

COMPLIANCE CHECKLIST

OP4: Freestanding Outpatient Nuclear Medicine Facilities

The following checklist is intended to be used in the plan review applications for health care facilities submitted to the Massachusetts Department of Public Health. This checklist summarizes and references the applicable requirements from the Licensure Regulations and the 2014 Edition of the FGI Guidelines for Design and Construction of Hospitals and Outpatient Facilities. Applicants must verify compliance of the plans submitted to the Department with all referenced requirements from the Licensure Regulations and FGI Guidelines when completing this Checklist. A separate Checklist must be completed for each hospital or clinic department, or clinical suite.

Other jurisdictions, regulations and codes may have additional requirements which are not included in this checklist, such as:

- NFPA 101 Life Safety Code (2000) and applicable related standards contained in the appendices of the Code
- State Building Code (780 CMR)
- Joint Commission on the Accreditation of Health Care Organizations
- CDC Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health Care Facilities
- USP 797
- Accessibility Guidelines of the Americans with Disabilities Act (ADA)
- Architectural Access Board Regulations (521 CMR)
- Local Authorities having jurisdiction.

Instructions:

1. All requirement lines must be completed according to the following instructions and included in the plan submissions for Self-Certification Process or Part II of the Abbreviated Review Process.
2. This checklist must be completed by the project architect or engineer based on the design actually reflected in the plans at the time of completion of the checklist.
3. Each requirement line (___) of this Checklist must be completed exclusively with one of the following symbols, unless otherwise directed in the checklist. If a functional space is not affected by a renovation project, the symbol "E" may be indicated on the requirement line (___) before the name of the functional space (associated requirements on indented lines below that name, or associated MEP requirements do not have to be completed in this case). If more than one functional space serves a given required function (e.g. patient room or exam room), that clarification should be provided in the Project Narrative, and the requirement lines are understood to only address the functional spaces that are involved in the project.

X = Requirement is met, for new space, for renovated space, or for existing direct support space for an expanded service.

= Check box under section titles or individual requirements lines for optional services or functions that are not included in the project area.

E = Requirement relative to an existing suite or area that has been *licensed* for its designated function, is *not affected* by the construction project and *does not pertain to a required direct support space* for the specific service affected by the project.

W = Waiver requested for specific section of the Regulations or FGI Guidelines, where hardship in meeting requirement can be demonstrated (a Physical Plant Waiver Form must be completed for each waiver request).

4. All room functions marked with "X" must be shown on the plans with the same name labels as in this checklist.
5. Mechanical, electrical & plumbing requirements are only partially mentioned in this checklist. The relevant section of the FGI Guidelines must be used for project compliance with all MEP requirements and for waiver references.
6. Oxygen, vacuum, medical air, and waste anesthesia gas disposal outlets (if required) are identified respectively by the abbreviations "OX", "VAC", "MA", & "WAGD".
7. Requirements referenced with "FI" result from formal interpretations from the FGI Interpretations Task Group.
8. The location requirements including asterisks (*) refer to the definitions of the Glossary in the beginning section of the FGI Guidelines.

Facility Name: _____

DoN Project Number: (if applicable) _____

Facility Address: _____

Satellite Name: (if applicable) _____

Building/Floor Location: _____

Satellite Address: (if applicable) _____

Submission Dates:

Project Description: _____

Initial Date:

Revision Date:

Architectural Requirements

Building Systems Requirements

2.2-3.6 **FREESTANDING OUTPATIENT NUCLEAR MEDICINE FACILITIES**

3.1-1.2.2 **PATIENT PRIVACY**
 ___ Each facility design ensures appropriate levels of patient acoustic & visual privacy & dignity throughout care process

3.1-1.2.3 **SHARED/PURCHASED SERVICES**
 check if not included in project
 ___ Details of shared or purchased space and/or services indicated in Project Narrative
 ___ Waiver requests have been submitted for shared or purchased space (except as explicitly allowed below)

3.1-1.3.2 **PARKING**
 1.3-3.3.1.1 ___ Parking capacity sufficient to satisfy needs of patients, personnel & public

140.209 **ACCESS**
 ___ Facility is accessible to handicapped individuals

3.1-1.3.3 **ENTRANCE**
 ___ At grade level
 ___ Clearly marked
 ___ Located so patients need not go through other activity areas (public lobbies may be shared)

