

Division of Facilities Planning and Construction Brief on Health Systems Planning (HSP) Process (October 2007)

The Health System Planning process - The HSP process has two essential components: the first being the computer application, which based on inputs determines the services to be providing at a facility, and the second component being the review and discussion between the health disciplines and other interested parties to determine if the HSP computer program has properly captured the needs of the community.

Once the HSP process has been completed, the HSP computer application provides the bases for the documents necessary for the government or its representative to plan and acquire approval for a medical program then communicate the necessary information to a hired Architect/Engineer for the design of a facility. A brief overview of the systems performance and limitation follows:

1. **Planning** - The system provides the Program Justification Document (PJD) through the following process (See Appendix A for Glossary and Abbreviations) :
 - a. An initiator, usually someone at the area level responsible for starting projects. commences a new project.
 - b. From the software's User Population database, the initiator will select the communities to be served for the project. These communities selected may vary by discipline. For some disciplines, the initiator will need to identify non-native populations to be served, crossover workload, distances to alterative care, and the Resource Requirements Methodology (RRM) approved staffing.
 - c. At this point, the software calculates the populations to be served by age and sex group and forecasts that population for the appropriate project year. It then multiplies these populations age and sex groups by patient utilization rates (See Appendix B for Utilization Rates), and considers whether a certain percentage of the care will require a higher level of acute care or specialization than is available at an IHS Primary Care Acute Care. Within each discipline, there is the capability to justify a workload and override the software. calculation. It then compares the approved workload to the discipline allocation criteria to determine if an adequate workload is available to support each discipline (See Appendix C for Template Workload Thresholds). For the disciplines that meet the workload threshold, the application documents the need for these services.
 - d. To provide a complete document for approval, the initiator will need to document information on the existing facilities in the appropriate places within the HSP application.
 - e. At this point, the necessary PJD and POR documents are available for IHS approval.
2. **Architect/Engineer (A/E) Communication** - The software, at this point, has also tabulated the necessary information for communication to the design team. The following documents are available for publication for the A/E:
 - a. Program of Requirements
 - b. Template Drawings - Hard copy and AutoCAD files.
 - c. Equipment Use - A department-by-department, room-by-room, equipment and furniture list
 - d. Room Function Code Drawing - Hard copy and AutoCAD files

- e. Room Function Code Data Sheet
- 3. **Limitations** - The HSP process provides PJD and POR solutions ranging from a 'Health Location' providing primary care in a remote location one day a week to an Acute Care 36-bed Hospital. The HSP process provides some rationale for larger facilities, but special studies will be required for those facilities due to scale and specialization issues.
- 4. **Development Methodology** - The HSP Process was developed in six steps (Note: a similar process is used bi-annually to update the system):
 1. Identification of Discipline Work Teams and Leadership
 2. Patient Utilization and Defining Characteristics Productivity
 3. Projected Workloads and Defining Characteristics
 4. Space Programming and Design Notes
 5. Architectural and Medical Equipment Planning
 6. Software Development

A brief overview of each step is provided below:

Identification of Discipline Work Teams and Leadership - The IHS steering committee established work teams specific to each discipline (medical service or support service) to oversee the development of key drivers and facility standards pertinent to that discipline. They also Identified the Work Team Leader as the point of contact to facilitate necessary decisions.

Patient Utilization and Defining Characteristics Productivity - Pursuit of the key drivers necessary for facility decisions required three steps: data collection, analysis, and approval. It commenced with three simultaneous data collection efforts:

Albuquerque Data Center - Inpatient bed days by specialty, births, surgical procedures, and clinic stops by provider type were tabulated by age and sex group by community, service units, and grouped as necessary by the Data Center. The data was requested from communities of twenty service units with recently completed facilities. Ten of those facilities were clinics and ten were hospitals. The data was requested for the past 8 years.

Ancillary Workloads - Facility workload questionnaires were sent to twenty recently completed facilities to capture data pertinent to the ancillary workloads (pharmacy, laboratory, radiology), which was not readily available at the Albuquerque Data Center.

Discipline Questionnaires - Questionnaires specific to operational practices and problems were distributed to the Work Team Leaders.

Analysis of the information revolved around demand for a discipline, patient utilization rate by age and sex group or clinical referrer, and determining the capacity or possible productivity of that discipline's defining characteristic (doctor, procedure room, etc.)

Approval was achieved through telephone consultants with the Work Group Leaders and the Steering Committee. These key drivers are documented in the Notes to the Programmer.

Projected Workloads and Defining Characteristic - IHS provided PJDs and PORs for 27 future facilities to be considered as the range of necessary facilities. Outpatient and Inpatient User Populations for each project were established and the utilization rates and defining characteristics capacity applied. The resulting solutions indicated repetitive requirements amongst the 27 facilities. Each disciplines solution were reviewed, refined, and eventually approved by the Steering Committee and Work Group Leaders.

These approvals defined the discipline as out-of-template or template-based as well as the

necessary characteristics of each template.

Space Programming and Design Notes - Necessary space, functional diagrams, and operational notes were documented and distributed to the Work Group Leaders and the Steering Committee for their review and approval. This was a two-submittal process.

Architecture and Medical Equipment Planning - Architecture, medical equipment, furniture, and design criteria were developed, documented, and distributed to the Work Groups and the Steering Committee for their review and approval. This was a four-submittal process.

Software Development - The development of the software commenced at the Space Programming stage and consisted of developing the Program Specification, programming the application, and a closing Partnering/Instructional class.

5. **Disciplines Narratives Overview** - Each Discipline Narrative's content and organization is determined by its development as a "Template-based service" or as an "Out-of-template service." The user is provided with information necessary to identify the appropriate workload to apply to template-based services and to develop the space program for out-of-template services. The organizations of these two types of narratives are outlined below:

Template-based Services:

These services include departments and functions whose spatial needs and functional layout remain constant in IHS supported communities; i.e. they are not influenced by varied local customs and practices. Where multiple scales and/or types of service are anticipated, multiple templates are presented.

Notes to the Programmer - This section explains important assumptions on which the guidelines for all the templates in the service are based, including demographic and/or workload assumptions and the parameters differentiating the different templates developed. It also provides ideas and suggestions to the programmer about special situations that may require deviations from criteria.

Template Design Notes - This section provides design information inherent to a specific template and its associated service (work load) capacity. Included are: Fundamental Parameters of operation hours and staffing; Imperative Issues associated with use of the template; Operational Concept Notes important to application of the template; Adjacency Requirements between the template and other services; Expansion/Flexibility considerations for application of the template; Room/Suite Specific Issues to address in application of the template; and Miscellaneous Notes/Issues specific to the template.

Template Plans - A floor plan is provided for each specific template. This plan cross-references larger scale documentation and criteria for each type of room available.

Out-of-Template Services:

These services include departments and functions whose spatial needs and/or functional layout are heavily influenced by local customs, local health conditions, or facility scale.

Notes to the Programmer - This section opens with a statement of the type of facilities for which it may be appropriate to apply the guidelines in the chapter. This section explains principal assumptions on which the guidelines for the service are based, including staffing criteria, demographic and/or workload assumptions and other pertinent issues. It also provides ideas and suggestions to the programmer about special situations that may require deviations from criteria.

Space Allocation Criteria - The "Space Allocation Criteria" chart documents the formulas on which space is allocated by the HSP process software. Certain types of space may not be required in

some facilities. Whenever the space required is different than the space indicated by the software, the Programmer must prepare justification for deviations from space allocation criteria and seek approval from the Director of IHS.

Design Notes - This section provides design information to induce hours of operation, concept of operation, staffing, adjacency requirements, expansion issues, and other considerations critical to properly designing a facility. This section, while not a comprehensive guide to designing health facilities, provides important design requirements for the planner and architect. This narrative is provided as design instructions to the A/E team with the space program for the facility.

Functional Diagrams - The diagrams in each chapter show the relationships among rooms within a unit and reference to dominant relationships with other services.

