Patient Group Direction For The Administration Of Midazolam And Flumazenil Injection By Nurse Practitioners Working Within NHS Grampian To Patients Undergoing Upper/Lower GI Endoscopy And Insertion Of Central Venous Catheters

Co-ordinators:  
Endoscopy Nurse Practitioner

Consultation Group:  
See relevant page in the PGD

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Medicine Guidelines and Policies Group

Signature:  

Signature:  

Identifier:  
NHSG/PGD/flumaz_midaz/MGPG743

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A Patient Group Direction is a specific written instruction for the supply or administration of named medicines in an identified clinical situation. It is drawn up locally by Doctors, Pharmacists and other appropriate professionals, approved by the Employer and advised by the relevant professional advisory committees. In most cases, appropriate clinical care is provided on an individual basis by a specific prescriber to a specific individual patient. Patient Group Directions should only be considered where they offer a benefit to patient care without compromising patient safety in any way.

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Title: Patient Group Direction for the administration of Midazolam and Flumazenil Injection by Nurse Practitioners working within NHS Grampian to patients undergoing upper/lower GI endoscopy and insertion of venous catheters

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Author: Endoscopy Nurse Practitioner

Subject: Patient Group Direction

Key word(s): PGD patient group direction PGD midazolam flumazenil sedation central venous catheter endoscopy radiology nurse

Policy application: NHS Grampian

Purpose: This Patient Group Direction (PGD) authorises appropriately qualified and trained nurses to administer midazolam and flumazenil to individuals without the requirement for a patient specific prescription written by a medical practitioner.

Responsibilities for implementation:

Organisational: Chief Executive and Management Teams
Corporate: Senior Managers
Departmental: Heads of Service/Clinical Leads
Area: Line Managers
Hospital/Interface services: Deputy General Managers and Clinical Leads
Operational Management Unit: Unit Operational Managers

Policy statement: It is the responsibility of individual nurses and their line managers to ensure that they work within the terms laid down in this PGD and to ensure that staff are working to the most up to date PGD. By doing so, the quality of the services offered will be maintained, and the chances of staff making erroneous decisions which may affect patient, staff or visitor safety and comfort will be reduced. Supervisory staff at all levels must ensure that staff using this PGD act within their own level of competence.

Review: This policy will be reviewed at least every two years or sooner if current treatment recommendations change.
This document is also available in large print and other formats and languages, upon request. Please call NHS Grampian Corporate Communications on (01224) 551116 or (01224) 552245.

Responsible for review of this document: Endoscopy Nurse Practitioner

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1. Introduction

This patient group direction (PGD) will allow nurse practitioners to be authorised to administer midazolam and flumazenil to individuals aged 16 years and over.

Some procedures can produce a level of discomfort which patients may be unable to tolerate, and which may generate high levels of anxiety. Benzodiazepines such as midazolam are the most common choice for sedation for endoscopic and radiological procedures. Midazolam has a short half life, is an effective anxiolytic and promotes sedation, amnesia and muscle relaxation.

Midazolam will be administered to all adult patients attending for upper/lower GI endoscopy or radiological procedures, requesting sedation, if it is deemed appropriate and safe in accordance with the set guidelines of the Endoscopy Nurse Practitioner/Radiology Nurse Specialist protocols.

Flumazenil is the antagonist (reversal) agent for benzodiazepines and may be used to counteract the effects of midazolam, e.g. over sedation, respiratory depression or other adverse effects. Flumazenil must be readily available for use within the appropriate departments where midazolam is used.

N.B. Nurse administration of flumazenil is outwith the terms of the product licence but it is however accepted clinical practice where the nurse has adequate experience in resuscitation and the ability to fully evaluate and monitor the patient's respiratory status and airway.

This PGD should be used in conjunction with the recommendations in the current British National Formulary and individual Summary of Product Characteristics.

