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STATE OF MINNESOTA

MEMORANDUM

April 2, 1969

TO: Morris Hursh
Commissioner

FROM: David J. Vail, M.D., Director
Medical Services Division

SUBJECT: The Staffing Problem and State Hospital Futures

I am writing this to present to you my thoughts on the staffing problem and the future of state hospitals in Minnesota. You may want to share these ideas with the Governor, the State Planning Agency, and others in the Executive Branch; or with the Legislature.

I. The Staffing Problem

The essence of the staffing problem is captured in the nursery rhyme:

> There was an old woman who lived in a shoe.
> She had so many children, she didn't know what to do.
> She gave them some broth without any bread,
> Spanked them all soundly, and sent them to bed.

Note that the verse captures the input atmosphere of haste, harrassment, and confusion. Note the outcome, which is explicit on two points: (1) underfeeding (broth without bread) and (2) indiscriminate corporal punishment (sound spankings for all). The outcome also implies curtailment of activities (sending them to bed).

The processes described, affecting both the old woman and the children, are akin to those which in Minnesota we have generally ascribed to dehumanization.

1. The riddle

But the old rhyme, which is so self-evident on its face, also contains a riddle, and here is the riddle: How many children did the old woman have?

How many children is too many?

This question gets to the heart of the staffing problem, that is, the problem of staff:patient ratios.

2. Factors in the riddle

There are at least three factors that would get us closer to an answer to the riddle. Of these, the most important would be, what kind of children are they? Are they healthy, self-sufficient, and normally cooperative? Are they over-

active, rambunctious, quarrelsome, or hateful? Are they, on the other hand, dull, listless, or so physically or otherwise handicapped as to require special attention to basic bodily needs?

Another factor to be reckoned with is the condition of the shoe, especially the amount of crowding that may exist and other aspects of the immediate environment that may affect the behavior of the inmates; as well as the adequacy of labor-saving devices.

Finally, one must consider the condition of the old woman. How loving is she, how able to tolerate stress and primary process demands, how strong and alert, how well prepared for her duties? How much help does she have?

There are striking analogies between the riddle of how many children are too many and the staff situation in mental hospitals. For instance, at what point does the staff become like the old woman, so that they don't know what to do and they take shortcuts?

Stated more positively, at what point is the staff adequate to do the job?

This is the place where we now find ourselves in the Minnesota state hospitals. There has been a drastic reduction in the past ten years in the number of persons to be taken care of. At the same time there has been a shift in the type of case toward individuals requiring on the average more attention and special care than previously. One must recall that the baseline from which change is calculated was never adequate as to staff:patient ratios. Moreover, various factors, including higher expectations than previously, have meant that a different kind of job is being done than was true ten or even five years ago.

3. How much ward staff is enough?
I think we should aim for the situation where, at any one time, one staff person on duty, dealing directly with patients, should not have to take care of more than 8 individuals. This is a reasonable, manageable span of control in groups, recognized by industry, group therapists, and the military. Variance might range between 1:12 in some groups to 1:4 or even more concentrated in groups with special needs.*

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* I saw recently a situation wherein it took two able-bodied men to calm down, wash, and dress, a single brain-injured young man; here the staff:patient ratio was 2:1.

Taking a 1:8 ratio for purposes of argument as a reasonable standard, we must reckon a few extra elements into the calculation. On the one hand, there is the well-known fact that providing a 1:8 ratio around the clock on the ward means that there must be 4.7 staff persons in toto to maintain the one at a time and thus the overall on-duty ratio on the ward is really not 1:8 but 4.7:8, or better than 1:2. In addition, there are the many supporting personnel needed to maintain and supply the essential transaction that is taking place on the ward.*

One must look further beyond the staff:patient ratio to what is being done at a particular time. There are two main processes at work, going on more or less simultaneously. One is that much of the activity on wards has nothing to do directly with personal relationships between staff and patients, but rather is impersonal: sorting clothes, house cleaning, doing chart work, etc. Generally, it could be said that though there has been progress in recent years in defining the tasks on the wards and allocating them to specialists, the situation is still far from satisfactory. One has to reckon with the fact that the impersonal tasks are less demanding than the personal ones; given a choice, despite protestations, staff will tend to graviate to impersonal tasks.

