



DoD SPACE PLANNING CRITERIA

CHAPTER 420: LABOR AND DELIVERY / OBSTETRIC UNITS AUGUST 7, 2015

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SECTION 1: PURPOSE AND SCOPE

1.1. PURPOSE AND SCOPE. This chapter outlines space planning criteria for labor, delivery and recovery activities as well as antepartum, intrapartum and postpartum activities for the Labor and Delivery (L&D) / Obstetric Unit within the Military Health System (MHS).

Space planning criteria for the following services are provided in this chapter:

- 1 Labor and Delivery Unit (Includes Labor Delivery Recovery (LDR) and Labor Delivery Recovery Postpartum (LDRP) beds)
 - 2 Antepartum Testing
 - 3 Triage
 - 4 C-Section Operating Rooms (ORs)
 - 5 Obstetric Unit (Includes antepartum and postpartum beds)
 - 6 Level I Nursery (for Level II/III/IV Nurseries refer to Chapter 430: NICU)
- A. This space planning criteria applies to all Military Medical Treatment Facilities (MTFs). Policies and directives, DoD's Subject Matter Experts (SME), established and/or anticipated best practice guidelines / standards, and the Defense Health Agency (DHA) provides the foundation for the workload based space criteria and Net Square Footages (NSF) for each space. Room Codes (RC) in this document are based on the latest version of DoD's UFC 4-510-01, Appendix B.

B. Concepts of Care:

In MTFs, there are only two accepted concepts of care for the birthing of infants.

- 1 The LDR room model.
- 2 The LDRP room model.

LDRP rooms are recommended for all DoD MTFs where the average workload is 100 deliveries per month or less. For greater than 100 deliveries per month, the LDR model is recommended. Exceptions in planning for MILCON will be considered when significant complexity of care and staffing issues exist. Exceptions to these guidelines will be made on a case-by-case basis following submission of a Business Case Analysis to DHA. In addition, exceptions will be made for renovation projects where it is documented that the existing facility will not accommodate

LDRPs. In these cases, the LDR concept with an Obstetric / Postpartum Unit will be programmed.

When annual births are projected to be less than 360, justification of OB services is required. The following factors should be taken into consideration as part of the justification:

1. MTF Location
2. Market availability of local OB services
3. Provider and Active Duty readiness and quality of life issues

Renovation projects can implement LDRs if space allocation / constraints don't allow design and implementation of the LDRP model, or if average workload exceeds 1,200 deliveries per year.

Inpatient L & D / Obstetrical Unit space requirements are a function of birth volume and provider practice patterns at the facility. These items must be analyzed in detail.

1. The primary purpose of the birth volume analysis is to forecast the number of mothers who will give birth from an MTF beneficiary population during each of the next five years. The analysis of birth volume must consider the current and any projected changes in the beneficiary population at risk for obstetrical services. The population at risk is generally considered to be women between the ages of 15 and 45. The analysis of the beneficiary population must include beneficiary category, single year age group and marital status. The analysis of birth volume must also consider historical and projected changes in fertility of the population at risk. The unit of analysis for the fertility rate analysis must be mothers giving birth as defined by patients discharged from DRGs 370 through 375. The fertility rate information must be beneficiary category and single-year age group specific, i.e. 18 year old, 19 year old, etc. Analysis of historical fertility rate data from the catchment area population for a period of not less than three years is necessary. This analysis should include an assessment of seasonality trends in the birth volume data.
2. The primary purpose of the provider practice pattern analysis is to translate the birth volume forecast into clinic and hospital workload. There are five key obstetrical practice pattern parameters that have been shown to determine inpatient obstetrical facility resource requirements. These parameters are:
 - a. Cesarean delivery rate, DRGs 370, 371
 - b. Cesarean delivery Average Length of Stay (ALOS)
 - c. Vaginal birth delivery rate (DRGs 372-375)
 - d. Vaginal birth ALOS

- e. Discharge rate to non-birth related obstetrical patients as defined by patients discharged from DRGs, 378, 379, 380, 382, 383 and 384; 376, 377 can also be used if they were not postpartum patients.

At some locations, GYN surgical patients may be collocated with or cared for on this unit. In a women's health model the outpatient OB/GYN clinic may also be located adjacent to this unit with routine antepartum testing completed on the OB unit (due to the expertise of nursing staff and best use of resources).

If the MTFs Concept of Operations is to include non-birth related GYN patients on the same patient unit with obstetric or postpartum patients, then the following practice patterns must be considered:

- a. Non-birth related obstetrical patient ALOS.
- b. Surgical GYN patients (DRGs 353-369), when these patients are placed on an obstetric unit.
- c. Surgical GYN patients (DRGs Surgical GYN patients DRGs 353-369 ALOS), when these patients are placed on an obstetric unit.

NOTE: Consideration must be given to DRGs 376 and 377 Postpartum and Post abortion Diagnoses with (377) or without (376) OR Procedure. A birth may or may not be associated. The number of discharges and the ALOS of each must be captured. This is also true for the DRGs 353-369 (diseases and disorders of the female reproductive system, surgical), when these patients are placed in the obstetric unit.

Although Public Law (Statute), "Standards Relating to Benefits for Mothers and Newborns" does not apply to DoD facilities, nor to care provided via TRICARE, the standards set forth should be followed for planning purposes. These standards state that mothers shall receive a minimum of 48 hours of inpatient care following vaginal delivery and 96 hours following cesarean section, if they so desire. The direction of this legislation is to assure that mothers, not HMOs or third party payers, have control over their minimum length of stay. In most hospitals including MTFs, the mother may elect to be discharged in less than the minimum times stated.

Analyses of these practice pattern parameters from both institutional and an individual provider perspective is necessary. Historical performance data should be compared with normative source data. Guidance from the Using Service's Obstetrics consultant and the MTF should be provided regarding the target planning values for these five parameters. The target values for these five parameters should be used for inpatient obstetrical facility planning purposes.

The analysis must consider clinical practice patterns, nurse allocation, scheduling, and staffing practices.

For forecast birth volume is defined by patients discharged from DRGs 370 through 375.

C. Diagnostic Related Groups (DRGs) for this section:

- 353: Pelvic Evisceration, Radical Hysterectomy and Radical Vulvectomy
- 354: Uterine and Adnexa Procedures for Nonovarian/Adnexal Malignancy with CC
- 355: Uterine and Adnexa Procedures for Nonovarian/Adnexal Malignancy without CC
- 356: Female Reproductive System Reconstructive Procedures
- 357: Female Reproductive System Reconstructive Procedures for Ovarian or Adnexal Malignancy
- 358: Uterine and Adnexa Procedures for Nonmalignancy with CC
- 359: Uterine and Adnexa Procedures for Nonmalignancy without CC
- 360: Vagina, Cervix and Vulva Procedures
- 361: Laparoscopy and Incisional Tubal Interruption
- 362: Endoscopic Tubal Interruption
- 363: D and C, Conization and Radioimplant for Malignancy
- 364: D and C, Conization Except for Malignancy
- 365: Other Female Reproductive System OR Procedures
- 366: Malignancy of Female Reproductive System with CC
- 367: Malignancy of Female Reproductive System without CC
- 368: Infections of Female Reproductive System
- 369: Menstrual and Other Female Reproductive System Disorders
- 370: Cesarean Section with CC
- 371: Section without CC
- 372: Vaginal Delivery with Complicating Diagnoses
- 373: Vaginal Delivery without Complicating Diagnoses
- 374: Delivery with Sterilization and/or D and C
- 375: Delivery with OR Procedure except Sterilization and/or D and C
- 376: Postpartum and Post abortion Diagnoses without OR Procedure
- 377: Postpartum and Post abortion Diagnoses with OR Procedure
- 378: Ectopic Pregnancy
- 379: Threatened Abortion
- 380: Abortion without D and C
- 381: Abortion with D and C, Aspiration Curettage or Hysterotomy
- 382: False Labor
- 383: Other Antepartum Diagnoses with Medical Complications
- 384: Other Antepartum Diagnoses without Medical Complications.

SECTION 2: OPERATING RATIONALE AND BASIS OF CRITERIA

2.1. OPERATING RATIONALE AND BASIS OF CRITERIA.

A. Workload projections, number of patient beds (see formulas below), and planned services/modalities for a specific MHS facility project shall be sought by the planner in order to develop a baseline PFD based on these Criteria. Healthcare and clinical planners working on MTFs shall use and apply the workload based criteria set forth herein for identified services and modalities to determine space requirements for the project.

1. LDR and LDRP Calculation:

The vast majority of patients arriving at a hospital in need of obstetrical care are not scheduled in advance. Rather, these patients arrive in an unscheduled or random way (scheduled cesarean deliveries and scheduled induction patients are exceptions that do not arrive at the hospital randomly). A great deal of work has been done on the mathematics of random processes. Queuing theory, for example, is a branch of mathematics that studies people waiting in lines or queues. The mathematical model, the Poisson process, has been used to accurately describe many random processes. The Poisson process has been shown to accurately describe obstetrical facility occupancy in a number of studies dating from 1960.

There are two required inputs to the Poisson process, the arrival /admission rate and the service time or Average Length of Stay (ALOS). The Poisson process assumes that admissions are random events with respect to day of week and time of day. If a significant proportion of admissions are scheduled, use of the Poisson process will overestimate the requirements for rooms and beds. Therefore, the Poisson process should be considered a conservative estimate (overestimate) of room and bed needs.