2. Clinical Decision Making

2.1. Patients who may be considered for the administration of Midazolam

Any patient attending for upper/lower GI endoscopy by the Endoscopy Nurse Practitioner or insertion of central venous catheter by the Radiology Nurse Practitioner.
Patients within the Nurse Practitioner’s patient selection protocol:

(i) Patients 18 years and over.
(ii) Patients aged 16 or 17, at the discretion of an endoscopy or radiology consultant following discussion.
(iii) Patients within American Society of Anaesthesiologists (ASA) Class 1 or 2 (Appendix 1), Class 3 at discretion of an endoscopy or radiology consultant following discussion.
(iv) Patients requiring an endoscopic or radiological procedure who wish sedation.

2.1.1. Patients who may be considered for the administration of Flumazenil

(i) Any patient who requires the effects of midazolam induced sedation to be reversed during or after upper/lower GI endoscopy or insertion of a central venous catheter.
(ii) Patients with hypoxia (Sa O₂ levels <94%).
(iii) Over sedated patients (unrousable to light touch/verbal stimulation).
(iv) Any other adverse reaction to the administration of midazolam.

2.2. Patients who may receive the administration of Midazolam or Flumazenil

All patients in 2.1 above, who do not want specifically to consult with a doctor and are willing to have treatment from the nurse practitioner.

Administration will not take place unless there is a named medical endoscopist/radiology supervisor who is in the department or readily available to provide clinical support, as per the Nurse Practitioner Protocols.

2.3. Contraindications

Patients may be administered midazolam under this PGD (and be eligible for the administration of the reversal agent flumazenil) unless they:

(i) have had a previous adverse reaction/hypersensitivity to IV midazolam or flumazenil or any of the excipients.
(ii) have respiratory depression, acute pulmonary insufficiency, sleep apnoea syndrome, severe renal hepatic impairment or severe cardiac disease.
(iii) have contraindications to receiving flumazenil as a reversal agent, i.e. known hypersensitivity to flumazenil, pregnancy/breastfeeding.
(iv) are patients with life threatening conditions, i.e. raised intracranial pressure, status epilepticus.
(v) are patients on long term benzodiazepines or zopiclone (may precipitate withdrawal symptoms), prolonged benzodiazepine therapy for epilepsy (risk of convulsions).
(vi) have a history of recent or ongoing alcohol or drug abuse.
(vii) have a history of epilepsy.
(viii) have a history of panic disorders (risk of recurrence).
(ix) are in an ASA classification outwith Nurse Practitioner selection criteria.
(x) do not wish sedation for their procedure.
2.4. Precautions

Patients with the following conditions require caution with administration of IV midazolam, i.e. reduced dose, administration deferred, or seek medical advice.

Respiratory disease, COPD, asthma, muscle weakness, past history of drug or alcohol abuse, marked personality disorder, hepatic impairment.

(i) Practitioners will verbally check patient’s allergies and extent of any adverse reactions with previous usage of both midazolam and flumazenil prior to the administration of midazolam.
(ii) Patients will be assessed by a practitioner named within this patient group direction.
(iii) Practitioners must make use of the patient’s medical history (from notes or by talking to the patient) for information relevant to the decision making process.
(iv) Practitioners must be aware of interactions with other drugs, foods, herbal remedies or disease states, e.g. ACE inhibitors and Alpha blockers – produce enhanced hypotensive effect; opioid analgesics and antipsychotics increase sedative effects.
(v) Practitioners must seek information from current BNF, SPC, ask a pharmacist, or seek medical advice.
(vi) If the patient’s fitness and suitability cannot be established, administration should be deferred.
(vii) If in doubt – consult named medical contact.

Where the practitioner requires advice on the suitability of treatment, management of problems or feels the patient’s management is outside their sphere of competence, support is available from a consultant trained in endoscopy/radiological procedures (as per nurse practitioner’s protocols).