Another process going on is that increasingly, as off-ward activity programs and especially productive work programs improve, there are during normal working hours fewer patients on the ward than there used to be in past years. The number of patients off wards is proportional to their capability; thus wards occupied by able-bodied, fairly capable persons may be virtually empty during daytime hours.

It is not clear to me from my observations whether staffing practices have really caught up with the facts of occupancy. Thus, I have found wards with only a dozen patients there -- the others are at work or elsewhere -- while the 2 or 3 staff may be in the office doing chart work, stacking clothes, etc.; and sad to say the staff may be rarely engaged in interactions with patients beyond group TV-watching (student nurses are an exception).

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* There are analogies to the military situation, regarding the question of how many troops and how much supply are needed to maintain one front-line combat soldier. A World War II homily had it that one American infantry-man required 20 headquarters personnel and ten trucks, the British soldier took 10 headquarters personnel and one truck, the German, 5 headquarters personnel and one truck; while the Russian needed only a spoon in his boot. Another military analogy to the staff:patient ratio of current interest is the problem of how many U.S. soldiers are needed to win American objectives in Vietnam. How much is enough?

One wonders also whether the staff concentrations on the three daily shifts are entirely realistic if staff:patient interaction is the object. The nursing departments have long since worked out the schedules for activities, or more accurately duties: both the impersonal ones like cleaning, bed-making, and laundry sorting, and those that are personal but are often treated impersonally such as feeding and bathing. But are the staffing patterns related to the facts of the diurnal variations in occupancy? If they were, then the greatest staff concentration on wards with working patients would be between the hours of 5 - 10 p.m., when there would be more patients on hand to converse with; but such is not usually the case.* Night shifts should probably be better manned than they are, for then there would be a chance for staff to interact with restless, insomniac patients; and what better opportunity would there be to get caught up on chart work?**

A first basic principle would appear to be: Allocate staff to where the patients are. This is simple enough on its face but in the traditional hospital it can be complex, even impossible. For different staff occupy different territories, and though patients may move around during the day, staff do not, as they are bound to departments or department-owned territories by and large. The way out of the dilemma is not clear; possibly we should think in terms of a total pool of patient-related personnel and not in terms of so many personnel on the ward, so many in school, so many in rehabilitation, etc.

4. How much non-patient-related personnel are enough? This question refers to the large number of supporting personnel in the various shops and offices that make up the total complex of the traditional hospital. These places have been often patient-related in that they have depended on patient help in order to function, a situation which is, in my opinion, basically wrong. They may more legitimately be patient-related by serving as training resources.

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* In this connection, the deadness of hospitals during the weekends is well known and difficult to counteract. The problem is not unlike that of service agencies dealing with working-class clients who can only get to the center on evenings or weekends. An obvious factor is that the staff wishes to enjoy the evening and weekend leisure hours that are the custom of the general community.

** Night shifts, of course, are notoriously unpopular, and with good reason, for they may produce a form of schizophrenia in the worker. They are sometimes assigned in order to punish or show disfavor.

I believe it would be a valid long-range goal to eliminate as many as possible of the non-patient-related jobs in the hospitals. There are two main avenues to reach such a goal. (1) Drop the function entirely, and replace it on a purchase or contract basis. (2) Automate.

Minnesota has made significant progress in recent years along the first approach (i.e., elimination) by phasing out farms, by purchasing power, and by consolidating laundries.* A plan to try pre-packaged foods may significantly affect the enormously busy and costly food service industry in mental hospitals.

Automation as such is at present weakly developed, though there have been attempts to study the application of systems like Addressograph. There is every reason to expect that in the future functions like record-keeping (clinical, administrative, and financial), communications, and possibly other functions could be handled in whole or in part by automation.

It is true that as functions have been phased out up to now the state has saved little or nothing, for the personnel line items are moved into more vital areas to compensate for long-standing deficits; but sooner or later that situation should change.

Thus, a second basic principle would be: <u>phase out as many as possible non-patient-related jobs</u>.

<u>THE TWO BASIC PRINCIPLES</u>, then, are:

(1) Allocate staff to where the patients are.
(2) Phase out as many as possible non-patient-related jobs.