6. Calculations:

Ambulatory Care Calculations

1. The author of the PJD and POR selects the communities desired for the facility's Primary Care Service Area.
2. The computer identifies the most recent year's User Population by Age and Sex Group for each community.
3. The author selects the projection year for the medical workload.
4. The computer identifies a growth rate for each community by county from the IHS Service Populations.
5. The program then applies the appropriate growth rate to each community in the Service Area and establishes a projected User Population by Age and Sex Group for each community in the Service Area.
6. The program then multiplies these Age and Sex group populations by the Age and Sex group Primary Care Provider Visit Utilization (PCPV) Rate to establish visits by group. All visits are then summed for a total PCPV for the specified Service Area. This is the "Total Workload" for the Service Area.
7. For certain selected disciplines, the program identifies a percentage of the workload that is anticipated to be contracted due to acuity or specialization. This is listed and subtracted from each discipline's "Total Workload" to achieve "Workload less Acuity."
8. The computer checks the "Workload less Acuity" amount and compares it to the threshold for the discipline. If less than the threshold, or if a nearby facility is within a policy travel distance, the workload is categorized as "Contracted/Referred due to threshold". If greater than the threshold or beyond the distance policy, the workload is categorized as "Unmet Need."
9. Crossover - For an existing facility, the Author inputs the previous year's PCPVs, and the previous three years of, PCPVs from outside the service unit (O.R.58), and Service Area PCPVs to Nearby Facilities.
10. The computer establishes from the three year averages and the previous years PCPVs a historical percent of increase or decrease for "Crossover."
11. The author is allowed to override this percent with their own percent and its accompanying justification.
12. The "Unmet Workload" added to the "Crossover" equals the "Facility Workload."
13. The author is allowed to override the "Facility Workload" with their own "Facility Workload" and its accompanying justification.
14. This workload is used to select the template.

Ancillary, Facility, & Support Service Workload Calculations

1. A number of disciplines' (lab, imaging, pharmacy, RT, clinical engineering, property & supply, facility management, & housekeeping) workloads are a result of other disciplines. Those disciplines may be within the facility or a nearby facility.

2. The author inputs neighboring facilities and their workloads to be supported by a selected discipline.
3. The program , when calculating for a selected discipline, identifies the Facility Workloads for the appropriate "influencing" discipline(s), the nearby facility's workloads, and the selected discipline's utilization rate. The program then multiplies the workload(s) by the rate(s), then sums the results to acquire the selected discipline's "Total Workload."
4. For certain selected disciplines, the program identifies a percentage of the workload that are anticipated to be contracted due to acuity or specialization. This is listed and subtracted from each discipline's "Total Workload" to achieve "Workload less Acuity."
5. The program checks the "Workload less Acuity" amount and compares it to the threshold for the discipline. If less then the threshold, the workload is categorized as "Contracted/Referred due to threshold". If greater then the threshold, the workload is categorized as "Unmet Need."
6. The "Unmet Need" is the "Facility Workload."
7. The author is allowed to override this "Total" with their own "Total" and its accompanying justification.
8. The program uses this final "Total" to select the template.

Inpatient Care Workload Calculations

1. The author of the PJD and POR selects the communities desired for the facility's Inpatient Service Areas. The author does this by discipline (L&D, ICU, Sub Acute, Psychiatric, Acute Care).
2. The program identifies the most recent year's User Population by Age and Sex Group for each community.
3. The author selects the projection year for the medical workload.
4. The program identifies a growth rate for each community by county from the IHS Service Populations.
5. The program then applies the appropriate growth rate to each community in the Service Area and establishes a projected User Population by Age and Sex Group for each community in the Service Area.
6. The program then multiplies these Age and Sex group populations by the Age and Sex group Inpatient Care Discipline-specific Bed Day Utilization Rate to establish bed days by discipline by group. Bed days by discipline are then summed for the "Total Workload" for the specified Service Areas.
7. The program then identifies a percentage of the bed days that are anticipated to be contracted due to acuity. This is listed and subtracted from each discipline's "Total Workload" to achieve "Workload less Acuity."
8. The program checks the "Workload less Acuity" amount and compares it to the threshold for the discipline. If less then the threshold, or if a nearby facility is within a policy travel distance, the workload is categorized as "Contracted/Referred due to threshold". If greater then the threshold or beyond the distance policy, the workload is categorized as "Unmet Need."
9. Crossover - For an existing facility, the Author inputs the previous three years of, bed days from outside the service unit (O.R.45 & 57), and Service Area bed days to Nearby Facilities (O.R. 45, O.R. 57 & O.R. 2).
10. The program establishes from the three year averages and the previous years PCPVs a historical percent of increase or decrease for "Crossover."
11. The author is allowed to override this percent with their own percent and its accompanying justification.
12. The "Unmet Workload" added to the "Crossover" equals the "Facility Workload."
13. The author is allowed to override this "Total" with their own "Total" and its accompanying justification.
14. The computer uses this final "Total" to select the template.

Labor & Delivery Workload Calculations

1. The author of the PJD and POR selects the communities desired for the facility's Labor and Delivery Service Area.
2. The program identifies the IHS's most recent User Population by Age and Sex Group for each community.
3. The author selects the projection year for the medical workload.
4. The program identifies a growth rate for each community by county from the IHS Service Populations.
5. The program then applies the appropriate growth rate to each community in the Service Area and establishes a projected User Population for each community in the Service Area. The program then sums the Service Area User Population.
6. The author inputs the Service Area's previous 3 years of Direct Care Births at the facility and the previous 3 years of Contract Care Births. The averages of each grouping are summed and compared to the present Service Area User Population to determine a Birth Rate. The birth rate is applied to the Projected User Population and the Projected Service Area Births is established.
7. The program then identifies a percentage of the births that are anticipated to be contracted due to acuity. This is listed and subtracted from the Projected Service Area Births to achieve "Births less Acuity".
8. The program checks the "Workload less Acuity" amount and compares it to the threshold for the discipline. If less than the threshold, the workload is categorized as "Contracted/Referred due to threshold". If greater than the threshold, the workload is categorized as "Unmet Need".
9. Crossover - For an existing facility, the Author inputs the previous three years of Births from outside the service unit, and Service Area Births to Nearby Facilities.
10. The program establishes from the three year averages and the previous years PCPVs a historical percent of increase or decrease for "Crossover"
11. The author is allowed to override this percent with their own percent and its accompanying justification.
12. The "Unmet Workload" added to the "Crossover" equals the "Facility Workload."
13. The author is allowed to override this "Facility Workload" with their own "Workload" and its accompanying justification.
14. The program uses this final "Total" to select the template.

Surgery Workload Calculations

1. The author of the PJD and POR selects the communities desired for the facility's Surgical Service Area.
2. The computer identifies the IHS's most recent User Population by Age and Sex Group for each community.
3. The author selects the projection year for the medical workload.
4. The computer identifies a growth rate for each community by county from the IHS Service Populations.
5. The program then applies the appropriate growth rate to each community in the Service Area and establishes a projected User Population by Age and Sex Group for each community in the Service Area.
6. The program then multiplies these Age and Sex group populations by the Age and Sex group Inpatient and Outpatient Surgical Episodes Utilization Rate to establish Inpatient and Outpatient Episodes by group. Episodes are then summed for the "Total Workload" for the specified Service Areas.
7. For certain selected disciplines, the computer identifies a percentage of the workload that are anticipated to be contracted due to acuity or specialization. This is listed and subtracted from each discipline's "Total Workload" to achieve "Workload less Acuity".
8. The program checks the "Workload less Acuity" amount and compares it to the threshold for the discipline. If less than the threshold, the workload is categorized as

“Contracted/Referred due to threshold”. If greater than the threshold, the workload is categorized as “Unmet Need”.

9. Crossover - For an existing facility, the Author inputs the previous three years of, episodes from outside the service unit (Surgery Log), and Service Area episodes to Nearby Facilities (Surgery Log)
10. The program establishes from the three year averages and the previous years PCPVs a historical percentage of increase or decrease for "Crossover"
11. The author is allowed to override this percent with their own percent and its accompanying justification.
12. The "Unmet Workload" added to the "Crossover" equals the "Facility Workload."
13. The author is allowed to override this "Facility Workload" with their own "Workload" and its accompanying justification.
14. The computer uses this final "Total" to select the template.

