

Networking: The Linking of People, Resources and Ideas

Table of Contents

Services Available	3	Summary of CUSS 2nd Annual Software Survey	12
Notes from the Coordinator/Editors	4	Human Service Network Projects	13
Articles, Reviews and Reports		Member Comments and Activities	
The Human Services and MUMPS by W.F. LaMendola	5	International	14
Automating the Veterans Administration's Hospitals using MUMPS by R.M. Cooper & John F. McGuire	5	Research Projects and Reports	14
The V.A. Mental Health Information System Package: Version I by K.W. Hammond & D.K. Gottfredson	6	Education/Training	15
Automated Directory of State Welfare Systems by P.J. Smith	7	Health & Mental Health	15
MUMPS on Microcomputers by R. F. Walters	8	Disabilities	15
A Micro-Computer Based System for Senior Citizen Community Services by C.E. Helms	8	Child Welfare	16
Psychological Tests for MicroMUMPS	9	General	16
MUMPS Order Forms	10	Resources and Materials	
Getting Started in ANS MUMPS	11	Funding Services	16
		Electronic Information Utilities and Networks	17
		Newsletters, Magazines & Journals	18
		Articles	18
		Books and Reports	18
		Software Announcements	18
		Call for Papers	18
		Upcoming Events, Conferences & Meetings 19	

About the Network

Computer Use in Social Services (CUSSN) Network is a nonprofit association of professionals interested in exchanging information and experiences on using computers in the social services. Members participate in the Network by:

- Sending materials for the CUSSN Newsletter, such as: (1) member needs, interests, hardware/software use, activities, etc.; (2) information on resources; and (3) longer reports/articles on conferences, surveys, vendor products, ideas, experiences, computer applications, and events. Those wanting longer pieces to be anonymously reviewed by CUSSN advisory board members, should so indicate.
- Participating in the skills bank and software clearinghouse.
- Distributing Newsletters to friends and at workshops and conferences. If you're attending a conference where participants may be interested in the CUSSN, let me know and I will send newsletters to distribute or place on a resource table.
- Referring vendors. If you think a vendor/consultant could benefit by exposure to CUSSN members, tell them, so they can advertise their services and products in the CUSSN Newsletter.
- Holding local CUSSN meetings. Local meetings in Dallas/Ft. Worth, Chicago and Baltimore have been successful. For those in a foreign country, Floyd Bolitho's (below) work in Australia offers a model to follow.

Network dues are \$5 for students and the poor, \$10 for individuals, and \$10+ for those willing to provide additional support. Those interested in joining the Network should write to Dick Schoech, CUSSN Coordinator/Editor, The University of Texas at Arlington, Box 19129, Arlington, Texas 76019. Make checks payable to CUSSN Network. Please indicate if you do not want your name provided to those interested in using the CUSSN mailing list.

CUSSN ADVISORY BOARD MEMBERS

- Floyd H. Bolitho, Assistant Professor, La Trobe U., School of Social Work, Bundoora Victoria, Australia, 3083
 Ray Carlson, PhD, Professor, School of Social Work, Dalhousie University, Halifax, Nova Scotia B3H 3J5 Canada
 Ram A. Cnaan, Lecturer, Tel Aviv U. School of Social Work, POB 39040, Jerusalem Israel, 69978
 Gunther R. Geiss, Associate Professor, Adelphi U. School of Social Work, Garden City, NY, 11530
 Michael Gorodezky, Consultant, 1401 Grizzly Park, Berkeley, CA 94708
 James Gripton, Professor, U. of Calgary School of Social Welfare, 2500 University Dr., N.W., Calgary Alberta, Canada T2N 1N4
 Walter LaMendola, PhD, Associate Professor, School of Social Work, U. of Denver, Denver CO 80208
 Duncan Lindsey, Chair of the Board, Perfect Software Inc., 61 W 34th Ave., Eugene, OR, 97405
 F Dean Luse, President, Outpost Inc., 119 Wilson, Park Forest, IL 60466
 Laurence Moseley, Computer Science Dept., University College, Singleton Park, Swansea, United Kingdom SA2 8pp
 Thomas Neudecker, Director of Continuing Education, U. of Pittsburgh School of Social Work, 2225 Cathedral of Learning, Pittsburgh, PA 15240
 Richard Reinhoehi & Linda Iroff, Consultant, Human Development Consortium, 25 N. 54th Ave., E. Duluth, MN 55804
 Lynn Vogel, Assistant Professor, U. of Chicago, School of Social Service Administration, 969 E. 60th St., Chicago, IL 60637

