The proposal to modernize the Public Health Service Indian Hospital includes major functional rearrangement of the hospital departments, provide 100 GM&S beds, and expansion of certain departments to meet program needs not visualized when this hospital was built nearly 30 years ago. While this extensive modernization is designed in three phases, the funding should be established for the total project to insure the lowest cost, to avoid unnecessary confusion during the construction phase, and to minimize contract administrative problems.

Although the original construction cost was estimated at \$1,174,000, revised estimates, dated December 21, 1966, show a need for \$1,502,000.

### TALIHINA, OKLAHOMA

#### 1. Problems

- a. Machinery, electricity, air conditioning, plumbing, etc. needs major modernization throughout. By constructing this project in phases will greatly increase cost of this work by at least 20%.
- b. Lack of coordination between phases and continuity of phases will increase construction cost by at least 15%.

2. Revised Construction	By Phases	By One Construction
Planning	\$ 65,000	\$ 65,000
Construction and Adminis- tration of construction	\$1,802,400	\$1,502,000
Total	\$1,867,400	\$1,567,000

#### 3. Cost per phase:

Phase	I	=60%	-	\$1,120,440
Phase	II	=25%	•	466,850
Phase	III	=15%	-	280,110
Total				\$1,867,400

The Architect recommends that the construction contract on all three phases be awarded as one contract with the proposed phasing setforth as the scope of the work. By having only one bid economy should be achieved as it allows the contractor to bid and buy materials as one project.

# Construction funds for alterations

### Project Cost Estimate

#### Proposed Project

Plans are to modernize the existing Indian hospital at Talihina, Oklahoma to provide 100 general medical and surgical beds with coordinated outpatient facilities and ancillary services. The project involves functional rearrangements in the main hospital building, which presently does not permit efficient and economical operation; correction of problems resulting from the dispersal of supporting activities in a number of buildings at widely separated locations; and modernization of the outpatient department, medical records, waiting room, surgical suite and administrative offices. Some rearrangement and relocation of these spaces as well as other elements of the hospital will be involved. A number of the old buildings will be eliminated through the consolidation of activities.

# Existing Facility

The Talihina Hospital is located in the southeastern corner of Latimer County in southeast Oklahoma. The hospital was constructed in 1938 as a 227-bed general and tuberculosis hospital. It was carried as a 198-bed hospital until 1964. During 1964 there was a reduction in use of TB beds, as new patients were transferred to the State Hospital and in July 1964 the TB unit was discontinued. Currently 114 general beds are available.

The Talihina Hospital is the primary health resource for the Choctaws and other constituent members of the "Five Civilized Tribes". Close identification of the Talihina Hospital with the Choctaws and Chickasaws goes back to the appropriations of 1914 and 1915, which authorized the Secretary of Interior to construct a sanatarium on unallotted lands of the Choctaw and Chickasaw Tribes. Upon reconstruction in 1938 Talihina was designated as a medical center (with a large tuberculosis unit) for the Five Civilized Tribes: Choctaw, Chickasaw, Cherokee, Creek, and Seminole.

### Population and Service Unit Delineation

The Talihina Service Unit comprises 16 counties in southeastern and south central Oklahoma and covers an area of approximately 100 by 200 miles. This is not a reservation area as such. The trust land is scattered throughout the counties within the service unit. It covers the area of land originally allotted to the Choctaws and some Chickasaws.

The 1960 census reported a total of 10,653 Indian beneficiaries residing within the counties comprising the service unit. Of this number approximately 70 percent are estimated to be Choctaws; members of the rest of the Five Civilized Tribes (Chickasaw, Cherokee, Creek, and Seminole) constitute 20 percent, and other tribes, 10 percent.

The age distribution of these beneficiaries differs from other Indian service units. In contrast to the 23 Federal Indian Reservation States where about 55% are under 20 years of age, in Oklahoma slightly over 50% are in this age group. More than 25% of the Oklahoma beneficiaries are estimated to be 45 years and older. This is in contrast to about 16% for Indians in the 23 Federal Reservation States.

### Program Plan

The proposal involves the conversion of the existing 114-bed facility to a 100-bed general medical and surgical hospital, and functional rearrangements of existing space. Included in the bed plan is a 10-bed diagnostic unit for diagnosis of suspected tuberculosis patients and patients with a history of tuberculosis.

In order to provide an operation to achieve the objective of improving the health level of the beneficiaries through the provision of a comprehensive integrated health program, three major shifts in the program are proposed: (1) use of State resources for the hospitalization of tuberculosis patients, (2) establishment of field clinic programs in three isolated locations where there are currently no organized health services, and (3) reorganization of the inpatient and outpatient services, and provision of adequate ancillary services which will meet the special needs of long-term patients, and correct problems involved in obstetrical services.

Health problems of the beneficiaries and services needed for this service unit differ from other Indian reservation communities. A major difference is the age distribution and the larger proportion of older persons. Patients with the degenerative-type illnesses represent a much larger proportion of general patients discharged, and pediatric patients a lower proportion. Distance from the hospital presents special problems, particularly for obstetrical patients. It has been necessary to hospitalize many who travel great distances and who are not yet ready to deliver. Following delivery, delay is also encountered through complications in arranging for transportation.

Many of these patients have had limited, if any, prenatal care and as a result there is a higher proportion of patients who have complications of pregnancy and complicated deliveries necessitating longer hospital stay.

### Mortality

For this service unit the leading causes of death are diseases of the heart, malignant neoplasms, vascular lesions of the central nervous system, accidents, and diabetes. In contrast to experience among other Indian tribes, the degenerative diseases characteristic of the older age groups are among the leading causes of death.

