

Louis G. Foley, Chairman, State Board of Control: This is the first time in many meetings that every superintendent has been present. In view of the severe weather and the extremely bad condition of the roads, we are especially pleased to see you all here today.

Due to its interest in improving the sanitary conditions at the state institutions and the standard of the medical care of the patients there, the Minnesota State Medical Association desired to make a survey at the institutions under the supervision of the State Board of Control. They did this, and I am pleased to introduce to you this morning Dr. Theodore H. Sweetser, chairman of the Committee on State Health Relations, who will tell us something about the results of that survey. Dr. Sweetser.

37-RSM-THS

RESUME OF MEDICAL SURVEY OF STATE INSTITUTIONS

Theodore H. Sweetser, M.D.

Chairman, Committee on State Health Relations
Minnesota State Medical Association

Mr. Foley, Ladies and Gentlemen: In May 1934 the suggestion was made to the Minnesota State Medical Association that a survey of the medical services in the state institutions be made by a committee of the Association. It was felt that such a survey might protect the institutions against irresponsible and unwarranted criticisms, and might result in some helpful suggestions. The Council of the State Medical Association recognized the probable mutual advantage of closer cooperation with the state institutions under control of the State Board of Control. The task of making the survey was assigned to the Committee on State Health Relations.

After discussions in the committee and with members of the Board of Control and the director of one of the institutions, an outline was drawn up and the first visits were made late in 1935. After much effort and delays of various sorts the last survey visits were made in July 1936. It is to be understood that the report regarding each institution is for the date on which it was visited, and that changes may have occurred since.

The committee appreciates the helpful cooperation of the medical officers of the various institutions. The informal conversations during the visits brought out some valuable suggestions.

The survey covered in general twelve subjects: hygienic conditions; food; labor or occupation of residents or inmates; disciplinary measures; recreation and exercise; size and type of institution; hospital, including equipment, records, laboratory, provisions for outside consultation and for emergencies, autopsies, and medical research; medical personnel; nursing personnel; druggist; other personnel; and any medical service to employes.

I. **Hygienic Conditions**, including ventilation, heating, fire hazards, refrigeration, washing facilities, plumbing, sewage disposal, crowding, provision for isolation of contagious diseases and tuberculosis. Plumbing, ventilation, heating and refrigeration equipment are all inspected by the Division of Sanitation of the State Board of Health and the State Safety Commission from two to four times annually. Refrigeration is also inspected and supervised by the State Dietitian.

Plumbing is of excellent quality and well kept in newer buildings (for instance, at the Cambridge institution), but is antiquated in many of the older buildings, being forty years old in the main building at the Fergus Falls State Hospital. Naturally the maintenance of such old plumbing in hygienic condition is a difficult and eventually a losing fight in spite of the best efforts possible. Money should be sought fairly soon for adequate overhauling or replacements of plumbing in some of the older buildings.

I should like to ask, in this connection, if anything has been done at Fergus Falls with regard to straightening that difficulty out.

W. L. Patterson, M.D., Superintendent, Fergus Falls State Hospital: So far as I know there has not. The same plumbing is there. We have not made much headway toward replacing it because the money has not been available.

The electric wiring has been placed in conduits, but that is about all.

The wear and tear on that old plumbing has been tremendous and eventually it will break down unless we get money from somewhere to put in new plumbing fixtures.

Mr. Foley: Dr. Patterson, that all comes under repairs and replacements.

Dr. Patterson: It comes under repairs and replacements, but the way it is now it is going to take a lot of money to replace that equipment. We should have about \$15,000 to improve that plumbing, put the electric wires in conduits, and replace piping which is corroding and rusting. The ordinary repair fund which we get (last biennium we got \$12,000) is inadequate for any extensive repairs. It is just enough to keep the institution functioning.

C. R. Carlgren, Member State Board of Control: Mr. Chairman, I may say on this question that the appropriations asked for repairs and replacements in the budget requests now pending before the legislature are in substantial amounts, especially for the larger institutions. What we shall be able to do in the coming biennium of course depends upon to what extent the requests are granted. If we should receive from the legislature the amounts requested, considerable overhauling of old equipment could be carried on in all the older institutions.

Dr. Sweetser: This is not meant as simple fault-finding.

Mr. Foley: That is true, Doctor. We appreciate that.

Dr. Sweetser: Sewage Disposal was unsatisfactory at Cambridge (into Rum river), Ah-gwah-ching (but plans being made), St. Cloud (but will connect with plant for city being built), Willmar (plant being built), Faribault School and Colony for Feeble-Minded, Red Wing (into Mississippi river), Hastings (appropriation for new plant made—into Vermillion river now), Shakopee (into Minnesota river), Stillwater (into St. Croix river, provision being made for plant), Gillette (into St. Paul sewers, metropolitan plant being built), Anoka (inadequate, plans being made). Arrangements are satisfactory at Fergus Falls, Sauk Center, St. Peter, Faribault School for Deaf, Faribault School for Blind, Owatonna State Public School and Rochester.

Have plans at Ah-gwah-ching been fixed up yet? I understand there were some plans being made for that.

Mr. Foley: Not yet.

Dr. Sweetser: Have connections been made at the St. Cloud plant?

Mr. Foley: No.

Dr. Sweetser: Is the plant completed at Willmar?

Mr. Foley: That has been completed.

Dr. Sweetser: School for Feeble-Minded?

Mr. Foley: Nothing has been done at this time. The city is talking about building a plant.

Dr. Sweetser: Red Wing?

Mr. Foley: Nothing done yet.

Dr. Sweetser: Hastings?

Mr. Foley: That is completed.

Dr. Sweetser: Shakopee (into Minnesota river). Anything done about that?

Estelle Jamieson, Superintendent, State Reformatory for Women: Nothing.

Dr. Sweetser: That is a small institution.