3.1-1.4 **FACILITY LAYOUT**
 ___ Precludes unrelated traffic in facility

2.2-3.6.1.2 Space & Equipment Within Each Nuclear Medicine Procedure Room:
 (1) ___ Nuclear medicine equipment
 (a) ___ Stretcher
 (b) ___ Exercise equipment (e.g., treadmill, bicycle)
 (c) ___ Staff work space
 (2) ___ Permits entry of stretchers

2.2-3.6.2 **SCINTIGRAPHY (GAMMA CAMERA) ROOM**
 check if not included in project

2.2-3.6.2.2 Space Requirements:
 ___ room sized & configured in compliance with manufacturer specifications
 ___ installation plans have been submitted to DPH Plan Review

Nurse Call System:
 ___ Emergency staff assistance station Table 2.1-2

2.2-3.6.2.3 ___ handwashing station

Architectural Requirements

Building Systems Requirements

2.2-3.6.3 **POSITRON EMISSION TOMOGRAPHY (PET) SUITE**

check if not included in project

2.2-3.6.3.1(2) **Location & Layout:**
 ___ PET suites designed & positioned in hospital or facility to restrict incidental exposure to ionizing radiation sources by persons not immediately involved in PET examination

2.2-3.6.3.2(1) (a) ___ PET Scanner room
 ___ sized to accommodate PET equipment & clearances in accordance with manufacturer specifications
 ___ equipment installation plans have been submitted to DPH Plan Review

2.2-3.6.3.3 ___ Control room
 ___ full view of patient in the PET scanner

2.2-3.6.3.4 ___ Patient uptake/cool-down room
 ___ shielded room
 ___ dedicated toilet to accommodate radioactive waste & handwashing station

2.2-3.6.3.5 ___ Handwashing stations
 ___ locations of patient contact
 ___ locations where radiopharmaceutical materials are handled, prepared or disposed of

Support Areas for PET Suite:

2.2-3.6.3.6 ___ pre-procedure & recovery area or room
 ___ accommodates at least 2 stretchers

2.2-3.5.3.1(2) ___ immediately accessible* to procedure rooms
 ___ separate from corridors

2.2-3.5.3.1(3) ___ arranged to permit visual observation by staff before & after procedure

2.2-3.5.3.2 **Space Requirements:**
 ___ patient bays*
 check if not included in project
 ___ min. clear floor area 60 sf
 ___ 4'-0" between sides of patient beds/stretchers
 ___ 3'-0" between sides of patient beds/ stretchers & adjacent walls or partitions
 ___ patient cubicles*
 check if not included in project
 ___ min. clear floor area 80 sf
 ___ min. clearance 3'-0" between sides & foot of lounge chairs/stretchers & adjacent walls or partitions

Nurse Call System:
 ___ Emergency staff assistance station Table 2.1-2

Ventilation:
 ___ Min. 10 air changes per hour Table 7.1
 ___ Exhaust

Nurse Call System:
 ___ Patient station Table 2.1-2
 ___ Emergency staff assistance station

Architectural Requirements

Building Systems Requirements

- ___ single-bed rooms
 - check if not included in project
- ___ min. clear floor area 100 sf
- ___ min. clearance 3'-0"
 - between sides & foot of lounge chairs/stretchers & adjacent walls or partitions
- ___ provisions such as cubicle curtains used for patient privacy

2.1-2.6.5
2.1-7.2.2.8(1)

- Handwashing Stations:
- ___ handwashing stations in patient care areas located to be visible & unobstructed

2.1-2.6.5.3

- ___ handw. stations that serve multiple patient care stations
 - check if not included in project:

(1)

- ___ at least one handwashing station for every 4 patient care stations or fewer & for each major fraction thereof

(2)

- ___ evenly distributed
- ___ provide uniform distance from two patient care stations farthest from handwashing station

2.2-3.6.3.6
(2)
(3)

- ___ computer equipment room
- ___ contaminated soiled holding area

2.2-3.6.4 **SINGLE-PHOTON EMISSION COMPUTED TOMOGRAPHY (SPECT) SUITE**
 check if not included in project

2.2-3.6.4.2

- ___ SPECT scanner room
 - Space Requirements:
 - ___ sized to accommodate SPECT equipment & clearances in accordance with manufacturer specifications
 - ___ equipment installation plans have been submitted to DPH Plan Review

Nurse Call System:

- ___ Emergency staff assistance station Table 2.1-2

2.2-3.6.4.3

- ___ Control room
 - ___ full view of patient in the SPECT scanner

2.2-3.6.4.4

- ___ Computer equipment

2.2-3.6.4.5

- ___ Handwashing stations
 - ___ locations of patient contact
 - ___ locations where radiopharmaceutical materials are handled, prepared & disposed of

