COMPLIANCE CHECKLIST

IP23: Chemotherapy Infusion

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 nursing unit, 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:
- 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)

__________________________________________________________

Satellite Address: (if applicable)

__________________________________________________________

Project Description:

______________________________________________________________________________

MDPH/DHCFLC 05/15 IP23
Architectural Requirements

2.2-3.12

CHEMOTHERAPY INFUSION

2.2-3.12.2  ___ Treatment Area
2.2-3.12.2.1(3)  ___ separate from administrative & waiting areas

2.2-3.12.2.2  Space Requirements:

___ patient bays*  
□ check if not included in project
___ min. clear floor area 70 sf
___ 5'-0" between sides of patient beds/stretchers
___ min. clearance 3'-0" on at least three sides of bed or lounge chair

___ patient cubicles*  
□ check if not included in project
___ min. clear floor area 80 sf
___ min. clearance 3'-0" on at least three sides of bed or lounge chair

___ single-bed rooms  
□ check if not included in project
___ min. clear floor area 100 sf
___ min. clearance 3'-0" on at least three sides of bed or lounge chair

2.2-3.12.2.4  ___ Each patient station has provisions for visual privacy from observation by other patients & visitors

2.2-3.12.2.5  ___ Handwashing stations
2.1-7.2.2.8(1)  ___ handwashing stations in patient care areas located to be visible & unobstructed
2.1-2.6.5.3  ___ handwashing 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

2.2-3.12.2.5  ___ handwashing station located in, next to, or directly accessible* to nurse station
(2)

2.2-3.12.2.6  ___ Patient toilet room
___ located in treatment area
___ handwashing station

Ventilation:
___ Min. 6 air changes per hour  
___ 10 air changes per hour  
___ Exhaust

2.2-3.12.2.8  ___ Nurse station
___ located in treatment area
(1)  ___ designed to provide visual observation of all patient care stations
(2)  ___ nurse station out of direct line of traffic
Architectural Requirements

2.2-3.12.4.2 Airborne infection isolation (AII) room
☐ check if not included in project

2.1-2.4.2.2
(1) single-bed room
☐ provision made for personal protective equipment storage at entrance to room
☐ handwashing station in each patient room

2.1-2.3.1(6) monolithic floors with integral coved 6” high wall base

Building Systems Requirements

Ventilation:
☐ Min. 12 air changes per hour Table 7.1
☐ Exhaust
☐ Negative pressure
☐ No recirculating room units
☐ Space ventilation & pressure relationship maintained in event of loss of normal electrical power
☐ Exhaust air from AII rooms, associated anterooms & toilet rooms discharged directly to outdoors
☐ Exhaust grilles or registers located directly above patient bed on ceiling or on wall near head of bed
☐ Permanent device monitoring differential air pressure between AII room & corridor

2.1-2.4.2.2(4) separate room with toilet & handwashing station

2.1-2.4.2.3 Anteroom:
☐ check if not included in project
(1) for persons to don personal protective equipment before entering patient room
(2) all doors to anteroom have self-closing devices

2.1-2.4.2.4(1) (b) self-closing devices on all room exit doors
(c) doors has edge seals

2.2-3.12.6 SUPPORT AREAS FOR CHEMOTHERAPY INFUSION CENTER

2.2-3.12.6.6 Medication safety zone - medication preparation room

2.1-2.6.6.2(1) (a) under visual control of nursing staff
(b) work counter
☐ handwashing station
☐ lockable refrigerator
☐ locked storage for controlled drugs

Sharps Containers:
☐ check if not included in project
☐ sharps containers placed at height that allows users to see top of container

(c) (d) space to prepare medicines in addition to any self-contained medicine-dispensing unit

Ventilation:
☐ 4 air changes per hour Table 7.1
Nurse Call System:
☐ Duty station Table 2.1-2