Mr. Carlgren: The only possibility there would be joining with the city. Negotiations are under way for a joint disposal plant.

Dr. Sweetser: Something like St. Cloud?

Mr. Carlgren: That is right.

Dr. Sweetser: Stillwater. Has provision been made for the plant there?

Mr. Foley: The contract has been let.

Dr. Sweetser: Anoka?

Mr. Foley: That is practically finished. Just finished.

Mr. Carlgren: Did you state that arrangements were very satisfactory at a lot of institutions?

Dr. Sweetser: According to our report; yes.

Mr. Foley: We have a new plant at Sauk Center.

Mr. Carlgren: There is no treatment at Owatonna whatsoever.

Mr. Foley: None whatever. We are negotiating now with the city.

M. R. Vevele, Superintendent, State Public School: The Owatonna sewage goes into the Straight river. We are going in with the city of Owatonna on a sewage disposal plant.

J. C. Lysen, Superintendent, School for the Blind: The School for the Blind and the School for the Deaf go in with the city and the sewage is sent to the river.

Dr. Sweetser: That is not very satisfactory. That was evidently missed in this survey. Different ones made surveys and it is very likely they could have missed some points.

Ventilation in most buildings is by windows only. We are pleased to note the presence of air-conditioning in most of the St. Peter Hospital, in two infirmary buildings at the Ah-gwah-ching Sanatorium, and in parts of some other institutions.

For Refrigeration there is wide variation in methods, which are reported to be satisfactory. Most of the institutions have a large ammonia plant to carry most of the load, with ice or electric refrigerators for special work, such as laboratory and small special diet kitchens. A question of purity might be raised as to the source of ice at Sauk Center. This might be further investigated by an epidemiologist from the State Board of Health.

Inez B. Patterson, Superintendent, Home School for Girls: Every cottage at the Home School has an electric refrigerator and the water is from the city supply, which is satisfactory.

Dr. Sweetser: I thought they cut the ice from the lake. There is no control of the drainage there.

Miss Patterson: That ice is used for some refrigeration, but the food does not come in contact with it.

Dr. Sweetser: The Board of Health investigates the source of supply, so I suppose that would be satisfactory.

Heating is supplied by a central coal steam plant in most of the institutions, although at Sauk Center there is a separate plant for each unit, and at Faribault all three of the institutions use natural gas instead of coal. The steam plant at Fergus Falls, in addition to heating all the buildings, runs the dynamos by the exhaust steam and thereby furnishes all electricity needed.

Are there any other institutions that use the exhaust steam for electricity?

Mr. Foley: It is the same at all of them.

Dr. Sweetser: Fire Hazards have been largely eliminated in the new buildings in some of the institutions. However, there are some spots of very considerable danger; for example, the third floor dormitory at Red Wing and some of the older buildings at Rochester, and at the School for the Deaf. Our survey did not go into details in this respect.

This whole problem of fire hazard should be gone over by the medical officers of the institutions and referred to the proper authorities.

Fire protection was not checked in most institutions. Fire drills occasionally, at least for employees, might be valuable in the larger hospitals if not now provided.

Mr. Carlgren: It may be said that there were a number of requests made of the legislature two years ago that were not granted. They are again renewed this year. We hope we shall be able to add fire escapes, for example, to the third floor dormitory at Red Wing; to the third floor of cottages at Anoka; and several other places.

Dr. Sweetser: What about fire drills for employees and patients? Are they used anywhere?

Mr. Foley: How many of you have fire drills?
(Several superintendents raised their hands.)

Dr. Sweetser: It would be a big advantage to have the employees know where their stations are in order to avoid panics.

Mr. Foley: I think that is a good suggestion, Doctor.

Dr. Sweetser: Washing Facilities were satisfactory in most cases. In one institution it was suggested that individual towels (paper or others) for kitchen personnel be substituted for the one roller towel in use. At Red Wing it was noted on one visit that more frequent changes of towels might be provided with advantage. While such a need is often noted in any household with boys in their teens, the special need in the circumstances is worthy of note.

Overcrowding was noted at Fergus Falls, St. Peter (in one ward), Faribault (all three schools), Rochester, Red Wing, Gillette (in parts), and Stillwater (not the hospital). The School and Colony for Feeble-Minded, with a capacity of 1,800, normally has a population of 2,800. The Rochester State Hospital, with a capacity of 1,400, had 1,562 patients, with beds or cots put up in halls each night. The Gillette Hospital, with a few vacant beds in the total, was overcrowded in some departments, so that we found cots in one corridor (porches are used in the summer).

Mr. Carlgren: I believe, Mr. Chairman, that situation is altered now. At the present time the situation is different at the Gillette State Hospital. A fourth hospital for the insane is being built at Moose Lake. Do we admit overcrowding at Red Wing?

H. E. Hegstrom, Superintendent, State Training School: I do.

Mr. Carlgren: We have asked for an additional cottage at Red Wing. If the appropriation is granted, that will relieve the situation there.

J. M. Murdoch, M.D., Superintendent, School for Feeble-Minded: The School for Feeble-Minded, with a normal capacity of less than 2,000, is now caring for 2,315, and there is a waiting list of over 1,000 committed as feeble-minded to the guardianship of the State Board of Control.

The capacity of the School will be increased about 200 when the hospital and the addition to the Boys' Custodial Department, now in course of erection, are ready for occupancy. However, there will still be great need for additional provision for the feeble-minded.

Mr. Carlgren: Two new cottages have been completed at Cambridge that are now being occupied. There is a new hospital building nearing completion at the School for Feeble-Minded and an addition to the Boys' Custodial Building. This, admittedly, does not meet the situation so far as the feeble-minded who have been committed to the guardianship of the Board but not yet admitted to the institution are concerned, but a bill has been introduced in the legislature for the establishment of a new institution for the feeble-minded in the northern part of the state. What action the legislature will take we cannot forecast. If that legislation should pass, we should be able to meet that situation in Minnesota.

