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Folder Title:
[TIRR - Strategic Plan] [1985-1991] [1]

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Withdrawal/Redaction Sheet (George Bush Library)

Doc. No. / Type	Subject/Title	Date	Restriction	Classification
01a. Memorandum	To: Distribution list From: Charlie Beall Re: [confidential] (2 pp.)	3/27/91	C	
01b. Paper	Re: Strategic Plan (19 pp.)	n.d.	C	

Page 1 of 1

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File Location: [TIRR - Strategic Plan] [1985-1991] [1]

Pinksheet Number: MB10855

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AR Disposition:	MR Disposition:
AR Disposition Date:	MR Disposition Date:

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Freedom of Information Act - [5 U.S.C. 552(b)]

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P-5 Release would disclose confidential advice between the President and his advisors, or between such advisors [(a)(5) of the PRA]
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MEMORANDUM

TO: Lex Frieden
FROM: Mark Fuhrer 
DATE: March 1, 1991

Recently I learned that Hermann Hospital, a prime referral source of ours, has established an inpatient rehabilitation program headed by a physiatrist. Early on, the unit will likely be devoted to "less complex" cases, e.g., moderate strokes. However, there is every reason to believe that it will move toward becoming "full service," especially in view of the continuing exemption of rehabilitation units from DRG regulations.

Is there a planning priority that warrants attention more than that of protecting and nurturing our "front end," i.e., our sources of referral, especially for comprehensive inpatient rehabilitation services?!

The Corporate Rain Dance

Most planners ride into the future facing the past. It's like trying to drive a train from its caboose.
By Russell L. Ackoff

OUR attitude toward planning in the United States has gone through a major transformation in the last 10 years. Until then planning was associated with Communism and, therefore, was considered to be a bad thing. Since then it has been put into the category of what Winnie-the-Pooh called "good things." But the fact that planning probably has become the most frequently discussed topic in management literature does not mean that a lot of it is being done. Instead, a lot of what is being done is *called* planning. These are two very different things.

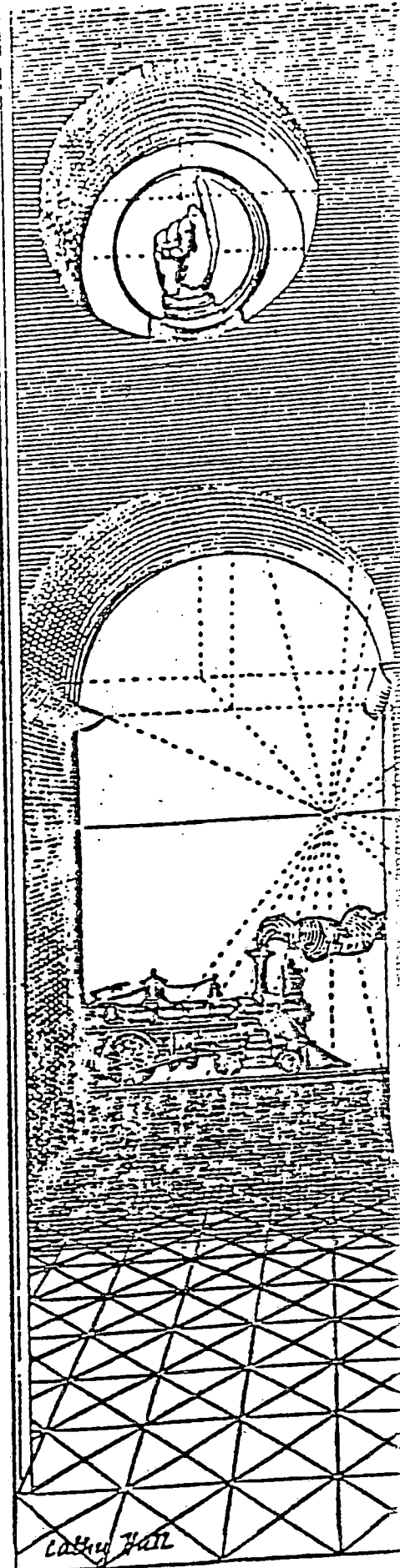
Recently, a prominent business magazine featured an article on how a corporation I have worked in makes its planning decisions. The article was based on interviews with the corporation's executives. It was a fascinating piece — of fiction! It had absolutely nothing to do with the way decisions were actually made: it described how the executives would like to have made their decisions. I find such public deception about corporate planning objectionable on two counts. First, it reinforces the shaky, unsuitable (but undisclosed) basis on

which most planning is done. Second, I think it's unethical because it leads shareholders and investors to expectations which are ill-founded; they — and the employees — have a right to know how executives actually plan.

Most of the planning that I have seen in about 250 American and foreign corporations is like a ritual rain dance performed at the end of the dry season to which any rain that follows is attributed. Rain dancing has no effect on the weather even though it may have therapeutic effects on the dancers. Despite this, I find that as a so-called professional planner I'm repeatedly asked to help improve corporate dancing, not to help control the weather.

The rain dancing is usually led by Chief Bottom-Up or Chief Top-Down. Bottom-up planning is often initiated by a chief executive officer who hears a lecture about the necessity of planning and decides to do something about it. He calls for the senior vice presidents and says, "Gentlemen, it's about time we had a corporate plan. I want a five-year plan for the corporation one year from now. So you should each give me plans for your area of responsibility 11 months from today." They salute, say, "Yes, sir," and withdraw. Then they call a meeting with the junior vice presidents and say much the same thing as the chief executive officer did, but they give their subordinates 10 months to submit their plans, leaving a month to coordinate and integrate the plans. This process continues down the line until the lowest level managers are called. If there are more than 12

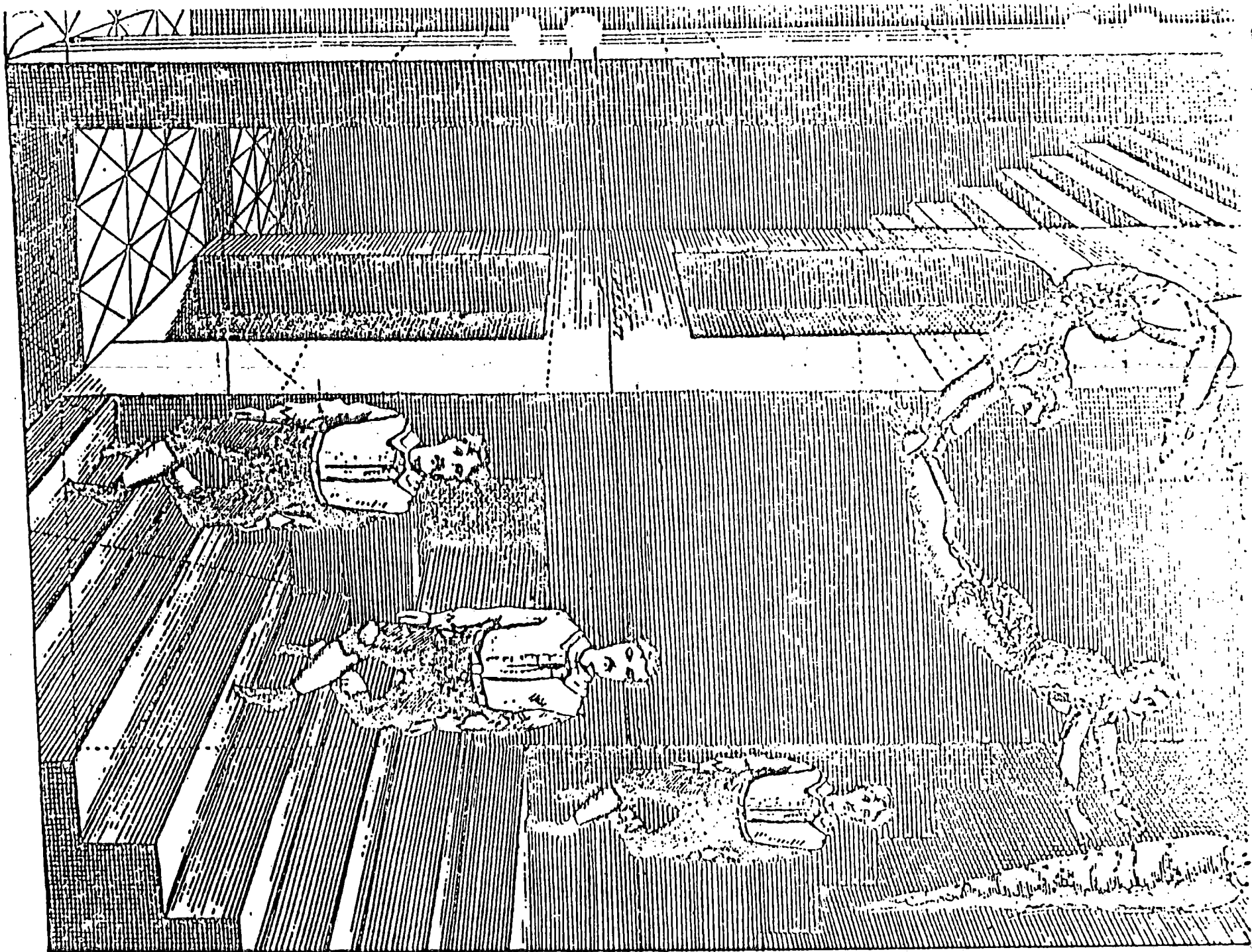
Russell L. Ackoff is the Daniel H. Silberberg Professor of Systems Sciences at The Wharton School. His most recent book, co-authored with six colleagues, is Designing a National Scientific and Technological Communication System, the University of Pennsylvania Press.



OCT 28 1987

TRC-MAIL ROOM

Carly Hall



Top-down planning is usually initiated when senior executives go into hiding in the Bahamas.

levels in the organization they may be directed to submit their plans six months ago!

Because the lowest level managers have little if any time for planning they usually make a list of projects that have been hanging around for a while. These are seldom treated in any systematic way. They are merely described and their cost and expected return are estimated. Then they are passed up to the next level where a little filtering and combining is done; also costs and expected returns have safety, or fudge, factors added to them. And so on up until a massive collection of unrelated projects reaches the chief executive officer. He deals with the whole as his subordinates dealt with their unrelated parts.

The result is a hodge-podge, not a plan. Fortunately, the output is taken no more seriously than promises made in church. The so-called plan is seldom if ever consulted. It is used occasionally to impress visitors who do not examine its content.

Top-down planning is usually initiated when the senior executives go into hiding in the Bahamas or some reasonable facsimile and prepare a "white paper" laying out corporate objectives and the broad strategies by which they are to be pursued. This becomes the corporate sermon from the mount. It is passed down to the next level for translation into terms relevant to that level, and so on to the bottom. But it is no more effective than the bottom-up hodge-podge.

NOW I want to look more closely at why there is so much rain dancing and then suggest a program for corporate weather control. Most managers and management educators say the essential activity of management is "decision making" and "problem solving." For this reason management education increasingly focuses on developing the ability to make decisions and solve problems. In the last 10 years, however, some of us involved in

planning have come to realize two rather surprising things about all this: first, problems do not exist — they are a figment of our imaginations; second, if they did actually exist they would have no solutions.

These assertions obviously require some explanation.

Consider the nature of textbooks for a moment. They present students with a set of clearly-labeled subject headings. At the end of each chapter students are given a set of well-formulated problems that usually have only one correct solution. As a result, students tend to think of life as a series of clearly-defined episodes at the end of which they are given well-formulated problems to solve. But no manager ever has a regular and guaranteed supply of well-formulated problems.

Instead, as William James, the great American philosopher-psychologist of the turn of this century, observed, life presents us with "great big buzzing confusions." His student, John Dewey, who became an equally great philosopher, analyzed such buzzing confusions and tried to identify the ultimate elements of which they were made. He discovered that the ultimate element of confusion is what we call a "problem."

Dewey's discovery has a very important implication for planning: it implies that problems are related to great big buzzing confusions as atoms are related to objects. In other words, problems, like atoms, are conceptual abstractions — we cannot experience them directly. But we can experience confusion which is made up of problems, just as we can experience tables and chairs which are made up of atoms. It is in this sense that problems can be said not to exist.

A few years ago I coined a term to replace the awkward expression "great big buzzing confusion." I called it a "mess" because I couldn't resist the pun: mess-management.

A mess is not merely an aggregation of problems; it is a *system* of problems. This means that the problems interact. Therefore, if we do the usual thing and break up a mess into its component problems and

try to solve each one separately, we will not solve the mess. For every time we solve a problem, we create new ones. Example: if my son presses me because he wants an automobile, and if his pressure constitutes a problem for me, and if I finally relent and decide to get rid of that problem by giving him an automobile — then I create a whole new sequence of problems.

On a larger scale, in the public sector, an urban mess is decomposed into problems labeled transportation, housing, health, education, utilities, and so on. In corporations, the same is done for problems labeled finance, production, marketing, research and development, and so on. These are usually planned separately.

But problems aren't entities which can be destroyed: they are simply part of a sequence: problem/solution; problem/solution; and so on beyond the horizon. Problems are also linked in parallel: again, they are interactive. So how we solve one problem affects the solubility of others. That's what I mean when I say we must deal with "messes," not problems. Only when you have viewed a mess as a system of problems can you explain how it is possible to "improve" every part of a city (or corporation) separately and still have the whole get worse.

Planning has to do with the future. But planners can look at the future with entirely different perspectives. Over the past 20 years, most planning I have observed represents three basic points of view.

The first is the *reactive or retrospective* point of view. It accounts for nearly all of what is called planning. It is preoccupied with identifying and fixing up bad situations. It expresses a desire to return to a previous state, one which is considered preferable either to the current state or to the state toward which the future seems to be taking us. The reactive planner tries to buck the tide and swim back to a familiar shore.

This type of planning tries to get rid of deficiencies in an organization one by one. It takes messes apart, identifies their component problems, and designs sepa-

rate projects to solve them. There are usually more projects than available resources can support. Therefore, this type of planning concentrates on selecting "top priority" projects and allocating most resources to them.

The reactive planner walks into the future facing the past. He has a good view of where the organization has been and is, but no view of where it is going. Such planning is like trying to drive a train from its caboose. It is preoccupied with tactical questions, ignoring strategic issues. It is *satisficing* (satisfactory plus sufficing) — trying to do good enough, but not as well as possible.

In reactive planning the principal tactic for removing a deficiency is to try to identify a simple cause and suppress or repress it. For example, when an "alcohol problem" developed in the United States earlier in this century, alcohol was identified as its cause and prohibition followed. (Recall that this created more serious problems than it solved.) Today we have what is called a "narcotics problem." What's our solution? Repress narcotics. We don't learn much from our previous mistakes.

The second type of planning (most prevalent among professional planners) can be called *preactive* or *prospective* planning. It consists of "predicting and preparing." It is based on the belief that things are getting better all the time. Therefore, it is concerned with accelerating the approach of the future. It doesn't try to buck the tide, but rides on its leading edge, so as to get to where the tide is going before anyone else does. Then it plans to collect a toll from all who arrive later.

Forecasting plays a fundamental role in such prospective planning. It tries to predict accurately both the problems and opportunities that the future will bring, so that it can minimize the one and maximize the other.

Preactive planning focuses on *programs* — sets of interconnected projects directed at producing a desired future state. Such planning tends to be strategically oriented; it deals with longer-range objectives than reactive planning does.

Also, it deals with more of the organization — not just with its deficient parts taken separately. But the external environment in which an organization operates is beyond the planner's boundaries. If he knows yellow-fever mosquitos are on the way, he tries to inoculate everyone against malaria rather than to divert or destroy the mosquitos.

The preactive planner tries to optimize, to do as well as possible, not merely to do well enough. Unlike the reactive planner whose principal tools are judgment, intuition, and experience, his are science, technology, and experimentation.

However, preactive planners are confronted by a dilemma that they are reluctant to face, one that arises from their preoccupation with forecasting. They will buy or support almost any effort to produce a better view of the future whether it involves use of the Delphi method, econometric models, time series analysis, or what not. But they do not ask a fundamental question about forecasting: Under what conditions can we forecast the future accurately? The answer, unfortunately, is: Only where the future is *completely determined* by the past.

It is clearly not consistent to assume that the future of the *environment* is determined but not the future of the organization engaged in planning. It turns out, then, that the only conditions under which the future can be predicted accurately are the determined ones that nothing can be done about. Then why forecast?

This dilemma has recently given rise to a new approach to planning which can be called *interactive* or *introspective*. It is fundamentally different than the other two approaches.

The basic approach of the interactive planner is "make it happen." He is unwilling either to return to a previous state, settle for his current state, or accept the way things are going. Unlike the other two types of planners he believes that the future is largely under an organization's control. It depends more on what we do between now and the future than on what has happened up until now. Therefore, he

conceives of planning as the *design of a desirable future and the invention of ways to bring it about*.

THIS planning posture has important consequences. First, since politics is often defined as the art of the possible, most planners are really concerned with finding out what is possible in the minds of people who wield power, in the private sector as well as the public sector. So they actually play politics but call it planning. Instead, planning should be the art of the *impossible*. Planning ought to convert what is initially considered to be impossible into what is subsequently accepted as possible. The interactivist planner tries to do more than optimize — he tries to *idealize*, that is, do better in the future than the best that is conceived of now.

Second, the interactive planner does not believe that most of the relevant future can be accurately predicted because he believes it depends on choices *yet to be made*. Therefore, the only useful way of preparing for a largely unpredictable future is to design organizations, institutions, and societies that are capable of rapid, effective learning and adaptation to changing internal and external conditions. For this reason, interactive planning emphasizes organizational design and management.

Third, the interactive planner focuses on all three aspects of an organization — the parts (but not separately), the whole, and the environment. He believes that often the most effective way of influencing the future of an organization is to change its environment. He may not have as much control over the environment as he has over the organization, but he uses as much as he has up to the hilt.

To illustrate, I will compare planning to the practice of medicine:

□ Reactive planners try to treat symptoms where they occur, mistaking symptoms for causes. They act like a

doctor who always tries to treat headaches with brain surgery.

□ Preactive planners look at the whole system, and interpret a difficulty as a symptom of a systemic deficiency, not of an isolated part. So they might first try to treat headaches by changing diet or prescribing new eye-glasses.

□ Interactive planners focus on the interaction of the system and its environment. They are like a doctor who considers treating a patient's persistent headaches by having him take a new job in a different environment.

AS interactive planning has developed in the past few years, my colleagues and I have identified a set of basic principles and specific steps for the planning process. It is beyond the scope of an article to detail the whole process, so I want to focus on two elements which I believe make interactive planning unique: the first entails moving from the past to the future in a very special way; the second entails starting in the future and working back to the present.

The first unique element is what I call a "reference projection" – an extrapolation from the past into the future, based on the assumptions that neither the system nor its environment will change in any fundamental way. The planner knows these assumptions are false. Therefore, a reference projection is not a forecast in the usual sense. We will soon see what type of forecast it is.

First, consider an example. In 1960 we prepared a reference projection for an automobile manufacturer based on the assumption that the company could continue to grow in the future as it had in the past without any fundamental change in what it was doing. We projected that by the year 2000, the cost of maintaining the 1960 level of urban traffic congestion would be more than 12 times the largest amount ever spent in one year on *all* modes of urban transportation. Such ex-

penditures, we felt sure, were not going to be made. Furthermore, we determined that if they were made, more than 100 percent of the cities' surfaces would be covered by streets and parking lots!

Now we can say what a reference projection is: it is a forecast of *what cannot happen*. Its usefulness lies in pointing out where changes must occur in the future. Such projections do not tell us what will happen because that depends on decisions that have yet to be made; but by telling us what won't happen, they focus attention on critical aspects of the future. They identify where the creative opportunities are.

In a projection prepared for the Fourth District Federal Reserve Bank headquartered in Cleveland, we extrapolated the amount of hand-processed paper work it handles, using data from 1946 to 1973. We also estimated the number of people required to handle it. By the year 2000 the required space would exceed the total amount of commercial space available in Cleveland. Therefore, something in the system must change. What will change depends on what the Bank plans to do; but it had better do something, and quickly.

Now let's turn to the second unique element, the most critical step in interactive planning: *idealized redesign* of the organization. To start, I'll describe it by example.

In the early 1950's I was doing some work with a friend in the R&D laboratory of a public utility. When I got there one morning he said to me, "Russ, you're going to have to keep yourself busy for an hour or two because the boss called a meeting I have to attend. I don't know what it's about or how long it will last." Then, as an afterthought, he added, "Why don't you come with me? No one said that visitors aren't allowed." I said "OK" and went along with him to a small auditorium where about 20 or 30 people had gathered.

The boss entered, went to the podium, and with a very serious look on his face said, "Gentlemen, our entire system was destroyed last night." People looked at him as though he were crazy. After a pause, the boss continued, "I know what

you're thinking – that the system has not been destroyed. But from now on, in this laboratory we're going to act as though it has been. One year from today I want a design of a system to replace the one we now have, assuming it has been wiped out completely. There will be no financial, legal, or other types of restrictions on the design. But it must be technologically feasible. I don't want a piece of science fiction. And it must be capable of supporting itself if it were built. It must be operationally viable."

Then he explained, "I've been here for a long time. When I look back on what's been done here during that time, much of it has been unimaginative and uncreative because we've been constrained by what we have in place. Most of our work has been directed to removing its deficiencies, not to developing the system we would like to have." That meeting started a process that produced designs of almost every major innovation that has occurred in the system since then, and many more yet to come.

So an idealized design is a picture of the system its designers would build *now* if they were free to replace the current system with whatever they wanted most. It is subject to only two constraints: technological feasibility and operational viability.

