In the past two decades the term "medical center" has come to indicate an endeavor on the part of individuals of common purpose and interest to pool resources, share facilities, and exchange ideas toward the better care of the physically and mentally ill. The medical center has come to mean an all-inclusive pattern of care, designed to carry forward when normal procedures fail, to reduce the exigencies to routine and the unusual to commonplace. It has come to signify the meeting place of students, the optimum field for research, and the sounding-board for universal hospital practices. Above all, it represents a strong prescription to be taken only by a vigorous community.

For the most part, established centers are to be found in the large metropolitan areas where they tend to serve the routine needs of a large sector of population and the specialized needs of an unlimited migrant group. However, there are a sufficient number of centers located in small communities, particularly in the midwest, to belie the essentiality of a metropolitan area. The latter have well-conceived ambulatory services covering in one instance at least, a state-wide area.

Organization patterns vary, usually following the conception of the originators. Some stem from a single, narrowly controlled organization, others are comprised of several, independent and otherwise unrelated organizations. There would seem no hard and fast form of organization or development, but all would seem to agree that the keynote is the opportunity of greater community service through cooperative effort.
Weaknesses, somewhat correlated to their size and scope, have become apparent through the years. From administrative viewpoints the scope and weight of such a large undertaking in some instances has proved too great for a single administrative unit, not entirely by size, but most particularly because of the "human element". On the other hand in some centers this important "human element" consideration has been waived because of its complex nature and the administrative standards have become inflexible in an attempt to create a factory-like precision and economy.

These are but a few of the factors from which we may draw experience, factors that in general indicate that there are no set of rules to which we need conform, and that the best possible organization of a medical center may yet be forthcoming.

Without doubt, it was with the basic values of a "center" in mind that brought prominent Houstonians into early discussions and meetings. It was understanding of these basic values that finally developed a sincerity and singleness of purpose that led to the inception of The Texas Medical Center. On November 1, 1945 it was incorporated under the laws of Texas exclusively for benevolent, charitable, and educational purposes, and to achieve any of the following purposes:

"To promote and provide for or assist in the establishment, support and maintenance of facilities for medical, dental and nursing education and other phases of health and medical education, for hospitalization and treatment of the sick and afflicted, and for research in the field of health and science of medicine and dentistry."
"To promote and provide for or assist in the establishment, support and maintenance of medical schools, dental schools, schools of public health and nursing, hospitals and clinics; and to provide facilities and financing for housing of students, faculty members and employees of all and any of such institutions.

"To promote, provide for or assist in the establishment, support and maintenance of a general health program for the State of Texas, as well as special health programs for the State of Texas.

"To join and assist other institutions organized and operated exclusively for any one or more of the purposes herein stated.

"To make awards, give prizes, grant scholarships, publish reports and engage in research.

"To accept and administer gifts, donations and bequests, whether of money, personal property, or real estate, and otherwise to accumulate, administer and disburse funds to advance or achieve any of the above stated purposes.

The Board of Trustees of The Texas Medical Center, with E. W. Bertner, M.D., as President, have done much to pave the way toward this development. They have studied the needs of the community and of the Southwest. They developed interest and support that will be of lasting value; they have been understanding of individual differences; and finally, they have envisioned a Center in all its ramifications, which promises to become the most outstanding agency for health occurring in the Southwest within a generation. This endeavor may well become a pattern for other communities to approximate.
A. TOTAL BED FACILITIES

1. Requirements:

In dealing with the community program we were able to estimate bed requirements from factors relating to population and population growth, tangible bases even though subject to many vagaries. Properly applied these factors and ratios establish an overall area "need", and even a reasonably accurate need of an isolated segment of the population such as the rural element.

The bed requirement of the Community is but one yardstick by which the physical scope of the Medical Center can be determined. Allocations must be based also upon the desirable concentration of patients for community service as well as for teaching and research; on practical problems of capital finance; to some extent upon existing Medical Center patterns; and upon evaluation of the newer opportunities which will arise during the years of growth.

In an earlier section of the report we indicated that the Texas Medical Center by 1970 should have a bed capacity of 5,000. This was planned so as to fulfill the proportionate obligation to community service in kind and volume and to meet the entire undergraduate teaching program of the various professional schools without an undue proportion of in-patients on any one service being required for this purpose. In addition the total of 5,000 beds assured the Center a sufficiently large cross section of patients so that graduate training and research in such specialties as dermatology, neuro-surgery and ophthalmology
could be undertaken successfully. This may be explained with more clarity by stating that of one hundred patients admitted to a general hospital, usually only two will become patients on the eye service. Consequently, the number of admissions, hence bed facilities, necessary to guarantee a program of training in that specialty must be estimated accordingly. This type of ratio, therefore, was given consideration in our determination of beds for the Center.

Naturally, these estimates in all of the various specialties do not in each instance reflect the same proportion to total acute beds as the formula in the overall community would dictate. The reason for this apparent "liberty" is to be found in the theory of a planned program wherein it is unnecessary that each general hospital fit the overall pattern, or that a group of hospitals fit the proportionate share of total needs—but rather, it is necessary that the grand total should conform.

Services such as contagious, tuberculosis and chronic are not now considered as entities in the medical education program, but we feel that provisions should be made for them in the Center, and that they can become a valuable source of clinical teaching material.

The Medical Center will in all likelihood draw a concentration of certain phases of work, as for example pediatric care. The Children's Hospital which we have recommended should be located there if possible. This would automatically reduce the need for pediatric care in other hospitals, yet not eliminate it; nor would it produce excessive facilities if the whole program is properly balanced.
Therefore, pediatric patients might be concentrated within the special unit and the hospitals within the Center, while the less complicated non-teaching obstetric cases might be directed away from the Center. In such manner, adequate clinical teaching material for each service is assured, and the overall bed proportion is maintained.

To do this, for the benefit of the community, will require continuous, alert policy control and emphasis upon public education.

