COMPLIANCE CHECKLIST

IP24 Pharmacy Services

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 2018 Edition of the FGI Guidelines for Design and Construction of Hospitals. 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)
- Accreditation requirements of The Joint Commission
- CDC Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health Care Facilities
- USP 797, USP 800 & Regulations of the Massachusetts Board of Registration in Pharmacy
- Occupational Safety & Health Standards (OSHA)
- 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 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 marks, unless otherwise directed in the checklist. If a functional space is not affected by a renovation project, the mark “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.

   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. “E” must not be used for an existing required support space associated with a new patient care room or area.

   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). An explicit floor plan or plan detail must be attached to 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, waste anesthesia gas disposal and instrument air outlets (if required) are identified respectively by the abbreviations "OX", "VAC", "MA", "WAGD" & "IA".
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 and reproduced in this checklist.

Facility Name:

Facility Address:

Satellite Name: (if applicable)

Satellite Address: (if applicable)

Project Description:

DoN Project Number: (if applicable)

Building/Floor Location:

Submission Dates:

Initial Date:

Revision Date:

MDPH/DHCFLC 02/19 IP24
<table>
<thead>
<tr>
<th>Architectural Requirements</th>
<th>Building Systems Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1-4.2</td>
<td>PHARMACY SERVICES</td>
</tr>
<tr>
<td>2.1-4.2.1.2</td>
<td>LOCATION</td>
</tr>
<tr>
<td>(1)</td>
<td>Pharmacy room or suite accesible to clinical areas of hospital</td>
</tr>
<tr>
<td>(2)</td>
<td>Controlled access to pharmacy room or suite</td>
</tr>
<tr>
<td>2.1-4.2.2</td>
<td>PHARMACY AREAS</td>
</tr>
<tr>
<td>2.1-4.2.2.1</td>
<td>Dispensing facilities</td>
</tr>
<tr>
<td>(1)</td>
<td>room or area for receiving unpacking &amp; inventory control of materials used in pharmacy</td>
</tr>
<tr>
<td></td>
<td>Ventilation:</td>
</tr>
<tr>
<td></td>
<td>Min. 4 air changes per hour</td>
</tr>
<tr>
<td></td>
<td>Positive pressure</td>
</tr>
<tr>
<td>(2)</td>
<td>work counters &amp; space for automated &amp; manual dispensing activities</td>
</tr>
<tr>
<td>(3)</td>
<td>extemporaneous compounding area</td>
</tr>
<tr>
<td></td>
<td>sink &amp; counter space for drug preparation</td>
</tr>
<tr>
<td>(4)</td>
<td>area for reviewing &amp; recording</td>
</tr>
<tr>
<td>(5)</td>
<td>area for temporary storage exchange &amp; restocking of carts</td>
</tr>
<tr>
<td>(6)</td>
<td>security provisions for drugs &amp; personnel in dispensing counter area</td>
</tr>
<tr>
<td>2.1-4.2.2.2</td>
<td>Manufacturing facilities</td>
</tr>
<tr>
<td>(1)</td>
<td>bulk compounding area</td>
</tr>
<tr>
<td></td>
<td>Ventilation:</td>
</tr>
<tr>
<td></td>
<td>Min. 4 air changes per hour</td>
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<tr>
<td></td>
<td>Positive pressure</td>
</tr>
<tr>
<td>(2)</td>
<td>provisions for packaging &amp; labeling</td>
</tr>
<tr>
<td>(3)</td>
<td>quality control area</td>
</tr>
<tr>
<td>2.1-4.2.2.3</td>
<td>Storage</td>
</tr>
<tr>
<td>(storage cabinets, shelves or separate rooms or closets)</td>
<td>Ventilation:</td>
</tr>
<tr>
<td>(1)</td>
<td>bulk storage</td>
</tr>
<tr>
<td></td>
<td>Min. 4 air changes per hour</td>
</tr>
<tr>
<td></td>
<td>Positive pressure</td>
</tr>
<tr>
<td>(2)</td>
<td>active storage</td>
</tr>
<tr>
<td>(3)</td>
<td>refrigerated storage</td>
</tr>
<tr>
<td>(4)</td>
<td>storage for volatile fluids &amp; alcohol</td>
