

Section 3

Functional Diagrams



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General Considerations

Space needs and clinical programs can be anticipated to change during the life of the building. In order to facilitate changes in function, minimize remodeling work, and to allow for greater interoperability in the use of Clinic spaces, the use of modular spaces and designs is encouraged. The following diagrams in this section illustrate some typical concepts for the development of basic Exam/Treatment (E/T) modules. Once the basic module is established, it may be repeated for larger, multiple module clinics.

The space program for each Module will include Core Spaces (including Reception/Control, Exam Rooms, Intake/Exit Interview, Nurse Triage, Treatment and Procedure Rooms, Patient Toilets, Nurse Station, Medication Room, Staff Toilet, Clean Supplies, Soiled Utility, and Conference and Consultation) and Support Spaces (including HACs and Clerical Offices).

The number of exam rooms and modules is determined from mission, staffing and workload projections using the criteria and formulas in Chapter 262. Typical E/T modules will have 10 to 19 exam rooms and support spaces. The diagrams in this Section depict the relationships of the Core and Support spaces in a typical E/T Module in the Ambulatory Care Clinic. Specialty Clinics, such as Chemotherapy, Dermatology, Gastroenterology, etc., will require additional specialized treatment and support spaces as listed in the space program.

The most common space size in the Ambulatory Care Clinic should be a unit of 120 net square feet (examination rooms, offices, and many support spaces). For free-standing clinics within a medical center, corridors used by patients should be at least 6 feet in width. Where the clinic is attached to the hospital, 8 foot corridors are required.

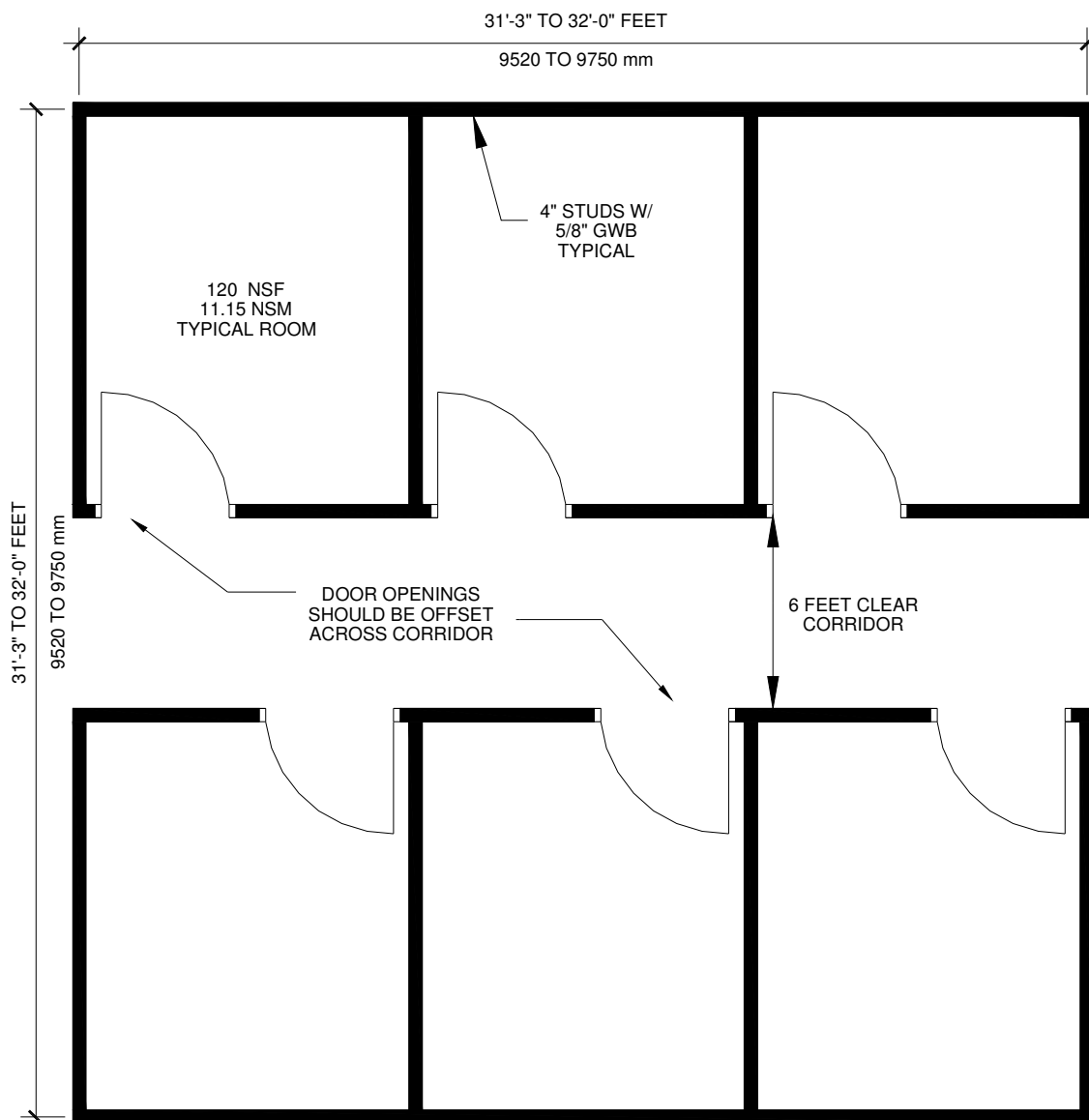
Accordingly, the planning module used to develop the Guide Plates is based on a room of approximately 10 by 12 feet (see diagram on Page 3-3). Allowing for partition widths, six typical (or unit) rooms and a 6 foot wide corridor (for free-standing clinics) will fit in 31'-3" to 32'-0" square grid. This is the module used in developing this Design Guide and is intended as a starting point for consideration during design. It is not intended to restrict the use of other suitable modules or structural grids. The A/E shall coordinate the final module with the structural system selected for the project.