Appendix “A”

HSP Glossary and Abbreviations

Health Systems Planning (HSP) process

HSP Glossary and Abbreviations (Feb 2007)

Term	Definition
Additional Service	<p>A Discipline/Service that is not typically provided in an IHS facility, but is currently provided or is being proposed in a replacement/new facility. Examples might include Dialysis, Tribal Health Education, WIC, etc. When an Additional Service is added the following information is to be provided:</p> <p><u>Mission:</u> Briefly state the purpose for the service and why it is necessary to include the space for the service within the proposed facility.</p> <p><u>Concept of Operation:</u> Identify the basic programs for the service. Indicate whether the staff will be primarily located in the office, or will spend the majority of their time in the field. Indicate the type of activities that will be conducted within the facility.</p> <p><u>Workload:</u> Establish the demand for the service, in terms of population served, visits per year, number of procedures for a period of time, etc.</p> <p><u>Details:</u> Identify the details necessary for successful operation. For example, proximity to a loading area for transportation of supplies to vehicles, or storage of commodities for the WIC program, etc.</p>
A-E Guide	<p>The design guide provided by the Division of Engineering Services (DES) to contracted Architects and Engineers at the onset of the design process. The guide indicates required national standards, codes, and the design submittal/process requirements.</p>
Alternative Rural Healthcare Facility or Alternative Rural Hospital (ARH)	<p>A health care facility providing a broad range of ambulatory care and community health services, emergency room services, but limited, low acuity inpatient care. The facility may also include low risk birthing and ambulatory surgery services. This facility does not provide inpatient surgery, c-sections, or ICU services. These facilities routinely serve patients referred from health centers and act as a referral center to facilities providing higher acuity and specialty care.</p>
Area (IHS Areas)	<p>The IHS consists of 12 large geographic administrative units responsible for the planning and provision of health care at their Service Units and/or supporting Tribally compacted/contracted health care programs.</p>
Average Daily Patient Load (ADPL or ADC)	<p>The average number of inpatients receiving care per day (excluding newborns) during a given time period, usually annual. This number is calculated by dividing the total inpatient days provided during a period of time by the number of days in the period. Also known as a Average Daily Census (ADC).</p>
Average Length of Stay	<p>The average period of time in days that an inpatient remains in a hospital per admission during a reporting period. It is calculated by dividing the total number of inpatient days for a reporting period by the number of admissions for that period.</p>
Beds	<p>Available hospital beds set up and staffed for use, either occupied or vacant. This number includes cribs and youth beds, but excludes bassinets, beds held in storage, beds in wards that are closed, labor room beds, emergency unit beds, outpatient unit beds, anesthesia recovery beds, incubators, isolates, and beds that otherwise are not staffed or maintained for continual use. Also called, redundantly, inpatient beds.</p>
Billable Tests	<p>Tests billed to 3rd party payers.</p>
Building Area by Clinical Function	<p>The total square meters anticipated for disciplines of similar function, e.g.; Ambulatory Care, Inpatient Care. Within the HSP, IHS departments are organized into nine Clinical Functions: Ambulatory Care, Inpatient Care, Ancillary Services, Preventive Care, Behavioral Health, Administration, Facility Support, Support Services and Additional Services.</p>

Term	Definition
Building Gross Area	The sum of the habitable floor areas included within the exterior walls of a building. Usually measured in square meters and abbreviated BGSM.
Capacity	What can be reasonably expected of a discipline given the discipline's defining characteristic and IHS operational expectation.
Capacity Analysis	A comparison of required to existing defining characteristics. Should be used for Facility Master Planning, proposing Addition/Alterations and Priority Development.
Concept of Operation	Describes how the proposed discipline/service will function in the facility.
Contract Services	Health services provided under contract to IHS or Tribal organization or authorized treatment of American Indians and Alaska Natives usually in other than IHS facilities.
Cross Over	Identification of historical workload migration to and from an existing facility.
Defining Characteristic	The recognized significant component of a discipline's ability to deliver care, e.g; physician, exam rooms, modality (radiology room).
Deliveries	The number of deliveries of a live born infant or a dead fetus (and placenta) by manual, instrumental or surgical means. Multiple births are reported as one delivery. Caesarean sections are included only when performed in delivery rooms (is this true?). Each abortion or other procedure performed in a delivery room is also reported as a delivery (is this true?).
Dental Operatories	The dental chair work station for dental professionals.
Dental Service Minutes	A relative value unit measuring dental workloads. The projected number of minutes indicates the quantity of workload required to place 55.4 percent of the American Indian and Alaska Native population on a maintenance level of dental care over a 10 -year interval.
Department Gross Area	An approximation of the area of a department including wall thicknesses, minor duct spaces, structural elements, and corridors within the department. Usually measured in square meters and abbreviated DGSM.
Derivatives	Situations that modify the space or staff allocation in Small Ambulatory Care facilities.
Design Notes (Template)	Provides design information inherent to a specific template and its associated service (work load) capacity. Included are: Fundamental Parameters of operation hours and staffing; Operational Concept Notes important to application of the template; Adjacency Requirements between the template and other services; Expansion/Flexibility considerations for application of the template; Room/Suite Specific Issues to address in application of the template; and Miscellaneous Notes/Issues specific to the template. This narrative is provided as design instructions to the A-E team with the space program for the facility.
Design Notes	Provides design information to include hours of operation, concept of operation, staffing, adjacency requirements, expansion issues and other considerations critical to properly designing a facility. This section, while not a comprehensive guide to designing health facilities, provides important design requirements for the planner and architect. This narrative is provided as design instructions to the A-E team with the space program for the facility.
Discipline	A specific medical specialty, e.g; medicine, nursing, pharmacy, dentistry, radiology, etc.

Term	Definition
Deviations	Some project-specific deviations from the guidelines and template planning solutions provided in the HSP may be permitted in response to unique conditions; however, these should be made only when the effects are fully understood. Deviations due to code developments should be addressed to the Contracting Officer. Operational deviations from the guidelines and template planning solutions should be approved via the project design team prior to the implementation of the changes.
Equipment & Criteria System	The part of the software from which you can extract detailed room-by-room equipment and furniture lists, building system criteria, and overall equipment and furniture budgets.
Facility Design	The effort typically performed by a contracted Architect/Engineer. The effort turns the Program of Requirements into a building design solution
Equipment (Group I)	Fixed, built-in, attached, and installed equipment normally included in the construction contract.
Equipment, (Group II)	Major moveable equipment - items having a useful life of 5 years or more (Moveable equipment does not require attachment to the building or utility service, other than provided by an electrical plug or quick disconnect fitting. Examples include chairs, beds, bassinets, desks, computers and printers, network file servers, typewriters, system furniture, sphygmomanometers, microscopes, centrifuges, portable whirlpool units, exercise bars, refrigerators, and linen carts.)
Equipment (Group III)	Minor moveable equipment - items having a useful life of less than 5 years (These items are of relatively small cost and size and lend themselves to on-site storage for replacement of lost or worn out equipment. Examples include linens, blankets, gowns, wash basins, bed pans, pipettes, surgical instruments, silverware, and chinaware.)
Equipment (Special Purpose)	Group I, II, or III technical, medical, or scientific equipment needed to operate a laboratory, a hospital, a clinic, a clinical research patient care unit, an animal care facility, or equipment which is specific to a single purpose and not generally suitable for other purposes (Examples of such equipment include incubators, electric ovens, sterilizers, vacuum and pressure pumps, centrifuges, water baths, casework, sinks, shelves, patient headboards, workbenches for microscopes, and moveable apparatus for laboratory animals. Special-purpose equipment may be classified as either fixed or moveable equipment.)
Facility Planning	The effort required to determine the programs, concepts of operation, and staffing needs for a facility - typically culminates in a Program Justification Document.
Facility Programming	The effort required to determine the necessary space, delivery method, and operational hours to meet the predetermined facility's medical needs (approved PJD) - typically culminates in a Program of Requirements.
Functional Diagrams	A drawing indicating the desired room-by-room relationships for a discipline.
Health Center	An ambulatory care facility operating a minimum of 40 hours per week, staffed with a basic health team offering services for acute and chronic ambulatory problems and acting as a referral center to higher levels care.
Health Location	An ambulatory care location operating with visiting providers less than one day per week in a remote community that provides limited primary care and dental services.
Health Station	An ambulatory care facility providing primary care and dental services typically less than 40 hours per week that is geographically separate from any other health care facility, and provides limited clinical services.