2.5. Action to be taken when a patient is excluded from treatment under this PGD

If a patient is excluded from treatment under this PGD, medical advice should be sought – refer to a doctor. The procedure may need to be re-scheduled on to a medical endoscopist/radiologist list or the procedure completed under direct consultant supervision.

2.6. Action to be taken when a patient does not wish the treatment to be received under this PGD

The patient retains the right to choose not to have sedation or change their mind at any time up to the point of administration of IV midazolam. If the patient wishes to undergo the procedure without sedation, this will be documented, and the procedure can be performed if deemed appropriate.
3. Description Of Treatment Available Under This Direction

3.1. Midazolam Injection 5mg/5mL

Midazolam injection is presented as ampoules containing midazolam 5mg in 5mL solution for injection. Check the manufacturer’s packaging/leaflet for a list of excipients in the product.

Store securely locked in a cupboard according to local guidance for the storage of Schedule 3 Controlled Drugs.

Midazolam is a Prescription-only Medicine (PoM) and a Schedule 3 Controlled Drug.

3.1.1. Dose, route and frequency

Dose:

Initial Dose 2mg midazolam over 1 minute, (elderly >60 years, debilitated or chronically ill – 0.5-1mg). If sedation not adequate after 2 minutes, then incremental doses of 0.5 - 1mg may be given until a safe level of conscious sedation is achieved. Maximum total dose 5mg. The dose is titrated against the response of the patient.

Usual range 2.5-7.5mg. Maximum dose for this PGD: 5mg. Elderly >60 years, debilitated or chronically ill, maximum dose: 2.5mg.

Route:

Slow intravenous injection (titration) via a flexible intravenous cannula.

Frequency:

One or more intravenous injections over the procedure. Increments of 0.5-1mg may be given if necessary until a safe level of conscious sedation is achieved.

Most endoscopic/radiological practices recommend that 5mg of midazolam should be a sufficient dose and that elderly patients are initially given 1-2mg. It is recommended by the American Society of Anaesthesiologist (1996) that any intravenous sedation/analgesic drugs should be given in small titrated doses to ensure the desired effect of conscious sedation is achieved. Assessment of the patient’s sedation levels will be achieved by applying a sedation score tool, e.g. Ramsey Conscious Sedation Scale (Appendix 2). Oxygen will be given to all sedated patients via nasal cannula at a rate of 2 litres per minute, during the procedure and until fully recovered. Pulse oximetry monitoring to record pulse and oxygen saturation levels and non-invasive blood pressure will be recorded pre-administration of midazolam, during the procedure and post procedure until fully recovered. ECG monitoring will be available for use if required.
3.2. Flumazenil Injection 500 micrograms in 5mL

Each 5mL ampoule contains 500 micrograms of flumazenil (100 micrograms per mL) in a clear, almost colourless, sterile aqueous solution. Excipients in the formulation include disodium edetate, glacial acetic acid, sodium chloride, sodium hydroxide and water for injections. This product contains 3.7mg of sodium per millilitre (18.5 mg per 5 mL vial).

Do not store above 25°C.

Flumazenil is a Prescription-only Medicine (PoM).

3.2.1. Dose, route and frequency

Dose:

200 micrograms initially administered by intravenous injection over 15 seconds. If the desired level of consciousness is not obtained within 60 seconds a further dose of 100 micrograms can be injected and repeated at 60-second intervals where necessary, up to a maximum total dose of 500 micrograms over 5 minutes.

Route:

Slow intravenous injection.

Frequency:

If a total dose of more than 500 micrograms is required, contact the supervising consultant for clinical support.

3.3. Concurrent medication

Midazolam interacts with a wide range of other medicines. The practitioner will refer to the Summary of Products Characteristics (SPC) and the current British National Formulary to establish potential interactions between midazolam and other medicines.

Administration of midazolam under this PGD is contraindicated in patients taking benzodiazepines (and zopiclone) because of the potential need for flumazenil as a reversing agent. Flumazenil blocks the central effects of benzodiazepines by competitive interaction at the receptor level; the effects of non-benzodiazepines acting via the benzodiazepine receptor, such as zopiclone, are also blocked by flumazenil. Withdrawal symptoms may be precipitated.

