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Royal Cornwall Hospitals NHS Trust

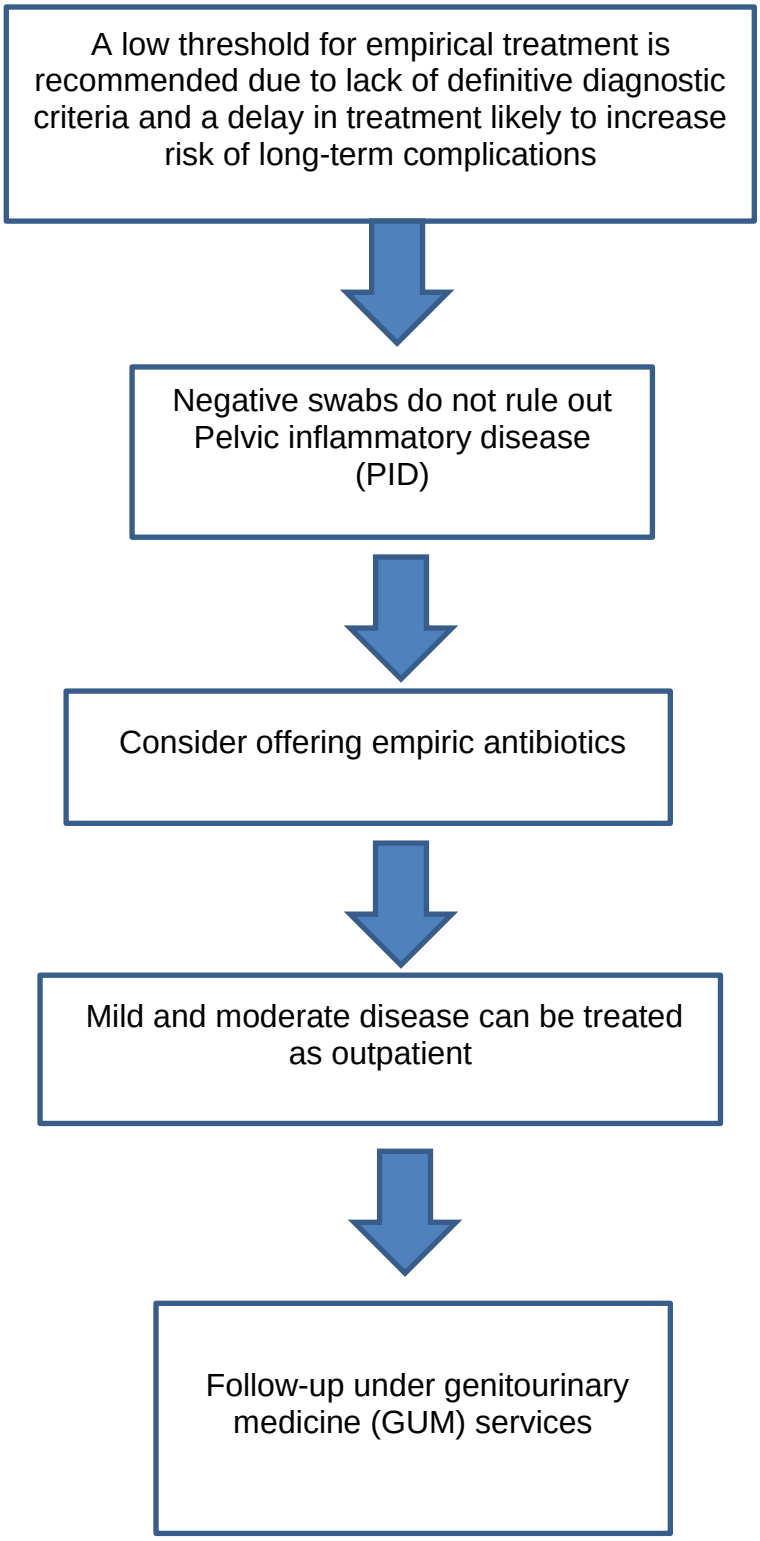
Pelvic Inflammatory Disease Clinical Guideline

V2.0

October 2022

Summary

This guideline will provide evidence-based guidance on the management of Pelvic Inflammatory Disease



1. Aim/Purpose of this Guideline

1.1. This guideline will provide evidence-based guidance on the management of Pelvic Inflammatory Disease.

1.2. Pelvic inflammatory disease (PID) is usually the result of an ascending infection from the endocervix resulting in the formation of endometritis, salpingitis, parametritis, oophoritis, tubo-ovarian abscess +/- pelvic peritonitis.