Term	Definition
Health Systems Planning process	An IHS tool for the planning, programming and design of health facilities.
Health Systems Planning software	The computer application that manages the Health Systems Planning process.
Inpatient Days	<p>A measure denoting lodging provided to one inpatient in one 24-hour period. The day of admission is counted as an inpatient day, but the day of discharge is not counted. Newborns are excluded from this count. When a patient is formally admitted and is discharged or dies on the same day, this period is counted as one patient day regardless of the number of hours the patient occupied a hospital bed.</p> <p>Ambulatory surgery cases are not normally admissions and are not included in the patient day count unless the patient is formally admitted, an inpatient chart is initiated, and a regularly maintained inpatient bed is assigned. Brief occupancy of a bed without formal admission as an inpatient in the surgical recovery room, emergency unit, or clinic area is not counted as an inpatient day. Also known as Patient Days or Bed days.</p>
Joint Commission on Accreditation of Healthcare Organization	A health care accrediting organization which surveys hospitals and health centers every 3 years to assess compliance with published standards of care which often impact on operation and facility design.
Key Drivers	The critical factors that determine the demand for and the productivity of a discipline or service, e.g., user population, primary care provider visits (PCPVs).
Labor and Delivery Total Workload	The number of births for each of the past 3 years. The information is obtained from (Form O.R. 60) for Existing Facility or from Contract Care (From Report 31).
Market Share	The percentage of the user population from a specific community or service area that is expected to be served at a facility for a specific discipline.
Near by Facility	An IHS or non-IHS healthcare facility within a given distance or driving time.
Near by Facility (Referral Point)	An IHS or non-IHS healthcare facility that refers workload to the planned facility.
Net Area	The area computed by measuring the inside finish of exterior walls to the inside finish of partitions and from inside finish to inside finish of interior partitions. This area does not include area for walls, duct spaces, structural elements, shafts, corridors or vestibules. Typically measured in square meters and abbreviated NSM.
Notes to the Planner	A document that explains the principle assumptions on which the guidelines for the service are based, including staffing criteria, demographic and/or workload assumptions and other pertinent issues. It also provides ideas and suggestions to the planner about special situations that may require deviations from criteria.
Notes to the Planner (Template)	A document that explains the important assumptions on which the guidelines for all the templates in the service are based, including demographic and/or workload assumptions and the parameters differentiating the different templates developed. It also provides ideas and suggestions to the planner about special situations that may require deviations from criteria.
Obstetrics	Refers to patients in a hospital or clinic for consultation or treatment in regards to conception and child-bearing.
Out of Template discipline	A discipline whose planning, programming and design is influenced considerably by local practice and custom. The functions of these departments are not typically driven by a critical medical function thereby allowing variation in design.

Term	Definition
Outpatient Visit	Total number of ambulatory care visits recorded at a facility. Historically, IHS has estimated this number based on PCPVs. That conversion factor from PCPV's to OPV's is 1.5 for hospital and 2.0 for outpatient facilities.
Patient Utilization Rates	The average planned annual health care demand a single patient has for a discipline.
Projected User Population	The HSP establishes the Projected User Population by multiplying the 'user population' in each community by the county growth factor. The county growth factor = (County 'service population' in the projection year / County 'service population' in the 'user population' database year).
Projection Year	The final planning projected year is 10 years from the year the POR is approved.
Primary Care Acute Care Hospital	A facility providing basic inpatient services, ambulatory care, and a range of inpatient and ambulatory specialty care. These facilities routinely serve patients referred from health centers and Alternative Rural Healthcare Facilities. While certain medical and surgical specialties may provide services part time in this facility, full time IHS staff capabilities will likely be limited to family practice/general medicine, internal medicine, pediatrics, obstetrics & gynecology and general surgery.
Primary Care Provider	Health care professional who provides direct patient care in the outpatient unit. For space planning in the outpatient unit, PCP will be limited to general medical, family practice, pediatric, internal medicine, and Ob/Gyn physicians, physician assistants, nurse practitioners, nurse mid-wives, and in Alaska, Community Health Aides.
Primary Service Area	A group of communities and its population for which, at a minimum, the primary care disciplines are being planned and resourced. Referred to as PSA.
Productivity Rates	The defined IHS annual expectation in workload for a defining characteristic. For example, the productivity rate for primary care providers is 4300 visits per year (4400 in RRM).
Program of Requirements	This document details necessary space, staff, concept of operation, and hours of operation. It is provided to Congress with the Project Justification Document for budgeting and funding approval and to the Architect/Engineer to provide design direction.
Program Justification Document	This document details the unmet health care needs of specified Service Areas warranting the construction of a health care facility to meet that need.
Ration	The number of meals divided by three provided to anyone, whether within the cafeteria or not.
Referral/Medical Centers	IHS's most comprehensive acute and ambulatory care facilities. They provide for treatment and diagnostic services beyond the specialization or acuity capabilities of the Primary Care Acute Care Hospital. Specialties may include orthopedics, ophthalmology, cardiology, etc. These facilities routinely receive patients from health centers, Alternative Rural Hospitals, and Primary Care Acute Care due to these specialties.
Recommended Workload	When an initiator does not agree with a software provided medical workload, the ability to justify a new workload and override the system solution is provided. A justification is required for a Recommended Workload.
Remote	Served only by air service during winter months.
Resource Requirements Methodology	The IHS staffing methodology: standards and criteria used to develop the staff required to provide a stated level and quantity of health care.

Term	Definition
Room	A room is defined as a space containing a specified activity. This space may be enclosed by walls or be part of a larger space containing several different activities.
Room Function Codes	A five digit alphanumeric code assigned to each unique type of space within the HSP process
Service Area	The area, population base, or communities that support a specific discipline or a group of disciplines. Clinics typically only have one Service Area, a Primary Care Service Area (PSA). Hospitals typically have at least two Service Areas, a PSA and an inpatient Service Area, where the PSA are the communities served by the Primary Care disciplines and the Inpatient Service Area is a larger group of communities that the facility serves for Emergency, Labor and Delivery and Inpatient Care. A facility can possibly serve different population bases or service areas for every discipline.
Service Area Communities	Communities that support a specific discipline or a group of disciplines.
Service Index	Is calculated based on the projected number of inpatient beds, the number of Primary Care Provider Visits and the Gross Square Meters of other buildings maintained.
Service Population	The US Census number of Native Americans from a specified area. The 'Service Population' is used to project the 'User Population.' The 'Service Population' data in the HSP is by county. IHS HQ publishes their projected service population by county regularly to provide planning guidance.
Service Unit	An administrative subunit of an IHS Area overseeing the delivery of health care to a specific geographic area
Small Ambulatory Care facilities	A space template that includes criteria for access standards, concept of operations, and both staff and space allocation. The Small Ambulatory Care criteria was established to provide a consistent allocation of resources to small communities or service area with a user population less than required for a health center.
Space Allocation Criteria	The "Space Allocation Criteria" documents the formulas on which space is allocated by the HSP process software. Certain types of space may not be required in some facilities. Whenever the space required is different than the space indicated by the software, the planner must prepare a justification for deviations from space allocation criteria and seek approval from IHS Headquarters.
Space Template	A template of space for a discipline within a specific workload range.
Special Study	Special studies are required when a facility's size and/or its specialization requirements fall outside of the workload ranges and disciplines established in the HSP. The study establishes and justifies the criteria standards, concept of operations, and both staff and space allocation. The HSP plans programs, staffing and facility requirements for communities with 25 people to 30,000 people, Special Studies will be necessary at service area populations larger than this.
Staff Requirements	The number and type of staff required to provide a stated level and quantity of health care. The requirements are determined by use of the Resource Requirement Methodology (RRM).
Steering Committee	The IHS Headquarters group overseeing the development of the HSP process

Term	Definition
Surgical Cases (Operating Room Cases)	Includes <u>only</u> operations and surgical procedures performed in the surgical suite. (Excludes contract surgery on a current workload level but may include "approved" contract surgery cases on a projected workload level if applicable. – not sure what this sentence means, would delete it; we have contract surgeons come into IHS hospitals which do all sorts of surgical procedures) It should also be noted that a given surgical case may have more than one surgical procedure involved.
Template Plans	A pre-approved floor plan for a discipline within a specific workload range. The plan cross references larger scale documentation and criteria for each type of room provided.
Template-based disciplines	Disciplines driven by specific function that are consistently distributed by objective criteria
Thresholds	The minimum population or workload necessary to justify the provision of a specific discipline.
Travel Distance	The distance a User has to travel from his home to a facility to receive care
User	A Native American that has received or registered to receive health care in the past three years
User Population	The User Population consist of Indian registrants who have had at least one direct or contract inpatient stay, ambulatory care visit, or dental visit within a three years period.
User's Manual	Instructional guidance for the HSP process software
Work Group Leader	The senior or key point of contact for a discipline who is responsible for coordinating input from the discipline's work group
Work Group	Discipline specific professionals that were provided review materials during the development of the HSP process.

