Chapter HSS 123

CAPITAL EXPENDITURE REVIEW FOR HOSPITALS, OTHER ACUTE CARE FACILITIES AND HOME HEALTH AGENCIES

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Note: Chapter HSS 123 was created as an emergency rule effective January 1, 1984.

HSS 123.01 Authority and purpose. This chapter is promulgated under the authority of s. 150.03, Stats., to implement subchs. I and III of ch. 150, Stats. Its purpose is to provide definitions, standards and procedures to be used by the department to implement the capital expenditure review program for hospitals, ambulatory surgery centers and other acute health care facilities, and for home health agencies, established by subch. III of ch. 150, Stats. That program is primarily directed at containment of health care costs, but also seeks to promote orderly and cost-effective development of efficient health facilities and services and to prevent unwarranted expansion or replacement in the health care industry. The department recognizes that the scaling down of hospital operations, development of alternatives for excess bed capacity, conversion of services from inpatient to outpatient and the enhancement of price competition both among hospitals and between hospitals and health care pro-

viders not regulated by the department are ways in which cost containment may be achieved.

History: Cr. Register, March, 1985, No. 351, eff. 4-1-85.

HSS 123.02 Applicability. (1) This chapter applies to any application declared complete by the department on or after the effective date of this chapter. Interim rules adopted under s. 2020 (11) (b) of 1983 Wisconsin Act 27 apply to projects declared complete prior to April 1, 1985.

(2) This chapter applies to any person who proposes to:

(a) Obligate for a capital expenditure, by or on behalf of a hospital, that exceeds either of the following limits, as adjusted by the department under s. 150.15, Stats., and s. HSS 123.04 (3);

1. $1,000,000; or

2. $1,500,000 in either of the following situations:

a. The project is limited to the conversion to a new use of part or all of an existing hospital building; or

b. The project is limited to the renovation of an existing hospital building. This subparagraph does not apply to new construction or building additions;

(b) Before July 1, 1986, undertake a substantial change in a health service;

(bm) On or after July 1, 1986, implement an organ transplant program, burn center, neonatal instensive care program, cardiac program or air transport services, or add psychiatric or chemical dependency beds;

(c) Obligate for an expenditure, by or on behalf of a hospital, independent practitioner, partnership, unincorporated medical group or service corporation for clinical medical equipment that exceeds $1,000,000, as adjusted by the department under s. 150.15, Stats., and s. HSS 123.04 (3);

(d) Purchase or otherwise acquire a hospital;

(e) Add to a hospital's approved bed capacity; or

(f) Construct or operate an ambulatory surgery center or a home health agency.

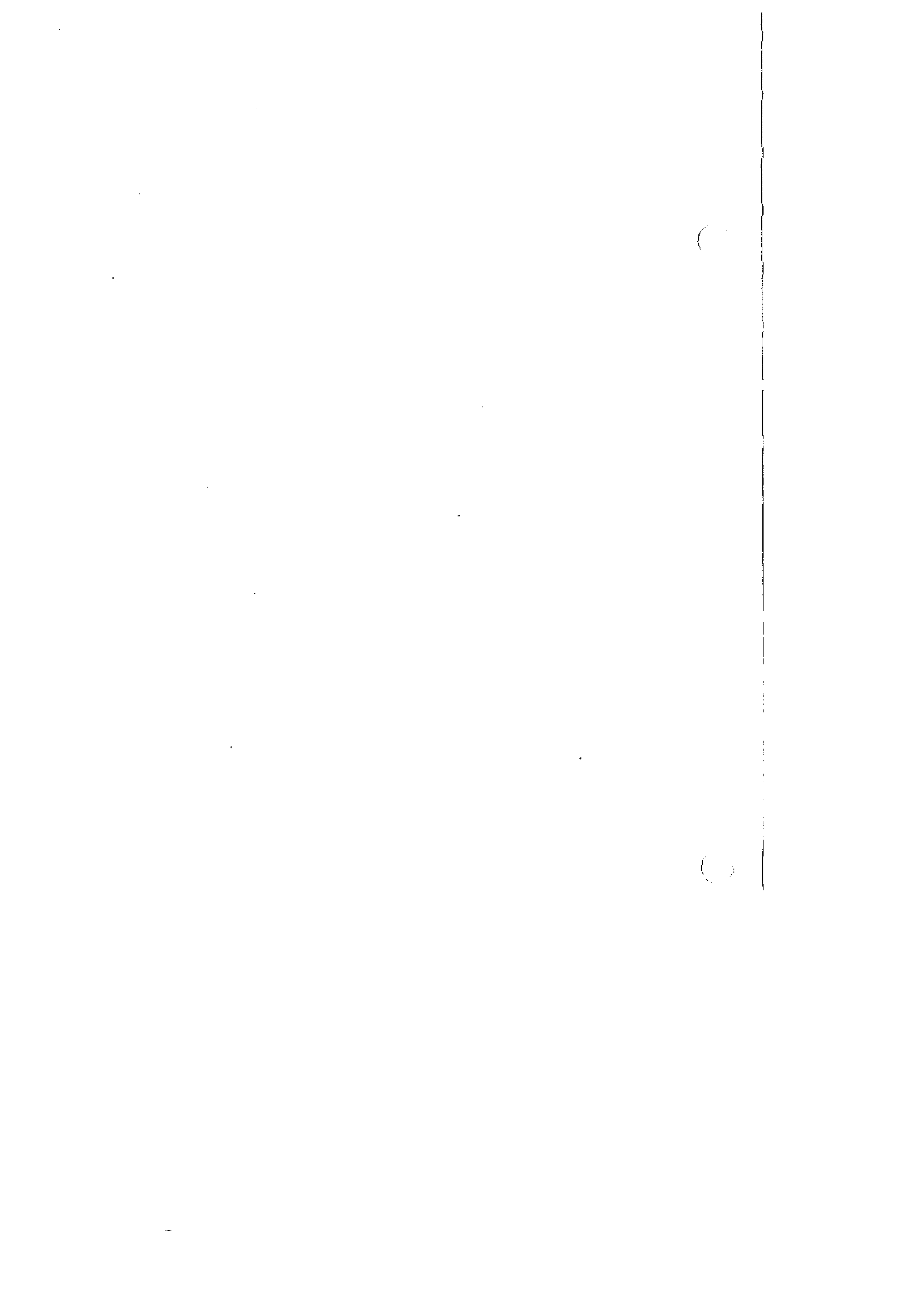
History: Cr. Register, March, 1985, No. 351, eff. 4-1-85; correction in (1) made under s. 13.93 (2m) (b) 14, Stats., Register, March, 1986, No. 363; am. (2), Register, Janury, 1987, No. 373, eff. 2-1-87.