1.3. Chlamydia trachomatis and Neisseria gonorrhoea are only implicated in 25% of PID cases.[1] 10-45% of endocervical Neisseria gonorrhoea and 10-30% of endocervical Chlamydia trachomatis will develop into PID.

1.4. Organisms commonly found in the vagina such as Gardnerella vaginalis, anaerobes and Haemophilus influenza have been implicated. Mycoplasma genitalium has also been associated with PID.

1.5. This version supersedes any previous versions of this document.

Data Protection Act 2018 (General Data Protection Regulation – GDPR) Legislation

The Trust has a duty under the Data Protection Act 2018 and General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team

Royal Cornwall Hospital Trust rch-tr.infogov@nhs.net

2. The Guidance

2.1. Risk factors

- < 25 years old
- Early first coitus
- Multiple sexual partners
- Recent change in sexual partner (<3 months)
- Personal or partner history of sexual transmitted disease
- Recent termination of pregnancy

- Recent insertion of IUCD (<6 weeks)
- HSG/IVF/ISCI

2.2. Complications

- Tubal infertility
- Risk of ectopic pregnancy
- Chronic pelvic pain
- Perihepatitis and pelvic adhesions

2.3. Symptoms

- Lower abdominal pain (often bilateral)
- Deep dyspareunia (recent onset)
- Abnormal uterine bleeding (Inter-menstrual/ post-coital)
- Abnormal vaginal discharge (can be slight and transient)
- Right upper quadrant pain (secondary to Fitz-Hugh Curtis syndrome- 10-20%)

2.4. Signs

- Bilateral lower abdominal pain
- Cervical motion tenderness
- Adnexal tenderness
- Temperature >38°C

PID may be asymptomatic and clinical symptoms and signs have a poor PPV (65-90%).

2.5. Differential Diagnosis

- Ectopic pregnancy
- UTI
- Complications of an ovarian cyst (torsion or rupture)
- Acute appendicitis
- Endometriosis

- Functional pain
- Bowel disorders including inflammatory bowel disease and irritable bowel syndrome

2.6. Investigations

- Urinary pregnancy test
- 'Triple swabs'
    - Vulvovaginal swab for Chlamydia trachomatis and Neisseria gonorrhoea NAAT. (CTNG Panther swab)
    - Cervical charcoal swab for Neisseria gonorrhoea culture.
    - High vaginal charcoal swab if vaginitis (and consider HVS for TV culture if vaginitis associated with purulent discharge).
- Bloods
    - Recommend HIV & syphilis serology
    - Consider FBC and CRP (if raised this supports diagnosis but is nonspecific)

2.7. Management

2.7.1. A low threshold for empirical treatment is recommended due to lack of definitive diagnostic criteria and a delay in treatment likely to increase risk of long-term complications (as above). Negative swab's do not rule out PID.

2.7.2. Consider offering empiric antibiotics if:

- <25y/o and sexually active and/or recent change in sexual partner
- Plus new onset of bilateral lower abdominal pain with local tenderness on bimanual examination (cervical motion tenderness +/- adnexal tenderness)
- Negative urinary pregnancy test.

2.7.3. Mild and moderate disease can be treated as outpatient. Inpatient criteria:

- Surgical emergency cannot be excluded
- Severe disease clinically e.g. clinical signs of tubo-ovarian abscess, pelvic peritonitis, vomiting, or pyrexia (>38°C)

- No clinical response to oral treatment or not tolerated

2.7.4. NB If intra-uterine device (IUD/S) in situ, the Faculty of Sexual and Reproductive Healthcare (FSRH) recommend starting antibiotics and review at 72 hours, with removal of device if no improvement. There is little RCT evidence on treatment of PID with intra-uterine device in situ, but evidence does suggest better short term clinical outcomes if removed. If sexual intercourse without a barrier method has occurred within the previous 7 days, there may be a risk of pregnancy if IUD/S is removed - hormonal emergency contraception and follow-up pregnancy testing may be appropriate.

2.8. Antibiotic Treatment

2.8.1. Outpatient regimens:

- IM ceftriaxone 500mg stat then oral doxycycline 100mg BD + metronidazole 400mg BD for 14 days

OR

- Oral ofloxacin 400mg BD + oral metronidazole 400mg BD for 14 days (only if resistant gonorrhoea can be excluded)

NB ofloxacin should not be used in patients at high risk of gonococcal PID due to quinolone resistance. If metronidazole not tolerated in mild or moderate PID it can be discontinued.