If in doubt about drug compatibility those administering under this PGD will consult a pharmacist, the Grampian Medicines Information Centre, and/or endoscopy/radiology trained consultant.
3.4. **Adverse effects**

Risks involved with large doses of **midazolam** are respiratory depression, hypoxemia, decreased cardiac output and systemic arterial pressure.

Also:

(i) Respiratory arrest
(ii) Confusion/ataxia (especially elderly)
(iii) Amnesia
(iv) Paradoxical increase in aggression/agitation
(v) Muscle weakness
(vi) Anaphylactic reaction.

Resuscitation equipment must be available within the relevant departments, including basic intubation and manual ventilation in order to ensure airway management.

**Occasional side effects:**

Headache, vertigo, hypotension.

**If flumazenil is given too rapidly agitation, anxiety and fear may occur.**

Other side effects of flumazenil include:

(i) Nausea, vomiting, flushing.
(ii) Increased blood pressure, heart rate.
(iii) Excessive doses may cause anxiety, tachycardia, dizziness, sweating.

These effects usually subside rapidly without the need for any specific treatment. If any of the above or any other side effects occur, refer to a medical practitioner and document in patient’s notes.

Careful monitoring of patient is required until the effects of midazolam have subsided owing to the shorter half life of flumazenil and subsequent risk of re-sedation.

**The patient should remain under supervision for at least one hour from time of injection.**

If any complications arise during or after the procedure then the opinion of a consultant trained in the appropriate area (i.e. endoscopy/radiology) should be sought.

All adverse incidents will be documented in nurse care plan and endoscopy/radiology report. Adverse incidents will also be reported back to clinical supervisor.

**Arrangements for referral for medical advice**

If any complications arise during or after the procedure then the opinion of a consultant trained in endoscopy/radiology should be sought immediately. All adverse incidents will
be documented in nurse care plan and endoscopy/radiology report. Datix reports will be completed and forwarded to appropriate manager. Adverse incidents will also be reported to consultant supervisor.

Medical advice in cases of anaphylaxis

Injections of IM adrenaline/epinephrine 1:1000 must be available to treat an anaphylactic reaction should this occur. Medical advice must be sought as soon as possible from a doctor if any patient develops any signs of hypersensitivity. If there is a delay in medical support arriving and the condition of the patient is deteriorating then an emergency ambulance must be called on 999 or direct via ambulance control or dial 2222 (hospital internal) according to local procedure, or seek urgent medical advice. (Refer to Patient Group Direction for the administration of adrenaline (epinephrine) in cases of suspected anaphylactic reactions by qualified health professionals).

Treatment of midazolam overdose

(i) Administration of IV flumazenil.
(ii) The incident must be documented in the nursing care plan and endoscopy/radiology report.
(iii) Close observation/monitoring in event of re-sedation or further complications occurring.
(iv) In an event where IV flumazenil is being administered, clinical support from a consultant trained in endoscopy/radiology should be sought.
(v) If a cardio/respiratory arrest should occur the appropriate actions should be taken in accordance with NHS Grampian Policy.
(vi) Completion of an incidence/occurrence report (Datix) should be undertaken and forwarded to appropriate manager.

Treatment of flumazenil overdose

There is no specific antidote for overdose with flumazenil. Treatment of an overdose with flumazenil should consist of general supportive measures including monitoring of vital signs and observation of the clinical status of the patient.

3.5. Advice to patient

(i) Advice should be given on what to expect and what to do for major and minor reactions.

(ii) The patient information leaflet contained in the medicine(s) should be made accessible to the patient/parent/guardian or person with parental responsibility. Where this is unavailable, or unsuitable, sufficient information should be given to the patient/parent/guardian or person with parental responsibility in a language that they can understand.