The Poisson process calculates the occupancy rate and probability that a bed will not be available (patient turn-aways). The calculation of this probability explicitly illustrates the trade-off between desired occupancy rate and the probability that a bed will not be available. There is no consensus on the “right” level that demand exceeds the facility capacity (percent of patient turn-aways). Estimates of the appropriate demand level for planning purposes range from 90 to 99.9 percent. The determination of the trade-off between occupancy rate and turn-away probability is a responsibility of the facility planners. The ability of the facility to accommodate patients in other rooms in the obstetrical unit or in other hospital units for short periods or to limit the number of scheduled procedures during periods of peak demand are important considerations when making this decision.

Normative formulas are provided below for the purpose of both quick and comparative program development. The Poisson process will be used to provide the accepted quantity solutions.

Common Planning Factors: Actual experience rates are more desirable and should be obtained from the historic workload for the facility. The following factors are provided for comparative purposes.

- a. Minimum mother ALOS for normal vaginal birth = 2.0 days
- b. Minimum mother ALOS for cesarean section birth = 4.0 days
- c. Infant ALOS for a normal vaginal birth = 1.5 days
- d. Infant ALOS for Cesarean Birth = 3.5 days
- e. Cesarean Birthrate is about 30% nationally

Calculation of the number of LDR rooms:

Step 1: Determine the projected number of LDR events, which equals the number of vaginal births (project the annual number of births minus the annual projected number of cesarean births).

Step 2: Add to this the number of cesarean births less the number of “scheduled cesarean births.” The purpose of adding the unscheduled C-sections is to provide LDR space for the woman who goes to an LDR room to attempt vaginal delivery and after some period of labor time, is taken to an operating room for an emergency cesarean section.

Step 3: Determine the Average Length of Stay in an LDR for a normal vaginal birth. This number on average is 0.5 days or 12 hours (6-hrs. labor, 2-hrs. delivery, 3-hrs. recovery and 1 hr. room cleanup). A description of how to determine ALOS by DRG is provided at the end of this section.

Step 4: Determine the desired occupancy in the LDRs. The most widely used number in the private sector is 75% or 0.75.

Step 5: Insert the numbers attained in steps one through three into the formula and calculate the number of LDRs required.

Formula 1:

$$\text{Number of LDR Rooms} = \frac{(\text{Projected LDR Events})(\text{ALOS})}{(365)(\text{Occupancy Rate})}$$

Note:

Refer to Space Planning Criteria Chapter 120 for more detailed information on Occupancy Rates.

A rule-of-thumb is that LDRs are provided at a ratio of one per 350 non-cesarean births.

For Cesarean Section Births refer to DRG 370 and DRG 371.

For Normal Deliveries refer to the following DRGs: 372, 373, 374 and 375.

DRG 375 may require additional review since it is described as a vaginal delivery with OR procedure except sterilization and/or D&C.

Calculation of the number of LDRP rooms:

Step 1: Determine the projected number of LDRP events, which equals the number of vaginal births (project the annual number of births minus the annual projected number of cesarean births).

Step 2: Determine the Average Length of Stay in an LDRP for a normal vaginal birth. This number on average is 2 days. A description of how to determine ALOS by DRG is provided at the end of this section.

Step 3: Determine the desired percentage of occupancy in the LDRP unit. The most widely used number in the private sector is 75% or .75.

Step 4: Insert the resulting values of steps one through three into the formula below and calculate the number of LDRPs required.

Formula 2:

$$\text{Number of LDR Rooms} = \frac{(\text{Projected LDRP Events})(\text{ALOS})}{(365)(\text{Occupancy Rate})}$$

Refer to Space Planning Criteria Chapter 120 for more detailed information on Occupancy Rates.

Note:

There is no difference in the LDR and the LDRP formulae. The results are different because of different variables, most notably the ALOS (average length of stay).

Calculation of the number of Cesarean Rooms:

Step 1: Project the number of annual cesarean births. A rule-of-thumb is that

30% of all births will be cesarean; however, there is considerable variation between hospitals.

Step 2: Divide the projected number of cesarean births by 500 to determine the total number of cesarean rooms required. Always round up to the next highest number. The minimum number of rooms must be one.

Formula 3:

$$\frac{\text{Projected \# of Annual Cesarean Births}}{500 \text{ Births Per Room}}$$

Note: In smaller facilities, the Cesarean Room(s) may be located in Surgical Services, if it is proximate to the Obstetric Unit.

Calculation of the number of Post-Partum Beds:

Step 1: Determine the projected number of annual births, low risk and then high risk. (See definitions for DRGs in each category.)

Step 2: Determine the Average Length of Stay (ALOS) in the obstetric unit. This number on average is 1.5 days for low risk patients and 3.5 days for high-risk patients. A description of how to determine ALOS by DRG is provided at the end of this section.

Step 3: Determine the desired percentage of occupancy in the obstetric unit. The most widely used number in the private sector is 75% or .75

Step 4: Insert the resulting values of steps one through three into the formula below and calculate the number of Postpartum Beds required.

Step 5: Calculate the formula twice, once for the projected number of low risk births and once for the projected number of high-risk patients. Add the resulting number of beds from each calculation to determine the total number of obstetric beds required.

Formula 4:

$$\text{Number of Postpartum Beds} = \frac{(\text{Projected \# of Annual Births})(\text{ALOS})}{(365)(\text{Occupancy Rate})}$$

Refer to Space Planning Criteria Chapter 120 for more detailed information on Occupancy Rates.

Note: Postpartum beds are not required with the LDRP model of care. However, antepartum or high risk obstetric beds may be required, and an obstetric unit may also be provided in a hospital with a very large OB service (250 or more births per month). In this case, a special study is needed using a Poisson process to determine beds needed. This formula will need to be calculated twice: once for projected low-risk births using the lower ALOS and then again for the projected number of high- risk births using the high risk ALOS.

Calculation of other Antepartum / OB / GYN Beds:

Step 1: Determine the projected number of admissions from the above DRGs.

Step 2: Determine the Average Length of Stay (ALOS) in the obstetric unit for each DRG. A description of how to determine ALOS by DRG is provided at the end of this section.

Step 3: Insert the paired numbers (patients by DRG and ALOS by DRG) attained in steps one and two into the formula below and calculate the number of postpartum beds required for each DRG.

Step 4: Calculate the formula nine times, once for each DRG. Add the resulting number of beds from each calculation to determine the total number of other OB beds required.

Formula 5:

$$\text{Number of Other Beds} = \frac{(\text{Projected Number of Patients in each DRG})(\text{DRG ALOS})}{365}$$

Note: Other OB beds are for DRGs 376, 377 (except those following delivery), 378, 379, 380, 381, 382, 383 & 384. What about all the GYN DRGs (353-369)?

Calculation of Level I, Holding Nursery Bassinets:

Please refer to Chapter 430: Nursery which also contains space criteria for the Level I, Holding Nursery and planner shall not duplicate space.

Formula 6:

$$\text{Total \# of Bassinets} = \frac{\text{Total Number of LDR}}{(\text{LDRP \& Postpartum Rooms})(10\%)}$$

B. Space planning criteria have been developed on the basis of an understanding of the activities involved in the functional areas required for the two components: Labor and Delivery Unit and Obstetric Unit and their relationship with other services of a MTF. These criteria are predicated on established and/or anticipated best practice standards, as adapted to provide environments supporting the highest quality health care for Service Members and their dependents.

C. These criteria are subject to modification relative to equipment, medical practice, vendor requirements, and subsequent planning and design. The final selection of the size and type of medical equipment is determined during the design process.

D. The area for each Room (NSF) in this document has been provided by the Military Health System (MHS) Template Board Workgroup.

E. Unit size is based on the parameters in Table 1. Depending on the MTFs Concept of Operations and staffing model, when the total projected number of patient beds exceeds the maximum recommendation for a unit, the planner may consider providing one large unit or two small units.

F. The space planning criteria of the L&D / Obstetric Units Chapter were developed to provide flexibility in sizing inpatient units, as well as the grouping and location of some common spaces such as family waiting, nurse station, and other support spaces. The criteria support the planning of these inpatient unit functional areas as a "module" of spaces that supports twelve beds. The goal of limiting module size is to minimize staff walking distances and to allow for sharing of common spaces when units are located on the same floor. This allows for flexibility of sizing these inpatient units ranging from a 6 bed-unit to a 12 bed-unit for L&D, and from a 12 bed-unit to a 24 bed-unit for Obstetrics.

TABLE 1: NURSING UNIT SIZES

420: LABOR AND DELIVERY / OBSTETRIC UNITS		
NURSING UNITS	NUMBER OF BEDROOMS PER UNIT	
	MIN*	MAX**
Labor and Delivery (LDR or LDRP Models)	6	12
Obstetric (Ante / Post Partum)	12	24
MIN*: The minimum number of projected patient beds required to plan a Unit.		
MAX**: The maximum recommended number of patient beds per Unit.		

G. Calculation of the Antepartum Testing Room and Exam / Triage Room in Functional Area 3: L & D Triage Patient Area; and the C-Section Operating Room in Functional Area 6: L & D C-Section Area is derived from workload projections via the workload Input Data Statements as outlined below. Most of the remaining rooms in those functional areas and in the Support Functional Areas are determined based on the number of Patient Bedrooms, Exam / Triage and ORs generated by workload. Mission (M), Staffing (S) and Miscellaneous (Misc) Input Data Statements drive the rest of the spaces in this document.