Net and Departmental Gross Area


Net Area (Net Square Feet, NSF; or Net Square Meters, NSM) is the actual floor area in a room or functional area (finish to finish) that can be used by people, furnishings, or equipment. Department Gross Square Feet (DGSF) includes, in addition to the Net Area, partitions and circulation internal to the functional area or department. The net to department gross factor (NTDG factor) adopted by VA for Ambulatory Care is 1.65. **The 1.65 factor anticipates that internal circulation must be added to connect functional areas and individual rooms.**

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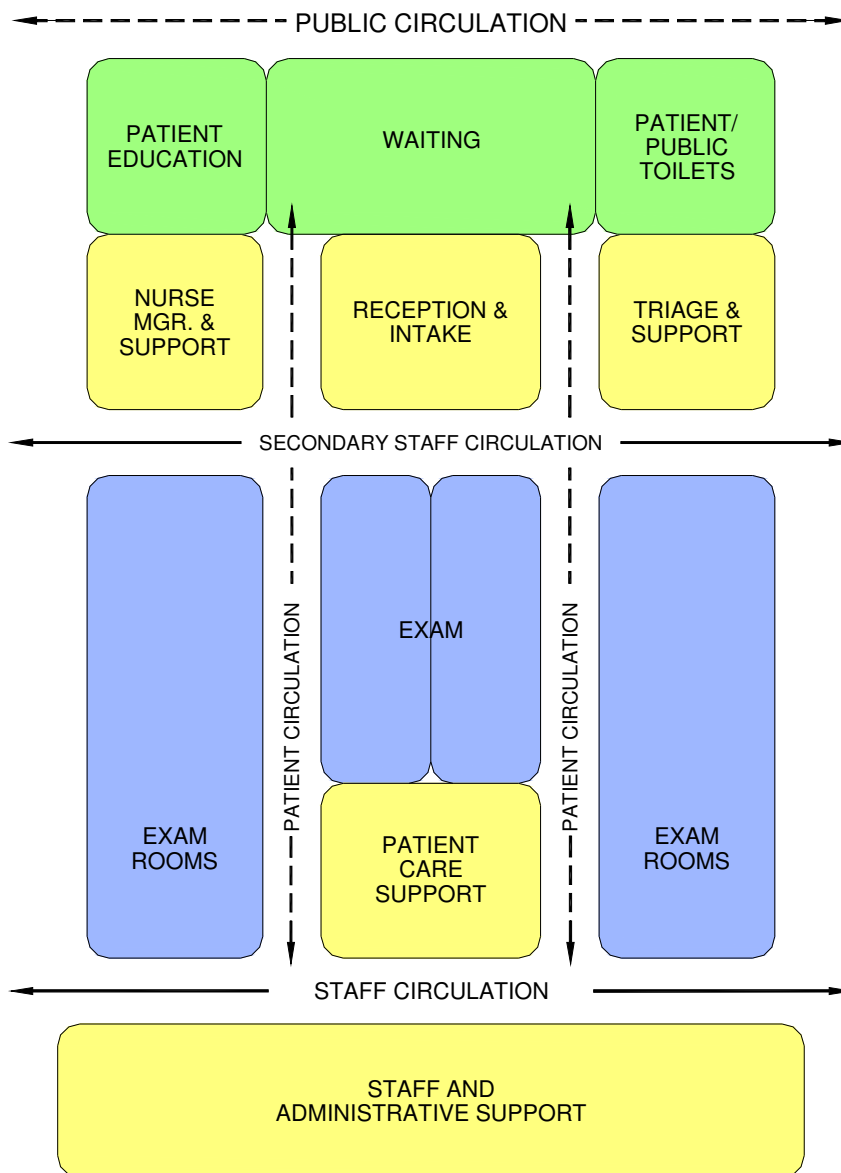
Planning Module



LEGEND FOR FOLLOWING FUNCTIONAL DIAGRAMS:

- | | | | |
|---|----------------------------|---|-----------------------|
|  | PATIENT OR "PUBLIC" SPACES |  | = PATIENT CIRCULATION |
|  | STAFF SUPPORT |  | = STAFF CIRCULATION |
|  | EXAM ROOMS | | |

E/T Single Module Relationship Diagram



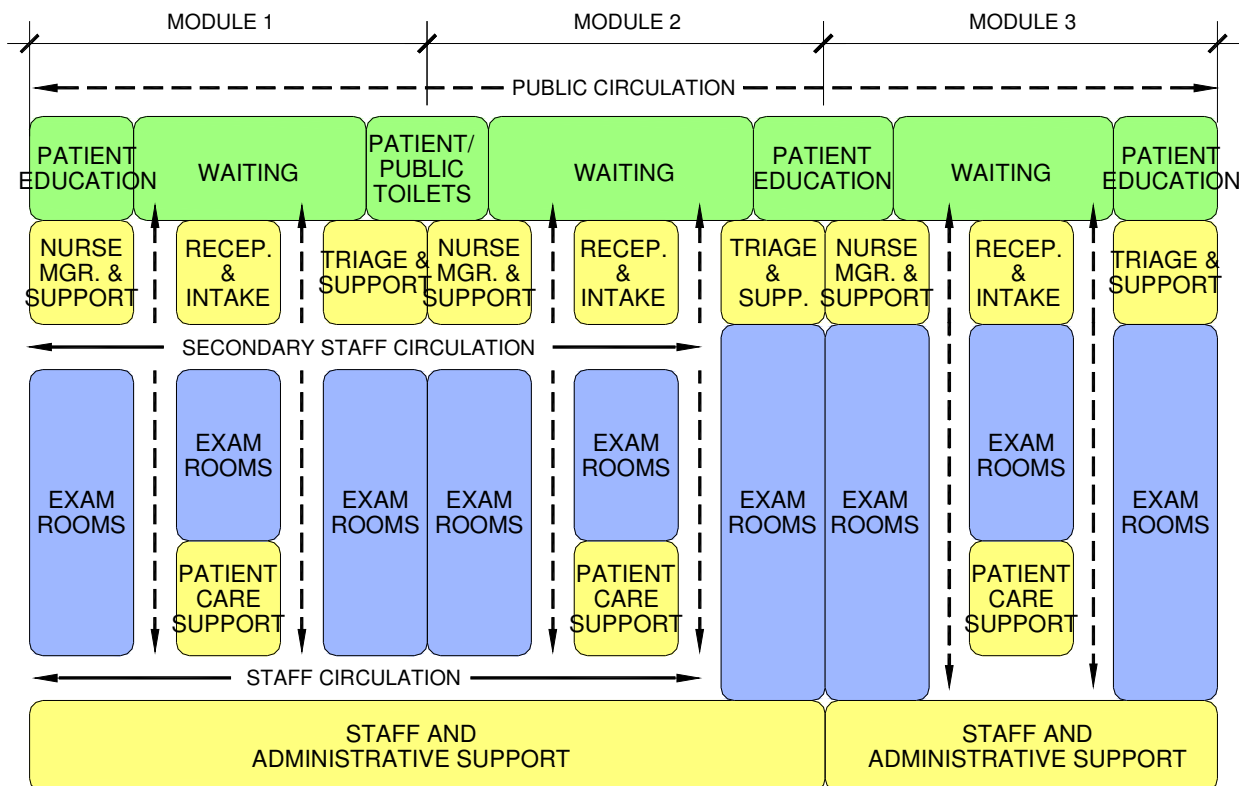
Typical Exam/Treatment Module is based on 10 to 19 exam rooms and support spaces.

