

Nuclear Medicine and Molecular Imaging Advisory Group (NMMAG) Annual Report 2018-19

The Nuclear Medicine and Molecular Imaging Advisory Group (NMMAG) is currently chaired by Angela Meadows with the support of the Vice Chair, Penny Delf. SCoR professional officer support by Sue Johnson and SCoR administrative support provided by Valerie Asemah. NMMAG changed its name from the Nuclear Medicine Advisory Group (NMMAG) to the Nuclear Medicine and Molecular Imaging Advisory Group to reflect the wider work within this speciality.

In order to provide the widest possible range of feedback the membership of the group includes a diverse mix of SCoR members from the radiographic workforce of various grades, specialties and experience from across the four countries of the UK.

During 2018 NMMAG welcomed Claire Moody (ARSAC Representative), Frances Hogg (IPEM Liaison) and Rayjanah Allie and Sarah Stace in advisory capacities. We currently have a vacancy seat for a representative to act as BNMS liaison.

Members:	Role	Job Title	Site
Angela Meadows (AM)	Chair	Radiographer / Unit Manager	Royal Preston Hospital
Penny Delf (PD)	Vice Chair	Senior Lecturer	
Christopher Kalinka (CK)	UK Council	UK Council	Royal Glamorgan Hospital
Clare Moody (CM)	ARSAC Representative - Advisory	Radiographer	Royal Victoria Infirmary
Tristan Barnden (TB)	Advisory	Radiographer	Maidstone Hospital
David Jones (DJ)	Advisory	Superintendent Radiographer	Wrexham Maelor Hospital
John Thompson (JT)	Advisory	Radiographer	Furness General Hospital
Jo Weekes (JW)	Advisory	Consultant Radiographer	New Cross Hospital
David Williams (DW)	Advisory	Superintendent Radiographer	Queen Alexandra Hospital
Sarah Stace (SS)	Advisory	Superintendent Radiographer	Withybush General Hospital
Rayjanah Allie (RA)	Advisory	Radiographer	University College Hospital
Observers:			
Sue Johnson (SJ)	Professional Officer	Professional Officer	Society & College of Radiographers
Valerie Asemah (VA)	Minutes		Society & College of Radiographers
Sai Han (SH)	Royal College of Physicians - Advisory	Nuclear Medicine Physician	Gartnavel General Hospital
Frances Hogg (FH)	IPEM Liaison		IPEM
Vacant	BNMS Liaison		BNMS

Meetings 2018

Two meetings were held during 2018 (March 7th and November 7th); both were well attended. Members unable to attend in person have successfully dialled-in using the new conferencing facilities at the Society Head Quarters as required.

Synapse

All NMMAG members actively contribute via Synapse to comment and provide advice and guidance on key documents circulated for the advisory groups attention. This is in addition to actively working on the NMMAG work plan and attending the bi-annual NMMAG meetings

Activities

NMMAG members responded to consultations on a wide range of draft documents, including those produced by the SCoR, NICE and HEE:

- Consent and MCA guidance (SCoR)
- Communicating Benefit and Risk (SCoR)
- National Occupational Standards (S4H)
- Apprenticeship standards / EPA (Institute for Apprenticeships)
- Long Term Cancer Plan (NHSe)
- Leading a Breast Screening Service (NHSBSP)
- Lung Cancer Standards (NICE)
- Facing the Facts, Shaping the Future (HEE)

NMMAG members represented the SCoR at a range of working groups and at advisory meetings:

- Tripartite Nuclear Medicine Group (IPEM, Society and College of Radiographers, and the British Nuclear Medicine Society) Working Group.
- Diagnostic Imaging & Advisory Group (DIAG)
- Medical Radioisotope Round Table Meeting
- Tripartite Nuclear Medicine Group: With three separate organisations representing several facets of the Nuclear Medicine practitioner workforce (i.e. the nonmedical workforce) there are many potential areas of overlap in terms of responses to consultation and guidance on practice. This Roundtable was initiated in order to share intelligence and information which affect all three organisations to prevent duplicated effort.
- As chair for NMMAG, I represent the group by attending the DIAG meetings and ensuring collaboration and sharing of information.