Dr. Sweetser: Prevention and Isolation of Contagious and Infectious Disease. We have reports of some testing and inoculation for the preven-

tion of communicable diseases on admittance at Cambridge, Sauk Center, St. Cloud, and Gillette. There may be similar provisions elsewhere, as this was not definitely included in the survey. Isolation of contagious diseases is satisfactory in most cases, but could hardly be called adequate at Willmar, St. Peter, Stillwater, and Anoka. The provision is reported as very poor at the School for the Deaf, non-existent at Hastings, and being remedied by new building at School and Colony for the Feeble-Minded at Faribault. A survey of the provisions for tuberculosis in state institutions was made at the direction of the Board of Control in 1935, and arrangements now seem to be adequate. Provision is made for transfer of active cases of tuberculosis to the more favorably fitted institutions. Does anybody want to say anything about it?

Mr. Carlgren: Dr. Hilleboe, may we hear from you on this subject?

H. E. Hilleboe, M.D., Director, Division of Tuberculosis, State Board of Control: Following the survey of 1935, it was deemed advisable to have examinations of all the patients who had adult-type tuberculosis in 1936 in order to determine which were active and which were inactive cases and whether isolation or medical care and treatment only were needed. This survey was completed last week. There are approximately 1,100 cases of adult-type tuberculosis in sixteen institutions, concentrated mostly at Willmar, Fergus Falls and St. Peter, with isolation centers also at the State Prison and at the Willmar State Asylum. Perhaps the best facilities exist at Willmar because of the fact that there are separate buildings there of approximately 100-bed capacity. The Board of Control is contemplating the concentration of adult cases at the Willmar State Asylum, so that the active cases can be definitely taken care of.

I think it can be said that the original survey carried out in 1934-35 led the way for definite plans for taking care of tuberculosis cases, and I think that during 1937 all the tuberculosis cases will be under adequate control from the point of view of isolation as well as of medical care and treatment.

Dr. Sweetser: Dr. Burns also deserves a great deal of credit for that survey, if I understand it correctly.

Mr. Foley: Yes; it was his job and Dr. Hilleboe's.

Dr. Sweetser: I appreciate this as a very fine piece of work, and I am glad that the State Board of Control worked it out before we made this survey. It is a very good arrangement so far as I can see.

As far as contagious diseases are concerned, do any of you want to make any remarks?

I understand that a hospital building is being erected at the School for Feeble-Minded.

Mr. Foley: Yes.

Dr. Sweetser: What about the School for the Deaf?

Leonard M. Elstad, Superintendent, School for the Deaf: Our hospital, which is a frame structure, is forty-three years old. It is entirely inadequate, accommodating only eighteen children, while we have more than

three hundred in the School. We should have at least forty beds. The fact that we have both boys and girls adds to our problem. It seems impossible to prevent epidemics. When it becomes necessary to isolate certain cases, we have to push some of the boys out of their dormitory so that we may use it for an isolation ward. They double up with other boys. As the halls are all open, we have had to board them up.

We have asked for a new hospital.

Dr. Sweetser: What about Hastings?

Wm. J. Yanz, Superintendent, Hastings State Asylum: Where it has been necessary to isolate cases, we have used the basement in the hospital.

Dr. Sweetser: Have you been able to handle it in that way, or have epidemics spread?

Mr. Yanz: We have, up to this time, had very few cases for isolation, but when we had any we used a large room in the basement under the day room in our hospital. This room has two outside walls well lighted; also has an outside entrance, as well as an entrance to the hospital.

Cases isolated in this room have an attendant with them at all times. This attendant does not have any connection with any ward or the hospital during the time he is caring for the isolation cases.

Dr. Sweetser: What about Anoka?

M. W. Kemp, M.D., Superintendent, Anoka State Asylum: We do not have a separate building for isolation at Anoka, but we have rooms in the basement, which have separate bath and toilet facilities, in which we are able to take care of contagious diseases that require isolation. During the past winter we have had three cases of scarlet fever which were started from a patient who had been home for Christmas, and two more were exposed and susceptible before we found out about her exposure. Using isolation technique, the scarlet fever was stopped right away and we had no further cases.

Mr. Foley: We do not have much contagion in our larger institutions. There is more contagion in our institutions for children.

What about Red Wing, Mr. Hegstrom?

Mr. Hegstrom: We have had very little contagion.

Mr. Foley: Have you had adequate means for taking care of contagious diseases?

Mr. Hegstrom: We have a third-floor ward that we use for isolation purposes. It is very seldom that we have occasion to use it.

Mr. Foley: Miss Patterson, what has your experience with contagion been?

Miss Patterson: In the seven and a half years that I have lived at Sauk Center we have had one case of scarlet fever, one of mumps—one girl had an attack of mumps three weeks after admission—and four cases of flu.

Each girl has a room alone, which I think is a great help; besides strict isolation at the hospital.

Mr. Foley: You have never had an epidemic?

Miss Patterson: No; no measles or scarlet fever in epidemic.

Mr. Foley: Whooping cough?

Miss Patterson: Not any.

Mr. Foley: Mr. Elstad?

Mr. Elstad: A small child contracts contagious diseases very easily, and when you have twenty-five children in a dormitory and one returns from his vacation with some contagious disease he can expose the whole group. We had 107 cases of mumps last year.

If we had the small children in a unit by themselves, they would not be continually spreading epidemics among the older children.

Mr. Foley: We are working on that. We have asked for a new hospital building.

Mr. Carlgren: We have asked for a new hospital building at the School for the Deaf and for a new school building for the younger children. Besides school rooms this building will have dormitories, recreation rooms, dining rooms and kitchen. This will separate the younger children from the older ones. If it is possible to secure that grant, the situation at your institution, Mr. Elstad, will be complete in so far as housing facilities are concerned.