Rooms are arranged along double loaded corridors.

“Public” functions are located at the “front” of the module. Most staff offices and common support functions are located at the “back” of the module.

Patient access to the exam/treatment areas is controlled through the Reception and Triage functional areas.

E/T Multiple Module Relationship Diagram



Typically Ambulatory Care Clinics will have several E/T modules and Specialty Clinics.

Exam/treatment modules may be arranged to allow common circulation as shown for Modules 1 and 2. This may provide planning and operational efficiencies from shared space or equipment (such as “overflow” into an adjacent module on busy clinic days); and can help maintain efficient staff and support circulation separate from public routes.

Some modules (specialty clinics in particular) may need to limit “through traffic” and should be kept distinct from adjunct modules as shown by the relationship between Modules 2 and 3.

Functional Relationships with Hospital Based Services

The hospital based Ambulatory Care Clinic will rely on a number of other services in the Medical Center for patient care and support functions. The following matrix indicates desirable relationships based on efficiency and functional considerations.

The arrangement of existing spaces and structural features may limit adjacencies in a new clinic when it is planned as an addition or expansion to an existing Medical Center. Consideration should be given to remodeling or relocating functions with critical relationships to the Ambulatory Clinic when the existing arrangement would significantly compromise patient care or efficiency.

Proximity Codes For Table

The degree of proximity that is desirable with other departments or areas that share a functional relationship with the Ambulatory Care Clinic is indicated by a scale of 1 to 4 (1 representing the greatest level of adjacency). An "X" entered in the diagram represents a relationship where separation is desirable for the departments or areas in question.

Code	Proximity Relationship
1	Very Strong: Adjacent
2	Strong: Close, same floor
3	Moderate: Convenient, different floor acceptable
4	Weak: May be separated, limited traffic or communication necessary
X	Separation required or desirable