Architectural Requirements

Building Systems Requirements

2.2-3.6.6 **SUPPORT AREAS FOR NUCLEAR MEDICINE SERVICES**

- 2.2-3.6.6.1 Control desk & reception area
 - 2.2-3.6.6.3 Documentation area
 - 2.2-3.6.6.4 Consultation area
 - (1) area for consultation with patients or referring clinicians, including remote consultation with referring clinicians
 - 2.2-3.6.6.6 Dose administration area
 - (1) located near preparation area
 - (2) visual privacy from other areas
 - handwashing station
 - 2.2-3.6.6.7 Pre-procedure patient care area (may be combined with dose administration area)
 - accommodates patients on stretchers or beds
 - out of traffic
 - under control of staff
 - 2.2-3.6.6.10 (1) Soiled workroom
 - handwashing station
 - clinical sink (or equivalent flushing-rim fixtures)

or

 - (2) Soiled holding room
- 2.2-3.6.6.11 (1) Clean linen storage area
 - handwashing station- (2) Film storage
 - inactive image storage
 - under administrative control
 - properly secured to protect images from loss or damage
- 2.2-3.6.6.12 Environmental services room
 - located in nuclear medicine suite
- 2.1-2.6.12.2 (1) service sink or floor-mounted mop sink
- (2) provisions for storage of supplies & housekeeping equipment
- (3) handwashing station or hand sanitation station
- 2.2-3.6.6.14 Computer room
 - check if not included in project

- Ventilation:
 - Min. 10 air changes per hour Table 7.1
 - Exhaust
 - Negative pressure
- Nurse Call System:
 - Duty station
- Ventilation:
 - Min. 10 air changes per hour Table 7.1
 - Exhaust
 - Negative pressure

Architectural Requirements

Building Systems Requirements

- 2.2-3.6.6.15 Radiopharmacy
 check if not included in project
 (only if radiopharmaceutical preparation is performed off-site)
- appropriate shielding
 - (1) space requirements
 - (a) space for dose calibration, quality assurance & record-keeping activities
 - (b) space for storage of radionuclides, chemicals for preparation, dose calibrators & records
 - (2) floors & walls constructed of easily decontaminated materials
 - handwashing station

- Ventilation:
- Min. 6 air changes per hour Table 7.1
 - Exhaust
 - Negative pressure
 - Exhaust hoods 2.2-3.6.6.15(3)

- 2.2-3.6.6.16 Hot lab (Scintigraphy, PET & SPECT)
 check if not included in project
- securable area or room
 - (2) shielded
 - (3) source storage area
 - dose storage area
 - storage area for syringe shields
 - handwashing station

- Ventilation:
- Min. 6 air changes per hour Table 7.1
 - Exhaust
 - Negative pressure

2.2-3.6.7 **SUPPORT AREAS FOR STAFF**

- 2.2-3.6.7.1 Staff toilet
 readily accessible* to nuclear medicine department

- Ventilation:
- Min. 10 air changes per hour Table 7.1
 - Exhaust

2.2-3.6.8 **SUPPORT AREAS FOR PATIENTS**

- 2.2-3.6.8.2 Patient changing rooms
- (1) immediately accessible* to procedure rooms
 - (2) seat or bench, mirror & provisions for hanging clothing & securing valuables

- 2.2-3.6.8.3 Patient toilet rooms
 reserved for nuclear medicine patients
 immediately accessible* to waiting & procedure rooms

- Ventilation:
- Min. 10 air changes per hour Table 7.1
 - Exhaust

2.2-3.6.9 **SPECIAL DESIGN ELEMENTS FOR NUCLEAR MEDICINE AREAS**

- 2.2-3.6.9.1 Architectural Details:
- (1) ceiling-mounted equipment properly designed rigid support structures located above finished ceiling
 - (2) radiation shielding
 - radiation shielding plans have been submitted to the DPH Radiation Control Program

Architectural Requirements

Building Systems Requirements

3.1-5

GENERAL SUPPORT FACILITIES

3.1-5.2

Linen Services:

3.1-5.2.2

on-site linen processing

3.1-5.2.2.1

dedicated linen processing area

(1)

accommodates washer & dryer

(2)

area divided into distinct soiled (sorting & washing) & clean (drying & folding) areas

Ventilation:

Min. 10 air changes per hour Table 7.1

Exhaust

Negative pressure

No recirculating room units

3.1-5.2.2.2

storage for laundry supplies

3.1-5.2.2.3

clean linen storage

3.1-5.2.2.4

handwashing station

or

3.1-5.2.3

off-site laundry services

3.1-5.2.3.1

soiled linen holding area or dedicated area for soiled laundry cart

3.1-5.2.3.2

clean linen storage area

3.1-5.3

Materials Management:

