Hereford Hospitals
NHS Trust

Universal Meticillin Resistant Staphylococcus Aureus (MRSA) Screening Protocol
IC.08

IF THIS DOCUMENT HAS BEEN PRINTED, IT SHOULD NOT BE ASSUMED TO BE THE LATEST VERSION.

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Policy Author (Job Title):	Consultant Microbiologist	
Document Description:	This policy has been developed to protect patients, staff and the public against the risks of acquiring healthcare associated infection.	
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	Drugs & Therapeutics	
	Health & Safety Committee	
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	Clinical Equipment Committee	
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	Joint Risk Committee	
	Facilities Meeting	
	Health Records Committee	
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	Information Governance Committee	
	Education & Training Committee	
	Decontamination Committee	
Date Approved by Policy Sub Group:	18th November 2010	
Date Operational:	18th November 2010	
Review Date:	November 2013	
Monitoring	This policy will be monitored by the Infection Prevention and Control Team. Regular compliance figures (admissions/number screened) will be fed back to the relevant areas and will be reported at the Infection Prevention and Control Committee and Patient Safety Group.	

1. Policy Statement

This policy has been developed to protect patients, staff and the public against the risks of acquiring healthcare associated infection. All staff must follow the MRSA screening procedures below.

This policy needs to be read in conjunction with the MRSA management and prevention policy and the Infection free elective orthopaedic ward policy.

2. Introduction

Early identification of MRSA colonized patients is key to successful prevention of transmission to other patients. The risk of transmission from an unknown MRSA carrier is recognised to be 12 times higher than from a known carrier, due to the effect known infection has on the practices of staff.

Early identification of MRSA carriers allows prompt isolation and institution of infection control precautions. It also guides antibiotic treatment decisions and in surgical patients, offers the opportunity to reduce MRSA load using decolonization and to target antibiotic prophylaxis.

All elective admissions including the 18 week day cases **must** be screened for MRSA. Patients must be screened, decolonized and treated within 12 weeks. All emergency admissions **must** be screened for MRSA.

The following patient groups should not be routinely screened:-

- Medical day cases who are not having an indwelling device inserted.
- Ophthalmology patients
- Patients undergoing TOPS/ERPCS
- Patients for radiological procedures including angiography/ESWL
- Patients for dental procedures including orthodontics
- Patients for endoscopy including arthroscopy
- Dermatology patients having minor procedures
- Patients for carpal tunnel syndrome repair
- Patients for trial without catheter
- Patients for joint infections
- Patients for prostatic biopsy
- Children
- Maternity/obstetrics except for elective caesarians and any high risk cases e.e. high risk of complications in the mother and/or potential complications in the baby, (e,g. likely to need SCBU, NICU because of size or known complications or risk factors) and

mothers who have a previous history of iv drug use or are health care workers.

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3. Elective MRSA Screening

Surgical and medical elective admissions including day cases must be screened in outpatients for both medicine and surgery. The doctor seeing the patient and placing the patient on the list for elective admission must inform the outpatient nurse so that screening can be undertaken. If surgical patients are listed in tertiary clinics, the MRSA screening must be undertaken in pre-op assessment. If medical patients are listed in tertiary clinics, the MRSA screening must be done on the admitting ward.

The following specimens should be taken for MRSA screening for inpatient electives – nose and groin/perineum and indwelling devices, CSU, wounds.

Daycase procedures – nose and indwelling devices, CSU, wounds.

Regular attendees – nose/perineum and indwelling devices, CSU, wounds.

A&E – nose and groin/perineum and indwelling devices, CSU and wounds.

Where used all swabs should be inoculated into rapid MRSA broth.

Outpatient procedure

1. High risk patients – orthopaedic implant procedures – see algorithm 1

2. Low risk patients – all surgical/medical patients other than patients having orthopaedic implants – see algorithm 2.

3. **Accident and Emergency procedure**

   a. All patients who will be admitted should be swabbed as part of the preparations for transfer to the ward.

   b. The patient should be asked for verbal consent and should be given a patient information leaflet (12)

   c. The patient should be swabbed according to the protocol (13). Rapid MRSA broth should be stored at 4^0C in the refrigerator.

   d. The Casualty card and photocopy should be stamped with the MRSA stamper in the upper corner to indicate that MRSA swabs have been taken.

