05 APPENDICES

5.1 SCHEDULE OF ACCOMMODATION

The schedule of accommodation follows providing two scenarios:

- Scenario 1: 1 SPECT/CT and 1 PET/CT
- Scenario 2: 3 SPECT/CT and 2 PET/CT

A stress testing room and a bone densitometry room are assumed under both scenarios.

These schedules of accommodation are indicative only and the number of scanners provided should be based on a clinical services plan which examines future service trends and projected activity.

The ‘Room / Space’ column describes each room or space within the Unit. Some rooms are identified as ‘Standard Components’ (SC) or as having a corresponding room which can be derived from a SC. These rooms are described as ‘Standard Components – Derived’ (SC-D).

The ‘SD/SD-C’ column identifies these rooms and relevant room codes and names are provided. All other rooms are non-standard and will need to be briefed using relevant functional and operational information provided in this HPU.

In some cases, Room / Spaces are described as ‘Optional' or ‘o’. Inclusion of this Room / Space will be dependent on a range of factors such as operational policies or clinical services planning.

5.1.1 Entry / Exit / Reception / Undosed Waiting

Note 1: It is assumed that this entry / reception provides a single public access to nuclear medicine and PET services.

AusHFG Room Code	Room / Space	SC / SC-D	1SPECT / CT + 1 PET/CT		3 SPECT / CT + 2 PET/CT		Remarks
			Qty	m2	Qty	m2	
WAIT-20	Waiting	Yes	1	15	1	24	Cold' Waiting Area. Indicative area allocation based on 3 people waiting per modality including bone densitometry. Area to be confirmed based on service profile.
PLAP-10	Play Area - Paediatric	Yes	1	8 (o)	1	10 (o)	Optional. Only required for services with a significant paediatric casemix.
RECL-10	Reception / Clerical	Yes	1	10	1	15	May be shared with adjacent services in smaller units eg medical imaging.
	Office - Workstation			4.4	1	4.4	Administration workstations collocated with reception. Number of workstations dependent on staff profile.
INTV	Interview Room	Yes	1	12 (o)	3	12 (o)	Optional, depending on operational practices and local jurisdictional policies.
STPS-8	Store - Photocopy / Stationery	Yes	1	3	1	5	Bay including multifunction device.
WCPU	Toilet - Public	Yes			2	3	'Cold' toilets.
WCAC	Toilet - Accessible	Yes	1	6	1	6	'Cold' toilets.
	Discounted Circulation			25%		25%	

5.1.2 Nuclear Medicine Zone

Dosed / 'Hot' Waiting

AusHFG Room Code	Room / Space	SC / SC-D	1SPECT / CT + 1 PET/CT		3 SPECT / CT + 2 PET/CT		Remarks
			Qty	m2	Qty	m2	
WAIT-10	Waiting	Yes	1	6	1	18	Number of patients waiting will depend on the service profile, eg patients having cardiac scans will wait longer. 2m2 per person recommended for radiation protection purposes. A separate 'hot' play space will be required where a significant paediatric service is provided.
WCPT	Toilet – Patient	Yes	1	4	2	4	'Hot' toilets.
BWD-1	Bay - Water Dispenser	Yes	1	1	1	1	
	Discounted Circulation			25%		25%	