5. <u>Result</u>

The result should be a gradual "tightening" of staff:patient ratios to where the patient-related staff is not only properly <u>allocated</u> in terms of numbers and span of control (see #3, above); but also properly <u>functioning</u>. At the same time non-patient-related staff should be reduced as functions may be dropped or done by automation.

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* It is astounding to realize that as recently as 1955 Minnesota erected at the Rochester State Hospital a new and completely equipped slaughter house!

My Guess at this point is that, given some variation depending on the total population of the facility, its layout, and in particular the nature of the caseload, the overall gross staff:patient ratio will end up at around 1:1. This ratio would provide on the average for one staff per shift:8 patients, or 4.7:8 around the clock on the wards; with the balance of 3.3:8 made up of activities, social service, other special professional (including medical), and managerial personnel, plus the various supporting groups.

II. The future of state mental hospitals

1. Populations

I predict that state hospital populations will continue to drop, possibly even at an accelerating rate. The factors in favor of this prediction are those that have existed so far, only enhanced: greater acceptance of mental problems in the wider society, more and better non-state programs and facilities, and especially better financing systems (through insurance, state-to-local reimbursements, grants, etc.)

The factors against a further decline of the state hospital population must also be reckoned with. The two most potent in my opinion are:

(1) The pressure resulting from recognition of need of and public demand for service to previously neglected or semi-neglected caseloads. Notable examples are chronic alcoholic offenders, sexual offenders, heavy users of drugs other than alcohol (especially young adults), borderline anti-social personalities, and other similar groups. The persons I am thinking of are not mentally ill in the professionally-accepted sense of the term; though they are "of unsound mind" (old definition of "mentally ill person") and have a "disorder which substantially impairs (their) mental health" (Minnesota Hospitalization and Commitment Act definition of "mentally ill person"). I call them hard-core losers, and I believe this is as good a term as any. Many of them are with us now; many are adrift in the general community; no doubt some are at any given time in lock-ups, jails, workhouses, reformatories, or prisons.

(2) Staff anxiety about dropping populations and the resulting threat to an individual's particular job and even the future of the hospital is an extremely powerful force in maintaining hospital censuses. One does not like to acknowledge this officially, but it exists.

2. Regionalization
The Department of Public Welfare has a long-range plan for the state mental hospitals. This is the regionalization plan, whereby the present mentally illness and mental retardation hospitals will become more nearly alike in their function. The plan calls for Fergus Falls, Brainerd, Moose Lake, Willmar, St. Peter, Cambridge, and Rochester State Hospitals to be responsible for out-state regions of several counties; each region consisting of 2 to 4 mental health-mental retardation areas; while Anoka, Hastings, and Faribault State Hospitals will be the primary state resources for the seven county metropolitan area.*

The regional hospitals will all have program development and planning responsibilities for the three major problems of mental illness, mental retardation, and inebriacy and the age sub-groups of adolescents and geriatrics.

The beauty of the regionalization plan is that it does not pre-suppose or assume the actual existence of a state-run facility in the particular region. If for some reason the need for the state facility itself, the "beds", disappears, the regionalization principle can be carried on through a regional office of mental illness-mental retardation-inebriacy program development and implementation. At some point, the economics of the situation may call for the state-run hospital or other facility in the region to be closed down and then the state-operated "beds" could be provided outside the region; but this would not eliminate the function of the regional mental illness-mental retardation-inebriacy program office.

To repeat: The regionalization plan does not pre-suppose or assume the actual existence of a state-run hospital or other state-run facility in the particular region.

3. An orderly phasing-out
There are many long-range problems involved in the question of how to phase out the state mental hospitals. Again, let it be clear that I am referring to the regional hospital or treatment facility as we customarily think of it, and not the regional function or the regional program office.

Let us accept the validity for the moment of the overall 1:1 staff:patient ratio.

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* A refinement of the basic plan would give Faribault State Hospital additional specific responsibilities for the four county area served by the South Central Mental Health Center at Owatonna, in which it is located.

Now let us look at an approximation of the current situation:

11 hospitals:8800 patients:6600 staff or 800 patients: 600 staff on the average.