</tr>
<tr>
<td>(5)</td>
<td>secured lockable storage for narcotics &amp; controlled drugs</td>
</tr>
<tr>
<td>(6)</td>
<td>equipment &amp; supply storage for general supplies &amp; equipment not in use</td>
</tr>
<tr>
<td>2.1-4.2.3</td>
<td>STERILE WORK AREAS</td>
</tr>
<tr>
<td>□ check if not included in project</td>
<td></td>
</tr>
<tr>
<td>2.1-4.2.3.1</td>
<td>Layout of pharmacy precludes unrelated traffic through non-hazardous drug IV preparation rooms &amp; hazardous drug IV preparation rooms</td>
</tr>
<tr>
<td>(2)</td>
<td>Positive pressure non-hazardous IV preparation room &amp; negative pressure hazardous drug IV prep room do not share robotic systems</td>
</tr>
<tr>
<td><strong>Architectural Requirements</strong></td>
<td><strong>Building Systems Requirements</strong></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td><strong>2.1-4.2.3.2</strong> Non-hazardous IV preparation area</td>
<td></td>
</tr>
<tr>
<td>☐ check if not included in project</td>
<td></td>
</tr>
<tr>
<td>___ laminar-flow workstation designed for product protection</td>
<td></td>
</tr>
<tr>
<td>(1) ___ laminar-flow workstation includes non-hydroscopic filter rated at 99.97 percent (HEPA filter)</td>
<td></td>
</tr>
<tr>
<td>(2) ___ laminar-flow workstation have visible pressure gauge for detection of filter leaks or defects</td>
<td></td>
</tr>
<tr>
<td>___ complies with regulations of Board of Registration in Pharmacy 247 CMR 17.00</td>
<td></td>
</tr>
<tr>
<td><strong>2.1-4.2.3.3</strong> Hazardous drug IV preparation room</td>
<td></td>
</tr>
<tr>
<td>☐ check if not included in project</td>
<td></td>
</tr>
<tr>
<td>___ separate room provided for preparation of hazardous drug IV admixtures under class II (type A2 B1 or B2) or class III biological safety cabinet</td>
<td></td>
</tr>
<tr>
<td>___ complies with regulations of Board of Registration in Pharmacy 247 CMR 19.00</td>
<td></td>
</tr>
<tr>
<td><strong>2.1-4.2.8</strong> SUPPORT AREAS FOR PHARMACY</td>
<td></td>
</tr>
<tr>
<td><strong>2.1-4.2.8.2</strong> Separate room or area provided for office functions</td>
<td></td>
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<tr>
<td><strong>2.1-4.2.8.3</strong> Room for education &amp; training (may be multipurpose room shared w/ other departments)</td>
<td></td>
</tr>
<tr>
<td><strong>2.1-4.2.8.4</strong> Outpatient medication consultation area</td>
<td></td>
</tr>
<tr>
<td>☐ check if not included in project</td>
<td></td>
</tr>
<tr>
<td>(only if medications are not dispensed to outpatients from hospital pharmacy area)</td>
<td></td>
</tr>
<tr>
<td><strong>2.1-4.2.8.7</strong> Handwashing station</td>
<td></td>
</tr>
<tr>
<td>___ provided either in anteroom or immediately outside room where open medications are prepared</td>
<td></td>
</tr>
<tr>
<td><strong>2.1-4.2.8.13</strong> Unit dose procedure used</td>
<td></td>
</tr>
<tr>
<td>☐ check if not included in project</td>
<td></td>
</tr>
<tr>
<td>___ additional equipment &amp; supply storage</td>
<td></td>
</tr>
<tr>
<td>___ space for carts</td>
<td></td>
</tr>
<tr>
<td><strong>2.1-4.2.9</strong> SUPPORT AREAS FOR STAFF</td>
<td></td>
</tr>
<tr>
<td><em>(may be outside pharmacy area &amp; shared with other departments)</em></td>
<td></td>
</tr>
<tr>
<td><strong>2.1-4.2.9.2</strong> Readily accessible* to pharmacy</td>
<td></td>
</tr>
<tr>
<td><strong>2.1-4.2.9.1</strong> Lounge</td>
<td></td>
</tr>
<tr>
<td>___ Locker facilities</td>
<td></td>
</tr>
<tr>
<td>___ Staff toilet room</td>
<td></td>
</tr>
<tr>
<td>Ventilation:</td>
<td>Table 7.1</td>
</tr>
<tr>
<td>___ Min. 10 air changes per hour</td>
<td></td>
</tr>
<tr>
<td>___ Exhaust</td>
<td></td>
</tr>
<tr>
<td>___ Negative pressure</td>
<td></td>
</tr>
<tr>
<td>___ No recirculating room units</td>
<td></td>
</tr>
</tbody>
</table>
**ARCHITECTURAL DETAILS**

