targeted strategies for the control of individual syndromes and for planning STI interventions. Currently, not all national control programmes have an accurate picture of their respective STI epidemics, and the regional epidemic profile is

sketchy. Since the clinical management of STIs in SADC Member States is syndrome-based, surveillance of STIs can only be effectively performed on the basis of syndrome classification of diseases.

Therefore, the establishment of a standardized STI clinical surveillance with well-defined case definitions (see Table 5.1) to achieve harmonization is recommended for each Member State in the SADC region. The STI clinical surveillance standard operating procedures and tools are provided in Annex III. It is also hoped that implementation of such an intervention will result in improved STI surveillance across the States and also strengthen individual Member States' national STI control programmes.

Sentinel surveillance usually involves a select few healthcare facilities. A national control programme, preferably with the assistance of an epidemiologist and bio-statistician, should decide on the number of facilities to be involved in the STI surveillance. This will determine the number and level of service providers to be trained.
High staff turnover and rotation within Member States' health systems remain challenges. A decision must be made whether all service providers should be trained in STI surveillance along the STI clinical management, in order to ensure that the surveillance system is not disrupted when new staff are employed at a sentinel site.
The basic STI clinical surveillance activities should be implemented in each Member State. These should be either universal reporting or sentinel site reporting, depending on the availability of resources. Other components of the surveillance as described below could also be adapted.

13.2.2 Prevalence assessment and monitoring

The primary purposes of STI prevalence assessment and monitoring are to identify population subgroups with high prevalence of Sexually Transmitted Infections, and to monitor trends in STI prevalence among defined populations (for example, women who are routinely screened for syphilis during antenatal care).

Prevalence data are of great use in STI programme planning, management and evaluation because they can be used to:

- Identify subgroups that are at high risk for HIV infection (as evidenced by high rates of Sexually Transmitted Infections)
- Guide funding and resource allocation for STI and HIV prevention programmes;
- Monitor the effectiveness of STI and HIV prevention programmes; and
- Develop national estimates of Sexually Transmitted Infections.

Most Member States routinely collect data on the prevalence of syphilis among pregnant women.

Microbiological surveillance Information obtained from the STI clinical surveillance may be augmented with periodic and targeted microbiological surveys in order to determine the aetiology of syndromes, antimicrobial sensitivity patterns and temporal changes thereof.

13.2.3 Assessment of aetiology of infection

Periodic assessment of aetiologies of STI syndromes (such as urethral discharge, genital ulcer disease or vaginal discharge) provide data for guiding STI syndromic management, assist in the

interpretation of syndromic case reports, and aid the assessment of disease burden due to specific pathogens. These data also may be used to evaluate syndromic management algorithms.

13.2.4 Antimicrobial resistance monitoring

In view of the substantial use of drugs for treatment of gonococcal infections, and increasing rates of resistance worldwide and in the SADC region, it is important for each Member State to monitor antimicrobial resistance in Neisseria gonorrhoeae as a core component of STI surveillance. The principal objective of monitoring antimicrobial resistance in N. gonorrhoeae is to obtain data necessary for developing guidelines for treatment and to detect newly emerging resistance.

- It is recommended that these should be conducted periodically every 3 to 5 years;
- In regions where rates of chancroid are high, studies to assess antimicrobial resistance in H. ducreyi may be performed with the assistance of a specialised reference laboratory.

13.2.5 Special studies

Periodically, STI programmes may perform special studies to address important STI surveillance issues that are not part of routine case reporting or prevalence assessments. Examples may include assessments of quality of care using mystery clients, or measuring incidence and prevalence of STI-related complications such as PID or ectopic pregnancy.

These studies can include estimation of the burden attributable to asymptomatic STIs, investigations for outbreaks of particular infections, such as syphilis in certain populations and geographical settings. In many Member States, STI patients seek to obtain medication directly from pharmacies or the informal private sector (such as traditional healers) without first seeking diagnosis from a service provider at the health facility.