4. **Outpatient Procedure**

a. All patients who will be admitted for surgery/medical intervention should be screened.

b. The patient should be asked for verbal consent and should be given a patient information leaflet (12).

c. The patient should be swabbed according to the protocol (13). Rapid MRSA broth should be stored at 4^0C in the refrigerator.

d. The MRSA screen must be documented on the upper right hand side of the patient's front admission sheet using the red MRSA screen stamp. The date of the screen must be documented within the stamp information.

e. Positive results will be telephoned to the pre-assessment unit or Medical Daycase, the consultant secretary and the GP.

f. Management of positive patients should follow the relevant algorithm (15,16,17).

g. If the patient is MRSA negative, the patient should not be informed but should be admitted as planned. A copy of the swab results should be placed in the patient's notes.

5. **Maternity**

If a pregnant women is booked for an elective section, she should be MRSA screened (nose and perineum/groin and any lesions) at 36/40. If positive she should be issued with a decolonization pack to be used in the 5 days prior to the booked section date. If a pregnancy is identified as high risk i.e. baby likely to require SCBU, maternal risk factors, then the mother should be screened at this point and two cycles of decolonization therapy should be given. If still positive then discuss management with infection control. All MRSA positive mothers irrespective of success of decolonization treatment should be placed in a single side room and managed according to the MRSA policy.

6. **Microbiology**

a. Microbiology will process the specimens according to the Universal MRSA Screening Standard Operating Procedure.

b. All broths received will be incubated for 24 hours unless they have already undergone a colour change.

c. Negative results will be available on APEX as soon as processing is complete (24 hours) and will be returned to the relevant ward or to the relevant consultant secretary.

d. The universal MRSA screening medical laboratory assistant will telephone MRSA positive results to the relevant ward or to the pre-assessment unit, to the Consultants Secretary and for information to the GP.

7. Ward Procedure

a. If a patient has not been screened prior to admission from A&E or is a direct admission from clinic or the community, the patient should have routine MRSA screening swabs taken using the usual bacteriology method. Swabs should be taken from nose and perineum/groin, lesions etc and sent in the normal way. If the A&E screen is incomplete e.g. wound not swabbed, a full screen must be undertaken on the ward.

b. On the admitting ward, the record of the MRSA screen should be transferred to the upper right hand side of the patient's front admission sheet using the red MRSA screen stamp. This method of recording the screen should also be used if the screen has been undertaken on the ward/clinical area. Clinical staff must ensure that the date of the screen is documented within the stamp information.

c. Positive patients should be isolated as per MRSA policy.

d. It is not necessary for the MRSA status of patients to be known pre-discharge. Waiting for results of MRSA screens should not delay discharge. Where patients are found to be MRSA positive on admission screening after discharge, the Infection Control Team will inform the patient's GP.

8. Transfers from other hospitals

On accepting a transfer, determine whether or not the patient has had a previous MRSA screen. The patient should be transferred irrespective of whether or not they have had a screen. Transfer should not be delayed by awaiting screening or screening results. The patient should be screened on arrival. If available the patient should be placed in a single room pending MRSA results but priority should be given for side room isolation to patients where there is a known infection control indication for isolation e.g. diarrhoea, known MRSA. The lack of an available side room should not delay transfer. The two exceptions to this are admissions to the infection-free elective orthopaedic ward and when patients are transferred from hospitals abroad where they should always be placed in a side room.

9. Rescreening of long term inpatients

Patients who are inpatients in HHT or community hospitals must be rescreened every month (every 30 days) following the admission screen, for the duration of their stay. A full MRSA screen must be performed including nose, groin, wounds and CSU.

10. Monitoring

This policy will be monitored by the Infection Prevention and Control Team. Regular compliance figures (admissions/number screened) will be fed back to the relevant areas and will be reported at the Infection Prevention and Control Committee and Patient Safety Group.

	Result Positive or Negative	Date Treatment started	Day 1 Tick Box	Day 2 Tick Box	Day 3 Tick Box	Day 4 Tick Box	Day 5 Tick Box	Day6 Tick Box	Day 7 Tick Box	Day 8 Re Screening
Date of 1st Screen								No Treatment Required	No Treatment Required	
Date of 2nd Screen								No Treatment Required	No Treatment Required	
Date of 3rd Screen								No Treatment Required	No Treatment Required	

How you can help?

When you are in hospital you can help reduce the possibility of infection by taking some simple precautions.

- Keep you hands and body clean. Always wash your hands or use hand wipes after using the toilet or commode.
- Only take into hospital essential items to avoid clutter around your bed space which will prevent staff from being able to thoroughly clean that area.
- Encourage your visitors to wash their hands and use the hand gel provided at the entrance to the ward, and on exiting.
- Make sure you wash hands before touching wound dressings, or any tubes or drips entering your body.

