attitude is that we are trying to give our managing director all the authority that his position calls for. This does not mean that either doctors or the scrub women have to take all that a man of less poise than Mr. Clark might be tempted to hand out in his lower moments. Miss Mary Follett, a philosopher and a woman of outstanding competence, delivered a paper before the Taylor Society some years ago on "The Illusion of Final Authority."[3] In the hospital as in industry, authority is no longer centered in one individual.

Another answer to this attitude is that the *professional* approach to a job is no longer confined to the professions. Money rewards are still very important. But the work itself is constantly assuming more importance among all grades of workers. The director of a hospital can take his place in the ranks of professional men even though he is dependent on a salary rather than on fees. If you have any trouble between doctors and a director with administrative authority the fault lies either in your choice of a director or in the doctors.

I really believe progress toward solving the problems that Mr. Rorem and Mr. Clark have raised will be expedited if the hospital will take on largely the techniques and attitudes of industrial management. I have seen our own hospital reports—daily, monthly and annually—change from jokes to informative, accurate statements that permit helpful comparisons by periods. Hospital budgets must likewise change from mere forecasts which prevent the expenditure of more money than is available to compasses for use in developing better methods and a better balance between different phases of the work.

Perhaps the most important requirement is the introduction of what is called cost finding in industry. Justice Brandeis pointed out some years ago that the electrical industry had everything to gain and nothing to lose by comparing costs. The same is true in the hospital field. A few years ago I wanted to find out what the cost situation in hospitals was and employed a competent management engineer to find out for me. He brought me a huge sheet, issued in New York, which gave the cost per patient day for all hospitals in New York City. From the standpoint of a management engineer the sheet was almost valueless because only whole costs were given, with no explanation of variation. We have to have the details which explain variations in order to compare either two hospitals or two practices in the same hospital. We ought to be able to compare all the side services. Such comparisons will be of assistance to those who are not as good as they might be and will do those who are perfect no harm.

More than forty years ago the Standard Oil Company had the cost of making a gallon of oil broken down into three or four hundred items of cost. Whenever one of their manufacturers had a low cost on any of these items the others were sent to see how he did it. For some years the United States Steel Corporation has been doing a similar thing in their blast furnaces, only they reverse the process. Whenever a man has a high cost the others go in to help him bring it down.

The trouble in the medical field, and I include hospitals, is that we act too much as individuals. The doctor is going to find it to his advantage to do more work in groups and so is the hospital. At present hospitals are taking patients away from each other and doing all sorts of unco-operative things in order to have their beds 70 to 80 per cent filled. I believe 70 per cent occupancy is considered normal and satisfactory for hospitals. But I look forward to the time when 90 per cent of our hospital beds will be filled. This will be brought about, I believe, by community co-operation between hospitals. Plants will not be increased beyond a certain capacity and patients will be guided to the hospitals where there are beds to be filled rather than to those that have to put up beds in hallways.

Homer Wickenden.[4] I think it is very fitting that the Taylor Society should discuss hospital management. When you consider that $50,000,000 a year are spent by the hospitals in New York alone, it is evident that their problems are worthy of study by the most expert engineers.

Mr. Clark has given an excellent picture of how the wheels go 'round inside the hospital. He has convinced me that hospital management is a science, but it is certainly even more of an art. A good hospital administrator must be a good artist.

In his paper and a recent book, "The Public's Investment in Hospitals," Mr. Rorem has made a valuable contribution to our "thinking" in the hospital field. In pointing out the three competing elements in a hospital—the physician, the nurse, and the hospital—Mr. Rorem brings out very clearly some of the difficulties involved in adapting scientific management to hospitals.

Though I have great respect for his opinions I am not quite convinced of the value of including depreciation and interest on investment in cost figures. They certainly are costs. The hospitals of New York spend $600,000 a year on interest payments on indebtedness. But are these not community costs which should not be borne by the individual patient?

Mr. Rorem believes that the inclusion of these costs will stimulate the hospital superintendent to make greater use of his plant. Perhaps this is true, but factors outside the superintendent's control, such as economic conditions, are very important. I have in mind a maternity hospital which is having a hard struggle this year because there are fewer babies being born in these bad times. The superintendent could surely not be blamed for this. Adding interest and depreciation charges to the cost figures might not help him. Other factors which affect the occupancy of his hospital are the age of his plant, the lack of community planning in providing hospitals, the reputation of the medical staff, and so on.

The superintendent is constantly under pressure from his Board to cut costs. Would he be any more concerned if interest and depreciation charges were added? Or would he not be tempted to cut down the volume of free work? This would be a bad thing for the community.

If interest and depreciation charges are added, why should not taxes be added also? The community has to pay on behalf of the patient the taxes from which the hospital is exempted. Fire and police protection, good pavement and sanitation, surely contribute to the welfare and safety of the patient. I think, however, that Mr. Rorem is right in saying that hospital trustees and superintendents need a larger appreciation of the amount of capital tied up in hospital plant and equipment and its potential usefulness.

In the matter of occupancy, I wonder if the 90 per cent mentioned by Mr. Cooke is desirable? It is not if hospitals are to cope with sudden epidemics, but perhaps these should be cared for in some other way.

Mr. Cooke mentioned the need for greater co-operation in planning hospital facilities. This is a thing which hospital superintendents and trustees as a group can control.

I made a rather rough estimate of the number of hospital beds in the boroughs of New York. In Brooklyn there are about five beds to every thousand people, a maximum provision according to some authorities. I am inclined to think that Brooklyn does not need as many beds as this. In Manhattan, where the population is decreasing, the number of hospital beds is increasing and yet the City has appropriated almost $12,000,000 for additional beds in Manhattan; almost $4,000,000 for the Bronx; almost $4,000,000 for Queens and $2,000,000 for Richmond. There is at present an undersupply of beds in the boroughs of the Bronx, Queens and Richmond, but if all this construction is carried out, hospital administrators will have to scramble around for patients during the next ten years.

Mr. Clark's paper should be read by the business man who complains about hospital costs and says he can get more for his money in a hotel. In fact the general public would profit by reading it. Mr. Clark made an interesting comparison between hotel and hospital costs, but I am wondering if his comparison should not have been made between hotel guests and private-room patients who pay from $7.00 to $10.00 per day, plus extra charges, plus special-nurse fees. I am not so sure that that comparison would then satisfy everybody. That is a matter for further study.

The following questions came to me as I read Mr. Clark's paper:

1. Shall we be able to reduce hospital costs materially?
2. If they are reduced, will the difference be used to reduce the patient's bill or to add new diagnostic and therapeutic services? I have the feeling that the saving will be absorbed in more refined techniques of treatment.

I certainly agree with Mr. Cooke that we need more adequate cost finding. Since I am responsible for the statistical sheet to which he referred I want to say that the United Hospital Fund is certainly not satisfied with it. We realize its shortcomings almost as well as Mr. Cooke, but we believe it is better than nothing.

It does not pretend to be a cost-analysis sheet but it does give hospitals some material for comparing various services. To improve this sheet we have organized a Conference on Hospital Accounting in which about one hundred hospitals are participating. At present we are working on what we think will be a satisfactory means of harmonizing the accounts of the various hospitals, if we can get them to accept it. And we have reason to believe they will be glad to co-operate. After we get the hospitals to the point of using a unified accounting system we believe we

[3] *Bulletin of the Taylor Society*, Vol. XI, No. 5, December, 1926.

[4] General Director, United Hospital Fund of New York, New York, N. Y.