3.1-5.3.2

receiving facilities

accessible from designated delivery door

3.1-5.3.3

clean clinical supply storage

3.1-6.2

PUBLIC AREAS

3.1-6.2.1

Vehicular drop-off & pedestrian entrance

3.1-6.2.2

Reception & information counter, desk, or kiosk

2.2-3.6.8.1

Patient waiting area

(1)

screened & separated from unrelated traffic

under staff control

3.1-6.2.4

Public toilets (may be located off public corridor in multi-tenant building)

3.1-6.2.4.1

readily accessible from waiting area without passing through patient care or staff work areas

Ventilation:

Min. 10 air changes per hour Table 7.1

Exhaust

Local telephone access

3.1-6.2.5

Provisions for drinking water

3.1-6.2.6

Wheelchair storage

3.1-6.3

ADMINISTRATIVE AREAS

3.1-6.3.3

General or Individual offices

3.1-6.3.5

Medical records

3.1-6.3.5.1

restricted to staff access

Architectural Requirements

Building Systems Requirements

3.1-6.4 **SUPPORT AREAS FOR STAFF**

- 3.1-6.4.1 Staff lounge
 check if not included in project
 handwashing station
- 3.1-6.4.2 Storage for staff personal effects (locking drawers, cabinets, or lockers)
 readily accessible to individual work areas

Architectural Details & MEP Requirements

3.1-7.2.2 **ARCHITECTURAL DETAILS**

- 3.1-7.2.2.1 Corridor Width:
 IBC 1018.2 Min. 44" except in corridors used to transport patients on stretchers
or
 Compliance of corridor width with State Building Code is established in submitted Code Review Sheet

- Min. 72" in corridors used to transport patients on stretchers
 check if not included in project
- 421 CMR 6.00 Corridors include turning spaces for wheelchairs

- 3.1-7.2.2.2 Ceiling Height:
 Min. 7'-10" (except in spaces listed below in this section)
- (1) Min. 7'-6" in corridors
 Min. 7'-6" in normally unoccupied spaces
- (2) Min. height 7'-0" from lowest protruding element of equipment in radiography rooms
 check if not included in project

- 3.1-7.2.2.3 Doors & Door Hardware:
 (1) Door Type:
 (a) all doors between corridors, rooms, or spaces subject to occupancy of swing type or sliding doors
 (b) sliding doors
 check if not included in project
 no floor tracks in patient care areas

- (2) Door Openings:
 (a) door provides stretcher access
 min. clear width 45.5"
 min. clear height 83.5"
or
 door does not provide stretcher access
 door to room used by patients min. clear width 32"
- 421 CMR 26.00
 3.1-7.2.2.3
 (3) door do not swing into corridors except doors in behavioral health units & doors to non-occupiable spaces
 lever hardware
 doors to patient use toilets in patient care & treatment areas have hardware that allows staff emergency access
- 3.1-7.2.2.8 Handwashing Stations:
 (3) Anchored to support vertical or horizontal force of 250 lbs.
- (4) Counter-Mounted Sinks:
 (a) countertops made of porcelain, stainless steel, or solid surface materials
 plastic laminate countertops
 check if not included in project
 at minimum substrate marine-grade plywood with impervious seal
 (5) no storage casework beneath sink
 (6) provisions for drying hands at all handwashing stations except hand scrub facilities
 (a) hand-drying device does not require hand contact
 (b) hand-drying provisions enclosed to protect against dust or soil
 (7) liquid or foam soap dispensers

- 3.1-7.2.2.9 Grab Bars:
 (2) anchored for concentrated load of 250 lbs.
 (3) bariatric design
 check if not included in project
 ___ length of rear wall grab bars 44"

3.1-7.2.3 **SURFACES**

- 3.1-7.2.3.1 Flooring & Wall Bases:
 (1) Selected flooring surfaces cleanable & wear-resistant for location
 (2) Smooth transitions between different flooring materials
 (3) Flooring surfaces, including those on stairways, stable, firm & slip-resistant
 ___ Carpet provides stable & firm surface
 (4) Floors & wall bases materials in all areas subject to frequent wet cleaning are not affected by germicidal cleaning solutions