MDPH/DHCFLC 05/15 IP23
### Architectural Requirements

<table>
<thead>
<tr>
<th>2.1-4.2.3.2</th>
<th>Sterile IV preparation room</th>
</tr>
</thead>
<tbody>
<tr>
<td>(check if not included in project)</td>
<td></td>
</tr>
<tr>
<td>separate sterile work room with</td>
<td></td>
</tr>
<tr>
<td>laminar-flow workstation designed for</td>
<td></td>
</tr>
<tr>
<td>product protection</td>
<td></td>
</tr>
<tr>
<td>(1) laminar-flow workstation includes</td>
<td></td>
</tr>
<tr>
<td>non hydroscopic HEPA filter</td>
<td></td>
</tr>
<tr>
<td>(2) laminar-flow workstation includes</td>
<td></td>
</tr>
<tr>
<td>visible pressure gauge for</td>
<td></td>
</tr>
<tr>
<td>detection of filter leaks or defects</td>
<td></td>
</tr>
</tbody>
</table>

| DPH-BRP Policy |
| ISO Class 7 clean room (as defined by USP 797) |

| 2.1-4.2.3.3 | Cytotoxic IV preparation room. |
| check if not included in project |
| separate room for preparation of |
| cytotoxic IV admixtures under Class II |
| (Type A2, BL, or B2) or Class III |
| biological safety cabinet. |

| DPH-BRP Policy |
| ISO Class 7 clean room (as defined by USP 797) |

| USP 797 Access to sterile IV preparation room through ISO Class 7 anteroom |

| 2.1-4.2.6.5 | handwashing station |

| USP 797 Access to sterile IV preparation room through ISO Class 7 anteroom |

| 2.2-3.12.6.7 | Nourishment area or room |
| (2) | drinking water-dispensing unit for patient use separate from handwashing station |

| 2.1-2.6.7.2 | handwashing station |
| (1) | work counter |
| (2) | refrigerator |
| (3) | microwave |
| (4) | storage cabinets |
| (5) | space for temporary storage of unused & soiled food service implements |

| 2.1-2.6.7.3 | provisions & space for separate temporary storage of unused & soiled meal trays not picked up at mealtime |

| 2.1-2.6.9 | Clean workroom or clean supply room |
| 2.1-2.6.9.1 | clean workroom used for preparing patient care items |

| (1) work counter |
| (2) handwashing station |
| (3) storage facilities for clean & sterile supplies |

### Building Systems Requirements

| Ventilation: | USP 797 |
| Min. 30 air changes per hour |
| Positive pressure |
| HEPA filter |

| Ventilation: | USP 797 |
| Min. 30 air changes per hour |
| HEPA filter |

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| Ventilation: | USP 797 |
| Min. 30 air changes per hour |
| HEPA filter |

| Ventilation: | Table 7.1 |
| 2 air changes per hour |

| Ventilation: | Table 7.1 |
| 4 air changes per hour |
| Positive pressure |

| Nurse Call System: |
| Duty station |

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MDPH/DHCFLC 05/15 IP23
### Architectural Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1-2.6.9.2</td>
<td>clean supply room used only for storage &amp; holding as part of system for distribution of clean &amp; sterile supplies</td>
</tr>
<tr>
<td>2.1-2.6.10</td>
<td>soiled workroom or soiled holding room</td>
</tr>
<tr>
<td>2.1-2.6.10.1</td>
<td>(1) handwashing station</td>
</tr>
<tr>
<td></td>
<td>(2) flushing-rim clinical service sink with bedpan washer</td>
</tr>
<tr>
<td></td>
<td>(3) work counter</td>
</tr>
<tr>
<td></td>
<td>(4) space for separate covered containers</td>
</tr>
</tbody>
</table>

### Building Systems Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1-2.6.9.2</td>
<td>Ventilation: 4 air changes per hour&lt;br&gt;Positive pressure</td>
</tr>
<tr>
<td>2.1-2.6.10</td>
<td>Ventilation: 10 air changes per hour&lt;br&gt;Exhaust&lt;br&gt;Negative pressure</td>
</tr>
<tr>
<td>2.1-2.6.12.2</td>
<td>Nurse Call System: Duty station</td>
</tr>
<tr>
<td>2.1-2.7.1</td>
<td>Ventilation: 10 air changes per hour&lt;br&gt;Exhaust</td>
</tr>
</tbody>
</table>

### SUPPORT AREAS FOR STAFF

#### Staff lounge facilities

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2-3.12.7.1</td>
<td>located on same floor as cancer treatment/infusion therapy unit &amp; convenient to unit</td>
</tr>
</tbody>
</table>

#### Staff toilet room

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2-3.12.7.2</td>
<td>readily accessible* to chemotherapy infusion unit</td>
</tr>
</tbody>
</table>

### SUPPORT AREAS FOR PATIENTS

#### Waiting room

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2-3.12.8.1</td>
<td>toilet room with handwashing station</td>
</tr>
</tbody>
</table>