Infection Prevention and Control Team
Hereford Hospital NHS Trust
Union Walk
Hereford
HR1 2ER

01432 355444
Ext 5133

Hereford Hospitals NHS

NHS Trust

MRSA Screening Leaflet

Information for Patients

Undergoing Orthopaedic Implant Surgery

Infection Prevention and Control

Hereford Hospital NHS Trust takes MRSA and all healthcare associated infections extremely seriously. We are committed to reducing infection rates within our hospital and providing quality care for our patients.

What is MRSA?

MRSA is short for **M**eticillin **R**esistant **S**taphylococcus **A**ureus. It is a type of bacteria that has become resistant to a lot of antibiotics. In healthy people this bacteria is not harmful, but it is a problem in hospitals where people are recovering from operations or illnesses and are more vulnerable to infections.

How MRSA spreads

MRSA is mainly spread on hands, so hand washing is the most important way to stop it spreading. It can also be spread by contaminated equipment or the environment.

Why do we screen for MRSA?

There are many people in the community that have MRSA without showing any symptoms. MRSA is only detected by a laboratory test. By screening in Pre-Clerking Clinics and in Accident & Emergency, we can find out who is an unknown carrier and provide treatment either prior to admission or within 48hours of admission. As part of the pre-operative assessment patients are screened routinely for MRSA. This helps to prevent the spread of the infection and lower the risk of complications after surgery.

The Screening Process

The nurse in Pre-Clerking Clinic or Accident & Emergency will take two swabs, one from your nose and one from your groin area. This involves taking a cotton bud swab placing it in and around the inside of your nose, and the same again with the second swab in your groin area. The process will only take a few seconds and is not painful but may feel a little uncomfortable. The swabs are then sent to the hospital laboratory for testing.

What happens next?

The swabs take 2 to 3 days before the results are known. If your swab result is **negative** that means that MRSA was not detected. This means that you will be able to proceed with your admission as planned. If you are already in hospital you will not need any treatment.

If your swab results are **positive** then you will need to be treated, either prior to admission or during your stay. This will not necessarily postpone your admission , however your doctor will talk to you about the treatment required and any possible increased risks.

If your swabs were taken in the Pre -Clerking Clinic, the clinic staff will contact you regarding your treatment if you are found to be positive for MRSA. If you are known to have a history of MRSA you may be given special antibiotics while you are in theatre but this will be assessed by your doctor and is dependant on the type of operation you are having.

The treatment consists of an antiseptic body/hair wash and an ointment that needs to be applied up your nose, for 5 days.

Patients having hip and knee replacement surgery only will have follow up swabs.

If you are found to be positive for MRSA before or during your admission you may be required where possible to stay in a single side room, to reduce the spread of the infection to other vulnerable patients.

If you are admitted via Accident & Emergency or as a planned admission and have a wound, this will not be swabbed in A&E but will need to be swabbed within 48hours of admission. Please feel free to remind staff when you are admitted to the ward.

During your stay if you are found to be MRSA positive you will be visited by a member of the Infection Prevention and Control team who will be more than happy to answer any questions that you may have.

How can MRSA affect you?

MRSA can cause colonisation or infections.

Colonisation

Most people who have MRSA are colonised. This means that the MRSA is present in the nose or groin area but doing no harm to the person. People who are colonised will have no symptoms of infection and will feel fine. It is not generally necessary to treat MRSA colonisation, however if you are coming into hospital for surgery it may be necessary to treat you with the ointment and the antiseptic washes.

Infection

When MRSA causes infection this means that the bacteria is causing the person to be ill. It can cause a mild infection and the symptoms include redness and inflammation at a wound site. It can cause a more serious infection, such as Septicaemia which is an infection in the blood. If a patient has an infection caused by MRSA then antibiotics, other than flucloxacillin need to be used to fight the infection. These antibiotics may need to be given by an injection or drip into a vein.

How you can help?

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- Keep you hands and body clean. Always wash your hands or use hand wipes after using the toilet or commode.
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The treatment consists of an antiseptic body/hair wash and an ointment that needs to be applied up your nose, for 5 days.

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Hereford Hospitals NHS
NHS Trust

Protocol for MRSA screening using selective MRSA broth

All adult patients to be admitted must be screened for MRSA.
Please note this procedure is for screening NOSE and groin or perineum.

Routine Wound Swabs and Urine Samples must have full MC & S requested and send to the Microbiology Department in the usual way. If the patient has an indwelling device or wounds then these should be swabbed and swirled in the broth too. A CSU should also be sent if appropriate.

