OKLAHOMA STATE SANATORIUM

TALIHINA, OKLAHOMA 74571

TO: Glenn P. Dewberry, M. D.

DATE: August 7, 1973

FROM: Minnie Wagoner

SUBJECT: History of Eastern Oklahoma Tuberculosis Sanatorium

Several months ago, I compiled a history of EOTS for a patient who was interested. I have just attempted to update this history and thought you might be interested, so have attached a copy.

OSS #117

HISTORY OF
EASTERN OKLAHOMA TUBERCULOSIS SANATORIUM

The law authorizing the establishment of this sanatorium passed the Oklahoma Legislature in 1919. This bill stated that tuberculosis was hereby declared to be dangerous to the public health and provided for the establishment of three state tuberculosis sanatoria. At this time, $50,000 was appropriated for the establishment and equipment of a Negro sanatorium at Boley, and $100,000 each for the establishment and equipment of two sanatoria for whites, one at Clinton known as the Western Oklahoma Tuberculosis Sanatorium and one at Talihina known as the Eastern Oklahoma Tuberculosis Sanatorium.

The sanatorium for Negroes at Boley was discontinued in 1931 and provisions were made for the care of Negroes at the Western Oklahoma Tuberculosis Sanatorium at Clinton, where a separate building was allotted to their care.

Eastern Oklahoma Tuberculosis Sanatorium was opened for the admission of patients on November 1, 1921, with facilities for caring for about 50 patients. This sanatorium is located on the Winding Stair Mountain about three miles west and a little north of the town of Talihina. It is located on a ledge of mountains overlooking a broad expanse of the Kiamichi Valley. The hospital is about 800 feet above the valley.

The buildings included the administration building, a frame pavilion, and three frame cottages. The administration building housed the general offices, laboratory, drug room, x-ray room, operating room, examination room, kitchen, and general dining room. All of these were on the first floor; on the second floor were rooms for the female employees. The open-air pavilion, with its screened-in sleeping porches and private dressing rooms, gave the patients the benefit of the pure mountain air while in bed on the sleeping porches.

At the time the sanatorium was opened, it was generally thought that the principal function of a tuberculosis sanatorium was not so much the curative and educational part in the fight against tuberculosis as the isolation of old chronic cases. Therefore, many of the first admissions were the more advanced and hopeless cases.

In the summer of 1924, an additional hospital building was built, giving the institution 100 beds, which soon became inadequate for the demand of the eastern half of the state. This building, two stories high, was built of faced brick and was fireproof throughout. It accommodated 50 patients and contained its diet kitchen, treatment room, pharmacy, and general work rooms. Each patient had an individual room with hot and cold running water, toilet and linen closet, which opened out onto the screened sleeping porch by French doors. The arrangement of the building placed each patient on the south side to give them a large amount of breeze in the summer and a protection in the winter. Each patient slept on a sleeping porch, except in very bad weather.

The sanatorium was a little village of its own with all conveniences of a city. The laundry, power plant, and steam plant were located just north of the other buildings. The power plant furnished light for the entire institution at this time. The steam plant heated all buildings, furnished tanks of hot water and steam for sterilizing dishes and cooking utensils and for sterilizing in the operating room, and furnished power for the laundry.

Methods used in the treatment of tuberculosis were artificial pneumothorax, heliotherapy, certain types of vaccine, rest, fresh air, and good wholesome food. The education of the patient was not overlooked. He not only had to learn to "acquiesce gracefully" in the daily chase, but he was taught to take care of himself so that when he left the institution he would not spread the infection. He was also taught how to keep well.

In the Recreation Building, the patient was taught an occupational therapy to give him a vocation suitable to his physical condition so that he would not be a burden to his community when he left the institution. He was also entertained by moving picture shows and other amusements in the Recreation Building.

In January, 1925, a new 150-horsepower steam boiler was added to the central heating plant, giving the institution two boilers to be used simultaneously or separately. In December of the same year, a new five-inch steam line was connected into the power house and laid through a new concrete tunnel to distribute steam to all the buildings. This saved labor and fuel and gave greater heating efficiency.