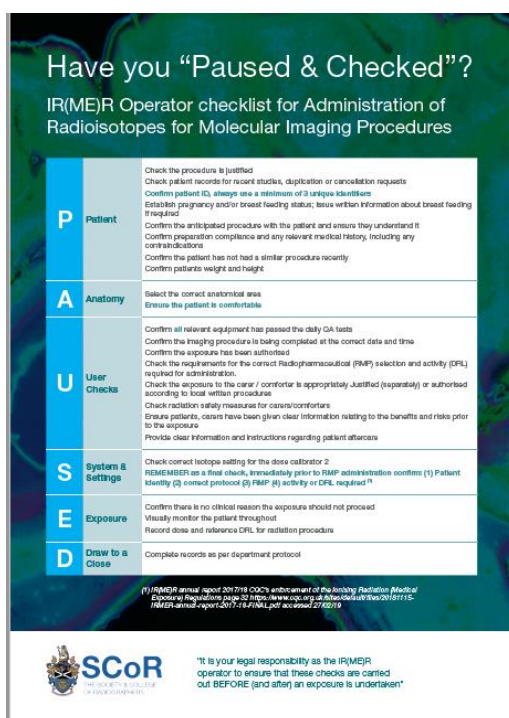
- Medical Radioisotope Round Table: The roundtable was created to address previous radioisotope shortages, concern re the withdrawal from EURATOM and pending BREXIT.
 - Radioisotopes are essential tools in medicine for both diagnosis and treatment, but rapid radioactive decay means that they cannot be stockpiled.
 - Following previous shortages, the NHS has reduced the amount of radioisotopes used through efficiency savings.
 - Long-term security of supply may rely on investment and agreements with international producers, or investing in new technology to produce them in the UK.
 - The Government has stated that withdrawal from the European Atomic Energy Community (EURATOM) will not affect the UK's ability to import medical radioisotopes.
 - Therapeutic use of radioisotopes is a small field, but expected to grow rapidly in the next decade, as new drugs are developed

During 2018 NMMAG has also provided feedback to the SCoR on a diverse range of issues through its Professional Officer (Sue Johnson):

- International recruitment
- Apprenticeships
- Imaging and Therapy Practice
- IR(ME)R implementation

Work Plan 2018 Activities

- **Creation of PAUSE & CHECK for Molecular Imaging** – Two documents were created, one for radioisotope administration and one for image acquisition



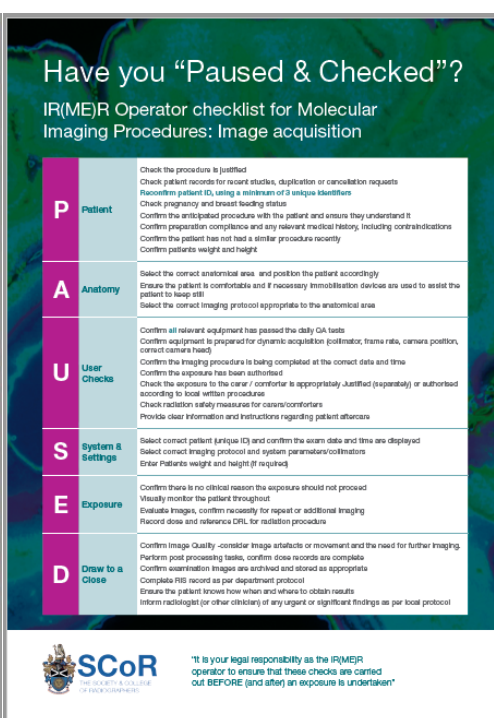
Have you "Paused & Checked"?
 IR(ME)R Operator checklist for Administration of Radioisotopes for Molecular Imaging Procedures

P Patient	Check the procedure is justified Check patient records for recent studies, duplication or cancellation requests Confirm patient ID, always use a minimum of 2 unique identifiers Establish pregnancy and/or breast feeding status, issue written information about breast feeding if required Confirm the anticipated procedure with the patient and ensure they understand it Confirm preparation compliance and any relevant medical history, including any contraindications Confirm the patient has not had a similar procedure recently Confirm patients weight and height
A Anatomy	Select the correct anatomical area Ensure the patient is comfortable
U User Checks	Confirm all relevant equipment has passed the daily QA tests Confirm the imaging procedure is being completed at the correct date and time Confirm the exposure has been authorised Check the requirements for the correct Radio-pharmaceutical (RMP) selection and activity (DRL) required for administration. Check the exposure to the carer / comfortor is appropriately justified (separately) or authorised according to local written procedure Check radiation safety measures for carers/comfortors Ensure patients, carers have been given clear information relating to the benefits and risks prior to the exposure Provide clear information and instructions regarding patient afterwards
S System & Settings	Check correct isotope setting for the dose calibrator 2 REMEMBER as a final check, immediately prior to RMP administration confirm: (1) Patient identity (2) correct protocol (3) RMP (4) activity or DRL, required ¹⁾
E Exposure	Confirm there is no clinical reason the exposure should not proceed Visually monitor the patient throughout Record dose and reference DRL for radiation procedure
D Draw to a Close	Complete records as per department protocol

1) IR(ME)R annual report 2017/18 COC's endorsement of the Ionising Radiation (Medical Exposure) Regulations page 32 <https://www.sco.org.uk/sites/default/files/2018/01/15/IRMER-annual-report-2017-18%20COCs-endorsement-27-02-18.pdf>