H. Exam Room, Testing Room and Procedure Room capacity calculation is based on the following formula / parameters:

Formula:

$$\frac{(Operating\ Days\ per\ Year)(Hours\ of\ Operation\ per\ Day)}{\frac{Average\ Length\ of\ Encounter\ (ALOE)\ in\ Minutes}{60\ Minutes}} (Utilization\ Factor)$$

User-defined Value:

1. Operating Days per Year: 232, 240 or 250. (Default in SEPS: 240)
2. Hours of Operation per Day: 6, 7, or 8 (Default in SEPS: 8)

Fixed Value:

1. Utilization Factor: 80%

Calculation: Annual Workload for one Exam Room / Triage:

$$\frac{(240 \text{ Operating Days per Year})(8 \text{ Hours of Operation per Day})}{\frac{60 \text{ Minutes}}{60 \text{ Minutes}}} (0.80) = 1,536$$

Minimum Annual Workload to generate an Exam Room, Testing Room or Procedure Room:
20% of Annual Workload for one Room.

I. Workload based room calculation examples:

1. Room Criteria Statement (Room 1): Minimum one if the projected annual clinic encounters is between 307 and 1,536; provide an additional one for every increment of 1,536 projected annual clinic encounters greater than 1,536; the minimum workload to generate an additional room is 307.

- a. Input Data Statement 1, Answer 1:

How many annual clinic encounters are projected? (W) = 4,700

Step 1: Subtract the increment from the projected annual encounters to account for the “Minimum one” condition.

$$4,700 - 1,536 = 3,164$$

One room generated

Step 2: Divide the resulting value by the increment.

$$\frac{3,164}{1,536} = 2.05$$

Two additional rooms generated

Step 3: Multiply the whole value (“2” in the previous step) by the increment.

$$(2)(1,536) = 3,072$$

Step 4: Subtract Step 3 from Step 1.

$$3,164 - 3,072 = 92$$

Step 5: Compare Step 4 with the “minimum workload to generate an additional room” value; if higher, provide an additional room.

$$92 < 307$$

No additional rooms generated.

Total number of rooms generated by 4,700 annual encounters: 3

b. Input Data Statement 1, Answer 2:

How many annual clinic encounters are projected? (W) = 15,000

Step 1: Subtract the increment from the projected annual encounters to account for the “Minimum one” condition.

$$15,000 - 1,536 = 13,464$$

One room generated

Step 2: Divide the resulting value by the increment.

$$\frac{13,464}{1,536} = 8.76$$

Eight additional rooms generated

Step 3: Multiply the whole value (“8” in the previous step) by the increment.

$$(8)(1,536) = 12,288$$

Step 4: Subtract Step 3 from Step 1.

$$13,464 - 12,288 = 1,176$$

Step 5: Compare Step 4 with the “minimum workload to generate an additional room” value; if higher, provide an additional room.

$$1,176 > 307$$

One additional room generated.

Total number of rooms generated by 15,000 annual encounters: 10

2. Room Criteria Statement (Room 2):

Minimum two if the projected annual encounters is between 614 and 6,144; provide an additional one for every increment of 3,072 projected annual encounters greater than 6,144; the minimum workload to generate an additional room is 614.

a. Input Data Statement 2, Answer 1:

How many annual clinic encounters are projected? (W) = 12,500

Step 1: Subtract the increment from the projected annual encounters to account for the “Minimum one” condition.

$$12,500 - (6,144)((3,072)(2)) = 6,356$$

Two rooms generated

Step 2: Divide the resulting value by the increment.

$$\frac{6,356}{3,072} = 2.06$$

Two additional rooms generated

Step 3: Multiply the whole value (“2” in the previous step) by the increment.

$$(2)(3,072) = 6,144$$

Step 4: Subtract Step 3 from Step 1.

$$6,356 - 6,144 = 212$$

Step 5: Compare Step 4 with the “minimum workload to generate an additional room” value; if higher, provide an additional room.

$$212 < 614$$

No additional rooms generated.

Total number of rooms generated by 12,500 annual encounters: 4

b. Input Data Statement 2, Answer 2:

How many annual clinic encounters are projected? (W) = 18,000

Step 1: Subtract the increment from the projected annual encounters to account for the “Minimum one” condition.

$$18,000 - (6,144)((3,072)(2)) = 11,856$$

Two rooms generated

Step 2: Divide the resulting value by the increment.

$$\frac{11,856}{3,072} = 3.85$$

Three additional rooms generated

Step 3: Multiply the whole value (“3” in the previous step) by the increment.

$$(3)(3,072) = 9,216$$

Step 4: Subtract Step 3 from Step 1.

$$11,856 - 9,216 = 2,640$$

Step 5: Compare Step 4 with the “minimum workload to generate an additional room” value; if higher, provide an additional room.

$$2,640 > 614$$

One additional room generated.

Total number of rooms generated by 18,000 annual encounters: 6

TABLE 2: WORKLOAD PARAMETER CALCULATION

420: LABOR AND DELIVERY / OBSTETRIC UNITS				
WORKLOAD	AVERAGE LENGTH OF STAY (minutes)	UTILIZATION RATE	NUMBER OF ANNUAL BIRTHS / STAYS IN ONE ROOM (*)	MINIMUM ANNUAL BIRTHS / STAYS TO GENERATE ONE ROOM (20%)
Antepartum Testing Room	45	80%	2,048	410
Exam / Triage Room	60	80%	1,536	307
C-Section Operating Room	60	80%	1,536	307

(*) Values in this column are representative and are based on an 8-hour per day and a 240-day per year default value. SEPS calculates this value dynamically based on answers to the Input Data Statements.

SECTION 3: PROGRAM DATA REQUIRED: LABOR AND DELIVERY

3.1. INPUT DATA STATEMENTS. Input Data Statements are based on questions about Workload (W), Mission (M), Staffing (S) and Miscellaneous (Misc) information.

1. Is a Labor and Delivery Unit authorized? (M)
 - a. How many LDR patient beds are projected? (W)
 - b. How many LDRP patient beds are projected? (W)
 - i. How many LDR / LDRP Airborne Infection Isolation (AII) Rooms, greater than one, are authorized per the MTFs Infection Control Risk Assessment (ICRA)? (W)
 1. Are Anterooms for the LDR / LDRP Airborne Infection Isolation (AII) Rooms authorized per the MTFs Infection Control Risk Assessment (ICRA)? (M)
 - c. How many annual Antepartum Testing encounters are projected? (W)
 - d. How many annual Exam / Triage Room encounters are projected? (W)
 - e. (1)Is the L & D Triage Patient Area authorized to operate outside the standard 8-hour per day shift? (Misc)
 - i. (2)Is the L & D Triage Patient Area authorized to operate a 7-hour per day shift? (Misc) (If not, a 6-hour per day shift will be used to calculate workload driven spaces)
 - ii. (3)Is the L & D Triage Patient Area authorized to operate outside the standard 240 days per year? (Misc)
 - iii. (4)Is the L & D Triage Patient Area authorized to operate 250 days per year? (Misc) (If not, 232 days per year will be used to calculate workload driven spaces)
 - f. Is Antepartum Testing available in the Outpatient Women's Health Clinic? (M)
 - g. Is a C-Section Area for the L&D Unit authorized? (M)
 - i. How many annual C-Section procedures are projected? (W)
 - h. (5)Is the L & D C-Section Area authorized to operate outside the standard 8-hour per day shift? (Misc); if not:
 - i. (6)Is the L & D C-Section Patient Area authorized to operate a 7-hour per day shift? (Misc) (If not, a 6-hour per day shift will be used to calculate workload driven spaces)
 - i. (7)Is the L & D C-Section Patient Area authorized to operate outside the standard 240 days per year? (Misc); if not:
 - i. (8)Is the L & D C-Section Patient Area authorized to operate 250 days per year? (Misc) (If not, 232 days per year will be used to calculate workload driven spaces)
 - j. Are Caregiver Workstations for the L & D Unit Patient Care Area authorized? (M)
 - k. Is a Monitoring Station for the L & D Patient Care Area authorized? (M)
 - l. Is a Point of Care Laboratory in L & D Unit Support authorized? (M)

- m. Is Decentralized Food Tray Rethermalization for L & D Unit Support authorized? (M)
- n. How many L & D FTE positions are authorized? (S)
 - i. How many L & D FTE positions are authorized to have a private office in L & D Staff and Administration? (S)
 - ii. How many L & D FTE positions are authorized to have a shared office in Staff and Administration? (S)
 - iii. How many L & D FTE positions are authorized to have a cubicle in Staff and Administration? (S)
 - iv. How many L & D Male FTEs will work on peak shift? (S)
 - v. How many L & D Female FTEs will work on peak shift? (S)
- o. Is a Sub-Waiting for L & D Staff and Administration is authorized? (Misc)
- p. Is a Conference Room in L & D Staff and Administration authorized? (Misc)
- q. Is Patient Record storage in L & D Staff and Administration is authorized? (Misc)
- r. Are Toilet / Showers in L & D Staff and Administration authorized? (Misc)
- s. Is an On-Call Room in L & D Staff and Administration Area authorized? (Misc)
- t. Is a Scrubs Distribution Room in L & D Staff and Administration authorized? (Misc)

SECTION 4: SPACE PLANNING CRITERIA: LABOR AND DELIVERY

For calculation of the number of Vending Machine areas, Public Toilets, Communication Closets, and Janitors Closets for this Chapter, please refer to DoD Space Planning Criteria Chapter 610: Common Areas.

4.1. FA1: L & D UNIT FAMILY / VISITOR AREA.

Spaces in this area may be shared among more than one L & D Unit on a floor; planner may consider sharing these between an L & D Unit and an OB Unit if the concept of Operations permits. Locate outside / accessible to the Unit.

1. **Waiting (WRC01)** **120 NSF**
Minimum NSF; provide an additional 120 NSF for every increment of twelve Antepartum Testing, Exam / Triage Room, LDR / LDRP Rooms, of all types and C-Section Operating Rooms greater than twelve.
2. **Playroom (PLAY1)** **120 NSF**
Minimum one; provide an additional one for every increment of twenty four LDR / LDRP Rooms, of all types, greater than twenty four.