2.8.2. Inpatient regimens:

- IV ceftriaxone 2g OD + IV/PO doxycycline 100mg BD.
  - Oral switch to oral metronidazole 400mg BD + doxycycline 100mg BD for total 14 days

OR

- IV clindamycin 900mg TDS + IV gentamicin (2mg/kg loading dose) followed by 1.5mg/kg TDS (or 7mg/kg OD).
  - Oral switch to either oral clindamycin 450mg QDS or oral doxycycline 100mg BD + oral metronidazole 400mg BD to complete 14 days.

2.8.3. If alternative regimes are required due to allergies, please see BASHH guideline or discuss with microbiology and GUM senior doctor.

2.8.4. NB- IV antibiotics should be continued for 24hrs after clinical improvement then oral switch. IV doxycycline is not licensed in UK but is available from IDIS world medicines.

2.9. Advice for patients

2.9.1. Explain condition, treatment (possible side effects) and complications.

2.9.2. Make referral to the sexual health team as per flow chart appendix 3.

2.9.3. Advise to avoid sexual intercourse until patient and partner have been treated.

2.10. Follow-up under sexual health services (see flow diagram for referral pathway)

2.10.1. Telephone call /e-mail to patient in first 72hrs to initiate partner notification, check is any problems with treatment and education.

2.10.2. Follow up as necessary depending on results/ adherence to treatment and clinical response. Usually will be at 1-2weeks, either in clinic or by telephone.

2.10.3. Cases of chlamydia, gonorrhoea and other significant STIs detected in the community can be referred by the GP to the GU services run by Brook once the GP has notified the patient of the result.

2.10.4. Any in-patient diagnosed with an STI can be referred to the HIV team, using the Maxims internal referral process. The team will ensure the patient has been treated appropriately and refer onwards to Brook for partner notification.

2.10.5. For those patients who have a positive test result after discharge from the hospital, the results will go to the responsible consultant who will need to notify the patient of the result and refer on to Brook for treatment and partner notification.

2.10.6. Any positive STI results for out-patients will be sent to the responsible consultant to be managed in the same way. Brook is happy to manage all patients diagnosed with an STI **AFTER** the patient has been informed of the test result from both a treatment and partner notification perspective.

2.10.7. Brook has asked for referrals to be emailed using the attached form (appendix 4) to cornwallreferrals@brook.org.uk.

3. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	Audit the compliance to guideline
Lead	Sarah Eddy, Advanced Nurse Practitioner, Emergency Gynaecology Unit / Early Pregnancy Unit
Tool	Ad hoc monitoring of guidance as part of routine audit activity
Frequency	Annual review at the Audit and Governance meeting
Reporting arrangements	Audit and Governance meeting
Acting on recommendations and Lead(s)	Audit and Governance meeting
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned within 3 months. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders

4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the 'Equality, Inclusion & Human Rights Policy' or the Equality and Diversity website.

4.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	Pelvic Inflammatory Disease Clinical Guideline V2.0
This document replaces (exact title of previous version):	Pelvic Inflammatory Disease Clinical Guideline V1.0
Date Issued/Approved:	September 2022
Date Valid From:	October 2022
Date Valid To:	October 2025
Directorate / Department responsible (author/owner):	Sarah Eddy, Advanced Nurse Practitioner, Emergency Gynaecology Unit / Early Pregnancy Unit
Contact details:	01872 252686 rch-tr.egu@nhs.net
Brief summary of contents:	For all clinical staff working in the Division of women, children & sexual health to provide evidence based guidance on the management of Pelvic Inflammatory Disease
Suggested Keywords:	Pelvic, Inflammatory, PID, Gynaecology, genitourinary medicine
Target Audience:	RCHT: Yes CFT: No KCCG: No
Executive Director responsible for Policy:	Medical Director
Approval route for consultation and ratification:	Gynaecology Directorate meeting
General Manager confirming approval processes:	Caroline Chappell
Name of Governance Lead confirming approval by specialty and care group management meetings:	Caroline Amukusana
Links to key external standards:	None
Related Documents:	none required

Information Category	Detailed Information
Training Need Identified?	No
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet & Intranet
Document Library Folder/Sub Folder:	Clinical / Gynaecology