(iii) Patients are advised to be collected by a responsible adult and have someone stay with them for 24 hours. Patients will be given information discharge leaflets with advice and contact details.
(iv) Avoid driving, operating machinery, signing legal documents for 24 hours.

(v) Avoid alcohol for 24 hours after administration of midazolam.

(vi) If any side effects occur, contact GP, endoscopy department/radiology department or nearest accident and emergency department.

3.6. Follow up treatment

Patients should not leave if they are feeling at all unwell without speaking to the nurse first. If necessary a doctor or the patient’s GP should be contacted for advice.

If a cardio/respiratory arrest should occur the appropriate actions should be taken in accordance with local policy. Completion of a DATIX form must be forwarded to the appropriate manager.
Part B

4. Designated Staff Authorised To Administer Under This PGD

The following staff are authorised to administer the drug specified in this PGD without an individual medical prescription providing the patient falls into one of the categories listed in 2.2 of this PGD. Staff must be employed either directly by NHS Grampian, or contracted to provide NHS services, or providing services in partnership with NHS Grampian under the direction of this authorised PGD.

(i) Endoscopy Nurse Practitioner or Radiology Nurse Practitioner, who are Registered Nurses as recognised by the NMC.

In addition the following requirements are necessary. Staff must:

(i) agree to be professionally accountable for their work (Appendix 3).

(ii) be competent to assess the patient’s capacity to understand the nature and purpose of the administration in order for the patient to give or refuse consent.

(iii) be aware of current treatment recommendations and be competent to discuss issues about the drug with the patient.

(iv) have been trained and assessed as being competent in the administration of the drug. All staff will have access to the current PGD.

(v) Have completed the Glasgow Caledonian University “Endoscopy Skills and Knowledge for Nurses/Vascular Access course incorporating Sedation Module or equivalent. All staff will have access to the current PGD.

(vi) have undertaken an NHS e-anaphylaxis training session which covers all aspects of the identification and management of anaphylaxis. This can be accessed via eKSF or the AT Learning® tool.

(vii) be competent in basic life support which is required to be updated annually.

(viii) hold a current Immediate or Advanced Life Support certificate and attend regular updates.

(ix) hold a current IV Drug Administration certificate.

(x) hold a current IV cannulation certificate.

(xi) have immediate access to the appropriate equipment and drugs to treat anaphylaxis and have access to the current PGD for the management and treatment of anaphylaxis should this occur.

(xii) maintain their skills, knowledge and their own professional level of competence in this area according to their individual Code of Professional Conduct.
agree to work within the terms of the NHS Grampian PGD.

Professional Managers/Nurse Managers/Lead Nurses will be responsible for:

(i) Ensuring that the current PGD is available to staff providing care under this direction.

(ii) Ensuring that the staff have access to all relevant Scottish Government Health Directorate advice, including any relevant CMO letter(s).

(iii) Ensuring that staff have received adequate training in all areas relevant to this PGD and meet the requirements above.

(iv) Maintaining a current record of all staff authorised to administer the drug specified in this PGD.

5. **Documentation**

5.1. **Authorisation of administration**

Registered nurses/nurse practitioners working within NHS Grampian can be authorised to administer the drug specified in this PGD by their nurse manager / supervising Consultant.

A certificate of authorisation ([Appendix 4](#)) signed by the authorising doctor/manager should be supplied. This should be held in the individual nurses’ records or as agreed locally.

5.2. **Record of administration**

An electronic or paper record for recording the screening of patients and the subsequent administration of the drug specified in this PGD must be completed in order to allow audit of practice. This should include:

(i) Name and address of patient/parent/guardian or person with parental responsibility, patient CHI No
(ii) Date of birth
(iii) Consultant/General Practitioner details
(iv) Risk group, if appropriate
(v) Physical examination required, if appropriate
(vi) Exclusion criteria, record why drug not administered
(vii) Reason for giving
(viii) Consent to the administration (if not obtained elsewhere)
(ix) Drug manufacturer, batch number, expiry date
(x) Site where drug administered, dose and route of administration
(xi) Signature and name in capital letters of practitioner who administered the drug
(xii) Date drug given
(xiii) Record of adverse effects (advise patient’s doctor).
These records should be retained:

**For children and young people**, retain until the patient's 25th birthday or 26th if the young person was 17 at the conclusion of treatment.