In July, 1925, the Legislature appropriated $45,000 for the construction of a new nurses home at the sanatorium. This building, completed in April, 1926, was a two-story brick building, fire-proof throughout, with hot and cold water in each room, linen closet, and extra electric receptacles. The rooms opened onto a screened sleeping porch with French doors. The basement contained a small kitchen and laundry for the nurses' personal use. Each floor had its own large living room with a large home-like fireplace.

In October, 1927, construction was begun on a new service building; this building was completed in 1928. This building housed the kitchen, dining room, store and cold storage rooms, and a large auditorium, as well as quarters upstairs for employees.

In May, 1927, another step was made in the development of the physical equipment with the installation of what was said to be the most powerful x-ray in any hospital in the state.

In May, 1928, there were estimated to be about 12,000 persons in Oklahoma in need of tuberculosis treatment. There were less than 600 beds available for this purpose. There were no facilities whatsoever for caring for white and Negro children suffering from tuberculosis. The two state-operated institutions, the Eastern and Western Oklahoma Tuberculosis Sanatoria, were growing institutions, but were as yet entirely inadequate to care for all who needed treatment.

In November, 1928, EOTS had a capacity of 100 beds and was carrying 120 patients (20 patients over capacity) and had a waiting list of about 100 patients. The institution had a well-equipped kitchen and dining room. The food was well prepared and the dishes were sterilized in live steam under pressure. There was a power plant furnishing heat and light, a laundry, cold storage and ice plant, dairy barn and Holstein dairy herd. The water supply was derived from springs and surface water that came off Buffalo Mountain.

The ward buildings for patients were equipped with open-air sleeping porches

and steam-heated dressing rooms. Methods used in the treatment of tuberculosis were rest, food, fresh air, artificial pneumothorax, sun baths, x-ray, and some special treatments as needed. For diagnosis, there was a well equipped laboratory and guinea pigs for doubtful diagnoses.

A moving picture show was provided once a week in the new service building for those patients who were able to be up and attend. There was a non-denominational Sunday School each Sunday morning, Christian Endeavor each Monday evening, and church services two and three times a week, the pastors of the churches of Talihina taking alternate weeks with occasional services held by visiting ministers.

Clinics were held over the eastern part of Oklahoma periodically by the superintendent and field nurse with the aid of the local health units. These clinics had the advantage of finding early cases of tuberculosis that still had a chance to get well.

At this time, the state still had two great needs in its anti-tuberculosis campaign. The first was additional and more adequate sanatoria to care for adult cases. The second was provision in the immediate future for the care of child cases. It was felt to be virtually impossible for children and adults to be treated in the same sanatorium unless special wards for each were provided.

A 65-bed children's building was added to the sanatorium in 1930. This building was two stories in height and consisted of a center portion with wings on each side. The wings were used as sleeping porches on the south with dressing rooms opposite on the north. The central portion downstairs had a large reception room for visitors, a head nurse's office, a treatment room, and a spacious dining hall and kitchen. The second floor had two isolation wards of four beds each, two rooms for nurses, a solarium, and a school room. This building was a complete unit within itself, but was heated from the central heating plant.

The public school operated at the Eastern Oklahoma State Tuberculosis Sanatorium served students who had had their normal school progress interrupted because of tuberculosis. The school, which attempted to aid the student in making nearly normal progress toward high school graduation, was fully accredited as a part of the Talihina Public School System. To teach in the school, the teacher was required to have a special education certificate with at least a Bachelor's Degree, including special work in the field of Art Education, Home Economics Education, and Elementary Education. Funds were provided for the operation of the school by a special appropriation of the State Legislature. The Medical Staff of the sanatorium, under the direction of Dr. F. P. Baker, Superintendent, determined when the student could start attending classes and the number of subjects he was physically able to carry.