HSS 123.03 Definitions. In this chapter:

(1) "Acquire" means to gain ownership but does not include consolidation or merger of 2 or more corporations each of which owns a currently approved and operating hospital if the consolidation or merger is without consideration. In this subsection, "consideration" means something of value given or promised that has the effect of making an agreement a legally enforceable contract.

(2) "Affected party" means the applicant, a health systems agency or other local planning agency, a governmental agency, another person providing similar services in the applicant's service area, the public to be

served by the proposed project, a 3rd-party payer or any other person who the department determines is affected by an application for approval of a project.



2. Head scan with contrast, 1.25;

3. Head scan combined, 1.75;

4. Body scan without contrast, 1.50;

5. Body scan with contrast, 1.75;

6. Body scan combined, 2.75; and

7. Any spine scan, 3.00.

(c) "Residual salvage value" means the estimated amount for which the CT equipment can be sold, less any dismantling, removal or other costs, when retired from operation.

(d) "Scan" means the series of images or slices necessary for CT diagnosis of one anatomical area.

(3) NEED FOR COMPUTED TOMOGRAPHY SERVICES. The department shall not approve an application for fixed-base CT equipment unless the applicant demonstrates that:

(a) It has an approved bed capacity of at least 100 beds, or demonstrates to the department's satisfaction that there are clinical and financial justifications for waiving this requirement;

(b) Its 3-year projected utilization uses the methodology found in appendix B or another nationally recognized projection methodology. The applicant shall provide a rationale for all assumptions used in the utilization calculations. Justifiable modifications for changes in the inpatient to outpatient ratio may be used;

(c) The proposed equipment will perform 1,500 HECTs the first year of operation, 1,750 HECTs the second year of operation and 2,000 HECTs every year thereafter; and

(d) The projected changes for the proposed service and, where applicable, any physician charges are comparable to charges for similar services provided in similar settings.

(4) MOBILE CT SERVICES. (a) For an application relating to a mobile CT service, the applicant shall be the person acquiring the CT equipment.

(b) The applicant shall meet the standards under sub. (3) (b) to (d).

(5) MULTIPLE SCANNER INSTALLATIONS. The department shall not approve an application for additional CT equipment unless:

(a) The existing CT scanner performed 4,000 or more HECTs during the 12-month period preceding the date of application;

(b) The applicant provides the department with a 3-year utilization history of the existing scanner; and

(c) The applicant meets the standards under sub. (3) for the additional scanner.

(6) EQUIPMENT REPLACEMENT. (a) The department shall not approve an application for a replacement scanner unless the applicant demonstrates that:

1. The highest residual salvage value from among three bids for the replaced equipment has been obtained, and this value has been applied toward the purchase of new equipment; and

2. The original scanner will not be used by the applicant after the expiration of the 6-month transition period. The 6-month transition period shall begin on the operational date of the replacement scanner.

(b) The replaced original scanner shall be considered additional CT equipment for purposes of this review. An applicant using the original scanner after the replacement scanner's 6-month transition period has expired shall submit an application for its approval under this chapter.

History: Cr. Register, March, 1985, No. 351, eff. 4-1-85.

HSS 123.20 Air ambulance service criteria. (1) USE. The criteria set out in this section shall be used by the department to review applications to implement air transport services under s. 150.61 (2), Stats., and other applications relating to air ambulance services. The applicable criteria of s. HSS 123.13 shall also be used in the review of applications subject to this section.

(2) DEFINITIONS. In this section:

(a) "Air ambulance" means any aircraft operated under authority of 14 CFR 135, Subch. A, which is specifically designed, constructed, modified or equipped and staffed to be used primarily for the transportation of ill or injured persons.

(b) "Air ambulance services" means "air transport services" as used in s. 150.61 (2), Stats., which is the regular offering of transportation to ill or injured persons in an air ambulance.

(3) PLANNING AREAS. For purposes of this section, there shall be 2 planning areas in the state. Area I shall consist of health planning areas 2, 3 and 4. Area II shall consist of health planning areas 1, 5, 6 and 7.

(4) NEED FOR AIR AMBULANCE SERVICES. The department shall not approve an application relating to air ambulance services unless there is need for the services. To establish need, the applicant shall:

(a) Demonstrate that the services will make life-saving differences for patients with acute conditions;

(b) Project the annual number of patients in the planning area with an illness or injury requiring intervention and transport and for whom transport time is crucial. In making that projection, the applicant shall take into account:

1. The origin, by hospital or sending site, and diagnoses of the patients to be transported; and

2. The availability and adequacy of existing land and air transportation; and

(c) Demonstrate that approval of the air ambulance would not result in there being more than one airplane-type air ambulance and one helicopter-type air ambulance in that planning area.

(5) REQUIRED RESOURCES. (a) The department shall not approve an application relating to air ambulance services unless the applicant demonstrates that:

1. Trained personnel eligible to serve as ambulance attendants under ch. H 20 [HSS 110] will be available at all times for the treatment and transport of critically ill patients; and

2. Appropriate personnel trained in the diagnosis and treatment of critically ill patients are available at all times in the hospital to which patients are transported.

(b) The applicant shall provide the names of hospitals to which patients are going to be transported and have a written agreement with each hospital. The agreement shall state that the hospital will:

1. Accept patients transported by the applicant; and

2. Provide the personnel required under par. (a) 2.

(6) FINANCIAL FEASIBILITY. The department shall not approve an application relating to air ambulance services unless the applicant demonstrates that the services are financially feasible by:

(a) Documenting the projected direct and indirect costs of providing the services, including costs of personnel, equipment, facilities and supportive services;

(b) Establishing a separate cost center for all direct costs and procedures which incorporates full cost accounting methods for allocating any indirect costs;

(c) Documenting that the projected charges for providing the services, including personnel, equipment, facility and supportive service charges, are reasonable; and

(d) Documenting the net financial impact on hospital rates.