The **CUSSN Newsletter** is published approximately 4 times a year and is sent free to all network members. Institutional and library subscriptions are available for \$15 a year. For overseas air mail, add an additional \$5 for postage. All prices are in U.S. dollars. Back issues of the newsletter are available for \$2.50 each. Volume 1 has 2 issues;

The **CUSS Skills Bank** allows members to locate or share specific knowledge, skills and experiences. At present the skills bank permits searches by state or geographic area, by information systems experience and by application, all for the total cost of providing information about yourself. Suggestions on applications and expansion of the skills inventory are solicited. For more information contact Gunther R. Geiss, Adelphi U., School of Social Work, Garden City, NY 11530, (516) 288-7915

The **CUSSN Software Clearinghouse** offers a computerized inventory of commercial and public domain available human service software, a software review file, and a software exchange (see article). For more information, write Walter LaMendola, Professor, School of Social Work, U. of Denver, Denver, CO 80208

Special Interest Group (SIGs) are subgroups of network members where significant networking is occurring on a special topic. For a description of the Educators SIG, see Vol. 314, the description under "Member Activities—Educational" by Wallace Gingerich, U. of Wisconsin-Milwaukee School of Social Welfare, Milwaukee, WI 53201.

CUSSN Newsletter Editors:

Dick Schoech, Assistant professor, The University of Texas at Arlington, Graduate School of Social Work, P.O. Box 19129, Arlington, TX 76019.
 Lynn Harold Vogel, Assistant Professor, U. of Chicago, School of Social Service Administration, 969 E. 60th St., Chicago, IL 60637.

Announcing

Computers in Human Services

Volume 1, Number 1—Spring 1985. Quarterly.

For a complimentary issue, write
Haworth Press, 28 E. 22nd St., NY, NY 10010

EDITOR:

Dick Schoech, PhD
Assistant Professor
University of Texas at Arlington
P.O. Box 19129
Arlington, Texas 76019

About the Journal

Computers in Human Services explores existing practices and future potentials of computer, information, and assistive technologies in human service areas such as mental health, family service, public welfare, and developmental disabilities.

The quarterly refereed journal invites articles of the following types:

- **Software Application Descriptions:** documentation and analysis of unique and effective teaching procedures, service delivery models, personnel preparation approaches, technological advances, or other innovative policies
- **Case Studies:** reports of unusual or exemplary applications of computer-based technologies in human service settings
- **Research Reports:** empirically based surveys and studies
- **Review Papers:** critical literature reviews that raise pertinent issues, provide directions for new research and policy, synthesize theoretical and applied practices, and result in important conclusions for the field
- **Position Papers:** practical or theoretical statements that attempt to clarify, reinterpret, or further define existing approaches and practices or offer directions for the future.
- **Software and Book Reviews:** reviews of commercially available software and reviews of books and documents of interest to practitioners (write for software review guidelines)
- **Brief Reports:** 3–5 double-spaced typed pages describing topics such as preliminary research findings and hardware/software applications

Instructions for Authors

- 1 Original articles only.** Submission of a manuscript to this Journal represents a certification on the part of the author(s) that it is an original work, and that neither this manuscript nor a version of it has been published elsewhere nor is being considered for publication elsewhere.
- 2 Manuscript length.** Your manuscript should be between 10-18 pages double-spaced (including references and abstract). Lengthier manuscripts may be considered, but only at the discretion of the Editor.
- 3 Manuscript style.** References, citations, and general style of manuscripts for this Journal should follow: APA style (as outlined in the latest edition of the *Publication Manual of the American Psychological Association*). If an author wishes to submit a paper that had been already prepared in another style, he or she may do so. However, if the paper is accepted (with or without reviewer's alterations), the author is fully responsible for retyping the manuscript in the correct style as indicated above.
- 4 Manuscript preparation**
Margins: leave at least a one-inch margin on all four sides
Paper: use clean, white, 8½" x 11" bond paper
Number of copies: 4 photocopies
Cover page: *Important:* staple a cover page to the manuscript, indicating only the article title (this is used for anonymous refereeing)
Title page: enclose a title page but do not staple it to the manuscript. Include the title plus: full authorship; three to five keywords indicating article content; an ABSTRACT of about 100 words; an introductory