Such has been the theory behind our planning, and we believe it is important that it be weighed during the periodic reconsideration of these plans. We show in the following Table the proposed allocation of beds to the Texas Medical Center for the years 1950, 1960 and 1970, indicating growth from 2,500 to 5,000 beds during that period. The totals shown for the non-metropolitan area are representative of proportionate population, being 18 per cent in 1950, 15.25 per cent in 1960 and 12.3 per cent in 1970.
### Texas Medical Center Bed Requirement

<table>
<thead>
<tr>
<th>Category</th>
<th>1950</th>
<th>1960</th>
<th>1970</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Medicine</td>
<td>300</td>
<td>500</td>
<td>600</td>
</tr>
<tr>
<td>General Surgery</td>
<td>600</td>
<td>1,000</td>
<td>1,200</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>200</td>
<td>300</td>
<td>400</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>250</td>
<td>375</td>
<td>500</td>
</tr>
<tr>
<td>Orthopedics and Fractures</td>
<td>130</td>
<td>200</td>
<td>275</td>
</tr>
<tr>
<td>Gynecology</td>
<td>80</td>
<td>120</td>
<td>160</td>
</tr>
<tr>
<td>Otorhinolaryngology</td>
<td>75</td>
<td>110</td>
<td>150</td>
</tr>
<tr>
<td>Neurology</td>
<td>50</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>Urology</td>
<td>47</td>
<td>70</td>
<td>90</td>
</tr>
<tr>
<td>Dermatology</td>
<td>43</td>
<td>65</td>
<td>80</td>
</tr>
<tr>
<td>Neuro-Surgery</td>
<td>40</td>
<td>60</td>
<td>75</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>35</td>
<td>50</td>
<td>70</td>
</tr>
<tr>
<td>Total Medical Center:</td>
<td>2,500</td>
<td>4,000</td>
<td>5,000</td>
</tr>
</tbody>
</table>

**Balance of Metropolitan Area:**
- 1950: 2,583
- 1960: 3,698
- 1970: 6,764

**Non-Metropolitan Area:**
- 1950: 1,116
- 1960: 1,385
- 1970: 1,651

**Total Survey Area:**
- 1950: 6,199
- 1960: 9,083
- 1970: 13,415
The specialty bed figures may be checked readily with those of the Community Program by applying the percentage distribution of total acute bed figures used earlier in the report and shown here for reference:

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Medicine &amp; Surgery</td>
<td>.456</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>.143</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>.100</td>
</tr>
<tr>
<td>Orthopedics &amp; Fractures</td>
<td>.080</td>
</tr>
<tr>
<td>Gynecology</td>
<td>.048</td>
</tr>
<tr>
<td>Otorhinolaryngology</td>
<td>.045</td>
</tr>
<tr>
<td>Neurology</td>
<td>.032</td>
</tr>
<tr>
<td>Urology</td>
<td>.028</td>
</tr>
<tr>
<td>Dermatology</td>
<td>.025</td>
</tr>
<tr>
<td>Neuro-Surgery</td>
<td>.022</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>.020</td>
</tr>
<tr>
<td>Total</td>
<td>100.000</td>
</tr>
</tbody>
</table>

2. Planned Facilities:

Present planning indicates inclusion of three General Hospitals, a Tuberculosis Hospital and a Cancer Research Hospital in the Medical Center. Details of organization and financing are dealt with elsewhere in the report, but there remains the problem of measuring and integrating these facilities in relation to patient need.

Hermann Hospital has plans that will result in a new hospital of 370 beds to be reserved for private and semi-private patients. They also have plans calling for remodeling of the present hospital for exclusive use of free and part-pay patients with a bed capacity at least equal to the present 294.

Methodist Hospital plans a capacity of at least 300 beds, while St. Luke's Episcopal Hospital plans call for general beds in the amount of 250. Both are well grounded in understanding of their responsibility and rights in the conduct of teaching and research programs, and it is believed that the allotment of 20% of total beds for teaching purposes as originally proposed
by the Trustees of the Texas Medical Center will certainly be met if not exceeded.

The Tuberculosis Hospital, to be owned and operated by the City of Houston, will represent a minimum of 250 beds, all or any necessary part of which may be used for teaching within that specialty. We believe, that if necessary, teaching of certain undergraduate clinical subjects could be carried out here.

The M. D. Anderson Hospital for Cancer Research represents 200 beds, which irrespective of the pay status of patients, will be entirely available for teaching and research. Again, we believe that this may be considered a source of teaching not limited to graduate work, but of value also as clinical material for undergraduate teaching.

In the following table we have taken the capacities of the few services known to be quite definitely assigned on current plans, realizing however, that at this stage they are still very tentative. The table serves, however, to recapitulate the total beds:
## BED CAPACITY OF PLANNED HOSPITALS

<table>
<thead>
<tr>
<th>By Hospital and Services</th>
<th>Tentatively Assigned</th>
<th>Unassigned</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hermann</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatric</td>
<td>28</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>50</td>
<td>586</td>
<td>586</td>
</tr>
<tr>
<td>General</td>
<td>78</td>
<td>586</td>
<td>664</td>
</tr>
<tr>
<td>St. Luke's</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetrics</td>
<td>42</td>
<td></td>
<td>42</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>26</td>
<td></td>
<td>26</td>
</tr>
<tr>
<td>General</td>
<td>68</td>
<td></td>
<td>182</td>
</tr>
<tr>
<td>Methodist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetrics</td>
<td>47</td>
<td></td>
<td>47</td>
</tr>
<tr>
<td>General</td>
<td>47</td>
<td></td>
<td>253</td>
</tr>
<tr>
<td>M. D. Anderson</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td>200</td>
<td></td>
<td>200</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>250</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>Total</td>
<td>643</td>
<td>1,021</td>
<td>1,664</td>
</tr>
</tbody>
</table>

### Totals by Services

<table>
<thead>
<tr>
<th></th>
<th>Tentatively Assigned</th>
<th>Unassigned</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatric</td>
<td>28</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>139</td>
<td></td>
<td>139</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>26</td>
<td></td>
<td>26</td>
</tr>
<tr>
<td>Cancer</td>
<td>200</td>
<td></td>
<td>200</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>250</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>General</td>
<td></td>
<td>1,021</td>
<td>1,021</td>
</tr>
<tr>
<td>Total:</td>
<td>643</td>
<td>1,021</td>
<td>1,664</td>
</tr>
</tbody>
</table>

Less Cancer Beds: 443 1,021 1,464
If these assignments are carried forth, we will find a substantial shortage from the 2,500 beds in 1950 that we have indicated as the desirable quota. It must be mentioned again that the 5,000 bed requirement for 1970 and comparable totals in any prior period are exclusive of the 200 beds in the M. D. Anderson Cancer Hospital. This theory has prevailed throughout the report based upon the fact that the patients to the Cancer Hospital will not come from the immediate area principally. Hence, the 200 beds are not in the strict sense "available" to the Area. This theory is confined to measurements of patient bed needs while in discussions on clinical material available for teaching the capacity of 200 patients is considered. In the following, the 1950 shortage of beds is reflected:

**TEXAS MEDICAL CENTER BED REQUIREMENT AND SHORTAGE**

<table>
<thead>
<tr>
<th></th>
<th>1950 Requirement</th>
<th>1950 Planned</th>
<th>1950 Shortage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuberculosis</td>
<td>250</td>
<td>250</td>
<td>0</td>
</tr>
<tr>
<td>Psychiatric</td>
<td>100</td>
<td>28</td>
<td>72</td>
</tr>
<tr>
<td>Contagious</td>
<td>50</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>Chronic</td>
<td>250</td>
<td>0</td>
<td>250</td>
</tr>
<tr>
<td>Acute-Obstetrics</td>
<td>200</td>
<td>139</td>
<td>61</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>250</td>
<td>26</td>
<td>224</td>
</tr>
<tr>
<td>Other</td>
<td>1,400</td>
<td>1,021</td>
<td>379</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,500</strong></td>
<td><strong>1,464</strong></td>
<td><strong>1,036</strong></td>
</tr>
</tbody>
</table>
3. Conclusions

From the above we can judge a deficit of 1,036 beds existing after present building plans are carried to completion. Shortages exist in all phases of care except tuberculosis, with major shortages in chronic, pediatric, and acute care other than obstetrics.