(7) CONCURRENT REVIEW. (a) The provisions in s. HSS 123.08 (10) shall be used for concurrent review when there are 2 or more applications for the same planning area. The department shall approve the application receiving the highest score based on a comparative analysis of the applications using all applicable review criteria in s. HSS 123.13 and the review criteria in subs. (4) to (6). In addition, preference shall be given to the application which:

1. Proposes a multifacility or shared service arrangement and, if more than one application proposes a multifacility or shared service arrangement, the one that provides written documentation which demonstrates the greatest number and diversity of referring specialists; and

2. Provides the best geographical accessibility for the population being served in the planning area as determined by an analysis by the department of areas where the applicant intends to focus its resources and marketing strategies for the proposed service. Each applicant shall provide the department with the number of anticipated patient referrals from each identified market area and the patient origin by hospital or sending site for all referrals.

(b) The department shall approve the application that is determined to be the most feasible after a review of the following considerations:

1. The number of specialized services in the project's receiving hospital or hospitals, such as burn, pediatric intensive care, dialysis, perinatal and organ transplantation services;

2. The intensive care capability of the project's receiving hospital or hospitals in terms of specialized units, number of beds and staffing; and

3. The specialized operating room capability of the receiving hospital or hospitals.

(8) DATA REPORTING REQUIREMENTS. All air ambulance approval holders shall provide the department and the appropriate HSA with data relating to the number of patients served, operating costs, patient origin and any other information deemed necessary by the department to determine compliance with this section. The information shall be provided, upon request, in a format prescribed by the department for purposes of evaluation and project review. The department may not request the information from each service more than twice in a 12-month period.

(9) PROJECT IMPLEMENTATION TIMETABLE. A timetable for implementing the project shall be included in the approval. The timetable shall specify deadlines by which the approval holder must do each of the following:

(a) Meet its projected utilization under sub. (4) (b);

(b) Pay its full direct and indirect costs entirely from charges for the service; and

(c) Establish the separate cost center required under sub. (6) (b).

(10) REVOCATION OF APPROVAL. (a) Pursuant to ss. 150.11 (4) and 150.75, Stats., the department may revoke any approval issued under this section for either of the following reasons:

1. The approval holder has not obtained a license under s. 146.50, Stats., and ch. H 20 [HSS 110] within the period specified in the approval or does not maintain this licensure; or

2. The approval holder misses any deadline specified in the timetable for implementing the project and fails to make a good faith effort to meet the deadline.

(b) The approval holder has a right under s. 227.42, Stats., to a contested case hearing to review a revocation under this subsection.

History: Cr. Register, March, 1985, No. 351, eff. 4-1-85; r. and recr. Register, February, 1987, No. 374, eff. 3-1-87.

HSS 123.21 Home health agency criteria. (1) USE. The criteria set out in this section shall be used by the department to review applications for the operation of home health agencies. The applicable criteria of s. HSS 123.13 shall also be used in the review of applications subject to this section.

(2) DEFINITIONS. In this section:

(a) "Acute care hospital discharges under age 65" means the number of discharges of patients under age 65 from hospitals to home or self-care or to home care provided by a home health agency as reported on the most recent hospital discharge survey conducted by the department.

(b) "Home health agency" has the meaning specified in s. HSS 133.02 (3).

(c) "Population age 65 and over" means the estimated population of persons age 65 and over not residing in institutions, as reported by the state department of administration.

(d) "Service area" means the counties designated by the applicant within which the proposed services are to be delivered.

(e) "Therapy service" means physical, occupational, speech or other therapy, medical social service, home health aide service, or any other medically oriented service except skilled nursing care.

(f) "Unduplicated admissions" means the number of patients served by a home health agency during a calendar year regardless of the number of times an individual was admitted to the agency during the year, as reported to the department.

(3) NEED FOR SERVICES. (a) *Unserved population in need of service.* The department shall not approve an application for the operation of a home health agency unless the unserved population in need of service in the county as calculated under this paragraph exceeds 100 people. The department shall calculate the unserved population in need of service in a county by subtracting the population currently being served in the county from the population base in need of service in the county.

existing data collection mechanisms shall be used to obtain this information.

(b) Approved bed capacity shall be consistent with information on file with other bureaus in the department and survey results including the department's annual survey of hospitals.

History: Cr. Register, March, 1985, No. 351, eff. 4-1-85; am. (1) and (2) (b), Register, January, 1987, No. 373, eff. 2-1-87.

HSS 123.31 Burn center criteria. (1) USE. The criteria set out in this section shall be used by the department in its review of applications relating to burn centers. The applicable criteria of s. HSS 123.13 shall also be used in the review of applications subject to this section.

(2) DEFINITIONS. In this section:

(a) "Burn center" means a discrete unit within a hospital that is equipped and staffed to provide care solely for persons who have been burned.

(b) "Dedicated burn bed" means a bed within a burn center which is used solely for the care of the severely burned patient.

(c) "Existing burn center" means the burn center located at the university of Wisconsin hospital and clinics in Madison or St. Mary's hospital in Milwaukee or another burn center subsequently approved under this section.

(d) "Planning area" means the entire state.

(e) "Severe burn" means any life-threatening burn; any burn of more than 25% body surface area; any burn of more than 20% body surface area to a person under 10 years of age or over 40 years of age; any burn which destroys the skin and extends into underlying tissues covering 10% or more of the body surface area; any burn involving the face, eye, ear, hand, foot or perineum that is likely to result in functional or cosmetic impairment; any high voltage electrical burn; and any burn complicated by inhalation injury or major trauma.

(3) NEED FOR BURN CENTERS. (a) Except as provided in par. (c), the department shall not approve an application to either establish a burn center or to add dedicated burn beds to an existing burn center unless:

1. Each existing burn center in the state has operated at an annual average occupancy rate of at least 75% for each of the 2 12-month periods preceding the date of application; and

2. The applicant demonstrates on the basis of valid assumptions and relevant historical data that there is a need for the proposed burn center or additional dedicated burn beds. Determination of need shall be based upon:

a. The capacity of existing burn centers in the state;

b. The annual volume of patients who have been or who can appropriately be served in intensive care beds or other dedicated burn beds in the existing burn centers; and

c. The anticipated relationships of the proposed burn center with other burn centers.