This practice can be a source of a substantial amount of underreporting, and special studies may be needed to determine its extent and the magnitude of the under estimate. The core components discussed above are complementary activities, and their utility differs for different aspects of STI control. The way in which each of these activities is performed depends on the existing surveillance infrastructure (particularly the extent to which laboratory testing is available for routine clinical care), and on the structure of systems that are in place for reporting other communicable diseases as part of integrated disease surveillance.

The state of the HIV epidemic in Swaziland also has implications for activities and priorities for surveillance of Sexually Transmitted Infections. There exists no single model for a STI surveillance system that is ideal for all Member States. However, the types depicted in Figure 5.2 offer a framework for STI surveillance that can be adapted for use in most Member States.
Implementation Mechanisms for the Framework

14.0 Treatment table of paediatric dosages for the main STI pathogens

14.1 Summary table of common STI syndromes, their causes and treatment recommended in Swaziland

STI Syndrome	Causal pathogen	Drugs
Urethral discharge	Neisseria Gonorrhoeae Chlamydia Trachomatis Trichomonas Vaginalis	Cefixime, 400 mg orally stat or Ceftriaxone, 250 mg I.M stat (to treat gonococcal infection) PLUS Azithromycin, 1 g orally stat (to treat chlamydial infections) PLUS Metronidazole, 2 g orally stat (to treat trichomonal infections)
Genital ulcer	T.pallidum H. Duccei Chancroid HSV-2 (Klebsiella granulomatis low prevalence in Swaziland)	Benzathine Penicillin*, 2.4 million units I.M stat, PLUS • Azithromycin, 1g orally stat; OR Ceftriaxone, 250mg I.M stat; OR Ciprofloxacin, 500mg orally BID for 3 days; OR Erythromycin, 500 mg orally QID for 7 days (to treat chancroid) PLUS • Acyclovir, 400mg orally TDS for 7 days (to treat genital herpes). **NB**: Penicillin-allergic patients treat with: Erythromycin 500mg 6 hourly for 14 days
Vaginal discharge	N. Gonorrhoeae Chamydia Trachomatis T. Vaginalis	Ceftriaxone, 250mg IM stat. Second-line: Spectinomycin 2g IM stat, OR Gentamicin 240mg IM stat. PLUS • Azithromycin, 1g orally stat PLUS • Metronidazole, 2g orally stat If candida is evident give six days course on clotrimazole pessaries Doxycycline 100mg 12 hourly for 7 days Metronidazole 2g stat* <u>In pregnancy/during breast feeding</u>: Spectinomycin 2g stat Erythromycine 500mg 6 hourly for 7 days Metronidazole 2g stat**, *** If vulval oedema/curd-like discharge, erythema, excoriations present, add: Cotrimazole vaginal pessary 500mg stat inserted or 100mg 12 hourly for 3 days inserted or 200mg at night for 3 days
Lower Abdominal pain	Neisseria Gonorrhoeae Chlamidia trachomatis T. Vaginalis	• Ceftriaxone, 250mg IM stat PLUS • Azithromycin, 1g orally weekly for 2 weeks PLUS • Metronidazole, 400mg orally BID for 7 to 14 days

Scrotal Swelling Syndrome	Neisseria Gonorrhoeae Chlamidia trachomatis	Ceftriaxone 250mg IM stat or Spectinomycin 250mg IM stat **And** Doxycycline 100 mg 12 hourly for 7 days **or** Erythromycin 500mg 6 hourly for 7 days
Inguinal bubo	Haemophylus ducreyi Chlamidia trachomatis	Ciprofloxacin, 500 mg orally BID for 3 days OR Ceftriaxone, 250mg IM stat (to treat chancroid) PLUS Azithromycin, 1g orally stat and then 1g orally per week for 2 weeks (to treat both chancroid and LGV) OR Doxycycline, 100mg orally BID for 14 days (to treat LGV)
Neonatal conjunctivitis	Neisseria Gonorrhoeae Chlamidia trachomatis	**Neonate** Irrigate eyes Spectinomycin 25mg/kg body weight (up to a maximum of 75mg) **Plus** Erythromycin syrup 6 hourly (50mg/kg/day) for 14 days **Mother** Offer the health education and promotion package Ceftriaxone 250mg IM stat or Spectinomycin 2g IM stat **Plus** Erythromycin 500mg 6 hourly for 7 days **Father** Offer the health education and promotion package Ceftriaxone 250mg IM stat or Spectinomycin 2g IM stat **Plus** Doxycycline 100 mg 12 hourly for 7 days