Even in the face of what must appear to the interested spectator to be generous expansion programs, we are recommending that consideration be given to increasing effort toward expansion. First, the three general hospital plans are still in a formative stage. We urge that each consider more than contemplated expansion, preferably to a total of 500 beds each. We appreciate the problems incident to acceptance of this recommendation, but on the other hand there is in each of these three instances a set of machinery in operation, a nucleus of a supporting and operating organization, as well as a plan for the basic hospital services which need not undergo proportionate increase in cost.

If this is not feasible, one or two additional general hospitals should be sought to locate in the Center.

In another section of the report we dealt with a proposal for inclusion in the Medical Center, if possible, a children's hospital. This was to combine into a sub-center the orthopedic, psychiatric, contagious and pediatric medical care of children in a unit of at least 200 beds upon inception.

If Methodist, St. Luke's and Hermann could each build for 500 patients, and the Children's Hospital as well as the unit for chronic care, could become a reality, the overall patient
needs would be met. This, of course, gives consideration to the capacities of the present Hermann Hospital and the City Tuberculosis Hospital.

The previous table indicates need of 250 beds in the Center for selective chronic cases. It is realized that much initiative and effort will be necessary in bringing this about. Certainly, everyone is in agreement as to the overall need and most of us agree upon the value of teaching material in such a group. There remains but to stimulate an interest in financing such an endeavor and allocating an area, preferably adjacent to a parent general hospital.

Before leaving the subject of bed requirements and shortages, we wish to point out a factor which may already have become apparent: that the acute bed shortage in the Center in 1950 based on facilities now planned, totals 664, while the shortage in the total community amounts to only 860. This stems from having set the goal at 2,500 beds for 1950; and although the shortage seems disproportionate, we believe major emphasis and impetus should be given to the Center upon its inception.

B. BED REQUIREMENTS FOR EDUCATIONAL PURPOSES

Baylor University is to operate the College of Medicine in which an extensive medical program is to be carried out. The Medical School located in the Center is now being constructed, and it is expected that during 1947 it will be completed. It has six laboratory departments teaching the first two years of the medical curriculum, and it is planned that the last two years will be almost entirely clinical and bedside teaching to be carried out in the out-patient department and in the hospitals of the Center and the City. In addition to the
needs would be met. This, of course, gives consideration to the capacities of the present Hermann Hospital and the City Tuberculosis Hospital.

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Medical College, Baylor University plans an Institute of Biological and Pathological Research.

In our section on Community Program we dealt at some length on the undergraduate training program in the University and recommended that the clinical training of undergraduates could be most satisfactorily carried out if confined to the physical limits of the Center, thereby eliminating problems of travel and guaranteeing a maximum uniformity in teaching techniques and standards.

From this we dealt with the analysis of the teaching bed requirement as of 1970. Based upon the thousand bed requirement established by the faculty of the Medical School we concluded that if the general hospitals in the Center assign between 20 and 25% of the facilities which we estimate is the total needed by 1970, the program can be carried with ease. In fact, we calculated that the 1,200 beds representing contagious, tuberculosis, cancer and chronic patients would be in excess of the actual teaching need, and would offer a source from which to draw an unlimited amount of supplementary training material.

The program could be further assured, we feel, through adoption of recommendations that teaching of medical students be carried on among pay patients following a period of indoctrination of medical student and staff, coupled with an active public relations program.

This would seem the picture toward which the program should be pointed, but we realize that some time will elapse before all of these facilities are available and before the above mentioned teaching practice can be of measured value. In the interim, the amount of available teaching beds must be known. As
stressed the frequent interchange of beds between services is practice common among all the hospitals and renders impotent any figures reflecting beds by "medical services". We must be satisfied, therefore, with knowledge of the total numbers available and depend in large part upon the cooperation of the hospitals in making assignments that will fit the teaching need.

In the table that follows we have attempted to outline the 1950 probable and possible source of teaching material, first in the Medical Center, and secondly in the City of Houston:

### UNDERGRADUATE TEACHING MATERIAL

<table>
<thead>
<tr>
<th>1950 Probable Sources:</th>
<th>Undergraduate Teaching</th>
<th>Non-Teaching</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hermann</td>
<td>294</td>
<td>370</td>
<td>664</td>
</tr>
<tr>
<td>Methodist</td>
<td>60</td>
<td>240</td>
<td>300</td>
</tr>
<tr>
<td>St. Luke's</td>
<td>50</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Total</td>
<td>404</td>
<td>810</td>
<td>1,214</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Possible Sources:</th>
<th>Undergraduate Teaching</th>
<th>Non-Teaching</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children's Hospital</td>
<td>100</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>Chronic Hospital</td>
<td>50</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Cancer Hospital</td>
<td>200</td>
<td>-</td>
<td>200</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>50</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Expansion Programs</td>
<td>116</td>
<td>464</td>
<td>580</td>
</tr>
<tr>
<td>Total</td>
<td>516</td>
<td>964</td>
<td>1,480</td>
</tr>
</tbody>
</table>

Grand Total: 920 1,774 2,694
We have applied a ratio of 20% of total beds available in Methodist and St. Luke's, the total capacity of the present Hermann Hospital which together reflects about 404 undergraduate teaching beds. Under "Possible Sources" we have shown 50% of the recommended 200 bed Children's Hospital and made an allowance of 50 beds from a recommended 250 bed chronic hospital. We have shown the full allocation of the M. D. Anderson Cancer Hospital beds, and 20% of the proposed City Tuberculosis Hospital beds. We have added 116 beds which would accrue through acceptance of recommended expansion of St. Luke's, Methodist, and the new Hermann Hospital to 500 beds each at a rate of 20% teaching.