(b) Except as provided in par. (c), the department shall not approve an application to establish a burn center unless the applicant establishes the following:

1. There will be a sufficient number of severe burn patients in the planning area who need a burn center and cannot be served at an existing burn center to ensure a utilization level of at least 50 severe burn admissions the first year of operation and to sustain a level of at least 75 severe burn admissions each year after the first year; and

2. There will be a minimum of 6 dedicated burn beds in the proposed burn center, of which 2 will be intensive care beds.

(c) For a pediatric specialty hospital wanting to establish a burn center, the determination of need shall be based upon the following:

1. There is a sufficient number of pediatric severe burn patients in the planning area to ensure a utilization level of at least 25 severe burn admissions per year; and

2. There will be a minimum of 4 dedicated burn beds in the burn center and a minimum of an additional 2 intensive care beds capable of meeting intensive care needs of pediatric burn patients available within the facility.

(4) REQUIRED RESOURCES. The department shall not approve an application to establish a burn center unless the applicant:

(a) Has transfer agreements with hospitals not having a burn center to assure the transfer of the projected number of severe burn patients;

(b) Has transfer agreements with other acute care facilities having a burn center to assure quality patient care and optimal use of existing burn centers;

(c) Has a burn center which is distinct from other units in the hospital, with its own nursing station, intensive care beds, rooms and equipment;

(d) Has the capacity to provide emergency care and stabilization of severe burn patients; evaluation of burn severity; acute, convalescent and rehabilitative burn care, including skin banking; and basic and clinical research;

(e) Demonstrates that the existing emergency medical system is capable of adequately providing transportation for the severe burn patient from those areas of the state to be served by the proposed burn center;

(f) Has available, 24 hours a day, the services rated essential for hospital burn centers by the American burn association as listed in appendix G; and

(g) Has available the resources necessary for the projected number of severe burn patients, including the resources rated essential for burn centers by the American burn association as listed in appendix H.

(5) DATA REPORTING REQUIREMENT. All burn centers in the state shall provide the department and the appropriate HSA with data relating to the number of patients served, patient utilization, operating costs, patient origin and any other information deemed necessary by the department to determine compliance with this section. The information shall

be provided, upon request, in a format prescribed by the department. The department shall not request the information more than twice in a 12-month period.

APPENDIX A

Designated Health Planning Areas in Wisconsin
Under 42 USC 300L
[HSS 123.03 (19)]

Health Service Area #1

Columbia, Dane, Dodge, Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk counties

Health Service Area #2

Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, Waukesha counties

Health Service Area #3

Calumet, Fond du Lac, Green Lake, Marquette, Outagamie, Waupaca, Waushara, Winnebago counties

Health Service Area #4

Brown, Door, Kewaunee, Manitowoc, Marinette, Menominee, Oconto, Shawano, Sheboygan counties

Health Service Area #5

Barron, Buffalo, Chippewa, Clark, Crawford, Dunn, Eau Claire, Jackson, La Crosse, Monroe, Pepin, Pierce, Polk, Rusk, St. Croix, Trempealeau, Vernon counties

Health Service Area #6

Adams, Florence, Forest, Juneau, Langlade, Lincoln, Marathon, Oneida, Portage, Taylor, Vilas, Wood counties

Health Service Area #7

Ashland, Bayfield, Burnett, Douglas, Iron, Price, Sawyer, Washburn counties

APPENDIX B

TABLE B-1: CT INPATIENT PROCEDURE PROJECTIONS
[s. HSS 123.19(3)(b)]

HEAD PROCEDURES

	Primary Discharges*	Primary Discharge Factor	Initial Inpatient Procedures	Follow-up Factor	Total Follow-up Procedures	Secondary Discharges*	Secondary Discharge Factor**	Initial Secondary Procedures	Total Inpatient Procedures
Head Neoplasms		X1.0		X1.10			XF		
Other Head Disorder		X.84		X.14			XF		
Head Total			(A)		(B)			(C)	(A+B+C)

BODY PROCEDURES

	Primary Discharges*	Primary Discharge Factor	Initial Inpatient Procedures	Follow-up Factor	Total Follow-up Procedures	Secondary Discharges*	Secondary Discharge Factor**	Initial Secondary Procedures	Total Inpatient Procedures
Body Neoplasms		X.45		X1.10			XF		
Other Body Disorder		X.22		X.14			XF		
Body Total			(A)		(B)			(C)	(A+B+C)

SPINE PROCEDURES

	Primary Discharges*	Primary Discharge Factor	Initial Inpatient Procedures	Follow-up Factor	Total Follow-up Procedures	Secondary Discharges*	Secondary Discharge Factor**	Initial Secondary Procedures	Total Inpatient Procedures
Spine Disorders or Trauma		X.22		X.14			XF		
Spine Total			(A)		(B)			(C)	(A+B+C)

*Primary and secondary discharges are calculated by using the ICD-9-CM codes found in the application materials approved by the Department.

**Secondary Discharge Factor $F = .05 \times \frac{A+B}{A}$

TABLE B-2 — CT SCAN MIX AND HECT CONVERSION

TABLE B-2

CT SCAN MIX AND HECT CONVERSION

[s. HSS 123.19(3)(b)]

Scan Location	Scan Mix Factor	Scan Type	HECT Conversion Factor	HECT Count
Total Head	X.10	Head Unenhanced	X1.00	
Total Head	X.05	Head Enhanced	X1.25	
Total Head	X.85	Head Combined	X1.75	
Total Body	X.10	Body Unenhanced	X1.50	
Total Body	X.65	Body Enhanced	X1.75	
Total Body	X.25	Body Combined	X2.75	
Total Spine	X1.00	All Spine	X3.00	

Total HECTS ______

TABLE B-3

CT OUTPATIENT CONVERSION

[s. HSS 123.19(3)(b)]

Total Inpatient Procedures		Outpatient Conversion	Total Inpatient Outpatient Scans
Total Inpatient Head	______	÷ .55 =	______
Total Inpatient Body	______	÷ .55 =	______
Total Inpatient Spine	______	÷ .55 =	______

APPENDIX C — TABLE C-1: FORMULA FOR PROJECTING NEED FOR ACUTE CARE BEDS

APPENDIX C

TABLE C-1: FORMULA FOR PROJECTING NEED FOR ACUTE CARE BEDS

[s. HSS 123.27(3)(c)3.]