**For 17 years and over** retain for 6 years after last date of entry.

Or for 3 years after death, or in accordance with local policy, where this is greater than above.

5.3. **Consent**

Prior to the administration of the drug, consent must be obtained, preferably written, either from the patient, parent, guardian or person with parental responsibility and documented either in the patient’s medical records/notes or on an administration form (see Section 5.2). Consent must be in line with current NHSG “Staff Policy for Obtaining Consent for Clinical Procedures and Healthcare Interventions”. See link below.

http://intranet.grampian.scot.nhs.uk/ccc_nhsg/15692.html?pMenuID=460&

6. **Further Points**

The manufacturers leaflet inside boxes of drug should be read and advice from them taken into consideration.

7. **Facilities And Supplies To Be Available At Sites For The Administration Of The Drug Specified In The PGD**

The following should be available at sites where the drugs are to be administered:

(i) Monitoring equipment, i.e. pulse oximetry, non-invasive blood pressure, ECG.
(ii) Pipeline or cylinder supply of oxygen.
(iii) Resuscitation equipment especially airway equipment, e.g. ambubag, guedel airways, etc.
(iv) Supplies of the drugs specified in this PGD.
(v) Access to medical support (this may be via telephone).
(vi) Safe storage areas for medicines and equipment.
(vii) Approved equipment for the disposal of used materials.
(viii) Clean and tidy work areas.
(ix) Copies of the current PGD for the drugs specified in the PGD.
(x) PGD for the administration of adrenaline (epinephrine) in cases of suspected anaphylactic reactions by qualified health professionals.

8. **Audit**

All records of administration of the drug specified in this PGD will be filed with the normal records of medicines administration in each practice/service. A designated person within each HSCP/practice/service will be responsible for auditing completion of drug forms and collation of data.
9. Management And Monitoring Of Patient Group Direction

9.1. Consultative group

Ms Brigid Aitken  Nurse Endoscopist, Dr Grays
Ms Eleanor Binnie-McLeod  Nurse Manager, ARI
Mr Mark Brown  Clinical Pharmacist
Mr Robert Cockburn  Radiology Nurse Practitioner
Mr Alistair Duncan  Clinical Pharmacist
Ms Claire Farrow  Nurse Endoscopist, ARI
Dr C Hew  Consultant Gastroenterologist, Dr Grays
Ms Sarah Kirkman  Trainee Nurse Endoscopist, ARI
Ms Dympna McAteer  Consultant Radiologist
Ms Aileen McKinley  Colorectal Surgeon
Dr P Phull  Consultant Gastroenterologist, Lead for Endoscopy
Ms Laura Sales  Trainee Nurse Endoscopist, ARI
Ms Alison Smart  Nurse Manager, Dr Grays
Dr Brian Stickie  Consultant Anaesthetist
Dr J Thomson  Consultant Gastroenterologist, Clinical Lead
Mr Steven Yule  Consultant Radiologist

9.2. Professional advisory group approving PGD

Medicine Guidelines and Policies Group

9.3. Authorising managers

Dr Nick Fluck  Medical Director, NHS Grampian

Mr David Pfleger  Director of Pharmacy and Medicines Management, NHS Grampian

Ms Amanda Croft  Nursing Director, NHS Grampian

10. References

(i)  Electronic Medicines Compendium http://www.medicines.org.uk

Midazolam 1mg/1mL Injection (Hameln Brand) - Date of revision of text July 2015, accessed 02/05/2015
(ii) Electronic Medicines Compendium [link] Flumazenil 0.1mg/mL Injection (Hameln Brand) – Date of revision of text July 2015, accessed 02/05/2015


(iv) British Society of Gastroenterology (2003) Safety and Sedation during endoscopic procedures [available online] [website URL].