Why engage in a process as fantastic as this? For a number of reasons. In general terms it turns the planning process around 180 degrees – instead of planning *away from a current state* we start planning *toward a desired state*. That means planning from the future to the present in contrast to conventional planning which goes from the present to the future. The eyes of the planners are focused on ultimate objectives – ideals – throughout.

Idealized redesign has specific benefits. First, it facilitates widespread participation in the planning process. No one is an expert on what ought to be: everyone's opinion is relevant. Arthur Burns has no special knowledge of what the banking system ought to be, however much he knows about what it is and is not. He can't tell me what my local bank ought to be

Bottom-up planning is taken no more seriously than promises made in church.

doing for me. My opinion on that is just as relevant, if not more so, than his. The president of a company may have more useful opinions than a janitor on how the company ought to finance its growth, but the situation is reversed when it comes to keeping the company facilities clean.

The second advantage of idealized design lies in its focus on the processes of learning and adaptation to change. This becomes clear when we consider how an idealized design differs from a utopian design. To begin with, it does not pretend to be a perfect state. Rather it is built on the realization that our concept of the ideal is subject to continuous change in light of new experience, information, knowledge, understanding, wisdom, and values. Furthermore, the designers engaged in idealization cannot answer all the questions they have about what the system ought to be. Therefore, they must design a capability for answering these questions experimentally. So it is an *ideal-seeking* system, unlike a utopia which pretends to be beyond improvement.

A third advantage of the idealization process lies in its stimulation of creativity. Creativity is normally inhibited by conscious or unconscious self-imposed constraints based on what seems feasible and acceptable to others. The idealized design removes consideration of feasibility (except technological), acceptability, and the usual financial, legal, and other types of constraints. Therefore, it releases our imagination from the bonds that keep it from roaming creatively.

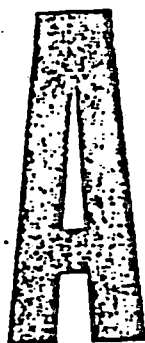
Finally, and perhaps most important, is the impact idealized design has on our concept of feasibility. It can convert the impossible into the possible.

Now, if interactive planning is so useful, why isn't more of it being done?

For one thing, there are not many people who consider themselves to be professional planners. Of those who do, not many use this conception of planning. Over time, I hope this will change through the education process. But the more basic reason is that very large numbers of

people in management are essentially in the reactive, the inactive, or particularly in the preactive mode. They feel they can deal with the future, and thereby the present, by predicting and preparing.

Some of them are actually succeeding. So the ones who aren't look at the successful ones and say: "We're not succeeding because we're not doing it as well as they're doing it." They ignore the fact that preactive planning works best in high-technology corporations such as IBM, Xerox, and Polaroid. These companies tend to be optimistic about the future because the future of their technology seems to be good. In other words, the future is going to be better than the present, let's predict what it's going to be, identify the opportunities, and exploit the hell out of it.



ACCEPTANCE of interactive planning is largely a matter of intellectual unrest in individuals. Where they are in positions of authority they can do something about it. But there are a lot of enthusiastic people who are in positions where they can't do anything about it. People

in positions of authority normally will turn to it only as a last resort when faced with a problem that's critical to their survival.

Today there are corporations threatened by long-run problems of *overemployment*, too much manpower. They are in a bind because the cost of efforts to reduce overemployment is extremely great, including a threat to the survival of an organization. It is increasingly difficult, particularly as a result of union and legal activities, to get rid of unnecessary people. And since society isn't taking care of them very adequately, there is also a question of justice and conscience. I have run into this problem in at least 10 different contexts in the last year; people are tremendously worried about it. But no standard approach to planning will "solve" this "problem."

Another contemporary survival prob-

lem is the corporations based on classes of products whose consumption cannot continue to grow in the future as they have in the past, nor even grow as rapidly as the economy. They must change the nature of their business in a very fundamental way. Food companies are a good example. General Mills has diversified into toys and Anheuser-Busch is strong in family entertainment. This last quarter of the 20th century has its equivalents of the buggy whip manufacturers who disappeared in its first quarter.

A final word. People often ask me how I know when things are going well in interactive planning. My answer always is, if you have to ask that question once you're in the process, then it's not going well. If it succeeds, there is no need to make fine measurements. Basically it is, and ought to be, a crusade. It's not solely an intellectual activity. Planning becomes a way of life, the essential activity in management, and everybody in the organization has an opportunity to contribute. When an organization passes through the planning threshold, people begin to get a sense of their capacity to design and create a future. Ultimately, it is far more gratifying than rain dancing. ■

Suggested Reading

- IGOR ANSOFF, *Corporate Strategy*. McGraw-Hill Book Co., 1965. *A different but related look at corporate planning.*
- C. WEST CHURCHMAN, *The Systems Approach*. Delacorte, 1968. *A seminal work on the strengths and weaknesses of this approach, particularly as it applies to planning.*
- HASAN OZBEKHAN, "Planning and Human Action," in *Hierarchically Organized Systems in Theory and Practice*, ed. by Paul A. Weiss, Hafner, 1971. *A thoughtful exposition of the theory of interactive planning.*
- RUSSELL L. ACKOFF, *A Concept of Corporate Planning*. John Wiley and Sons, 1970. *An early formulation of interactive planning, then called "adaption," in the corporate context.*

not done a detailed analysis, so I may be unfair in this area, but it seems to me that our business-management textbooks and courses emphasize the traditional, hierarchical form of organization. We teach our students how to "wield authority," and we make it clear that career success is "making it to the top."

We may not say this out loud, but it is implied even in the concept of higher education: with a degree one can enter the system at a "higher" level and aspire more immediately to a position of authority. Alumni often complain that they did not get a position of responsibility soon enough; usually they mean they did not get enough authority. "Calling the shots" is good, something to be aspired to. Invisible contribution to a team effort does not count. Reality is hierarchy, so to get as high as possible is the obvious, valid goal.

We encourage comparative performance rather than individual competence by noting how much our alumni make in their first jobs. We are obsessed with ranking our schools on a hierarchy of overall excellence that has prestige value but little meaning in terms of the actual content of the education; the ratings are not based on a detailed analysis of what actually goes on in the various management schools.

In summary, I believe we take hierarchy for granted and that we have failed to realize how the assumptions underlying hierarchy pervade our thinking both in schools and in the workplace. If it is true that organizations will be flat networks in the future, then we must give serious thought to the following questions.

- What do we mean when we say "management"?
- Will management reside in individual managers, or will it be distributed as a function in networks and working teams?
- Can managers as such be selected, trained, and

developed?

- Will our models for educating managers continue to have relevance? Will we have to invent wholly new concepts of what individuals must learn how to do in order to coordinate work?
- Most important, will we have to abandon hierarchy as an organizing principle and invent new concepts of coordination and control that will generate new kinds of developmental requirements? ■

References

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25 Years of Excellence

file PR/Marketing
857

MEMORANDUM

TO: *Linda Fiddle*
FROM: David D. Stock *DS*
RE: Consultation Visit
DATE: October 14, 1985

Thank you for participating in the recent marketing consultation visit. A report for your review is attached. Efforts will be undertaken to make improvements in those areas noted. Further information regarding process will follow after November 1, 1985.

J.
R.
K.

THE J. R. KREIDER CO. INC.

SPECIALISTS IN DISABILITY MANAGEMENT
AND MODIFIED WORK PROGRAM DEVELOPMENT

P.O. BOX 541, PHOENIXVILLE, PENNA. 19460, TEL: (215) 948-0858

October 4, 1985

David D. Stock
Texas Institute of Rehab
and Research
1333 Moursund Avenue
Houston, TX 77030

Dear Mr. Stock:

Re: Consultation 10/1, 2, 3/85

First, permit me to thank you for the fine way you organized my visit to TIRR. Because of your schedule, I feel maximum benefit was gained from my visit. Your entire staff was totally receptive and fully cooperative.

I have enclosed a listing of the recommendations I made as a result of my visit. We reviewed most of these recommendations during my summary session on Thursday.

Also, attached is a listing of needs which are a result of the survey at your facility and the recommendations. These are areas where I know I can be of value from the standpoint of program development. If you feel you can use my services in these areas, I would urge that we begin at the earliest possible date. My schedule is expected to open up during early December.

If we can get the programs in place by mid-January, you will be in an excellent position to begin marketing by January 15, 1986. Between mid-November and January 15th, little actual marketing can be accomplished. It is an excellent time to concentrate on program development and marketing strategy.

I look forward to hearing from you in this regard, and until then, I remain

Very truly yours,

Jeffrey R. Kreider
Jeffrey R. Kreider
President

JRK:slf

TEXAS INSTITUTE OF REHAB AND RESEARCH NEEDS

1. Summary of Texas W.C. Law.
2. Catastrophic Injury Reporting Format and Training.
3. Low Back Injury Reporting Format and Training.
4. Physicians' Manual on Dealing with Insurance Companies.
5. Marketing List -- All of Texas -- not just Houston. Any other area which TIRR feels is their territory.
6. Guest Speak at TIRR Open House or Training Program "Disability Management."
7. Letter to show audit results of 1% or less.
8. Letter to stop \$15 audit fee.
9. Help select insurance liaison.
10. Help select tour guide (department heads tour me).
11. Review of Spinal Cord Marketing Brochures.
12. Training of Staff and Insurance Liaison.
13. Development of Programs for Voc.
14. Development of Marketing Approaches to Voc Programs.

TEXAS INSTITUTE OF REHAB AND RESEARCH RECOMMENDATIONS

Intake

1. Make certain special requests are followed.
2. Gather goals from sponsor and referrer.
3. Pre-authorization being handled well.

Billing

1. Billing 15th and 30th of the month -- good.
Reduces pay lag.
Increases cash flow.
2. Need to coordinate reporting and billing so they are sent together for comp carriers.
3. Need claim number and case captions on each report and bill -- on front or cover sheet.
4. Stated 1% error rate -- publish it to carriers; show them how fair and accurate you are.
5. Wait 45 days before collectors call medical carriers. Under combined reporting/billing system give comp carriers 45 days. Also, 30 too short considering high possibility of home office approval.

Records/Reporting

1. Not right info for carriers. Establish two special reporting formats:
They are --
A. Catastrophic
B. Other
2. Be different than other facilities. Stop \$15 charge to audit. Bill marketing for audits as P.R. work -- announce it.
3. Need insurance liaison for reporting and marketing.
4. Establish reporting mechanism not part of patient's chart. For info only.
5. Establish "Special Handling" instructions for copies of reports and bills.

Spinal Cords

1. New advertising brochure based on "who wrote the book" theory. Who trained here? Push Dr. Carter as "The Ultimate" in knowledge and care.
2. Publish to home office insurance company executives stats -- costs -- point out, up front, how other centers distort cost figures.

3. Best Kept Secret in Texas -- "It's No Secret. We Trained the Experts." Alumnus!
4. Offer "in office" training on various disabilities to local claims offices, company by company. Want to establish "special" and "trusting" relationship.
5. See Dr. Carter with his sense of humor as having high appeal to claims person. Creates strong image of doctors being real -- human -- touchable.
6. Make certain rehab nurse and claims person is invited to staffings.
7. Go back to all local patients with recall system -- determine if follow up services are necessary. Provide on outpatient. System for re-check.

Polio

1. National marketing campaign to become center.
2. Deal with individual problems caused by residuals. Let research fall out of problem solving; not vice versa.
3. Good results with job modification -- publish to public and L.T.D. carriers.

Back Program

1. Specialized reporting format encompassing physical, emotional, financial, vocational, motivational.
2. Individualized -- not everyone needs whole program.
3. Insurance liaison heavily involved in intake and staffing re: "System" problems.
4. Need voc involvement to be R.T.W. oriented.
5. Take responsibility only up to placement model and role. Consider use of VSB.
6. Consider meeting with several influential insurance carriers re: "What is missing" in "other" programs.

Amputees

1. Consider tactic to make patients and customers comfortable with Dr. Meir leaving.
2. Consider services which could be accomplished on an outpatient basis. Nearby hotel accommodations?
3. R.T.W. success -- publish to workers' compensation and L.T.D. carriers. L.T.D. different than W.C.

Outpatient

1. Growing interest -- high -- start offering in an organized way. Show lesser costs compared to your

per diem inpatients. Show lesser costs to similar services by your competitors. If required for 12 months accept lesser profit to create interest and volume.

Stroke/Head Injury

1. Not the same to ins. industry. With 80% stroke 20% head injury turn off to ins. cos. Don't like stroke and head injury patients mixed. Gives appearance of "stroke" program trying to attract head injuries. Somehow re-package and sell separately.

Pediatrics

1. Market real heavy to case managed medical carriers. Equitable, Occidental, Prudential, Met Life, etc. Real concerned with pediatrics.
2. Market to general public as only program in Texas. Play up Dr. Bouser's double board. Parents want the best for their children. Play up school component -- important.

Voc Rehab

1. Texas physical capacity loss state. Some potential for voc -- but limited. Play up physical capacities combined with jobs patient can physically and vocationally do. Not strictly voc eval -- combine.
2. Need to examine how to provide --
profit -- how to
package -- how to
sell -- the following

pre-employment evals
on-site work evals -- safety and health
job descriptions
career change -- general public
displaced executives
plant lay offs and shut downs
TIRR's employees injured; R.T.W. reduce
TIRR's W.C. costs
V.S.B. use -- develop resume; can use in
all of the above

Marketing

1. Ins. liaison to market comp carriers needs to be selected.

2. Specialized brochures (present ones OK) directed toward insurance companies with cover letter explaining insurance company related points. Anticipate objections and deal with them in letter. "Did you know..." (Harrington, Jackson, etc., etc.) Be bold.
3. Present marketing plan -- well organized and appropriate -- just like my schedule was.
4. Sales pitch to all markets problem solving, not just quality. People do not buy products or services. They buy solutions to problems.

Scoper's

by

MEMORANDUM

TO: Harold Taylor

FROM: Mark Fuhrer MF

DATE: May 17, 1989.

A few weeks ago when Karen and I were discussing the questionnaire you had asked us to address, I alluded to past strategic planning efforts that had taken place at TIRR before Karen joined us. Today, quite serendipitously, I came across the enclosed document bearing a revision date of September, 1985. It depicts analyses of industry trends, actual or potential competition, and perceived strengths and weaknesses of our programs that we alluded to in our memo as components of strategic planning. This document also affords an interesting opportunity to assess how much was accomplished that is called for by the plan.

cc: K. Hart, Ph.D.

TIRR STRATEGIES

1. Diversify.

- a. Expand our amputee program and consolidate our market position.
- b. Expand our program in pediatric rehabilitation and consolidate our market position.
- c. Modify and enlarge our head injury program capabilities and expand our market share.
- d. Organize all of our general adult rehabilitation services into a program approach and expand our market share.
- e. Consolidate and strengthen the market position of our spinal cord injury and amputee programs.
- f. Develop additional strengths -- improve and expand programs other than SCI, for example, Surgery (hand, urology), Neurophysiology, Poly-trauma.
- g. Establish a post-polio service to take advantage of our present leadership position in this region (and in the national press).

2. Vertically integrate.

- a. Services for the Industrially Injured. Start working directly with (large) employers on the value of rehabilitation and return to work programs for their own disabled employees to obtain the position of top rehabilitation provider and resource in the area sensitive to their concerns.
- b. Develop a group to work with new companies entering the rehabilitation field by providing consulting, management expertise through contract, and joint ventures. Organize a group of present and new internal and external specialists and support resources to develop and market educational materials and experiences for the rehab professionals and stakeholders in the related industries (e.g., insurance, health care, state government agencies, employer groups). Run the rehab components of new rehabilitation-oriented skilled nursing facilities.
- c. Shift to better organized and more comprehensive outpatient services, provided closer to home in an outpatient/daycare setting.
- d. Develop a home health care service group to reduce the need for institutionalization.

- e. Establish an outreach and technical support program with formal linkages to rehabilitation facilities in Texas' rural areas and smaller SMSA's.
 - f. Start a case management/coordination business that works for individuals (rather than insurance companies).
 - g. Develop (through joint ventures or syndication) (Vencare?) a skilled care facility capable of handling a percentage of healthy, ventilator dependent persons (e.g., quadriplegics, polio).
 - h. Create an expert assistance resource accessed by an "800" number telephone hotline for information support of physicians, rehab professionals, rehab facilities, former patients, and their families.
 - i. Establish a dominant position in the rehabilitation engineering and rehabilitation technology markets in the five-state region.
3. Change the conditions in the market.
- a. Help HCFA to develop its recommendations to Congress to bring rehabilitation services (presently excluded) into the Medicare Prospective Payment System.

- b. Start a move to expand no-fault auto insurance nationally, and to Texas, specifically.
 - c. Work with Texas State agencies and legislators to help improve the legislation, regulations and resources that affect availability and financing of quality rehabilitation services for Texans.
 - d. Keep THFC hearing officers current on the facts of rehabilitation (e.g., need, demand, and resources) by presenting expert testimony at appropriate hearings.
 - e. Catalyze the association of similar rehabilitation facilities into an affiliation like the Voluntary Hospitals of America.
- 4. Position ourselves for possible future entry into the rated tax-exempt debt markets.
 - 5. Concentrate on providing high quality rehabilitation results at lowest cost to the purchaser over the long term (rather than lowest cost in the short term) and on establishing that niche in the market and repositioning the competition.
 - 6. Re-organize the corporate structure to provide the business flexibility needed to seize the opportunities that present themselves.

7. Establish formal relationship with a Department of PM&R at UTMSH before anyone else.
8. Catalyze the creation of a self-sustaining alumni support group of Texas SCI patients like the Texas Head Injury Foundation and the new Texas Polio Survivors Association.
9. Obtain and maintain the position (for the appropriate legal entity) as the number one and most productive rehabilitation research group in the five-state region.
10. Grow now in order to recruit and acquire commitment of limited quality staff before competition enters the staff market.
11. Develop a source of competitive advantage by producing evidence that key services being provided are effective and efficient.
12. Use our educational resources to support the corporate objectives.
13. Develop an educational capability for disseminating service expertise of the programs, where our competitive advantage would not be weakened by so doing.
14. Networking. Develop multi-institutional relationships to implement our vertical integration strategies, choosing relationships that preserve our flexibility and effect control over volume.
15. Fund-raising. Develop and implement a fund-raising strategy that integrates various philanthropic sources.

VALUES

1. Continued excellence in rehabilitation programs that meet the needs of the patients served and serve as models -- for the community and for developing and testing innovations -- and at the same time to be viewed as a fair cost provider for the patient mix we serve.
 - a. Selected disability groups of appropriate size will be served by programs that will focus on effective and efficient delivery of care that produces the best possible improvement of the individual's functions and performance, according to his/her opportunities.

Programs will:

1. Focus on achievement of expected rehabilitation outcome, with monitoring of results of our efforts and feedback to staff, referrers and payors.
2. Seek and incorporate consumer input into program protocol design (patients and families, referrers, employers, payors), and will ensure that programs respond to community needs.
3. Develop and use clinical and administrative program modifications to improve both results and efficiency.

4. Seek, and include in program protocols, relevant and practical research findings that improve effectiveness and efficiency.
5. Participate in research to evaluate and improve the effectiveness of the services being provided.
6. Participate in training programs to disseminate service expertise to pre- and post-graduate professionals.
7. Control costs while assuring quality services that meet ethical and professional standards.

b. Programs shall make available and coordinate a comprehensive array of rehabilitation services, covering all phases of the process, and including:

1. Prevention of disabling complications,
2. Restoration of biological and psychological well-being,
3. Preservation of residual function,
4. Restoration of useful and meaningful functions,
5. Transitional and independent living support for reinstitution of capability and opportunity for personal autonomy,
6. Follow-up after discharge for maintenance of results and improvement of outcome and scheduling of services previously not indicated,

7. Reduction of environmental barriers and needless dependencies,
8. Return to home, education or work.

c. Programs and resource departments will acquire develop and retain an experienced and dedicated staff who adapt the programs and keep them responsive as objectives change, through:

1. A balanced grouping of clinical and full-time faculty on the active medical staff,
2. Team functioning and multi-disciplinary participation where appropriate to improve synergy, coordination and communication and the effectiveness and efficiency of clinical practice. When used, teams shall vary in composition and leadership according to appropriateness for program effectiveness and efficiency.
3. Continuing education focused on development of skills grounded in state-of-the-art philosophy and methods,
4. Planned recruitment and continued development of capable, creative and committed staff,
5. Promotion of excellence.
6. Involvement of staff in program design, improvement and evaluation.

2. Continued development and coordination of networks of service providers and community resources that provide continuity of support for the disabled person.

TIRR programs will:

- a. Provide essential backup and specialized support for community hospital patients by offering regional tertiary care services.
 - b. Extend and maintain formal intake linkages and protocols (e.g., trauma centers, hospitals, physicians, preferred provider organizations, insurance companies, self insured employers).
 - c. Extend formal discharge linkages (e.g., home, independent living centers SNF's, ICF's, HHA's).
 - d. Develop and apply technologies that restore function, aid self-care, mobility, environmental control and communication.
 - e. Train staff of referral and disposition sources in clinical management techniques that reduce complications and preserve function.
3. Development of increased opportunities in the community for return to work, de-institutionalization, and reduction of barriers to participation in community life.