ACUTE CARE SERVICE AREA XX

Hospital Service	Discharge x Rate/1,000	Length of x Stay	199X Projected Pop. in 1,000	=	199X Projected Patient Days	÷ 365 =	Projected Average Daily Census	÷ Occupancy Standard =	Unadjusted 199X Bed Need	199X Bed Need -	Approved Beds =	199X Bed Excess or Need
Pediatrics	xx.xx(1)	x.xx(7)	xx.xxx(13)		xxxxx.x(19)		xx.x(25)	.xx	xx.x(31)	xx(35)	xx(40)	xx(45)
Medical/Surgical 15-44 years	xx.xx(2)	x.xx(8)	xxx.xxx(14)	xxxxx.xx(20a)								
45-64 years	xxx.xx(4)	x.xx(9)	xx.xxx(15)	xxxxx.xx(20b)								
65-74 years	xxx.xx(4)	x.xx(10)	xx.xxx(16)	xxxxx.xx(20c)								
75 + years	xxx.xx(5)	x.xx(11)	xx.xxx(17)	xxxxx.xx(20d)								
TOTAL					xxxxxx.x(20e)		xxx.x(26)	.xx	xxx.x(32)	xxx(36)	xxx(41)	xx(46)
Obstetrics	xx.xx(6)	x.xx(12)	xx.xxx(18)		xxxxx.x(21)		xx.x(27)	.xx	xx.x(33)	xx(37)	xx(42)	xx(47)
ICU/CCU	x.x percent of nonobstetric patient days(22)											
					PED xxx.x(23)		x.x(28)	.xx				
					M/S xxxx.x(24)		xx.x(29)	.xx				
							xx.x(30)	.xx	xx.x(34)	xx(38)	xx(43)	x(48)
										xxx(39)	xxx(44)	xxx(49)

APPENDIX C-1: NOTES

TABLE C-1: NOTES

(1) $$\frac{\text{Discharges from ACSA hospitals for Wisconsin residents under 15 years of age excluding newborns and discharges for diagnosis in (6)}}{\text{Under 15 market share population for ACSA excluding in-migration adjustment}}$$

(2) $$\frac{\text{Discharges from ACSA hospitals for Wisconsin residents 15–44 years of age excluding discharges for diagnoses in (6)}}{\text{15–44 market share population for ACSA excluding in-migration adjustment}}$$

(3) $$\frac{\text{Discharges from ACSA hospitals for Wisconsin residents 45–64 years of age excluding discharges for diagnoses in (6)}}{\text{45–64 market share population for ACSA excluding in-migration adjustment}}$$

(4) $$\frac{\text{Discharges from ACSA hospitals for Wisconsin residents 65–74 years of age excluding discharges for diagnoses in (6)}}{\text{65–74 market share population for ACSA excluding in-migration adjustment}}$$

(5) $$\frac{\text{Discharges from ACSA hospitals for Wisconsin residents 75 years of age and over excluding discharges for diagnoses in (6)}}{\text{75 years of age and over market share population for ACSA excluding in-migration adjustment}}$$

(6) $$\frac{\text{Discharges from ACSA hospitals for Wis. residents with the following principal ICDA discharge diagnoses 630.0, 633.0–633.2, 633.8, 633.9, 640.0–646.9, 648.0–676.0}}{\text{One-half the population 15–44 market share population for ACSA excluding in-migration adjustment}}$$

OR, IF SMALLER,

(1a) $$\frac{\text{Discharges from all hospitals in Wisconsin for Wis. residents under 15 years of age excluding newborns and discharges for diagnoses in (6)}}{\text{Wisconsin under 15 years of age population}} + \text{Change in pediatric discharge rate projected over the next 5 years using a linear regression method for the most recent 7 years of national discharge data} + \text{One standard deviation using a poisson distribution} = \sqrt{\text{Statewide discharge rate}}$$

(2a) to (6a) same as (1a) for age groupings in (2) to (6) above.

(7) Patient days from ACSA hospitals for Wis. residents under 15 years of age, excluding newborns and discharges for diagnoses in (6)
Discharges from ACSA hospitals for Wis. residents under 15 years of age, excluding newborns and discharges for diagnoses in (6)

(8) Patient days from ACSA hospitals for Wisconsin residents 15-44 years of age, excluding discharges for diagnoses in (6)
Discharges from ACSA hospitals for Wisconsin residents 15-44 years of age, excluding discharges for diagnoses in (6)

(9) Patient days from ACSA hospitals for Wisconsin residents 45-64 years of age excluding discharges for diagnoses in (6)
Discharges from ACSA hospitals for Wisconsin residents 45-64 years of age excluding discharges for diagnoses in (6)

(10) Patient days from ACSA hospitals for Wisconsin residents 65-74 years of age excluding discharges for diagnoses in (6)
Discharges from ACSA hospitals for Wisconsin residents 65-74 years of age excluding discharges for diagnoses in (6)

(11) Patient days from ACSA hospitals for Wisconsin residents 75 and over excluding discharges for diagnoses in (6)
Discharges from ACSA hospitals for Wisconsin residents 75 and over excluding discharges for diagnoses in (6)

(12) Patient days from ACSA hospitals for Wisconsin residents with the principal discharge diagnoses in (6)
Discharges from ACSA hospitals for Wisconsin residents with the principal discharge diagnoses in (6)

OR, IF SMALLER,

(7a) Patient days from all hospitals for Wisconsin residents under 15 years of age, excluding newborns and discharges for diagnoses in (6)
Discharges from all hospitals for Wisconsin residents under 15 years of age, excluding newborns
\+ Change in pediatric lengths of stay projected over the next 5 years using a linear regression method for the most recent 7 years of national discharge data.
\+ One standard deviation using a normal distribution

$$\sqrt{\frac{\Sigma(X_i-\bar{X})^2}{N-1}}$$

(8b) to (12b) Same as (7a) for age groupings in (8) to (12) above.

