

Table 1: Treatment plan (EBRT and Brachytherapy) report components

Section	RECOMMENDED		OPTIONAL
	EBRT	Brachytherapy	
General	Hospital/Location Print date or date of service Planning system (version)		Page numbers Plan creation/revision date Planner/staff
Demographics	Patient name/MRN/ID		Date of birth/Sex
Prescription / Written directive on plan document	Target Anatomic Site Dose Fractionation Prescription method/Plan normalization method		Course/Diagnosis identifier Planner/Physician approval/date
Plan Summary	Machine identifier Energy, photon/electron Beam names/IDs Gantry/couch angles Collimator angle & size RX & normalization MUs per beam Couch angles	Isotope Initial calibration (date & activity) current activity & decay factor Catheter connection channel identifiers First dwell position & offset Catheter (length/index) Source positions (step/space) & dwell time Total delivery time	
Additional Plan info	Isocenter location Patient or couch shifts Planning CT date/scanner ID Patient orientation (head first/supine) Ref. points/points of interest with location/dose/type	Treatment date & time Ref points/points of interests Treatment unit name Applicator name, size	Name of CT density table Import log Plan UID Composite plan information IEC convention
Dose calculation	Method (Convolution/AAA) Normalization method Heterogeneity corrections (Y/N) Grid resolution/size Tissue density override warning messages examined	Calculation method (e.g. TG-43)	
Beams eye views (For 3D treatment fields)	Field edges (jaws & MLC) Graticule/scale Wedge direction graphical display Patient orientation Beam information Target contours Critical OAR contour(s) Bolus placement with skin render	Catheter reconstruction view Applicator model name used for planning	
Images with Isodose	Absolute isodose lines with selected target & OARs contours Prescription isodose level(s) Isocenter point or its location (NA for brachy) Patient orientation Slice number		
DVHs (when appropriate)	Structure names Defined dose constraint to each structure Volume Minimum dose Maximum dose Mean dose DVH graphs		

OARs: Organs-at-risk; UID: Unique identification number; DVHs: dose volume histograms; AAA: Anisotropic analytical algorithm

DRAFT

Table 2: Planner checklist items

	RECOMMENDED	OPTIONAL
Planning	Isocenter or reference origin agree with simulation Set correct couch removal/Insert table model Override density in contoured tissue reasonable Normal/critical structure contours reasonable PTV and ITV are logical (without stray voxels) and approved by physician Bolus (if applied) documented per convention Field name/ID correct and following convention Add new calculation/reference point Use the scheduled treatment machine Warning /error messages addressed	Calculation methods/dose grid size /resolutions set correctly Composite plan if multiple CTs, sequential treatments, or retreatment
Plan document	Rx matched with Rx in R&V Isodose distributions DVHs Scorecard/DVH metrics meet clinical requirements 3D beam arrangement display Electron/Bolus skin render DRRs as appropriate	Include an Iso-center image slice Table vertical measured Follow local center documentation standard Site set-up completed/approved
R&V Preparation	Document Iso shifts & bolus Additional setup instruction Image guidance/Motion management (KVCBCT, MVCBCT, DIBH, etc.) documented Rx approved by physician in R&V or in Plan Reference CT (iso/structures) for CBCT sent for 3 rd party image guidance system Block/Accessory code (e.g. electron code) checked Dose tracking parameter set Field parameters set and completed (table vertical, tolerance table, or default table position, SID) Treatment delivery pattern/schedule set correctly Set table tolerance DRR associated & set to Tx SSDs documented	Table Vertical inserted in fields Check number limits of contours/CT slices on IGRT systems Backup timer check

R&V: Record and Verify System; KVCBCT: Kilo-voltage cone beam CT, MVCBCT: Mega-voltage cone beam CT; DIBH: deep inspiration breath hold; Rx: prescription; Tx: treatment; SID: source-imager distance, SSD: source-skin distance; DRR: digitally reconstructed radiograph

Table 3: Prescription minimum items (EBRT and Brachytherapy)

