Journal of Digital Imaging

VOL 3, NO 1

FEBRUARY 1990

EDITORIAL

A Good Beginning

THE FIRST YEAR of the JOURNAL OF DIGITAL IMAGING (JDI) has been a great success through the efforts of the authors, the academic referees, the Editorial Board, my Editorial Assistant, Mrs. Joan Segota, and many people at W.B. Saunders Company. It has been an honor and pleasure for me to work with these individuals and to see and to share the result of this labor.

In its first year, JDI has become the best and largest source of refereed original contributions on computer applications in radiology. Now into our second year, I want to share some comparisons between JDI and some of the major radiology journals. I also wish to examine how closely we have met our stated goals.

As JDI is published quarterly, the first year of publication comprises the four issues from November 1988 to August 1989. The first issue contained 44 pages, but immediately thereafter, the page count increased to approximately 64 pages per issue. These four issues included a total of 31 manuscripts. I arbitrarily identified 19 categories of computer use for the purpose of characterizing the types of computer applications discussed in the first year. Some articles covered more than one category, resulting in forty classifications for the 31 articles. This analysis is shown in Table 1.

Not surprisingly, the most frequent topic (25%) was picture archiving and communication systems (PACS). Four of the 31 manuscripts discussed radiology information systems (12.5%), and 4 papers dealt with image processing (12.5%). The "Digital Imaging Basics" feature appeared three times, and computer workstations were also discussed three times (10%). The other categories were covered in one or two manuscripts. Unfortunately, there were no articles on teleradiology.

The comparison with other journals is summarized in Table 2. Of course, the major journals contain many articles on diagnoses and findings related to particular disease states, and these articles often involve the use of computer-based imaging modalities. This type of diagnostic article is, of course, excluded from JDI and also excluded from the comparison data that include only articles on computer applications in radiology. The year from November 1988 to October 1989 includes 12 issues of the comparison journals. Data are shown for both the number of articles published and the number of pages devoted to them. The far more extensive coverage of JDI is clear.

The Editorial Board set a goal of seeking original contributions that

1. Explain digital images and their manipulation, including archiving and transmission;
2. provide information on the functionality and cost of radiology information systems and other computer-based systems used to address departmental or office problems; and
3. provide information on computer basics and computer-based systems such as teleradiology, decision support systems, office and practice support systems, and expert systems.

The spread of manuscripts across 19 categories indicates the breadth of coverage on computer applications in radiology in the first year. The refereeing process has been a real benefit.

On the down side, a significant disappointment is the lack of articles on teleradiology. Although many radiologists are using teleradiology in one form or another, very few people choose to write about their experiences. I have contacted a number of people working in the field to urge them to share their work with JDI readers. Do you have

Table 1. Computer Applications Categories

No. of Papers	Category
2	Artificial Intelligence/Expert Systems
2	Computer Assisted Education
3	Computer Work Stations
2	Computer-Based Reporting
1	Computerized Tomography (CT)
1	Digital Displays
2	Digital Images
3	Digital Image Basics
1	Digital Radiography
4	Image Processing
1	Imaging Strategies
2	Local Area Networks
1	Magnetic Resonance Imaging (MRI)
8	Picture Archiving and Communication Systems (PACS)
1	Personal Computing
1	Quantitative Bone Density Measurement
1	Radiology in the Future
4	Radiology Information Systems
0	Teleradiology

teleradiology experience from which others could benefit?

Already, JDI provides more refereed contributions on computer applications in radiology than all of the other surveyed journals combined. JDI can be an even better source in the future as more of our readers become contributors and share

Table 2. Refereed Contributions on Computer Applications in Radiology

Journal	No. Papers	No. Pages
<i>Radiology</i>	9	42
<i>American Journal of Roentgenology</i>	5	21
<i>Investigative Radiology</i>	9	49
<i>Journal of Nuclear Medicine</i>	2	18
	<u>25</u>	<u>130</u>
JOURNAL OF DIGITAL IMAGING	31	227

their experiences with others. Submitted manuscripts on all computer applications in radiology are most welcome.

In the last analysis, the success of JDI is determined by how useful it is to you, the readers. Please let us know how JDI can be more valuable to you. What topics would you like to see covered? A software review feature will be offered as an experiment in the near future. Do you have software you would like to share? Are there other features that should be considered?

Thank you for your input and support in our first year. With the help of your comments and contributions, we pledge to do everything possible to make the current year of JDI even more useful to you.

Roger A. Bauman, MD
Editor-in-Chief

Erratum

In the May 1989 issue of the JOURNAL OF DIGITAL IMAGING (Vol 2, No 2), the name of a coauthor of "Multimedia Radiological Reports: Creation and Playback" was mistakenly omitted. Professor B. Pagurek of the Department of Systems and Computer Engineering, Carleton University, Ottawa, Ontario, Canada, should have been listed as a coauthor. The authors regret that the error was not spotted until after the paper appeared in print.