With the full realization of all these probable and possible developments the beds available for undergraduate teaching would amount to 920. It is quite possible that this number should be reduced somewhat in view of the questionable utilization of, for instance, 200 cancer beds, 50 tuberculosis beds, and 50 chronic beds in an undergraduate teaching program.

From this it is apparent that the undergraduate training program of the Baylor University must continue for the next few years to be performed in part in the hospitals of the City. As at present the general clinical material at Jefferson Davis, the obstetrical material available at St. Joseph's, and the additional material to be offered through Memorial Hospital's participation with the Medical Center would seem adequate to meet all needs. However, some adjustment of professional staff organizations in these hospitals will be necessary, particularly at Jefferson Davis.
0. CENTRALIZATIONS

The most basic concept of a Medical Center calls for cooperative effort among all participants in the solution of their mutual problems, in the advancement of their mutual aims, and in the coordination of their activities one with the other. The close alignment of potential strength in a Center presents endless opportunities if the participants reach a common ground of understanding, first of each other's problems, and secondly of their combined power.

In The Texas Medical Center the hospitals are additionally fortunate in having an active Center group to abet their planning and give financial assistance to joint enterprises which are of benefit to the group and, hence, to the Medical Center itself.

We have analyzed the advantages and disadvantages of a number of specific joint enterprises, or centralizations as we have termed them. From these we have selected those below as worthy of immediate consideration. Fundamentally, the advantages stem from improved service and possible economies. The financial savings accrue from savings in total capital investment, or by releasing areas in hospitals for more valuable revenue producing activities or by savings in operating expense.

The question most frequently asked in dealing with group action toward centralization is - "Are we losing our autonomy and our right to individualism?" It poses a problem to answer concisely, because what one hospital group would care to preserve under a flag of "individualism", another hospital group might condemn as a flagrant misuse of entrusted funds. A centralization, properly conceived and administered is representative of the constituent's theories of operation. Although it may be unable to absorb numerous individualistic ideas in fairness to other
constituents, a satisfactory cooperative method can usually be
determined if the desire to do so is present. The centralizations
that follow are not intended as completed "working" procedures,
but only as recommendations for continued study, discussion and
through by the participating hospitals and interested groups.

We list the following centralizations as worthy of further
study while the plans for the proposed units are being developed,
and that decisions may be reached as to ownership, control and
support, so that the participants may be assured that the common
functions will be available prior to their need.

1. Central Out-Patient

An Out-Patient Department, including complete clinics and
a central medical record department for statistical analyses,
should be established in the Medical Center. Such a central unit
is highly essential to a well integrated teaching program. It
would give assurance that the maximum quantity of clinical material
available in the area, especially in connection with the teaching
of the specialties, would be put to the best possible use.

This point is made in view of the fact that in even more
populated areas, teaching material in neurology, urology, dermatology,
and ophthalmology frequently fulfills only minimum teaching
requirements, and if the total amount available in Houston is
divided between two, three, or four clinics, the time might come
when no one clinic would have available a good cross-section of
teaching material.

The faculty of Baylor Medical School has indicated that
out-patient clinic experience could best be conducted in a clinic
averaging 200 visits per day for a clinical undergraduate body of
the size they propose. This too would be grounds for advocating
a central clinic in that it is unlikely that any one hospital would be prepared to meet such demands.

Professional control should be vested in the Baylor University College of Medicine and the University of Texas Dental School.

Consideration has been given to the dangers that might arise from a lack of correlation between out-patient and in-patient activities, and although this becomes a possibility in a plan such as proposed, joint interest and responsibility by the clinic and hospital, possibly through the medium of an out-patient department central committee with ample in-patient representation can successfully establish safeguards.

In the development of the professional staff by the schools mentioned above, we would suggest that the chief of the in-patient service from one of the general hospitals be appointed as chief of the corresponding out-patient clinic. These appointments could be arranged so that the hospital carrying the bulk of an in-patient specialty would likewise have the corresponding out-patient specialty, and this formula might be extended to include responsibility for the proper supervision by attending physicians.

Problems, of course, present themselves when considering the allocation of out-patients to in-patient services, when the latter services are distributed in several distinct hospitals.

It could be the responsibility of a previously mentioned central committee to study the problems in connection with referring out-patients in need of hospitalization with a view to observing proper and previously agreed upon proportions. In this connection it might be necessary to establish patient day quotas for participating hospitals so that their fair share of medically indigent work flows to them through the out-patient's admitting section. In the
referral of all such patients, it is believed that the central clinic must be held responsible for the final determination of indigency and of the need for hospitalization, relieving the individual hospital of both responsibilities.

When this clinic comes into being, there may be certain problems which must be met in developing lines of demarcation between it and Jefferson Davis Out-Patient Department and other clinics which may spring from the plans of the City Health Department.

We urge that the out-patient department be sub-divided into clinics representative of all in-patient services of a complete general hospital, including venereal disease, now a weakness of the present clinics, and psychiatry, now a very minor consideration of these clinics. Furthermore, it is urged that consideration be given to establishment of a follow-up clinic within the central out-patient organization, and it is suggested that the work of this clinic might be coordinated with the activities of the Visiting Nurse Association.

An important adjunct to the teaching and research service for which the clinic is to be founded rests in great part upon the medical records system devised and the mechanism by which these findings become the common property of interested physician groups.

We are suggesting that consideration be given to a unit-type medical record which would embody the complete history during all in-patient and out-patient experiences. To accomplish this, the clinic must become the focal point for the records of all patients in the Center.

It is recommended that the record room of the out-patient department be equipped with electrical tabulating equipment and through use of standard nomenclature by all hospitals, a punch card system be devised that would facilitate any number of reports on medical statistics. This, and the unit record system require that
the medical records of all in-patients should be sent to the out-patient record room for punch carding and tabulating. This system should accomplish the maximum in interchange of medical data and save a substantial amount in reducing repetition of statistical services.

If, on the other hand, medico-legal aspects of record keeping dictate that individual hospitals retain permanent custody of private patient records, we urge that they be subjected to punch-carding to preserve that important function of the system and that this be done centrally, after which the record itself could be returned to the respective hospital for permanent filing.

Having a bearing on this discussion of records and record keeping is an earlier discussion dealing with the possible organization of a school for medical record librarians within the Medical Center, and after study it may be that the hospitals would agree that the parent organization best fitted to sponsor this school would be the out-patient clinic. Certainly, a substantial amount of the practical experience of such students could be obtained herein.