At the time of the completion of the children's building, known as the Harper Building, there were enough children on the children's waiting list to occupy every bed and applications were still coming in. The Harper Building filled a long-felt need in Oklahoma's anti-tuberculosis campaign.

Also in 1930, the road from Talihina to the sanatorium was improved, with three new bridges adding much to its passability. The state and county used not to maintain all the roads. There was a time when Talihina closed up and had "work days" in order to keep the road passable. In those days, the three-mile trip from Talihina to the hospital took 15 or 20 minutes and sometimes you couldn't get there. This trip now takes three or four minutes.

The following was taken from an article in "Mountain Air", a monthly publication of Eastern Oklahoma Tuberculosis Sanatorium, December, 1930:

> It is believed that it would be a good idea to give a summary of the work done and things accomplished at the sanatorium during the last three years.
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> The patient capacity at the sanatorium three years ago was 112; today, it is 185. The ladies pavilion has had some sun parlors partitioned off into bedrooms, more patients were crowded into the hospital building, and the adult capacity was increased to 125.
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> The new children's building, which was completed in June, 1930, is equipped to house approximately 60 patients. These beds are not all filled because a certain number must be held open to isolate any children suffering from contagious diseases such as mumps, measles, whooping cough, etc. . . . This building is a success from every standpoint. It was no trouble to fill it with children who are, beyond a doubt, afflicted with childhood tuberculosis.
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> Eastern Oklahoma Sanatorium is located on a bench of the Winding Stair Mountains 3.6 miles from the little town of Talihina, and the altitude is close to 1,000 feet above sea level. The institution is now comprised of six brick buildings, a large frame building for ambulatory patients, four small cottages, a dairy barn, and a mule barn. Of the brick buildings, one is the administration building; one the dining hall, auditorium, and ice plant; one houses the power plant and laundry; one serves as a home for nurses and other female employees; one houses some 70 hospital patients; and the other is the Harper Building for children. These buildings represent the investment of about one-half million dollars.
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> Three years ago, the water supply at the sanatorium was a problem. The institution had outgrown its water supply and it was nothing unusual in the summer time for sanatorium employees to have to go from one creek hole to another with a pump and coal oil engine and pump water. During the summer of 1929, it became necessary to limit the amount of water, and regulations had to be made as to how the water could be used. Water was turned off at intervals and then turned on just for absolutely necessary purposes.
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> This water problem has been solved. The sanatorium now has over a mile of cast iron water main leading from the sanatorium to the city mains of Talihina. These city mains receive water by gravity from the new Talihina Lake which covers some 30 acres and has its water supply from the hillsides that are not inhabited and has very little vegetation. The water from this source is considered to be free from contamination by disease germs. This water does not come all the way to the sanatorium by gravity but has to be pumped over 1500 feet and lifted nearly 140 feet to the water tank.
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> With the increase in patient capacity naturally comes an increase

in the dairy herd. A gradual weeding-out process has taken place in the dairy herd and cows that were boarders have given way to cows of sufficiently high milk production to justify feeding them. The dairy herd is still not large enough to furnish all the milk that is needed in the sanatorium. We are trying to build up a registered Holstein herd and at this time there are six registered cows, the rest being grade Holsteins of high milk production.

. . . The dairy barn is modern in every respect and is of sufficient size to take care of 24 milch cows. An electric milking machine has been installed and the milk goes from the cows through a cooling machine and from there into half-pint bottles which have first been sterilized in live steam. The milk is served in these bottles, soda straws being provided with which to drink the milk.

An endeavor to increase the beauty of the grounds has been made. Shrubs have been planted, lawns are mowed, more roadways have been made, sidewalks joining all buildings have been constructed, and stumps and rocks have been removed from the grounds. There are 620 acres in the sanatorium reserve but not over 20 acres are serviceable for grounds and garden purposes, the most of this land being in woods and hillsides. The sanatorium proper will cover about 12 or 15 acres.

The X-Ray Department has been enlarged, and just recently has acquired one of the latest automatic fluoroscopic tables; in fact, it is said to be the first one of this type out of the factory of the General Electric Company.