Document: Drafted: January 2011
Completed: February 2011

Review date: At least every 2 years or sooner if current treatment recommendations change.
AMERICAN SOCIETY OF ANAESTHESIOLOGISTS (ASA)
CLASSIFICATION OF PHYSICAL STATUS.

Class I

The patient has no organic, physiological, biochemical or psychiatric disturbance. The pathological process for which surgery is to be performed is localised and does not entail a systemic disturbance. Examples: a fit patient with an inguinal hernia, a fibroid uterus in otherwise healthy women.

Class II

Mild to moderate systemic disturbance caused either by the condition to be treated surgically or by other path physiological processes. Examples: non or slightly limiting organic heart disease, mild diabetes, essential hypotension or anaemia. The extremes of age may be included in here, even though no discernible systemic disease is present. Extreme obesity and chronic bronchitis may be included in this category.

Class III

Severe systemic disturbances or disease from whatever cause, even though it may not be possible to define the degree of disability with finality. Examples: severely limiting organic heart disease, severe diabetes with vascular complications, moderate to severe degrees of pulmonary insufficiency, angina pectoris or healed myocardial infarction.

Class IV

Severe systemic disorders that are already life threatening, not always correctable by operation. Examples: patient with organic heart disease showing marked signs of cardiac insufficiency, persistent angina, or active myocarditis, advanced degrees of pulmonary, hepatic, renal or endocrine insufficiency.

Class V

The moribund patient who has little chance of survival but is submitted to operation in desperation. Examples: the burst abdominal aneurysm with profound shock, major cerebral trauma with rapidly increasing intracranial pressure, massive pulmonary embolus. Most of these patients require operation as a resuscitative measure with little if any anaesthesia.
Appendix 2

Ramsey Conscious Sedation Scale

Level 1: Anxious, agitated or restless.

Level 2: Cooperative, orientated, tranquil.

Level 3: Drowsy but responds to commands.

Level 4: Asleep but exhibits a brisk response to stimuli.

Level 5: Asleep and exhibits a sluggish response to a stimuli.

Level 6: Asleep with no response to stimuli.

A patient at Ramsey Level 2 or 3 is ready for a procedure. Levels 5 and 6 constitute the onset of general anaesthesia and goes beyond the desirable limits of conscious sedation.
Health Care Professional Agreement To Administer Medicines Under Patient Group Direction

I: ____________________________ (Insert name)

Working within: ____________________________ e.g. HSCP, Practice

Agree to administer medicines under the direction contained within the following Patient Group Direction

**Patient Group Direction for the administration of midazolam and flumazenil injection by nurse practitioners working within NHS Grampian to patients undergoing upper / lower GI endoscopy and insertion of central venous catheters**

I have completed the appropriate training to my professional standards enabling me to administer medicines under the above Patient Group Direction. I agree not to act beyond my professional competence nor outwith the recommendations of the Patient Group Direction.

Signed: ____________________________

Print Name: ____________________________

Date: ____________________________

Professional Registration No: ____________________________
Certificate Of Authorisation To Administer Medicines Under Patient Group Direction

This authorises: ________________________________________________

Working within: ________________________________________________ e.g. HSCP, Practice

To administer medicines under the following Patient Group Direction

**Patient Group Direction for the administration of midazolam and flumazenil by nurse practitioners working within NHS Grampian to patients undergoing upper/lower GI endoscopy and insertion of central venous catheters**

The above named person has satisfied the training requirements and is authorised to administer medicines under the above Patient Group Direction. The above named person has agreed not to act beyond their professional competence nor outwith the recommendations of the Patient Group Direction

Signed: ______________________________________________________ Authorising Manager/Doctor

Print Name: ________________________________________________

Date: ______________________________________________________