Nuclear Medicine Scanning & Support Areas

AusHFG Room Code	Room / Space	SC / SC-D	1SPECT / CT + 1 PET/CT		3 SPECT / CT + 2 PET/CT		Remarks
			Qty	m2	Qty	m2	
	Injection Room		1	12	2	12	For dose administration and examination. Assume 1 room shared between 2 scanners. Shielded consult room with recliner chair.
CHPT	Change Cubicle - Patient	Yes			2	2	Pre and post-scan; radiation shielded. 1 change cubicle per scanning room.
CHPT-D	Change Cubicle – Accessible	Yes	1	4	1	4	Pre and post-scan; radiation shielded.
SPECT-CT	SPECT-CT Imaging Room	Yes	1	50	3	50	
SPECT-CTCR	SPECT-CT Control Room	Yes	1	14	2	14	
	SPECT / CT Equipment / Computer Room		1	10 (o)	2	10 (o)	Optional. Includes computer mainframe / server modules for the SPECT/CT. Room temperature to be maintained for heat generating equipment. Notional space allocation only and will depend on vendor requirements.
STRT	Stress Testing Room	Yes	1	20 (o)	1	20 (o)	Optional depending on service profile. Trolley / bed access assumed. Similar arrangement to STRT however this needs to be a shielded room, does not require the Echo machine. The defibrillator may be located within or very near to the room.
	Bone Densitometry		1	20 (o)	1	20 (o)	Optional depending on service profile. Assumes trolley / bed access required and overhead ceiling mounted hoist.
	Nuclear Medicine Hot Lab		1	14	1	18	Refer to separate line item for PET hot lab. A combined hot lab, serving both Nuclear Med & PET, may be possible, however the PET hot lab must be located close to PET uptake rooms. Assumed to include Technegas and emergency eye wash. Area requirements will depend on scope of services eg dispensing of therapeutic doses, preparation of radiolabelled blood products etc.
	Nuclear Medicine Cold Lab		1	10 (o)	1	18 (o)	Optional depending on service requirements and local jurisdictional approaches. Used as a low level radioactive laboratory. Where provided the hot lab area allocation may be reduced.
	Entry Lobby - Isotope Delivery		1	4	1	4	Dual access from external corridor and within unit.
	Store - Phantoms			1		2	
	Radioactive Waste Holding Store		1	5	1	8	
	Discounted Circulation			37%		37%	

Nuclear Medicine Patient Holding and Therapeutic Procedures

Where therapeutic procedures are provided, the projected activity will require confirmation to determine the number of bays to be provided. These may be shared with the patient holding area for Nuclear Medicine, however consideration needs to be given to the types of procedures undertaken and radionuclides used to guide whether patient amenities i.e. toilets, can be shared.

Shared clinical support space noted below, such as utilities, linen bays and mobile equipment bays should be within ready access of the patient holding areas.

AusHFG Room Code	Room / Space	SC / SC-D	1SPECT / CT + 1 PET/CT		3 SPECT / CT + 2 PET/CT		Remarks
			Qty	m2	Qty	m2	
PBTR-H-9	Patient Bay – Holding, 9m2	Yes	2	9	6	9	Inpatient holding for Nuclear Medicine. Indicative number of bays noted, actual number will depend on projected volume of inpatients. Shielding requirements will depend on location.
PBTR-H-9	Patient Bay – Holding, 9m2	Yes			4	9 (o)	Optional. For services providing therapeutic procedures. Number of bays will depend on projected activity, may include clinical trials. Shielded area. Separate treatment room/s for day procedures may be required depending on the number of spaces provided and proposed arrangement.
TRMT	Treatment Room	Yes			1	14 (o)	Optional, to support therapeutic procedures depending on types of procedures provided. Shielded room.
BHWS-B	Bay - Handwashing - Type B	Yes	1	1	2	1	Additional required for therapeutic procedures.
SSTN-10	Staff Station	Yes	1	8	1	12	For oversight of patient holding.
WCPT	Toilet – Patient	Yes	1	4	2	4	Additional required for services providing therapeutic procedures.
	Discounted Circulation			37%		37%	

5.1.3 PET Suite

AusHFG Room Code	Room / Space	SC / SC-D	1SPECT / CT + 1 PET/CT		3 SPECT / CT + 2 PET/CT		Remarks
			Qty	m2	Qty	m2	
	Uptake Room		3	10	6	10	Radiation shielded. Assumes ambulant patients who will be injected in a recliner. Assume 4 uptake rooms per PET/CT.
	Uptake Room - Large		1	15	2	15	Radiation shielded. This room will be used as an uptake room for those on beds. Number will depend on service profile, increased number required for paediatric services. Children will often be induced in the Uptake room so access to anaesthetic gases is required.
CHPT-D	Change Cubicle – Accessible	Yes	1	4	2	4	Pre and post-scan; radiation shielded
WCPT	Toilet – Patient	Yes	1	4	1	4	Hot' toilets - Radiation shielded.
WCAC	Toilet - Accessible	Yes	1	6	1	6	Consider automated door given heavy weight due to shielding is difficult for disabled patients to manage.
PET-CT	PET-CT Imaging Room	Yes	1	50	2	50	This will also accommodate Total Body PET systems, however consideration needs to be given to shielding requirements and the number of uptake rooms given the faster throughput.
	PET-CT Control Room	Yes	1	14	2	14	Includes communication (intercom) connection to PET/CT and Uptake rooms.
	PET/ CT Computer / Equipment Room		1	10 (o)	2	10 (o)	Optional. Includes computer mainframe / server modules for the PET/CT. Room temperature to be maintained for heat generating equipment. Notional space allocation only and will depend on vendor requirements.
	PET/CT - Alcove for Automated Infusion System		2	2 (o)	3	2 (o)	Optional. Shared between 2 uptake rooms for location of automated infusion system where provided via a port.
BHWS-B	Bay - Handwashing – Type B	Yes	1	1	2	1	In corridor, 1 per 4 uptake rooms.
	PET Hot Laboratory		1	14	1	18	Will be adjacent to uptake rooms. Includes emergency eye wash.
	Radiopharmaceutical Laboratory		1	40 (o)	1	40 (o)	Optional, specialised services only where manufacturing is undertaken. Indicative minimum area allocation for a radiopharmaceutical lab noted. Actual area to be determined based on the scale and scope of manufacturing and associated activities across nuclear medicine and PET services.
BES	Bay – Emergency Shower	Yes	1	2	1	2	Radiation shielded. Locate outside radiopharmaceutical lab where provided.
	Discharge Lounge		1	8	1	12	Radiation shielded. Collocate with Beverage Bay. Operational policy relating to patients on trollies requiring transfer to be confirmed.
	Discounted Circulation			37%		37%	