Abbreviations

Abbreviation	Phrase	Abbreviation	Phrase
A/E	Architect/Engineer	LDRP	Labor, Delivery, Recovery, Post Partum Room
AC	Ambulatory Care	LRB	Low Risk Birth
ADA	Americans with Disabilities Act	MRI	Magnetic Resonance Imaging
ADPL	Average Daily Patient Load	MSS	Medical Supply Service
AI/AN	American Indian / Alaska Native	MSW	Medical Social Worker
AIA	American Institute of Architects	NFPA	National Fire Protection Association
AIA Guidelines	AIA Guidelines for Design and Construction of Hospital and Medical Facilities	NSM	Net Square Meters
ALOS	Average length of stay	OB/Gyn	Obstetrics/Gynecology
ARH	Alternative Rural Hospital	OB	Obstetrics
AV	Audiology Visits	OPV	Outpatient Visits
BB	Blood Bank	OSHA	Occupational Safety health Administration
BGA	Building Gross Area	PCC	Patient Care Component
BIA	Bureau of Indian Affairs	PCP	Primary Care Provider
CEM	Clinical Engineering Man-hours	PCPV	Primary Care Provider Visits
CHA	Community Health Aide	PECV	Primary Eye Care Visits
CHR	Community Health Representative	PH	Public Health
CHS	Contract Health Services	PJD	Program Justification Document
CT	Computed Tomography Imaging	PJDQ	Program Justification Document Quarters
DSM	Dental Service Minutes	POC	Point of Contact
DGA	Department Gross Area	POR	Program of Requirements
DNA	Department Net Area	PORQ	Program of Requirements Quarters
ECG	Electrocardiogram	PSA	Primary Service Area
EMT	Emergency Medical Technician	PTV	Physical Therapy Visit
ENT	Ear, Nose, Throat	PWU	Pharmacy Workload Units
ED	Emergency Department	RF	Radiographic/Fluoroscopy
ER	Emergency Room	RRM	Resource Requirements Methodology
FEDS	Facility Engineering Deficiencies System	RT	Respiratory Therapy
ETO	Ethylene Oxide	RTWM	Respiratory Therapy Work Minutes
FTE	Full Time Equivalent	SA	Sub-Acute
FY	Fiscal Year	SAC	Small Ambulatory Care facility
GRE	General Radiology Exam	SL	Service Level
GYN	Gynecology	SM	Square Meters
HC	Handicapped Accessible	SSER	Site Selection and Evaluation Report
HSP	Health Systems Planning process	SU	Service Unit
HVSR	Housing Verification Survey Report	SUD	Service Unit Director
ICU	Intensive Care Unit	TAV	Total Audiology Visits
IHS	Indian Health Service	TSV	Total Specialty Visits
IP	Inpatient	US	Ultrasound
IPB	Inpatient Beds	UFAS	Uniform Federal Accessibility Standard
IPD	Inpatient Days	WC	Water Closet
JCAHO	Joint Commission on Accreditation of Healthcare Organizations	WIC	Women, Infant, and Children Program
LMIP	Laboratory Management Index Program		

Appendix “B”

Utilization Rates

Utilization Rates by Age / Sex Group and Care Type as used in HSP2007

Ambulatory Care												
	Primary Care		Specialty Care		Emergency Room		Eye Care		Audiology		Dental	
	PCPV's		Specialist Visits		ER Visits		Optometry Visits		Audiology Booths		Dental Service Minutes DSM'S)	
Age Groups	M	F	M	F	M	F	M	F	M	F	M	F
0-1	3.8160	3.4620	0.0840	0.0680	0.4579	0.4154	0.0000	0.0000	0.0490	0.0430	95	95
1-4	5.0620	4.8460	0.1300	0.1120	0.6074	0.5815	0.2853	0.2583	0.2790	0.2080	95	95
5-9	2.3550	2.4790	0.0860	0.0920	0.2826	0.2975	0.2536	0.2536	0.1760	0.1310	95	95
10-14	2.1960	2.2920	0.0930	0.0820	0.2635	0.2750	0.2536	0.2536	0.0690	0.0620	95	95
15-19	2.0710	4.2460	0.0990	0.1040	0.2485	0.5095	0.3728	0.3728	0.0350	0.0250	95	95
20-24	2.0710	4.2460	0.0990	0.1040	0.2485	0.5095	0.2925	0.2925	0.0350	0.0250	95	95
25-34	2.7080	4.8740	0.1400	0.1750	0.3250	0.5849	0.2925	0.2925	0.0500	0.0510	95	95
35-44	2.7080	4.8740	0.1400	0.1750	0.3250	0.5849	0.2925	0.2925	0.0500	0.0510	95	95
45-54	4.1520	6.2660	0.2900	0.3810	0.4982	0.7519	0.4320	0.4320	0.1700	0.1310	95	95
55-64	4.1520	6.2660	0.2900	0.3810	0.4982	0.7519	0.4320	0.4320	0.1700	0.1310	95	95
65 +	5.4990	6.3960	0.3490	0.3700	0.6599	0.7675	0.4320	0.4320	0.4640	0.2880	95	95
Ancillary Rates												
Discipline / Workload Unit												
Laboratory												
Chem/Hema/Immun/Urin billable tests	0.8340	0.8340			0.2830	0.2830						
Transfusion BB billable tests	0.0160	0.0160			0.0110	0.0110						
Microbiology billable tests	0.1700	0.1700			0.2890	0.2890						
Histo/Cytology billable tests	0.0020	0.0020			0.0300	0.0300						
Diagnostic Imaging (Refer to Ancillary Services for additional DI services by Age Groups)												
General Radiology Exams	0.0840	0.0840			0.1680	0.1680						
Fluoroscopy Exams	0.0070	0.0070			0.0020	0.0020						
Ultrasound Exams	0.0140	0.0140			0.0040	0.0040						
CT/MRI Exams	0.0020	0.0020			0.0040	0.0040						
Pharmacy												
Inpatient Workload Units												
Outpatient Workload Units	11.9090	11.9090			2.2850	2.2850	2.5920	2.5920			0.0220	0.0220
Physical Therapy												
Inpatient PT Visits												
Respiratory Therapy												
RT work minutes	0.7050	0.7050			3.4780	3.4780						
Clinical Engineering												
Clinical Eng'r Manhours	0.0137	0.0137			0.0506	0.0506					0.0004	0.0004
Housekeeping												
Lb's of Linen	0.1461	0.1461			1.8010	1.8010					0.0054	0.0054
Property & Supply												
Storage Index	0.2550	0.2550										

Workload Updated in HSP2005:
 Workload Updated in HSP2007:

Utilization Rates by Age / Sex Group and Care Type as used in HSP2007

Inpatient Care												
Age Groups	Acute Care Nursing						Sub-Acute Care		Intensive Care		Labor / Delivery Nursery	
	Medical Bed Days		Surgical Bed Days		Pediatric Bed Days		Sub-Acute Bed Days		ICU Bed Days		Births	Ante/PP Bed Days
	M	F	M	F	M	F	M	F	M	F	F	F
0-1					0.08400	0.08400			0.01140	0.01140		
1-4					0.08400	0.08400			0.01140	0.01140		
5-9					0.08400	0.08400			0.01140	0.01140		
10-14					0.08400	0.08400			0.01140	0.01140		
15-19	0.07330	0.07330	0.06710	0.06710					0.02440	0.02440	0.0470	2.7300
20-24	0.07330	0.07330	0.06710	0.06710					0.02440	0.02440	0.0877	2.7300
25-34	0.07330	0.07330	0.06710	0.06710					0.02440	0.02440	0.0846	2.7300
35-44	0.07330	0.07330	0.06710	0.06710					0.02440	0.02440	0.0323	2.7300
45-54	0.25420	0.25420	0.19790	0.19790					0.06550	0.06550		
55-64	0.25420	0.25420	0.19790	0.19790					0.06550	0.06550		
65 +	1.02850	1.02850	0.53450	0.53450					0.21660	0.21660		
Discipline / Workload Unit	Ancillary Rates											
Laboratory												
Chem/Hema/Immun/Urin billable tests	3.5430	3.5430	3.5430	3.5430	3.5430	3.5430			3.5430	3.5430	26.6550	3.5430
Transfusion BB billable tests	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250			0.1250	0.1250	0.2300	0.1250
Microbiology billable tests	0.2140	0.2140	0.2140	0.2140	0.2140	0.2140			0.2140	0.2140	5.1450	0.2140
Histo/Cytology billable tests	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050			0.0050	0.0050	0.7450	0.0050
Diagnostic Imaging												
General Radiology Exams	0.0370	0.0370	0.0370	0.0370	0.0370	0.0370			0.0370	0.0370		0.0370
Fluoroscopy Exams	0.0040	0.0040	0.0040	0.0040	0.0040	0.0040			0.0040	0.0040		0.0040
Ultrasound Exams	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140			0.0140	0.0140		0.0140
CT/MRI Exams	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110			0.0110	0.0110		0.0110
Pharmacy												
Inpatient Workload Units	5.4310	5.4310	5.4310	5.4310	5.4310	5.4310			5.4310	5.4310	23.4890	5.4310
Outpatient Workload Units												
Physical Therapy												
Inpatient PT Visits	0.1200	0.1200	0.1200	0.1200	0.1200	0.1200			0.1200	0.1200		0.1200
Respiratory Therapy												
RT work minutes	35.7980	35.7980	35.7980	35.7980	35.7980	35.7980			35.7980	35.7980	19.0830	35.7980
Clinical Engineering												
Clinical Eng'r Manhours	0.0849	0.0849	0.0849	0.0849	0.0849	0.0849			0.0849	0.0849	0.8896	0.0849
Housekeeping												
Lb's of Linen	10.8370	10.8370	10.8370	10.8370	10.8370	10.8370			10.8370	10.8370	67.7600	10.8370
Property & Supply												
Storage Index	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800			0.2800	0.2800		0.2800

Utilization Rates by Age / Sex Group and Care Type as used in HSP2007

Ancillary Services												
	Surgery				Diagnostic Imaging						Physical Therapy	
	Inpatient Episodes		Outpatient Episodes		Mammo- graphy Exams	Bone Meneral Density	CT		MRI		Outpatient PT Visits	
Age Groups	M	F	M	F	F		M	F	M	F	M	F
0-1	0.00509	0.00509	0.02459	0.02459			0.0218	0.0193	0.0094	0.0094	0.0220	0.0110
1-4	0.00509	0.00509	0.02459	0.02459			0.0218	0.0193	0.0094	0.0094	0.0420	0.0070
5-9	0.00509	0.00509	0.02459	0.02459			0.0218	0.0193	0.0094	0.0094	0.0770	0.0380
10-14	0.00509	0.00509	0.02459	0.02459			0.0218	0.0193	0.0094	0.0094	0.1570	0.1400
15-19	0.02251	0.02251	0.05442	0.05442			0.0308	0.0349	0.0185	0.0232	0.4540	0.3840
20-24	0.02251	0.02251	0.05442	0.05442			0.0443	0.0582	0.0321	0.0439	0.4540	0.3840
25-34	0.02251	0.02251	0.05442	0.05442			0.0443	0.0582	0.0321	0.0439	0.5350	0.2770
35-44	0.02251	0.02251	0.03030	0.03030	0.3500		0.0443	0.0582	0.0321	0.0439	0.5350	0.2770
45-54	0.03878	0.03878	0.10155	0.10155	0.7000	0.1000	0.0878	0.1038	0.0055	0.0824	0.8480	0.8650
55-64	0.03878	0.03878	0.10155	0.10155	0.7000	0.2000	0.0878	0.1038	0.0055	0.0824	0.8480	0.8650
65 +	0.09461	0.09461	0.17878	0.17878	0.7000	0.2000	0.2084	0.1917	0.0912	0.0989	1.2800	1.4240
Discipline / Workload Unit	Ancillary Rates											

Utilization Rates by Age / Sex Group and Care Type as used in HSP2007

Preventive Care		Behavioral Health			
Public Health Nursing		Mental Health/ Social Work		Psychiatric Nursing	
PHN Contacts		Mental Health Visits		Psychiatric Bed Days	
M	F	M	F	M	F
1.1066	1.0730	0.1100	0.0070	0.0000	0.0000
0.4141	0.4165	0.0160	0.0160	0.0000	0.0000
0.1931	0.2007	0.0900	0.0550	0.0000	0.0000
0.1374	0.1468	0.1620	0.1210	0.0220	0.0073
0.0768	0.3089	0.1160	0.1420	0.0077	0.0557
0.0626	0.3551	0.1160	0.1420	0.0077	0.0557
0.0848	0.2785	0.1460	0.4910	0.0139	0.0198
0.1271	0.2530	0.1460	0.4910	0.0122	0.0110
0.2506	0.3725	0.1180	0.2030	0.0111	0.0070
0.3735	0.5260	0.1180	0.2030	0.0110	0.0070
0.8364	1.0310	0.0450	0.0830	0.0386	0.0369
0.4090	0.4090				
0.0990	0.0990				
6.3320	6.3320	6.6790	6.6790		
0.6270	0.6270				

Appendix “C”

Template Workload Thresholds

Health Systems Planning (HSP) process

Template Workload Thresholds and Allocation in HSP2007

Note: Templates can be based on either a template drawing or a template of space. Both template types are determined by workload.

	Discipline	UD (1)	SL	Template	Travel Time (minutes)	Service Radius (km)	Work Load Threshold	Work Load Limit	Unit (2)	Dept Gross m ² .
1	Acute Care (6-Beds)	05	1	ACB6	90	100	1,095	1,255	Bed Days	471.00
2	Acute Care (8-Beds)	05	2	ACB8	90	100	1,256	1,775	Bed Days	591.00
3	Acute Care (10-Beds)	05	3	ACB10	90	100	1,776	2,316	Bed Days	669.00
4	Acute Care (12-Beds)	05	4	ACB12	90	100	2,317	2,874	Bed Days	743.00
5	Acute Care (14-Beds)	05	5	ACB14	90	100	2,875	3,444	Bed Days	810.00
6	Acute Care (16-Beds)	05	6	ACB16	90	100	3,445	4,025	Bed Days	888.00
7	Acute Care (24-Beds)	05	7	ACB24	90	100	5,223	6,421	Bed Days	1,213.00
8	Acute Care (24-Beds)	05	8	ACB26	90	100	6,422	7,036	Bed Days	1,276.00
9	Acute Care (24-Beds)	05	9	ACB28	90	100	7,037	7,653	Bed Days	1,354.00
10	Acute Care (30-Beds)	05	10	ACB30	90	100	7,654	8,273	Bed Days	1,438.00
11	Acute Care (32-Beds)	05	11	ACB32	90	100	8,274	8,897	Bed Days	1,506.00
12	Acute Care (34-Beds)	05	12	ACB34	90	100	8,898	9,525	Bed Days	1,587.00
13	Acute Care (36-Beds)	05	13	ACB36	90	100	9,526	10,155	Bed Days	1,638.00
14	Audiology (1-Audiologists)		2	AU2			610	3,095	Audio. Visits	81.00
15	Audiology (2-Audiologists)		3	AU3			3,096	3,736	Audio. Visits	166.00
16	Clinical Engineering		1	CE1			880	2,600	Man Hours	42.00
17	Clinical Engineering		2	CE2			2,601	4,300	Man Hours	84.00
18	Dental Care (5-DTR)	05	1	DCC5			Req's min. 4,400PCPV	170,000	DSM	302.00
19	Dental Care (6-DTR)	05	2	DCC6			170,001	230,000	DSM	382.00
20	Dental Care (7-DTR)	05	3	DCC7			230,001	254,000	DSM	412.00
21	Dental Care (8-DTR)	05	4	DCC8			254,001	278,000	DSM	481.00
22	Dental Care (9-DTR)	05	5	DCC9			278,001	326,000	DSM	499.00
23	Dental Care (10-DTR)	05	6	DCC10			326,001	384,000	DSM	522.00
24	Dental Care (11-DTR)	05	7	DCC11			384,001	432,000	DSM	560.00
25	Dental Care (12-DTR)	05	8	DCC12			432,001	480,000	DSM	653.00
26	Dental Care (13-DTR)	05	9	DCC13			480,001	528,000	DSM	609.00
27	Dental Care (14-DTR)	05	10	DCC14			528,001	576,000	DSM	693.00
28	Dental Care (15-DTR)	05	11	DCC15			576,001	600,000	DSM	716.00
29	Dental Care (16-DTR)	05	12	DCC16			600,001	648,000	DSM	739.00
30	Dental Care (17-DTR)	05	13	DCC17			648,001	672,000	DSM	787.00
31	Dental Care (18-DTR)	05	14	DCC18			672,001	720,000	DSM	818.00
32	Dental Care (19-DTR)	05	15	DCC19			720,001	744,000	DSM	860.00