SCoR
THE SOCIETY & COLLEGE OF RADIOGRAPHERS

"It is your legal responsibility as the IR(ME)R operator to ensure that these checks are carried out BEFORE (and after) an exposure is undertaken"



Have you "Paused & Checked"?
 IR(ME)R Operator checklist for Molecular Imaging Procedures: Image acquisition

P Patient	Check the procedure is justified Check patient records for recent studies, duplication or cancellation requests Reconfirm patient ID, using a minimum of 2 unique identifiers Check pregnancy and breast feeding status Confirm the anticipated procedure with the patient and ensure they understand it Confirm preparation compliance and any relevant medical history, including contraindications Confirm the patient has not had a similar procedure recently Confirm patients weight and height
A Anatomy	Select the correct anatomical area and position the patient accordingly Ensure the patient is comfortable and if necessary immobilisation devices are used to assist the patient to keep still Select the correct imaging protocol appropriate to the anatomical area
U User Checks	Confirm all relevant equipment has passed the daily QA tests Confirm equipment is prepared for dynamic acquisition (positioner, frame rate, camera position, correct camera lens) Confirm the imaging procedure is being completed at the correct date and time Confirm the exposure has been authorised Check the exposure to the carer / comfortor is appropriately justified (separately) or authorised according to local written procedure Check radiation safety measures for carers/comfortors Provide clear information and instructions regarding patient afterwards
S System & Settings	Select correct patient (unique ID) and confirm the exam date and time are displayed Select correct imaging protocol and system parameters/conditions Enter Patients weight and height if required
E Exposure	Confirm there is no clinical reason the exposure should not proceed Visually monitor the patient throughout Evaluate images, confirm necessity for repeat or additional imaging Record dose and reference DRL for radiation procedure
D Draw to a Close	Confirm image Quality - consider image artefacts or movement and the need for further imaging Perform post processing tasks, confirm dose records are complete Confirm examination images are archived and stored as appropriate Complete RIS record as per department protocol Ensure the patient knows how when and where to obtain results Inform radiologist (or other clinician) of any urgent or significant findings as per local protocol

SCoR
THE SOCIETY & COLLEGE OF RADIOGRAPHERS

"It is your legal responsibility as the IR(ME)R operator to ensure that these checks are carried out BEFORE (and after) an exposure is undertaken"

Arrange a study day for Hybrid Imaging

- Planning for or a Nuclear Medicine and Molecular Imaging Study Day - Arranged for November 5th 2019
- Unfortunately, at the time of writing this report, the event has been cancelled due to limited numbers.

Nuclear medicine and Molecular Imaging Advisory Group (NMMAG) – Member professional links and seats on committees

- Summary details at the end of this report.

Work Plan 2019 Goals

- Continue to seek seats/links/contributions with relevant nuclear medicine and AHP panels assisting with consultations and guidelines (i.e. HTA, NICE) thereby contributing to national agendas
- Improve communication and resources for SoR members working in NM
- Contribute to and support Nuclear Medicine and related publications across the organisation
- Provide an NMMAG Workshop
 - Review interest and consider a Hybrid Imaging workshop approach rather than study day in 2020.
- Develop a PET MR advice document
- Contribute to a collaborative article (for publication) further to the BNMS Spring Meeting 2019, SoR and BNMS jointly chaired session which focussed on “Intravenous Contrast Media in Hybrid Imaging”
- Continue to contribute and support Nuclear Medicine and related publications across the organisation, to include: Radiography, Synergy and relevant articles / information on the NMMAG Webpages.
- Liaise with and pursue opportunities for joint work/presentations/publications with BNMS (RTNG) and IPeM on technologist/radiographer shared issues
- Support the attendance of SoR at BNMS spring meeting



THE WONDERS OF HYBRID IMAGING AND MOLECULAR RADIOTHERAPY: CURRENT AND FUTURE DEVELOPMENTS IN MOLECULAR IMAGING AND THERANOSTICS
 5 November 2019 • SCoR Headquarters, London SE1

This event will provide an insight into current and future clinical issues for healthcare professionals working within molecular imaging and theranostics. Expert speakers working at the cutting edge of technology and practice will share their knowledge and experience with delegates. Exploration of new techniques, treatments and challenges will help nuclear medicine technologists, radiographers and other non-medical professionals to prepare for a bright future in nuclear medicine practice. Delegates will leave with tangible evidence to take back to their departments of future service challenges, as well as information to help them develop and deliver high quality patient services. This programme, which has been developed by the SCoR's Nuclear Medicine and Molecular Imaging Advisory Group, will be suitable for radiographers, nuclear medicine technologists, other associated allied health professionals, educators and students. With thanks to our Industry Partner, Imaging Equipment Ltd for sponsoring this conference.