Mr. Elstad: That is right.

Dr. Sweetser: **II. Food.** Food quality; balanced ration; water; supervision of cooking; table service; food handlers, their health and medical inspection; and washing facilities. Food quality, preparation, balanced rations, refrigeration and table service are inspected and overseen by the State Dietitian who visits each institution at intervals. Many of the institutions have trained resident dietitians. In most cases the food was reported as adequate and varied and well prepared; one visitor classed the food at one institution as "institutional." Examination of food handlers when hired in all but one institution, and periodically in most; not adequate in two institutions. Washing facilities for food handlers were adequate in all but one or two places. We recommend the periodic examination of food handlers by the medical staffs in all institutions.

III. Labor and Occupations of Residents or inmates vary greatly according to character of the institutions. At some institutions all occupations are represented while at the State Sanatorium the patients do no work at all. Work of the institution is done largely by patients in many of the places; such is done under supervision, and seems to be largely planned either for its later occupational value to the individual patients or inmates or for its therapeutic value in the individual case.

IV. Disciplinary Measures. In most places discipline is maintained by loss of privileges for most offenses and seclusion for serious offenses. These seem to be sufficient without force or physical chastisement.

In Red Wing there is some provision for corporal punishment under very strict control and safeguards. I think there is nothing like that anywhere else. What about Sauk Center?

Miss Patterson: No; we have nothing of that kind.

Mr. Foley: The ages of the boys in Red Wing range from eleven years up to twenty. Nothing impresses them so much as corporal punishment, although it is not used very often. It is administered by the superintendent and the superintendent alone.

Dr. Sweetser: **V. Recreation and Exercise** varies greatly according to the type of institution and physical and mental condition of the patients or inmates. In every institution we found a very wholesome attitude and an attempt to keep up the morale. Occupational therapists are extensively used in giving exercise and recreation as well as in teaching. In some of the institutions, notably the State Sanatorium, there is a definite effort to furnish recreation and educational facilities to the employees as well as to the patients.

VI. Sizes and Types of Institutions. There is a great variation among the institutions under the State Board of Control both as to type and size. (There are individual reports for each institution.)

VII. Hospitals. These vary in importance and size, comprising the entire institution in some cases and being a relatively small department in some of the penal institutions. (There are individual reports covering the sizes of the hospitals and the percentage of occupancy.)

Records vary somewhat in type but are adequate in each case, although there appears to be no note as to the type of record at St. Cloud and Shakopee.

Miss Jamieson: Our cases needing hospitalization are taken care of by the University Hospital with the exception of tonsillectomies and spinal punctures. We have adequate facilities for isolating contagious cases if the need arose.

Dr. Sweetser: You have some record on such cases?

Miss Jamieson: Oh, yes. We keep complete records on all cases, the University submitting a report on all findings.

Dr. Sweetser: **Laboratories** vary considerably in equipment and size with the relative importance of the hospital in the institution. The employment of a permanent technician in the laboratory at Cambridge, St. Peter and Stillwater might be considered if money can be found. Dr. Hemstead would like to find some way of turning back some paper films, which were sent to him for chest work and which are not as satisfactory as the regular safety films. We agreed with him on this. There seems to be no laboratory in the School for the Deaf or the School for the Blind, but there is a satisfactory arrangement for laboratory work outside the institution. Apparently no technician is needed in the laboratory at the State Public School at Owatonna and at Hastings and Anoka asylums. There is no definite note of a laboratory at Shakopee.

Miss Jamieson: All of our laboratory work is sent in to the State Board of Health for diagnosis with the exception of urine analysis which our staff physician does.

Dr. Sweetser: There is Provision for Emergencies and for Consultations at all the institutions. We are glad to note that some attempt is being made at research in cooperation with the University in some institutions. Some institutions report no autopsies while Rochester reports 33 per cent, Willmar reports 54 or 55 per cent, and Gillette State Hospital 100 per cent, through the remarkable efforts of the superintendent. Autopsies are almost never done at the penal institutions. Ah-gwah-ching Sanatorium expresses a desire for the addition of a pathologist to its staff.

With regard to the 33 per cent of autopsies at the Rochester State Hospital, I presume that work was done with some help from The Mayo Clinic.

Mr. Foley: Yes.

Dr. Sweetser: We will have to take our hats off to the Gillette State Hospital. Miss McGregor's efforts have certainly been outstanding.

With regard to Ah-gwah-ching, did you get a pathologist to do your autopsies?

H. A. Burns, M.D., Superintendent, State Sanatorium: Not yet. The autopsies are performed by members of the staff. We have not yet secured the services of a full-time pathologist for this purpose.

Dr. Sweetser: How do you get along with that?

Dr. Burns: We are doing fairly well, although it crowds us at times a good deal. We performed about 32 per cent of autopsies during the calendar year 1936.

Dr. Sweetser: What about the penal institutions? Of course there might be considerable criticism in event there were an autopsy.

Mr. Foley: Deaths are not frequent at the penal institutions. Should there happen to be a death by accident, of course that would be a case for the coroner.

Dr. Sweetser: I understand that at Cambridge they have considerable difficulty when they request an autopsy. Would it not be well, when an autopsy is requested and refused, to have that refusal noted on the patient's chart?

Mr. Foley: We do that in the majority of cases.

D. E. McBroom, M.D., Superintendent, Colony for Epileptics: When an autopsy is refused at our institution, we make a notation to that effect.

Dr. Sweetser: What percentage are you getting?

Dr. McBroom: Not any. It has only been within the last year that we have made such a request.

Dr. Sweetser: Have you been turned down?

Dr. McBroom: With every one.

Dr. Sweetser: How many?

Dr. McBroom: I think about eight.

