1. General

1.1 Like all medical doctors, radiologists owe a duty of care to their patients and to those working with them. Patients attending the specialist’s clinic expect the highest possible standard of service. For good medical practice, the public would also expect the radiologist to have career-long maintenance of standards.

1.2 This Guide is intended to provide some details of good medical practice for the practicing radiologists. It is not meant to be exhaustive, and will be updated by the College from time to time.

1.3 Medical doctors practicing in Hong Kong should study the booklet “Professional Code and Conduct – for the Guidance of Registered Medical Practitioners” published by the Medical Council of Hong Kong. The booklet which is distributed to all registered medical practitioners was last revised in January 2009. [http://www.mchk.org.hk/Code_of_Professional_Conduct_2009.pdf] Items in this guide extracted from the booklet are marked ‘MC’ with the number of the corresponding item to which reference should be made.

1.4 You should note the International Code of Medical Ethics, which is also printed on page 7 of the referred the Medical Council of Hong Kong booklet in section C of Part I.

1.5 The General Medical Council also publishes helpful booklets on various issues, including “The Duties of a Doctor”, “Good Medical Practice”, “Maintaining Good Medical Practice”, “Seeking Patients’ Consent: the Ethical Considerations”, “Performing Procedures: a Guide to the Arrangements”, “Confidentiality: Protecting and Providing Information” and “Management in Health Care: the Role of Doctors”.

1.6 The Royal College of Radiologists of the United Kingdom also publishes (in Jan 2012) a document called “Good practice guide for clinical radiologists – 2nd edition” [https://www.rcr.ac.uk/docs/radiology/pdf/BFCR%2812%291_GoodPractice.pdf] Items extracted from the document are marked ‘RC’ with the number of the corresponding item to which reference should be made.

1.7 As a radiation worker, you should be aware of the provisions in the Radiation Ordinance, and its Regulations on Irradiating Apparatus and Use of Radioactive Substances.

1.8 Since radiologists work in close coordination with the radiographers, knowledge of the relevant sections of the Radiographers Regulations and Radiographers Code of Practice is advisable.

1.9 A Specialist Register is now available to the public of Hong Kong. Radiologists to subscribe on that Register should observe the requirements for registration with the professional bodies and for continuing medical education.
1.10 It is important to keep update with the current practice in Radiology and clinical medicine.

1.11 For good medical practice, you should provide patient care within the limits of your knowledge, skill, experience and competence. (RC 4)

1.12 For maintenance of good practice, continuous professional development and clinical audits are necessary. (RC 5)

2. Working Facilities

2.1 A valid license issued by the Radiation Health Unit of the Radiation Board is required for each irradiating apparatus. Any alterations in the registered data with the license, including relocation of equipment, require notification of the Radiation Board.

2.2 For the use of radioactive substances, a separate license for each practice site should be obtained from the Radiation Health Unit, while the detecting equipment or devices do not need to be licensed.

2.3 In view of the possibility of sudden medical emergency or adverse events from administration of contrast or other medications occurring at the site of practice, adequate resuscitative facilities in good working conditions should be readily available.

2.4 All medical equipment should be kept in proper working conditions, including production of good quality images, mechanical and electrical safety, calibration and radiation protection.

3. Working Personnel

3.1 In accordance with the Radiation Ordinance, as a radiation worker you should hold a valid license to operate an irradiating apparatus.

3.2 Workers on radionuclide imaging should also hold a valid license for the use of radioactive substances.

3.3 While the current Radiation Ordinance stipulates that any persons working under the supervision of a registered medical practitioner can operate an irradiating apparatus, if this situation applies to your practice, you or a registered medical practitioner should be personally providing the supervision in the same premises where the medical exposure takes place.

3.4 Radiographers working with you should hold the corresponding valid licenses to work as registered radiographers.

3.5 You should note that under their current Code of Practice, Radiographers are not permitted to issue medical reports to the patients or referring doctors, except to his/her supervising radiologist.

3.6 Covering or improper delegation of medical duties to non-qualified persons is
unethical. Proper training and personal supervision of such persons is essential. (MC 21.1 & 21.2)

3.7 In this connection, attention should be paid to the existence of various categories of registered radiographers (or for that matter, other supplementary medical professions) and their corresponding scope of work.

4. Professional Responsibilities and Service

4.1 Be aware of the standard and responsibilities expected of a medical practitioner. Disregard of professional responsibilities to patients may be taken as misconduct.

4.2 The medical practitioner is responsible for the medical care of the patient who is in the radiology practice area. This includes the appropriate imaging investigation, the conduct of the examination, the management of complications and the provision of the report.