Protocol

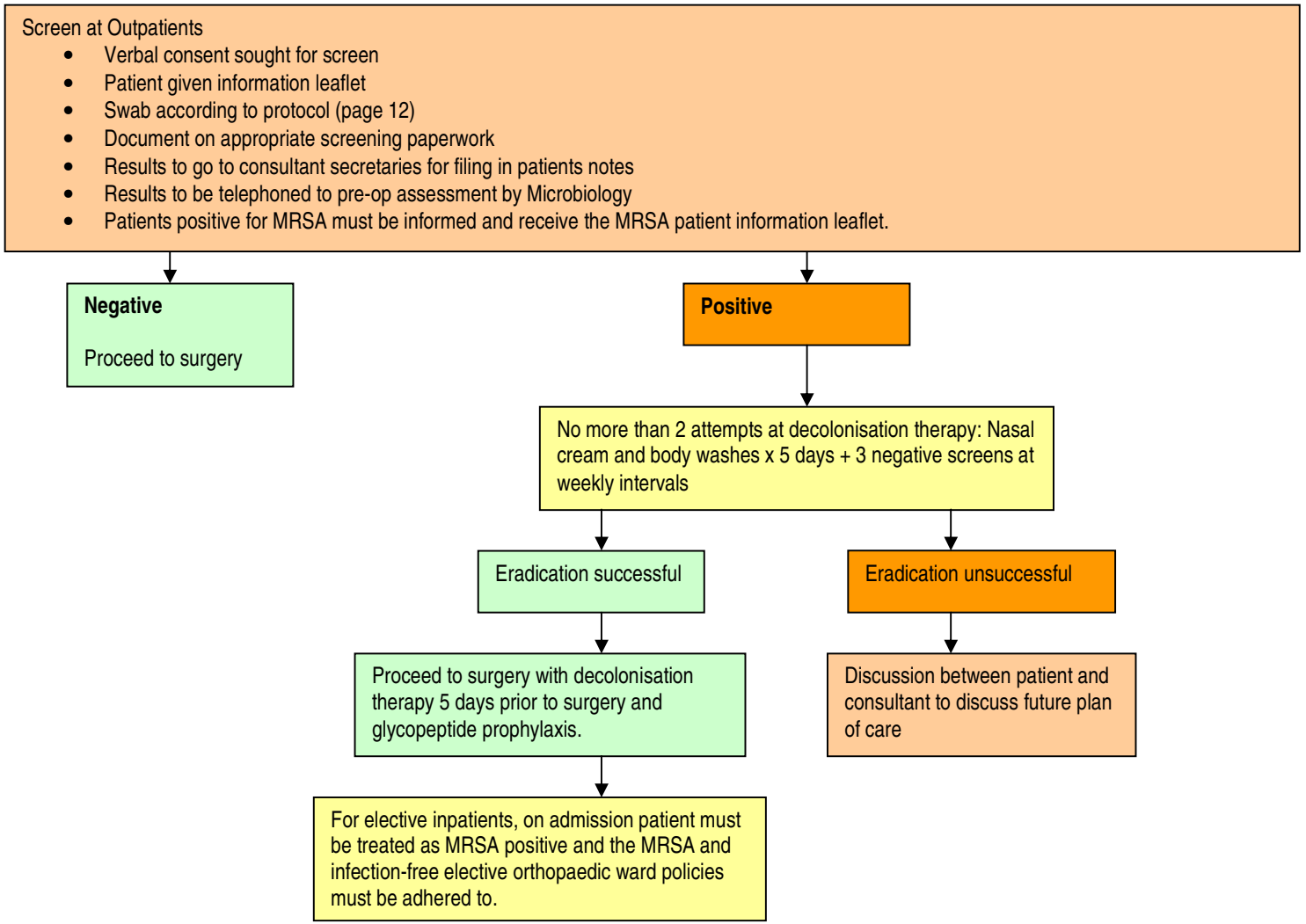
1. **Decontaminate hands by washing or using alcohol hand gel.**
2. **Swab patient's nose (one swab to both nostrils) and swirl swab in broth for at least 5 seconds. Discard swab with clinical waste.**
3. **Follow above procedure for the groin or perineum swab.**
4. **All swabs are to be inoculated into the same pot of broth. i.e. one pot of broth per patient.**
5. **Complete microbiology request form with patient label and tick details and label MRSA broth with patient label ensuring the batch number is not covered on the bottle and place into specimen bag. These will need to be batched together for daily collection.**
6. **A Portering collection for the broths will occur at 4 pm to take the specimens to the laboratory.**
7. **After this time continue to batch the broths then place in the incubator at 3am. After 3 am continue to batch the broths until the 4pm collection.**
8. **All other specimens that have not been collected in this way need to be sent to Microbiology as an ordinary specimen.**