Dr. Sweetser: Maybe Dr. Wilson has some idea how that may be obtained.

L. B. Wilson, M.D., The Mayo Clinic, Rochester: It is a very difficult problem. Intelligent persons will consent to an autopsy, but the lower the grade of intelligence, the lower percentage of autopsies will there be. Many of them have not had any responsibility for the care of their relatives in the institutions for a long time, but after the death of those relatives they immediately assume all responsibility when the question of an autopsy is brought up.

Geo. H. Freeman, M.D., Superintendent, St. Peter State Hospital: I think we could get the relative who had not seen the individual concerned for ten or twelve years to consent to an autopsy if we could get him to come to the institution so that we could talk things over with him. But now all we can do is send a wire telling the relatives that the patient is sick and then, in a few days, send another wire stating that the patient has died and asking if they will permit an autopsy. We do not even see their folks, because the patients have been so long absent from the family that they have lost all interest in them. When you send a telegram, they are not going to grant an autopsy. If you could talk with them, no doubt you could get as high as seventy per cent. We get about thirty-three per cent autopsies. I am surprised that we get that many. Most of the relatives live a hundred miles away. All of them live at least as far as St. Paul. Some live up north much farther than that. Unless someone who is versed in the situation can talk with these folks, we are not going to get the autopsy.

Dr. Sweetser: Couldn't you telephone?

Dr. Freeman: You cannot get permission over the telephone unless you are dealing with a dummy. Most of them haven't even a telephone. It would be a very small percentage that we could reach by phone. Unless you can get personal contact with people you can't get autopsies to any large extent.

Dr. Sweetser: You seem to be very successful, Miss McGregor. What do you do?

Elizabeth McGregor, Superintendent, Gillette State Hospital: If I cannot reach the people I call the family doctor and tell him what we want. He has personal contact with them, and I ask him to telegraph me their permission and then send it in in writing.

When a child is very ill, we keep the family doctor informed as to its condition. Either Dr. Chatterton or the staff doctor caring for the child writes to him, and thus the family doctor is kept informed about the condition of the patient.

If we are not able to contact the family doctor, we ask that some member of the family come to the Hospital if possible. If I can get a member of the family to come to the institution, there is practically never any difficulty. I have not much persuasive power over the long-distance telephone, but it has been years since we have been refused.

Dr. Freeman: Isn't there a difference with Miss McGregor? She is dealing with children who have been at the institution a comparatively short time. After our patients have been in the institution about ten years, the only time we hear from the relatives is when they want to get a divorce or something like that.

Miss McGregor: We send to every parent a copy of our findings in the case of every post-mortem, and sometimes they are asked to go in and have a talk with their family doctor. He also is given a copy of the findings.

Dr. Sweetser: Do you think it would help any if I should bring up this matter at the secretaries' conference which we have Saturday? Men from the county societies all over the state will be there. We could even publish in *Minnesota Medicine* this idea that the family doctors could help the state institutions a good deal if they were willing to go out of their way a little.

Mr. Foley: It often happens that relatives with whom we have had some contact when the patient was first admitted drop out of his life when they find that there is no hope for him, and they stay out until his death. A number won't even pay the small amount that we ask for the maintenance of a patient. Where a person has been the sole charge upon the state for a number of years, I think it would be a good thing if we could have legislation to the effect that an autopsy could be had for research purposes when that patient died.

Dr. Sweetser: I do not know whether you could get away with it without putting it in the blank of admission, but if some law could be devised it might clarify the situation and give you some authority. In mental hospitals it is pretty hard to get very far with any research problem if you cannot have autopsies.

Mr. Foley: Dr. Smith, at the quarterly meeting at the Rochester State Hospital a short time ago one of the doctors from The Mayo Clinic gave us a very good talk on that subject, and told us what he had found in some of the post-mortems. Would you mind telling us about some of the unexpected things which have been found at different times?

B. F. Smith, M.D., Superintendent, Rochester State Hospital: I do not recall the specific pathology that was found in the few cases that Dr. Robertson discussed, but there are frequently many interesting things that are found in complete post-mortems.

We have had a few cases of ruptured aneurysms during the past year that we did not expect. There were two cases that died within a few minutes and one within a few hours. We thought it was a heart condition, but it turned out to be a ruptured aneurysm.

Autopsies are very important, and I think that if the medical staff is quite interested in obtaining autopsies and will devote a little time to talking matters over with the relatives and explaining in a scientific way what a post-mortem is for, that permission may be obtained. In those cases where we do not have a personal interview, I think it is well to ask permission by telephone. Occasionally we get an autopsy by telephoning the relatives. We make every effort we can to obtain autopsies. It is true that if we cannot

finish our case by complete autopsy we have not completed our records and our research is not complete.

Dr. Sweetser: Do you try to reach the family in the home?

Dr. Smith: No; very seldom have we contacted the family physician. We have in one or two instances, but we do try to reach the relatives by telephone, because we can explain to some extent by telephone. Of course we cannot always reach them by telephone, but in a great many cases we can. The intelligence of the relatives, plus the amount of time that one spends in trying to explain to them what is wanted, seems to determine the percentage of our autopsies.

Dr. Wilson: I have had considerable experience in this, and I would hesitate to recommend any law requiring autopsies in state cases. It has been tried in several states and has created much resentment. There is probably a higher percentage of autopsies in Minnesota than in any other state in the Union. There were 2,450 autopsies done in the University medical school last year. There is no other center that approaches it. We have in Rochester about 750 autopsies a year. At the Clinic we get about 95 per cent if we can have a personal interview with the relatives, and about 50 per cent if we contact them by telegraph.

M. C. Petersen, M.D., Superintendent, Willmar State Asylum: At Willmar we have been having 60 to 70 per cent autopsies.

In some cases, where the patient was not in good condition, we have written to the relatives to get permission for autopsy.