TIRR will act where possible to:

- a. Reduce system-wide disincentives for return to work (especially in the legal, health and welfare, and care delivery systems).
- b. Improve employer and public awareness of the productive value of persons with disabilities and advocate for their inclusion in the mainstream of community life.
- c. Educate employers regarding the economic return on investment in rehabilitation and re-employment of disabled workers.
- d. Involve the patient's employer early in the rehabilitation process in order to maintain employment opportunities.
- e. Foster development of additional employment and re-training opportunities.
- f. Develop less intensive and lower cost care and community living possibilities for those persons for whom work and independent living is not an option.
- g. Create options to meet the long-term care needs of healthy ventilator-dependent persons.
- h. Develop disability-reducing or compensating innovations (e.g., barrier-free design, environmental controls, mobility and function-restoring technology, both engineering and clinical) that make possible independent and community living and return to work.
- i. Improve and extend patient training in self-care to prevent complications requiring rehospitalization.
- j. Cooperate actively with independent living resources.

4. Continued leadership in development of human resources for the rehabilitation field by providing a primary site for clinical education.
 - a. TIRR will continue to be a teaching hospital for undergraduate medical students and residents in physician specialties in rehabilitation medicine and rehabilitation surgery (Neurosurgery, Orthopedic Surgery, Plastic Surgery, PM&R, Radiology, Urologic Surgery).
 - b. TIRR will continue to be a teaching hospital for training non-physician clinical professional staff (clinical nurses and public health nurses, physical, occupational and respiratory therapists, medical social workers, psychologists, orthotists, prosthetists, dietitians, and pharmacists).
 - c. TIRR will continue to be a model environment for educational opportunities for administrative residents and graduate students.
 - d. TIRR will provide continuing education for representatives of purchasers of service (rehab nurses, claims adjusters, rehab counselors).
5. To further the achievement of the above goals and objectives through continued leadership in clinical and operational rehabilitation research and technology development, targeted to problems in the clinical service programs and through modification of the clinical programs in the light of relevant and practical research findings.

Specifically, TIRR will:

- a. Be a community leader and authority on prevention of trauma.
- b. Advance the knowledge base of contemporary rehabilitation medicine by providing a primary setting for conduct of clinical research and for development and initial application and evaluation of new diagnostic and treatment methods.
- c. Advance the knowledge base of rehabilitation practice, especially independent living, and vocational rehabilitation, and develop innovations (technology, methods of social change) that move more disabled people to independent living and work.
- d. Conduct high quality rehabilitation-related research programs in close affiliation with affiliated medical schools.
- e. Conduct research in mutually beneficial relationships with universities and service and research organizations in the U. S. and other countries through formal and informal affiliations and through sharing of staff.
- f. Seek Federal and private sponsorship through grants, contracts and other business arrangements for research and technology development activities of mutual benefit and high priority to TIRR.
- g. Develop additional sources of funding for key researchable internally-generated questions.
- h. Develop a source of matching funds for Federal grants.

6. To further the achievement of the above ideals through education of various publics (physicians, health professionals, patients, families, sponsors, and lay public) in pertinent aspects of rehabilitation to foster utilization of research results, and to transfer knowledge and technology through:

- a. Publications (print and audio-visual, e.g., books and monographs, cassettes, cassette/slide courses, videotapes, self-study courses).
- b. Seminars and continuing education courses (targeted to specific groups),
- c. Media (print, radio, TV), (through an accessible public relations contact),
- d. Consultation,
- e. Telephone "Hotline",
- f. Participation in policy-making bodies in the profession and the community,
- g. Exhibits at professional meetings,
- h. Speakers Bureau, and
- i. Recognizing and rewarding community efforts.

7. To maintain and improve our financial resources necessary to provide rehabilitation services to the community as a whole, as well as to meet the rehabilitation needs of its medically indigent.

TIRR will:

- a. Ensure that adequate financing exists beyond current operating needs that is sufficient to meet standard business requirements of maintenance, expansion, and replacement of the physical plant, as well as to conduct education and research programs, consistent with community need.
- b. Ensure that revenues are adequate to cover direct and indirect expenses, working capital needs, capital costs and a surplus for expansion of services and meeting permanent working capital needs in future periods.
- c. Evaluate our financial requirements against the usual hospital financial performance indicators, particularly those that measure our creditworthiness as determined by national credit rating agencies, and to maintain and improve them through financially sound and effective delivery of services.
- d. Incorporate appropriate procedures, such as discounted cash flow analysis for debt financing and project planning.
- e. Ensure that we are in accordance with our financial policy statement as we plan, manage and evaluate our programs to meet community rehabilitation needs.
- f. Actively promote the removal of financial obstacles that impede provision of necessary inpatient and outpatient services and equipment to patients with severe physical disability, beginning with timely and prompt financing immediately post trauma, and continuing through required, lifetime follow-up.

8. To use corporate structures that best support our mission and goals.

Our corporate structure will provide us the flexibility to effectively implement our strategic plan, and establish appropriate legal entities to conduct the activities planned.

1. PATIENT POPULATIONS: NEED

Summary. The need for rehabilitation medicine services is increasing because of aging, chronic disease, high technology medicine, improved survival rates, increased trauma, and improved trauma centers.

The Aging Population, 1980-1990 (in thousands)

<u>Age</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>2000</u>	<u>2030</u>
Under 25	91,443	90,145	89,925		
25 - 44	61,893	71,235	77,678		
45 - 64	43,896	44,194	46,087		
<u>65 - over</u>	<u>24,927</u>	<u>27,305</u>	<u>29,825</u>		55,000
Total	222,159	232,879	243,515		

The population of Americans 65 or older is growing at twice the rate of those under 65 and the number of Americans 75 and older is growing four times the rate of those under 65.

In 1980, 38% of inpatient days were used by persons age 65 or older. Admissions were three times more frequent and L.O.S. 75% longer than the under 65 group. It is estimated that between 1980-1989, the number of inpatient days will increase by 15%. The older population will account for 89% of this increase.

Healthcare facilities are focusing on a changing patient population, the older, disabled and chronically ill populations, and devising activities to meet the long term needs of these patients. SCI and polio patients are entering the aging process and present new problems. Treatment, therefore, focuses on maintaining independence, and maximizing the patients' ability to perform the basic activities of daily living. For persons with permanent or chronic illnesses, the goals tend to be rehabilitation. Substantially increased chronic care and rehabilitation services will be needed, including home care.

The increase in the geriatric population will create significant new demands for rehabilitation, day care centers, and home maintenance programs.

Older Americans have more strokes, a higher incidence of diabetes, more broken hips; in short, more disabilities requiring rehabilitation services.

A British medical publication estimated that one-half of the strokes incurred in people 55 years or older, and one-half of those required intensive rehabilitation. In this country, 50% of those that survive strokes will be alive seven years later and 30% of strokes get into rehabilitation or skilled nursing facilities.

Medical advancements in recent years have decreased stroke deaths by 31% and heart disease mortality by 18%.

There are thought to be 20 million arthritics in the United States and those with neurological disorders may number 1.5 million.

In 1970 it was estimated that in the United States there are some 23 million physically disabled people and nearly half are severely disabled.

Between 1966 and 1976, the number of permanently disabled Americans increased by 37%, while the total population increased by only 10%. Furthermore, one out of every seven Americans is permanently disabled.

In all, at some time during our lives, 70% of the population becomes disabled to the extent of being unable to climb stairs.

In 1972 it was estimated that in the United States there are some 15 million persons limited in their ability to work because of chronic health conditions and impairments. A rate of about 146 per 1,000 population. Approximately half the disabled 7.7 million were unable to work altogether.

It is estimated that each year back pain disabilities affect at least 17.7 million people badly enough to require hospitalization.

It is currently estimated that each year 7,500 people survive traumatic spinal cord injury, that possibly as many as 422,000 survive brain trauma, and that over 700,000 live following strokes.

S.S.A.'s most recent survey (1982) findings report among persons aged 20-34, total disability occurred at a rate of 22 per 1,000 population. The rate approximately doubled for each succeeding 10-year age group and reached 190 per 1,000 for those 55 to 64.

Musculoskeletal and cardiovascular disorders rank first and second as the most frequent reported disability categories reported by both the totally and partially disabled.

Higher technology medicine increases the need for rehabilitation services because it contributes to higher survival rates for victims of serious illnesses and injuries.

Trauma accounts for approximately 100,000 deaths a year. In addition, more than 2 million trauma victims are hospitalized each year, and more than 400,000 of them end up permanently disabled. In other words, one out of every five hospitalized trauma victims ends up permanently disabled.

Approximately half of the trauma deaths are due to motor vehicle accidents and the number of motor vehicle deaths and injuries per 100,000 population has risen steadily since the 1960's.

The down sizing of automobiles is expected to increase the number of motor vehicle deaths and disabling injuries. In fact, the National Highway Safety Traffic Administration is projecting a 26% increase in highway deaths by 1990 based on assumptions of no growth in number of cars or miles traveled.

Our high incidence of trauma and improved medical care of trauma victims also is increasing the need for rehabilitation services because of higher survival rates. Level 1 trauma centers promise to save the lives of 20 to 30% of patients who, if treated elsewhere, would otherwise die unnecessarily.

Increasing numbers of trauma rehabilitation units are opening up inpatient beds just for trauma patients.

High unemployment rates will decrease the number of industrial related rehabilitation cases.

The move from a society of families to a society of individuals is increasing the value of rehabilitation. These changes are forcing people to become more self reliant and independent out of necessity. Rehabilitation, therefore, is most highly valued in a society that places a premium on self reliance, independence and productivity.

2. Patient Services (Rehabilitation Industry)

Summary.

- 1) Emphasis will be on de-institutionalization -- through the institution spectrum and on rehabilitation to achieve it.

- 2) The major growth areas in health care over the next 20 years will be primary and ambulatory care, public health education with emphasis on prevention and well care, home care, geriatric care, emergency room and trauma care, mental health, and rehabilitation.

The important areas in rehabilitation over the next 10 years: Jobs (productivity and restoring individuals for job market); independent living (de-institutionalization); research and computerization (prevention of problems or complications); coordination of rehabilitation services (lower cost of services through effective utilization of a variety of resources on a timely basis).

More rehabilitation services will be provided to patients in an outpatient setting.

Patients who are hospitalized in rehab beds will have a greater acuity of illness and disability in the future.

According to HSA reports, rehabilitation beds increased 6% nationally in 1980.

There is estimated to be 17,000 rehabilitation beds in the United States, about 1% of all hospital bed utilization, 1% of inpatient days, and 1.1% of outpatient visits. About 7,600 of the rehabilitation beds are located in only 69 hospitals. There are generally four acute-care hospital beds for every 1000 people. There is only one rehabilitation bed for every 1,300 severely disabled people. These numbers will grow rapidly as beds

are re-allocated from acute care to rehab under pressure of the Medicare Prospective Payment System and as new businesses enter the field. In 1983 we had 80 rehabilitation hospitals. By 1984 there were 220 hospitals and units and by 1985, 450.

The rehabilitation industry will have potentially strong allies in the business community on issues where there is shared interest or concern for employment, cost containment over the long term.

Rehabilitation sub-specialization units will increase in the coming decade for two real reasons: marketing and more effective and efficient care.

Medical rehabilitation will continue to be popular, with increased referrals from the private commercial insurance industry because of bottom-line economics -- rehabilitation can reduce company long term payouts.

Organizations providing rehabilitation for those with disabilities will need to join forces with the disabled populations in an image-building program of working "with" disabled people, not "for" disabled people.

Industrial companies, insurers, rehabilitation medicine specialists, and coordinative rehabilitation agencies will work together toward early intervention of rehabilitation services following work-related injury, and emphasizing the goal of return to work.

Rehabilitation industry must adopt sophisticated management techniques.

Rehabilitation industry will need to improve their ability to market and assess the effects of rehabilitation services.

The rehabilitation industry is not well understood or popular in the health care industry. We will need to develop greater capacity for marketing, data collection, analysis, and interpretation of results for advocacy purposes.

The "rehabilitation story" needs to be told in terms of human value and more importantly in the future in terms of economic benefit.

The holistic approach to health care will create new opportunities in the field of rehabilitation and patient education.

Rehabilitation institutions will need to identify and implement innovative programs, promote education, family centered care, cost containment efficiency and sound community planning to be successful and survive.

Pro-competition and "consumer choice" health plans will demand more emphasis be placed on outcome-oriented quality evaluation as a measure of technology effectiveness in justifying the purchase of high cost inpatient rehabilitation services to third-party payors and planning agencies.

Acute care hospitals will have a variety of incentives to enter into or expand their scope of rehabilitation services. Acute care hospitals will conveniently use the "swing" concept when med/surg beds are underutilized, since nearly 55% of all rehab beds are presently found in acute care community hospitals.

Hospices, "the swing bed concept", home care programs, day care centers, and innovative long term care services will become more popular in the 1980's.

Hospitals will be required to provide respectful and humanistic care and monitor their communities' level of satisfaction with services.

Hospitals will need to develop patient education programs aimed at health needs assessment, prevention and good health care practices.

There will be a gradual shift from medical care after disease or injury to prevention and well care.

Hospitals will increasingly adopt a marketing orientation.

Increased social pressures on health care institutions to explore alternative methods of delivery of care.

Consumers will continue to demand a greater voice in both personal and public health care decisions as they begin to participate more in payment for their care.

Hospitals increasingly will decentralize, developing more satellites, particularly for primary care service delivery.

Physicians will develop closer relationships with hospitals in marketing and providing more specialized services.

Multi-hospital systems will become more profitable. Freestanding hospitals will become less profitable. By 1995 forecasters predict that 53% of private, not-for-profit, religious and investor-owned hospitals will be owned, controlled, and managed by chains, up from 36% in 1982. Investor-owned chains will increase their market share to 23% by 1995, up from 14% in 1982. Not-for-profits will have 48% of the market.

Research will be called for to identify the "best" products and procedures. Hospitals will begin to organize and underwrite health care to target markets.

3. Reimbursement

Summary. The financing of health care services will continue to be a major issue and center around cost containment and access to sources of funds. Legislation and regulations affecting health care institutions will continue to increase on both the federal and state levels. Cost containment legislative proposals will continue to be emphasized at the federal level as with the Medicare Prospective Payment System, while at the same time give more flexibility to the state and local governments to determine the amount of spending for social and health service. Competition (price, service) will be a dominant force as price caps, patient participation in payment, declining volume, and dissolution of CON processes comes about.

Community non-profit rehabilitation facilities will face severe pressures to maintain their programs in the face of increasing costs, competition and decreasing governmental funds.

Health care costs will grow to 12% of GNP by 1995 and 14% of the GNP by 2000 (NEJW), up from 10.5% in 1984. (AA/ACHA) In 1984 health expenses are rising 2.5 times the GNP rate.

Business and organized labor have evidenced a growing concern over the impact of the growth of the cost of employment-related health insurance on their production costs and on the take-home pay portion of the total compensation package.

Business coalitions will be formed to take control of their health care cost exposure through prevention, employee assistance plans, aggressive bill review, PPO contracts.

In the 1990's, subscriber enrollment will decrease, reducing market share of commercial insurers (AA/ACHA).

Further tightening of Medicare and Medicaid reimbursements, and control of capital expenditures charged to Federal sources will be reduced by 10.2 billion between 1984 and 1989 (per CBO).

Commercial insurers will form HMO's and PPO's to protect market share and to guard against cost shifting (AA/ACHA).

Regardless to which direction the legislation goes, it is imperative that hospitals be cost competitive, both with other hospitals in their service areas, as well as with some of the emerging alternative ways of delivering health care in their market place.

HMO's will increase five-fold by the 1990's (AA/ACHA).

Stricter limits will be placed on government financing of health care through ratcheting down of DRG prices. This will result in government paying for a reduced number of patients or paying a smaller proportion of the cost for those covered under governmentally funded programs.

Hospitals will develop new structures and innovative programs to increase financial resources and provide an adequate operating margin as revenues from patient care do not cover costs.

The establishment of minimum benefit levels for the entire population is likely under any pro-competition health care bill. If rehabilitation services are not adequately covered under the basic health care services provisions of a plan, such services will not be adequately covered under catastrophic protection.

Use of tax-exempt bonds for capital needs will continue to increase as other sources of hospital revenue philanthropy and government grants decrease substantially. But the ability of the independent, not-for-profit hospital to issue debt will be reduced by investor

estimates of increased risk due to expectations of adverse PPS effects on independent hospital viability.

Certificate of need processes will be "sunsetted" as Federal incentives turn to the PPS and competition. In Texas, the CON agency was "sunset" in 1985.

Proprietary "for profit" hospital corporations will expand through conversion and acquisition.

Inability to pay for needed health services will continue to be an impediment to access those services. "Indigent care" will be a state issue, and will affect the acute care needs of the indigent, the physically disabled, and the elderly who require long term institutionalization or home care.

The prospective payment systems will expand to other payors over the decade.

Attempts to involve patients directly in the financing of their care through additional deductible and co-payment provisions will continue. This will increase patient attention to services, and price and will make stronger the competitive forces. It may increase the frequency of litigation and frequency of complaints on bad/unnecessary services.

Competition will not be for the patients, but the payors of care.

Private insurance companies are seen as having the greatest potential for contracting services from rehabilitation facilities, outstripping mental health, Medicaid and Medicare income in the next ten years.

Competition among rehabilitation hospitals for patients supported by commercial insurance, Workers' Compensation carriers, and large self-insured employers will become keener. However, competition for such referrals will be determined by a successful track record of patient outcome versus costs of rehabilitation services. For this reason, it will take time for referral patterns to change.

The cost of labor, goods, and services that hospitals must purchase will continue to increase, placing hospitals in a difficult position. Efforts to expand hospital revenue limits ("caps") to other payors intensify.

The health care industry will become a more highly publicized political issue in the 1980's at the federal, state and local levels.

Local influences will increase in importance.

Hospital management and governing boards must become more involved politically at the local and state levels.

The rehabilitation industry will need to develop competence in dealing with the requirements of both health system plans and certificate of need. The industry needs to develop national rehabilitation guidelines to identify the rehabilitation bed need. Presently there is no statistical

data base or accepted formula to determine the need for rehabilitation beds using non-disabled or disabled populations.

A stronger relationship between the community acute care hospital and rehabilitation hospitals and programs is required if early rehabilitation intervention and cost-effective rehabilitation services are to be provided for disabled patients.

The capacity of free-standing rehabilitation hospitals to provide the new technology of the future ultimately will be determined by their ability to gain access to needed capital funds.

4. Human Resources

Summary. The problem of shortages and maldistribution of certain categories of health manpower will continue to exist. A continuing shortage of specialists in physical medicine and rehabilitation may be offset by a surplus in other medical specialists.

The medical rehabilitation field will depend on internists, pediatricians, orthopedic surgeons and neurologists to carry much of the load. These physicians will need appropriate training in rehabilitation medicine.

There are 2,400 active board-certified physiatrists in the United States, while 4,060 will be needed by 1990.

The Graduate Medical Education National Advisory Commission (GMENAC) Report, which predicted the shortage of physical medicine and rehabilitation specialists by 1990, predicts surpluses by 1990 in "rehabilitation-related" specialties (internists, orthopedics, neurology, rheumatology).

Of the 124 United States' medical schools, 71 schools have PM&R programs.

There is a need for inclusion of additional rehabilitation courses into continuing medical education for physicians in general.

One distinguished medical educator estimates that by the year 2000 about half the work of physicians will be devoted to the care of people 65 and older.

This over-capacity in a number of medical specialties and the increase in aging patients may prompt a number of specialists to assume more responsibility for the rehabilitation management of their patients with fractures, joint replacements, amputees, stroke, head and spinal injury, and arthritis.

Furthermore, these surplus specialists may also encourage hospitals to diversify and develop inpatient units dedicated to the rehabilitation of patients in their specialties.

Recruitment of health professionals will continue to be a major problem, particularly in rehabilitation disciplines of physical medicine and

rehabilitation, nursing, physical therapy, occupational therapy, prosthetics and orthotics, neuropsychology, rehabilitation research and engineering.

With emerging rehabilitation medicine technological advancements, there will be an increased need for highly trained technical personnel.

Rehabilitation hospitals will experience increased competition for staff with community hospitals and will have to develop their competitive capabilities to maintain adequate staffing levels and appropriate staffing patterns.

Successful recruitment will depend upon institutional image, continuing educational opportunities, competitive salary and benefit packages, and working conditions.

Hospitals will increasingly subcontract with personnel pool agencies in order to meet their staffing needs.

Shortages of certain health professionals will encourage the development of additional para-professional manpower categories.

The rehabilitation industry should initiate a careful evaluation of the development or utilization of new categories of para-professionals, such as rehabilitation nurse practitioners, rehabilitation technicians, cognitive retrainers, orthotic/prosthetic bench technicians, etc.

TIRR STRENGTHS

1. Strong, visible, respected, and recognized program in spinal cord injury rehabilitation. Particularly recognized for excellent management of the apneic quadriplegic patient and patients with multiple trauma.
2. Small, but strong, visible program in amputee services.
3. Experienced, respected and recognized medical staff and consultants.
4. Strong, experienced department directors and professional staff involved in service, research and education.
5. Dedicated and loyal staff.
6. Availability of a full range of needed services, surgical, medical, diagnostic, therapeutic, rehabilitative, managerial and technological resources, most on site, with others available in the TMC.
7. Established, long-standing linkage to the primary trauma centers in the HSA-11 13-county area.

8. Location in Texas Medical Center with strong linkages to and cooperation with other TMC institutions (image, service supports). The image and reputation of TMC and its constituent institutions is the highest. Outside health facilities cluster around it.
9. Located in large potential referral base (large, growing population center), community need for services.
10. Affiliation with a medical school (Baylor College of Medicine) that has one of the highest reputations in the country, and offers high quality support in every clinical area.
11. Historically, a national and international reputation for quality patient care, excellent results and beneficial innovations. Quality of care in the programs maintained by direct supervision of qualified senior physicians and experienced professional specialists.
12. Full accreditation by JCAH and CARF.
13. We know more about how to do quality rehabilitation than most groups in the region.
14. Long-established and continually improving relationships with payor groups and referrers in the region.
15. Twenty-five years of successful service and marketing to more than 30,000 patients and families from all states and 30 foreign countries.

