Effective staff communications in a large I.C.U.

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Abstract

A byproduct of the Quality Assurance process is the continual review of individual and group practice. The aim is to eliminate errors and to improve care. For managers and directors to know what issues are currently important to the staff members an upward channel of communication is also needed. In our SICU with over 120 staff there was no documentation of communication in either direction. Casual survey did not reveal a major problem – but the need to document the dissemination of information, particularly new policies – especially to satisfy accrediting agencies – led us to develop MEMOS, an electronic mail system for staff members within the local area network (LAN) in the SICU. The system will run on an individual PC. The network is used because of the physical configuration of the intensive care units. The system is used by nurse managers to keep staff members up to date. Features include:

- Easy file maintenance.
- Individual password access.
- A defined group of system operators with access to all system functions
- Limited access to all other users.
- As many as 40 definable sub-groups for the purposes of mail distribution.
- Easy operator tallying of those delinquent in reading their mail.
- Hard copy with distribution list for all memos added to system.
- Browse feature to allow re-reading of old memos.
- Feedback channel regularly read by system operators.

This system has improved the level of staff awareness in the SICU and helped build morale.

Introduction

The Intensive Care Unit is a complex environment, with a rapidly changing melange of patients, personnel, policies and procedures. In a well run unit, there is a continual process of re-evaluation both of individual practice and of the group approach to problems. Much of this activity can be broadly classified as Quality Assurance. In the Surgical Intensive Care Units at The Buffalo General Hospital these quality assurance activities take on many forms. Patients are followed prospectively using a broad range of clinical physiological and administrative monitors – about fifty in all, outcomes are monitored, equipment breakdown and repairs are vigorously tracked to ensure unit ‘readiness’. Regular chart review for completeness and decision content both from a physician and nursing
standpoint is also an integral part of this process. From time to time, when a major incident occurs, an ad hoc committee is convened which conducts an inquiry, which may or may not lead to new policies. All of these activities lead to a constant flow of information affecting those who work in the Intensive Care Unit. In our large complex, with a staff of over 120 it became clear that there were major deficiencies in the way in which this information was being passed on to workers.

Methods

A system was therefore designed with the following objectives:

1. It had to be able to be operated by the unit managers responsible for policies and communications without needing outside help.
2. The staff members in the unit similarly needed to be able to use the system without needing extensive orientation.
3. A permanent record of what had been communicated was considered highly desirable.
4. It had to be possible for the unit managers to discover easily those staff members who had been lax in keeping up with the flow of information.
5. A method of responding to staff turnover by updating files in an efficient manner was essential.

To meet these needs, a purpose built program called MEMOS was written. It appears to meet all the requirements described above, with some additional enhancements which will be discussed.

System description

The Surgical Critical Care Units at The Buffalo General Hospital are made up of four interconnected ‘pods’. They share a common nursing, clerical, technical and house staff. Within each pod there is a microcomputer – these are connected to one another in a Local Area Network. (LAN, AST Research, Inc., Irvine, CA), the system will run on a single computer, the network and the additional terminals are used because of the size of the units and the number of staff who need access to the system.

How a staff member uses the system

The MEMOS program is selected by the staff member from a menu of programs used within the ICU – many of these are similar to programs described by others for use in an intensive care setting [1]. The user is then confronted with an alphabetical list of names in a tabular format four wide and twenty deep. As our unit has more than eighty staff members, (the maximum that can be accommodated on one screen) those staff members whose names begin with letters in the latter half of the alphabet must use the ‘Page Down’ key to get to the right page. Initially the name at the top left of the screen is high-lighted. The user signs on to the system by moving this highlight to his or her name and pressing the return key. The cursor is moved using arrow keys on the keyboard, or by pressing the letter of the alphabet with which the user’s name begins. This latter action will cause the cursor to jump immediately to the first name beginning with the letter pressed, repeat pressing will make it step through other names beginning with the same letter. This is usually a much quicker method of access.

Once the user has selected a name, a password code is requested (Fig. 1). A feature of the system is that it allows the users to select their own password the first time they use the system. (It can of course subsequently also be re-set or changed by a unit manager, but not by a general user.) When the password is successfully entered, a status message is displayed (Fig. 2).

Reading new memos

If the user chooses to read waiting memo(s), he or she then pages through the memos waiting to be read by pressing the space bar when requested. Each memo has to be on the screen for a minimum of twelve seconds before the next one can be