

To the Editor:

I was the senior programmer responsible for the development of BOSS (Bug Oriented Surveillance System, Ardmore, Pennsylvania) software, the nosocomial infection control program based on Dr. Maryanne McGuckin's renowned system. Your recent reviews of infection control software are invaluable resources for your readers, and I wanted to comment on the features provided by BOSS.

We developed the program with the mandate to create a software package that stressed the ease of use for which Dr. McGuckin's system has become known. The system requires a minimal amount of user entry and data collection. While it appears rather spartan when compared to other systems, it is only because of the power of simplicity.

The BOSS program was written to be used with minimal hardware so it would fit into the most restrictive budget. It can run on a personal computer (PC) system with a single floppy disk and only 256K of memory. Reports are pre-defined, but provide for user selection of data ranges, and the data can be exported in several formats for use with data base and statistical packages. Data are stored in flat files using a multi-level index.

The key to the BOSS system is its ease of use. One reading of the manual is sufficient; the menu structure is concise, and help information is displayed on-screen at all times. We created a program that does the important tasks as quickly and as easily as possible, leaving out the frills that complicate data entry and learning.

The reality of the institutional environment means that one person will have very little time to enter data and prepare reports. BOSS was created for that reality.

Alan Neihauer

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Sharon LaHaise, RN, PhD, was asked to respond to these letters.

The purpose of our recent eval-

uation study¹ was to compare infection control software on criteria that will be important in meeting the new Joint Commission on Accreditation of Healthcare Organizations (JCAHO) standards. In screening the many commercial software products, we concluded that only AICE (ICPA, Inc., Austin, Texas) and NOSO-3 (Epi-Systematics, Inc., Ft. Myers, Florida) appeared to have the functionality for this purpose, and, as explained in the article, we found AICE to be superior.

We did not include the BOSS (Bugs Oriented Surveillance System, Ardmore, Pennsylvania) software in the study because its functionality appears to be too limited for meeting the new JCAHO standards, which call for epidemiologic rates stratified by risk indexes for multiple problems. Specific limitations of BOSS stem from the fact that it was developed for laboratory-based monitoring of microbial isolates from clinical cultures. Anecdotal success stories about controlling outbreaks notwithstanding, it is widely acknowledged that in most hospitals, the culturing practices of physicians are too incomplete and varying to provide a sufficient basis for nosocomial infection surveillance.

While SWIR (surgical wound infection report) was undoubtedly a thoughtful addition to BOSS, it adds only one additional specific function; we were looking for one software package with which we could accomplish all of our objectives. For example, we are now in the process of adding targeted surveillance studies for monitoring infections in employees, exposures to occupational hazards (e.g., human immunodeficiency virus (HIV) in hospital employees and "first-responders" (e.g., firefighters, police, paramedics) in our service area and communicable disease reporting from inpatients, emergency room visits, outpatients and hospital staff.

We also are expanding into risk analyses on noninfectious complications for our hospital's quality assurance and safety program.

The increasing breadth of these epidemiologic monitoring projects far exceeds the capacities of BOSS-SWIR and necessitates a broadly applicable software program such as AICE.

Sharon LaHaise, RN, PhD
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REFERENCE

1. LaHaise S. A comparison of infection control software for use by hospital epidemiologists in meeting the new JCAHO standards. *Infect Control Hosp Epidemiol.* 1990;11:185-190.

To the Editor:

I have been a NOSO-3 (Epi-Systematics, Inc., Ft. Myers, Florida) user for four years and read with interest the thorough comparison between AICE (ICPA, Inc., Austin, Texas) and NOSO-3 presented by Dr. LaHaise in the April issue (1990;11:185-190). While I have been generally satisfied with the performance of NOSO-3, I do find that some functions are time-consuming and have concern about this.

In my opinion, however, a serious disservice has been done in stating that analyses such as service-specific rates are inaccurate because of a design flaw in the NOSO-3 data-base structure. In discussing the flaw, the statement is made that whenever a patient is readmitted, the new demographic information replaced the old. While the NOSO-3 manual is not helpful in making a distinction between an existing patient and a new admission for that patient, it is logical to me that any readmission or change of ward and service requires the entry of a new demographic file along with the infection(s) documented for that time frame. Therefore, this is how I enter the data (keeping demographic data to a necessary minimum), and as a result, I have had no errors in numerators or denominators to the best of my knowledge.

Anne Walsh, RN, CIC
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Canada

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