I think we could get at least 80 per cent if we could locate the relatives. In many cases we can not locate them.

Dr. Sweetser: We wrote to the American Medical Association for a booklet entitled "Essentials in a Hospital Approved for Residencies in Specialties." They have this to say regarding autopsies:

"Thoroughness in post-mortem performance should be emphasized. All hospitals desiring approval for the training of residents must examine post-mortem 15 per cent or more of their fatal cases. The necropsy records should be complete, should be kept on file, and should include a summary of the clinical record.

"Necropsies should be witnessed as often as possible by the resident. He may, with value, participate in their performance, in the writing of the protocols, and in preparing the final record in which appears a detailed description of both the gross and the microscopic observations."

We cannot hope to have our institutions approved for residencies unless we can have at least 15 per cent autopsies.

VIII. Medical Personnel. The details will be found under the individual surveys. The staffs seem to be sufficient for the ordinary work but apparently not sufficient to allow time for research, although some institutions are doing research in cooperation with the University or with The Mayo

Foundation. Dr. E. J. Simons of Swanville reported that the ratio of medical staff to patient population is smaller there than in any other tuberculosis sanatorium in the state of Minnesota.

IX & XI. The Nursing and Other Personnel vary greatly according to the needs of the various institutions. Individual surveys cover the details.

X. Pharmacists run the drug rooms at Ah-gwah-ching, Fergus Falls, St. Peter, Rochester, and Gillette. Drugs are dispensed by the medical staffs at Cambridge, Sauk Center, St. Cloud, Willmar, State School and Colony for Feeble-Minded, Red Wing, Hastings, Stillwater, and Anoka. Special drugs from drug stores for Willmar, Red Wing and Hastings. No druggist is present but no provision noted at School for the Deaf and at the State School at Owatonna. Drugs furnished from town drug store for School for the Blind and at Shakopee.

XII. Medical Service to Employees. We are pleased to note that medical attention to non-medical employees for illness is by private physicians in nearest towns in case of most institutions. However, this practice is not universal for employees quartered at some institutions. The problem deserves study and some declaration of principle by the State Medical Association and the State Board of Control. Of course there can be no objection to institutional care of accidents and illnesses occurring in line of duty.

The question that was raised by several persons in the State Medical Association was that engineers and various employees in these institutions should be on the same basis as employees of other kinds of institutions and be taken care of by their own family physician in the town. That is a question that may raise a great deal of protest.

Mr. Foley: In most institutions they have that same procedure now.

Dr. Sweetser: Of course in industrial accidents they can be taken care of, especially when in residence in an institution, but I mean cases of colds and pneumonia or something else that has nothing to do with their employment.

Is there any question that anybody cares to ask about that?

Dr. Freeman: I think it is generally understood that a hospital running a training school takes care of the nurses that become ill.

Dr. Sweetser: I think in some hospitals that is true except for illnesses not relating to their employment or training. Then they get their own physician.

Dr. Freeman: I question that. I think in most hospitals they have the attending doctor on the staff and that doctor is not paid.

But, to get back to St. Peter, it is rather generally understood that if you have maintenance in the institution you can consult one of the physicians, but we discourage it, and we much prefer to have outside physicians take care of our employees, but we will provide hospital facilities for them if they are in residence. That is as far as we go. That practically only includes our nurses and a few other employees. The engineer lives outside

the institution, and his own physician takes care of him. If an employee lives down town, we won't go down there to see him. He has to be with us if we take care of him. In that way we have eliminated a lot of cases.

Dr. Sweetser: Are the nurses in training different from the graduate nurses?

Dr. Freeman: I think, if the superintendent of nurses became ill, one of my physicians would take care of her unless she wanted her private physician. We would be glad to have her get him.

Dr. Patterson: The situation in the hospital at Fergus Falls is not very different from what it is at St. Peter. The employees are given their choice of whether they want to have one of the doctors in the institution or whether they will call in their physician at Fergus Falls. Almost invariably they choose one of the staff physicians because they do not want to pay the bill of someone outside. If they live in the institution and room there, it is customary for them to have one of the staff physicians. A good many of the outside physicians do not care much about coming up to the institution to take care of an employee who lives there. We have asked employees a number of times to get an outside physician but, either because he was too busy or for some other reason, he did not care to attend them; he preferred to have us do it; so our physicians have practically got to take care of them.

We do not take care of any employees who live in Fergus Falls. They call whatever doctor is available.

Dr. Sweetser: It would be pretty hard not to take care of the student nurses, but I do not know about the rest of them.

Dr. Patterson: If they have to have operative procedure, that is something else. We will not do it. We call in a surgeon. That is the situation as it exists in the hospital at Fergus Falls at the present time. We could refuse to take care of any of them when they are sick, I suppose, and have them secure an outside physician, but in a hospital such as ours it is much easier for the staff physicians to take care of them than it is to call anybody in from the outside. That is, those who reside in the institution; not those who do not.

Mr. Hegstrom: Those of us who do not furnish medical service are put on the spot because some of the other institutions furnish it to employees.

Mr. Elstad: Doesn't it seem reasonable, if a teacher gets the mumps from teaching a class, that she should be entitled to more than she would if she should get the mumps from somebody down town? I think she is entitled to some consideration. The same would apply if they get scarlet fever in the same way. It is in the line of duty.

Dr. Sweetser: I suppose that would be in line of duty.

Mr. Carlgren: As stated by Miss McGregor and Mr. Elstad, wouldn't it be fair for a resident employee who contracted a contagious disease in the line of duty to receive special consideration from the institution?

Dr. Sweetser: I might remark that in our private hospital, St. Mary's, in Minneapolis, we do take care of our student nurses. There is no question of pay or anything. But our graduate nurses, whether living in the hospital or not, pick out their own physician and settle the thing privately.

Mr. Carlgren: Irrespective of the nature of the illness?

