



SOP Number      **OCMR\_004**  
 SOP Title        **Minimum Attendance Policy**

	NAME	TITLE	SIGNATURE	DATE
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## 1. PURPOSE

This SOP details the minimum number of personnel who should be present and in what circumstances (minimum attendance) when scanning different categories of subjects both within and outside core OCMR hours.

## 2. SCOPE

This SOP applies to all OCMR staff and collaborators who undertake scanning within OCMR, whether for clinical or research purposes. The OCMR staff committee reserve the right to terminate any project which is found to be in breach of this SOP.

## 3. INTRODUCTION

There are many different kinds of Magnetic Resonance (MR) scans undertaken at OCMR. These can involve different groups of participants / patients, the use of medication and the use of a variety of different equipment. To ensure that participants in all studies are scanned safely, scans are classified into four types which broadly correspond to an increasing level of safety concern. This SOP describes these categories, defines when scans of each category can be conducted and the requirements for attending staff for each category of scan.

## 4. DEFINITIONS

### 4.1 Healthy adult

A healthy adult is a person over the age of 18 with no known pre-existing medical conditions and does not fit the definition of vulnerable adult detailed below.

### 4.2 Vulnerable adult

A vulnerable adult is someone aged 18 or over;

- Who is, or may be in need of, community services due to age, illness or a mental or physical disability.
- Who is, or may be unable to take care of himself / herself, or unable to protect himself / herself against significant harm or exploitation.

### 4.3 Child

Anyone under the age of 18

## 4.4 Scan Types

<b>Category 0</b>	Phantom scanning only
<b>Category 1</b>	Technical development or simple scanning with no task fMRI or other experimental manipulation, on healthy adult participants.
<b>Category 1A</b> <i>A clinical event is not expected and the participant population does not require special care.</i>	Task fMRI or other additional experimental manipulation on healthy adult participants.
<b>Category 2</b> <i>There is an increased risk of clinical event or the participant population requires special care</i>	Patients or participants with a pre-existing condition (e.g. angina)
	Projects involving any of the following:  Administration of IV drugs that do not affect haemodynamics (e.g. gadolinium contrast agent)  Low risk interventions or use of low risk accessory equipment (e.g. power injector or tDCS)  Additional physiological monitoring or treatment (e.g. pulse oximeter, BP monitoring)  Vulnerable subjects (e.g. children, the elderly, those with reduced mobility or those defined as vulnerable adults)
<b>Category 3</b>	High risk participant / patient scanning. This category includes any person who is haemodynamically unstable, acutely unwell or requires medical intervention (e.g. anaesthesia or sedation). This also includes studies which use drugs that have a significant haemodynamic or metabolic effect (e.g. adenosine or dobutamine)

## 4.5 Operators

<b>Physics / Phantom operator</b>	Operators only engaged in phantom scanning. Need to undergo the scanner operator training programme and have been trained to position phantoms. Their annual magnet safety training must also be kept up to date.
<b>Trained Operator</b>	An operator who has completed their operator training, including current emergency evacuation training and current Basic Life Support (BLS) training. This category includes those who are qualified to operate the magnet only for specific named projects as well as general operators.
<b>Expert Operator</b>	An operator who has significant experience in scanning subjects, is competent to deal with an emergency situation and has yearly updating of Basic Life Support and Automated External Defibrillator training (BLS + AED). Qualification as an expert operator will be determined by senior OCMR staff.
<b>Radiographer</b>	An MR trained radiographer who has up to date Immediate Life Support (ILS) + AED or manual defibrillator training.

## 4.6 Researchers

<b>Researcher</b>	A trained researcher who is competent to run their experiment. This does not include short term undergraduate or MSc project students. Senior OCMR staff will give clarification in the event of doubt. All researchers must have up to date magnet safety training.
<b>Specifically Trained Researcher</b>	An experienced researcher who has specific training (medical or otherwise) in the intervention being used, or in dealing with participants / patients from that population group, as stated in the relevant ethics application. Magnet safety training and emergency evacuation training must be current.
<b>Medical Doctor</b>	A currently practising medical doctor with an appropriate honorary or substantive clinical contract with the Oxford University Hospitals (OUH) NHS Foundation Trust.
<b>Research Study Nurse</b>	A qualified clinical nurse who is employed to assist with clinical care of participants and patients in a specific study.