#### Toilet & handwashing station

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2-3.12.8.2</td>
<td>toilet &amp; handwashing station</td>
</tr>
</tbody>
</table>

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Table 7.1
**Architectural Requirements**

2.2-3.12.8.2  ____ Storage for patient belongings

2.2-3.12.9  Special Design Elements:

(1)  ____ no decorative water features

(2)  ____ no fish tanks

**Building Systems Requirements**

(4)  ____ Lever hardware

(b)  ____ Doors for patient toilet facilities

(5)  ____ 2 doors separated by

(a)  ____ horizontal distance equal to

one-half length of max. diagonal room dimension

or  ____ door that swings outward

or  ____ door equipped with emergency rescue hardware

or  ____ sliding door

(4)  ____ Glazing within 18” of floor

☐ check if not included in project

☐ safety glass, wire glass or plastic break-resistant material

2.1-7.2.2.7  GLAZING MATERIALS:

(4)  ____ Handwashing Station Countertops:

☐ check if not included in project

☐ porcelain, stainless steel or solid surface materials

2.1-7.2.2.8  HANDWASHING STATIONS:

(1)  ____ Handw. stations in patient care areas located to be visible & unobstructed

(3)  ____ Anchoring suitable for vertical or horizontal force of 250 lbs.

(4)  ____ Handwashing Station Countertops:

☐ check if not included in project

(a)  ____ porcelain, stainless steel or solid surface materials

(b)  ____ plastic laminate countertops

☐ check if not included in project

☐ substrate marine-grade plywood (or equivalent) with impervious seal

(5)  ____ Designed to prevent storage beneath sink

(6)  ____ provisions for drying hands

(a)  ____ hand-drying device does not require hands to contact dispenser

(d)  ____ hand-drying device does not require hands to contact dispenser

(7)  ____ Liquid or foam soap dispensers

2.1-7.2.2.2  ARCHITECTURAL DETAILS

2.1-7.2.2.1  NFPA 101

Aisles, corridors & ramps required for exit access in a hospital not less than 8'-0” in clear & unobstructed width

or  Code Review Sheet establishing compliance with NFPA 101 has been submitted

Aisles, corridors & ramps in adjunct areas not intended for the housing, treatment, or use of inpatients not less than 44” in clear width

2.1-7.2.2.2  CEILING HEIGHT:

(1)  ____ Min. ceiling height 7’-6” in corridors & normally unoccupied spaces

(4)  ____ Min. height 7’-6” above floor of suspended tracks, rails & pipes located in traffic path for patients in beds and/or on stretchers

Min. ceiling height 7’-10” in other areas

2.1-7.2.2.3  DOORS & DOOR HARDWARE:

(1)  ____ Doors between corridors, rooms, or spaces subject to occupancy swing type or sliding doors

(a)  ____ Sliding doors

☐ check if not included in project

☐ manual or automatic sliding doors comply with NFPA 101

☐ code review sheet attached

☐ no floor tracks

(b)  ____ Swinging doors for personnel use in addition to sliding doors

☐ check if not included in project

☐ min. clear width 34.5”

(3)  ____ Doors do not swing into corridors (except doors to non-occupiable spaces & doors with emergency breakaway hardware)

☐ min. clear width 34.5”

☐ doors not swing into corridors

☐ code review sheet attached
## 2.1-7.2.2.9 GRAB BARS:
1. Grab bars anchored to sustain concentrated load of 250 lbs.

## 2.1-7.2.2.10 HANDRAILS:
1. Handrails installed on both sides of patient use corridors.
2. Rail ends return to wall or floor.
3. Smooth non-textured surface free of rough edges.
4. Eased edges & corners.
5. Finishes cleanable.

## 2.1-7.2.2.12 NOISE CONTROL:
1. Partitions, floors & ceiling construction in patient areas conform to Table 1.2-6.

## 2.1-7.2.3 SURFACES

### 2.1-7.2.3.1 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.
4. Carpet check if not included in project provides stable & firm surface.
5. Floors & wall bases of soiled workrooms, toilet rooms & other wet cleaned areas are not physically affected by cleaning solutions.

### 2.1-7.2.3.2 WALLS & WALL PROTECTION:
1. Washable wall finishes.
2. Wall finishes near plumbing fixtures smooth, scrubbable & water-resistant.
3. Monolithic wall surfaces in areas routinely subjected to wet spray or splatter.
4. No sharp, protruding corners.
5. Wall protection devices & corner guards durable & scrubbable.