7.2 STIs in children and adolescents

The occurrence of STIs in children with the exception of neonatal infections and congenital syphilis invariably indicates sexual abuse. Health workers therefore should arrange for emotional as well as legal support for the child as part of the comprehensive management. In rare instances, however, chlamydial vaginitis acquired perinatally could manifest up to the age of three. Genital warts are not specific indicators of abuse unless supported by other evidence. Bacterial vaginitis has been diagnosed in children who have been abused, but its presence alone does not prove sexual abuse. Candidiasis is not a sexually transmitted infection in adults or children.

STI in adolescents place them at a higher risk of acquiring HIV. This is because the same biological and social factors that increase vulnerability to STI also increase vulnerability to HIV infection.

Biological factors

Mucosal tear during sexual act

- Underdeveloped vaginal epithelium, leading to interruption in mucosal integrity which could be easily infected by aetiologies of STI and HIV.

Social factors

- Multiple sexual partnerships
- Commercial sex
- Poor health seeking behaviour
- Poor self-esteem
- Lack of youth friendly services

The following key issues are useful to remember during management of STI in adolescents

- Adolescents may have limited access to health care and may not seek care adequately. therefore, arrangements should be made to ensure compliance and future follow up.
- Partner notification and management is often difficult, thus risk of re-infection exists.
- Pregnancy should be considered and screening is pertinent in adolescent females.

Syndromes in children and adolescents are caused by similar pathogens as in adults and thus follow similar management principles. However, some medications used in adults may not be used for children. The following Table shows the management of STDs in children or adolescents.

7.2.1 Treatment table of pediatrics dosages for the main STI pathogens

Pathogen	Treatment
Bacterial infections	
Neisseria gonorrhoeae	Ceftriaxone 20-50mgs IM single dose Spectinomycin 25Mgs / Kg body weight [up to a maximum of 75mgs
Chlamydia trachomatis	Erythromycin 50 mgs/kg, in divided doses, 6 hrly 7 days Azithromycin [1year and over] 8-11kgs; 62.5mg 12hrly 12-19kgs;125mgs 12hrly 20-29kgs;187mgs 12hrly 30-49kgs; 250mgs 12hrly 7 days
Chlamydia trachomatis (strains L1-L3)	Erythromycin 50 mgs/kg , in divided doses ,6 hourly , 14 days

Treponema pallidum	Benzathine Penicillin 600,000-1.2Mega units IMI [50,000units/KG IMI] Erythromycin 50 mgs/kg , 6 hrly , in divided doses,14 days Procaine Penicillin G 150,000 IU/kg, IM 12 hourly 14days Erythromycin 50 mgs/kg , 6 hourly ,in divided doses, 30 days
Haemophilus ducreyi	Ceftriaxone 20-50mgs IM single dose Erythromycin 50 mgs/kg , 6 hourly, in divided doses, 7 days
Klebsiella (Calymmatobacterium) granulomatis	Erythromycin 50 mgs/kg , 6 hrly, in divided doses, 14 days Azithromycin [1year and over] 8-11kgs; 62.5mg 12hrly 12-19kgs;125mgs 12hrly 20-29kgs;187mgs 12hrly 30-49kgs; 250mgs 12hrly Until the lesions get epithelalized, may take weeks
Mycoplasma genitalium	Erythromycin 50 mgs/kg , 6 hrly, in divided doses, for 7 days
Ureaplasma urealyticum	
Viral infections	
Human immunodeficiency virus (HIV)	Appropriate ART
Herpes simplex virus type 2 (HSV-2)	**Initial episode;** **2yrs and older** Acyclovir 200mgs 5 hrly, 7 days **Under 2 yrs** Acyclovir 100mgs 5hrly ,7 days **Subsequent episodes**; above treatment for 5 days **Suppressive therapy;** **Over 2yrs** Acyclovir 200 mgs 12 hrly daily, **Under 2yrs;** Acyclovir 100mgs 12 hrly maximum 1 year
Hepatitis B virus (HBV)	Interferons Supportive therapy