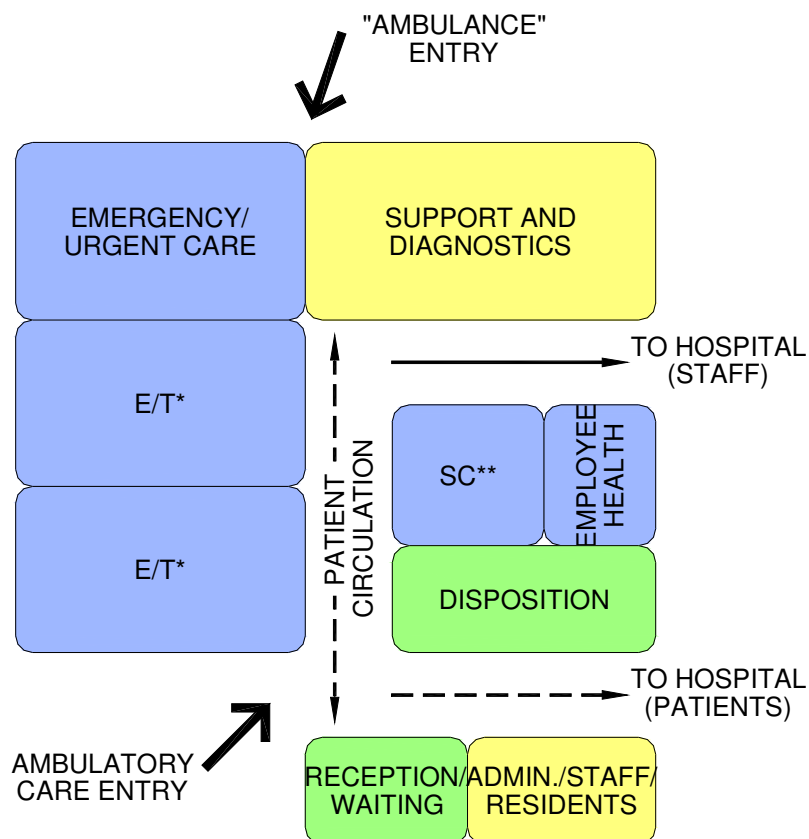
Functional Relationship Matrix—Ambulatory Care (Hospital Based)

SERVICE	Proximity Code	Remarks
Audiology and Speech Pathology	2	
Canteen	3	
Cardiovascular Laboratories / Cardiology Clinic	2	
Childcare / Development Center	X	
Clinical Services Administration	4	
Day Hospital--Day Treatment Center	X	
Dental Service	3	
Dialysis Center	3	
Digestive Diseases Program - Endoscopy Suite	3	
Domiciliary	X	
EEG Laboratory	3	
Environmental Management Service	4	Limited to linen and housekeeping.
Eye Clinic	1	
Lobby	1	
Magnetic Resource Imaging	4	
Medical Administration Service	1	
Mental Health Clinic: Outpatient Psychiatric Clinics	X	
Nuclear Medicine	4	
Nursing Units (ICU, MH&B, MSN, NHCU, SCI)	4	Usually limited or no traffic.
Nutrition and Food Service	4	
Pathology and Laboratory Medicine	4 or 2	4 if specimen collection provided in Ambulatory Clinic; otherwise 2
Pharmacy Service	1	
Physical Medicine and Rehabilitation Service	3	
Police and Security Service	1 or 2	1 if police not in ER/UC
Prosthetic and Sensory Aids Service	3	
Pulmonary Medicine	4	
Radiation Therapy Service	4	
Radiology Service	2	
Service Organizations	3	
Substance Abuse Clinic	X	Usually remote from Amb Care.
Supply, Processing and Distribution	3	
Surgery Service	3	
Voluntary Service	1	

Planning Considerations

Although the Ambulatory Care Clinic may be designed as a freestanding structure on the Medical Center campus, in most cases the Clinic should be adjacent or contiguous with the existing hospital building for ease of circulation and access to other services within the hospital. The following diagram illustrates typical relationships within the Clinic and factors to be considered in the relationships between the Clinic and existing hospital. The diagram is necessarily generic. The design of an individual Clinic must consider the project-specific space program and the existing conditions at the Medical Center.

- Clearly identify the Main patient/public entry to the Clinic; reinforce the entry sequence with the design of site circulation systems.
- Separate Emergency/Urgent Care (or Ambulance) entry from the main entry to the Ambulatory Care Clinic.
- Consider relationships to existing hospital building entries. Keep in mind that the Ambulatory Care entrance has the potential to become the new “main entry” as the focus of VA healthcare continues to shift inpatient to outpatient care.
- Staff entry and staff/support circulation to hospital building should be separated from patient/public circulation if possible.



* E/T EXAM/TREATMENT MODULES AS REQUIRED
 ** SC SPECIALTY CLINIC MODULES AS REQUIRED