16. "Graduates" of our residency programs, and our various educational and staff development programs become referrers.
17. A reputation for conducting excellent research and demonstration programs, with a history of certain recognized innovations in rehabilitation medicine, surgery, technology, and rehabilitation practice.
18. Innovation and application of technology (including high technology) is routine at TIRR. We are comfortable with it, we know how to innovate as well as apply it, and we have been doing it for years.
19. A large, intensive, leading edge research program in restorative neurology and clinical neurophysiology, privately funded, and international in scope.
20. Our Independent Living Research Utilization program is nationally recognized and effective, and links us into a wide network of resources.
21. Many of our staff occupy influential leadership positions in national, state, and local industry (AAPM&R, ASIA, ACRM, AAOS, NARE, ICM/NAS, CARE, AHA, GHSC, AAP, etc), government advisory groups and consortia. We have been, and continue to be, involved in establishing various standards for the rehabilitation field.
22. Teaching programs in conjunction with universities and schools for health professions, locally, state, and nationwide.

23. Strong and involved Board Executive Committee and Board of Trustees, with effective linkages and relationships with the community representatives and access to resources.
24. We have not yet reached our potential in any area, and this keeps staff here and excited.
25. Alert, capable management team, experienced in and familiar with the rehabilitation field, and capable of moving the organization to its goals.
26. Excellent payor mix -- largely private, third party insurance (casualty and worker's compensation) with small (12% Medicare) cost payor base.
27. Recently completed new bed space, ancillary space, outpatient department expansion.
28. We have a certificate of need for additional capacity.
29. Historically high occupancy rates.
30. Most financial ratios better than industry standards.
31. Staff are ready for and will get excited about a clear direction for TIRR.

32. TIRR has an institutional reputation that may transcend the programs, and that may attract referrals to new programs we may choose to offer.
33. We are involved in various forums that are developing recommending to HCEA an appropriate reimbursement mechanism for rehabilitation.
34. We own almost a whole city block of land outside of the Texas Medical Center at our annex site. Almost half the property is undeveloped, and has no covenants (like TMC property) that prohibit build/lease back financing with investor groups.
35. Staff involvement with consumer groups.
36. Dedication and commitment of staff to a behavior and philosophy of rehabilitation.
37. Currently available research expertise covers a broad range of rehabilitation concerns embracing pathophysiologic, behavioral, social and vocational issues.
38. Our current research programs are manned by a cadre of professional and technical staff members with extensive experience, first-rate reputations, and a track record of productivity.
39. The clinical environment is supportive of research efforts involving intensive observation of patients and of service delivery procedures.

40. We have in-depth experience with a broad array of research sponsors,
both federal and non-federal.

TIRR WEAKNESSES

1. Consumer orientation, market responsiveness, general business perspectives, relationships and practices do not yet sufficiently pervade the medical staff, management, and staff, and are increasingly necessary in the changing environment. Staff are slow to adjust.
2. Present full time medical staff are fully utilized and their number must be expanded in order to gain their participation in planning strategic business units.
3. Present management team must be expanded in order to develop new strategic business units.
4. The marketing effort is under-resourced, insufficiently coordinated, and inadequate for a competitive environment. Needs organization, direction, leadership and funds.
5. The patient care areas, with the exception of the recent remodeling and expansion, do not meet the expectations of today's patients, families, and referrers (even though their needs are met). Patient meals are criticized with respect to taste, variety, presentation and temperature.
6. Many ancillary services (OT, X-Ray,) have unattractive space that is inadequate for additional service volume from the recent bed capacity expansion.

7. Land in the Texas Medical Center proper is rapidly being used, and while we have property available, our growth options are limited to what will fit on existing parcels, or requires demolition of existing structures.
8. Most of the TMC parking (for staff and patients) is distant from our building, and is considered expensive by some of our patients and family members, who see it as a barrier, and potential employees who see it as an employment disincentive.
9. There is not yet a comprehensive, shared, long term corporate plan, developed jointly, committed to, and guiding our activities and decisions.
10. There is uncertainty regarding the future of the Department of Rehabilitation at Baylor College of Medicine. Lack of strong Baylor support.
11. Our head injury program will not grow without energetic, aggressive physician leadership -- the team is being pulled together.
12. Among some referrers, we are known by many for one patient type -- severely disabled complicated patients -- "our kind". We don't get many other kinds of patients -- moderate, or mild disabilities, non-SCI. This limits our ability to grow and ties our occupancy figures (and financial performance) to one patient group. When referrals vary, we have no significant alternate source of patients.

13. Five physicians are responsible for 90% of our volume. Loss of only one of them could severely affect our service volume and financial performance (and thereby our ability to service debt). This looks risky to us as well as to rating agencies, and limits our access to capital by reducing our creditworthiness. The five include the following:

<u>Specialty</u>	<u>Age</u>
Internist	56
Internist	44
PM&R	43
PM&R	48
Neurologist	62

14. As a single small, specialized hospital, our access to capital markets, is limited. Rating agency judgments of our creditworthiness are determined in part by this fact, and additional expense (for letters of credit, insurance, and higher interest) is required if debt is to be issued.

15. Our successful financial track record is not yet sufficiently long to qualify for a favorable rating by a rating agency.

16. We rely, for most of our volume, on a single patient group, spinal cord injury. While this is a strength, it is also a weakness, in that it limits our flexibility. Competition in the spinal cord injury

rehabilitation services market due to the PPS incentives and/or declining incidence of the problem due to successful prevention measures is likely to reduce our volume. We have not developed other markets to which we could shift.

17. We have to focus on teamwork at the management level. We have capable individuals who are not yet functioning smoothly as a team.
18. In some areas, our service volume is inadequate to support essential backup staff.
19. We may lose patients due to delays in ascertaining the patient's financial ability to pay. Some factors we can control -- others we can only influence.
20. Our costs may be higher than others and we may lose market share if delays in handling patient equipment acquisition extend length of stay. We have not yet arrived at a satisfactory equipment handling methodology.
21. Our communication with inpatients regarding how they see the rehabilitation process, the staff, and the amenities, is inadequate in that we do not hear about some problems until after discharge, if at all, and cannot correct them while the patient is here.
22. Our medical staff and hospital relationships with sponsors are not yet properly coordinated, resulting in inconsistent approach,

understanding of concerns, and variable response, quality and timeliness, that strains our ties to these "customers" and costs us referrals.

23. Our treatment philosophy has been oriented primarily to an inpatient focus with outpatient service receiving low priority. The new incentives require an emphasis on reducing hospitalization and require a reversal of this approach which we have not yet achieved.
24. Uncertainty about the future, lack of agreed, long term goals, lack of clarity of the policy-making process, the desired management style and philosophy, and the clinical rehabilitation philosophy, and limited upward mobility lead to low energy, reduced morale, and staff turnover.
25. Variable, inconsistent feedback to referrers, patients and payors.
26. We have not systematized our quality promotion activities.
27. We have no corporate-level reportable statistics on outcome -- the results of rehabilitation -- that indicates the results of our efforts in an aggregate form and helps interpret to lay observers the benefits of the rehabilitation services we provide.
28. Research activities at TIRR have produced few salable products in recent years. We peaked over ten years ago with Harrington rod instrumentation, the Engen polypropylene brace, the kits for upper extremity orthoses (now marketed by Orthotic Systems, Inc.).

29. Our long history in the field may limit our creativity and willingness to break from tradition. Old methodologies may not serve us in a field where new entries are innovative and entrepreneurial. We are at risk of attempting business as usual when the tides are changing with such force that change is inevitable.
30. Appropriate functional relations among service, research, and education are only beginning to be understood and developed.
31. We have not established good mechanisms to have input into the State legislative process.
32. We lose some patients to follow-up.
33. We are not adequately active (or staffed) in disseminating materials or in training people in the region.
34. There is a lack of understanding of and appreciation for the roles of the various non-clinical departments.
35. Inter- and intra-departmental infighting continues. Historical independence makes integration, coordination and cooperation difficult.
36. Board members have not been as active as we have needed.
37. Having been in existence for 25 years, we continue some activities, policies, attitudes and services that are not appropriate for

circumstances today, and need redirection to meet current needs or pruning to free resources for new activities.

38. A desired degree of consensus about the essentiality of TIRR's research and educational programs is lacking.

39. Insufficient effort has been made to cultivate the Board's interest and support for research and educational programs.

40. Agreed upon, resourced, long-term plans for increasing the scope and effectiveness of the research and educational programs are lacking.

41. Presently, research capability and effort is too unevenly represented in major disability-oriented programs, e.g., being strong in the spinal cord injury program and weak in the amputee rehabilitation.

42. The content of educational programs has been shaped too much by the priorities of Federal granting agencies and too little by internally-generated priorities.

43. Very few funds are available to support the pilot development of promising research ideas before being submitted for competitive funding, and virtually no funds are available to meet discontinuities in external grant support of key research programs.

44. Virtually all current research programs suffer from a severe lack of space, and no provision has been made to house expanded research activities.

45. Current research programs are under-exploited with regard to providing rehabilitation research training.

46. An inter-disciplinary approach to inservice training and education is lacking in some clinical departments.

OPPORTUNITIES

1. For the first time in history, rehabilitation is an attractive venture financially. Being experienced and knowledgeable, we can acquire or direct some of the resources into areas long of interest to us.
2. The thawing toward free market competition that the PPS has brought to the health care system by DRG payment and by exemption of rehabilitation services lets us establish relationships heretofore difficult to achieve. Creative financing, organizational structures and business plans are possible and commonplace now, and will continue for several years, until things stabilize into the best feasible resourcing arrangement under the new reimbursement methodology.
3. New entries in the rehab field will need help to set up and operate rehabilitation services. Training and upgrading will be required.
4. We presently have unused physical plant capacity for inpatient and outpatient programs.
5. We have regulatory approval to grow. We already have a CON. Others don't (yet). We can build up to 192 beds, even a complete replacement facility if we can finance it. After sunset of the

Texas Health Facilities Commission, uncertainty in the planning environment regarding future Section 1122 regulations deters others from proceeding.

6. There is time (12-18 months) to expand, consolidate and protect our market position. It will take over a year for most new entries to secure a CON, build, staff and market another facility. Bed conversion may occur sooner, but probably not in our tertiary market segment.
7. There is unmet need for rehabilitation services in patient groups we don't presently serve. Diversification is possible.
8. New entries in the market (both investor-owned and not-for-profit) have proposed combining our expertise with their financial resources in joint ventures, management contracts, and consulting arrangements, to help create the required array of rehabilitation services in this community. With the appropriate corporate structure, we can work together to extend our services and share in the return on investment.
9. There is a need for education. Seminars, short courses, self-study courses, and "internships" will be necessary for emerging rehab programs at other sites.

10. There is an incentive for the major rehab facilities to cooperate and associate (with due attention to anti-trust laws), and interest in forming a national consortium of premier rehabilitation facilities.
11. High tech medicine, increased survival rates from trauma, an increasing number of persons over 65 with major disability and with chronic disease is increasing the need for restorative and rehabilitation services.
12. There is a growing need for transitional care (home care, congregate living), as well as long-term custodial care.
13. Some programs of our competitors are vulnerable to an alternative entry into their markets with a different focus and approach.
14. We are aware of no pediatric rehabilitation program in the area, other than ours which is growing rapidly.
15. Baylor's PM&R Department has the potential to operate several bed services here.
16. We can collaborate with the University of Texas, Rice University, University of Houston, Texas A & M University, and others in programs of mutual interest and benefit.
17. New funds are available from the private sector.

18. We can fill a gap that now exists and increase deinstitutionalization and independent living.
19. Former patients may be organized into alumni supporters.
20. We have new board members and new board leadership. They may become more involved in the mission.
21. We are generating internal funds that can be used to finance new ventures.
22. Local businesses are now following the national trend and are increasingly aware of the return that is possible on an investment in rehabilitating their workers compensation claimants and returning them to work. They will need guidance and resources to do so.
23. Sponsor concerns about the cost-effectiveness of rehabilitation interventions, new and old, will make expanded research effort imperative. Similarly crucial will be research concerned with the "likelihood to benefit" of patients with impairments and disabilities of various types and severity. We are well positioned to acquire new research projects in these areas.
24. A large community need exists for dealing with the medical and rehabilitation problems of polio survivors. Our roots are in this problem area, and expert physician resources are available to meet the demand. Our lead physician is nationally recognized and a program can be assembled quickly.

THREATS

1. Until rehabilitation becomes reimbursed on a prospective basis by Medicare, financial incentives of the Medicare Prospective Payment System (and present exemption of rehabilitation from the PPS) will decrease acute hospital occupancy, leading them to reclassify beds into rehabilitation units to escape into this remaining cost-reimbursed segment of care.
2. There is, and will continue to be, significantly lower pressure for the acute hospitals to refer their patients to a rehab facility. Indeed, the incentives are to start rehab units and transfer patients there if reimbursement is improved thereby.
3. Entrepreneurs, as well as non-profit and for-profit chains will aggressively enter the rehab market with new facilities quickly designed, built and marketed following the (perhaps temporary) reimbursement incentives created (unintentionally?) by HCEA when they exempted rehab from the Medicare PPS.
4. New entities into the rehab services market will compete for already limited professional resources. Shortages exist now, and are projected to 1990, for PM&R physicians, physical and occupational therapists. The supply of exceptionally qualified medical and other professional experts is even worse.

5. Regardless of our quality and cost, new entries into the market will reduce, perhaps temporarily, our share of certain markets, as some payors try out a new facility with no track record of results, especially if costs are lower. This may seriously reduce the volume and revenues of our present programs.
6. Need for rehabilitation services may exceed present capacity, but demand (the ability to pay for services to satisfy the need) of some financial resources appears to be close to present capacity. State agencies, (OCS, TRC) still run out of funds periodically. Their budgets are not likely to expand in proportion to proposed entries of new capacity into the market, leaving for us smaller slices of the reimbursement pie. These state agency funds are often used to complete the funding package for rehabilitation services for given patients).
7. Successful prevention programs (automobile crash restraints, DWI deterrence) should reduce the incidence of new spinal cord injury patients. This may not be totally offset by increases in injury due to smaller, lighter cars, failure to use restraints, and population growth. SCI cases constitute 75% of our volume, and with that program at risk, our financial position is, too.
8. Our small size, specialty nature, and short history of excellent financial performance may restrict our access to sufficient capital to do the things we need to do to compete.
9. At 95 beds, our size and volume has been too close to our break-even point for this patient and service mix, and we have been too

sensitive to changes in volume. At 115 beds we are in better shape, but must grow further to reach a conservative operating point. Limited referrals, capital access, and increased competition may prevent this.

10. We are too dependent on a few key physicians, the loss of any one of whom (or even their absence for vacation) significantly reduces hospital productivity and revenues. Projected shortages of key rehab experts to expand our physician cadre increase this risk.
11. Our specialization in apneic quadriplegia was affected temporarily by the unexpected loss of convenient, on-site access to our adult and pediatric pulmonary specialist physicians and later, loss of the anesthesiologist threatened our surgical services and the programs that use those services. While satisfactory arrangements were made in those cases with minimal discontinuity, other traditional professional consultation arrangements may be similarly revised unexpectedly as the effects of competition increase.
12. Dallas Rehabilitation Institute is to open a 120-bed tertiary rehab facility 250 miles away in November of 1985. This facility is going to affect our catchment area, which we are going to have to expand beyond HSA-11 as we may experience some loss of market share for desirable patient populations. In 1983, we received ____ or ____% of our patients from the Dallas/Fort Worth metroplex.

13. By December 31, 1985, HCFA is to report to Congress a mechanism for including rehabilitation under the prospective payment system. It may not be one that recognizes fairly the complexity of care that our patient population requires. This could prevent efficient and effective delivery of rehabilitation services by limiting the variety of needed programs of service and the business models to provide them that are viable under the reimbursement system. At this time (November 1985) it looks like exemption will continue for several years, leaving the market highly attractive to the acutes.
14. Not knowing what the reimbursement environment will be leaves us at risk of acquiring debt now and not being able to handle the debt service later. The new PPS system for rehabilitation or another reimbursement system (e.g., vouchers, all-payor) could adversely affect our ability to do business.
15. We are at risk of decreased volume due to bad publicity related to patient and family dissatisfaction with services, charges, and results.
16. There are likely to be further cutbacks in Federal grant funds for rehabilitation-related projects.
17. Pre-occupation with changes in the sponsorship of services will push concerns about research and educational program development too far in the background.

--CONFIDENTIAL--

Pre-Applications in Texas Counties

Summary of Efforts

Company: National Medical Enterprises

Agent: Bill Williams, (512) 450-1093, (512) 732-1082

Background: Large investor-owned hospital chain, most diversified, with acute hospitals sharing about 50% of total hospital earnings. The company is in nursing homes (Hillhaven 23%), psychiatric hospitals (12%), and home care (6%). It acquired in 1984 Rehab Hospital Services Corporation which added \$70 million to its annual revenues of \$1.6 billion. This area is expected to grow at the rate of 26% per year for the next five years, second only in growth to management activities.

The Hillhaven Division is the second largest nursing home company with 35,000 beds and will generate 22% of operating income in 1985.

Linkages: NME has no acute care hospitals in Houston but is moving into the area. In 1985 they acquired Contemporary Health Management, Inc. of The Woodlands which owned Baywood Hospital in Webster, and Laurelwood Hospital in The Woodlands, both psychiatric hospitals and NME's first two hospitals in the HSA-11 area.

NME also is opening the new Dallas Rehab Institute in November 1985, a 120-bed freestanding rehab hospital in Dallas. by the end of the year NME's rehab beds will number 1055. NME is the second largest health services company and owns, operates, or manages 444 acute psychiatric and long-term care hospitals with more than 52,000 beds. Rehab Hospital services employees number more than 1300 and beds number 1055.

NME is moving to develop a facility similar to DRI (a tertiary "rehab facility" in San Antonio. The San Antonio Rehab Center (SARC) in the northern part of the city.

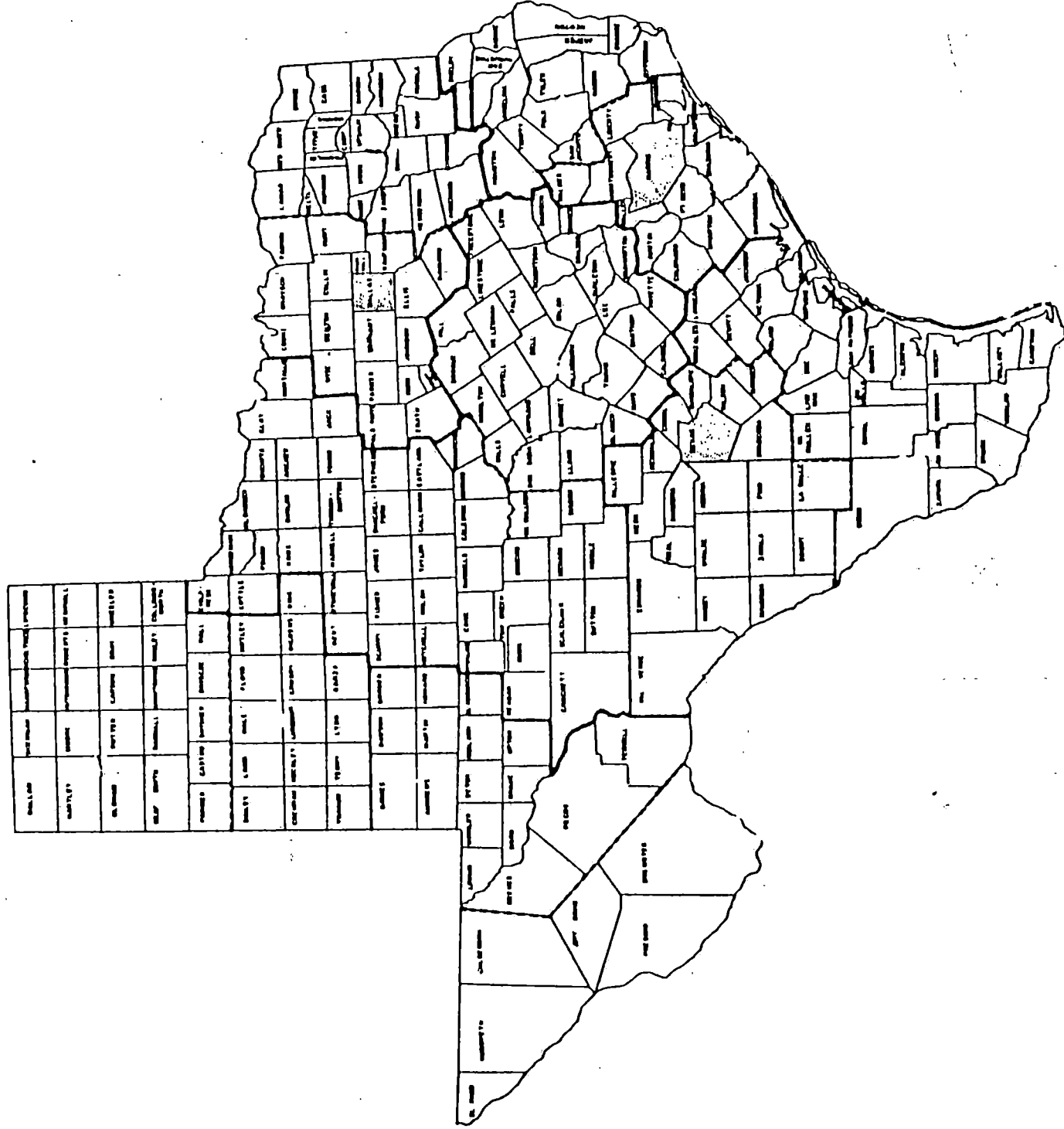
Apparent Market Segment: A full range of services including primary in the acute hospitals, secondary in the rehab hospital services style facilities (RHSC is largely in New England) and tertiary in the style of Dallas Rehab Institute and the planned SARC.