Up to this point we have not dealt with the basic organization of this out-patient department. We believe that The Texas Medical Center, Inc. should own and operate this department. We intend this to imply certain assistance toward meeting building and equipment costs. The operating expenses should be borne proportionately by the participating hospitals, by the Medical School of Baylor University, by the University of Texas Dental School, by the city government and by the community. In indicating community support, we refer to an earlier discussion dealing with the basis upon which the Community Chest now allocates funds to hospitals for the assistance of medically indigent.
As previously stated the Medical School of Baylor University and the University of Texas Dental School would assume professional control of the medical staffing of the clinic. This would encompass approval of appointments, general conduct of the professional staff, rotation of students, assisting in resident assignments, and in recommending policies tended to improve or guarantee teaching standards.

With this diversification of responsibility we must not lose sight of the fact that the general hospitals of the Center have a vested interest in this clinic, financially, educationally, and institutionally, and their representation on the out-patient committee should be of such strength as to guarantee this.

Operational cost of the clinic is difficult of estimation, and we hesitate to use available information on local clinics because of involved accounting procedures. In fact, out-patient cost figures are notably inaccurate in most areas as a result of confusing systems of prorating costs between hospitals and medical schools.

However, from current figures available, principally in the Cleveland, Ohio area where accounting systems are well standardized and have been subjected to involved research, we conclude that the clinic, if operated to serve as well as teach, at a level of 55,000 visits per year, will involve a gross cost between $1.95 and $2.25 per visit. This cost does not reflect interest on investment nor depreciation on building. Not only will this centralization guarantee the highest quality of community service and the maximum use of clinical teaching material available but it will also save capital investment and operating expense.
2. Central Laundry and Linen Service

Laundry

We are recommending the centralization of laundry and linen service based largely on the financial economies accruing to participating hospitals and other constituent organizations both in actual capital outlay and in the subsequent operation costs.

In the first instance, we have the value of space freed to each hospital by removal of planned laundry rooms, linen rooms, and sewing rooms. Next, the capital outlay necessary to equip the laundry planned in several hospitals would far exceed that necessary to equip a single large laundry. This saving is difficult to estimate, and in part would depend upon the general theory of operation, namely, as to whether a work day in excess of the standard eight hours with the resultant reduction in equipment necessary would be feasible.

Economies apparent in operating costs seem to resolve into these factors: namely, that manipulation and utilization of manpower is usually possible to a greater extent within a larger group of employees; that supervisory costs do not usually increase in direct proportion to the increase in employees; and that low unit costs usually result from larger quantity usage of water, steam heat, light, power and supplies.

It will, of course, be necessary to study in detail with building and equipment engineers the plans of a central laundry service and only through such study can the actual savings in capital outlay and operating cost be determined. However, the experiences of hospitals currently interested in building programs would seem to indicate that for a centralization of the present planned 1,600 beds, approximately $175,000 must be planned as the cost of building and
$160,000 as the cost of equipment. On the other hand to build and equip five separate units in the general hospitals, the cancer and the tuberculosis hospital, building costs would approximate $250,000 and equipment $300,000. This represents a potential total saving of $220,000 on the present planned capacity. When you contemplate the future expansion to 2,500 beds or 5,000 beds, the potential savings in investment is highly significant.

Naturally, these are gross estimates. When the plans of each of the five units are far enough advanced, more accurate estimates can be secured for final decision.

Additional savings in operating costs can be secured by centralization. From a study of operating costs in varying sized hospitals we have found that many with capacity less than 350 tend toward per capita per diem costs approximating .42 while those operating laundries serving the large volume centers approximate .27 per capita per diem.

It is estimated that 480,000 patient days would be the volume of service in The Texas Medical Center of 1,600 beds. The higher per capita cost, reflecting the probable operation of the decentralized laundries, would indicate $192,000 operating costs per year. The centralized laundry securing the lower per capita cost would reflect $130,000 or an annual potential saving approaching $60,000. Approximately this same saving is estimated when the lower rate on poundage is attained by centralization.

Certainly, with laundry and linen expense approaching 5% of total hospital expenditure and with the above gross estimates in mind, careful consideration of the advantages of centralization should be made.
Linen Control

It would seem advantageous to include as a function of the central laundry the control, including replacement, of all hospital linens and these suggestions might be carried in mind as having a bearing on successful operation:

(1) It might prove feasible to appoint a representative committee experienced in nursing needs, in laundry techniques, and in matters of purchasing to consider diligently their mutual problems and strive for standardization of size and quantities of hospital linens. They should attempt re-designing of items to fill needs being met by use of multiple slightly varying pieces.

(2) Such standardization would permit interchangeability of linens between the hospitals and avoid the expense of processing, or marking, and of sorting which would further insure the lowest possible poundage cost.

(3) Such standardization would also tend toward elimination of "special" high priced manufactured items and increase the purchasing power of "stock" items.

Sewing Room

It would, of course, be feasible to have adjacent to the laundry area a sewing room capable of undertaking manufacture of small quantities of special items and the repair of all hospital linens.

Rug Cleaning Room

Although more frequently appended to housekeeping facilities and under their control, in this instance where centralization is being urged, this truly economic function might reasonably be made the responsibility of the central laundry, more from the standpoint of centralized location than for any other reason.
General

Control of this service unit could well rest with the Texas Medical Center, Inc. with capital and operating expenses met by the hospitals and other units of the Center using the facilities. Sliding scales based upon poundage or unit poundage costs could be established on a non-profit making formula to guarantee participants a rate lower, we believe, than possible under their own necessarily restricted volume.

3. A Central Maintenance of Buildings and Grounds Service

We are recommending that consideration be given to the centralization of the responsibility for the maintenance of buildings and grounds. This is intended to refer to the services of engineers, draftsmen, estimators, electricians, mechanics, carpenters, painters, and representatives of other trades deemed necessary to the organization of a well-rounded department.

Such an endeavor would permit the availability of engineers and skilled mechanics normally unavailable to hospitals of medium size and modest budgets. The operating expense for such work should be lessened both through planned maintenance and by the greater utilization of equipment.

By reason of the quantity of work, the full time services of consulting engineers, draftsmen, estimators, and such special trades as masons, glazers and elevator electricians which the average individual hospital could not afford would become available, and the ability to avoid duplication of ordinary equipment and tools would allow for expenditures in much needed but seldom acquired machine shop equipment. Such maintenance shops might profitably include a modest sized machine shop and a paint shop, including stripping tanks,
et cetera, equipped to renovate all hospital furniture and equipment.

Centralization of maintenance could logically start with appointment of a building committee having the authority necessary to bring into conformity and standardization "specifications", particularly those dealing with mechanical and electrical installations which are involved in the proposed buildings. This should apply to the plans and specifications of St. Luke's Methodist, and Hermann, and to the other units of the Center as they come into being. The advantages of standard specifications would at the beginning hardly seem to justify the work involved, but as time passes and the replacement of literally thousands of individual parts becomes a routine problem, the value of standardization will become apparent.