Dr. Sweetser: I should think an injury in the line of duty would have to be taken care of by the institution. In those cases these hospitals carry compensation insurance; the patients receive compensation for the time they lose; but the hospitals do not carry anything for the hospitalization because the individuals carry that themselves. They do not carry anything for medical care, either, in most institutions, so that if the patient pays you anything you have to get it on the side out of his compensation for time lost. Something of that sort.

Aside from the problems noted in the survey, there are a few other recommendations that deserve consideration.

1. For the general public health we feel that money should be spent to make sewage disposal at all state institutions modern and hygienic. We feel that sewage should not be allowed to contaminate any river or lake. This is brought into prominence especially by the low level of the state rivers and lakes in the last few years.

2. The method of care and commitment of the criminally insane has been a subject of separate consideration. We hope that the arrangements made and plans advanced by the Board of Control in this past summer will prove satisfactory. Some study should be made as to the feasibility of psychiatric as well as psychologic study of all inmates at penal institutions at time of admittance.

Mr. Foley: We are doing that now. We have had a psychologist all the time.

Dr. Sweetser: I think the discovery of mental disease in these people at the time they are committed for an offense is an important thing for the protection of the population. I think it is a little different from psychology.

Mr. Foley: If there is any question about an inmate's mental condition, we get someone from a state hospital to examine that person very thoroughly.

In addition to that, we have our own psychiatrists who go to the institution when requested by the warden or the superintendent to make a study of those cases and advise what should be done.

Dr. Sweetser: The proposition that we wanted you to think about and see what might be done about was to have a psychiatrist look at these people when they are committed. Maybe that seems way beyond the possibilities, but it is worth thinking about.

Mr. Foley: If you are going to do that, it should be taken care of before the patient goes to the institution. It should be taken care of by the district

court. It is not done. That is the trouble. We get people who should never be in such an institution.

Dr. Sweetser: This was brought up by a pediatrician. It would be very interesting to know about it, especially with regard to encephalitis and criminal conduct; not only from the standpoint of research but also from the standpoint of how it is to be taken care of. That would be important to the population at large.

Mr. Carlgren: You are dealing with quite a question, I fear.

As you all probably remember, the classification law enacted two years ago established a new procedure in the handling of persons convicted of crime. Under that law they are now all sent by the court to the State Reformatory at St. Cloud, but it is to be borne in mind that, while the legislature enacted that law, they made no appropriation for it. The expense incurred is paid out of regular appropriations made for the State Reformatory and for the State Prison. Each is charged with its proportion of that expense.

I do not question the value of psychiatric service. As Mr. Foley stated, it is being utilized in all questionable cases. All cases are given a psychiatric examination, and a complete investigation and case history is developed in the case. I feel that the present classification law could well be amended so that the court may commit the men to either of the two penal institutions, and the Classification Board continued with the power to transfer. I feel that would make it possible to carry out more effective classification in the two penal institutions.

This present biennium finds our own state department in a little different position than it has ever been in the past and possibly ever will be in the future. We are obliged to go before the legislature asking for a deficiency appropriation of some \$800,000 on account of inadequate appropriation made two years ago.

Dr. Sweetser: We appreciate that and the opportunity to talk this over with you. It is a matter of outlining the problems in which we think there should be some interest. Those things have to be taken up, of course, if we are to do anything with them in the future.

Mr. Carlgren: By the way, we are going before the legislature to ask for some supplementals. One of those supplementals covers a new unit for psychiatric service in the hospital at the State Prison.

Dr. Sweetser: You have your psychological study to determine the mental grade of these people, recognizing that persons of a low grade of mentality are likely to get into trouble.

The mentally ill, due to loss of their sociologic balance, you might say, get into trouble in just the same way. We think it is just as important that they have the same study.

Dr. Freeman: I think the situation is probably more adequately handled than you think it is, because every inmate who comes before the Board

of Parole appears before a psychiatrist, so that there is a rough screen which sifts out cases which deserve further study; anything that is reasonably obvious is checked out and reserved for further observation; so that psychiatric studies are made on quite a number of cases. If a man is obviously mentally peculiar, his case is called to the attention of the psychiatrist, who visits the institution every month.

This matter is not so much neglected as we are led to think by this discussion.

Mr. Carlgren: Don't you think you could add to that statement, Dr. Freeman, by saying that the inmates are constantly observed by the institution physicians, and if the conclusion is reached that there are any mental difficulties involved attention is called to that fact and special examinations held?

Dr. Freeman: Yes.

Dr. Sweetser: To continue with our recommendations:

3. There should be some further study of salaries of the medical personnel at Minnesota state institutions as compared with those in similar institutions elsewhere in order that any gross inequalities may be removed if found to exist.

4. New methods of furnishing medical care are being tried at several institutions, notably at Red Wing. We hope that these experiments will be given adequate trial before further changes are made. We would appreciate some later news as to the impressions of the Board of Control and the affected superintendents and medical personnel regarding the working of the methods being tried.

I suppose you know what we are driving at. Especially in some of the smaller institutions, a great deal of difficulty is sometimes experienced in finding the most satisfactory way in which to take care of illness, and we appreciate that the Board and the various superintendents have tried to work that out in the best possible way. The fact that there are changes occasionally in methods shows that there is an attempt to improve and progress all the time. We hope that any one method that is being tried newly will be tried long enough to prove its worth.

Mr. Foley: With regard to Red Wing, the specific place mentioned, we did make that change. There are two worth-while clinics in Red Wing, and we have made arrangements with them to alternate that service.

Mr. Hegstrom: They are alternating their service every two months.

We now have a complete medical arrangement, including specialists to care for eye, ear, nose and throat defects, which we did not have before. Formerly the work was one of the family-doctor style, with these clinics donating their services in order to help the Red Wing hospitals.