Rehab Hospital Services is under pressure to develop a rehab facility in the Houston market. NME is attempting to assemble a deal between TIRR and NME and perhaps some other participant such as Dr. Busala's group or the Memorial Care Systems or just TIRR. Discussions continue on these three options.

THFC Action
before Sunset:

NME obtained a certificate to proceed with the San Antonio Rehab Center in San Antonio and is, in fact, proceeding to develop that facility. The Gonzalez/Warm Springs Rehab Hospital had also planned an 80- or 90-bed facility in the Medical Center in San Antonio that apparently is not proceeding at this time, or else appears to be changing its financing strategy to include physician investors.

Activities in
New York
Regional Mixed Groups
(Klub Post and Service
Cooperation)



Company: Memorial Care Systems

Agent: Nancy Rice Hudson

Background: Memorial recently (1983) reorganized under a not-for-profit parent: Memorial Care Systems, creating certain for-profit and not-for-profit corporations controlled directly or indirectly by MCS. Subsidiaries include:

Memorial Regional Care Services handles certain institutions under lease. Not-for-profit.

Memorial Hospital Foundation of Houston receives and maintains funds for charitable and educational purposes. Certain accounts (cash and real property) were transferred to the Foundation.

Memorial Holding Corporation, a for-profit holding company.

Four Sevens, Southwest Co., a for-profit real estate development company.

Combined gross revenues were \$162 million in 1983, generating an excess of \$11 million of revenues over expenses.

In 1984, Memorial SW secured a CCN to expand and remodel (a \$22 million project), and included expansion of rehabilitation services. The project is due to complete in January 1987.

Apparent Market Segment: Comprehensive general acute, rehab, psychiatric, and skilled care needs in Harris and Fort Bend Counties with expansion to the region (HSA 11 and western counties). Align for growing geriatric population.

Linkages: Other Memorial System Hospitals owned, leased, or managed.

Apparent Approach: Rehab facilities are to be in a discrete unit in an acute hospital (SW), housed in a new building in the complex with psychiatric, skilled care, and associated ancillaries. Rehab currently is 32 beds, and will expand to 62 (14 private, (134 net sq.ft.) and 48 semi-private (209 net sq.ft.)).

The new unit will include administration, ADT, cafeteria, pharmacy satellite, PT, 3335 sq.ft., OT, 3672 sq.ft., and speech, 1242 sq.ft., and social

service, 810 sq.ft., to serve the three patient groups. Rehab nursing will be on the second floor (62 beds), with 120 beds of SNF on levels 3 and 4 with psych beds and ancillaries on levels 5 and 6.

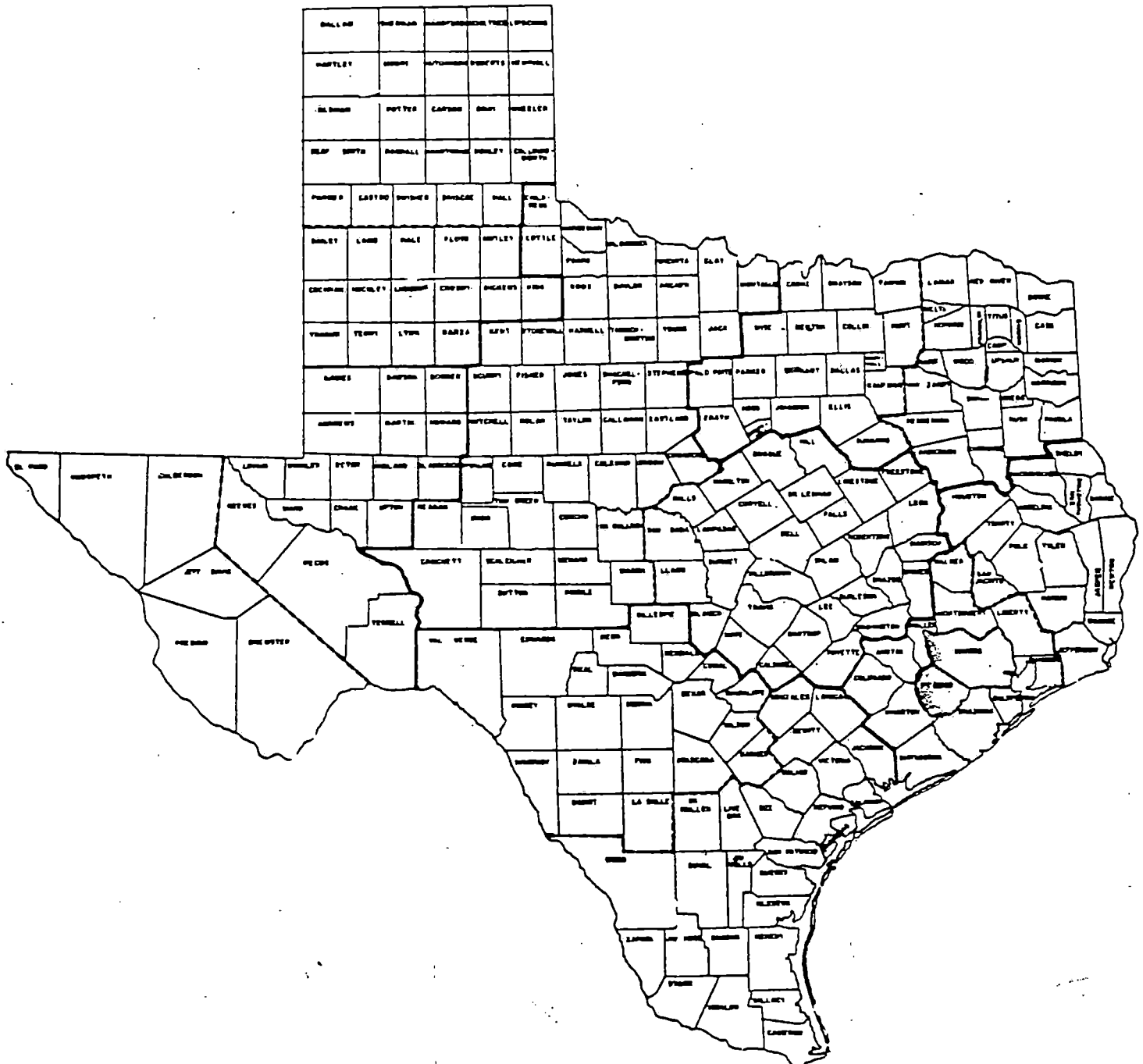
At \$22 million, this is a capital cost/bed of \$85,000.

Rehab beds (62) are 11% of the hospital beds (709) and 7.5% of all beds when the SNF beds (120) are included (829).

THFC Action:

CCN approved May 1984. Under way.

MEMORIAL CARE SYSTEMS



Company: AMI

Background: Investor-owned chain, number 3 in size, recently bought Lifemark facilities. 95 hospitals, 14 states, \$2.76 billion gross revenues.

Apparent Market Segment: Local outpatient rehabilitation. Rehab needs of inpatients from their acute hospitals.

Linkages: Their acute hospital chain, their SNF's.

Apparent Strategy: Routine creation of small 10-30 bed rehab units in their acute hospitals to take advantage of Medicare PPS incentives. Use available space from low occupancy by reclassification with no major investment. Enter outpatient rehab market, large and centralized in Dallas and small and distributed in Harris County, with community rehab centers. Perhaps CORF's. This would be a first in Texas.

Moving late in development of insurance products to capture enrolled patients for their facilities (AMICARE) HMOs, PPOs.

Use Twelve Oaks as rehab hub of a radial network. Twelve Oaks now at 27 beds and expanding to 40, using Dr. Orego (ex-TIRR PM&R resident) recruiting for PT, OT, speech staff. Mostly primary, secondary rehab levels (stroke, etc.).

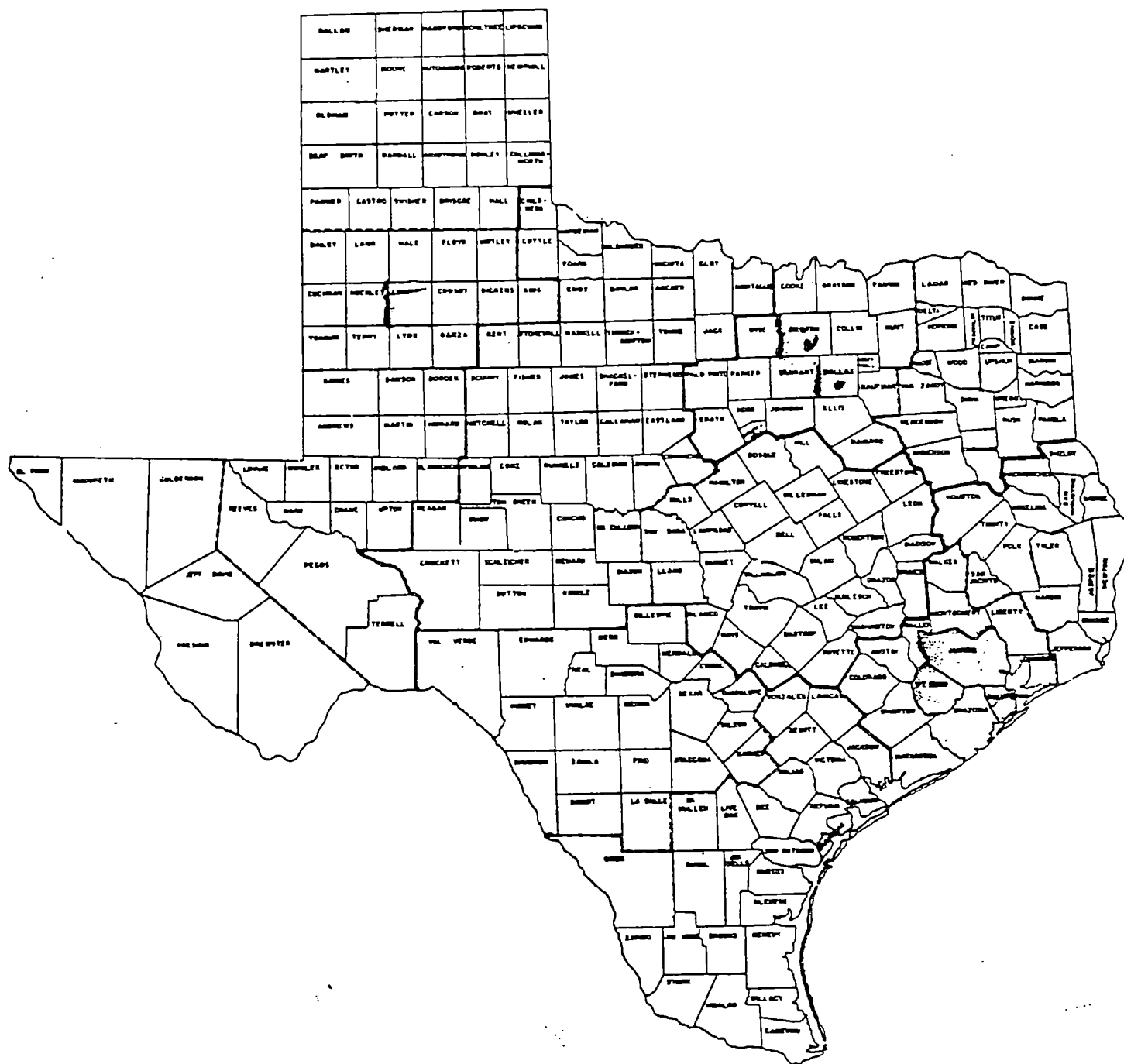
Round out integration with tertiary medical centers (Presbyterian/St. Lukes in Denver, St. Josephs in Omaha, St. Lukes affiliation in Houston). Expanding into ADS including general rehabilitation hospitals.

THFC Action before Sunset: \$1.5-2 million OPC in Dallas at Medical Arts Center. Six identical small outpatient rehab units, 4 in Houston, and one each in Pasadena and Katy.

Rehab units for existing hospitals:

- 20 beds at West Texas Hospital, Lubbock
- 20-30 beds at Westgate Medical Center, Denton
- 30-50 beds at Heights Hospital, Houston
- 30-50 beds at Twelve Oaks Hospital, Houston
- Bill Hatherill, Adm., Don Orego, M.D., Rehab Med. Dir., (PM&R)
- 9-20 beds at Danforth Memorial Hospital, Texas City

AMERICAN MEDICAL INTERNATIONAL, INC.



Company: Hospital Corporation of America, Inc.

Background: Largest investor-owned hospital chain in the world. Owns 185 hospitals, 31,000 beds (in South), manages 190 hospitals, 25,000 beds (in North). Occupancy 50%. Late move to insurance products (HMOs, PPOs). Did not recover from AHS tender offer and Wall Street devalued stock after HCA forecast flat earnings for 1986. Growth ceases.

Linkages: HCA hospitals, Medical Center del Oro's Head Injury program, Texas Head Injury Foundation members.

Apparent Market segment here: Harris County Head and spinal trauma rehabilitation, acute phase through low intensity.

Apparent Strategy: Uncertain. Medical Center del Oro Hospital has handled the acute, high-intensity rehab phase for traumatic brain injury. Create rehab units in existing acute hospitals that can use them.

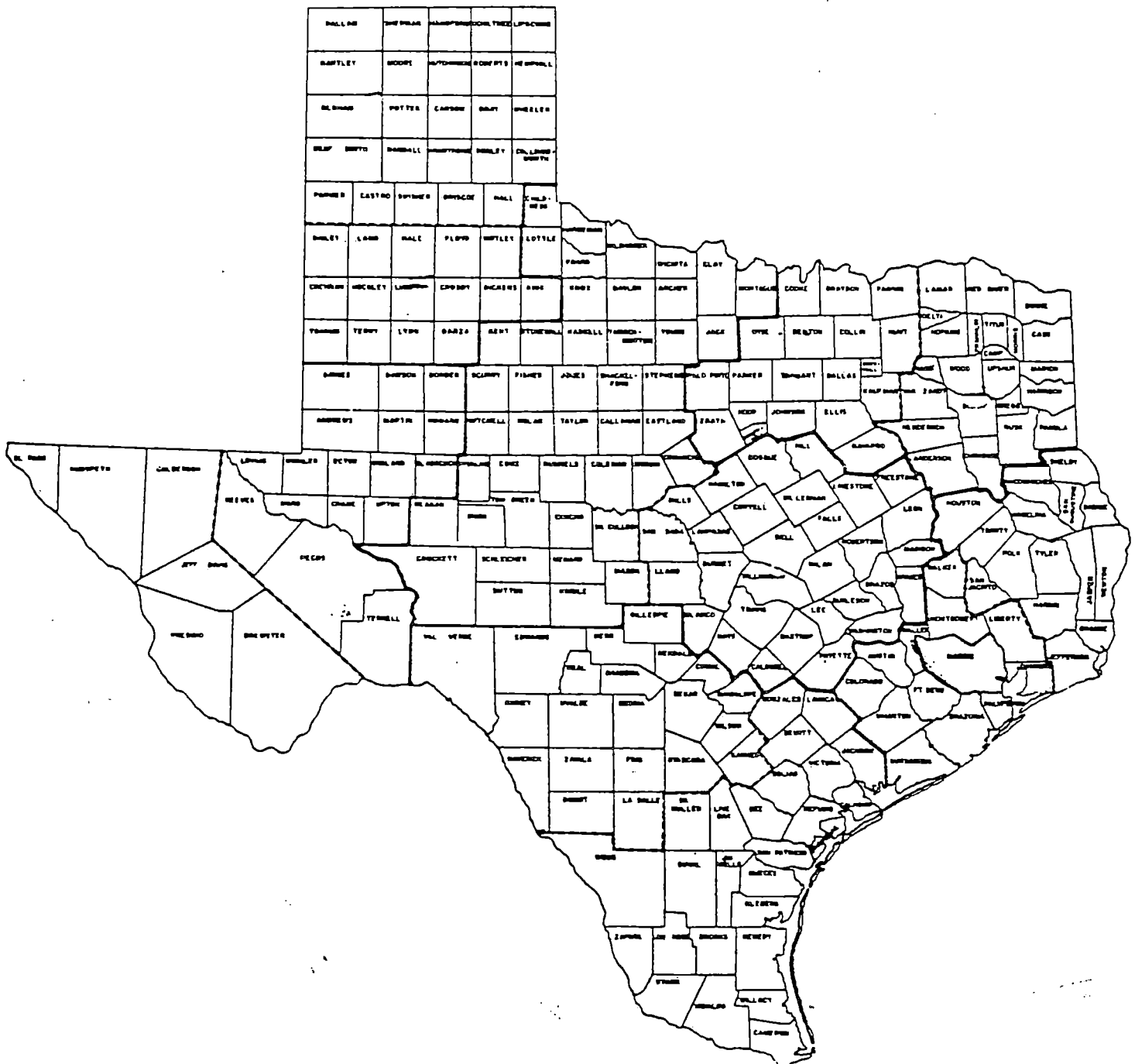
HCA has pulled out of medical rehabilitation in Austin, at least temporarily. It's not clear that Nashville is committed here or nationally to rehabilitation. The CCN for Houston Rehab Hospital did not appear last period -- it was pre-ap'd for the first half of 1984.

The del Oro expansion would cost \$280,000 per bed, easily at the full-service acute level. NME considers \$240,000 to be "tertiary" level rehab.

The HRH facility would run \$125,000 per bed, more in line with a mid-intensity facility. Certainly not nursing home level.

THFC Action: before Sunset Pre-ap HRH again \$9-15 million. Pre-ap del Oro expansion \$25-35 million (under the Administrator's name. Why not corporate?) Pre-ap units for Northshore Medical Plaza (20) and Spring Branch Memorial (12-35). Pre-ap outpatient rehab at del Oro.

HOSPITAL CORPORATION OF AMERICA



Company: Ambulatory Hospitals of America, Inc.
Ambulatory Hospitals of Texas, Inc.
Skill Care of America (Texas), Inc.

Agent: Hugh Morrison

Background: Twenty-one ex-Lifemark people. Focus now on horizontally integrated skilled nursing facility beds in larger ICFs. Also DME.

Linkages: St. Benedict's in San Antonio

Apparent Market Segment: Low-intensity geriatric rehabilitation, probably at the SNF level with rehab components. All major SMSA's.

Apparent Strategy: Construct new 30-50 bed (small) rehab facilities at a cost of \$60,000 per bed. This is definitely low-level intensity and characteristic of a SNF approach. Small facilities would require central management (and many facilities to support the overhead).

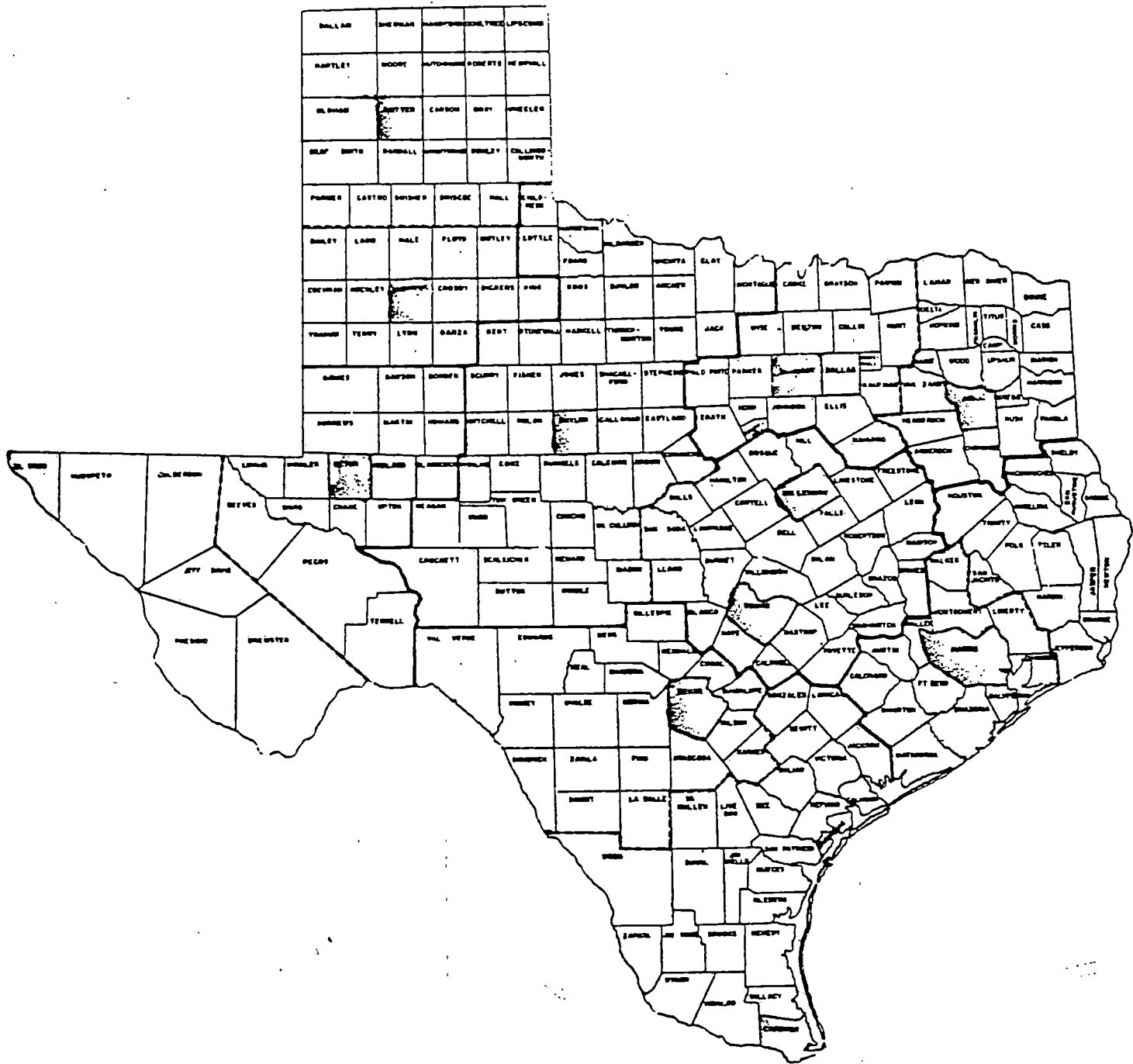
Buy existing facilities (St. Benedict's, San Antonio).