The expeditious handling of emergencies may be pointed out as a reason against centralization of workmen, with the feeling that proper "coverage" might not be accorded all areas; although this might occur, it should not be deemed an inevitable condition and proper management will provide for meeting emergencies.

The operating expenses for maintenance of buildings and grounds should be considerably less for the participating hospitals due not only to better distribution of manpower but to greater utilization of equipment.

4. Central Heating and Power Plant Service

Obviously in this sized project considerable economy can be realized by a central service of this kind. It should be owned and operated by the Medical Center and service furnished at cost. Substantial savings can also be realized in the total capital investment for such facilities. Moreover, valuable space in other buildings can be utilized for more significant purposes. Practical problems in timing the construction of this facility urge early study.
and consideration so that the service would be ready for expanded institutions.

5. Central Purchasing and Storing Office

Although we have recommended elsewhere that a reorganization of the Hospital Council be undertaken to the end that hospitals of the entire area might provide themselves with certain important group services, one of which is centralized purchasing, we recommend that within the Medical Center itself, a central purchasing function be organized also that would coordinate the purchasing requests from hospitals, clinics and other units of the Center wishing to participate.

As the Medical Center units pass their early stage of development, well over one million dollars of total supplies must be purchased annually by them. Such an amount dictates a need of highly trained personnel, suggests economies from bulk purchases at lower prices and through the development of a larger range of potential markets than could be otherwise secured by each unit acting separately. Storeroom facilities should be provided for the bulk purchases, to be issued periodically to the smaller storerooms of the individual units of the Medical Center. Its cost would be relatively small and could be prorated over the supplies used by each unit.

This would appear to be a duplication of function and energy except for the fact that the Hospital Council should limit the scope of their efforts to the procurement of bulk supplies of a nature that should be well defined in advance. Hence, many hundreds of items daily needed in a unit the size of The Texas Medical Center would still require procurement, in fact, would represent the more difficult part of the purchasing problem although representing probably
a small per cent of the value involved in all supply expenditures.

Such centralization has obvious advantages, not the least of which lies in the channeling of all commercial contacts into one location in the Center where they can be equitably, ethically, and expeditiously handled.

Although this unit might not be responsible for large bulk purchasing and, therefore, responsible for the savings accruing thereby, in comparison with decentralized purchasing it could surely be staffed more economically, be able to develop a larger range of potential markets as a result of more volume, and to some extent correlate requirements to secure advantageous prices, while if the Hospital Council failed to develop this service, this proposal would be paramount.

6. Central Personnel Service

Personnel wages, particularly in hospital organizations, are mounting until it appears that they will represent from 70% to 75% of the total budget. In addition to its effect upon the quality of service, good personnel management can result in real economies of operation. Certain of these personnel functions can be conducted more effectively by centralization in a project of this size than by decentralized efforts. We refer to the recruitment, pre-employment interviewing and testing, in training programs, health service and indoctrination procedures. This service should be conducted by the Medical Center and offered to all units in the Center on a cost basis prorated by payroll per unit or service secured.

We would recommend that a committee of personnel relations be appointed to coordinate and standardize as deemed necessary to meet the unusual conditions existing in individual hospitals.
It is believed that at the start of such a centralization the function be vested with the original interview and screening processes preceding actual employment for the non-professional groups only, placing the responsibility for a temporary period for the procurements, interviewing, and hiring of graduate nurses and technicians, with the individual hospital.

This function guided by the committee of personnel relations should undertake in-training programs and indoctrination lectures that would be deemed necessary and would have the function of developing statistics on labor turnover and separations. It should be vested with the responsibility of conducting terminal interviews, as well as maintaining records on up-grading and job evaluations.

It would be responsible for interpreting labor conditions and markets and establishing contacts leading to the sources of labor supply, should prove competent and invaluable in the setting of wages and salary scales, in the standardization of job classifications, and a source to which employees might bring personal as well as vocational problems. It should devise health programs for employees and be responsible for organizing and carrying out such recreational programs as may be agreed upon.

7. Central Public Relations Service

The public relations aspects of a project as major as this in the health life of this community are of paramount importance, particularly during the formative years of the project when the community's public opinion is experiencing its first contact and is being molded. The individual units in their current fund-raising campaigns are securing already realistic public reactions and appreciating the need of greater public information.
It is realized that the average moderate sized hospital cannot afford the full time services of a public relations officer, but with such a group as suggested in the Medical Center, we recommend that consideration be given to this important aspect of public education. Such a person or staff would be responsible for welding cooperative plans utilizing every possible legitimate and ethical means of informing the public of the benefits to be derived from its hospitals.

From such an office working toward a regularity and continuity of public releases, the hospitals, in fact, the Center is certain of the following benefits:

(1) Development of public understanding and appreciation of hospital services.

(2) Fostering of an attitude of general goodwill on the part of the public toward the hospitals.

(3) Stimulation of more accurate analysis of community needs and institutional resources.

(4) Clarification to the public and to governmental bodies the status of voluntary hospitals so that the many economic problems being discussed may be solved in a most desirable manner.

(5) Effecting a thorough understanding as to the legitimate reasons for hospital construction. Make known the advantages of over-hospitalization and stimulate the greater use of existing hospital facilities.

(6) Stimulating voluntary contributions, public and private endowments.

In addition to the work of public education, such a staff might undertake work in preparation of bulletins, annual reports, and intra-center publications.

This service because of its all inclusive nature should be
operated by the Medical Center with a prorating of the costs to the individual agencies and to the Center itself.

8. Pharmaceutical Manufacturing Unit

We are recommending that consideration be given to the development of a central pharmaceutical laboratory in the outpatient building which would be coordinated with and furnish facilities for the School of Pharmacy dealt with in recommendations necessary for needed training facilities. This laboratory should be under a Pharmacologist appointed to the faculty of a university.

If such an undertaking could be accomplished, it would serve the purpose of training student pharmacists, which training could be rounded out through internships of reasonable duration in the hospitals' pharmacies of the Medical Center, and at the same time prove a source from which could be procured almost any non-biological preparation used by the hospitals and at costs far lower than obtainable on the open market.

It is suggested that in addition to the routine compounding of medications in bulk, the manufacture of sterile solutions would be an economic undertaking. Substantial savings have been realized through just such plans already in existence in other Centers, and these might be studied as patterns for the development of this unit.