### CORRIDOR WIDTH:

2.1-7.2.2.1

- **Aisles, corridors & ramps in adjunct areas not intended for the housing, treatment, or use of inpatients not less than 44” in clear & unobstructed width**
- **Detailed code review incorporated in Project Narrative**

### CEILING HEIGHT:

2.1-7.2.2.2

- **Min. ceiling height 7'-6” in corridors & in normally unoccupied spaces**
- **Min. ceiling height 7'-10” in other areas**

### DOORS & DOOR HARDWARE:

2.1-7.2.2.3

- **Doors between corridors, rooms, or spaces subject to occupancy swing type or sliding doors**
- **Check if not included in project**
- **Sliding doors comply with NFPA 101, detailed code review incorporated in Project Narrative**
- **No floor tracks**

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### SURFACES

2.1-7.2.3.1

- **Flooring surfaces cleanable & wear-resistant for location**
- **Smooth transitions provided between different flooring materials**
- **Flooring surfaces including those on stairways are stable, firm & slip-resistant**
- **Floors & wall bases of toilet rooms & other areas subject to frequent wet cleaning are constructed of materials that are not physically affected by germicidal or other types of cleaning solutions**
- **Floors are monolithic & integral coved wall bases are at least 6” high & tightly sealed to wall in IV & chemotherapy preparation rooms**

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**Countertops substrate**

- **Check if not included in project**
- **Marine-grade plywood (or equivalent material) with impervious seal**

**Handwashing station casework**

- **Check if not included in project**
- **It be designed to prevent storage beneath sink**

**Provisions for drying hands**

- **Check if not included in project**
- **(only at hand scrub facilities)**

**Hand-drying device does not require hands to contact dispenser**

**Hand-drying device is enclosed to protect against dust or soil & to ensure single-unit dispensing**

**Liquid or foam soap dispensers**

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**HANDWASHING STATIONS:**

2.1-7.2.2.8

- **Handwashing station countertops made of porcelain, stainless steel, solid-surface materials or impervious plastic laminate assembly**

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**Wall finishes are washable**

**Wall finishes near plumbing fixtures are smooth, scrubbable & water-resistant**
### Compliance Checklist: Pharmacy Services

#### Wall Surfaces
- Wall surfaces in areas routinely subjected to wet spray or splatter (e.g., environmental services rooms) are monolithic or have sealed seams that are tight & smooth

#### Wall Protection Devices
- Wall protection devices & corner guards durable & scrubbable

#### Ceilings
- Ceilings provided in all areas except mechanical, electrical & communications equipment rooms
  - Ceilings cleanable with routine housekeeping equipment
  - Acoustic & lay-in ceilings where used not create ledges or crevices

#### Semi-Restricted Areas
- Ceiling finishes are scrubbable, non absorptive, non perforated, & capable of withstanding cleaning with chemicals
- Lay-in ceilings gasketed or each ceiling tile weighs at least one pound per square foot
- Use of perforated tegular serrated or highly textured tiles not are permitted in semi-restricted areas
  - Ceilings of monolithic construction