Content areas of the journal include:

- Software theory, design, and development, including computer programs and accompanying documentation in policy planning, research management, and therapy
- Current developments in hardware which have implications for the human services
- Stages in the life cycle of computer applications, from acquisition to enhancement or replacement
- Systems analysis, design, and implementation, including analysis of human service decision making, information requirements, and knowledge acquisition and use
- Information resource management in human service agencies
- Computer use for community action/development, e.g. networking
- The impacts of computer-based technologies on society and on individuals, groups, and organizations that provide human services
- Computer-related issues facing direct service practitioners, managers, policy makers, and clients, such as confidentiality and job displacement
- Education, training, rehabilitation, and computers as instructional tools

Two series of articles will be offered to bridge the gap between those experienced in computers and their application and those relatively new to the field. **The Computer Literacy Series** will present articles of a tutorial nature that define a human service hardware, software, or application area; explain basic concepts and terminology; illustrate potential applications and develop a glossary and a list of basic readings. **The State of the Art Series** will present articles that summarize the leading edge of current practice and identify problem areas, opportunities, and issues in areas such as psychological testing, computerized instruction for the mentally retarded, and protective services.

footnote with authors' academic degrees, professional titles, affiliations, mailing addresses, and any desired acknowledgment of research support or other credit.

- 5 Return envelopes.** When you submit your four manuscript copies, also include: a regular envelope, stamped and self-addressed. This is for the Editor to send you an "acknowledgement of receipt" letter.
- 6 Spelling, grammar, punctuation.** Authors are responsible for final manuscript copy which is written in clear and acceptable English, free of spelling, grammar, and punctuation errors. Final article that is accepted must be ready for typesetting.
- 7 Inconsistencies must be avoided.** Be sure you are consistent in your use of abbreviations, terminology, and in citing references, from one part of your paper to another.
- 8 Preparation of tables, figures, drawing.** All tables, figures, illustrations, etc. must be sent "camera ready" once the manuscript has been accepted. Photocopies are acceptable for review purposes. That is, they must be clearly typed or artistically prepared so that they can be used either exactly as they are, or else used after a photographic reduction in size. Figures, tables, and illustrations must be prepared on separate sheets of paper. Always use black ink and professional drawing instruments. On the back of these items, write your article title and the journal title lightly in pencil, so they do not get misplaced. In text, skip extra spaces and indicate where these figures and tables are to be placed.

Services Available

Vendor/Consultant	Contact Person	Services
California		
Applied Humanomics 1421 Chapala Santa Barbara, CA 93101	Mike Herron (805) 965-0555	A computer telecommunication system, called neXus, which can be custom designed for networking nonprofits, human service organizations, and individuals; fund accounting software developed especially for nonprofits for use on micros; other software for nonprofits.
Illinois		
E&P Associates, Inc. 664 N. Michigan Ave. Chicago, IL 60611	Lynn Harold Vogel, Ph.D., (312) 962-1429 or 984-1815	Specialists in the provision of consulting and data processing services to the human services, health care, and insurance industries; Staff has average of over 14 years experience in assisting Fortune 500 & small organizations in addressing computer related & other managerial needs.
OUTPST, Inc. 119 Wilson Park Forest, IL 60466	F. Dean Luse, Ph.D., ACSW President, (312) 748-3854	Consultation: Training, Forms design & management, Accountability, Information & Decision Systems; Simulations for Human Service Training.
SPSS Inc. 444 North Michigan Ave. Chicago, Illinois	Tom Ryan, Marketing, (312) 329-2400	SPSS provides software for human services survey and data analysis, and report-writing for mainframes, IBM PC, DEC Pro 350.
Synergistic Office Systems (SOS) 510 N. Lake St. Mundelein, IL 60060	Joseph Zefran, MSW, (312) 738-8545; David Kropp, ACSW, (312) 949-0100	Full-service vendor to human service agencies; consultation, systems analysis, training, hardware, software, and services.
Iowa		
Human Services Computer Systems 14 S. Dubuque Iowa City, Iowa 52240	Lucy Luxenburg, MSW Human Services Consultant (319) 354-7327 / 351-3956	Consultation for Human Service and other nonprofit organizations; software customized to meet individual needs.
Maryland		
KBL Group, Inc. 'Knowledge Based Living' 808 Pershing Drive, -100 Silver Spring, MD 20910	Karen Levitan, Ph.D., President, (301) 588-4633	Services to help you use information, technology, and systems as professional resources. We work for you; we work with you; we help you do it yourself.
Missouri		
Freeman Hospital 1102 W. 32nd Joplin, Missouri 64801	Anne Winegardner, Director, I&R, (417) 623-2801	Total package solution to computerizing the I&R: Apple III or IBM PC, custom-programmed software, staff training, LINKLIN I&R Training Manual, customer support, program consultation.
New York		
CWIS/Agency Information Management Service 251 Park Ave, South New York, New York 10010	Robert C. Gunderson, Executive Director, (212) 505-1180	Automation consulting services, automated fund raising management, mailing list services and membership (including quarterly newsletters on automation for nonprofits); regularly scheduled seminars and workshops: ADOPT-NET (automated adoptions information exchange system). Monograph available (\$3): "Is Computerization Right for My Agency?"
Gunther R. Geiss, Ph.D. 8 Meadowlark Ln. Huntington, NY 11743	(516) 692-5414 or 489-2000	Consultation and Training (from executive to operators) Emphasizing Microcomputer Systems for Human Service Providers.
King Associates 215 Shoreward Drive Great Neck, NY 11021	Michael A. King, D.S.W. (516) 487-5995	Microcomputer applications for social work and hospital discharge planning—customizing available—IBM, Apple.

