

QUALITY ASSURANCE EXTENT SURVEY

1. Departmental Quality Assurance (QA) Program Management

#	Questions	Responses
1.1	Is there documentation of the roles and responsibilities of all the professionals involved in the care of radiotherapy patients?	Yes No
1.2	Does the facility have written clinical guidelines for treatment (care plans)? (select all that apply)	Patient Specific Institutional National
1.3	Does the facility have policies and procedures manuals for:	Medical Physicists Yes No
		Radiation Therapy Technologists Yes No
1.4	Does the facility have a QA committee?	Yes No
1.5	Is there a Radiation Safety Program that oversees the safe use of ionizing radiation?	Yes No
1.6	Is there an incident reporting system? (select all that apply) local / national / international	Local National International
1.7	Do you perform internal auditing (e.g. AAPM TG103)?	Yes No
1.8	Do you participate in comprehensive external audits of practice (e.g. QUATRO)?	Yes No
1.9	Has the facility participated in dosimetry audits within the last 2 years (e.g. RPC, IAEA/WHO TLD, etc.)?	Yes No
1.10	Is the facility participating in clinical trials?	Yes No
1.11	Are there national or institutional guidelines for staffing levels for: (select all that apply)	Radiation Oncologists Medical Physicists Radiation Therapy Technologists
1.12	Are there national guidelines or regulations for the qualifications of staff? (select all that apply)	Radiation Oncologists Medical Physicists Radiation Therapy Technologists
1.13	Is participation in continuing professional development (CPD) mandatory?	Radiation Oncologists Physicists Radiation Therapy Technologists
1.14	Are there documented emergency procedures to be followed in the event of acute failure of equipment or systems that could affect safety	Yes No

2. Equipment Quality Control (QC) Programme Management

#	Questions	Responses
2.1	Is acceptance testing performed by the medical physicists prior to the clinical use of new equipment and systems?	Yes No
2.2	Is commissioning performed by the medical physicists prior to the clinical use of new equipment and systems?	Yes No
2.3	Are baseline quality control procedures developed and tested prior to application or clinical use of new equipment or systems? (check all that apply)	external beam teletherapy units HDR brachytherapy systems LDR brachytherapy systems imaging equipment treatment planning systems record and verify systems absolute dosimetry systems relative dosimetry systems in vivo dosimetry systems

3. Patient Treatment Quality Control (QC) Programme Management

#	Questions	Responses
3.1	Is there a multi-disciplinary review of the treatment decision (tumor board) for each patient? This may not apply to patients treated as emergencies.	Yes No Select patients only
3.2	Is there a comprehensive (or interdisciplinary) new patient planning conference in order to collectively design the treatment plan?	Yes No Select patients only
3.3	Is there a regular interdisciplinary film review conference (also referred to as quality assurance round or treatment planning round)?	Yes No
3.4	Is there an independent monitor unit calculation performed for all non-IMRT treatment plans?	Yes No Select Tx plans only
3.5	Patient specific quality control of the treatment plan is performed for every patient treated with the following treatment techniques (select all that apply)	3D CRT IMRT Electrons
3.6	Is there a quality check for individualized patient aids and accessories that are manufactured, e.g. shielding blocks or compensators?	Yes No
3.7	Is there an institutional policy requiring physician approval of portal image(s)?	Yes No Sometimes
3.8	Is there a regular chart check conducted while the patient is on treatment?	Yes No Sometimes
3.9	Is there a clinical assessment of each patient while on treatment?	Yes No Sometimes

3.10	Is a radiation oncologist present, or readily available and capable of responding in a timely manner, at all times when radiation treatment is being delivered?	Yes No
3.11	Is a medical physicist present, or readily available and capable of responding in a timely manner, at all times when radiation treatment is being delivered?	Yes No
3.12	The minimum number of Radiation Therapy Technologists present during routine external beam treatment delivery is?	1 2 3 4 >4
3.13	Are Radiation Oncologist(s) present during setup and treatment delivery of the first fraction?	Always Special Procedures Only Never
3.14	Are medical physicist(s) present during setup and treatment delivery of the first fraction?	Always Special Procedures Only Never
3.15	Are the paper or electronic records of the radiation treatment plan maintained with sufficient detail to allow the plan to be reconstructed by an independent person?	Yes No
3.16	Are there established procedures to be followed in the event of an unintended treatment break?	Yes No
3.17	Is in vivo dosimetry used in external beam radiotherapy?	Routine First Fraction Only Special Procedures Radiation Oncologist Request Never

4. Sample Cases

Please specify if you treat the cases listed below. If yes, please fill in the second table below according to the most commonly-used treatment technique in your department. You may need to consult with your radiation oncologists to complete this section:

Case 1: Head and Neck	62 year old male presents with a T₃N₁M₀ Oropharynx, squamous cell carcinoma, low risk, WHO 0-1	Do you treat this type of case?	Yes	No
Case 2: Head and Neck	50 year old female presents with T₃N₁M₀ nasopharyngeal carcinoma, low risk, WHO 0-1	Do you treat this type of case?	Yes	No
Case 3: Breast	47 year old female (pre-menopausal) presents with T₃N₁M₀ cancer in the left breast post mastectomy, intermediate risk, WHO 0-1	Do you treat this type of case?	Yes	No
Case 4: Palliative	72 year old male presents with painful bone metastasis in the distal femur	Do you treat this type of case?	Yes	No

	Technique	Immobilization or positioning	Prescription	Modality	Treatment fields	Setup verification	Imaging frequency	In vivo dosimetry
Oropharynx	2D 2.5 D 3D IMRT Clinical Setup	Yes No	GTV _____Gy in _____Fractions	MV Photons Electrons Brachytherapy Orthovoltage	N/A	Film kV planar EPID kV CBCT MV CBCT geometric setup	First setup only Daily Weekly First setup and halfway Only on request	Yes No
Nasopharynx	2D 2.5 D 3D IMRT Clinical Setup	Yes No	GTV _____Gy in _____Fractions	MV Photons Electrons Brachytherapy Orthovoltage	N/A	Film kV planar MV EPID kV CBCT MV CBCT geometric setup	First setup only Daily Weekly First setup and halfway Only on request	Yes No
Breast	2D 2.5 D 3D IMRT Clinical Setup	Yes No	GTV _____Gy in _____Fractions	MV Photons Electrons Brachytherapy Orthovoltage	<input type="checkbox"/> Tangents <input type="checkbox"/> Supra-clavicular <input type="checkbox"/> Internal Mammary Chain	Film kV planar MV EPID kV CBCT MV CBCT geometric setup	First setup only Daily Weekly First setup and halfway Only on request	Yes No
Bone Metastasis	2D 2.5 D 3D IMRT Clinical Setup	Yes No	GTV _____Gy in _____Fractions	MV Photons Orthovoltage	N/A	Film kV planar MV EPID kV CBCT MV CBCT geometric setup	First setup only Daily Weekly First setup and halfway Only on request	Yes No

Are you willing to participate in a snapshot survey conducted by the IAEA regarding the depth of QA in your facility or institution? Yes No

Selected date "SD" for the THIRD SURVEY (Completed by IAEA staff)

dd/mm/yyyy

mm/yyyy