- 3.1-7.2.3.2 Walls & Wall Protection:
 (1)
 (a) Wall finishes washable
 (b) Wall finishes in vicinity of plumbing fixtures smooth, scrubbable & water-resistant
 (2) Wall surfaces in areas routinely subjected to wet spray or splatter are monolithic or have sealed seams
 (4) No sharp protruding corners
 (5) Corner guards durable & scrubbable

3.1-8.2 **HVAC SYSTEMS**

- 4/6.3.1 Outdoor Air Intakes:
 4/6.3.1.1 Located min. 25 feet from cooling towers & all exhaust & vent discharges
 ___ Bottom of air intake is at least 6'-0" above grade
 Roof Mounted Air Intakes:
 check if not included in project
 ___ bottom min. 3'-0" above roof level

- 4/6.4 Filtration:
 ___ Filter banks conform to Table 6.4

- 4/6.7 Air Distribution Systems:
 4/6.7.1 Ducted return or exhaust systems in spaces listed in Table 7.1 with required pressure relationships

- 4/7 Space Ventilation:
 4/7.1 Spaces ventilated per Table 7.1
 ___ Air movement from clean areas to less clean areas

- ___ Min. number of total air changes indicated either supplied for positive pressure rooms or exhausted for negative pressure rooms
 ___ Recirculating room HVAC units
 check if not included in project
 ___ each unit serves only single space
 ___ min. MERV 6 filter for airflow downstream of cooling coils

- 3.1-8.2.1.1(5) Acoustical Considerations:
 ___ Equipment location or acoustic provisions limit noise associated with outdoor mechanical equipment to 65 dBA at building façade

- 3.1-8.2.1.2 Ventilation & Space-Conditioning:
 (1) All rooms & areas used for patient care have provisions for ventilation
 (2) Natural ventilation only allowed for non sensitive areas via operable windows
 ___ Mechanical ventilation provided for all rooms & areas in facility in accordance with Table 7.1 of Part 4

3.1-8.3 **ELECTRICAL SYSTEMS**

3.1-8.3.2 **ELECTRICAL DISTRIBUTION & TRANSMISSION**

- 3.1-8.3.2.1 Switchboards Locations:
 (1)
 (a) located in areas separate from piping & plumbing equipment
 ___ not located in rooms they support
 (b) accessible to authorized persons only
 (c) easily accessible
 (d) located in dry, ventilated space free of corrosive gases or flammable material

3.1-8.3.6 **ELECTRICAL RECEPTACLES**

- 3.1-8.3.6.2 Receptacles in patient care areas conform to Table 3.1-1

3.1-8.3.7 **CALL SYSTEMS**

- ___ Nurse call stations conform to Table 3.1-2

3.1-8.4 **PLUMBING SYSTEMS**

- 3.1-8.4.2.5 Heated Potable Water Distribution Systems:
- (2) Systems serving patient care areas are under constant recirculation
 - Non-recirculated fixture branch piping does not exceed 25'-0" in length
 - (3) No dead-end piping
 - (4) Water-heating system has supply capacity at minimum temperatures & amounts indicated in Table 2.1-3
 - (5) Handwashing stations supplied as required above
- or**
- Handwashing stations supplied at constant temperature between 70°F & 80°F using single-pipe supply

3.1-8.4.3 **PLUMBING FIXTURES**

- 3.1-8.4.3.1
- (1) Materials material used for plumbing fixtures non-absorptive & acid resistant
- 3.1-8.4.3.2 Handwashing Station Sinks:
- (1) Basins reduce risk of splashing to areas where direct patient care is provided, sterile procedures are performed & medications are prepared
 - (2) Basin min. 144 square inches
 - Min. dimension 9 inches
 - (3) Made of porcelain, stainless steel, or solid-surface materials
 - (5) Water discharge point of faucets at least 10 inches above bottom of basin
 - (7) Anchoring for sinks withstands min. vertical or horizontal force of 250 lbs
 - (8) Fittings operated without using hands for sinks used by staff, patients & public
- (a) blade handles or single lever
- min. 4 inches long
 - provide clearance required for operation
- or**
- (b) sensor-regulated water fixtures
- meet user need for temperature & length of time water flows
 - designed to function at all times & during loss of normal power

- 3.1-8.4.3.5 Clinical Sinks:
- check if not included in project
 - (1) Trimmed with valves that can be operated without hands
 - (2) Handles min. 6 inches long
 - Integral trap wherein upper portion of water trap provides visible seal

3.1-8.7.2 **ELEVATORS**

- 3.1-8.7.2.1
- Outpatient facility located on more than one floor or on floor other than an entrance floor at grade level
 - at least one elevator
- or**
- Outpatient facility located on entrance floor at grade level