This space is provided to accommodate children's play activities, maybe an open or an enclosed area, and should be included within or adjacent to Waiting.

3. **Reception (RECP3)** **60 NSF**
Minimum NSF; provide an additional 30 NSF for every increment of twelve Antepartum Testing, Exam / Triage Room, LDR / LDRP Rooms, of all types, and C-Section Operating Rooms greater than twelve.

Serves as the control station for the L & D Unit.
4. **Consult Room (OFDC2)** **120 NSF**
Minimum one; provide an additional one for every increment of twenty four LDR / LDRP Rooms, of all types, greater than twenty four.
5. **Education / Resource Cubicle (CLSC2)** **30 NSF**
Minimum one; provide an additional one for every increment of twelve LDR / LDRP Rooms, of all types, greater than twelve.
6. **Lounge, Family / Visitor (SL001)** **120 NSF**
Minimum NSF; provide an additional 30 NSF for every increment of six Antepartum Testing, Exam / Triage Room, LDR / LDRP Rooms, of all types, and C-Section Operating Rooms greater than twelve.
7. **Toilet, Family / Visitor (TLTU1)** **60 NSF**
Minimum one; provide an additional one for every increment of twenty four LDR / LDRP Rooms, of all types, greater than twenty four.
8. **Toilet / Shower, Family / Visitor (TLTS1)** **60 NSF**
Minimum one; provide an additional one for every increment of twenty four LDR / LDRP Rooms, of all types, greater than twenty four.

4.2. FA 2: L & D TRIAGE PATIENT AREA.

1. **Antepartum Testing, Multi-Station Room (LDAT2)** **480 NSF**
Minimum NSF if the projected annual Antepartum Testing encounters is between 410 and 6,144; provide an additional 120 NSF for every increment of 2,048 projected annual Antepartum Testing encounters greater than 6,144; the minimum workload to generate an additional Antepartum Testing Station is 410 if Antepartum Testing is not available in the Outpatient Clinic / Women's Health Clinic. (Refer to Section 2)

Minimum NSF accommodates three testing stations and a work station.
2. **Toilet, Antepartum Testing Patient (TLTU1)** **60 NSF**
Provide one for Antepartum Testing.
3. **Exam / Triage Room (LDEP1)** **180 NSF**
Minimum two if the projected annual Exam / Triage Room encounters is between 307 and 3,072; provide an additional one for every increment of 1,536 projected annual

Exam / Triage Room encounters greater than 3,072; the minimum workload to generate an additional Exam / Triage Room is 307. (Refer to Section 2)

These rooms are also set up to accommodate Antepartum Testing.

- | | | |
|----|--|----------------|
| 4. | Toilet, Exam / Triage Room Patient (TLTU1)
Provide one per Exam / Triage Room. | 60 NSF |
| 5. | Nurse Station, Triage (NSTA1)
Provide one for the L & D Triage Patient Area. | 120 NSF |

4.3. FA 3: L & D PATIENT CARE AREA.

- | | | |
|----|---|----------------|
| 1. | LDR / LDRP Room (LDRP1)
Provide one per each projected LDR and LDRP patient bed; deduct the LDR / LDRP Airborne Infection Isolation (AII) Rooms from the total number of projected LDR / LDRP beds. | 360 NSF |
| 2. | LDR / LDRP, Airborne Infection Isolation (AII) Room (LDRP3)
Minimum one; provide an additional one per each LDR / LDRP Airborne Infection Isolation (AII) Room authorized, greater than one, per the MTFs Infection Control Risk Assessment (ICRA). | 360 NSF |

These bedrooms are part of the total number of projected LDR / LDRP patient beds. The number of airborne infection isolation rooms shall be determined by the infection control risk assessment (ICRA), which shall be conducted during the early planning phase of a project.

- | | | |
|----|---|----------------|
| 3. | Anteroom, LDR / LDRP Airborne Infection Isolation (AII) Room (BRAR1)
Provide one per each LDR / LDRP Airborne Infection Isolation (AII) Room if Anterooms are authorized per the MTFs Infection Control Risk Assessment (ICRA). | 70 NSF |
| 4. | Toilet / Shower, LDR / LDRP Room (TLTS2)
Provide one per each LDR / LDRP Room, of all types. | 60 NSF |
| 5. | Equipment Room, LDR / LDRP (SRSE1)
Minimum one; provide an additional one for every increment of two LDR / LDRP Rooms, of all types, greater than two. | 120 NSF |
| 6. | Workstation, Caregiver (NSTA3)
Provide one for every increment of two LDR / LDRP Rooms if Caregiver Workstations are authorized. | 60 NSF |

7. **Nurse Station (NSTA1)** **180 NSF**
Minimum one; provide an additional one for every increment of twelve LDR / LDRP Rooms, of all types, greater than twelve.

8. **Monitoring Station (NSTA3)** **60 NSF**
Minimum one if a Monitoring Station for the L & D Unit is authorized; provide an additional one for every increment of twelve LDR /LDRP Rooms, of all types, greater than twenty four.

Depending on the MTFs Concept of Operations, multiple monitoring stations can be consolidated into a single room.

9. **Team Collaboration Room (WRCH1)** **120 NSF**
Minimum one; provide an additional one for every increment of twelve LDR / LDRP Rooms, of all types, greater than twelve.

4.4. FA 4: L & D UNIT SUPPORT.

1. **Laboratory, Point of Care (LBSP1)** **120 NSF**
Minimum one if a Point-of-Care Laboratory is authorized; provide an additional one for every increment of twelve LDR / LDRP Rooms, of all types, greater than twelve.

2. **Medication Room (MEDP1)** **120 NSF**
Minimum one; provide an additional one for every increment of twelve LDR / LDRP Rooms, of all types, greater than twelve.

3. **Nourishment Room (NCWD1)** **120 NSF**
Minimum one; provide an additional one for every increment of twelve LDR / LDRP Rooms, of all types, greater than twelve.

4. **Storage, Breast Milk (NYFS1)** **60 NSF**
Minimum one; provide an additional one for every increment of twelve LDR / LDRP Rooms, of all types, greater than twelve.

5. **Infant Prep Room (LDPR1)** **120 NSF**
Minimum one; provide an additional one for every increment of twelve LDR / LDRP Rooms, of all types, greater than twelve.

Allocated space for staff to provide post-mortem care of infant prior to family viewing.

6. **Utility Room, Clean (UCCL1)** **120 NSF**
Minimum one; provide an additional one for every increment of twelve LDR / LDRP Rooms, of all types, greater than twelve.

7. **Utility Room, Soiled (USCL1)** **90 NSF**
Minimum one; provide an additional one for every increment of twelve LDR / LDRP Rooms, of all types, greater than twelve.
8. **Storage, Equipment (SRSE1)** **120 NSF**
Minimum NSF; provide an additional 60 NSF for every increment of six LDR / LDRP Rooms, of all types, greater than twelve.
9. **Alcove, Stretcher (SRLW2)** **60 NSF**
Minimum one; provide an additional one for every increment of twelve LDR / LDRP Rooms, of all types, greater than twelve.
10. **Alcove, Blanket Warmer (RCA04)** **30 NSF**
Minimum one; provide an additional one for every increment of twelve LDR / LDRP Rooms, of all types, greater than twelve.
11. **Alcove, Crash Cart (RCA01)** **30 NSF**
Minimum one; provide an additional one for every increment of twelve LDR / LDRP Rooms, of all types, greater than twelve.
12. **Alcove, Portable Imaging (XRM01)** **30 NSF**
Minimum one; provide an additional one for every increment of twenty four LDR / LDRP Rooms, of all types, greater than twenty four.
13. **Food Tray Retherm Cart Area, Decentralized (FSCS2)** **60 NSF**
Minimum one if Decentralized Food Tray Rethermalization is authorized; provide an additional one for every increment of twenty four LDR / LDRP Rooms, of all types, greater than twenty four.

4.5. FA 5: L & D C-SECTION AREA.

1. **Alcove, Nursery Transport Unit (NYTU1)** **30 NSF**
Provide one if a C-Section Area is authorized.
2. **Operating Room, C-Section (LDDR1)** **660 NSF**
Minimum one if a C-Section Area is authorized and if the projected annual C-Section procedures is between 307 and 1,536; provide an additional one for every increment of 1,536 projected annual C-Section procedures greater than 1,536; the minimum workload to generate an additional C-Section Operating Room is 307. (Refer to Section 2)
3. **Recovery Room, C-Section Patient (RRSS1)** **240 NSF**
Minimum one if a C-Section Area is authorized; provide an additional one for every increment of two C-Section Operating Rooms greater than two.

Allocated NSF includes area for infant recovery.

4. **Workstation, Staff (NSTA3)** **60 NSF**
Minimum NSF if a C-Section Area is authorized; provide an additional 60 NSF for every increment of two C-Section Operating Rooms greater than two.
5. **Workroom, Anesthesia (ANCW1)** **120 NSF**
Provide one if a C-Section Area is authorized.
6. **Scrub / Sink Area (ORSA1)** **60 NSF**
Minimum one if a C-Section Area is authorized; provide an additional one for every increment of two C-Section Operating Rooms greater than two.

