Survey User

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DATE: February 25, 1975

To

Joshua Lederberg

FROM :

Robert Greenes

SUBJECT:

Proposal by Frank Kuo for a Distributed Data Base System for Chronic Diseases

Dear Josh,

Thanks for giving me the opportunity to look at Kuo's Proposal. I think this is an interesting idea, and it certainly fits with the objective of utilizing SUMEX as a resource for medical applications of artificial intelligence. Although I would agree with the concept that multiple models and levels of specificity need to be used to deal with real world medical problems, it is not clear from this proposal how this use of multiple models will actually come about. Who is going to do the work? How is the expertise to integrate the various models with the data base to occur? If an effort such as this were to gain much impetus, it might be reasonable to consider a project staff supported at Stanford to actually make these multiple decision-making support programs available as a library.

It appears that the use of the distributed network is somewhat contrived in the sense that the number of computers involved in the proposed network certainly does not seem to be required. In a way, this has the appearance of being technological overkill in order to dramatize a concept. On the other hand, I know some of the work that has been going on at Gilbert's shop at Straub Clinic, and although I don't know Nordyke, I would expect that this group has a fairly high degree of competence.

One concern I have in the description of the project is the location of the data base for gathering statistics on collected experience. For a sophisticated consultation program to operate effectively and to improve over time based on its own experience, I would much prefer to see a data base management system integrated with SUMEX developed as part of the  $r_2$ source capabilities located here, rather than being maintained at one ofthe remote user sites. However, this is certainly not a criticism of the proposal but rather of the lack of activity in this area being done here. I think that the integration of a data base capability to help evaluate methodologies such as this would be a valuable effort to undertake at Stanford, particularly because of the data base capabilities that already exist locally. Parenthetically, this kind of data base capability, when coupled with some of the technological developments going on here, would be a useful part of a technology assessment program, if we were to propose that kind of emphasis for a Health Services Research Center at Stanford.

Regards,