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
October 2018	V1.0	Initial Issue	Jess Leese O&G Registrar
September 2022	V2.0	Responsibility for genitourinary medicine services and chlamydia screening has been transferred from RCHT to Brook since 1 December 2019. This has therefore changed the referral pathway.	Sarah Eddy, Advanced Nurse Practitioner

Appendix 2. Equality Impact Assessment

Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity & Inclusion Team rcht.inclusion@nhs.net

Information Category	Detailed Information
Name of the strategy / policy / proposal / service function to be assessed:	Pelvic Inflammatory Disease Clinical Guideline V2.0
Directorate and service area:	Gynaecology
Is this a new or existing Policy?	Existing
Name of individual completing EIA (Should be completed by an individual with a good understanding of the Service/Policy):	Sarah Eddy, Advanced Nurse Practitioner
Contact details:	01872 252686 rch-tr.egu@nhs.net

Information Category	Detailed Information
1. Policy Aim - Who is the Policy aimed at? (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	Standardised best practice for all clinical staff working in the Care Group of Women, Children & HIV for the management of Pelvic Inflammatory Disease
2. Policy Objectives	As above
3. Policy Intended Outcomes	As above
4. How will you measure each outcome?	See section 3
5. Who is intended to benefit from the policy?	All obstetrics and Gynae patients

Information Category	Detailed Information
6a. Who did you consult with? (Please select Yes or No for each category)	• Workforce: Yes • Patients/ visitors: No • Local groups/ system partners: No • External organisations: No • Other: No
6b. Please list the individuals/groups who have been consulted about this policy.	**Please record specific names of individuals/ groups:** Gynaecology Directorate meeting
6c. What was the outcome of the consultation?	Guideline agreed
6d. Have you used any of the following to assist your assessment?	**National or local statistics, audits, activity reports, process maps, complaints, staff or patient surveys: No**

7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
Age	No	
Sex (male or female)	No	
Gender reassignment (Transgender, non-binary, gender fluid etc.)	No	
Race	No	
Disability (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	Those with any identified additional needs will be referred for additional support as appropriate - i.e to the Liaison team or for specialised equipment. Written information will be provided in a format to meet the patient and their family's needs e.g. easy read, audio etc
Religion or belief	No	

Protected Characteristic	(Yes or No)	Rationale
Marriage and civil partnership	No	
Pregnancy and maternity	No	
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	

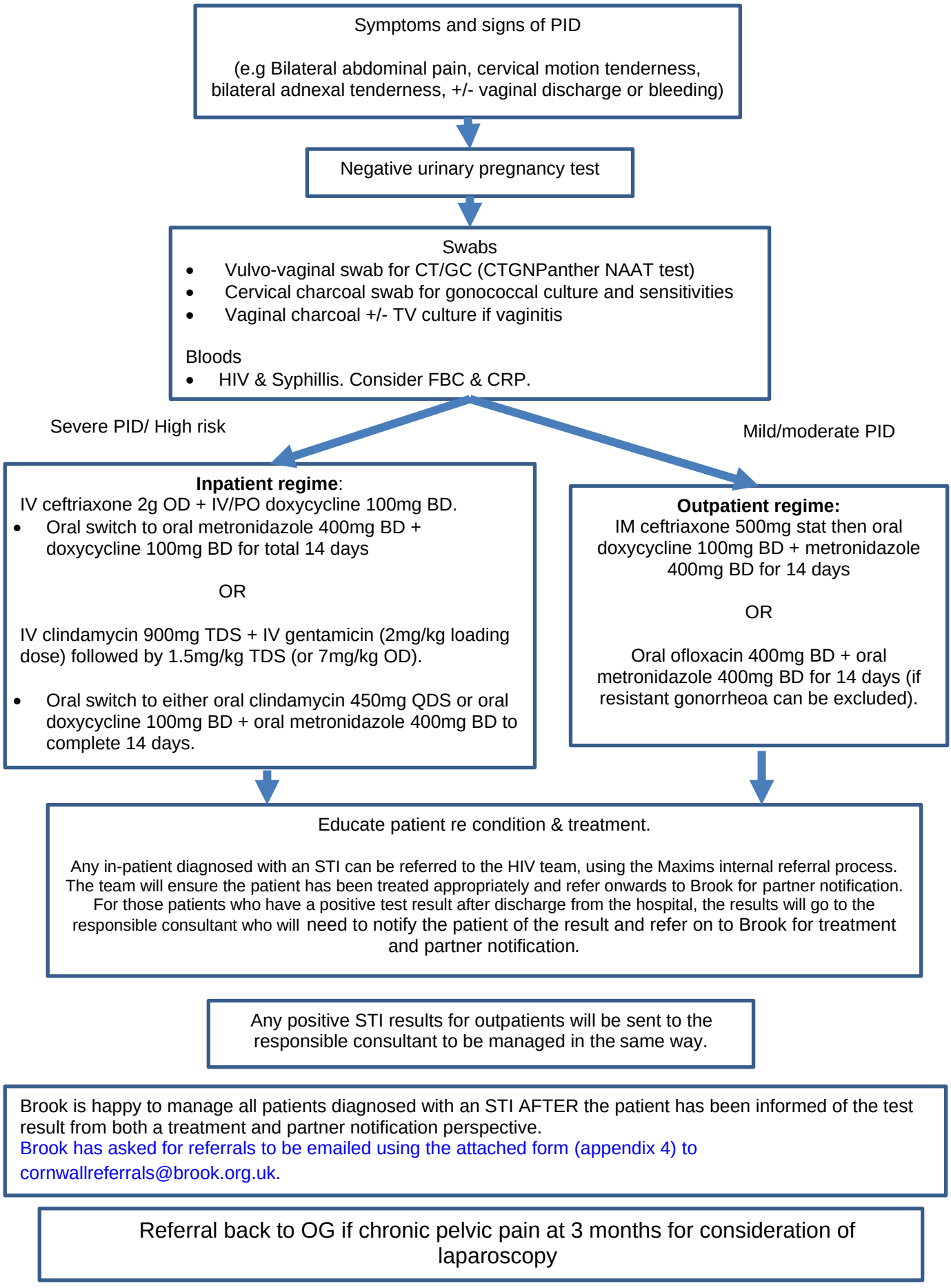
A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment: Sarah Eddy, Advanced Nurse Practitioner