Two violet ray lamps have been added, one being used in the solarium at the Harper Building and one in the general treatment room.

The Administration Building has been remodeled and several new storerooms and rooms for employees have been added.

Although its growth has been slow, it has been steady, and we feel quite proud of the little institution Oklahoma has provided for tuberculous patients in the eastern district of the state.

Even with the above-mentioned improvements and additions, the waiting list at the sanatorium continued to grow.

In 1932, a three-story brick Infirmary Building for women, 80-bed capacity, was constructed. This building was used to take care of the more advanced patients and also was used as a receiving ward. Due to a decrease in the 1932-33 appropriation for the sanatorium, field work was discontinued. Also in 1932, several hundred evergreens of different varieties were planted around the various buildings, adding greatly to the beauty of the grounds.

Improvements in 1936 included the addition to the hospital building of a kitchen and dining room with sun porch on top, connecting off south center of the building, known as "South Porch". A sun porch for heliotherapy treatments, or sun baths, was added to the children's building.

With the completion in 1936 of a modern brick building to replace the former cramped, small milk house, the institution had one of the best equipped milk plants in Oklahoma. The equipment included a 200-gallon pasteurizing machine. Equipment was also purchased to enable this plant to manufacture its own milk products, such as cottage cheese, cultured buttermilk, butter, etc.

In 1937, the largest and most costly edifice to grace the group of buildings on the hill at Eastern Oklahoma Tuberculosis Sanatorium was completed. The building cost $184,000.00, 45% of which was allocated funds from the PWA. It was 200 feet long by 40 feet wide, three stories high, and had a capacity for about 140 beds. In addition, there was a spacious storage basement covering about one-half the floor space area. The building was of brick construction and framework reinforced concrete. Floors were terrazo throughout. There was a large elevator in the center of the building to facilitate movement from floor to floor. The building also had a motor-driven dumb waiter for carrying food from floor to floor.

In the basement was located a refrigeration plant which took care of ice and refrigeration for the building. There was also an incinerator that connected near the nurses' station on each floor; this incinerator was for burning sputum cups, paper napkins, and various debris that came from the patients' rooms. This was the first building in the institution to be equipped with an incinerator.

On the first floor were the kitchen and dining room for the entire building, the reception and waiting room, nurses' office and chart room, and the doctors' examining room. Throughout the building and in each ward and room was an electric call system which registered in the halls on each floor and then in turn registered on the first floor, signaling the nurses' attention. These signal plugs were also equipped with radio jacks. Each end of the building was segregated from the other so that men patients could be accommodated on the east wing and women patients could be accommodated on the west wing.

At the time of completion of this building, the waiting list for patients was over 100 men and 100 women. Therefore, immediately after the building was opened, it was filled to capacity and, instead of the 60 to 80 patients it was constructed to house, the building continuously carried almost 160.

At no time since the establishment of the sanatorium had there been sufficient bed capacity to admit all of the people needing hospitalization for tuberculosis. This condition necessitated rules and regulations for the admission of patients, with a view of doing the most good for the patient and being the most economical for the state. In order to do this, it was considered more advisable to admit patients who had a chance to recover and would only be hospitalized from nine months to a year and who, upon dismissal, would be of value to the community by again becoming useful citizens.

Since the institution was established, duties increased from the original intent, and in 1937 included outpatient consultation and diagnostic service for doctors throughout the state. The sanatorium staff consisted of four physicians who were experienced in chest diagnosis. There was up-to-date x-ray equipment and a bacteriological laboratory with skilled technicians. As time had passed, the institution had adopted the modern methods of treating tuberculosis and had changed from its idea of a home for incurable cases of tuberculosis to an institution that utilized all the up-to-date methods to control tuberculosis.

Rest remained the most important factor in treating tuberculosis, while nourishing food and fresh air retained their importance. Artificial pneumothorax was used in about 25 percent of the cases. Phrenicneurectomy and thoracoplasty operations were performed when indicated by the regular staff at the sanatorium. At this time, the institution of 370, including the children's building.