Cytomegalovirus (CMV)	
Molluscum contagiosum (Poxy Virus)	GENITAL WARTS **Men**: penile and anal warts; carcinoma of the penis **Women**: vulval, anal and cervical warts, cervical carcinoma, vulval carcinoma, anal carcinoma **Newborns**: laryngeal papilloma
Kaposi-sarcoma (KS) associated herpes virus (KSHV or Human Herpes virus type-8)	ART PLUS, Chemotherapy Radiotherapy, Liquid nitrogen
Protozoal infections	
Trichomonas vaginalis	Metronidazole 7mg/kg , 8 hrly, 7 days Tinidazole 50-75mgs single dose. Stat Can repeat once if necessary
Fungal infections	
Candida albicans	Fluconazole 150mgs single oral dose Nystatin vag. Pessarie [100.000units] daily, 14 days Clotrimazole vag. Pessaries 200mgs nocte , 3 days Clotrimazole vag.tablet 500mgs nocte [single dose] Miconazole vag. Pessary 200mgs nocte , 7 days **Please note; Nystatin and Miconazole, pediatric doses not specified**
Parasitic infestations	
Phthirus pubis	Benzyl Benzoate emulsion [BB cream], 25% emulsion 1% Gamma benzene hexachloride Crotomiton 10% ointment
Sarcoptes scabiei	Benzyl Benzoate emulsion [BB cream], 25% emulsion 1% Gamma benzene hexachloride Crotomiton 10% ointment

8.0 Intervention at the next level of care.

N.B. It is important to note that a small proportion of clients may not respond to syndromic management in such cases the client should be referred for further management to the next level of care.

The referring officer has to send the client with a detailed history including details of the interventions.

- At the next level of care it is important to thoroughly go through the clients notes, to re-examine the client and to see to it that the syndromic management algorithm was followed before managing the client using another approach other than the syndromic approach.

8.1 Discharges and Lower Abdominal Pain (LAP)

Perform a wet mount /gram stain miscopy of vaginal specimen

- Motile trichomonas > Treat for trichomonas vaginalis
- Clue cells seen plus pH>4.5 or KOH positive > Treat for bacterial vaginosis
- Budding yeast cells or pseudohyphae seen > Treat for Candida albicans
- Intracellular diplococci present > Treat for gonorrhea & Chlamydia

Review in 3 days

- If improved > Continue with treatment
- If no improvement > Collect specimens for culture and sensitivity and offer treatment based on sensitivity patterns.

8.2 Genital ulcers

Syphilis - if non treponemal tests were not conducted by referring site, first perform them
If conducted and result is negative do treponemal tests (TPHA, FTA etc…) if the treponemal tests are positive treat for syphilis.

Chancroid – Do a bacterial culture a gram stain may be conducted as well.
NAAT e.g. PCR may be done if available.

Herpes simplex-do a culture on at least 3 unroofed pustules or vesicles

IMPLEMENTATION MECHANISM

Stakeholder analysis
Stakeholder role and Responsibilities

Government Ministries and Departments
Development partners
Implementing partners

Non Governmental Organizations
Faith Based Organization
Alternates

TECHNICAL WORKING GROUP

Swaziland National HIV and AIDS Program (SNAP)
Sexual Reproductive Health Unit (SRHU)
Central Medical Stores (CMS)
Swaziland Health Laboratory Services (SHLS)
School Health
His Majesties Correctional Services (HMCS)
Blood Bank
National Public Health Matron
HMIS
Epidemiology Unit
Monitoring and Evaluation Unit (M&E)
Health Promotion Unit (HPU)
National emergency response counsel for HIV and AIDS (NERCHA)
Medical and Dental Association
World Health Organization (WHO)
UNFPA
UNODC
UNAIDS
UNICEF
Expanded program on immunization (EPI)
Family life Association Swaziland FLAS
PSI
MSF
NATICC
University of Swaziland UNISWA, (academia)
Southern Nazarene University
PEPFAR Funded Partners ICAP,EGPAF,URC, MSH, HC3