Broth Storage

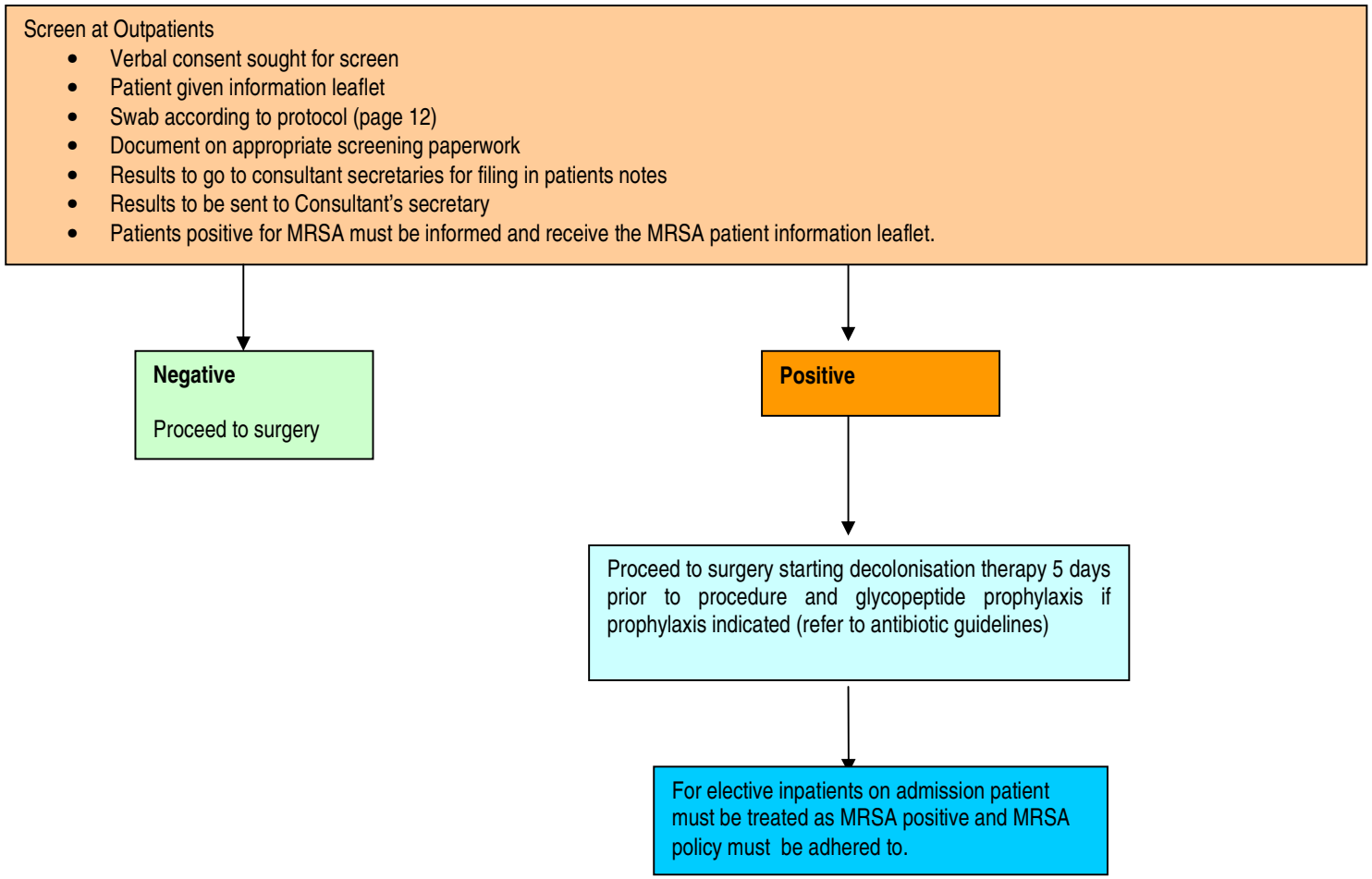
1. **Broth can be stored for 1 week at room temperature and must be discarded after a week, on a daily basis a member of the Microbiology staff will be visiting to check on stocks.**
2. **Otherwise broths must be stored in a refrigerator between 2 degrees and 8 degrees centigrade, during which time the broth is stable for up to the labelled expiry date.**
3. **Only use broth that is red in colour any yellow broths must be discarded as clinical waste**

For any queries regarding the above please contact Nigel Clarke, Laboratory Manager, Microbiology dept. Ext: 5717

Algorithm for High Risk Elective Admissions (Implant Surgery)



Algorithm for Low Risk Elective Admissions



Algorithm for Regular Attenders
(e.g. Chemotherapy and haematology)