	Discipline	UD (1)	SL	Template	Travel Time (minutes)	Service Radius (km)	Work Load Threshold	Work Load Limit	Unit (2)	Dept Gross m ² .
33	Dental Care (20-DTR)	05	16	DCC20			744,001	792,000	DSM	894.00
34	Dental Care (21-DTR)	05	17	DCC21			792,001	864,000	DSM	917.00
35	Dental Care (22-DTR)	05	18	DCC22			864,001	912,000	DSM	948.00
36	Dental Care (23-DTR)	05	19	DCC23			912,001	960,000	DSM	969.00
37	Dental Care (24-DTR)	05	20	DCC24			960,001	1,008,000	DSM	983.00
38	Dietary		1	DT1			Req's Acute Care	Less than 24,000	Rations	333.00
39	Dietary		2	DT2			Req's more than 5,150 Bed Days	24,000	Rations	499.00
40	Eye Care (1-Optometrist)		1	EC1			1,004	3,012	PECV	163.00
41	Eye Care (2-Optometrist)		2	EC2			3,013	5,020	PECV	236.00
42	Eye Care (3-Optometrist)		3	EC3			5,021	7,028	PECV	325.00
43	Education & Group		1	EGC1			101	250	Staff	74.00
44	Education & Group		2	EGC2			251	800	Staff	151.00
45	Emergency Level 4 (2-Patient)	07	1	ED2	90	100	1	2,298	ER Visits	102.45
46	Emergency Level 3 (3-Patient)	07	2	ED3	60	64	2,299	4,596	ER Visits	243.75
47	Emergency Level 2/3 (4-Patient)	07	3	ED4	60	64	4,597	6,894	ER Visits	271.20
48	Emergency Level 2 (5-Patient)	07	4	ED5	60	64	6,895	9,192	ER Visits	385.65
49	Emergency Level 2 (6-Patient)	07	5	ED6	60	64	9,193	11,490	ER Visits	421.86
50	Emergency Level 2 (7-Patient)	07	6	ED7	60	64	11,491	13,788	ER Visits	450.30
51	Emergency Level 2 (8-Patient)	07	7	ED8	60	64	13,789	16,086	ER Visits	484.65
52	Emergency Level 2 (9-Patient)	07	8	ED9	60	64	16,087	18,384	ER Visits	563.40
53	Emergency Level 2 (10-Patient)	07	9	ED10	60	64	18,385	20,682	ER Visits	598.05
54	Emergency Level 2 (11-Patient)	07	10	ED11	60	64	20,683	22,980	ER Visits	624.45
55	Emergency Level 2 (12-Patient)	07	11	ED12	60	64	22,981	25,278	ER Visits	655.35
56	Facility Management	05	1	FM_1			1	9	Service	61.00
57	Facility Management	05	2	FM_2			10	50	Service	99.00
58	Facility Management	05	3	FM_3			51	100	Service	176.00
59	Facility Management	05	4	FM_4			101	150	Service	246.00
60	Housekeeping & Linen		1	HL1			1	10,000	# Linen	28.00
61	Housekeeping & Linen		2	HL2			10,001	75,000	# Linen	56.00
62	Housekeeping & Linen		3	HL3			75,001	150,000	# Linen	84.00
63	Housekeeping & Linen		4	HL4			150,001	>	# Linen	165.00
64	Intensive Care		1	IC1			876	1,159	ICU Bed	324.00
65	Laboratory (Specimen Collection)	07	1	LB_0			4,400	6,449	Billable Test	34.22
66	Laboratory	07	2	LB_1			6,450	20,330	Billable Test	69.38

	Discipline	UD (1)	SL	Template	Travel Time (minutes)	Service Radius (km)	Work Load Threshold	Work Load Limit	Unit (2)	Dept Gross m ² .
67	Laboratory	07	3	LB_2			20,331	39,801	Billable Test	162.38
68	Laboratory	07	4	LB_3			39,802	78,742	Billable Test	198.80
69	Laboratory	07	5	LB_4			78,743	98,213	Billable Test	250.60
70	Laboratory	07	6	LB_5			98,214	137,155	Billable Test	306.27
71	Laboratory	07	7	LB_6			137,156	156,626	Billable Test	353.94
72	Laboratory	07	8	LB_7			156,627	215,039	Billable Test	413.71
73	Laboratory	07	9	LB_8			215,040	253,981	Billable Test	463.03
74	Laboratory	07	10	LB_9			253,982	292,923	Billable Test	517.08
75	Laboratory	07	11	LB_10			292,924	312,120	Billable Test	557.93
76	Labor & Delivery		1	LD1	90	100	125	299	LR Birth	326.00
77	Labor & Delivery		2	LD2			300	425	Births	495.00
78	Medical Supply		2	MS2			(3)	(3)		122.00
79	Medical Supply		3	MS3			(3)	(3)		168.00
80	Primary Care (2-Provider)	05	1	PCP2			4,400	6,449	PCPV	348.00
81	Primary Care (3-Provider)	05	2	PCP3			6,450	10,750	PCPV	392.00
82	Primary Care (4-Provider)	05	3	PCP4			10,751	15,050	PCPV	480.00
83	Primary Care (5-Provider)	05	4	PCP5			15,051	19,350	PCPV	552.00
84	Primary Care (6-Provider)	05	5	PCP6			19,351	23,650	PCPV	673.00
85	Primary Care (7-Provider)	05	6	PCP7			23,651	27,950	PCPV	747.00
86	Primary Care (8-Provider)	05	7	PCP8			27,951	32,250	PCPV	1,005.00
87	Primary Care (9-Provider)	05	8	PCP9			32,251	36,550	PCPV	1,019.00
88	Primary Care (10-Provider)	05	9	CPC10			36,551	40,850	PCPV	1,124.00
89	Primary Care (11-Provider)	05	10	PCP11			40,851	45,150	PCPV	1,202.00
90	Primary Care (12-Provider)	05	11	PCP12			45,151	49,450	PCPV	1,286.00
91	Primary Care (13-Provider)	05	12	PCP13			49,451	53,750	PCPV	1,398.00
92	Primary Care (14-Provider)	05	13	PCP14			53,751	58,050	PCPV	1,502.00
93	Primary Care (15-Provider)	05	14	PCP15			58,051	62,350	PCPV	1,737.00
94	Primary Care (16-Provider)	05	15	PCP16			62,351	66,650	PCPV	1,762.00
95	Primary Care (17-Provider)	05	16	PCP17			66,651	70,950	PCPV	1,853.00
96	Primary Care (18-Provider)	05	17	PCP18			70,951	75,250	PCPV	1,957.00
97	Primary Care (19-Provider)	05	18	PCP19			75,251	79,550	PCPV	2,031.00
98	Primary Care (20-Provider)	05	19	PCP20			79,551	83,850	PCPV	2,120.00
99	Primary Care (21-Provider)	05	20	PCP21			83,851	88,150	PCPV	2,211.00
100	Primary Care (22-Provider)	05	21	PCP22			88,151	92,450	PCPV	2,472.00
101	Primary Care (23-Provider)	05	22	PCP23			92,451	96,750	PCPV	2,487.00