Dr. Sweetser: The period of time which each clinic takes care of your boys may be varied, I suppose, according to how you and they feel it will work out the best. There is always that question.

Mr. Hegstrom: The eight months that we have been using the Red Wing clinics have definitely improved our medical program. The doctors are not only giving us the usual attention but many other services. As an example, for years we have had eight or nine tonsillectomies a year compared to our estimate of seventy-five this year. Consultation with other medical men is always available and no efforts are spared in providing the best of treatment and care of the boys, believing this to be an important part of the rehabilitation program.

Mr. Elstad: In institutions like ours, where the children are not wards of the state, I think it is always a question just how much medical attention should be given to them free of charge by the institution physician. We have an eye, ear, nose and throat man in Faribault who is on our staff, who does the tonsillectomies. I suppose most of those cases could be done at home in the summer, but they are not. In many cases, of course, the parents do not have the money.

Our doctor is very much interested in this situation. He does not know what the proper procedure is in such cases.

Dr. Sweetser: If you will write us a letter, we will take that matter up with the Association and see what they think about it.

There are two more recommendations which I should like to bring to your attention.

5. We believe that a conference between the medical officers of the institutions and the Dean of Medical Sciences or other officer of the University Medical School may result in some means of making more use of the opportunities for medical research in the institutions. For instance, it has been suggested that one subject for research might be a study of post-encephalitic children in relation to later criminal tendency.

6. We note that this year the Gillette State Hospital is the only state institution approved by the American Medical Association for residencies. Previously at least one other institution was on the approved list. We suggest that the problem be studied, the requirements ascertained and fulfilled, and request for approval of other institutions made by the Board of Control. If the larger institutions can be approved by the American Medical Association for residencies in specialties, it may be possible to work out some plan through the medical school or The Mayo Foundation so that fellows can be assigned to these institutions without much cost to the state. We note that the 1936 list of hospitals approved by the American College of Surgeons includes the Gillette State Hospital for Crippled Children and the Minnesota State Prison hospital. This matter deserves attention, also.

Mr. Foley: With regard to that, I will say that since that report was made the Fergus Falls State Hospital, the Rochester State Hospital, the St. Peter State Hospital, and the State Sanatorium have been approved by the American College of Surgeons.

Dr. Sweetser: Has the American Medical Association approved any others?

Mr. Foley: I think not.

Dr. Sweetser: It should be perfectly easy for other institutions to fulfill the requirements of the American College of Surgeons.

Mr. Foley: I understand that they are to make a thorough survey of our other institutions.

Dr. Sweetser: The members of the Committee on State Health Relations appreciate the courtesy and hospitality shown us by the Board of Control and the medical officers and superintendents of the various institutions. We really feel that the visits we were privileged to make were a broadening and valuable educational experience, as well as a pleasant one.

Mr. Foley: We appreciate all you have done for us, your fine cooperation. I am sure that I speak for all the institution heads as well as for the Board.

The next topic is "Advisability of Having Fellows Serve a Period of Time at Institutions in Connection with Studies Carried On at The Mayo Clinic."

A year ago last summer the Board of Control and the Board of Regents met in Rochester, and it was decided at that time to try having fellows serve a period of time at the Rochester State Hospital. The experiment has proved to be very successful. We have had wonderful cooperation from the Medical Foundation at the University and from The Mayo Clinic.

A few weeks ago we had another meeting with the heads of the Medical Foundation and The Mayo Clinic. At that time we invited Dr. Balfour, Dean of Fellows, to come up here and speak to us on this subject, but he was unable to come today, so Dr. Wilson is to speak to us in his stead, and will tell us how this work is to be carried on and how successful it is hoped it will be.

ADVISABILITY OF HAVING FELLOWS SERVE A PERIOD OF TIME AT INSTITUTIONS IN CONNECTION WITH STUDIES CARRIED ON AT THE MAYO CLINIC

L. B. Wilson, M.D.

The Mayo Clinic

Mr. Chairman, Ladies and Gentlemen: I am just pinch-hitting for Dr. Balfour. He would probably have taken up certain viewpoints with which I am not so familiar, but there are some things which I may be able to put before you to show clearly the place which the work which you have been discussing from the medical side occupies.

Mostly, you are concerned with the care of the mentally sick. You have good personnel on your staff. But you need new ones all the time, and it is a little difficult to get them. I suspect you all now have vacancies where you could use a few men adequately trained in psychiatry and neurology. Not many men are coming into that field.

At a meeting a week ago in Chicago, there were some very significant things decided upon pretty definitely by the Central Advisory Board for Medical Specialties. The Board of Surgery was accepted. The Board of Psychiatry and Neurology has been in existence for some little time.

The longest discussion we had in the Advisory Board was on questions pertaining to problems you have here; that is, whether the several boards would make suggestions to the different institutions as to what should constitute adequate training in various specialties; whether or not they would lay down specific rules.

Instead of making any specifications as to what should be required as a preliminary measure, every board, particularly the Board of Psychiatry and Neurology, very emphatically agreed that it would not enact any specifications. That leaves the whole thing up to the institutions concerned.

Let us confine ourselves to the Board of Psychiatry and Neurology. The members of that board all agree with one general principle, that graduate training must be a minimum of three calendar years. That does not mean that one year of residency may not be of value to the general practitioner when coordinated with other work. It is conceded that a year in many state institutions would be of some value for training in psychiatry, but it is hardly to be conceded that a one-year-trained man would be considered a psychiatrist or neurologist. If the Board of Control does set up independent residencies, it should make provision for the continued residence for a minimum of three calendar years. Not that every man must be continued for three years, but that there is the possibility, if he is good enough, of his being carried on for a period of three years.

Another requirement is that during that time he must have at least half of the time for clinical work in his special field.

Next, there must be opportunity for the graduate man to more familiarize himself with those features of the basic medical sciences which pertain