PROGRAMME

09:20 Registration and Refreshments
 09:50 Welcome and Introduction
 Sue Johnson, Professional Officer Clinical Imaging, The Society and College of Radiographers
 10:00 PET CT Here and Now
 Angela Meadows, Unit Manager, Preston PET CT Centre and Westminster MRI Centre for Alliance Medical Ltd
 10:30 Rebirth of SPECT with Quantitative SPECT/CT
 Dr John Dickson, Consultant Medical Physicist, University College London Hospitals NHS Foundation Trust
 Tea and Coffee
 11:00 Nuclear Medicine Imaging in Dementia
 Dr Zarni Win, Consultant Radiology and Nuclear Medicine Physician, Imperial College Healthcare NHS Trust
 11:50 Challenges and Opportunities in Research PET-MR: An MPE's Perspective
 Elizabeth Howat, PET Clinical Scientist, Newcastle PET Centre
 12:20 Normal Variants and Clinical Artifacts in PET/CT
 Dr Alex Conigan, Consultant Radiologist, Maidstone and Tunbridge Wells NHS Trust
 13:10 Lunch and Poster Viewing
 14:10 Theranostics in Paediatric Cancer
 Dr Matthew Ashridge, Clinical Scientist, Radiotherapy Physicist/ Nuclear Medicine, University College London Hospital
 14:40 PSMA PET in Diagnosis and Therapy of Prostate Cancer
 Dr Stefan Voss, Consultant Nuclear Medicine Radiologist, University College London Hospitals
 15:10 Selected Internal Radiation Therapy (SIRT) Service from a Nuclear Medicine Perspective
 April Louise Smith, Principal Clinical Scientist, University College London Hospital
 Tea and Coffee
 16:00 Radionuclide Therapy Dosimetry: Concepts and Practical Solutions
 Helena McMeekin, Clinical Applications Scientist, Hermes Medical Solutions
 16:30 From Acorn to Oak: How to Develop an MRT Service at a Local Level
 Joanne Wiles, Consultant Radiographer Nuclear Medicine, Royal Wolverhampton NHS Trust, New Cross Hospital
 17:00 Closing Remarks
 Dr Sir Alan, Consultant in Nuclear Medicine, NHS Greater Glasgow and Clyde

Book online at <http://www.event.com/d/sbqb9v>

Nuclear medicine and Molecular Imaging Advisory Group (NMMAG) – Member professional links and seats on committees

Angela Meadows

Chair NMMAG

Member of the SCOR DIAG group rep Member of the Tri-partite working party (NMMAG, BNMS & IPEM).
representing NMMAG.

Training & Education Committee Member for Alliance Medical in partnership with the Christie Hospital and the University of Cumbria.

Penny Delf

Vice Chair NMMAG

Member of the Tri-partite working party (NMMAG, BNMS & IPEM).

Dr Sai Han

UK Nuclear Medicine Specialist Advisory Committee (SAC) Member/Scottish Rep

External Adviser, Academy of Medical Royal Colleges and Faculties in Scotland

Scotland CMO'S specialty adviser in Nuclear Medicine NHS Education for Scotland Training Programme Director- Nuclear Medicine

Scottish PET-CT Working Group Member

David Jones

Principle Radiographer – Nuclear Medicine & PET-CT Service, BCUH, North Wales

Appointment with the CQC as 'Specialist Advisor'.

Chris Kalinka

Member of the CBOT and UK Council SoR

Member of the Welsh Radiographer Mangers Committee

Chair of the Medical Imaging Sub-Committee

Secretary for the Welsh Scientific Advisory Committee

National Imaging Programme Board Imaging Task Force

Imaging Information Management and Technology Sub-committee

Jo Weeks

Research Lead Group - The Royal Wolverhampton NHS Trust and University of Wolverhampton Quality Review Group

Member of Cancer Research UK Advisor Panel

NHS FAB Ambassador for the Royal Wolverhampton NHS Trust

John Thompson

External Examiner Leeds Medical Imaging BSc and MSc

Peer Reviewer for: BJR, Radiography, European Radiology, JMIRS, PLOS One

International Associate Editor JNMT, Editorial Board JMIRS

Lecturer MSc Health (Radiography) Lausanne, Switzerland

Tristan Barnden

Sessional lecturer South Bank University

Chair of the Kent regional non-medical cardiac stressor's group

Sarah Stace

Lead Nuclear Medicine Reporting Practitioner, Hywel Dda University Health Board

Chair of the West Wales Nuclear Medicine User Group

Frances Hogg

Chief Technologist- Nuclear Medicine- Glasgow Royal Infirmary

IPEM- Full member

IPEM Liaison NMMAG

External moderator IPEM Clinical Technologist training scheme assessor for RCT equivalence route