Preserve options in major SMSA's, four facilities each in San Antonio, Dallas, Fort Worth, Houston, one each in Tyler, Midland, Harlingen, Abilene, Lubbock, Amarillo.

Stop building surgi-centers.

THFC Action: Identical pre-aps, above cities.
Before sunset

PRE-APS IN TEXAS COUNTIES
(Ambulatory Hospitals of America)
 SKILL CARE OF AMERICA (TEXAS), INC.
 7/1/84 - 12/31/84



Company: New Medico, Inc., Hyannis, Massachusetts.

Agent: Alexis J. Fuller, Jr.

Background: Investor-owned. Facility name (Special Hospital for Head Trauma) reveals more than necessary for a pre-ap letter.

Apparent Market Segment: Post-acute head trauma rehabilitation in the Austin-San Antonio corridor.

Linkages: Used to be Medico. Company based in New England -- went out of business. Ernie Broadbent (Braintree) knows them.

Apparent Strategy: Construct new 120-200 bed facilities "special hospitals" under Texas law, at a cost of \$60,000 per bed. This would be a low-intensity facility at this level, probably post-coma, post amnesia:

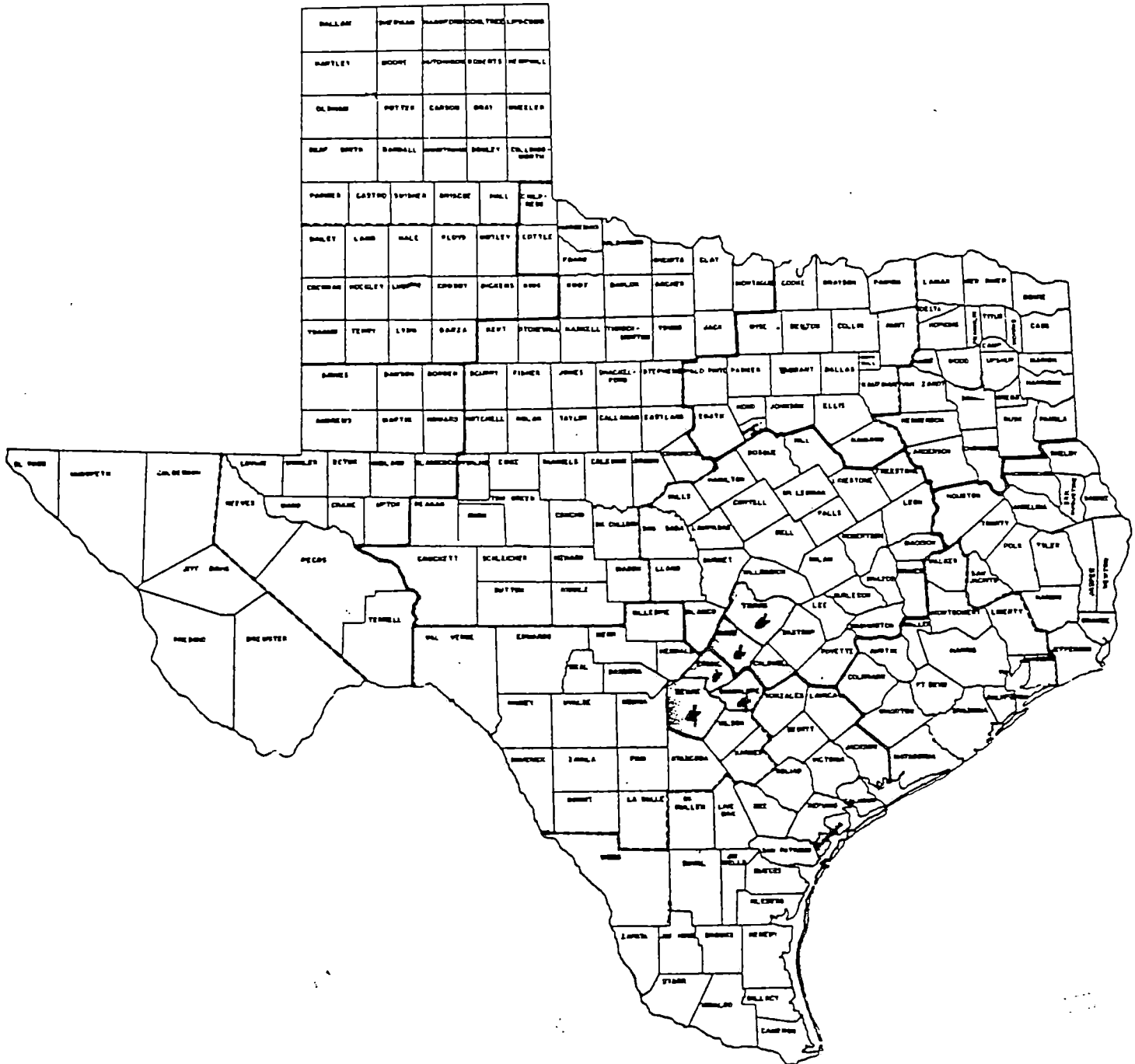
Preserve options for more than one (four) per county, anywhere in the five-county corridor while site selection continues.

Project Cost: \$7,200,000-\$12,000,000 each.

THFC Action: File identical pre-aps for four facilities per county: Bexar, Guadalupe, Comal, Hays, Travis.

Other Action: Engaged via consulting arrangement Sheldon Berrol, M.D., Chief of Rehab Med Services at San Francisco General Hospital. 1 hr/mo. Appointed one of their speech and language pathologists to CARF's national advisory committee on standards for Brain Injury Programs.

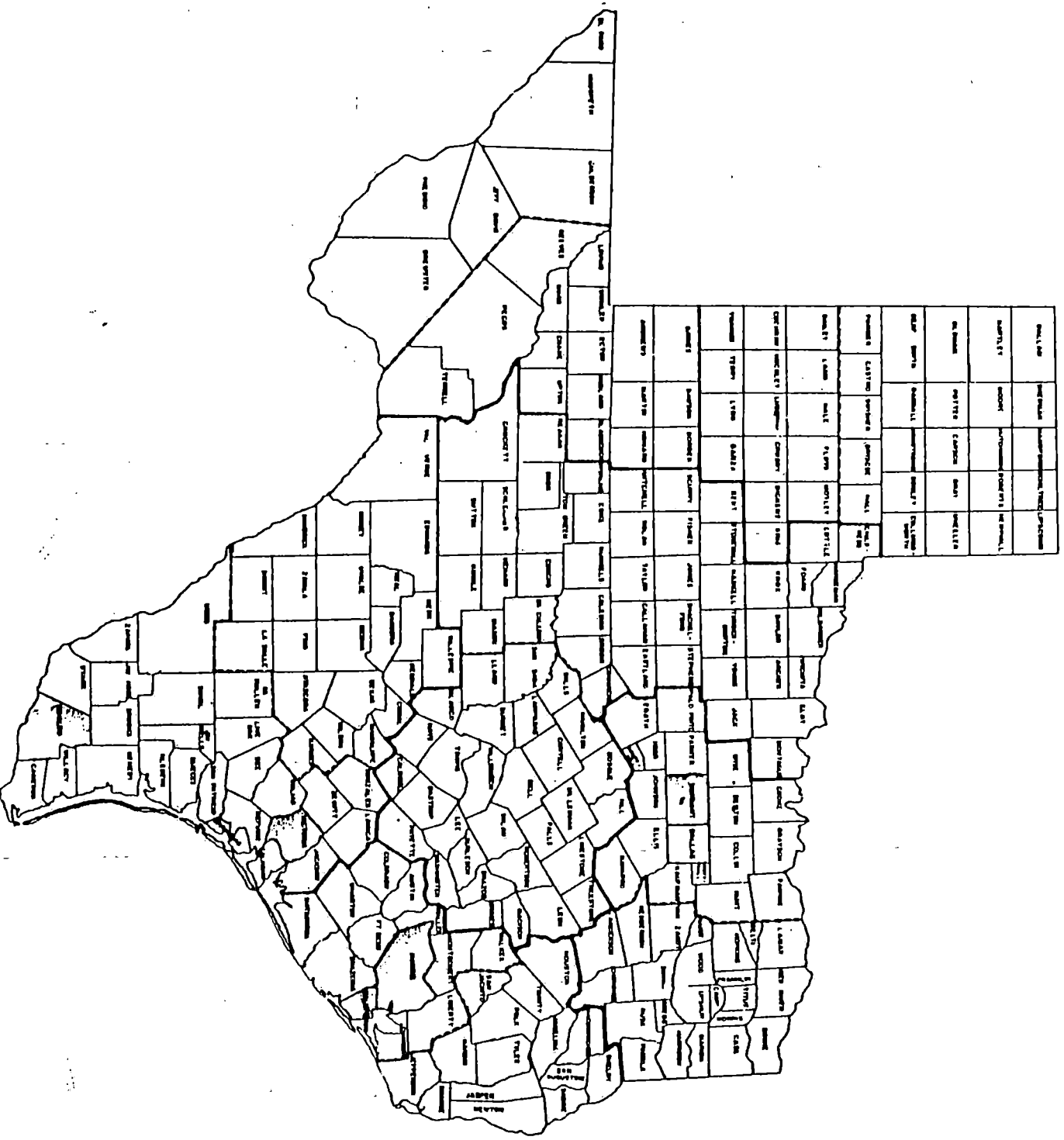
7/1/84 - 12/31/84



Company: Local Groups
 Agent: Various
 Background: Indigenous to local communities
 Apparent Market Segment: Local rehabilitation needs, low intensity, post-acute
 Linkages: Host acute hospital, some None
 Apparent Strategy: Reclassify existing beds, expand program. Some new starts motivated by Medicare PPS, head injury needs.
 THFC Action: Pre-ap

Market	Owner	Size	Cost	Cost/Bed
General	Arlington Rehab Ctr. Assoc.	30-75 beds	8-13 million	173,000
"	Methodist Hosp. of Dallas	85-120 beds	6 million	50,000
"	Harris Hosp-Meth FTW	30 beds	3 million	100,000
"	Grand Prairie Hosp.Auth.	40 beds	1 million	25,000
"	McAllen Methodist Hospital	10-15 beds	.5 million	
"	St. Joseph Hosp. Houston	30 beds	.2 million	
"	Hous.Northwest Med.Center	20 beds	.25 million	
Head inj.	Denereux Foundation Victoria	30-50 beds	2-4 million	80,000
"	Moody (TLC) Galveston	5-20 beds	1-4 million	
Gen'l/SNF	The Oaks	200	18.7	90,000

PRE-APS IN TEXAS COUNTIES LOCAL GROUPS



Company: "Steve Creekmore, Jr."

Agent: James M. Martin

Background: Unknown. No one heard of him. Probably a staff person of a large investor-owned company. Facility names (Rehabilitation Institute of <city>) suggests awareness of people in the field (Rehab Institute of Chicago, Rehab Institute in Detroit, Institute of Rehab Medicine (NY), The Institute for Rehab and Research), and benefits of affiliation through name identification.

Linkages: Unknown

Apparent Market Segment: Low to mid intensity broad medical rehabilitation market in the major Texas SMSA's

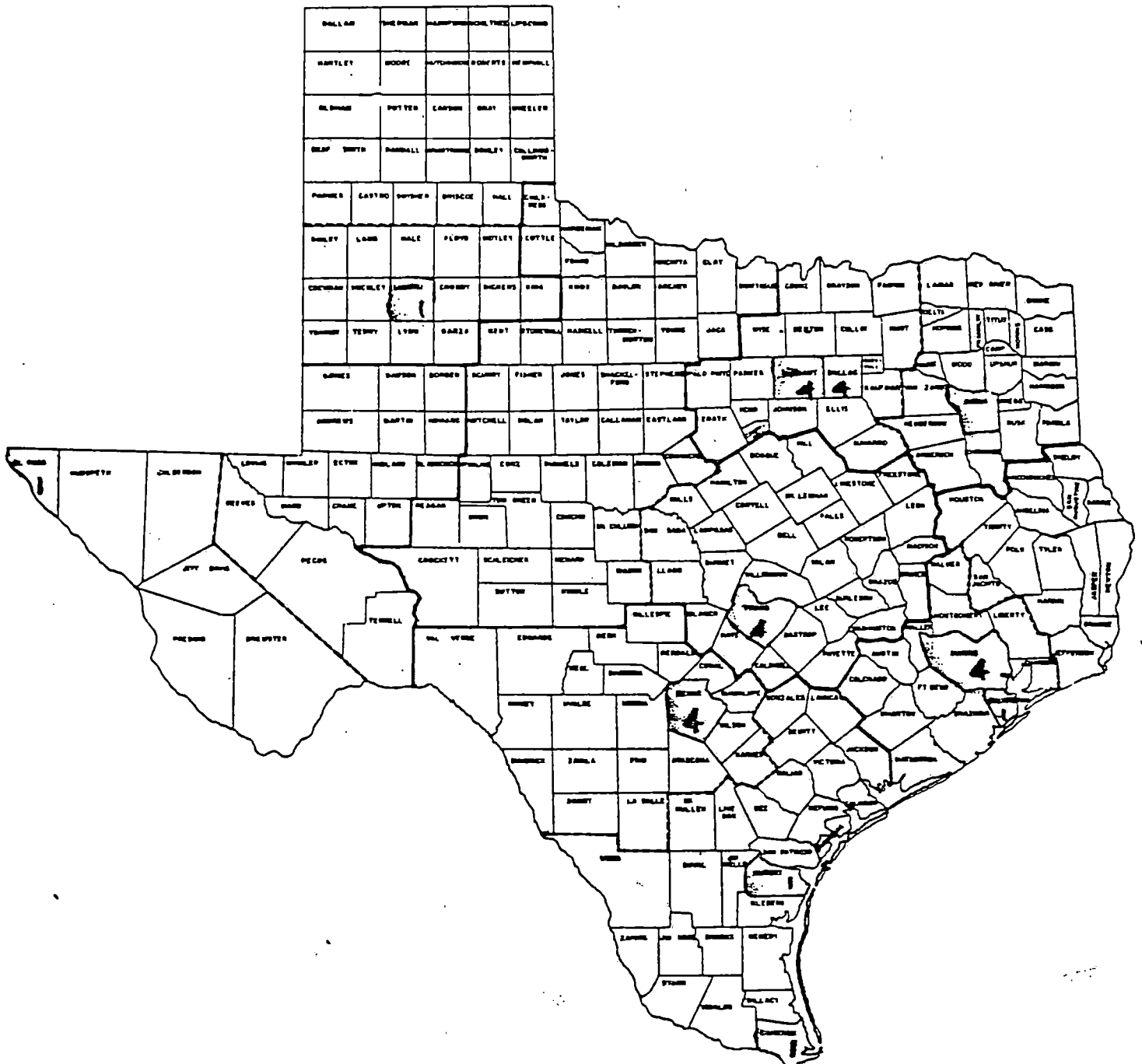
Apparent Strategy: Construct new, 50-bed (small) rehabilitation facilities at a cost of \$120,000 per bed (more complex cases than just head injury). It takes many such facilities to support the fixed overhead to run them, so either the company already has the mass, or expects to get it by building more than one in Texas.

Preserve options in Dallas, Fort Worth, Houston, Austin and San Antonio with four per city, and one per city in Brownsville, Corpus Christi, Tyler, Lubbock and El Paso.

Project Cost: \$6,000,000 each

THFC Action: Identical pre-aps, above cities

STEVE CREEKMORE JR.
7/1/84 - 12/31/84



Company: HPC

Agent: A. A. Gabriel

Background: Unknown

Apparent Market Segment: Smaller SMSA rehab, low-intensity, perhaps general, geriatric, SNF-based.

Linkages: Unknown

Apparent Strategy: Build new 70-100 bed low-intensity, low cost facilities -- \$20,000-35,000 per bed (?). This is an extremely low per square foot cost for an inpatient facility and they call it an acute care "hospital" in the pre-ap.

THFC Action: Identical pre-aps for 70-100 bed facilities in Amarillo and San Antonio area, 30-60 bed facility in Hidalgo County.

HPC

STRATEGY ANALYSIS

Especially since 1983, rapidly changing mechanisms for paying for health care are increasingly placing the provider and the patient at financial risk, resulting in lowered demand for inpatient care, shortened lengths of stay, and decreased intensity of services. As these changes erode the margins of health care providers, competition increases for ever scarcer financially covered patients -- price concessions are offered in exchange for patient volume. Traditional providers and new entries in the field are devising lower cost alternatives to inpatient care. The health care industry is being restructured, and as this takes place, we must review our basic strategy and modify it where necessary.

1. Current TIRR Strategy.

TIRR returns the severely physically impaired person to an autonomous, active, and productive community-based lifestyle outside of an institution by providing specialized comprehensive rehabilitation services including hospital care. Our research and education programs improve the effectiveness and efficiency of the rehabilitation process and support the inclusion of disabled people in mainstream community life. We function as a tertiary rehabilitation resource for the five-state region, both in the provision of specialized medical care and comprehensive rehabilitation services and in offering knowledge and support to other providers in our region.

TIRR is a teaching hospital for training physicians and other health professionals. Our medical staff are required to be medical school faculty. Until recently, we relied solely on Baylor College of Medicine and its Department of Rehabilitation as a source of faculty physicians. TIRR is a referral facility, and the rehabilitation needs of each patient are overseen by one of the full-time attending physicians on its medical staff.

Most of our programs occupy specialty niches in specialty markets. In some of these markets, we are in a leadership position--in others, we intend to get there. TIRR requires a sizable share of its major markets in order to maintain current clinical competence in dealing with the kinds of catastrophic disabilities in which we specialize.

Most disability results from chronic disease (80%) while the rest arises from trauma (20%). We have focused primarily on services to patients with disabilities resulting from trauma, specifically, spinal cord injury (for which we have a wide geographic service area), and amputees. In spinal cord injury, we provide the medical and surgical services of a hospital and the rehabilitation services of the typical rehab facility. Because the incidence of spinal cord injury is expected to decrease, and because of competitive forces in that arena, we are developing our programs for other disabilities, including pediatric rehabilitation, head injury and chronic disease, including stroke, multiple sclerosis and post-polio syndrome. All services are provided at a single site in the Texas Medical Center.

Trauma patients generally are young, and have private insurance. Coverage for services requires layers of private insurance, governmental entitlement packages and philanthropy. Sixty-five percent of our reimbursement has ordinarily come from payors who pay charges, with a relatively small amount coming from government (e.g., Medicare) and private sources that pay on a cost-plus basis. We have collected 93% of charges, historically, under the open-ended fee-for-service and cost-plus reimbursement systems. In a fee-for-service environment, we have generally provided whatever services we thought

the patients needed, and have sought reimbursement from as many sources as we could identify. Under reimbursement and indigent care we offset by varying prices to payors who pay charges.

Organized as a single, not-for-profit, charitable provider of hospital care, TIRR has sought to break even or generate a four or five percent margin to meet its indigent care responsibilities, to maintain a growth rate adequate to meet the needs of its patient referral volume, and to preserve its assets. Philanthropy, as a source of support for our charitable activities, has decreased over the years, and in 1984 amounted to around 1% of revenues. Philanthropy has supported capital expansion, from time to time, and as well covers some gaps in the reimbursement system.

TIRR continues to recognize strongly its social obligations to its community and to the patients that it serves and wants to maintain a stable, high-quality rehabilitation resource for that population. As a teaching hospital and an educational institution more generally, we expect to advance the effectiveness of comprehensive rehabilitation services and to demonstrate the value of these services in both economic terms and in improved quality of life for the individuals we serve.

2. Strategy Problems.

New Reimbursement Incentives. The prevailing social philosophy for the past 20 years was "equal access by all to the highest quality health care in the world, regardless of ability to pay". The business environment in health care in this period was such that: 1) hospitals generally were insulated from the effects of free market competition, 2) payments for care were open-ended fee-for service or cost-plus, 3) most insured patients were not at financial risk, 4) the tax and regulatory environment stimulated growth of health care capital, human resources, and technology and stimulated creation of investor-owned hospital systems, 5) the industry was dominated by not-for-profit community hospitals, 6) planning agencies made public the intents of competitors and afford an opportunity to present opposing views, and 7) rehabilitation was poorly understood by outsiders and little interest was shown in entering that arena. TIRR's strategy could focus on quality and response to patient demand--price competition and volume was not an issue.