Then let us look at hypothetical future phases:

A. 11 hospitals:6600 patients:6600 staff or 1 hospital: 600 patients:600 staff on the average
(This would equalize the staff:patient ratio in the manner described.)

B. 11 hospitals:3300 patients:3300 staff or 1 hospital: 300 patients:300 staff on the average

C. 11 hospitals:1100 patients:1100 staff or 1 hospital: 100 patients:100 staff on the average

I have carried the model to an extreme in order to make a point. I would still have to say that as things are going, allowing for the factors against a decline in population stated in II, 1 above, I would be willing to predict the following patient-population figures according to the schema just above:

A. 6600 patients : June 30, 1971

B. 3300 patients : June 30, 1974

C. 1100 patients : June 30, 1977

4. Economy

There comes a point when it is difficult for a hospital to continue economically. But when? At what point is it no longer in the state's interest to maintain the particular operation? Might this depend in part on the cost of maintaining the plant and keeping on a relatively large staff of non-patient-related personnel?

Stated another way: would a small facility, say of 100 beds, necessarily be "uneconomical" if it purchased power; sent the laundry out; had food sent in; obtained medical, laboratory, and other services from a nearby general hospital; and had all the record work done automatically?

These are very complex questions that no one has yet really been able to answer. And possibly the questions themselves are not yet really clear.

5. Politics and demography

Aside from the economics, there are very difficult politics involved, and other factors such as demographics. One does not talk casually about closing down facilities that may be vital to the economy of the town and its environs, as has been true of so many rurally-located hospitals.

The problem demographically in Minnesota is that the largest and most intact hospitals tend to be away from the population centers. In contrast, Hastings State Hospital is in the metropolitan area and yet it is physically the most run down of all. Logic, the laws of probability, and the thrust of current ideas in the mental treatment field all would suggest that Hastings and Anoka would be the two state hospitals most worth maintaining for they serve the largest population. But history may not write it this way.

6. Summary of long-range planning

While the long-range plan of the Department of Public Welfare might call for maintaining a hospital in service for one or another purpose, the legislature might decide to close it down. Thus, the Department's "long-range plan" is really a proposal dependent on many contingencies.

The long-range plan, to paraphrase what has already been said, is to continue the existing state hospitals at Anoka, Brainerd, Cambridge, Faribault, Fergus Falls, Hastings, Moose Lake, Rochester, St. Peter, and Willmar in operation as regional centers that would include the provision of actual in-patient services until such time as this may be impractical for one or more of the hospitals. At such time the hospital might be closed as a regional center for in-patient beds, but it would continue as a regional center for planning and program development, and possibly also child development studies, juvenile detention, or other clinical purposes; or ultimately simply as a regional office housing staff.

7. Conclusion

At what point such conversions might take place I cannot predict at the present time. We are apparently dealing with multiple and interacting processes in which professional, social, economic, and political judgements all play a part. In the absence of specific criteria it is probably best that we continue to study the progress of the situation, anticipate the decisions that will have to be made, and make them when the time comes. In such study and anticipation we should use the best technology, including computers, that is available.

The public has every right to expect that as the state hospitals decrease in size and the caseloads shrink, there should come a point when the cost will begin to decline.

At the same time the increasing investments in state grants and subsidies to local programs should logically be offset by declining investments in the state hospital system.

One way to get out of this bind might be a revision of the budgeting system in the direction of program budgeting on a regional basis. The basic budgeting unit then would be the region, with the amount appropriated to the region based on the general population at risk. The regional office could allocate the money into the various state and non-state operations in relation to the objectives of the parts of the total system within the region. Such an approach might be considered very radical; but at a time when institutional change is occuring and further rapid institutional change is needed, the radical way may be the best way.

On the other hand, the approach might not be so very novel. The hospital branch of the British National Health Service operates this way through the mediation of Regional Hospital Boards.

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I hope that the issues presented here and the suggested options for resolution will be widely discussed, so that together we can develop a long-range plan. I will be very glad to try to answer any questions that may be addressed to my by you or other readers of this essay.

DJV:mhv
cc: Cabinet
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Attention: Medical Director
Administrator
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Attention: Dr. Ellen Z. Fifer
Community Mental Health Centers
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