It would seem advisable to establish a pharmacy committee early in the stages of such centralization with substantial representation by medical staffs, and hospital pharmacists. This committee should take the necessary action and thought toward the establishment of a standard formulary acceptable to all hospitals of the Center and should develop regulations to control the use of proprietary drugs and excessively expensive drugs where less expensive substitutions of equal merit are available. It should advise on the inclusion and exclusion to the formulary of new and non-
official but accepted drugs.

It is suggested that if it becomes apparent that an unusual delay is likely to occur in the development of a pharmacy student body that consideration be given to establishing the laboratory either operated by the School or jointly by the hospitals, and that the staff be obtained from pharmacologists, pharmacists and technicians.

Consideration has been given to the centralization of functions related to home-going prescriptions, but this has been ruled out in view of the fact that the elaborate mechanism necessary for its accomplishment might well work a hardship upon many of the patients.

This unit should be operated by the Medical Center and the costs directly distributed to the hospitals and clinic on the basis of the number and volume of solutions, preparations and medications received by the participating agencies. Such a unit can become more than self-supporting, if desired.

9. Central Dining Service

We are recommending that consideration be given the development of central dining facilities which could be made available to personnel, student groups, ambulatory patients and visitors to all patients dependent for meals upon the locality of the Medical Center. Such facilities are deemed extremely important in the overall development of the Center inasmuch as it is a service which is frequently left to chance in a development of group activities and is finally met by commercial concerns in a manner entirely incompatible with the conditions and needs.

It is realized that hospitals of the Center must plan facilities in a degree that will provide food preparation for personnel and student groups as well as for patients, and that no proportionate
saving in equipment cost can be expected, if this recommendation is carried through. Also, we realize that a moderate proportion of personnel food preparation can usually be carried by employees primarily engaged in patient food preparation and that only a minimum cutback in the salary expense of these individuals can be expected.

We wish to point out three trends noticeable in recent years in hospitals throughout the country, all of which can be adopted with ease following such a centralization:

(1) There is a genuine interest in alleviating any and all phases of student group existence tending toward institutionalism.

(2) There are efforts being made to dispense with the old system of serving a "planned meal" to personnel and student groups with frequent dissatisfaction on the part of the recipient.

(3) Many hospitals have placed a cash value upon all perquisites including meals and are paying the value of such perquisites to students and personnel, allowing those individuals to buy their own meals consisting of what they want and where they want it.

These have all been accomplished or considered with a view toward correction of the conditions which over a period of many years have led to continuous agitation and aggravation.

It would seem that upon completion of all plans now in vision for The Texas Medical Center there might well be between 7,000 and 8,000 persons living, working, or visiting within the Center. Therefore, we feel that the Medical Center should operate a central restaurant which would furnish meals on a low profit or cost basis to individuals connected with the participating agencies;
and secondly, that all of the hospitals should keep to a minimum their dining services and kitchen facilities.

10. Communication System

It is our belief that the opportunities for economies and more effective operation can be secured by the installation of a central telephone service and a central pneumatic tube system. Each of these should be studied when the plans of the individual units have progressed sufficiently to be relatively definite and final decision made before construction. Their installations would be dependent upon the final decisions made in regard to other centralizations, such as laundry, maintenance, pharmacy, etc.

11. Organization

Insofar as the agencies which comprise the Medical Center are independently operated and the above desirable centralizations will have lasting effect upon future activities, it seems advisable to have formal organization channels by which individual differences may be recognized and the joint endeavors may meet their objectives. On the highest organization level the major policies can be coordinated and enunciated by the action of the Board of Trustees on which is included representatives of the participating agencies.

However, this is not sufficient to keep abreast with technical changes and currently varying operational problems which are present in the administration of educational and health agencies. Some provision should be made, at least, on two lower levels of the organization. Therefore, we suggest the creation of:

(a) A Central Administrative Advisory Committee, composed of the chief executives of the various units of the Medical Center, with the Chief Executive of The Texas Medical Center as chairman, which would
suggest detailed policies and recommendations on all joint projects and services for later action by the Board; would jointly develop regulations and procedures for carrying out the adopted policies and would adjust the current problems which undoubtedly would arise.

(b) Special Advisory Committees on Specific Joint Services; for example, Committee on Purchasing, Committee on Personnel, Committee on Pharmacy, and the like. These committees would be composed of respective department heads representing the various agencies and would be subordinate to the Central Administrative Advisory Committee to which they would make their recommendations. Likewise, they would be expected to develop rules and procedures for their respective fields.

D. MEDICAL CENTER UNITS

At the beginning of this study, the following institutions were scheduled to function as units in the Medical Center. Elsewhere in this report are our comments and suggestions relative to their functions and programs:

(1) Baylor University College of Medicine
(2) University of Texas Dental Branch
(3) University of Texas School of Public Health
(4) University of Texas Post-Graduate Medical School
(5) M. D. Anderson Hospital for Cancer Research
(6) Hermann Hospital
(7) Methodist Hospital
(8) St. Luke's Episcopal Hospital

TMC-36
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7. Methodist Hospital
8. St. Luke's Episcopal Hospital
(9) Tuberculosis Hospital

(10) Medical Library of Houston Academy of Medicine

Also, although not located in the Medical Center grounds, the Rice Institute can be of great value in cooperation with the School of Public Health and in fields of special research, particularly in parasitology, bio-chemistry and physics; the University of Houston can assist the community program significantly in the various joint-educational projects of the Medical Center; and several hospitals in Houston can materially aid through jointly planned educational and health endeavors.

In addition, we are recommending for location on the Medical Center Site the following:

(11) Texas Medical Center Out-Patient Department
   (See III, C, 1)

(12) Hospital and Research Institute for Children
   (See II, C, 6)

(13) Chronic Hospital (See II, A, 5)

(14) Rehabilitation Center (See II, C, 4)

(15) Continuation Center

There should be a unit which might be called a Continuation Center for the purpose of providing "continuation study". Its staff would encourage professional and occupational groups of the Area or State to meet in brief refresher courses at institutes, and its facilities would furnish them favorable conditions for the discussion of their mutual problems. The physical plant should consist of lecture rooms, lounging rooms and bedrooms, whereby the visiting student may be cared for completely during the entire institute of from five to ten days. The most outstanding unit of this
sort is located at the University of Minnesota where, during its ten years of operation, 520 courses have been conducted with over 24,000 registrants. This self-supporting unit should be owned and operated preferably by the University of Texas, but if that isn't feasible, by The Texas Medical Center.