FINANCING MECHANISM

Ministry of Health Budget Allocation
PEPFAR
Global Fund
UN Agencies
World Bank
SADC
ESA

STRATEGIC INFORMATION DEPARTMENT

HMIS
Research Unit

M&E
Epidemiology

ANNEXES

Guide for clinical history taking in a STI case

Guide for clinical history taking in a STI case	
General Details	Age Sex Marital status Residence Occupation Telephone number or any other contact information
Present Illness	Presenting complaints and duration
If complaints of vaginal discharge	Last Menstrual Period (LMP)? Itching? Odour? Colour and consistency of discharge?
If a woman complaints of lower abdominal pain	Vaginal bleeding or discharge? Painful or difficult pregnancy or childbirth? Painful or difficult or irregular menstruation? LMP: Missed or overdue period? History of recent delivery or abortion? Painful vaginal intercourse? Fever?
If complaints of genital or peri-anal ulcer	Site? Painful? Recurrent? Appearance? Spontaneous onset? Pain and swelling in the inguinal region?
If urinary symptoms	Pain or burning while passing urine? Frequency? Discharge from urethra?
Other symptoms	Warts? Lumps or swellings? Skin rashes? Discharge from anus? Difficulty in defecation/painful defecation
Medical History	
Any past STI?	Type? Dates? Any treatment and response? Result of any prior tests?
Other illness?	Type? Dates? Any treatment and response? Result of tests? Has ever had an HIV test? If yes, when? If HIV- positive: Taking ARV? CD4 count?
Medications? Drug allergies? Drug and alcohol use?	Recent or Current medications? History of allergies? Type of drug reactions? Name of drugs? Probe about penicillin if not spontaneous Patterns and frequency of use? Any injection drug use?
Sexual History	Whether sexually active? Date of last sexual intercourse? Sites of sexual exposure (i.e., vaginal, oral, anal)? Symptomatic partner? Number of sexual partners, any new partner?

	Condom use last sex? Condom use with regular partner/spouse? Condom use with other partners? Consistent condom use? Use of contraceptive methods?

Annex 2: A detailed Sexual History

Partners	• Do you have sex with men, women, or both?" • "In the past 2 months, how many partners have you had sex with?" • "In the past 12 months, how many partners have you had sex with?" • "Is it possible that any of your sex partners in the past 12 months had sex with someone else while they were still in a sexual relationship with you?"
Sexual Practices	• To understand your risks for STIs, I need to understand the kind of sex you have had recently." • "Have you had vaginal sex, meaning 'penis in vagina sex'?" If yes, "Do you use condoms: never, sometimes, or always?" • "Have you had anal sex, meaning 'penis in rectum/anus sex'?" If yes, "Do you use condoms: never, sometimes, or always?" • "Have you had oral sex, meaning 'mouth on penis/vagina'?"
For Condom Answers:	• If "never": "Why don't you use condoms?" • If "sometimes": "In what situations (or with whom) do you use condoms?"
Prevention of pregnancy	• What are you doing to prevent pregnancy?"
Protection from STIs	• What do you do to protect yourself from STIs and HIV?"
Past history of STIs	• Have you ever had an STI?" • "Have any of your partners had an STI?" • Additional questions to identify HIV and viral hepatitis risk include: • "Have you or any of your partners ever injected drugs?" • "Have your or any of your partners exchanged money or drugs for sex?" • "Is there anything else about your sexual practices that I need to know about?"

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