Allocated NSF allows for two adjacent scrub positions and should be located near the entry point to each C-Section OR. This area will be accessed from the restricted corridor.
7. **Supply Room, Sterile (ORSS1)** **120 NSF**
Minimum NSF if a C-Section Area is authorized; provide an additional 60 NSF for every increment of six C-Section Operating Rooms greater than six.
8. **Utility Room, Soiled (USCL1)** **90 NSF**
Minimum NSF if a C-Section Area is authorized; provide an additional 60 NSF for every increment of six C-Section Operating Rooms greater than six.
9. **Storage, Anesthesia (ORSS1)** **120 NSF**
Provide one if a C-Section Area is authorized.
10. **Storage, Equipment (SRSE1)** **120 NSF**
Minimum NSF if a C-Section Area is authorized; provide an additional 60 NSF for every increment of six C-Section Operating Rooms greater than six.
11. **Storage, Gas Cylinder (SRGC2)** **60 NSF**
Provide one if a C-Section Area is authorized.
12. **Janitor Closet (JANC1)** **60 NSF**
Provide a dedicated Janitor Closet if a C-Section Area is authorized.

4.6. FA 6: L & D STAFF AND ADMINISTRATION.

1. **Office, Private (OFA04)** **120 NSF**
Provide one for each L & D FTE position authorized to have a private office in L & D Staff and Administration.

Consider the following positions: Clinical Nurse Specialist; Lactation Support; Physician Assistant, Unit Chief / Supervisor, NCOIC / LCPO / LPO.

2. **Office, Shared (OFA05)** **120 NSF**
Provide one for every increment of two L & D FTE positions authorized to have a shared office in L & D Staff and Administration.

3. **Cubicle (OFA03)** **60 NSF**
Provide one per each L & D FTE position authorized to have a cubicle in L & D Staff and Administration.

These cubicles may be collocated in a shared space or dispersed as required.

4. **Sub-Waiting (WRC03)** **60 NSF**
Minimum one if a Sub-Waiting for L & D Staff and Administration is authorized; provide an additional one for every increment of twenty four LDR / LDRP Rooms, of all types, greater than twenty four.

5. **Conference Room (CRA01)** **240 NSF**
Minimum NSF if a Conference Room for L & D Staff and Administration is authorized; provide an additional 60 NSF if the total number of L & D FTE positions authorized is greater than ten.

Planner must determine adequacy and availability of existing Conference Room space and the ability to optimize resources by sharing Conference Room space with other departments.

6. **Copy / Office Supply (RPR01)** **120 NSF**
Minimum of one; provide an additional one for every increment of twenty four L & D Rooms, of all types, greater than twenty four.

7. **Storage, Patient Records (FILE1)** **120 NSF**
Provide one if Patient Record storage in L & D Staff and Administration is authorized.

8. **Lounge, Staff (SL001)** **120 NSF**
Minimum NSF, provide an additional 60 NSF for every increment of five L & D FTEs working on peak shift greater than ten; maximum 360 NSF.

9. **Toilet, L & D Staff (TLTU1)** **60 NSF**
Minimum one; provide an additional one every increment of fifteen L & D FTE positions working on peak shift greater than fifteen

10. **Locker / Changing, Male Staff (LR002)** **120 NSF**
Minimum NSF; provide an additional 10 NSF for every increment of two L & D Male FTE positions working on peak shift greater than twelve.

If a C-Section Area is provided, these lockers may be shared with that function; provide clean / dirty access.

11. **Locker / Changing, Female Staff (LR002)** **120 NSF**
Minimum NSF; provide an additional 10 NSF for every increment of two L & D Female FTE positions working on peak shift greater than twelve.

If a C-Section Area is provided, these lockers may be shared with that function; provide clean / dirty access.
12. **Toilet / Shower, L & D Staff (TLTS1)** **60 NSF**
Provide two if Toilet / Showers in L & D Staff and Administration are authorized.
13. **On-Call Room (DUTY1)** **120 NSF**
Minimum one if an On-Call Room in L & D Staff and Administration is authorized; provide an additional one for every increment of twenty four L & D Rooms, of all types, greater than twenty four.
14. **Toilet / Shower, On-Call Room (TLTS1)** **60 NSF**
Provide one for each On-Call Room if an On-Call Room in L & D Staff and Administration is authorized.
15. **Scrubs Distribution Room (LCCL4)** **120 NSF**
Provide one if a Scrubs Distribution Room in L & D Staff and Administration is authorized.

SECTION 5: PROGRAM DATA REQUIRED: OBSTETRIC UNIT

5.1. INPUT DATA STATEMENTS. Input Data Statements are based on questions about Workload (W), Mission (M), Staffing (S) and Miscellaneous (Misc) information.

1. Is an Obstetric Unit authorized? (M)
 - a. How many Antepartum / Postpartum patient beds for the OB Unit are projected? (W)
 - i. How many Antepartum / Postpartum Airborne Infection Isolation (AII) Bedrooms, greater than one are authorized per MTFs the Infection Control Risk Assessment (ICRA)? (W)
 1. Are Anterooms for the Antepartum / Postpartum Airborne Infection Isolation (AII) Bedrooms authorized per the MTFs Infection Control Risk Assessment? (M)
 - b. Are Caregiver Workstations for the OB Unit Patient Care Area authorized? (M)
 - c. Is a Monitoring Station for the OB Unit Patient Care Area authorized? (M)
 - d. Is a Point of Care Laboratory for the OB Unit Support authorized? (M)
 - e. Is Decentralized Food Tray Rethermalization for OB Unit Support authorized? (M)
 - f. How many OB Unit FTE positions are authorized? (S)
 - i. How many OB Unit FTE positions are authorized to have a private office in OB Unit Staff and Administration? (S)
 - ii. How many OB Unit FTE positions are authorized to have a shared office in the OB Unit Staff and Administration? (S)
 - iii. How many Obstetric Unit FTE positions are authorized to have a cubicle in the OB Unit Staff and Administration? (S)
 - iv. How many OB Unit Male FTEs will work on peak shift? (S)
 - v. How many OB Unit Female FTEs will work on peak shift? (S)
 - g. Is Sub-Waiting in OB Unit Staff and Administration authorized? (Misc)
 - h. Is storage of Patient Records in OB Unit Staff and Administration authorized? (M)
 - i. Is a Conference Room in OB Unit Staff and Administration authorized? (Misc)
 - j. Are Toilet / Showers in OB Unit Staff and Administration authorized? (Misc)
 - k. Is an On-Call Room in OB Unit Staff and Administration authorized? (Misc)
 - l. Is a Scrubs Distribution Room in OB Unit Staff and Administration authorized? (Misc)

SECTION 6: SPACE PLANNING CRITERIA: OBSTETRIC UNITS

For calculation of the number of Vending Machine areas, Public Toilets, Communication Closets, and Janitors Closets for this Chapter, please refer to DoD Space Planning Criteria Chapter 610: Common Areas.

6.1. FA1: OBSTETRIC UNIT FAMILY / VISITOR AREA.

Spaces in this area may be shared among more than one OB Unit on a floor; planner may consider sharing these between an L & D Unit and an OB Unit if the concept of Operations permits. Locate outside / accessible to the Unit.

1. **Waiting (WRC01)** **120 NSF**
Minimum NSF; provide an additional 120 NSF for every increment of twelve Antepartum / Postpartum Patient Rooms, of all types greater than twelve.

2. **Playroom (PLAY1)** **120 NSF**
Minimum one; provide an additional one for every increment of twenty four Antepartum / Postpartum Patient Rooms, of all types, greater than twenty four.

This space is provided to accommodate children's play activities, maybe an open or an enclosed area, and should be included within or adjacent to Waiting.

3. **Reception (RECP3)** **60 NSF**
Minimum NSF; provide an additional 30 NSF for every increment of twelve Antepartum / Postpartum Patient Rooms, of all types greater than twelve.

Serves as the control station for the OB Unit.

4. **Consult Room (OFDC2)** **120 NSF**
Minimum one; provide an additional one for every increment of twenty four Antepartum / Postpartum Patient Rooms, of all types, greater than twenty four.

5. **Education / Resource Cubicle (CLSC2)** **30 NSF**
Minimum one; provide an additional one for every increment of twelve Antepartum / Postpartum Patient Rooms, of all types, greater than twelve.

6. **Lounge, Family / Visitor (SL001)** **120 NSF**
Minimum NSF; provide an additional 30 NSF for every increment of six Antepartum / Postpartum Patient Rooms, of all types greater than twelve.

7. **Toilet, Family / Visitor (TLTU1)** **60 NSF**
Minimum one; provide an additional one for every increment of twenty four Antepartum / Postpartum Patient Rooms, of all types, greater than twenty four.

8. **Toilet / Shower, Family / Visitor (TLTS1)** **60 NSF**
Minimum one; provide an additional one for every increment of twenty four Antepartum / Postpartum Patient Rooms, of all types, greater than twenty four.

6.3. FA3: OBSTETRIC UNIT PATIENT CARE AREA.

1. **Bedroom, Antepartum / Postpartum (BRMS1) 360 NSF**
Provide one per each Antepartum and Postpartum patient bed projected; deduct the Antepartum / Postpartum Airborne Infection Isolation (AII) Rooms from the total number of projected Antepartum / Postpartum patient beds.

2. **Bedroom, Antepartum / Postpartum Airborne Infection Isolation (AII) (BRIT1) 360 NSF**
Minimum one; provide an additional one per each Antepartum / Postpartum Airborne Infection Isolation (AII) Room authorized, greater than one, per the MTFs Infection Control Risk Assessment (ICRA).

These bedrooms are part of the total number of projected Antepartum / Postpartum patient beds. The number of airborne infection isolation rooms shall be determined by the infection control risk assessment (ICRA), which shall be conducted during the early planning phase of a project.

3. **Anteroom, LDR / LDRP Airborne Infection Isolation (AII) Room (BRAR1) 70 NSF**
Provide one per each Antepartum / Postpartum Airborne Infection Isolation (AII) Room if Anterooms are authorized per the MTFs Infection Control Risk Assessment (ICRA).