Discharges in categories (1-12) and (1a-12a) exclude principal ICDA discharge diagnosis of 290 to 316 (except 303 and 304 and 305) for hospitals with an inpatient psychiatric service and 303 and 304 for hospitals with a chemical dependency service.

Calculation of ACSA population:

R x Zip Code Pop. = ACSA in-state population

$$R = \frac{\text{Admissions from zip code to ACSA hospitals}}{\text{Admissions from a zip code area to any Wisconsin Hospital}}$$

Zip Code population = MCD-Zip conversion factor for each MCD-Zip Code fragment (proportion of a given MCD served by a given zip code area times the MCD population estimate)

The in-state ACSA populations are adjusted to incorporate out-of-state population increase due to care provided residents of other states:

$$\text{out-of-state population} = \frac{\text{out-of-state discharges to the ACSA}}{\text{in-state discharges to the ACSA}} \times \text{in-state population}$$

Age cohort distribution are based on a determination of which counties had at least 50% of their geographic area within either primary or secondary service area of the ACSA. The proportional representation of each cohort as projected in the county or counties is applied to the total ACSA population.

(13)-(17) 1990 population projection based on calculation of ACSA in-state population + in-migration adjustment x county age cohort distribution

(18) One half the population 15-44 to represent the population of childbearing age

(19) Projected Patient Days for patients under 15 years of age

(20e) Sum of Projected Patient Days for medical/surgical patients 15 years of age and over = (20a) + (20b) + (20c) + (20d)

(21) Projected Patient days for obstetric patients

(22) ICU/CCU patient days as a percentage of total non-obstetric patient days for the ACSA (data from the Wisconsin Annual Survey of Hospitals)

(23) (22) x (19)

(24) (22) x (20e)

(25) (19) ÷ 365 (# of days in year)

(26) (20e) ÷ 365

(27) (21) ÷ 365

(28) (23) ÷ 365

(29) (24) ÷ 365

(30) (23) + (24)

(31) (25) ÷ Occupancy Standard in Appendix D for the service bed complement in ACSA. For services of less than 10 beds, the medical/surgical occupancy standard applies.

(32) (26) ÷ Occupancy Standard in Appendix D for the service bed complement in ACSA.

(33) (27) ÷ Occupancy Standard in Appendix D for the service bed complement in ACSA

(34) (30) ÷ Occupancy Standard in Appendix D for the service bed complement in ACSA. If a separate pediatric intensive care unit exists in the service area, bed need is calculated for 28 and 29 using the occupancy standard for the entire ICU/CCU bed complement

(35) (31) rounded to the nearest whole number

(36) (32) minus (34) rounded to nearest whole number

(37) (33) rounded to the nearest whole number

(38) (34) rounded to the nearest whole number

(39) (35) + (36) + (37) + (38)

(40)-(43) Service bed complement by ACSA from the Annual Survey of Hospitals adjusted for beds closed, deactivated or decertified under s. 123.30

(44) (40) + (41) + (42) + (43)

(45) (40) - (35)

(46) (41) - (36)

(47) (42) - (37)

(48) (43) - (38)

(49) (44) - (39)

TABLE C-2: FORMULA FOR PROJECTING NEED FOR SHORT-TERM INPATIENT PSYCHIATRIC BEDS
[s. HSS 123.27(4)(b)2.]
SERVICE AREA XX

Use Rate/ 1,000	x	Length of stay	x	199X Population (in 1,000's)	=	199X Projected Patient Days	÷ 365	=	199X Projected Average Daily Census	÷ Occupancy Standard (%)	=	Unadjusted 199X Bed Need	199X Bed Need	-	Approved Beds	=	199X Bed Excess or Need
x.x(1)		xx.x(2)		xxx.xxx(3)	=	xxxxx(4)			xxx.xx(5)	xx		xx.x(6)	xx(7)		xx(8)		xx(9)

(1) Use rate = Total number of admissions to short-term inpatient psychiatric services in the service area* / Current service area population

OR, IF SMALLER,

= Total number of admissions to short-term inpatient psychiatric services in Wisconsin* / Current Wisconsin population

(2) Length of stay = Total patient days in short-term inpatient psychiatric services in the service area* / Total number of admissions to short-term inpatient psychiatric services in the service area*

OR, IF SMALLER,

= Total patient days in short-term inpatient psychiatric services in Wisconsin* / Total number of admissions to short-term inpatient psychiatric services in Wisconsin*

(3) Projected population in 199X for the service area, based upon information provided by the University of Wisconsin Applied Population Laboratory and the State Department of Administration.

(4) (1) x (2) x (3)

(5) (4) ÷ 365 (number of days in the year)

(6) (5) ÷ Occupancy standard in Appendix D for the bed complement in the service area.

(7) (6) rounded to the nearest whole number

(8) Total number of approved short-term inpatient psychiatric beds in the service area.

(9) (7) - (8)

*Information on patient days and admissions from the Annual Survey of Hospitals.

TABLE C-3: FORMULA FOR PROJECTING NEED FOR CHEMICAL DEPENDENCY BEDS

[s. HSS 123.27(4)(c)2.]

SERVICE AREA XX

Use Rate/ 1,000	x	Length of stay	x	199X Population (in 1,000's)	=	199X Projected Patient Days	÷ 365	=	199X Projected Average Daily Census	÷	Occupancy Standard (%)	=	Unadjusted 199X Bed Need	199X Bed Need	-	Approved Beds	=	199X Bed Excess or Need
x.x(1)		xx.x(2)		xxx.xxx(3)	=	xxxxx(4)			xxx.xx(5)		xx		xx.x(6)	xx(7)		xx(8)		xx(9)

(1) Use Rate = $\frac{\text{Total number of admissions to chemical dependency services in the service area*}}{\text{Current service area population}}$

OR, IF SMALLER,

$= \frac{\text{Total number of admissions to chemical dependency services in Wisconsin*}}{\text{Current Wisconsin population}} + \frac{\text{1 Standard deviation above the statewide average use rate using the poisson distribution}}{\sqrt{\text{Standard average use rate}}}$

(2) Length of stay = $\frac{\text{Total patient days in chemical dependency services in the service area*}}{\text{Total number of admissions to short-term inpatient chemical dependency services in the service area*}}$

(3) Projected population in 199X for the service area, based upon information provided by the University of Wisconsin Applied Population Laboratory and the State Department of Administration.