If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:
Section 2. Full Equality Analysis

Appendix 3


Symptoms and signs of PID
(e.g Bilateral abdominal pain, cervical motion tenderness, bilateral adnexal tenderness, +/- vaginal discharge or bleeding)
Negative urinary pregnancy test
Swabs
Vulvo-vaginal swab for CT/GC (CTGNPanther NAAT test)
Cervical charcoal swab for gonococcal culture and sensitivities
Vaginal charcoal +/- TV culture if vaginitis
Bloods
HIV & Syphillis. Consider FBC & CRP.
Severe PID/ High risk
Mild/moderate PID
Inpatient regime:
IV ceftriaxone 2g OD + IV/PO doxycycline 100mg BD.
Oral switch to oral metronidazole 400mg BD + doxycycline 100mg BD for total 14 days
OR
IV clindamycin 900mg TDS + IV gentamicin (2mg/kg loading dose) followed by 1.5mg/kg TDS (or 7mg/kg OD).
Oral switch to either oral clindamycin 450mg QDS or oral doxycycline 100mg BD + oral metronidazole 400mg BD to complete 14 days.
Outpatient regime:
IM ceftriaxone 500mg stat then oral doxycycline 100mg BD + metronidazole 400mg BD for 14 days
OR
Oral ofloxacin 400mg BD + oral metronidazole 400mg BD for 14 days (if resistant gonorrheoa can be excluded).
Educate patient re condition & treatment.
Any in-patient diagnosed with an STI can be referred to the HIV team, using the Maxims internal referral process. The team will ensure the patient has been treated appropriately and refer onwards to Brook for partner notification. For those patients who have a positive test result after discharge from the hospital, the results will go to the responsible consultant who will need to notify the patient of the result and refer on to Brook for treatment and partner notification.
Any positive STI results for outpatients will be sent to the responsible consultant to be managed in the same way.
Brook is happy to manage all patients diagnosed with an STI AFTER the patient has been informed of the test result from both a treatment and partner notification perspective.
Brook has asked for referrals to be emailed using the attached form (appendix 4) to cornwallreferrals@brook.org.uk.
Referral back to OG if chronic pelvic pain at 3 months for consideration of laparoscopy

Appendix 4

Referrer agency address:

date:

Cornwall Sexual Health and Contraception Service

Dear Referral Team

Re: *(client name)* *(DOB)*

(client contact details)

Reason for Referral

Medical History

Yours Sincerely

brook.org.uk
81 London Road, Liverpool, L3 8JA *@BrookCharity*