4. **Toilet / Shower, Antepartum / Postpartum Room (TLTS2) 60 NSF**
Provide one per each Antepartum / Postpartum Bedroom, of all types.

5. **Workstation, Caregiver (NSTA3) 60 NSF**
Provide one for every increment of two Antepartum / Postpartum Patient Rooms, of all types, if Caregiver Workstations are authorized for the OB Unit Patient Care Area.

6. **Nurse Station (NSTA1) 180 NSF**
Minimum one; provide an additional one for every increment of twelve Antepartum / Postpartum Rooms, of all types, greater than twelve.

7. **Monitoring Station (NSTA3) 60 NSF**
Minimum one if a Monitoring Station for the OB Unit is authorized; provide an additional one for every increment of twelve Antepartum / Postpartum Rooms, of all types, greater than twelve.

Depending on the MTFs Concept of Operations, multiple monitoring stations can be consolidated into a single room.

8. **Team Collaboration Room (WRCH1) 120 NSF**
Minimum one; provide an additional one for every increment of twelve Antepartum / Postpartum Rooms, of all types, greater than twelve.

6.4. FA4: OBSTETRIC UNIT SUPPORT.

1. **Laboratory, Point of Care (LBSP1)** **120 NSF**
Minimum one if a Point-of-Care Laboratory is authorized; provide an additional one for every increment of twenty-four Antepartum / Postpartum Rooms, of all types, greater than twenty-four.
2. **Medication Room (MEDP1)** **120 NSF**
Minimum one; provide an additional one for every increment of twelve Antepartum / Postpartum Rooms, of all types, greater than twelve.
3. **Nourishment Room (NCWD1)** **120 NSF**
Minimum one; provide an additional one for every increment of twelve Antepartum / Postpartum Rooms, of all types, greater than twelve.
4. **Utility Room, Clean (UCCL1)** **120 NSF**
Minimum one; provide an additional one for every increment of twelve Antepartum / Postpartum Rooms, of all types, greater than twelve.
5. **Utility Room, Soiled (USCL1)** **90 NSF**
Minimum one; provide an additional one for every increment of twelve Antepartum / Postpartum Rooms, of all types, greater than twelve.
6. **Storage, Equipment (SRSE1)** **120 NSF**
Minimum NSF; provide an additional 60 NSF for every increment of six Antepartum / Postpartum Rooms, of all types, greater than twelve.
7. **Alcove, Stretcher (SRLW2)** **60 NSF**
Minimum one; provide an additional one for every increment of twelve Antepartum / Postpartum Rooms, of all types, greater than twelve.
8. **Storage, Breast Milk (NYFS1)** **60 NSF**
Minimum one; provide an additional one for every increment of twelve Antepartum / Postpartum Rooms, of all types, greater than twelve.
9. **Alcove, Nursery Transport Unit (NYTU1)** **30 NSF**
Minimum one; provide an additional one for every increment of twelve Antepartum / Postpartum Rooms, of all types, greater than twelve.
10. **Storage, Gas Cylinder (SRGC2)** **60 NSF**
Minimum one; provide an additional one for every increment of twenty-four Antepartum / Postpartum Rooms, of all types, greater than twenty-four.
11. **Alcove, Blanket Warmer (RCA04)** **30 NSF**
Minimum one; provide an additional one for every increment of twelve Antepartum / Postpartum Rooms, of all types, greater than twelve.

12. **Alcove, Crash Cart (RCA01)** **30 NSF**
Minimum one; provide an additional one for every increment of twelve Antepartum / Postpartum Rooms, of all types, greater than twelve.
13. **Alcove, Portable Imaging (XRM01)** **30 NSF**
Minimum one; provide an additional one for every increment of twenty four Antepartum / Postpartum Rooms, of all types, greater than twenty four.
14. **Food Tray Retherm Cart Area, Decentralized (FSCS2)** **60 NSF**
Minimum one if Decentralized Food Tray Rethermalization is authorized; provide an additional one for every increment of twenty four Antepartum / Postpartum Rooms, of all types, greater than twenty four.

6.5. FA6: OBSTETRIC UNIT STAFF AND ADMINISTRATION.

1. **Office, Private (OFA04)** **120 NSF**
Provide one for each OB Unit FTE position authorized to have a private office in OB Unit Staff and Administration.

Consider the following positions: Clinical Nurse Specialist; Lactation Support; Physician Assistant, Unit Chief / Supervisor, NCOIC / LCPO / LPO.
2. **Office, Shared (OFA05)** **120 NSF**
Provide one for every increment of two OB Unit FTE positions authorized to have a shared office in OB Unit Staff and Administration.
3. **Cubicle (OFA03)** **60 NSF**
Provide one per each OB Unit FTE position authorized to have a cubicle in OB Unit Staff and Administration.

These cubicles may be collocated in a shared space or dispersed as required.
4. **Sub-Waiting (WRC03)** **60 NSF**
Minimum one if a Sub-Waiting in OB Unit Staff and Administration is authorized.
5. **Storage, Patient Records (FILE1)** **120 NSF**
Provide one if Patient Record storage in OB Unit Staff and Administration is authorized.
6. **Conference Room (CRA01)** **240 NSF**
Minimum NSF if a Conference Room for OB Unit Staff and Administration is authorized; provide an additional 60 NSF if the total number of OB Unit FTE positions authorized is greater than ten.

Planner must determine adequacy and availability of existing Conference Room space and the ability to optimize resources by sharing Conference Room space with other departments.

7. **Lounge, Staff (SL001)** **120 NSF**
Minimum NSF, provide an additional 60 NSF for every increment of five OB Unit FTEs working on peak shift greater than ten; maximum 360 NSF.
8. **Toilet, OB Unit Staff (TLTU1)** **60 NSF**
Minimum one; provide an additional one every increment of fifteen OB Unit FTE positions working on peak shift greater than fifteen.
9. **Copy / Office Supply (RPR01)** **120 NSF**
Minimum of one; provide an additional one for every increment of twenty four OB Unit Rooms, of all types, greater than twenty four.
10. **Locker / Changing, Male Staff (LR002)** **120 NSF**
Minimum NSF; provide an additional 10 NSF for every increment of two OB Unit Male FTE positions working on peak shift greater than twelve.
11. **Locker / Changing, Female Staff (LR002)** **120 NSF**
Minimum NSF; provide an additional 10 NSF for every increment of two OB Unit Female FTE positions working on peak shift greater than twelve.
12. **Toilet / Shower, OB Unit Staff (TLTS1)** **60 NSF**
Provide two if Toilet / Showers in OB Unit Staff and Administration are authorized.
13. **On-Call Room (DUTY1)** **120 NSF**
Minimum one if an On-Call Room in OB Unit Staff and Administration is authorized; provide an additional one for every increment of twenty four Antepartum / Postpartum Rooms, of all types, greater than twenty four.
14. **Toilet / Shower, On-Call Room (TLTS1)** **60 NSF**
Provide one for each On-Call Room if On-Call Rooms are authorized for the OB Unit Staff and Administration.
15. **Scrubs Distribution Room (LCCL4)** **120 NSF**
Provide one if a Scrubs Distribution Room in OB Unit Staff and Administration is authorized.

SECTION 7: PROGRAM DATA REQUIRED: WELL BABY NURSERY (LEVEL I)

7.1 INPUT DATA STATEMENTS. Input Data Statements are based on questions about Workload (W), Mission (M), Staffing (S) and Miscellaneous (Misc) information.

1. How many bassinets for the Well-Baby Nursery (Level I) are projected? (W)
2. How many Airborne Infection Isolation (AII) Nursery bassinets, greater than one, are authorized per MTFs the Infection Control Risk Assessment (ICRA)? (W)

SECTION 8: SPACE PLANNING CRITERIA: WELL BABY NURSERY (LEVEL 1)

For calculation of the number of Vending Machine areas, Public Toilets, Communication Closets, and Janitors Closets for this Chapter, please refer to DoD Space Planning Criteria Chapter 610: Common Areas.

8.1. FA1: WELL BABY NURSERY (LEVEL 1).

Locate the Nursery (Level I) with L & D for the LDRP model of care; locate the Nursery with the OB Unit for the LDR model of care. Planner shall verify whether the Nursery (Level I) space is also provided in the Nursery Department (Chapter 430); do not duplicate.

1. **Nursery, Parent Teaching Room (NYPT1)** **240 NSF**
Provide one for the Well-Baby Nursery (Level I).
2. **Gowning Station (NYAR1)** **60 NSF**
Provide one for the Well-Baby Nursery (Level I).

Anteroom for family and staff to scrub and gown prior to entering the Well-Baby and the Airborne Infection Isolation (AII) nurseries.
3. **Nursery, Level 1 (NYNN1)** **240 NSF**
Minimum NSF; provide an additional 60 NSF per each projected Bassinet greater than three.

This Well-Baby / Holding Nursery accommodate bassinets in an open area.
4. **Nursery, Airborne Infection Isolation (AII) (NYIR1)** **180 NSF**
Minimum one; provide additional Airborne Infection Isolation (AII) Nursery bassinets, greater than one, as authorized per the MTFs Infection Control Risk Assessment (ICRA).

These rooms are part of the total number of projected bassinets. The number of airborne infection isolation nursery bassinets shall be determined by the infection control risk assessment (ICRA), which shall be conducted during the early planning phase of a project.

5. **Procedure Room (NYPR1)** **180 NSF**
Provide one for the Well-Baby Nursery (Level I).

SECTION 9: PROGRAM DATA REQUIRED: GME EDUCATION / TRAINING

9.1 INPUT DATA STATEMENTS. Input Data Statements are based on questions about Workload (W), Mission (M), Staffing (S) and Miscellaneous (Misc) information.

