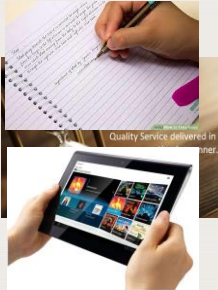



Audit report preparation

- Notes should be taken pre-audit
- Make sufficient notes at each stage of the audit
- End of day's summaries
- Reconfirm all findings
- Summary of findings and agreed work-plan




Quality Service delivered in 2015

The official report should be submitted within 2 weeks



Report Processing

- Agreed actions and work-plan
- Finalization of report area
- Official report and any recommendations.



IAEA
Department of Technical Cooperation (TC)
End-of-Mission Report

Title: **Supporting Quality Management Audits in Nuclear Medicine Practices (QUANUM)**

Project Number: **917286/1/2015**

Project Title: **Supporting Quality Management Audits in Nuclear Medicine Practices (QUANUM)**

Name of Expert: **Auditing team composed by M. Manago (coordinator), J. Bunnag, E. Shihazi, K. Pothiraj, T. Pothiraj (IAEA officials)**

Date of Mission: **01-05 December 2014**

Cooperating: **S. Sumanasekera, Senior Nuclear Medicine Physicist, Department of Nuclear Medicine and PET, Singapore General Hospital, Outram Road Block 2, Basement 4, Singapore (sumanes@sggh.com.sg)**

Terms of reference: **Describe the specific objectives of the assignment and the data to be performed by the expert in order to achieve the objectives.**

This quality management audit mission has been requested to improve the clinical practice in the Nuclear Medicine Department of Singapore General Hospital, Singapore. Singapore. It was performed from 01-05 December 2014.

Singapore General Hospital (SGH) is the first and largest hospital in Singapore. It provides affordable specialist care for patients, training for doctors and other healthcare professionals, and conducts research to further benefit patients. A not-for-profit institution, SGH is wholly owned by the government of Singapore and the Republic Hospital of the public healthcare system. SGH is a member of the Singapore Health Services (SHS) and is licensed under the Health Services Act (Cap 128) and the Health Services (Licensing) Regulations (Cap 128A).

The Nuclear Medicine Department of Singapore General Hospital is one of the largest Nuclear Medicine departments and provides a comprehensive range of clinical services to patients, training and research. They are equipped with a Philips Precedent Tomography (PET) scanner with Time-of-Flight technology, two Single Photon Emission Computed Tomography (SPECT) scanners and three gamma cameras. They also have 1,397 Bed Distribution and 9,888 Staff Strength (as of 31 May 2014).


Page No. 1 of 10 | Page Total: 10 | Page No. 1 of 10 | Page Total: 10

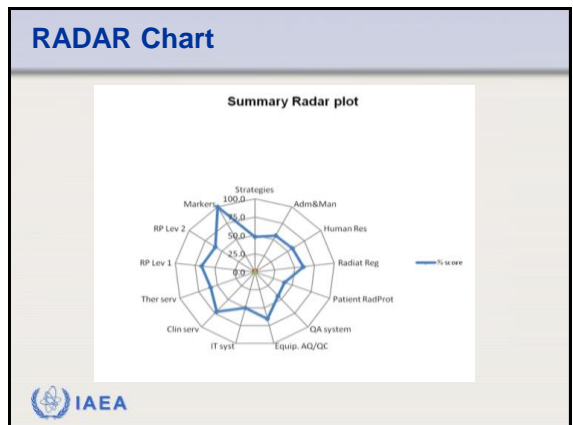
Contents of a audit report

Contents	Inclusion
Introduction	Background, demographics, public health system, national funding
ToR	Activities of the auditing team
Quality management	Mission, vision, quality policy, documental system
Regulatory / regulations	Licences
Radiation safety	Radiation protection and safety programme, radiation worker personal doses and area monitoring records, calibration certificates
NM premises	Overall space, floor plan, furniture, ventilation system, toilets, laboratories
Human resources	Staffing, organizational chart, education and training, competences, job descriptions

Contents of a audit report

Contents	Inclusion
Equipment	Imaging and ancillary equipment, computer systems and data handling, quality assurance / quality control of equipment
Clinical nuclear medicine	Requests, examples of imaging and non-imaging procedures and therapy, one example of a patient consent form
Radiopharmacy	Performance indicators related to IAEA publications
Radioimmunoassay services	Good laboratory practices, pre-analytical, analytical and post-analytical
Major strengths/ deficiencies	Major strengths should be listed; any deficiencies should be recorded in the audit process, with an indication on how and when improvements will be achieved.
Recommendation	These should be precise and clearly worded to the nuclear medicine service or according to IAEA instructions.
Annexes	Agenda, QUANUM Checklists, Presentation slides & floor plan.

- ### Key elements of audit report
- Self assessment, database and organi-gram - *Annexes*
 - Summary report 2 pages, when, where, how and general conclusion to permanent mission to send it to the national government
 - Rough report to be finished the day of the end of mission including discussion with local counterpart, templates provided to the experts
 - Full report with recommendations to the counterpart, government and IAEA, confidential
 - Team leader responsible to send the report to the agency
 - Follow-up report after one year
- 



Example of summary


Terms of reference :

- This quality management audit mission has been organized underto improve the clinical practice in nuclear medicine (NM) in the nuclear medicine department of the Clinical Centre in

Background :
The Clinical Center has about X00 beds. The department comprises three sections, namely

- diagnostic,
- thyroid diseases.
- Medical physics

The diagnostic section performs diagnostic and therapeut procedures, except treatment with radioactive iodine (I-131) for thyroid diseases, which is performed in the thyroid section.




Example

Quality summary :

- In summary a good centre which provided a patient focused service which is of centre most important requirement in Quality management in Nuclear medicine service.
- The external audit was arranged underprimarily to assess patient focused service in order to improve clinical practice in nuclear medicine.
- A quality management check identified deficiencies in
- To reach an accepted standard is therefore regarded major NC and corrective action should be instituted
- Acknowledgement

Specific details

- Critical
- Major
- Minor
- Recommendation



Critical priority: issues impacting safety of patients, staff and/or environment that should be promptly addressed (within days or weeks).


No:	Comment/action	Time frame	Date achieved

Major priority: issues impacting the capacity of the NMS to adequately perform its activities that should be addressed in a timely manner (e.g. 3-6 months).

No:	Comment/action	Time frame	Date achieved

Minor priority: issues that may be object of optimization, to be accomplished within a defined time period and re-evaluated during the next audit.

No:	Comment/action	Time frame	Date achieved



Recommendations


Recommendations to the Counterpart Institution

- Complete the documentation for the quality management system.
- Establish and maintain a comprehensive list of all the equipment under control, including quality control activities.
- Review the procedures for thyroid cancer treatment and doses according to international guidelines.

Recommendations to the Government

- Encourage the process of regular self assessment and auditing in medical practice.
- Support the establishment of SPECT/CT and PET/CT in the Nuclear Medicine Department.



Recommendation to the IAEA
Training in therapeutic applications of NM is needed



Conclusion and report

Combination of the following:

- Identifying areas that can be easily improved:
 - These may be changes which are easy to implement
 - major changes that require modification in the institute's infrastructure, but are feasible for the department
 - Identifying major problems that cannot be resolved by the nuclear medicine department alone, without significant assistance and/or contribution from other institutions outside the hospital or without significant resources.
- These proposals will be included in the detailed recommendations of the audit team.
- Transparent and No surprises!

Exit briefing

- Open discussion
- Confirm observations and findings
- Discuss issues
- Options to improve practice
- Action and Work plan
- Priority