4.3 Thorough knowledge of the pharmacological effects of commonly used drugs in the field is essential. Prompt recognition of side effects and ability to treat these is essential before the in charge radiologist can administer these drugs to the patients. Radiologists in charge of the patient are also required to be competent in basic life-support.

4.4 The patient has the right to proper and updated medical information on the clinical problem of interest.

4.5 In view of the possibility of radiation hazard in many radiological examinations, judicious use of irradiating apparatus and radioactive substances should be observed. The “as low as reasonably practical” or *ALARA principle in the use of medical exposure should be applied. All radiologists should be familiar with the function and operation of all irradiating apparatus with respect to radiation protection.

4.6 All radiologists carry a responsibility for the protection from unnecessary radiation of patients, themselves, other members of staff and members of the public including relatives/carers. Particular attention should be paid to the protection of organs highly sensitive to radiation (e.g. thyroid gland, gonads), and of children and pregnant women.

4.7 The choice of the appropriate modality for radiological investigation of a clinical problem should be balanced against the benefits and risks to the patient. The publications of clinical referral guidelines by the Hong Kong College of Radiologists (HKCR), the Royal College of Radiologists (RCR) as well as those from the World Health Organizations (WHO) are useful references. It is the responsibility of radiologists to keep track of any update in these guidelines.

4.8 The introduction of new procedures should be evidence-based, in accordance with the ethical principles and for the benefit of the patient. (You may refer to MC 22)
4.9 All radiologists undertaking interventional and vascular procedures should keep a permanent record of their practice and of any complications. Whenever any complication occurs, a detail record of the management of the complication should also be kept.

4.10 You should ensure that trainees work under supervision and to a level appropriate to their level of training and expertise. (RC 6)

4.11 A doctor’s signature (even a countersignature) on a report signifies that the doctor has taken reasonable steps to ensure that the content of the report is accurate in every respect. A countersignature by a second doctor could well be regarded as signifying agreement with the content of the report not merely spelling and grammar. (RC)

*In practice, the ALARA “As Low As Reasonable Achievable” principle can be applied in parallel

5. Medical Reports and Records

5.1 Radiology (or Imaging) reports are medical reports. They should be properly signed with denoted name, and dated. In fact, the written radiology report constitutes the legal record of the radiology investigation or procedure. It is therefore vital that the information contained within this record is accurate, explicit, understandable and informative.

5.2 Relevant medical information should be communicated in time to relevant parties for prompt medical care of patients. You should achieve appropriate response times: radiological investigations will only contribute to effective patient management if they are performed in a timely fashion. (RC 3)

5.3 To avoid misunderstanding of the intention of a radiological report, or failure to interpret the report for the total management of the patient, you may consider denoting the report “For the reference of the referring doctor only”.

5.4 For the communication of critical, urgent, or unexpected significant radiological findings, the responsibilities of the radiologist are:

- To ensure that the reports are timely, clear and precise, and the urgency for action is documented within the content of the report
- To clearly document advice on further management or action, where appropriate
- To contact the referring clinician or another appropriate member of their clinical team, and to ensure they receive the information, if the radiologist considered that there is a danger of life of a patient if unexpected relevant information contained in the report is not being acted upon. All request forms should have sufficient contact information for the radiologist to be able to contact the referring clinician/clinical team in case of emergency.
- To document, either at the end of the formal report or in the patient’s case notes, details of the named referring clinician/clinical team contacted, and the time and date of the communication (regardless of the successfulness of the communication)

1. (Adapted from Standards for the communication of critical, urgent and
5.5 In view of the common use of computers and digital information in radiology practice, you should note that medical records encompass both written and electronically stored information. Radiographs, photographs, videotape or CD, or other electronic recording on patients are medical records.

5.6 Comprehensive and secure record keeping reflects good medical practice. Detailed medical records will help in case of investigation. (You may refer to MC 1.1)

5.7 Duplicated reports and records should be properly labeled as such. If a radiological report is subsequently amended, both the original and the amended versions should be kept properly.

5.8 Medical records upon transfer or cessation of practice should be properly handled. (MC 1.3)

6. Personal Data Privacy

6.1 Be aware of the provisions of the Personal Data (Privacy) (Amendment) Ordinance 2012, which was first enacted in December 1996, in particular the patient’s rights of access to the information in his/her medical records. (MC 1.1.4 & 1.1.5)

6.2 As a radiologist, a lot of diagnostic information on a patient may be available to you. The information is private and sensitive. The medical information should not be disclosed to a third party without the prior consent of the patient; and any consent withdrawn should be respected. (MC 1.4)

6.3 In the case of medical referral from other clinicians, the patient should have given explicit or implied consent.

6.4 In exceptional circumstances, such disclosure of medical information may be provided in the absence of the patient’s consent in the case where disclosure is in the public interest, when required by law, or when failure to disclose endangers the individual patient with risk of death or serious harm. You should seek advice if in doubt. (MC 1.4.2 & 1.4.3)

6.5 The internet is not a secure means of transmitting confidential medical records. The patient’s consent should be obtained before such transmission.