1. Is an Obstetric Graduate Medical Education program authorized? (M)
 - a. How many OB Resident / Student FTE positions are authorized? (S)

SECTION 10: SPACE PLANNING CRITERIA: GME EDUCATION / TRAINING

10.1. FA1: OBSTETRICS GME EDUCATION / TRAINING.

1. **Office, Residency Program Director (OFA04)** **120 NSF**
Provide one if an Obstetric Graduate Medical Education program is authorized.

2. **Resident Collaboration Room (WKTm1)** **240 NSF**
Minimum NSF; provide an additional 60 NSF per each Resident / Student FTE position authorized greater than two if an OB Graduate Medical Education program is authorized.

Minimum NSF accommodates two residents, and a collaboration / reference area.

3. **Conference/ Classroom (CRA01)** **240 NSF**
Provide one if the total number of Resident / Student FTE positions is greater than five if an OB Graduate Medical Education program is authorized.

SECTION 11: PLANNING AND DESIGN CONSIDERATIONS

The following design considerations are intended to provide planners and designers with guidance on how to follow world-class and evidence-based design strategies for new and renovation of existing healthcare facilities. For a more comprehensive list, refer to the latest version of the World Class Checklist (<https://facilities.health.mil/home/>). Also refer to the Design Considerations and Requirements of the latest version of the FGI Guidelines for Design and Construction of Hospitals and Outpatient Facilities by the Facility Guidelines Institute (FGI Guidelines).

- A. The net-to-department gross factor (NTDG) for Labor and Delivery / Obstetric Unit is 1.50. This number when multiplied by the programmed net square foot (NSF) area determines the departmental gross square feet. This factor accounts for the space occupied by internal department circulation and interior partitions and other construction elements not defined by the net square foot area.

- B. Patient Room:
 - 1. Consider providing overnight accommodation for one guest within the patient room and include desk, internet access, TV and locked storage.
 - a. Consider installing ceiling lifts where needed to promote safety.

- C. Consider efficiency of layout such that walking distances of the routes staff repeatedly take are kept to a minimum.
 - 1. Consider providing decentralized caregiver workstations that are distributed throughout the nursing unit to allow nurses to spend more time with patients and less time walking. These workstations may be designed with views to patient rooms and provide convenient access to supply areas and computers for patient charting.
 - 2. Consider patient servers or cabinets to locate frequently used supplies and linen, thus decreasing frequent trips by nursing staff to and from the clean utility room.

- D. Team collaboration rooms and staff areas should be located so staff members may have conversations regarding patients and clinical matters without being heard by patients or visitors.

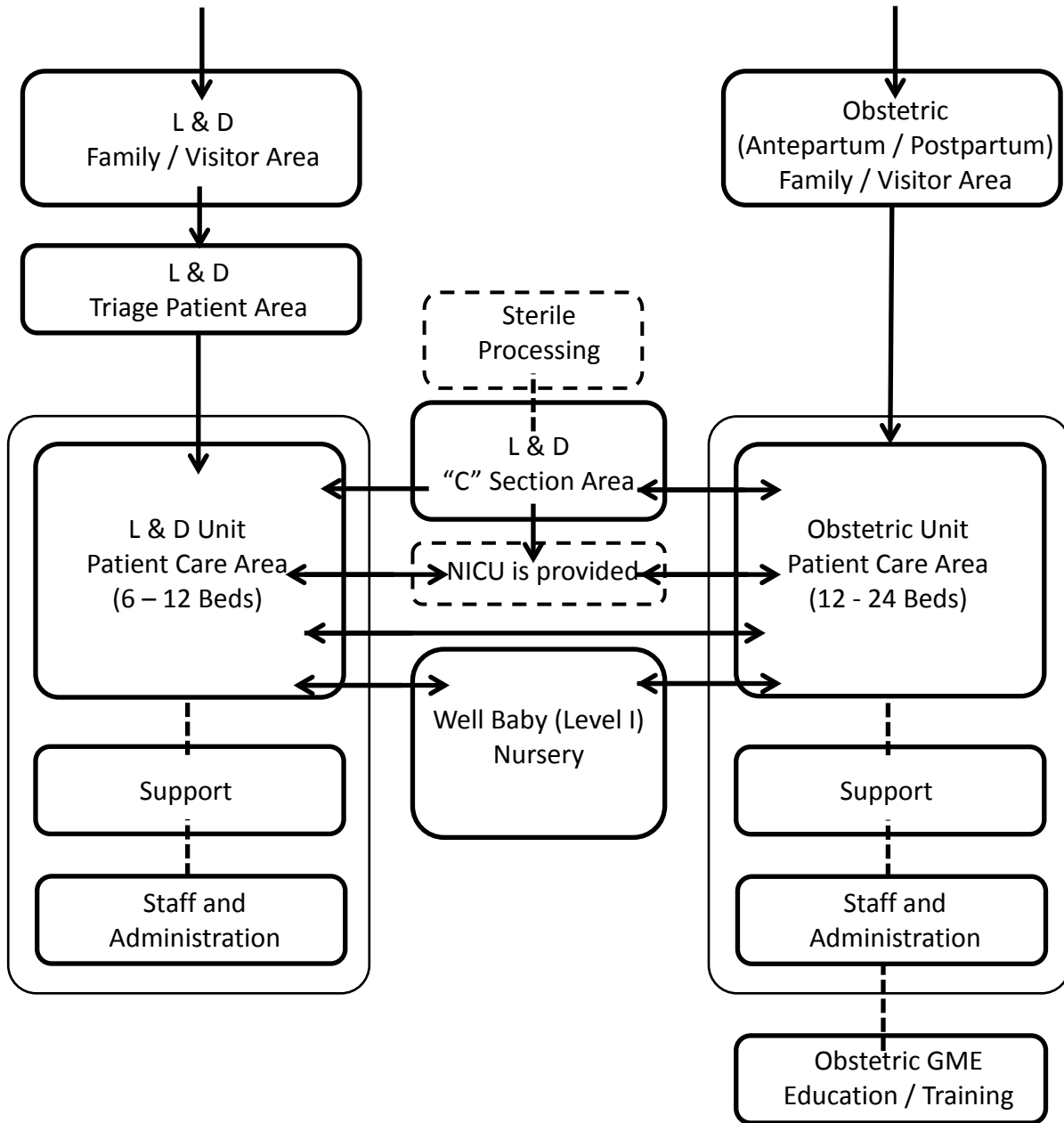
- E. Careful consideration should be given to both the type of hand-washing station that is installed and its placement. Hand washing sinks and alcohol-based hand-rub dispensers must be visible and accessible in patient rooms and treatment areas. Ensure convenient access to the medication station and nourishment area as well.

- F. Design for flexibility and adaptability to accommodate future expansion.

- G. The Medication Preparation Room should be enclosed to minimize distractions. A glass wall or walls may be advisable to permit observation of patients and unit activities.
- H. Consider security requirements early on in design (Consider infant security systems, closed circuit television camera to monitor visualization, etc.)
- I. In all equipment storage rooms, assure adequate power is provided for all equipment housed within these room.
- J. Provide plumbing hook-ups and a drain (not floor style) similar to a washing machine set up in each LDR/LDRP patient room to accommodate portable labor tubs.
- K. The Triage Area should be located near the primary entrance to the Labor and Delivery Unit and adjacent to the Waiting Room. The Triage Area should also be adjacent to the Labor and Delivery Unit for better patient flow and staff efficiency.
- L. The C-section suite should be located near the LDR/LDRPs to facilitate transfer of patients requiring unanticipated C-section deliveries.
- M. Provide dedicated clean and dirty elevators from the C-section suite to Central Sterile if these services are not on the same floor.
- N. Locate the Well Baby Nursery (Level I) on the Obstetric unit when the LDR concept is used, or on the Labor and Delivery Unit when the LDRP concept is used.
- O. If a NICU is provided, there should be a direct vertical or horizontal adjacency to the C-section OR.

SECTION 12: FUNCTIONAL DIAGRAM (INTERDEPARTMENTAL)

12.1. FUNCTIONAL DIAGRAM. The diagram below illustrates interdepartmental relationships among key areas / spaces within Labor and Delivery (LDRP Concept) and the Obstetric Unit (LDR Concept). The diagram is necessarily generic. The planner shall use this as a basis for design only and shall consider project-specific requirements for each Military Treatment Facility.



LEGEND

- Patient Circulation
- Staff Circulation

GLOSSARY

G.1. DEFINITIONS.

Airborne Infection Isolation (AII) Room: Formerly called negative pressure isolation room, an AII Room is a single-occupancy patient-care room used to isolate persons with certain suspected or confirmed infections. Examples are tuberculosis, measles, and chicken pox. Environmental factors are controlled in AII Rooms to minimize the transmission of infectious agents that are usually spread from person-to-person by droplet nuclei associated with coughing or aerosolization of contaminated fluids. AII Rooms should be provided with negative pressure (so that air flows under the door gap into the room).

Antepartum: This is the period of time before birth. A hospital Antepartum Room is where a doctor places a pregnant woman for observation and monitoring before the onset of labor, generally due to pregnancy complications or hospital-ordered bed rest. A woman may spend a few days or a few months in the Antepartum Room. This room is typically similar in size and configuration to a general acute care patient room.

Antepartum Testing / Triage: This area regulates the flow of patients into expensive birthing rooms by serving as a holding area for patients in early stages of labor (or false labor), a preparation area for patients who are scheduled for a C-section, or for patients who require tests/treatments such as an ultrasound and/or IV fluids.