### 2.1-7.2.3.3 CEILINGS:
1. Ceilings in areas occupied by patients, in clean rooms & soiled rooms:
   a. Cleanable with routine housekeeping equipment.
   b. Acoustic & lay-in ceilings check if not included in project do not create ledges or crevices.
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

4/7.2 Additional Room-Specific Requirements:
2.1-8.2.1.1 Acoustic Considerations:

(5) Equipment location or acoustic provisions limit noise associated with outdoor mechanical equipment to 65 dBA at building façade

2.1-8.2.1.2 Ventilation & Space-Conditioning:

(1) All rooms & areas used for patient care have provisions for ventilation

(2) Mechanical ventilation provided for all rooms & areas in facility in accordance with Table 7.1 of Part 4

2.1-8.3 ELECTRICAL SYSTEMS

2.1-8.3.2 ELECTRICAL DISTRIBUTION & TRANSMISSION

2.1-8.3.2.1 Switchboards Locations:

(1) Located in areas separate from piping & plumbing equipment

(b) Not located in rooms they support

(c) Accessible to authorized persons only

(c) Located in dry, ventilated space free of corrosive gases or flammable material

2.1-8.3.2.2 Panelboards:

(1) Panelboards serving life safety branch emergency circuits only serve same floor, floor above & floor below

(2) Panelboards serving critical branch emergency circuits only serve same floor

(3) New panelboards not located in exit enclosures

2.1-8.3.3 EMERGENCY ELECTRICAL SERVICE

(1) Emergency power per NFPA 99, NFPA 101 & NFPA 110

2.1-8.3.5 ELECTRICAL EQUIPMENT

2.1-8.3.5.2 Required handwashing station or scrub sink tied to building electrical service

check if not included in project

connected to essential electrical system

2.1-8.3.6 ELECTRICAL RECEPTACLES

2.1-8.3.6.2 Receptacles in Patient Care Areas:

(receptacles provided according to Table 2.1-1

2.1-8.3.7 CALL SYSTEMS

(1) Nurse call system locations provided as required in Table 2.1-2

(2) Nurse call systems report to attended location with electronically supervised visual & audible signals

(4) Call systems meet requirements of UL 1069 Standard for Hospital Signaling & Nurse Call Equipment

(5) Wireless system

check if not included in project

meet requirements of UL 1069

2.1-8.3.7.3 Bath Stations:

(1) provided at each patient toilet

(1) alarm turned off only at bath station where it was initiated

(3) located to side of toilets within 12” of front of toilet bowl & 3’-0” to 4’-0” above floor

2.1-8.3.7.4 Staff emergency stations for summoning local staff assistance for non-life-threatening situations at each patient care location

2.1-8.3.7.5 Code call station equipped with continuous audible or visual signal at point of origin

2.1-8.4.2 PLUMBING & OTHER PIPING SYSTEMS

2.1-8.4.2.5 Heated Potable Water Distribution Systems:

(2) systems serving patient care areas are under constant recirculation

(3) new 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
### Handwashing Stations

- Handwashing stations supplied as required above
- Handwashing stations supplied at constant temperature between 70°F & 80°F using single-pipe supply

### Drainage Systems

- Drainage piping above ceiling of, or exposed in electric closets
- Special provisions to protect space below from leakage & condensation

### PLUMBING FIXTURES

#### Handwashing Station Sinks

- Basins reduce risk of splashing to areas where direct patient care is provided, sterile procedures are performed & medications are prepared
- Basin min. 144 square inches
- Min. dimension 9 inches
- Made of porcelain, stainless steel, or solid-surface materials
- Water discharge point of faucets at least 10 inches above bottom of basin
- Anchoring for sinks withstands min. vertical or horizontal force of 250 lbs.
- Fittings operated without using hands for sinks used by medical & nursing staff, patients, public & food handlers

### Clinical Sinks

- Trimmed with valves that can be operated without hands
- Handles min. 6 inches long
- Integral trap wherein upper portion of water trap provides visible seal

### Medical Gas & Vacuum Systems

- Station outlets provided as indicated in Table 2.1-4
- Vacuum discharge at least 25'-0" from all outside air intakes, doors & operable windows

### Electronic Surveillance Systems

- Devices in patient areas mounted in unobtrusive & tamper-resistant enclosures
- Monitoring devices not readily observable by general public or patients
- Receive power from emergency electrical system