6.6 You should anonymise data which are intended to be presented to an audience or published.

7. Information on Professional Practice

7.1 Any information provided to the public or a patient should be decent, honest, truthful,
7.2 You should exercise care in issuing certificates and kindred documents, and do not include in such documents statements which you have not taken appropriate steps to verify. (MC 26)

7.3 The Medical Council prohibits the signing of blank certificates. (MC 26.3)

7.4 You should pay attention to the codes related to practice promotion, and dissemination of information about professional services to the public. (MC 5.2.2 - 5.2.5 & 6)

7.5 If a locum doctor is in practice in your working place, a notice to this effect should be displayed inside the office. (MC 1.3.4)

8. **Informed Consent**

8.1 Consent is part of quality care and also a legal requirement. (MC 2.1) Consent can be given non-verbally, orally, or in writing. It is good practice to seek written consent when the procedure is complex or involves significant risks. The consent should be obtained after sufficient information is provided to the patient (or his/her guardian).

8.2 All invasive procedures and examinations in which the patient may be at risk require informed consent. The patient should be properly informed about the nature, effect and risk of the procedures, and any alternative options, before signing up the consent. (RC 4)

8.3 The patient should be warned about complications that are significant, or that have significant likelihood of occurrence.

8.4 Consent is normally given by the patient or by a designated person under specific circumstances. The capacity of the person to understand should be assessed prior to signing the consent. You should make sure that the consent is provided out of voluntary decision making. (MC 2.1 & 2.2)

8.5 Effective communication including detailed explanation of the radiological examinations/procedures and their important complications is the key to enabling patients to make informed decisions. Up-to-date written material, visual and other aids may be employed to help in explaining complex procedures.

8.6 If you are performing an investigation or procedure, you being the doctor should be the best person to discuss with the patient prior to the consent. If you are delegating this to another person in circumstances when direct communication to patients is not practicable, you should make sure the person is suitably qualified and trained, has sufficient knowledge about the proposed investigation or procedure, and knows about the risk involved. Consent should be obtained from patients for any conscious sedation or specific high-risk medication to be given during the investigation or procedure.
8.7 Consent should preferably be recorded in a document. (MC 2.3)

8.8 A patient has the right to refuse a procedure, and such refusal should be respected and preferably documented. (MC 2.4)

9. **Financial and other Arrangements**

9.1 The examination fees of various investigations and procedures should be made known to patients on request. The Medical Council requires that a doctor should exhibit a notice in the clinic informing patients about their right to know the fees involved. (MC 12.1, 12.2 & 12.4)

9.2 If you have any kind of financial or professional relationship with organizations that may utilize and/or promote the service of the radiologist, you are responsible to ensure that the organizations and their advertising conform to the rules of the Codes of Practice for registered medical practitioners. You should also avoid personal involvement in promoting the services of such organizations. (You may refer to MC 13, 14, 15 & 18)

9.3 Where you have a financial interest in an organization to which you propose to refer a patient for investigation or treatment, such an interest should be disclosed before making the referral. (MC 5.2.1.3 & 13.1)

10. **Relationship with other Practitioners**

10.1 For the patients attending a radiographer practice, referral is required from medical practitioners for medical exposures with diagnostic purpose, from medical or dental practitioners for medical exposures of the teeth or jaw, and from medical practitioners or chiropractors for exposures of the spine.

10.2 For a person you would like to refer for plain radiography by the radiographers, it is necessary that you examine the person prior to your referral, and reveal on the request form the reason(s) for the radiography.

10.3 As regards simple screening examinations for employees (pre- or post-employment), visa application or for insurance purposes, examinations of the individuals may not be necessary if they are under a prime arrangement of regular service between the radiologist and the relevant organization.

10.4 You should not refer a person to other diagnostic/therapeutic services or another medical practitioner, unless you are confident that the services provided on referral will be performed competently and in accordance with accepted scientific standards. (MC 17.1)

10.5 Gratuitous and unsustainable comments which undermine trust in a professional colleague’s knowledge or skill is unethical and unacceptable. (MC 19.3)

10.6 You should not associate yourself with a non-qualified person in providing any form of medical care for your patients. (MC 20)
11. References


