

Maintaining health information system at healthcare institutions: a need of the day

Madam, Patient care has already entered in the era of evidence based medicine¹ and treatment decisions are desired to have support from research. Nevertheless only a small proportion of medicine is actually based on clear evidence. Most of it still relies on clinical experience or physicians' inclinations more so for emergency and critical care medicine and most of the surgical procedures.² This is mainly because of limitations including ethical issues and absence of tools to measure subjective exposures and outcomes. Still evidence can be obtained in some areas.

Widely applicable evidence is obtained from a sample which is representative of the population under study. Therefore, community based studies are preferred over facility based studies. Inability to study all diseases in community settings, due to various reasons has led to the concept of multi-center registries. Information gathered in this way facilitates wider representation of the study population. Such registries have been found to be of great value in studying cancers, blood disorders and bone marrow transplantations³, birth defects, twins and cardiothoracic surgeries.⁴

Goals of registry of a single or a group of related conditions must be clearly laid down at the outset. Only then extent of the information need to be collected can be decided. Once decided then a system is required to collect detailed standardized patient and treatment information. This information is computerized and hence a database is generated for analysis and report production. The goals laid down by the 'Acute Coronary Syndrome Data Set Writing Group' can be used for most of such databases.⁵ Multiple centers' independently maintained databases can be merged if required providing even wider representation. Similarly the canvas can be expanded to a national or even international level.

Rewards of maintaining such a database are many folds. It helps provide more uniform care to the patients, informs management about the long and short term resource allocation strategies and problematic areas in the patient management can be identified and improved, all leading to improved quality of care and hence patient satisfaction.

Patient attendance may be affected favourably. The system also creates learning opportunities for faculty and students of the harbouring institutions. Through multi-center data emerging clinical issues can be addressed with or without additional information. Evidence thus generated can help to develop treatment guidelines and preventive strategies consequently improving health status.

The implementation and maintenance cost of a database is well compensated by improved cost effective care made possible because of research findings. The risk stratification, identification of high risk patients and steps taken to improve the performance and outcome justify the costs. Moreover the lesson learnt from previous outcomes opens venues for evaluation of current treatments and nurture innovative treatments.

Thus, it can be summarized that if we consider quality of care and research as core values of health care provision then it becomes indispensable to install and maintain systematic information collection and retrieval system extensively whatever it may cost as in the long run it is bound to be cost effective in all respects.

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