### Heating Ventilation & Air-Conditioning (HVAC) Systems

#### Heating & Cooling Sources
- Provide heat sources & essential accessories in number & arrangement sufficient to accommodate facility needs (reserve capacity) even when any one of heat sources or essential accessories is not operating due to breakdown or routine maintenance

#### Central Cooling Systems
- Central cooling systems greater than 400 tons (1407 kW) peak cooling load
  - Number & arrangement of cooling sources & essential accessories is sufficient to support facility operation plan upon breakdown or routine maintenance of any one of cooling sources.

#### Outdoor Air Intakes & Exhaust Discharges
- Outdoor Air Intakes:
  - Located min. of 25 ft from cooling towers & all exhaust & vent discharges
  - Outdoor air intakes located such that bottom of air intake is at least 6 ft above grade
  - Facilities with moderate-to-high risk of natural or man-made extraordinary incidents locate new air intakes away from public access
  - Intakes on top of buildings
  - Located with bottom of air intake min. of 3 ft above roof level
  - Intake in areaway
  - Located with bottom of areaway intake opening is at least 6 ft above grade
  - Opening from areaway into building is at least 3 ft above bottom of areaway

#### Exhaust Discharges
- Ductwork within building is under negative pressure for exhaust of contaminated air (i.e. air from pharmacy hazardous-drug exhausted enclosures)
- Exhaust discharge outlets with contaminated air located such that they reduce potential for recirculation of exhausted air back into building
- Exhaust discharge outlets with contaminated air arranged to discharge to atmosphere in vertical direction at least 10 ft above adjoining roof level
- Exhaust discharge outlets from pharmacy hazardous-drug exhausted enclosures discharge with stack velocity of at least 2500 fpm
Part 3/6.4 FILTRATION:

- Two filter banks for inpatient care (see Table 6.4)
- Filter Bank No. 1: MERV 7
- Filter Bank No. 2: MERV 14
- Each filter bank with efficiency of greater than MERV 12 is provided with differential pressure measuring device to indicate when filter needs to be changed

Part 3/6.4.1 Filter Bank No. 1 is placed upstream of heating & cooling coils

Part 3/6.4.2 Filter Bank No. 2 is placed downstream of all wet-air cooling coils & supply fan

Part 3/6.7 AIR DISTRIBUTION SYSTEMS:

Part 3/6.7.1 Maintain pressure relationships required in tables 7.1 in all modes of HVAC system operation

Part 3/6.7.2 Air Distribution Devices: supply air outlets comply with Table 6.7.2

Part 3/6.7.3 Smoke Barriers: HVAC zones coordinated with compartmentation to minimize ductwork penetrations of fire & smoke barriers.

Part 3/6.8 ENERGY RECOVERY SYSTEMS:

☐ check if not included in project

Part 3/6.8.1 Located upstream of Filter Bank No. 2

Part 3/6.8.3 Energy recovery systems with leakage potential

☐ check if not included in project

Part 3/7 SPACE VENTILATION

Part 3/7.1.a Complies with Table 7.1

Part 3/7.1.a.1 Air movement is from clean to less-clean areas

Part 3/7.1.a.3 Min. number of total air changes required for positive pressure rooms is provided by total supply airflow

Part 3/7.1.a.4 Entire minimum outdoor air changes per hour required by Table 7.1 for each space meet filtration requirements of Section 6.4

Part 3/7.1a.5 Air recirculation through room unit

☐ check if not included in project

☐ complies with Table 7.1

☐ room unit receive filtered & conditioned outdoor air

☐ serve only a single space

☐ provides min. MERV 6 filter located upstream of any cold surface so that all of air passing over cold surface is filtered

2.1-8.3 ELECTRICAL SYSTEMS

2.1-8.3.2 ELECTRICAL DISTRIBUTION & TRANSMISSION

2.1-8.3.2.1 Switchboards Switchgear & Automatic Transfer Switches:

(1)(b) accessible to authorized persons only

(1)(c) located in dry ventilated space free of corrosive or explosive fumes, gases or any flammable material

(2) overload protective devices are listed for ambient room temperature for space in which they are installed

2.1-8.3.2.2 Panelboards:

(1) panelboards serving life safety branch circuits serve floors on which they are located & floors immediately above & below

(2) panelboard critical branch circuits serve floors on which they are located

(3) panelboards not located in exit enclosures or exit passageways

2.1-8.3.3 POWER-GENERATING & -STORING EQUIPMENT

2.1-8.3.3.1 Essential electrical system or emergency electrical power

(1) essential electrical system complies with NFPA 99

(2) emergency electrical power complies with NFPA 99
2.1-8.3.5 **ELECTRICAL EQUIPMENT**
2.1-8.3.5.1 Handwashing sinks that depend on building electrical service for operation are connected to essential electrical system
☐ check if not included in project
2.1-8.3.5.2 Electronic health record system servers & centralized storage provided with uninterruptible power supply

2.1-8.3.6 **ELECTRICAL RECEPTACLES**
2.1-8.3.6.1 Receptacles In Corridors:
(1) duplex-grounded receptacles for general use installed 50'-0" apart or less in all corridors
(2) duplex-grounded receptacles for general use installed within 25'-0" of corridor ends
2.1-8.3.6.3 Essential Electrical System Receptacles:
(1) cover plates for electrical receptacles supplied from essential electrical system are distinctly colored or marked for identification
(2) same color is used throughout facility

2.1-8.4 **PLUMBING SYSTEMS**
2.1-8.4.2 Plumbing & Other Piping Systems:
2.1-8.4.2.1(3) no plumbing piping exposed overhead or on walls where possible accumulation of dust or soil may create cleaning problem
2.1-8.4.2.5 Heated Potable Water Distribution Systems:
(2) heated potable water distribution systems serving patient care areas are under constant recirculation
(3) non-recirculated fixture branch piping max. length 25'-0"
(3)(a) no installation of dead-end piping (except for empty risers mains & branches for future use)
(3)(c) any existing dead-end piping is removed
☐ check if not included in project
(4)(a) water-heating system supplies water at temperatures & amounts indicated in Table 2.1-4

2.1-8.4.2.6 Drainage Systems:
(1)(a) drainage piping installed above ceiling of or exposed in electronic data processing areas & electric closets have special provisions to protect space below from leakage & condensation

(1)(b) drip pan for drainage piping above ceiling of sensitive area
☐ check if not included in project
☐ accessible
☐ overflow drain with outlet located in normally occupied area

2.1-8.4.3 **PLUMBING FIXTURES**
2.1-8.4.3.1(1) Materials used for plumbing fixtures are non-absorptive & acid-resistant

2.1-8.4.3.2 Handwashing Station Sinks:
(1) handwashing sinks designed with basins that will reduce risk of splashing to areas where medications are prepared
(2) sink basins have nominal size of no less than 144 square inches
sink basins have min. dimension 9 inches in width or length
(3) sink basins are made of porcelain, stainless steel or solid-surface materials
(5) water discharge point min. 10" above bottom of basin
(7) anchored so that allowable stresses are not exceeded where vertical or horizontal force of 250 lbs. is applied
(8) sinks used by staff have fittings that can be operated without using hands (may be single-lever or wrist blade devices)
☐ check if not included in project
(a) blade handles
☐ check if not included in project
☐ at least 4 inches in length
☐ provide clearance required for operation
(b) sensor-regulated water fixtures
☐ check if not included in project
☐ meet user need for temperature & length of time water flows
☐ designed to function at all times and during loss of normal power

2.1-8.6.2 **ELECTRONIC SURVEILLANCE SYSTEMS**
☐ check if not included in project
2.1-8.6.2.2 Monitoring devices are located so they are not readily observable by general public or patients
2.1-8.6.2.3 Electronic surveillance systems receive power from essential electrical system