**4.7 Scanning time periods**

<b>Working Hours</b>	08:00 – 18:00 Monday to Friday
<b>Extended Hours</b>	06:00 – 08:00 Monday to Friday 18:00 – 21:00 Monday to Friday 06:00 – 21:00 Saturday and Sunday UK National Holidays
<b>Scanning Prohibited</b>	21:00 – 06:00

**5. RESPONSIBILITIES**

All projects will be reviewed by senior OCMR staff prior to being authorised. Researchers will be invited to attend the project steering committee (PSC) before their project is authorised; this is an opportunity to ensure that all relevant documentation is in place and that all safety concerns are addressed prior to a project starting. Each project will be assigned an appropriate category.

Requests to set up new neuro projects should be referred in the first instance to the head of imaging applications, along with appropriate supporting documents. Again, prior to project sign off each project will be allocated to the appropriate scan category (see OCMR website for further details).

The OCMR staff committee has ultimate responsibility for the safety of subjects within OCMR. Any project wishing to scan outside of the minimum attendance regulations set out within this SOP must apply in writing to the OCMR staff committee. At the discretion of the committee exceptions to the Minimum Attendance Policy can be made. Decisions to permit such exceptions may be subject to the imposition of strict criteria which the staff committee determine are necessary in the interests of safety. These criteria must be adhered to.

**6. SPECIFIC PROCEDURE**

The minimum attendance requirements for each category of scan are set out in the table below. All scanning activities must comply with these requirements and any other stipulations that are made by the OCMR staff committee / PSC.

## 6.1 Minimum Attendance

	Hours	Minimum operator cover	Other staff required within control room	Other staff required within building*
<b>Category 0</b>	Working Hours	Physics / phantom operator		Any Additional member of staff
	Extended Hours	Physics / phantom operator	Member of staff familiar with the study**	
<b>Category 1</b>	Working Hours	Trained operator		Any additional member of staff
	Extended Hours	Trained operator	Member of staff familiar with the study**	Any additional member of staff
<b>Category 1A</b>	Working Hours	Trained operator		Any additional member of staff
	Extended Hours	Trained operator	Member of staff familiar with the study**	Any additional member of staff
<b>Category 2</b>	Working Hours	Trained operator		1) Specifically trained researcher, medical doctor or radiographer  AND 2) Member of staff familiar with the study**
	Extended Hours	Trained operator	Specifically trained researcher, medical doctor, or radiographer	Member of staff familiar with the study**
<b>Category 3</b>	Working Hours	Trained operator	Specifically trained researcher, medical doctor or radiographer	Member of staff familiar with the study**
	Extended hours	PROHIBITED – unless specifically agreed (in writing) with OCMR staff committee (see 6.2 below)		

\* This member of staff need not be within the control room but must be within earshot of the patient alarm.

\*\* A member of staff familiar with the study i.e. Researcher, Research study nurse, medical doctor, or radiographer as appropriate.

All researchers who wish to scan in extended hours must gain approval for this from senior OCMR staff as part of the project authorisation process.

## 6.2 Category 3 scans during extended hours

The minimum requirements for stress studies in extended hours are:

Absolute minimum of 3 people present who meet the below criteria

- Consultant led study (the consultant must be within the control room while the scan is in progress and within OCMR for the entire time the patient is present)
- All personnel must be evacuation trained
- At least one person must be ALS / ILS trained with the ability to run a crash call
- At least one expert operator and one trained operator present in the control room for the entire duration of the scan
- At least 3 people in the control room during stress perfusion

The OCMR staff committee reserve the right to impose additional conditions in the interests of safety. All conditions will be communicated to the requesting researcher by e-mail and must be adhered to.

## 6.3 Acute Patients during extended hours

In addition to the criteria above and any other criteria specified by the OCMR staff committee, when scanning acute patients out of hours, they must be clinically stable i.e.

- No refractory chest pain at rest
- No active heart failure with difficulty breathing at rest
- No substantial arrhythmia

## 7 CHANGE HISTORY

SOP no.	Effective Date	Significant Changes	Previous SOP no.
OCMR_004	September 2016	New Version	OCMR_006_V1