(4) (1) x (2) x (3)

(5) (4) ÷ 365 (number of days in the year)

(6) (5) ÷ Occupancy standard in Appendix D for the bed complement in the service area.

(7) (6) rounded to the nearest whole number

(8) Total number of approved chemical dependency beds in the service area.

(9) (7) - (8)

*Information on patient days and admissions from the Annual Survey of Hospitals.

APPENDIX D — HOSPITAL SERVICE OCCUPANCY STANDARDS [HSS 123.27 (3) (c)]

APPENDIX D
HOSPITAL SERVICE OCCUPANCY STANDARDS [HSS 123.27(3)(c)]

Medical/Surgical Services

Number of beds in service area	Occupancy standard
1-25	61%
26-50	69%
51-75	74%
76-100	78%
101-150	80%
151-250	82%
251+	85%

Pediatric Services

Number of beds in service area	Occupancy standard
1-10	50%
11-15	52%
16-20	57%
21-25	60%
26-75	65%
76-100	78%
101-150	80%
151-200	82%

Obstetric Services

Number of beds in service area	Occupancy standard
1-10	50%
11-15	51%
16-20	59%
21-25	62%
26-30	64%
31+	70%

ICU/CCU Services

ICU/CCU Services

Number of beds in service area	Occupancy standard
1-10	50%
11-15	56%
16+	66%

Psychiatric/Chemical Dependency Services

Number of beds in service area	Occupancy standard
1-20	80%
21+	85%

Long-Term Psychiatric Services

Number of beds in service area	Occupancy standard
1+	90%

APPENDIX E: PROPORTIONATE SHARE OF EXCESS BEDS BY HOSPITAL
BY HOSPITAL

APPENDIX E: PROPORTIONATE SHARE OF EXCESS BEDS BY HOSPITAL
[s. HSS 123.27(10)]
ACUTE CARE SERVICE AREA XX

Current Share of Excess

Hospital	Patient Days	Total Beds	Occupancy (%)	SMFP Expected Occupancy (%)	Current Hospital Excess
A	xxx,xxx(1)	xxx(2)	xx.x(3)	xx(4)	xx(5)
B*	xxx,xxx	xxx	xx.x	xx	xx
C*	xx,xxx	xx	xx.x	xx	xx

199X Share of Excess

Hospital	Current Hospital Excess	199X ACSA Excess	199X Proportionate Share of Hospital Excess
A	xx(5)		xx(8)
B*	xx(5a)		xx(8a)
C*	xx(5b)		xx(8b)
	xx(6)	xx(7)	xx(7)

*Same calculation as performed on hospital A performed on all hospitals in the service area.

APPENDIX E: NOTES

(1) Total patient days from the Wisconsin Annual Survey of Hospitals excluding patient days for psychiatric and chemical dependency (AODA) services and from neonatal intensive and intermediate care.

(2) Total approved beds excluding psychiatric, chemical dependency (AODA), neonatal intensive and intermediate care.

(3) [(1) ÷ 365] ÷ (2)

(4) Sum of (a) + (b) + (c) + (d):

(a)	Medical/surgical service bed complement (all other beds excluding psychiatric, chemical dependency and neonatal intensive/intermediate)	÷	Total approved beds (excluding psychiatric, chemical dependency, and neonatal intensive/intermediate)	×	Medical/surgical occupancy standard for the hospital's medical/surgical bed complement from Appendix D.
(b)	Pediatric service bed complement	÷	Total approved beds (excluding psychiatric, chemical dependency, and neonatal intensive/intermediate)	×	Pediatric occupancy standard in Appendix D unless the unit is less than 10 beds for which the medical/surgical occupancy rate in (4a) is used.
(c)	Obstetrics service bed complement	÷	Total approved beds (excluding psychiatric, chemical dependency, and neonatal intensive/intermediate)	×	Obstetrics occupancy standard in Appendix D.
(d)	ICU/CCU bed complement	÷	Total approved beds (excluding psychiatric, chemical dependency, and neonatal intensive/intermediate)	×	ICU/CCU occupancy standard in Appendix D.

(5) $(2) - \left[\frac{(1) \div (4)}{365}\right]$

(6) Sum of current hospital excess for all hospitals in ACSA [(5) + (5a) + (5b)]

(7) Total projected ACSA as stated in the SMFP and as calculated in Appendix C-1.

(8) (5) × (7) ÷ (6)

(8a) (5a) × (7) ÷ (6)

(8b) (5b) × (7) ÷ (6)

If (5), (5a) or (5b) are negative, the numbers are excluded from the calculation to determine (6) and therefore in the calculation of 199X proportionate share of hospital excess.

Note: (5a) and (5b) represent current hospital excess for the other hospitals in the ACSA XX.

APPENDIX F

METHODOLOGY FOR DETERMINING THE NUMBER OF CLINICALLY-APPLICABLE MRI DISCHARGES

[s. HSS 123.24 (3) (a) and (b)]

Major ICD-9-CM Groupings		Inpatient MRI Utilization Weights
001-139	Infectious and parasitic diseases	6.25%
140-239	Neoplasms	20.93%
290-319	Mental disorders	.11%
320-389	Diseases of the nervous system and sense organs	11.46%
390-459	Diseases of the circulatory system and connective tissue	15.29%
710-739	Diseases of the musculoskeletal system and connective tissue	7.78%
740-759	Congenital anomalies	1.99%
800-999	Injury and poisoning	.56%

The methodology to determine the number of inpatient clinically-applicable MRI discharges is as follows:

1. Count the number of principal diagnosis inpatient discharges that correspond to each major grouping of ICD-9-CM codes listed above; and

2. Multiply the number for each major grouping by the corresponding inpatient MRI utilization weight and add the products together to produce the number of inpatient clinically-applicable MRI discharges.