(16) Administration Building

During early stages of the survey discussions were held which led to the decision that the administrative offices of The Texas Medical Center would be located in the Central Library Building of the Houston Academy of Medicine. Since then other proposals have come to the foreground which led to the recommendation that the Medical Center should give consideration to a separate Administrative Building, furnishing areas capable of meeting the administrative need that will arise through active operation of certain centralizations suggested herein. It should house main offices of the Center, the central purchasing, personnel and public relations offices. In addition, such a building might make available offices to certain health agencies and organizations now having offices in Houston, such as the Visiting Nurse Association and the Houston Anti-Tuberculosis League.

(17) College of Nursing

An educational building with classrooms and laboratories should be erected for the use of the proposed College of Nursing (See II, D, 4 of main report).
(18) Service Building

We recommend that the central laundry, maintenance shops, heating and power plant and storerooms (See III, C 2,3,4,5) be integrated into a single building or a group of buildings.

(19) Housing

(a) Nursing Students Residence

A residence should be constructed for student nurses who are attending the College of Nursing and for those assigned from other schools to the special hospitals which are located at the Medical Center. It should be large enough to house 800 students and contain appropriate facilities for religious, recreational and social activities. If constructed in quadrangle form, it would be possible to segregate the students of each hospital located in the Medical Center, if they desired to do so, and still retain the advantages of centralization.

(b) Other Personnel

Interest has been evidenced in the development of housing for teachers, research workers, postgraduate students, technicians, et cetera, actively engaged in the Medical Center. We recommend such a development in dormitory, single and multiple apartment units, available on a rental or lease basis commensurate with the earning power of the lesor.

(20) Central Restaurant (See III, C, 9)
E. RECOMMENDATIONS

88. That The Texas Medical Center plan a program to provide 2,500 hospital beds by 1950, 4,000 beds by 1960, and 5,000 beds by 1970.

89. That the 1970 capacity of the Medical Center be distributed among the various medical specialty services in a manner to fulfill proper community obligations, to permit all undergraduate teaching of the proposed professional schools to be carried out in the Medical Center, and to provide adequate clinical material for graduate training and research (see III, A).

90. That immediate consideration be given to meeting the 1950 shortage of 1,036 beds in the Medical Center allotment of community needs, which will exist after completion of presently proposed building plans (see III, A).

91. That consideration be given to the enlargement of the three proposed new general hospitals to 500 beds each or to seeking one or two additional general hospitals.

92. That, although the acute bed shortage assigned the Medical Center appears disproportionate to the overall community shortage in 1950, major emphasis and impetus be given the Medical Center upon its inception.

93. That within the Medical Center the voluntary hospitals participate in the operation, support and benefits of a central Out-Patient Department.

94. That this Out-Patient Department offer services in all general clinical fields including psychiatry and venereal disease, which are weaknesses in the present out-patient services rendered.

95. That the Out-Patient Department be owned and operated by The Texas Medical Center, assisted by an advisory group representative of the participating hospitals, and medical, public health, and nursing schools.
96. That the medical and dental policies and appointments of the Out-Patient Department be the responsibility of the Baylor University College of Medicine and the University of Texas Dental Branch.

97. That the Out-Patient Department be held responsible for the final determination of medical indigency, for the need of hospitalization and for "referral" to the proper in-patient service of the hospitals of the Medical Center, as based upon predetermined budgets of maximum indigent case loads and with consideration of the specialty fields available within the participating hospitals.

98. That the Out-Patient Department encompass the central medical record and medical statistics tabulating rooms, through which would pass all records of out-patients and in-patients alike, but wherein only out-patient records would remain in permanent files.

99. That the Out-Patient Department encompass the central pathological unit and morgue which would be the site of major teaching and research work, yet available to hospitals in the Survey Area that are without the services of a pathologist. It would not obviate the desirability of the larger hospitals having their own pathology unit and carrying out their routine autopsy work.

100. That a central pharmaceutical manufacturing unit be organized in the Out-Patient Department from which a large number of bulk medications and sterile solutions, prepared at cost, could be supplied to participating hospitals.

101. That this central pharmaceutical manufacturing unit operate under advice of a Pharmacy Committee representative of the hospitals, medical, and pharmacy staffs and this committee undertake the preparation of a standard formulary for use by the participating hospitals.

102. That a central power plant be erected to furnish heat, light, power and steam to all units of the Medical Center, and that the service plant be operated on a non-profit basis by The Texas Medical Center.
103. That a central laundry and linen service be organized to furnish service to all units of the Medical Center and that this service be operated on a non-profit basis by The Texas Medical Center.

104. That a central dining facility be constructed to furnish low-cost meals to personnel, student groups, ambulatory patients and visitors primarily on a cafeteria level.

105. That participating hospitals consider cash payment to employees and token payments to students for meals now considered perquisites.

106. That a central department for the maintenance of buildings and grounds be instituted and operated by the Medical Center on a cost basis to participating units.

107. That a central purchasing division be established that would correlate the needs of all hospitals and units in the Medical Center, yet not duplicate the bulk purchasing phases of a Hospital Council purchasing section.

108. That a central personnel organization be developed that would embody all functions of recruitment, pre-employment interviewing, indoctrination, in-training, and health and welfare programs for personnel in hospitals as well as in allied units of the Medical Center.

109. That consideration be given to the establishment of a central public relations office, serving participating hospitals and the Medical Center as a whole in the conduct of a program aimed at the education of the public through ethical releases of information.

110. That there be developed in the Center under the administration and control of The Texas Medical Center, housing facilities for student groups and for various technical and professional personnel of the Medical Center at a level of lease or rental commensurate with the individual's earning power.

111. That a service building be erected which would combine the central power plant, laundry and linen service and maintenance department.
112. That central storage areas be provided in the service building to permit of bulk purchasing and central control.

113. That consideration be given to a central telephone system, central mail and messenger service, and a central pneumatic tube system between hospitals and the Out-Patient Department.

114. That a central blood bank, combined with a blood donor registry, be organized in the Out-Patient Department.

115. That a central library under auspices of the Houston Academy of Medicine be established at the Medical Center on a level that would supply the library needs of the entire Center.

116. That a medical museum be started as an adjunct to the central library.

117. That a Rehabilitation Center be constructed as a unit integrated with the Out-Patient Department and Chronic Hospital.

118. That a Continuation Center be established at the Medical Center by the University of Texas or The Texas Medical Center.

119. That an Administration Building be constructed to house the main offices of the Medical Center, the central purchasing, personnel and public relations offices and the offices of certain community health agencies.

120. That an education building be erected for the College of Nursing.

121. That a student nurses' residence be constructed in quadrangle form.

122. That a central advisory administrative committee be created in the Medical Center organization (see III, C, 11).

123. That special advisory committees be created for specific joint services at the Medical Center (see III, C, 11).