	Discipline	UD (1)	SL	Template	Travel Time (minutes)	Service Radius (km)	Work Load Threshold	Work Load Limit	Unit (2)	Dept Gross m ² .
102	Primary Care (24-Provider)	05	23	PCP24			96,751	101,050	PCPV	2,587.00
103	Primary Care (25-Provider)	05	24	PCP25			101,051	105,350	PCPV	2,698.00
104	Primary Care (26-Provider)	05	25	PCP26			105,351	109,650	PCPV	2,785.00
105	Primary Care (27-Provider)	05	26	PCP27			109,651	113,950	PCPV	2,859.00
106	Primary Care (28-Provider)	05	27	PCP28			113,951	118,250	PCPV	2,943.00
107	Primary Care (29-Provider)	05	28	PCP29			118,251	122,550	PCPV	2,972.00
108	Primary Care (30-Provider)	05	29	PCP30			122,551	126,850	PCPV	3,241.00
109	Primary Care (31-Provider)	05	30	PCP31			126,851	131,150	PCPV	3,315.00
110	Primary Care (32-Provider)	05	31	PCP32			131,151	135,450	PCPV	3,399.00
111	Primary Care (33-Provider)	05	32	PCP33			135,451	139,750	PCPV	3,487.00
112	Primary Care (34-Provider)	05	33	PCP34			139,751	144,050	PCPV	3,596.00
113	Primary Care (35-Provider)	05	34	PCP35			144,051	148,350	PCPV	3,696.00
114	Primary Care (36-Provider)	05	35	PCP36			148,351	152,650	PCPV	3,711.00
115	Primary Care (37-Provider)	05	36	PCP37			152,651	156,950	PCPV	3,963.00
116	Primary Care (38-Provider)	05	37	PCP38			156,951	161,250	PCPV	4,067.00
117	Primary Care (39-Provider)	05	38	PCP39			161,251	165,550	PCPV	4,146.00
118	Primary Care (40-Provider)	05	39	PCP40			165,551	169,850	PCPV	4,230.00
119	Primary Care (41-Provider)	05	40	PCP41			169,851	174,150	PCPV	4,318.00
120	Primary Care (42-Provider)	05	41	PCP42			174,151	178,450	PCPV	4,423.00
121	Primary Care (43-Provider)	05	42	PCP43			178,451	182,750	PCPV	4,437.00
122	Primary Care (44-Provider)	05	43	PCP44			182,751	187,050	PCPV	4,685.00
123	Primary Care (45-Provider)	05	44	PCP45			187,051	191,350	PCPV	4,773.00
124	Primary Care (46-Provider)	05	45	PCP46			191,351	195,650	PCPV	4,878.00
125	Pharmacy	05	1	PH_1			Req's min. 4,400PCPV	103,199	Work Units	131.00
126	Pharmacy	05	2	PH_2			103,200	257,999	Work Units	167.00
127	Pharmacy	05	3	PH_3			258,000	464,399	Work Units	279.00
128	Pharmacy (Requires Acute Care)	05	4	PH_4			258,000	464,399	Work Units	279.00
129	Pharmacy	05	5	PH_5			464,400	670,799	Work Units	343.00
130	Pharmacy (Requires Acute Care)	05	6	PH_6			464,400	670,799	Work Units	343.00
131	Pharmacy	05	7	PH_7			670,800	877,199	Work Units	425.00
132	Pharmacy (Requires Acute Care)	05	8	PH_8			640,800	877,199	Work Units	425.00
133	Property & Supply	05	1	PS_1			Req's min. 4,400PCPV	1,999	Stor. Index	87.00
134	Property & Supply (Satellite)	05	2	PS_1s			Req's min. 4,400PCPV	1,999	Stor. Index	31.00
135	Property & Supply	05	3	PS_2			2,000	4,999	Stor. Index	165.00
136	Property & Supply (Satellite)	05	4	PS_2s			2,000	4,999	Stor. Index	84.00

	Discipline	UD (1)	SL	Template	Travel Time (minutes)	Service Radius (km)	Work Load Threshold	Work Load Limit	Unit (2)	Dept Gross m ² .
137	Property & Supply	05	5	PS_3			5,000	9,999	Stor. Index	331.00
138	Property & Supply (Satellite)	05	6	PS_3s			5,000	9,999	Stor. Index	132.00
139	Property & Supply	05	7	PS_4			10,000	14,999	Stor. Index	437.00
140	Property & Supply (Satellite)	05	8	PS_4s			10,000	14,999	Stor. Index	163.00
141	Property & Supply	05	9	PS_5			15,000	20,000	Stor. Index	607.00
142	Property & Supply (Satellite)	05	10	PS_5s			15,000	20,000	Stor. Index	184.00
143	Physical Therapy		1	PT1			1,110	3,329	PT Visits	149.00
144	Physical Therapy		2	PT2			3,330	7,769	PT Visits	319.00
145	Physical Therapy		3	PT3			7,700	14,430	PT Visits	482.00
146	Respiratory Therapy (Req's Acute)		2	RT2			193,501	270,126	RTWM	81.00
147	SACF-Health Location	05	1	SACHL			80	488	PCPV	160.60
148	SACF-Small Health Station	05	2	SACSXS			498	975	PCPV	243.10
149	SCAF-Medium Health Station	05	3	SCAMHS			976	1,988	PCPV	335.50
150	SCAF-Large Health Station	05	4	SACLHS			1,989	3,000	PCPV	625.90
151	SCAF-Small Health Clinic	05	5	SACSXC			3,001	4,399	PCPV	1,125.30
152	Surgery (L & D Support Only) 1-C Section Rm	07	1	SG_0			300	2,000	Births	143.55
153	Surgery (Outpatient Only) 1- Procedure Room (1-OP / Endo OR)	07	2	SG_1			500	999	OP & Endo Episodes	289.58
154	Surgery (Outpatient Only) 2- Procedure Rooms (2-OP/ Endo OR's)	07	3	SG_2			1,000	1,999	OP & Endo Episodes	589.38
155	Surgery (Requires 300+ births) 3- Procedure Rooms (2-IP/OP/Endo OR's and 1-C Section Room)	07	4	SG_3			1,000 or 750	1,999 1,499	OP & Endo Episodes IP/OP/Endo Episodes	818.73
156	Surgery 3- Procedure Rooms (3-IP/OP/ 1-Endo OR's)	07	5	SG_3			2,000 or 1,500	2,999 2,249	OP & Endo Episodes IP/OP/Endo Episodes	818.73
157	Surgery (Requires 300+ births) 4- Procedure Rooms (2-IP/OP / 1- Endo OR's, 1-C Sect Rm)	07	6	SG_4			2,000 or 1,500	2,999 2,249	OP & Endo Episodes IP/OP/Endo Episodes	943.64
158	Surgery 4- Procedure Rooms (3-IP/OP OR's, 1- Endo OR)	07	7	SG_4			3,000 or 2,250	3,999 2,999	OP & Endo Episodes IP/OP/Endo Episodes	943.64
159	Surgery (Requires 300+ births) 5- Procedure Rooms (1-IP Ortho OR, 3-OP OR, 1-Endo, 1-C Sect Rm)	07	8	SG_5			3,000 or 2,250	3,999 2,999	OP & Endo Episodes IP/OP/Endo Episodes	1,237.50
160	Surgery 5- Procedure Rooms (2-IP Ortho OR, 3-OP OR, 1-Endo,)	07	9	SG_5			4,000 or 3,000	4,999 3,750	OP & Endo Episodes IP/OP/Endo Episodes	1,237.50

	Discipline	UD (1)	SL	Template	Travel Time (minutes)	Service Radius (km)	Work Load Threshold	Work Load Limit	Unit (2)	Dept Gross m ² .
161	Surgery (Requires 300+ births) 6- Procedure Rooms (1-IP Ortho OR, 3-OP OR's, 1-Endo, 1-C Sect Rm)	07	10	SG_6			4,000 or 3,000	4,999 3,749	OP & Endo Episodes IP/OP/Endo Episodes	1,404.65
162	Surgery 6- Procedure Rooms (2-IP Ortho OR, 3-OP OR's, 1-Endo)	07	11	SG_6			5,000 or 3,750	5,999 4,499	OP & Endo Episodes IP/OP/Endo Episodes	1,404.65

Notes:

1. Indicates which HSP version the template was last updated for.
2. Refer to the 'Notes to the Programmer' for each discipline for a definition of the 'Units.'
3. 'Work Load Threshold' and/or 'Work Load Limit' consist of more than one factor.