This is no longer the case. Providers and patients are increasingly at risk. Purchasers of services, (e.g., employers, reinsurance companies, and governments) are rapidly taking control of their increasing outlays for health services for their beneficiaries and, to the extent of their regulatory constraints and market clout, are limiting use of and payments to hospitals through a variety of mechanisms. Hospital charges are being forced downward at an accelerating rate through controls that include (Fig. 1):

- managed fee-for-service with oversight functions (pre-admission certification, continuing stay review, discharge planning, and retrospective review) to limit frequency of admission, intensity of services, and length of stay.

- formal and informal preferred provider arrangements (PPAs) that route patients to providers who offer discounts off charges and utilization controls, while adding a surcharge for patients who want to use other providers,

- health maintenance organizations (HMOs), pre-paid capitation systems that control utilization as well as cost, and

- fixed, diagnosis-specific payments.

TIRR is linked.

14. Restructuring. TIRR will reorganize its corporate structure to provide the business flexibility needed to seize the opportunities that present themselves.
15. Fund raising. TIRR as a 501(c)3 organization should develop and implement a sound fund-raising strategy that integrates the various philanthropic sources.

discuss joint ventures along these lines with Healthcare International, the for-profit system specializing in head injury and operating out of Austin.

d. Home health care services are necessary for some of the TIRR patients and could play a larger role if we are successful in some of our diversification activities. At present the volume isn't adequate to create a separate home health care group, and home health services are available through some of the affiliates at low cost, and increased use of those services would be something that we would bring to the affiliation.

e. Management services. Through its affiliations, especially with the not-for-profit hospital systems, TIRR may find it appropriate to develop a consulting service to provide management expertise through contract and joint ventures to the hospitals of the system regarding the management of their rehabilitation units and case management for their patients. This market will be explored as the affiliations are executed and as contact is made with the constituent hospital groups. TIRR would look to the Department of Physical Medicine at Baylor College of Medicine for Medical Director resources for these units.

f. TIRR will probably, in this context, establish an outreach and technical support program with formal linkages to rehabilitation facilities in the Texas rural areas and smaller SMSAs, especially those hospitals that are members of the affiliates with which

b. Level 2 Facility. National Medical Enterprises has determined to enter the Houston market and proposes a Level 2 facility joint ventured with TIRR and perhaps an acute-care provider. Three options are being considered, among them joint venture with a for-profit physicians group, joint venture with a suburban community hospital system, and a joint venture with TIRR alone. TIRR would be a partner to each of the ventures.

It appears wiser for TIRR to work with NME/RHSC if it considers entering the Houston market, rather than to ignore it and, if NME does enter, to own a piece of that business and affect the network. Participation would move us further up the learning curve and could as well prevent other players from entering that particular market. In the longer term, geriatric rehabilitation is likely to become an important share of the rehab volume and much of this care does not need the kind of intensity that TIRR provides at its medical center site. TIRR would be unable to develop a facility of this kind (a SNF/ICF) until the relatively distant future. It may be better to get in early with those who are entering so that we will have an interest in the market.

c. TIRR will consider a similar joint venture to develop facilities to handle the head injured patients, especially residential treatment centers where alternative drug therapies and retraining activities can be conducted. These would be still lower cost environments than the SNF/ICF facilities and would be targeted specifically to the head injured population. We would expect to

will affiliate with systems that are integrated into insurance. What TIRR has to do is to integrate in the other direction. In order for comprehensive rehabilitation services to be provided in a cost-effective manner, a spectrum of rehabilitation resources need to be available for patients who no longer need the intensive services that TIRR provides. A "step-down" facilities offer Level 2 or Level 1 services including residential treatment centers are appropriate for many of TIRR's programs and some links in the service chain are not available in the community.

TIRR has the concepts but not the capital or the management capacity to develop these chains so it will develop its expertise by establishing joint ventures with strong, competent partners to develop the necessary resources in the community that can benefit both TIRR patients and patients from other providers or who enter from other points in the rehab spectrum.

- a. Comprehensive Outpatient Rehabilitation Services. TIRR will develop through a joint venture relationship with the HealthSouth Rehabilitation Corporation one CORF in Harris County. This will develop new lines of business for TIRR as the facility will be configured to meet the needs of the referring physicians, many of whom are expected to be limited partner investors. It will also provide a resource for TIRR's patients in the markets where they live and an alternative to travel to the Medical Center for outpatient services of certain kinds.

d. Continue to work on bringing no-fault auto insurance with mandatory rehab benefits to Texas.

9. Develop an educational capability for disseminating service expertise of our programs where our competitive advantage would not be weakened by so doing. Direct our educational resources to support the corporate objectives.
10. Establish a formal relationship with the Department of PM&R at UIMSH before anyone else does.
11. Catalyze the creation of a self-sustaining alumni support group of Texas SCI patients like the Texas Head Injury Foundation and the new Texas Polio Survivors Association.
12. Grow now in order to recruit and acquire a commitment of limited quality staff before competition enters the staff market.
13. Develop a source of competitive advantage by producing before anyone else can evidence that key services being provided are effective and efficient. Our data base and history give us the information to do so. Others are new infants to the field and have no history.
14. Vertical integration. TIRR has integrated about as far as it can go into the acute end of rehabilitation. It can get patients as recently as three days post onset through its relationships with the trauma centers. TIRR itself will not integrate into insurance but

5. Develop a family practice clinic for serving the intercurrent acute problems of patients with severe physical disability and offer these services to patients from all of our programs.
6. Obtain the position in our region's various markets and with the national markets as the leading rehabilitation research group in our region and insure that our clinical programs are and are perceived as being state-of-the-art.
7. Establish a dominant position in the rehabilitation engineering and rehabilitation technology markets in the five-state region.
8. Change conditions in the market.
 - a. Help HCFA develop its recommendations to Congress to bring rehab services (presently excluded) into the Medicare PPS.
 - b. Work with the Texas state agencies and legislators to help improve legislation regulations and resources that affect availability and financing of quality rehabilitation services for Texans.
 - c. Catalyze an association of similar rehabilitation facilities into an affiliation like the VHA and position it as a major rehabilitation provider nationally with spinoff effects to its members.

- b. Improve relationships with existing insurance company referrers, rehab nurses, claims adjusters, and case management people.

While a sizable share of TIRR's revenues still come from private insurance, the percentage has been declining slightly in recent years. TIRR has not been as active or as successful at building strong relationships with the insurance companies as has Craig Hospital. TIRR must develop aggressively a strong, positive relationship with the various types of private insurance groups and reinsurers in this nation and market its services nationally if it is to penetrate Craig's market and prevent Craig and other competitors in Texas and Louisiana (IME) from taking ours. Price competition will be important as will relationships between TIRR (medical staff, intake, and discharge planning people) and the insurance companies. TIRR's business configuration versus that of other providers will have to be taken into account when pricing is discussed.

3. Concentrate on providing high quality rehabilitation results at a reasonable cost to the purchaser. Focus on providing the lowest cost over the long term rather than lowest cost in the short term. Establish that niche in various markets and reposition the competition.
4. Develop a means to better serve the patients we already have in the programs that we already have going through improved follow-up and drop-in clinics and better guest relations, service quality, and lower cost while they are here. Don't give them a reason to go anywhere else.

The Hermann Hospital and its affiliates and managed hospitals. Hermann is one of the major trauma centers in the community with fixed and rotary-wing Life Flight resources and a commitment to indigent care.

The Memorial Care System including the flagship Memorial Southwest and its affiliates and managed hospitals and through Memorial which is the local shareholder, the Voluntary Hospitals of America and their nationally-marketed insurance products for their system (with the Aetna Insurance Company) called Partners Health Plan.

Ben Taub General Hospital and, through Ben Taub, the Harris County Hospital District and its other hospitals and clinics. Ben Taub General is a major trauma center next door to TIRR. Mechanisms should be found to provide to District patients the kinds of services that TIRR provides and the District cannot duplicate. In the past, the only barrier has been the ability to move funds from the District to TIRR.

HMOs and PPOs. Insurance companies are also forming HMOs and PPOs as are for-profit hospital systems. TIRR should negotiate with these systems as a provider for "outlier" management to round out their spectrum of services (for those that are interested). Some HMOs and PPOs do not include catastrophic disability as a benefit, but they may in the future as increasing pressure is placed on them to meet the full spectrum of health needs of their enrolled population.

- e. Develop additional strengths -- improve and expand programs other than SCI, for example, Surgery (hand, urology), Neurophysiology, Poly-trauma.
- f. Organize all of our general adult rehabilitation services into a program approach and expand our market share.

3. Develop Referral Network.

- a. Access to reimbursement. Position TIRR as a participant in the insurance/health care delivery systems that are forming and that in the future will direct enrollees to patients in those systems. With its focus on comprehensive programs for severe physical disability, TIRR is a specialty provider in a specialty market and as a niche player does not compete with most other alternative delivery systems. It manages high clinical risk and high financial risk and does it very well and can sell these services to the systems that are forming. TIRR should associate with:

Methodist Hospital and its affiliates and managed hospitals and through TMH, American Healthcare Systems, and its insurance products that will serve those 1500 hospitals. Traditional insurance products as well as HMOs and PPOs that will be marketed nationally.

TIRR STRATEGIES

1. Preserve and expand our strongest program -- spinal cord injury -- focusing on increasing our market share in the region. There should be no reason to transfer patients outside of HCEA Region 6. Develop and expand national and Texas market for apneic quad management, phrenic nerve stimulator implants , spinal cord evaluation (with Neurophysiology).
2. Diversify.
 - a. Move aggressively to establish a post-polio service to meet the high community need and to take advantage of our present leadership position in this city and region (and in the national press).
 - b. Modify and enlarge our head injury program capabilities and expand our market share, focusing initially on the Houston market from nearby hospitals.
 - c. Expand our program in pediatric rehabilitation and consolidate our market position.
 - d. Expand our amputee program and consolidate our market position.

Company: Warm Springs Rehabilitation Hospital

Agent: David Gumper, Administrator

Background: Free-standing 80-bed rehabilitation hospital in Gonzales, Texas, near San Antonio.

Linkages: Mainly outpatient facility affiliations:
Brazos Valley Rehabilitation Center, College Station
Permian Basin Rehabilitation Center, Odessa

Apparent Market Segment: Low to mid intensity medical and vocational rehabilitation.

Apparent Strategy: Pro-active, aggressive. Expand into urban San Antonio with second 80-bed facility. Affiliate with rural outpatient rehab centers. Offer consulting services. Sell products, rights (e.g., Warm Springs tubular hand orthosis - manufacturing rights were sold to H. Weniger, Inc., San Francisco.)

THEC Action: No pre-ap. No CON. Site acquisition problems.

Company: St. Anthony Center (SCIW)

Background: A nursing home, skilled care facility with a rehabilitation component operated by the Sisters of Charity of the Incarnate Word, a chain of hospitals.

Agent: Sisters of Charity of the Incarnate Word

Apparent Market Segment: Geriatric SNF/Rehab/Hospice

Linkages: Other SCIW hospitals, open market, New Age Hospice

Apparent Strategy: Increase utilization by overlaying hospice function on present rehab beds.

THFC Action: Ask for DR to use 10 or fewer rehab beds for hospice services. One-year contract with New Age, converting to month-to-month. (AN84-0823-541)

Company: The Musculoskeletal Center, P.A., Tyler

Agent: Same

Background: A physicians' medical practice

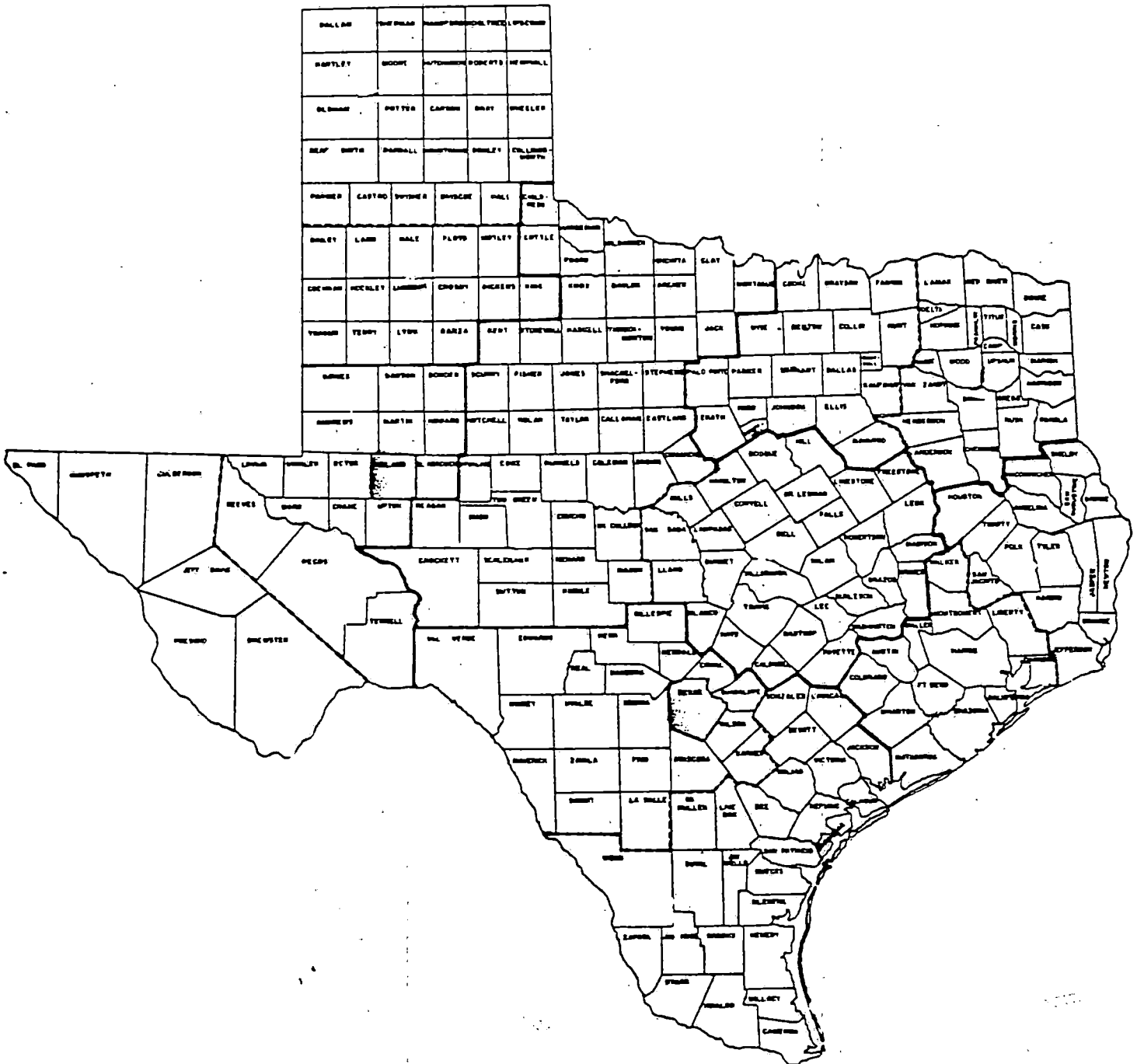
Apparent Market Segment: Area residents with general rehabilitation needs.
Spinal pain. Medicare beneficiaries.

Linkages: Unknown.

Apparent Strategy: Create first comprehensive outpatient rehabilitation facility (medicare certifiable) in the area. Will include PT, OT, Physical Medicine, spinal pain clinic, psychological services, x-ray, lab. No overnight or surgical facilities.

THFC Action: Secured DR September 20, 1984 (AO84-0727-494)

HEALTHCARE INTERNATIONAL, INC.



Company: Healthcare International, Inc.

Agent: Dudley McCalla

Background: Small, but high quality investor-owned chain of psychiatric facilities in Virginia and Texas (Austin, etc.)

Apparent Market Segment: Mid range general rehab, perhaps general or geriatric.

Linkages: Unknown.

Apparent Strategy: Construct a small facility, 50-100 bed range in San Antonio and/or Midland area. These would be in the \$100,000 per bed range, and thus relatively low-to-mid intensity.

THFC Action: Pre-ap Midland 50-80 beds, \$5-8 million. Pre-ap San Antonio 60-100 beds, \$6-11 million.

Through these controls, payors increasingly are specifying the services they want. They are opposed to "cost shifting" and are gradually foreclosing on hospitals' ability to cover indigent care, to provide needed but unreimbursed services to their patients, and to pay for graduate medical education. TIRR has felt the tightening of these controls for several years, but at an increasing rate recently. With unrestricted gifts for operations at a low, TIRR must meet its indigent care needs and cover gaps in reimbursement with operating surplus. Margin erosion with increasing downward pressure on charges threatens our ability to continue doing this to the extent we have in the past.

As a result, occupancy of the United States acute health care system fell to 50% nationally from 69% two years ago. Services are in oversupply. We have 4.5 beds/1000 when 3.5/1000 (some say under 3.0/1000) may be all we need. There is also an oversupply of physicians (nationally) in almost all specialties. Inpatient beds are being closed or converted to other uses (Fig. 2). Inpatient bed use rates are dropping. Once at 1200 days/1000 population/year we are moving to below 1000 days/1000 population/year. In some parts of the country where HMOs are dominant, 900 days/1000 population/year have been seen.

A Restructured Health Care Industry. These changes in the health care reimbursement structure are causing a rapid restructuring of the industry. With demand and price being driven downward, the only mechanism available for growth or maintenance of market share is to take control of the scarce resources (the paying patient). Consequently, both for-profit and not-for-profit acute care hospitals and systems of hospitals are moving quickly to capture and control this population. They are integrating both horizontally and vertically. Horizontal integration provides economies of scale, decreases costs, and opens new markets. Vertical integration (upward into insurance and downward into alternative, lower-cost health care delivery systems), improves opportunities to retain control of the patient population and to lower costs. Both for-profit and not-for-profit systems of hospitals are growing (Fig. 3). In this 13-county area, for example, there are some 80 hospitals, all but three of which are either affiliated with or managed by hospital systems. Over the years, smaller systems, both nonprofit and for-profit, are gradually absorbed by larger systems.

Hospitals are integrating into insurance and insurance companies are integrating into health care. Humana began in 1983 and now has some 45 HMO products in operation. National Medical Enterprises, HCA and AMI followed two years later and all have a wide range of HMO, PPO, and conventional insurance products on the market or on the way to market. In the not-for-profit sector, the Voluntary Hospitals of America, a 500-hospital not-for-profit system, has announced a joint venture with the Aetna to market a health maintenance organization for a VHA-brand of health care, VHA Partners' Health Plan. American Healthcare Systems, a system of 35 hospital systems, representing (owned, based or managed, or affiliated) 1500 non-profit hospitals is following suit in a joint venture with two insurance companies. In Harris County, plans like these have enrolled 220,000 persons, just less than 10% of the county population. By 1990, 33% of the population is expected to be enrolled.

Integration into rehabilitation is also taking place, driven largely (at this time) by financial benefits resulting from exclusion of those services from Medicare PPS reimbursement (DRGs). Exclusion is expected to continue for three more years. In the last two years, the number of hospitals with rehabilitation units jumped from 80 in 1983 to 200 in 1984 to 420 in 1985 (Fig. 4). National Medical Enterprises determined to take a major position in the rehabilitation field and bought Rehabilitation Hospital Services Corporation, a system of freestanding rehabilitation hospitals with, now, 1100 beds (including Dallas Rehabilitation Institute and the new San Antonio Rehabilitation

Center. Humana Hospital Lucerne in Florida is developing a Center of Excellence in Spinal Cord Injury. It is likely that these rehabilitation hospitals and units of acute care hospitals and nursing homes will retain patients that in the past would have come to TIRR. Rehabilitation Hospital Services Corporation is now interested in a project in Houston.

At this time, TIRR remains outside of these systems that are evolving to control the paying patients. If we continue our strategy of remaining independent, our referrals may erode substantially, as the number of systems increase and try to keep their patients in their systems. Effects are already being felt in generally decreased occupancy at TIRR in 1985 (down 10% from prior years).

With more players entering the rehabilitation field, patients, referrers, and payors have more options from which to choose. Facilities are being developed in nearly all cities with a reasonable population size, closer than we are to where the patients live. What was once a regional market is becoming more local. The single site strategy TIRR has used may not generate a sufficient volume of its specialty cases.

New facilities require staff to run them, and the shortage that is emerging suggests that new facilities will try to attract staff from the present facilities. A major concern, when entering a new market, is to identify and recruit physicians who will refer patients to the facility and operate it medically. TIRR risks having its staff "raided" since they are so well trained and well known, especially if the staff see elsewhere greater opportunity to achieve their goals. When seeking rehabilitation physicians, most hospitals look to PM&R physicians. Of the Physical Medicine and Rehabilitation (PM&R) physicians in Harris county, about half are members of the group that comprise BCM's PM&R faculty practice. Only in 1984 did TIRR extend admitting privileges to one of their number, yet the department is housed in TIRR. There should be some way of working with this group of physicians in the emerging systems of care (especially before someone else does).

Opportunities for furthering our rehabilitation interests and philosophy are being lost as others enter the markets without what we consider to be proper approach, learned through our years in the field.

TIRR's Current Position. Competition for patients is growing more intense. TIRR's immediate position is sound, yet quite risky in the longer run. While our revenues declined this year (20%), we have been able to reduce our expenses and to lower our break-even point (to 63 beds). Our marketing effort has increased volume to 75 beds (average), which is leading to good operating performance in recent months. We are financially liquid and have a very low long-term debt to equity ratio. However, we are experiencing wider fluctuations in occupancy and are concerned with long-term stability of volume.

