Berkshire & Surrey Pathology Services
A joint venture between Ashford and St. Peter's Hospitals NHS Foundation Trust, Frimley Health NHS Foundation Trust, Royal Berkshire NHS Foundation Trust and Royal Surrey County Hospital NHS Foundation Trust. Legal entity host Frimley Health NHS Foundation Trust

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Dear Microbiology Laboratory User

BSPS Guidelines on Appropriate Clinical Details for Microbiology Requests.

The microbiology laboratory is committed to providing the highest quality results, as quickly as possible, to facilitate good clinical care. The microbiology laboratory requires brief but pertinent clinical details on all diagnostic microbiology sample requests. This is to ensure the most appropriate processing of samples, correct assessment of the clinical relevance of results and adequate protection of laboratory staff from potentially hazardous organisms. We also believe that such an approach will have positive effects on antimicrobial stewardship.

Microbiology is a more subjective laboratory discipline than others. The rationale for clinical details can be split into three areas of the testing process; pre-analytical, analytical and post-analytical. There will however be overlap between the three areas:

Pre-analytical: Clinical details allow us to decide if the test is appropriate for a given clinical situation, and whether extra or alternative testing may be indicated.

Analytical: This area is particularly important for samples which are processed for bacterial culture. Clinical details can (and often do) affect any of the following steps in the bacteriology culture process:

- Whether additional tests in addition to culture are indicated.
- What incubation conditions are used (aerobic/CO2/anaerobic) for the culture plates.
- Which culture media are set up on the sample.
- Ascertaining the relative significance of different culture isolates and deciding further workup.
- Whether susceptibility testing should be performed, and what antimicrobials to test against.
- Which culture isolates should be reported to the requestor.
- Which antimicrobial susceptibilities are released to the requestor.
- Whether an interpretative comment is added to the final report.

Post-analytical: This allows us to decide whether the culture findings are consistent with the clinical details, which antibiotics should be reported, if any, and which interpretative or management comments should be added.

This document offers a guide to what the laboratory considers useful clinical information on various sample types. This is not an exhaustive list.

Urine Samples

A brief summary of the patient's specific symptoms, accompanied by any other useful information such as pregnancy, immunocompromising conditions, current antibiotics, allergies, etc.

Acceptable	Not acceptable
Symptoms • Dysuria/Frequency • Incontinence • Fever • Confusion (increased or new) • Flank pain • Suprapubic pain • Abdominal pain • Haematuria • Falls (non-mechanical) **Diagnoses/Clinical Scenarios** • Cystitis • Pyelonephritis • Sepsis • Delirium • ↑PSA • Prostatitis • Pelvic inflammatory disease (PID) • Pregnant • Urology pre-op • Gynae pre-op • Post-renal transplant • Epididymitis/orchitis • Pre-BCG treatment •Renal calculus (kidney stone)	• No clinical details • Monitoring • Review • Annual review • Screening (unless pregnant) • MSU /CSU (without clinical indication of an infection)

"?UTI"/"UTI" or similar will be accepted for testing. However, this is essentially a diagnosis as opposed to relevant clinical details and we strongly discourage this practice.

The patient's specific symptoms should be stated as detailed above. This helps the laboratory decide between an uncomplicated and complicated UTI and whether the upper renal tract may be involved. These decisions affect which antibiotics are tested, whether an antibiotic is interpreted as susceptible or resistant and which susceptibility results are reported back to the requestor.

Superficial Wound/Skin swabs

The diagnosis of wound infection is essentially a clinical diagnosis, with laboratory testing used to provide further information to guide management, particularly when the use of systemic antibiotics is deemed appropriate.

Please note: The body site the swab is taken from is a critical part of the information required for Microbiology to accept and process the swab.

Acceptable	Not acceptable
Symptoms • New or increased pain • Swelling • Erythema • Purulent exudate • Localised warmth • Systemic signs (fever, tachycardia, etc.) **Diagnoses/Clinical Scenarios** • Post-surgical wounds • Bite wounds • Superficial burns • Penetrating wounds • Diabetic foot infections • Skin grafts • Extensive eczema • Extensive impetigo • Cellulitis (only if associated skin break/wound) • Infected wounds that have not responded to standard management	• No clinical details (i.e. blank or just test request) • Cut • Chronic wounds/pressure sore/ulcers – These chronic lesions are inevitably colonised with bacteria, so the positive predictive value of the culture result is low. These samples will only be accepted if accompanied by specific clinical details suggesting infection (e.g. cellulitis, increasing erythema, rapid increase in size, increased pain, fever). • Peri-anal and groin wounds These are also low yield due to high contamination rate with enteric flora. These samples will only be accepted if accompanied by specific clinical details suggestive of infection.

"?infection"/"infection" or similar will be accepted for testing. However, this is essentially a clinical diagnosis as opposed to relevant clinical details and we strongly discourage this practice. A positive microbiological culture report does not indicate infection in the absence of clinical signs as growth will likely represent the patient's own colonising flora.

The patient's specific symptoms should be stated as detailed above. This helps the laboratory decide what organisms to report and which antibiotics are tested and reported back to the requestor.

Sputum Samples

Bacterial culture of sputum samples suffers from both poor sensitivity and specificity, leading to sub-optimal antimicrobial stewardship.

Acceptable	Not acceptable
• Infective exacerbation of COPD (recommended only if failing empiric therapy or resistant organism suspected) • Exacerbation of bronchiectasis • Bronchiectasis monitoring (no more than every 6 months) • Immunocompromised patient • Failure to respond to initial antibiotic therapy • Pneumonia (guidelines suggest moderate to severe cases only) • LRTI • Haemoptysis • Specialist request • CXR changes • Increasing SOB/dyspnoea	• No clinical details • Sputum • Screening • Monitoring

Faeces Samples

Infective Gastroenteritis testing

Acceptable	Not acceptable
• Food handler • Childcare attendance • Rural (including camping trips, farm visits, untreated water supply) • Raw seafood • Overseas travel (specify countries visited) • Recent antibiotics or chemotherapy • Bloody diarrhoea • Immunocompromised (includes pregnancy) • Persistent diarrhoea (>1 week) • Public Health request in outbreak situation	• No clinical details

We use PCR for identification of common bacterial and parasitic (Giarida and Cryptosporidium) causes of community gastroenteritis. Clinical details are important to indicate when specific culture plates should be added to the routine testing as well as the clinical follow up by the Microbiology clinical team.

Vaginal Swabs

Acceptable	Not acceptable
Symptoms • Discharge • Itch • Genital irritation/Vaginal soreness • Lower abdominal/pelvic pain **Diagnoses/Clinical Scenarios** • Post-partum • Miscarriage/RPOC • TOP • Post TOP • Post-operative, post colposcopy • Cancer of genital tract • Sexual abuse/assault • Bacterial vaginosis (BV) • Thrush/Yeast • PROM/SROM • Irregular bleeding • Endometritis • PID/?PID	• No clinical details • Review • Monitoring • Only the swab site

Health and Safety of Staff in the Laboratory

There is a risk to staff associated with the omission of particular clinical details, such as suspicion of high-risk pathogens, foreign travel and high-risk occupational information. This risk has been picked up by Health and Safety Executive (HSE) as a trend back in 2011 and they produced this safety bulletin in response to that trend and risk to laboratory staff. See link below.

https://www.hse.gov.uk/safetybulletins/clinicalinformation.htm