Hospitalization of children for primary tuberculosis was discontinued in 1941 when it was determined that hospitalization was not necessary for this type of the disease. This building was remodeled in 1948 for employee housing.

Another 100 patients' beds were added by constructing two wings on the Infirmary Building, these wings being opened for use in August, 1952. A new dining room and kitchen were added at the same time.

Treatment of tuberculosis was revolutionized in the late 1940's with the advent of certain drugs. Previously used surgical procedures employing lung collapse therapy were largely abandoned. The drugs continued to improve, and thus better chances of recovery and shorter hospital stays resulted. However, the basic reason for the accelerated decline in tuberculosis is the improved social and economic conditions in the country plus the introduction of tuberculosis drugs.

The Indian Sanatorium at Shawnee and the Talihina Indian Tuberculosis Unit were closed in the 1960's. The same decade also saw the closing of the tuberculosis unit at the Veterans Hospital in Sulphur.

On March 30, 1972, the Western Oklahoma Tuberculosis Sanatorium at Clinton was closed and all patients were transferred to Eastern Oklahoma Tuberculosis Sanatorium. Hospital facilities for tuberculosis patients remaining in the state were at the state sanatorium at Talihina and the tuberculosis unit at the Veterans Hospital in Oklahoma City. County health departments continued to provide diagnosis and outpatient treatment. Only about 30 to 40 percent of the patients need hospitalization and their average stay is about 90 days.

Effective May 2, 1973, the name of Eastern Oklahoma Tuberculosis Sanatorium was officially changed to "Oklahoma State Sanatorium" by the State Legislature.

In June, 1973, Dr. R. LeRoy Carpenter, State Health Commissioner, announced that, effective July 1, the Oklahoma State Sanatorium would assume increased outpatient responsibilities. The following article appeared in the "Oklahoma Health Bulletin" for June-July, 1973:

> "Expansion of tuberculosis outpatient responsibilities for the Oklahoma Tuberculosis Sanatorium, Talihina, will take effect July 1," announced Dr. Richard Burke, Director, Tuberculosis Division, State Health Department.
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> Tuberculosis case records and x-ray films of patients from 12 southeastern Oklahoma counties will be periodically reviewed and recommendations made by the sanatorium medical staff, beginning July. In addition the staff will serve as visiting tuberculosis consultants to five counties. These services were previously provided by the State Health Department, Tuberculosis Division.

"With the inpatient load of the sanatorium continually decreasing and the increased importance of outpatient treatment, the State Health Department feels staff physicians at the sanatorium should be allowed to take on greater responsibility in the area of outpatient care", the director said.

The State Health Department will continue to handle TB case and drug review, along with the processing and interpretation of x-ray films from the rest of the state.

The twelve counties involved are Sequoyah, McIntosh, Haskell, LeFlore, Pittsburg, Latimer, McCurtain, Pushmataha, Choctaw, Bryan, Atoka, and Coal. The sanatorium physicians will be holding TB clinics at county health departments located at Poteau, Idabel, Eufaula, McAlester, and Sallisaw.

At present, Oklahoma State Sanatorium has a patient capacity of 150. Most of the patients are over 50 years old; however, the ages range from teenagers and younger to the very elderly. The older patients require more individual attention, medical and nursing, and more specific and extensive drug regimens.

Patients who require major chest surgery are referred to the University Hospital, Oklahoma City. For other surgery and for consultation service, the services of the McAlester, McAlester, Oklahoma; Talihina Indian Hospital, for Indian patients only; and the regular services of specialists in internal medicine, pulmonary disease, cardiology, radiology, and ophthalmology are used.

An outpatient clinic is held for diagnostic purposes and for checkups of ex-patients, their families, and others. In addition, personnel periodically review and make recommendations on case records and patients x-ray films from 12 counties and the staff serves as visiting consultants to five counties. The sanatorium is also responsible for furnishing tuberculosis drugs for outpatient use throughout the state.

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