Our small size continues to be a problem. At 91 beds, our tertiary hospital sustains a sizable impact when occupancy varies by just a few patients. A larger volume over a broader patient mix would result in less impact by fluctuations in patient volume and increase stability and managability.

Some moves have been made to offset the impact of increased competition (rehab beds in the county have tripled in two years). An additional marketing person has been recruited, and an outside professional marketing group has been engaged. Results of our marketing activity are substantial and volume has increased over the first quarter of 1985. We reduced expenses by about 14% (reductions continue) and we streamlined our intake system to improve the speed and responsiveness of TIRR to the referrals. We

installed an 800 number (within Texas) which goes directly to a clinically-oriented intake expediter and the response has been quite favorable. Case managers now oversee effectiveness and efficiency in each patient's care and ensure that the referrer's goals are met. An improved scheduling system was put into place to increase efficiency and integration.

A promising outlook exists for some of our specialty programs, especially spinal cord injuries provided we act promptly. We are at this time one of the few resources in the country that specializes in the treatment of ventilator-dependent quadriplegic and phrenic nerve stimulator implantation. Others are entering this specialty area. Yet, new seat-belt laws passed by many states should eventually produce a decreased incidence of spinal cord injury. Since 50% of these injuries result from auto accidents, we may see lower volume in this program. Our pediatric rehabilitation program appears to be one of the first in the state and has shown growth in recent months after being established a year ago. We have brought on board a psychologist with neuropsychology training, viewed as essential to the rehabilitation of people with head injuries and have an active national search for a senior physician specialist in head injury. Post-polio syndrome is an area of strong community need. We have experts in the field and a head start on others, and could assemble a strong clinical program.

Most of our department management staff are improving their departments' efficiency, effectiveness, and responsiveness to fluctuations in patient mix and volume. Some employees are still entrenched in established ways of doing business which will have to be changed in the light of competitive trends. Particularly notable now is the need to obtain synergistic effects among operating departments. Individual department performance figures have improved substantially, and we now are orchestrating these services to increase efficiency, and to increase overlap and cross training so that volume shifts can be met effectively. We continue to be able to attract and retain excellent people.

TIRR's well-respected research capabilities are substantial. Our research programs are relatively secure, far advanced, and are a source of competitive advantage but are not well known by referrers and our target markets. Our spinal cord injury system grant has just been renewed for a five-year period and is one of the strongest in the nation. We also were awarded a new Research and Training Center grant in Independent Living. A privately-funded international research program in clinical neurophysiology and restorative neurology gives us in one setting a complete spectrum of diagnostic and treatment resources in the neurophysiology and restorative neurology field. Such a resource does not exist in this five-state region.

3. Core Elements of the Strategy Problem.

Our current policy of independence probably cannot be sustained if control over sizable numbers of patients is obtained successfully by the large vertically and horizontally integrated systems that are evolving to maintain control of patient volume. TIRR will have to link to these systems (probably more than one) if we are to maintain the flow of patients that is essential to our economic viability and to maintain the clinical competence of our staff in dealing with the conditions in which we have chosen to specialize. There appear to be opportunities in specialty programs where we possess distinctive competence, particularly, programs associated with central nervous system trauma (including head injury and spinal cord injury) that require comprehensive rehabilitation. TIRR's position as a tertiary rehabilitation resource for severe and catastrophic disability is an area of competitive advantage, although a significant volume of these cases is necessary to maintain that position .

TIRR will find it difficult, alone, to offset losses in its specialty program volume by shifting to relatively standard and routine rehabilitation activities. Whereas some of this volume has been available to us in the past, the competitive activities of the acute care hospitals and other signs point to a significant and perhaps unregainable loss of market share in this area.

Many rehab activities can be provided in lower cost delivery settings, and it is likely, as margin pressures accelerate over the next five to ten years, that even "distinct-part" rehab units in hospitals may be forced to move those patients outside of the hospital setting to lower cost settings. Rehabilitation for some patients can be offered in skilled nursing facilities or in outpatient settings, and we need access to this continuum of care for our patients if we are to be able to compete on the basis of price. We would like to participate financially in these options, either by creating them ourselves, or in joint ventures with others.

The notion that TIRR can continue to provide all of its services at a single site in a small tertiary hospital is also inappropriate for the new environment. As the regional markets to which we have had access become more localized, patients we have served will not as easily travel to our TMC location. Lower cost, more easily accessible outpatient rehabilitation services and alternatives to tertiary inpatient care must be developed. Price competition is expected eventually to drive outpatient services out of the high-cost inpatient hospital setting where we now house them.

4. Alternatives.

Several modifications to TIRR's current strategy are indicated in order to stabilize volume and maintain viability over the long term. A variety of alternative strategies are available:

- a. Building on our strengths in effective and efficient treatment of severe disability resulting from CNS trauma (and some severe chronic disease), we can offer those services on a regional basis to the emerging health care systems that will control patients. The target markets would be those payors (HMOs, PPOs and reinsurers) who have long-term exposure to expensive-to-maintain patients with severe physical disability. Rehabilitation services that we provide reduce their long-term costs by increasing patient independence and move them out of institutions to lower cost settings. We manage the clinical risk and the financial risk associated with catastrophic disability.
- b. TIRR can develop cost advantages. We can develop a spectrum of lower cost alternatives to inpatient rehabilitation. As the industry restructures, we will need to be able to offer "downstream" alternatives to inpatient care in order to meet price competition. A lot of rehab does not require the kind of intensive services available at TIRR and will, in the new environment, be carried out in skilled nursing facilities or in community-based comprehensive outpatient rehabilitation clinics. We can be there first.
- c. We can offer management services. The number of rehabilitation units and rehabilitation hospitals is increasing rapidly, and an informed management, able to produce both economic and clinical outcome results, is in short supply. Both clinical and business management services are in high demand. We could influence movement of patients through the system.
- d. Joint ventures with "good" competitors could increase market share and expand into new rehab markets while minimizing risk. As better capitalized facilities move into our service area, many seek us out. This diversification strategy

would allow us to obtain a share of new markets, which would permit our basic specialty services to continue, as well as feed them, to some degree.

- e. We might merge with a single vertically-integrated system. TIRR would become a captive of that system and would be reconfigured to meet that system's needs. This would probably mean decreasing specialization and increasing variety in order to meet the more routine rehab needs of other hospitals in the system. The prime objectives would become driven more by the acute care system's values and needs than those of rehabilitation. Merger would also close off other sources of patients.
- f. We could create and join a horizontally-integrated system of similar regional rehabilitation centers of excellence in this country and work together to market comprehensive rehabilitation services nationally, to link into the new systems, and develop cost saving activities through pooling our knowledge and purchasing power and by developing economies of scale.
- g. We can grow to a size that is less vulnerable and sensitive to volume shifts in our major programs.

5. Evaluation of Alternatives.

- a. Link into the evolving health care/reimbursement systems to handle their severely physically disabled patients. Specialization is a segmentation strategy, and could be quite effective in the new environment. Our expertise in managing these high economic cost patients with catastrophic disability gives us a cost advantage for these "outliers". Because we specialize in their treatment and see so many of them, we are able to obtain better results at lower cost than anyone who sees fewer. Also, we have an ongoing independently funded research effort in the development of systems of care to handle catastrophic disability in an economical fashion. Such benefits should be attractive to major systems of care in this country, including Voluntary Hospitals of America, American Healthcare Systems, insurance and reinsurance companies, employer groups, and for-profit hospital systems. Our strategy would shift to risk management services for payors where we would sell decreased exposure to long term risk. There are relatively few regional centers at this time that provide the highly specialized services that are required by various classes of patients with severe physical disability and even fewer centers that are able to address the management of patients with these conditions over a long period of time so as to produce lower costs to the payor. While severe physical disability rehabilitation may not yet be of significant wide concern to the acute care hospital industry that is integrating into insurance products, it will probably become more so as the initial slack is squeezed out of the system and prices are driven down. Workers compensation companies and reinsurance companies already recognize these values, and as the system evolves, that perspective is likely to be shared with others and to be included in their strategies.

It is unlikely that, in the near term, systems will horizontally integrate enough to generate sufficient cases to merit such specialization. Consequently, TIRR will need to develop clinical referral arrangements (and perhaps economic arrangements) with more than one system in order to maintain required volumes. TIRR may develop arrangements with for-profit as well as not-for-profit companies. It can probably execute this strategy so long as it does not become

owned by any individual system but is seen more as a service organization. Ownership by one system would immediately foreclose volume from others.

- b. **Cost Advantages.** Joint ventures can also be a mechanism by which TIRR can provide lower cost alternatives to inpatient rehabilitation care for our severe physical disability patients. Lower cost alternatives will be especially important there if the strategy is to lower the long-term cost to patients. "Step-down facilities" such as rehabilitation in skilled nursing facilities and in comprehensive outpatient rehabilitation facilities in the community will be essential to reduce the cost of these expensive cases with which we deal. TIRR probably cannot capitalize these facilities alone, but joint ventures with physicians or other investors is an available option if an appropriate legal structure can be developed.
- c. **Management Services.** Our operating departments have the ability to support management of several "distinct-part" rehab units in acute care hospitals. The number of these units is rising fast, and there is much need for talent in organizing them and getting them operating smoothly in the larger system. Participating in this area is consistent with our interest in developing integrated systems of care, as we are doing in the spinal cord injury area, and are intending to do for the head injury population, as well. We cannot yet do this on a large scale, however, and lack adequate physician resources. We could explore this with BCM's Department of Physical Medicine, which has voiced an interest.
- d. **Joint venture with "good" competitors.** Joint ventures with selected competitors who do not threaten our basic thrust or market share could increase our market share and expand it into new rehabilitation markets. Joint ventures with well-capitalized companies who also bring additional management experience to the deal can provide TIRR with an immediate opportunity to attain a share of the expanding rehab market that it cannot otherwise do alone. TIRR could provide an entree into many such markets in Texas if a relationship were developed in which we maintained substantial share of clinical control over the new ventures.

Entry of other players is accelerating the localization of what has been a regional rehabilitation market for TIRR. They are already either converting empty acute hospital beds to rehab facilities or building freestanding rehabilitation hospitals in regions that haven't had those resources before. This will erode somewhat the referral and follow-up market that TIRR has had if those services can be obtained closer to home. Joint ventures could provide us with continued access to our distant patients. We do not have access to enough capital to compete on a large geographic scale.

- e. **Merger with a single system** would eventually result in substantial changes to the mission and purpose of TIRR. As competition among systems increases, patient referrals could fall, and TIRR would probably begin to serve a broader range of needs of the host system as a whole, including more routine rehabilitation needs, since it is unlikely that there would be a large enough number of patients to drive our specialized programs. TIRR would be an attractive acquisition, however, because it would bring (initially) a staff with a good deal of rehabilitation expertise and research capability not otherwise available. How much research it would be allowed to do as a captive is unknown.
- f. **A national consortium of rehabilitation facilities** similar in quality to TIRR would have formidable competitive advantages in the new industry. Collective

clinical and management skills in rehabilitation would be great and the recognition of such a group as high quality, efficient providers would strengthen each participant, providing the benefits of horizontal integration in a system where the values are shared, and talent is available to solve problems (clinical and management) not understood by acute care systems.

6. Updating our Current Strategy.

The restructuring of the industry will continue over a five to ten year period, and thus will be driven by both new and old reimbursement strategies. Opportunities will continue to exist in both segments, the old declining in influence and the new growing. Similarly, it will take some time for TIRR to shift gears and direction. The pace with which we change our direction can be coordinated to some extent with the movement of the industry.

TIRR is in two markets. We have a regional (multi-state and international) market for spinal cord injury services. In our local market, we serve SCI and a wide variety of other disabilities. Consequently, the strategies that best serve TIRR often differ for our different programs.

Our highly specialized programs in spinal cord injury and head injury, and other specific patient problems that arise from chronic disease (e.g. post polio muscular atrophy, multiple sclerosis, and stroke) seem to be best served by a differentiation strategy that markets risk management to those vertically and horizontally integrated systems of care that have long-term exposure for patients who have these kinds of conditions. TIRR has to do two things in order to be able to maintain and expand that market share: 1) We must act to ensure efficient and effective use of our inpatient system through developing strong utilization review and outcome measurement programs, and 2) we must develop still lower cost alternatives to inpatient care so that we have available a variety of settings to which these patients can be moved in order to achieve a cost advantage. Comprehensive rehab care for catastrophic disability is costly, and to achieve the efficiencies that will be required, lower cost options will have to be available as a patient improves and becomes more independent.

TIRR will have to choose how to approach the systems involved. As mentioned above, in order to maintain the volume of patients, multiple systems will have to be involved and patients from more than one of those systems will drive TIRR. In order for this to take place, it is best that TIRR not be owned by any one of them. Ownership by one tends to foreclose on referrals from others.

Marketing rehabilitation services of this kind to major systems may be done locally by TIRR and nationally or by the emerging consortium of regional rehabilitation facilities. If the consortium becomes real, it would bring together some 20 major freestanding rehabilitation facilities representing every HCFA region of the U. S. to market high quality competitively priced rehabilitation services and risk exposure management activities to health care systems on a national basis and to develop cost-reducing opportunities for its members.

We will probably have to compete on the basis of cost advantage. Diversification of competitors into rehabilitation in our area means that more options will be available that are either more convenient geographically or at lower cost. Expansion of systems and insurance incentives to use preferred providers (and disincentives to use others) will exacerbate this trend. TIRR, like others, will have to compete in this market on the basis of price and to do so will require the creation of low-cost alternatives to the inpatient care now offered. Joint venturing with "good" competitors can increase our

market share and expand into the emerging rehabilitation markets. Through comprehensive outpatient rehabilitation facilities we can build linkages into the local and perhaps regional markets to provide more convenient rehabilitation services closer to home and to act as feeders to the tertiary facility at the medical center.

Successful head-to-head competition with large and growing for-profit systems on the basis of price is unlikely in the "general rehab" arena. TIRR is not adequately capitalized to do that. A specialization and differentiation strategy is more appropriate. We have an opportunity, however, to develop a joint venture relationship with Rehab Hospital Services Corporation, a division of National Medical Enterprises. Should NME decide to take a position in the rehabilitation industry in the Houston market, it might be better to negotiate with them as they enter that market and to own a piece of that business than to lose a portion of the market to them. The TIRR name provides entree to the market, and could be useful. On the other hand, NME has no acute care hospitals in the area and no captive referral population. It would have to take business from other providers in the area and barriers to their entry might be able to be developed if proper relationships with the other systems could be put into place.

7. Conclusions.

- a. TIRR should foster the development of the national consortium of other rehabilitation facilities of excellence and, through that consortium, negotiate nationally with major reinsurers and insurance markets and with the growing vertically and horizontally integrated for-profit and not-for-profit systems to meet the highly specialized rehab needs of their beneficiaries who have suffered the kinds of catastrophic and severe physical disability that we are equipped to treat and in which we have substantial expertise.
 - b. TIRR should, through that national consortium, offer clinical and business management expertise to the rapidly growing number of rehabilitation units in acute care hospitals or in skilled care facilities. Through these mechanisms, TIRR can influence the quality of rehab care, transfer research knowledge, improve efficiency, develop systems of care, and achieve other purposes of its mission.
 - c. TIRR should pursue these strategies on a regional level without the consortium whether or not the consortium materializes. This would formalize the informal relationships built by the SCI program with several local trauma centers.
 - d. To preserve its local market share, to serve new local patients, and to develop lower cost and more convenient alternatives to inpatient rehabilitation in the medical center, TIRR should enter into a joint venture with a company experienced in establishing comprehensive outpatient rehabilitation clinics. That joint venture should establish at least one or perhaps two such clinics in our local markets in the next year in order to establish a dominant leadership position in rehabilitation in our local area. These units, in addition to being self-sustaining (indeed they should generate a surplus within the first year) will provide some referrals to the central facility as well.
5. TIRR should improve its relationship with the Department of Physical Medicine physicians who represent almost half of the practicing PM&R physicians in the county. We should evaluate mechanisms whereby they would come to see TIRR as their base hospital, with other involvements (e.g., as medical directors of rehab units of other hospitals, skilled care facilities, and other freestanding rehabilitation

hospitals) as secondary. Their numbers, plus the movement of residents in PM&R through the Department offer a source of physician manpower to support growth and new ventures of TIRR. The Department is housed in TIRR, but its physicians (except one) practice elsewhere.

- f. TIRR should begin now to explore long term opportunities in geriatric rehabilitation via its link to the BCM Task Force on Aging. This population is growing, and has substantial rehab needs that may reduce institutionalization. It represents a group (chronic disease rehab) we have not served in large numbers, and an opportunity for growth if we find that severe trauma referrals decline.
- g. We should develop and build the legal arrangements and organizational structures that are necessary to permit these relationships to be established. Most other not-for-profit rehabilitation facilities of our size and focus already have them in place, and the approach is well understood in the field.
- h. We must solve the obsolete 7-bed ward and inadequate bathroom problem soon. Our program quality and results attract patients. The dense environment is causing increasing comments and concern as they tour our facility. Privacy is important to many patients and families, and the flexibility of smaller units improves response to varying patient mixes and higher occupancy levels can be reached.
- i. We should reopen our annex as a "stepdown" facility perhaps as a day hospital, offering comprehensive rehabilitation services, but without overnight accommodations (which could be arranged with hotel/motel chains for out-of-town patients). This would give us a low cost alternative to the TMC tertiary facility, begin our continuum of rehab resources, and increase our stability.
- j. To test the growth concept, we should meet initial needs for additional beds with leased space at a compatible hospital before embarking on construction of new space.

8. Revised TIRR Strategy.

TIRR returns the severely physically impaired person to autonomous, active, and productive, community-based lifestyle outside of an institution by providing specialized comprehensive rehabilitation services including hospital care. Our research and education programs improve the effectiveness and efficiency of the rehab process and support the inclusion of disabled people in mainstream community life. We function as a tertiary rehabilitation resource for the five-state region, both in the provision of specialized medical care and comprehensive rehabilitation services and in offering knowledge and support to other providers in our region.

TIRR is a teaching hospital for training physicians and other health professionals. Our medical staff are required to be medical school faculty. TIRR is a referral facility and the rehab needs of each patient are overseen by one of the full-time attending physicians on our medical staff. TIRR does not limit its medical staff to faculty who participate in the Faculty Practice Plan of the Department of Rehabilitation at TIRR. Qualified physician faculty from BCM or other medical schools and from various departments within those medical schools who are acceptable to and receive the approval of the Active Medical Staff of TIRR are eligible for such clinical privileges as the Active Medical Staff chooses to recommend, and the Board will rely on those recommendations for its decision regarding extension of privileges.

TIRR's programs will continue to occupy specialty niches in specialty markets. They will be problem-specific comprehensive rehabilitation services clustered around specific

problems and oriented to a long-term perspective from the acute phase through the aging process, and intended to deinstitutionalize patients, improve their quality of life, and minimize the long-term costs of disability. We intend for our programs to take a leadership position in those markets.

We are primarily a regional spinal cord injury center. Sixty-five percent of our volume is in this program and we have long-term research and demonstration grants in spinal cord injury and model spinal cord injury systems. Our data base and our experience with this problem has been accumulated over the long term and we will focus intensely on maintaining and expanding our share of this market, on maintaining a leadership position in innovations in treating this problem, and in reducing the costs to provide services for this problem. With our neurophysiology program we have the opportunity to establish a national center for spinal cord evaluation. We will move forward on that project. We will develop a leadership position in innovation and technology in treating spinal cord injuries.

We will develop additional clinical programs that have the focus, respect and market position that our spinal cord injury program has and will gain for them a major share of the market in that problem. We are committed to developing our head injury, post polio, and pediatrics programs in this manner. A third tier of program development possibilities includes multiple sclerosis and complex stroke cases. For the long term, we are interested in developing program concepts in aging, gerontology, and geriatric rehabilitation, and in determining the role that TIRR or one of its facilities may have in serving that expanding population.

Each TIRR program should be known to benefit from the research activities carried out at TIRR and related medical school departments. The program should have a high tech, high touch characteristic.

TIRR requires more business flexibility than it has as a single 501(c)3 organization. While its tax-exempt status is important to it, it needs to be able to benefit from joint venture arrangements with for-profit as well as not-for-profit organizations and therefore will restructure to a parent holding company and multiple subsidiaries structure that will allow it to enter into other such relationships.

TIRR will enter into new businesses and new markets outside of the medical center by seeking the best joint venture partners that it can find for the initial market entry. Subsequent entries may be either alone or with partners, depending on TIRR's interest and management capacity.

An appropriate entity of TIRR will affiliate with and develop referral relationships with hospital systems as appropriate and in TIRR's best interests. TIRR will focus on its regional and local markets rather than on national ones except for the subspecialty programs that have a national market. We will develop strength at home first.

TIRR will carefully consider its business configuration as it moves into price competition. Price quotes provided by other rehab providers reflect their scope of services which differs from ours. While we don't have to organize in the same business form as other providers, we must be able to present our costs in comparable ways to theirs or force them to present their costs in ways that are comparable to ours.

TIRR will adapt its programs to a controlled reimbursement environment, strengthening the preadmission certification, utilization review, service integration and coordination, and discharge planning functions in each of its programs.

TIRR will actively seek philanthropy as a source of support for our charitable activities and capital needs. We will continue to be a community rehabilitation resource and to function as a charitable hospital, education, and research institution. We recognize strongly our social obligations to the community that we serve and to the patient groups that can benefit from our services. We will maintain a stable, high quality rehabilitation resource for those populations. As a teaching hospital and an educational institution more generally, we expect to advance the effectiveness of comprehensive rehabilitation services and to demonstrate the value of these services in both economic terms and in improved quality of life for the individuals we serve.