RECOMMENDED		OPTIONAL
EBRT	Brachytherapy	
Prescription in R&V system		Concurrent chemo
Treatment site (anatomic site and laterality)		Previous radiation treatment
Photon or electron and energy	Isotope	Implanted device present
Daily dose/fraction pattern, Total dose, RX isodose line (%) or treatment depth		In-vivo measurement required (Y/N)
Normalization point or volume		
CBCT/Imaging frequency, pattern, and alignment structure (daily, weekly, etc.)		Action level
Special motion management (e.g. breath-hold)	N/A	
Pre-RT preparation (e.g., full bladder) or other unique situation (e.g., pregnant patient, in-vivo dosimetry, Bolus/compensator, or BID)		
Signed by physicians		

DRAFT

Table 4: initial Treatment plan (EBRT) checklist items for physicists

RECOMMENDED	OPTIONAL
Patient name/MRN	
Isocenter/Initial reference point matched with simulation doc	Calculation grid
Isocenter /Initial reference point matched with the patient skin marks	Dose calculation algorithm (per institutional policy)
Isocenter shift documentation	Setup beams associated with the same treatment isocenter
Field parameters (MUs, field size, collimator, gantry and MLC positions)	Image fusion/registration completed and documented
Planned Rx dose matched with Rx in R&V	
Rx in R&V in accordance of Table 3	
Planned for a scheduled Treatment machine	
Dose tracking point (volume) matched Rx in R&V	
All beams associated with the same iso for a single isocenter plan	
If multiple isocenters are used, each isocenter is labeled clearly & informative	
If multiple isocenters are used, beams are associated with correct iso	
Beam name following institutional convention.	
Beam clearance and modification needed (collision, bolus)	
Correct CT dataset used	
ROI density override appropriate	IMRT QA QCL/task created (IMRT)
Deliverability of beams (minimum MU for EDW, and maximum MU allowed for high dose, or high dose box checked, errors and warning messages)	
Couch included/excluded correctly	Special physics consult needed
Cardiac device dose documented (if applicable)	
Report conformal index (SRS/SBRT plan only)	
Secondary dose calculation difference < 5% or 3MU	
Preparation in R&V	
Rx approved by physician	
Plan approved by physician and physicist (or in plan document)	
Field parameters (MUs, field size, collimate, gantry, couch, beam modifier, and MLC positions) matched with plan	
All fields input (or associated) correctly and approved	
Site setup instruction entered and approved if required	
Reference CT input with correct isocenter and ROIs	Table vertical set for all beams
DRRs associated and approved (if exported to a third party system)	Created QCL/task for therapy check
Tolerance table set correctly	
Iso shifts instruction correct	
CBCT/IGRT alignment instruction presence	
SSD transcribed correctly	
Tx schedule set correctly	
Dose tracking set correctly	
Special device or medical condition in setup note	

R&V: Record and Verify System; KVCBCT: Kilo-voltage cone beam CT, MVCBCT: Mega-voltage cone beam CT; DIBH: deep inspiration breath hold; Rx: prescription; Tx: treatment ; SID: source-imager distance, SSD: source-skin distance; DRR: digitally reconstructed radiograph; QCL: quality-check-list; IGRT: image-guided radiotherapy; ROIs: regions-of-interest; EDW: enhanced dynamic wedge; MU: monitor unit