5.1.4 Shared Support Areas

It is assumed that much of the support space is shared between nuclear medicine and PET services but this will be dependent on Unit size and layout. In some cases, space may need to be duplicated.

AusHFG Room Code	Room / Space	SC / SC-D	1SPECT / CT + 1 PET/CT		3 SPECT / CT + 2 PET/CT		Remarks
			Qty	m2	Qty	m2	
CLN-10	Clean Store	Yes	1	10	1	14	Clean consumables.
STEQ-14	Store - Equipment	Yes	1	12	1	20	
BLIN	Bay – Linen	Yes	1	2	2	2	For inpatient holding & uptake rooms
BMEQ	Bay - Mobile Equipment	Yes	1	2	1	3	Mobile equipment requirements to be confirmed.
BRES	Bay - Resuscitation Trolley	Yes	1	1.5	1	1.5	Requires careful consideration of location. Rapid access from the Stress Test Room, if defib not located within the room, and other patient care areas is required.
BWP	Bay - Wheelchair Park	Yes	1	2	1	4	
BBEV-OP	Bay - Beverage, Open Plan	Yes	1	4	1	4	
CLRM-5	Cleaner's Room	Yes	1	5	1	5	Dedicated to unit to avoid radioactive contamination.
DTUR-8	Dirty Utility	Yes	1	8	1	10	Refer to Section 2.2.14 re radioactive waste disposal.
DISP-8	Disposal Room	Yes			1	8	Note separate radioactive waste store included above. Assume shared with adjacent department for smaller service.
	Discounted Circulation			37%		37%	

5.1.5 Staff Areas

AusHFG Room Code	Room / Space	SC / SC-D	1SPECT / CT + 1 PET/CT		3 SPECT / CT + 2 PET/CT		Remarks
			Qty	m2	Qty	m2	
REPR	Reporting Room		1	18	1	36	Assume 1-2 workstations per scanner with 6m2 per reporting workstation.
OFF-S9	Office- Single Person	Yes		9		9	Number and area allocation will depend on staff profile and local jurisdictional policies.
	Office - Workstation			4.5		4.5	Number and area allocation will depend on staff profile and local jurisdictional policies.
INTV	Interview Room	Yes		9		9	Number dependent on service requirements.
MEET-L-20	Meeting Room	Yes	1	15	1	25	Size will depend on number of people to be accomodated and local jurisdictional policies.
SRM-15	Staff Room	Yes	1	16	1	24	Area will depend on staffing profile and operational policies.
BPROP	Bay - Property, Staff	Yes	1	2	1	3	
WCST	Toilet – Staff	Yes	2	3	4	3	Number dependent on service profile.
SHST	Shower – Staff	Yes	1	3 (o)	1	3 (o)	Optional depending on approach to end of trip facilities.
	Discounted Circulation			25%		25%	

5.1.6 Cyclotron and Radiopharmaceutical Science Laboratory

Very few services across Australian and New Zealand will plan collocated cyclotron facilities.

An indicative area allocation of 400m2 including shielding, will be required for a cyclotron facility including the cyclotron vault, control area, laboratory space, storage and staff / technical support areas. It is recommended that planners refer to the most recently completed projects to better understand the latest technology and approaches to planning.