Note: ICD-9-CM codes refer to the standard disease codes and nomenclature found in the *International Classification of Diseases – 9th Revision – Clinical Modification*, prepared by the Commission on Professional and Hospital Activities for the U.S. National Center for Health Statistics. The major ICD-9-CM groupings and inpatient MRI utilization weights are based on the work of a panel of experts and high correlation averages as reported in the American Hospital Association's publication, *NMR – Issues for 1985 and Beyond.*

APPENDIX G

Essential Burn Services for a Hospital with a Burn Center [s. HSS 123.31 (4) (f)]

A hospital with a burn center shall have the following services staffed by qualified specialists available 24 hours per day:

1. Surgical:

a. Cardio-Thoracic Surgery;

b. General Surgery;

c. Neurological Surgery;

d. Obstetrics-Gynecological Surgery;

e. Ophthalmic Surgery;

f. Oral Surgery — Dental;

g. Orthopaedic Surgery;

h. Otorhinolaryngological Surgery;

i. Plastic Surgery; and

j. Urological Surgery.

2. Non-Surgical:

a. Anesthesia;

b. Medicine:

i. Cardiology;

ii. Endocrinology;

iii. Gastroenterology;

iv. Hematology;

v. Infectious Diseases;

vi. Internal Medicine;

vii. Nephrology; and

viii. Pulmonary Diseases;

c. Pathology:

i. Clinical;

ii. Anatomic; and

iii. Blood Bank;

d. Neurology;

e. Pediatric;

f. Physical Medicine/Rehabilitation;

g. Psychiatry; and

h. Radiology:

i. Diagnostic; and

ii. Angiography.

APPENDIX H

Essential Burn Resources for a Hospital with a Burn Center
[s. HSS 123.31 (4) (g)]

A hospital with a burn center shall have the following resources:

1. An emergency department, with:

a. One or more physicians in at least their 3rd post-doctoral year who have special competence in care of the critically injured and are on duty 24 hours a day in the emergency room;

b. RNs, LPNs and nurses' aides in adequate numbers, with at least one RN on each shift;

c. Airway control and ventilation equipment, including laryngoscopes and endotracheal tubes of all sizes, a bag mask resuscitator and a source of oxygen;

d. Bronchoscopes of all sizes;

e. Suction devices;

f. An electrocardiograph, an oscilloscope and a defibrillator;

g. An apparatus to establish central venous pressure monitoring;

h. All standard intravenous fluids and administrative devices, including intravenous catheters;

i. Sterile surgical kits for procedures that are standard for the emergency room;

j. Gastric lavage equipment;

k. Appropriate drugs and supplies;

l. Roentgenographic diagnostic equipment;

m. A two-way radio linkage with emergency medical transport vehicles to permit communication with essential on-call physicians; and

n. A section on burn care in the emergency room procedures manual.

2. A post-anesthetic recovery room, with:

a. RNs and other essential personnel available 24 hours a day;

b. Physician (usually anesthesiologist) supervision available from within the hospital 24 hours a day; and

c. Appropriate monitoring equipment, including an electrocardiograph, an oscilloscope and a defibrillator.

3. For the burn center:

a. A designated director;

b. An electrocardiograph, an oscilloscope and a defibrillator;

c. Cardiac output monitoring equipment;

d. A mechanical ventilator and a respirator;

e. A bed scale;

f. Pulmonary function measuring devices;

g. Temperature control devices;

h. Pressure distribution beds;

i. Appropriate drugs, intravenous fluids and supplies;

j. Physical therapy services and hydrotherapy services;

k. Occupational therapy services;

l. Immediate access to clinical laboratory services;

m. A nurse-to-patient ratio of at least 1:2 on each shift (includes all nursing personnel);

n. A physician in at least his or her second post-doctoral year, on duty in the unit 24 hours a day or immediately available to the unit from within the hospital;

o. One physical therapist for every 7 patients, based on 2 treatments required each day;

p. One occupational therapist for every 10 patients;

q. Social workers in numbers appropriate to the need;

r. The daily services of a dietitian;

s. A respiratory therapist available 24 hours a day;

t. Airway control and ventilation devices;

u. Oxygen sources with concentration controls; and

v. A cardiac emergency cart.

4. A renal dialysis center equipped and staffed for 24-hour service each day.

5. Special capabilities in radiology: angiography of all types.

6. Clinical laboratory services available 24 hours a day, including:

a. Routine blood and urine studies;

b. Blood gases and pH determinations;

c. Standard chemistries for blood, urine and other body fluids;

d. Coagulation studies;

e. Serum and urine osmolality;

f. Microbiology;

g. A comprehensive blood bank with adequate storage facilities in the hospital or access to a community central blood bank; and

h. Blood-typing and cross-matching.

7. Special requirements for the operating suite:

a. A surgical RN team leader for burn care;

b. A section on intra-operative burn care in the operating suite procedural manual;

c. A cardiopulmonary bypass pump and oxygentor;

d. An operating microscope;

e. Thermal control equipment for the patient;

f. Thermal control equipment for blood;

g. A fracture table;

h. Roentgenographic equipment;

i. Endoscopes, all varieties;

j. An electrocardiograph, an oscilloscope and a defibrillator;

k. Direct blood pressure monitoring equipment;

l. Temperature monitoring equipment;

m. Blood flow rate monitoring equipment;

n. A dermatome; and

o. A mechanical ventilator and a respirator.

8. A sufficient number of RNs, LPNs and nurses' aides trained in:

a. Burn care;

b. General trauma;

c. Advanced cardiopulmonary resuscitation;

d. Respiratory care;

e. General catheter care;

f. Monitoring and record-keeping; and

g. Areas such as trauma, surgery, neurological surgery and pediatrics for those nursing personnel assigned to special care areas such as intensive care units.

9. Quality assurance programs, as follows:

a. Medical care evaluations — morbidity and mortality review, including review of emergency room deaths, multidisciplinary burn conferences, medical units, medical nursing audits, utilization review and medical records review;

b. Disaster planning and rehearsal; and

c. A planned system for patient transfers after consultation and with prior agreement.

10. Education provided or arranged by the hospital, as follows:

a. Formal programs in continuing education for staff physicians, nurses, allied health personnel and community physicians;

b. An outreach program consisting of telephone and on-site consultations with physicians in the community and outlying areas; and

c. Public education on burn prevention in the home, in industry, on the highways, and on athletic fields; on standard first aid; and on problems confronting the medical profession, hospitals, and the public in regard to optimal care for burn victims.