Anteroom: An enclosed ventilated room adjacent to the isolation room whose purpose is to provide a barrier against the entry/exit of contaminated air into/out of the isolation room. As well, it provides a controlled environment for donning/removal of Personal Protective Equipment, decontaminating equipment, and handwashing.

Average Length of Stay (ALOS): The length of stay for an individual patient is the total amount of time that he/she stays in a healthcare facility between arrival (admission) and departure (discharge) and is determined based on the midnight census. The average length of stay for a specific patient population or facility is the total of all patient days (lengths of stay) divided by the number of patient admissions / discharges.

Care Giver Workstation: A documentation station for nursing unit personnel. Workstations can be “centralized” or “decentralized”. An example of “centralized” is the central nursing station that serves as the information hub of the unit and contains workspace for all care givers. An example of the “decentralized” workstation are care giver workstations that are distributed throughout the nursing unit, often located outside each patient room or between every two patient rooms to allow a caregiver to work efficiently while observing and caring for patients. Additionally, decentralized “teaming” workstations or substations can be provided for several caregivers to collaborate about the patient’s care.

Clean Utility Room: This room is used for the storage and holding of clean and sterile supplies. Additionally it may provide space to prepare patient care items. Clean linen may be

stored in a designated area in the clean utility room if space is not provided in a separate room or in an alcove.

Consult Room: This is a consultation room for family members to meet with physicians or other providers privately and is ideally located near the waiting room.

Cubicle: A cubicle is a partially enclosed workspace, separated from neighboring workspaces by partitions. Managers and other staff with no supervisory responsibilities as well as part-time, seasonal, and job-sharing staff may qualify for a cubicle.

Deliveries: The sum of the number of live births and still births in the hospital. A multiple birth delivery counts as one delivery.

Delivery Room / C-Section OR: This OR is required for C-section deliveries. Some MTFs have developed protocols for performing gynecological surgery in the delivery/operating suite.

Diagnostic Related Groups : A classification of diagnosis or surgical procedure (sometimes including age) into major diagnostic categories (each containing specific diseases, disorders, or procedures) for the purpose of determining payment of hospitalization charges, based on the premise that treatment of similar medical diagnoses generates similar costs.

Equipment Storage: Numerous items of equipment are used during the birth of an infant. Traditionally, in the LDRP (labor, delivery, recovery, postpartum) concept, the equipment needed at the time of birth can be shared between two rooms and kept in a common equipment room/alcove. In a traditional LDR (labor, delivery, recovery) concept, an area of the room provides storage for equipment dedicated to that room. However, in both the LDR and LDRP revised concepts, equipment storage is provided in a dedicated enclosed closet for each room. Additionally, there is a requirement for common storage space for equipment on the unit.

Exam / Triage Room: Birthing patients are initially seen and evaluated in an exam / triage room. This process is to determine if the patient is truly in labor and if there are any complications. The process of exam / triage can result in the patient being sent home (false labor, for example), the patient being sent to a room for the labor to progress, or to a cesarean section room (high risk patient or scheduled cesarean section). Exam / triage does not always lead to an immediate admission or release. It may take a couple of hours of observation to rule out active labor or fetal or maternal distress before the decision to admit or release to home can be made. It is also in this area that admission data is gathered.

Full-Time Equivalent (FTE): A staffing parameter equal to the amount of time assigned to one full time employee. It may be composed of several part-time employees whose total time commitment equals that of a full-time employee. One FTE equals a 40 hour-week workload.

Functional Area: The grouping of rooms and spaces based on their function within a clinical service. Typical Functional Areas are Reception Area, Patient Area, Support Area, Staff and Administration, and Education Area.

Graduate Medical Education (GME): After a physician completes 4 years of medical school, they must then complete an internship (also called PGY1 or Post Graduate Year 1) and then a residency (also termed GME or Graduate Medical Education). An internship typically lasts one year, and a residency can last from three to seven years depending on the specialty that is chosen.

Infection Control Risk Assessment (ICRA): An ICRA is a multidisciplinary, organizational, documented process that considers the medical facility's patient population and mission to reduce the risk of infection based on knowledge about infection, infectious agents, and the care environment, permitting the facility to anticipate potential impact.

Input Data Statement: A set of questions designed to elicit information about the healthcare project in order to create a Program for Design (PFD; see definition below) based on the criteria parameters set forth in this chapter. Input Data Statements could be Mission related, based on the project's Concept of Operations; and Workload or staffing related, based on projections for the facility.

Labor and Delivery Unit: A nursing unit for the care of mothers and babies during labor and delivery, which can include the use of LDRs (labor, delivery, recovery), LDRPs (labor, delivery, recovery, postpartum), and/or obstetric beds (postpartum/antepartum beds).

LDR (Labor, Delivery, Recovery): The room where a mother labors, delivers and recovers and then is transferred to a postpartum room for the remainder of her stay. The LDR room is also known as the birthing room. It is a procedure room and therefore does not require a window to the outdoors. LDRs are recommended when annual deliveries exceed 1,200.

LDRP (Labor, Delivery, Recovery, Postpartum): This supports a single room maternity care concept. The mother labors, delivers, recovers and spends the postpartum phase in one room. The rooms must include facilities for care of the infant during delivery and after birth. Since the mother spends more than 24 hours in this room, it is a licensed bed and requires a window to the outdoors. LDRPs are recommended where annual deliveries are less than 1,200.

Medication Room: This room where medication and supplies are stored; includes automated dispensing machines.

Net-to-Department Gross Factor (NTDG): A parameter used to calculate the Department Gross Square Foot (DGSF) area based on the programmed Net Square Foot (NSF) area. Refer to DoD Chapter 130 for the NTDG factors for all Space Planning Criteria chapters.

Nursery (Level I) Holding Nursery: When the infant stays with its mother in the room, referred to as "rooming-in", a small "holding nursery" is located adjacent to the nurse station on the unit(s) to accommodate well infants who need to be removed from the mother's room. The Holding Nursery will be located on the Obstetric unit when the LDR concept is used and on the Labor and Delivery Unit when the LDRP concept is programmed. It should be sized to accommodate the number of infants who do not remain with their mother during the postpartum stay.

Newborn Nursery or Well Baby Nursery: A newborn nursery is provided for every facility that includes delivery services. Each newborn nursery has no more than 16 infant stations. If a room-in concept is being used, the number of infant stations can be reduced. This smaller nursery is known as the Holding Nursery. (See above definition for Holding Nursery)

Obstetric Unit: Also known as Mother-Baby Unit, the Obstetric Unit cares for both antepartum and postpartum patients and may also be used for female surgery, and other obstetric (OB) or gynecology (GYN) related patients.

Office, Private: A single occupancy office provided for confidential communication.

Office, Shared: An office that accommodates two workstations.

Personal Property Lockers: This is a small-sized locker, commonly called purse or cell phone locker, and is generally used to secure purses and smaller valuables. Staff members who do not have an office or cubicle space where they can safely store belongings will be assigned these lockers.

Playroom: This space is provided to accommodate children's play activities; it shall be outfitted with appropriate furniture and accessories and included within the General Waiting.

Point of Care Laboratory: A laboratory that is located permanently away from the central laboratory, with one or several analyzers operated by either laboratory or non-laboratory personnel. The objective of creating this laboratory is to provide rapid point-of-care tests and improve turnaround time for critical tests.

Postpartum: This is the period of time following birth. Postpartum care encompasses management of the mother, newborn, and infant during the postpartum period. This period usually is considered to be the first few days after delivery, but technically it includes the six-week period after childbirth up to the mother's postpartum checkup with her health care. The Postpartum Room is where the mother stays after labor and delivery. If using an LDRP model of care, the LDRP room is the room the mother will use for the entire stay. The mother will give birth here and the baby will stay with her ("room in") until she is ready to go home. The nursery, in this case, is only for babies or mothers who are very ill, rather than well newborn care.

Program for Design (PFD): A listing of all of the spaces and rooms included within a service and the corresponding net square foot area of each space and room. This listing of spaces and rooms is based on criteria set forth in this chapter and specific information about Program Mission, Workload projections and Staffing levels authorized.

Provider: A medical professional, such as a physician, nurse practitioner, or physician assistant, who examines, diagnoses, treats, prescribes medications, and manages the care of patients within the scope of their practice as established by the governing body of a healthcare organization.

Scrubs Distribution Room: Space to dispense and receive scrubs via a manual or automated dispensing system. Space may be provided within each locker room or directly adjacent.

Space and Equipment Planning System (SEPS): A web based tool developed by the Department of Defense (DoD) and the Department of Veterans Affairs to generate a Program for Design (PFD) and a Project Room Contents list (PRC) for a DoD healthcare project based on approved Space Planning Criteria. Specific project-related Mission, Workload and Staffing information is entered in response to the Program Data Required - Input Data Statements (IDSs).

Soiled Utility Room: This space provides an area for cleanup of medical equipment and instruments, and for disposal of medical waste material. It provides temporary holding for material that will be picked up by Central Sterile or similar service. It should be accessible from the main corridor.

Team Collaboration Room: This space provides staff with an physical space conducive to teamwork. Room contains touchdown computer workstations for documentation and a table with chairs to hold meetings.

Unit: A unit is an area of patient care that includes a number of patient rooms and all of the support functions necessary to provide care to the patients on that unit. Examples include an obstetric ward (unit), an LDR unit or an LDRP unit. The number of units varies and is provided in the formula in Table 1 under Section 2: Operating Rationale and Basis of Criteria.

Workload: Quantified effort; this may be historical, forecasted or both. Facility space planning is computed using workload based criteria. Workload projections divided by the throughput determined in this document for each workload driven room determines the quantity of rooms needed to satisfy the projected workload demand.