DRAFT

Table 5: Initial treatment plan (EBRT) checklist items for therapists

RECOMMENDED	OPTIONAL
Patient name, MRN, DOB	Enter "custom" for Bolus fields
ID photos and setup photos	DRR approved and associated
Consent signed by physician	
Rx in R&V signed by physician	
Plan laterality matched with Rx in R&V	
Plan used the scheduled treatment unit	
Isocenter shifts instruction clear & documented in setup note	
Rx in R&V agree with plan Tx technique in R&V agrees with plan Rx energy in R&V agrees with plan Total dose in R&V agrees with plan	Are MUs/daily dose reasonable
Field parameters consistence between plan and R&V	
SSD parameters	Peer review signed by physician/physicist
Treatment fields approved by physicist	Treatment couch inserted in plan
Treatment plan deliverability check (loading reference CT and collision check for non-coplaner beams)	Trigged imaging in RX
Sim setup info verified	Fiducial contoured
Special alerts/dose actions (position, bolus, in-vivo measurement, bolus removing, etc)	Multi-iso have separated sessions and separate reference CT and contours
Bolus documented	
In-vivo measurement indicated	3 rd party images
Respiratory/IGRT instructions	Patient Name, ID entered
3 rd party IGRT data ready	Reference CT/scan sent to 3 rd party system
Motion management parameters	ROI box drawn appropriate
Treatment schedule	Bolus field entered
Boost fields are scheduled/follow-up	
Tx appointment conflicts, concurrent chemo documented	TBI
Implanted device presence/document	Physics consult presence
Second MU check documented	Dose rate
Physics check completed/signed	Blocks/Compensator in Rx and setup note
IMRT/VMAT QA completed/signed	
<i>For electron fields:</i>	
e-appliator field parameters (energy cone, field size, gantry)	
e-block checked to the template	
e-block code verify(accessary code)	

R&V: Record and Verify System; KVCBCT: Kilo-voltage cone beam CT, MVBCT: Mega-voltage cone beam CT; DIBH: deep inspiration breath hold; Rx: prescription; Tx: treatment ; SID: source-imager distance, SSD: source-skin distance; DRR: digitally reconstructed radiograph; QCL: quality-check-list; IGRT: image-guided radiotherapy; ROIs: regions-of-interest; EDW: enhanced dynamic wedge; MU: monitor unit; TBI: Total body irradiation

Table 6: Initial Brachytherapy plan checklist items for physicists

	RECOMMENDED	OPTIONAL
PLANNING	Rx matched with plan	
	Source activity/air kerma strength (against decay table)	
	Correct planning image (e.g. correct date/time)	
	Plan normalization	
	Channel number	
	Index length	
	Catheter orientation (tip vs. connector)	
	Number of dwell positions and location of the first dwell point	
	Step size	
	Applicator name	
	Same applicator applied if a new plan created for subsequent fraction	
	Magnified catheter reconstruction in 3-D view	
	Plan optimization appropriate	
Dose distribution appropriate		
Secondary calculation		
R&V PREPARATION	Rx and plan approved by physician and physicist	

DRAFT

Table 7: Brachytherapy Treatment Checklist Items

	RECOMMENDED	OPTIONAL
Pre-treatment	Patient identification with two methods	Patient consent form signed
	Rx matched with plan and approved by an physician and a physicist	Review setup photos
	Correct applicator inserted (size, model)	
	Current source activity (against decay table)	
	Correct plan loaded	
	Total treatment time correct	
	Catheter channel number correct & follow local convention	
	Catheter length/step size correct	
	Patient pre-treatment survey done	
	Secondary dose check done	
Post-treatment	Daily QA done	
	Radiation emergency handling tools presence	
	Post-treatment survey	Name of survey meter
	Treatment procedure document signed	

DRAFT

Table 8: Weekly chart checklist items

RECOMMENDED		OPTIONAL
EBRT	Brachytherapy	
Rx site		CBCT and portal images approved
Rx changed or field modified since last check?		IMRT QA done and approved
Dose delivered to date (cGy)		Correct tolerance table applied
Number of fractions delivered		Bolus fields are indicated in setup note
Plan quality reasonable (applied to the first weekly check for each plan)		Treatment calendar is correct
Image frequency and modality agree with Rx		Review rejected IGRT images
Dose tracking correct		
Overrides with proper comments	Pre and post-treatment document uploaded and approved	
In-vivo measured required and results documented		
Review journal entries/patient notes		
Treatment breaks documented		
Special device or medical condition (pacemakers, etc.)		
Weekly SSD recorded and within limits (where applicable)		
IGRT shifts within limits or have a note		

DRAFT

Table 9: Final chart checklist items

RECOMMENDED	OPTIONAL
Treatment Site	
Total dose delivered	Are all weekly checks done appropriate
Number of fractions delivered	All verification images reviewed
Total dose delivered agrees with Rx (if not, proper documentation in the medical record)	
All documents signed (except for completion note)	

DRAFT