Services Available, cont.

New York/New Jersey

RFM/Associates, Inc.
One Bridge Plaza, Suite
400
Ft. Lee, NJ 07024

Rod Monger, PhD,
(201) 592-5895

A consulting and training firm whose associates are academics and experienced professionals. Services include programming, management development and training, systems design, technical writing, planning, security audits, and personnel searches. Write for brochure with full description of services. No charge for initial consultation. Micro specialization.

Texas

Dick Schoech, Ph.D.
1311 W. Lavender Ln.
Arlington, TX 76013

(817) 265-0459

Consultation and training on information systems feasibility, design, implementation and evaluation. Access to varied technical expertise of University setting.

Washington (District of Columbia)

Gibson-Hunt Associates
Suite 700
1331 H St., NW
Washington, DC 20005

Gail Gibson Hunt,
President,
(202) 737-5008

Planning and implementation support to health and human services organizations in the areas of program and project management, program evaluation, delivery system design and the application of information systems and computer technology.

Australia

Human Services
Information Systems
6 Chapman Blvd
Glen Waverly
Victoria 3150

Floyd Bolitho, Ph.D.,
(03) 687-6790,
(03) 459-1806

Consultation for Human Services, feasibility studies, training, systems design and implementation. Software Development and hardware vendor.

The above paid advertisements represent no endorsement or favorable review by CUSS. When choosing a consultant, remember the standard advice: (1) talk to more than one consultant, (2) obtain several comparable bids, and (3) ask for several recent clients and talk to them about their satisfaction.

In an effort to connect vendors and consultants with those who need their services, the CUSS Newsletter lists vendors and consultants by name, address, phone number, contact person and a description of the services offered. The fee for this listing is based on the length of the description as follows.

Description length	Rate per issue	Rate per year (4 issues)
under 15 words	\$5	\$18
under 30 words	\$8	\$28
under 45 words	\$10	\$34
under 60 words	\$12	\$40

Interested vendors/consultants should send payment along with their description. Larger advertisements (up to a full page) are available.

Notes from the Coordinator and Editor

This special issue on MUMPS is the second in a series of "theme issues" organized by CUSSN members. Many thanks to Walter LaMendola who gathered together the articles for this special issue. The availability of MicroMUMPS and the substantial amount of public domain software and support makes MUMPS an attractive first choice or a stand alone enhancement to an existing information system.

If anyone would like to coordinate a special issue or has ideas for special issue topics, please let us know.

Dick Schoech & Lynn Vogel
CUSSN Editors
July, 1984

Articles, Reviews and Reports

The Human Services and MUMPS by Walter F. LaMendola, Professor, U. of Denver School of Social Work, Denver, CO 80208.