# Morbidity

The leading notifiable diseases for F.Y. 1965 for this service unit were pneumonia, otitis media and gastroenteritis as shown in the following table:

## Leading Notifiable Diseases F.Y. 1965

1.	Pneumonia	137
2.	Otitis Media	123
3.	Gastroenteritis	65
4.	Strep Sore Throat	92
	Dysentery, all forms	37
	Venereal Diseases	20

## Hospitalization

Deliveries and complications of pregnancy were the leading reasons for hospitalization in 1965 and constituted 19% of the discharges. Digestive system illnesses and conditions (gastroenteritis, dysentery, etc.) ranked second (13.1%), allergic, endocrine, metabolic, and nutritional diseases ranked third (11.9%) and respiratory system diseases fourth (10.7%).

Of the total discharges, 19.3 percent were pediatric patients in fiscal year 1965 compared with 19.8 percent in 1964.

Greater emphasis will be placed on prenatal services and particularly on arrangements, long before delivery, for receiving medical services. This relates to the plans for improving field health services and conducting clinics closer to population centers.

F.Y. 1965 Hospital Discharges by Diagnostic Group.

Leading Causes			Discharges	Percent
Total discharges, ex	cl. newborn		1,447	100.0
Deliveries & compl. of pregnancy Digestive system diseases, incl. dysentery Allergic, endocrine, metabolic, etc. Respiratory system diseases including influenza and pneumonia Accidents Circulatory system diseases All other causes			275 190 172 155 (101) 114 126 415	19.0 13.1 11.9 10.7 (7.0) 7.9 8.7 28.7
<u>F.Y</u>	. 1965 Disch	arges by Age		
Age Group	Fire Control		Discharges	Percent
Total, excluding new	oorn		1,447	100.0
Pediatric discharges	(under 15)		279	19.3
Under 1 year Under 5 years 5 - 14 years			77 81 121	5.3 5.6 8.4
Total Adults			1,168	80.7
	Hospital Wo	orkloads	*	
	F.Y. 1964	F.Y. 1965	F.Y. 1966	Projected
Admissions - Total (excl. NB)	1,671	1,509	1,475	1,700
GM&S TB Births ADPL - Total	1,586 85 216 87	1,509 1/ 250 67	1,475 1/ 220 62	1,700  250 80
GM&S TB	52 35	67 <u>1</u> /	62 <u>1</u> /	80
Average length of sta	12.6	16.5	15.4	16.5
Outpatient facility visits Dental Care	11,973	14,605	15,278	15,000
patients examined services provided	665 2,650	1,009 3,759	860 3,223	1,250

# Contract Medical Care F.Y. 1965

	Cases	Days
McCurtain Co. Memorial Hospital Idabel	7	32
Sparks Memorial Hospital Fort Smith, Arkansas	10	81
St. Mary's Hospital McAlester, Oklahoma	23	90
All other	21	93
Total	61	296

# Bed Distribution and Projected Workload, After Modernization

The following is a summary of bed distribution and projected inpatient workload, after the project is completed:

Clinical Services	Beds	ADPL	Admissions
Pediatric Medical Surgical Obstetrical Diagnostic (TB) 1/	14 40 21 15 10	11 3 <sup>1</sup> 4 18 11 6	350 650 320 330 50
Total	100	80	1,700

# Newborn bassinets at present level:

	14
Suspect	_ 2
Prenatal	2
Regular	10

Excluding patients in the tuberculosis diagnostic unit, the length of stay is projected to average about 16.5 days. This is similar to the experience at several larger Indian general hospitals which have specialized services for the long-stay complicated case, in contrast to the short-stay acute general patients.

The percentage occupancy in the general medical-surgical beds averages about 82% (obstetrical beds were estimated at about 75% occupancy). This allows for flexibility during peak periods and provides for isolation and beds for special long-term patients.

l/Identified as G.M.&S patients until the
 diagnosis is confirmed, at which time
 the patient is transferred to the State
 hospittal.

### Outpatient medical clinics

It is anticipated that about 15,000 visits to outpatient medical clinics will be experienced. This estimate reflects increases in specialized clinic services and referrals, expected from three proposed field clinic locations, and from more comprehensive preventive health services to be provided.

It is noted that many beneficiaries are not receiving outpatient care due partly to the fact they cannot easily get to the hospital. The plan therefore contemplates the extension of organized field services to about 3,600 potential service unit beneficiaries who are too far from Talihina (95 to 150 miles) and whose health and economic situation is poor. The establishment of these services at Idabel, Tishomingo, and Ada is expected to result in additional referrals to Talihina for hospitalization. On the basis of the experience at Talihina hospital clinics, it is estimated that about 80% of the population close to the planned clinic locations will seek outpatient services (approximately 2,800 individuals) which will lead to additional hospital referrals.

### Community Hospital Facilities

The possibility of contracting for general medical and surgical beds in southeastern Oklahoma has been studied. According to the Oklahoma State Plan for the Hospital and Medical Facilities Construction Program there are 21 acceptable GM&S hospitals listed in the 16 counties in southeastern Oklahoma which constitute the patient drawing area of the Talihina service unit. Of the 21 hospitals, 8 are in communities where there are unmet bed needs and 3 others had over 75% utilization. Considering optimum utilization as 75% for the remaining 10 institutions, theoretically there are 35 beds available in 7 hospitals, in 6 counties. Except for the one in Ardmore, Oklahoma, which has a capacity of 100 beds (64% occupancy) the others range in size from 10 to 31 beds. These very small hospitals with few available beds cannot be looked to as a resource for providing the specialized type of care and continuity in medical management needed by Indian beneficiaries.

Not only are there the recognized disadvantages of small hospitals with regard to staffing, equipment and flexibility of services for the diversified type of patient load, but such hospital referral practices would negate achievement of the objective to coordinate public health activities in the field with the hospital therapeutic, preventive and restorative health program.