This issue of the CUSS Newsletter is devoted to a series of articles concerning the use and application of MUMPS to the human services. No, MUMPS is not always a disease! MUMPS is also an acronym for the Massachusetts General Hospital Utility Multi-Programming System. MUMPS is an operating system-programming language originally developed by the laboratory of Computer Science, Massachusetts General Hospital to meet needs recognized as important in health information systems. In the twenty years or so of its history, MUMPS has progressively been recognized as a language of choice for health as well as other human service information systems.

There are a number of reasons why MUMPS has an established human service following, but there are three which are most important. First, MUMPS is text, not number-oriented. Human services deal with problem solving in terms of progress notes, reaction notes—in other words, primarily on the basis of textual language not numbers. MUMPS has admirable characteristics in handling text. Second, MUMPS allocates space only as needed. Human service client records increase in size unpredictably. Some client records are slight; others are of great length. MUMPS increases space as required, and, alternately, if items are deleted, makes space available immediately. Third, MUMPS can support rapid access to a data base. Human services usually need to be able to access active records rapidly. Requests for service may require rapid production of a selected history of the client's encounters with the organization, perhaps only concerning a single problem. Some MUMPS implementations, such as the COSTAR system described below, have capitalized on the advantages of MUMPS in this area to provide comprehensive and accurate views of the client to the service provider.

MUMPS was designed to support the development of an information system in an incremental, or step by step, and evolutionary manner. MUMPS has the following characteristics:

- 1) allows easy and fast creation of modular applications;
- 2) allows changes in applications to be easily made without jeopardizing other applications in the system;
- 3) contains many data base management features;
- 4) handles text in powerful ways;
- 5) permits interactive, interpretive dialogue in a time sharing environment;
- 6) supports many people simultaneously accessing a data base;
- 7) supports communication across geographically separate sites.

MUMPS has and continues to maintain standard specifications by the American National Standards Institute. This guarantees portability across machines. MUMPS is supported by several computer manufacturers and is available for many different machines. Some major applications written in MUMPS are in the public domain, but many more should be available as the work in the Veteran's Administration (VA) proceeds. The article by Cooper and McGuire which follows describes the VA experience and plan. Hammond and Gottfredson's article discusses exciting developments in the VA's mental health applications.

Some of the disadvantages of MUMPS need to be noted. MUMPS was originally designed for minicomputers. Although Dick Walters and others have made the jump to microcomputers, the implementations did not really operate well until recently. Dr. Walters describes his experience in the *MUMPS on Microcomputers* article in this issue. Second, MUMPS programmers are not easily found. The VA's commitment to MUMPS should increase the stock of MUMPS programmers, but without a larger user's base for the language, it may not prosper. Third, MUMPS is often seen in the United States as a programming language for health. The wide variety of office automation applications, word processing, banking, and other commercial applications now available have not yet changed this impression.

COSTAR (**C**omputer **S**tored **A**mbulatory **R**ecord) is one of the more well known information systems written in MUMPS. COSTAR was originally developed in a collaborative effort for a Boston Health Maintenance Organization. COSTAR meets client treatment, as well as the administrative, financial, and research needs of a variety of health organizations. COSTAR, depending upon whether or not it is a public domain version or "improved" version, consists of a set of modules from which the organization can pick and choose. For example, there is a security module to control access and preserve data base integrity. There is a registration module that collects client demographics. This module maintains relationships between client identity and client information contained in various modules. The client records module col-

lects information on each client encounter. It can output 1) encounter reports—all information collected during an individual encounter; 2) status reports—a current summary of the client's status—for example, problem lists, dates of narrative reports, etc.; and 3) flow chart reports—a chronological record of specified items, detailing client progress. Other modules include scheduling, accounts receivable, accounts payable, and general ledger as well as a report generator and, more recently, a query language.

Automating the Veterans Administration's Hospitals using MUMPS¹ by Roger M. Cooper and John F. McGuire, Veterans Administration, Dept. of Medicine and Surgery, Medical Information Resources Management Office, Washington, D.C., 20420.

Abstract

"A large organization is effective through its mass rather than through its agility. Fleas can jump many times their own height, but not elephants. Mass enables the organization to put to work a great many more kinds of knowledge and skill than could possibly be combined in any one person or small group. But mass is also a limitation." Peter Drucker, in *Age of Discontinuity* (p. 192).

Introduction—The Veterans Administration (VA) has recently taken steps to become more effective through its mass, by using ANS MUMPS systems and principles of decentralization. It is creating a medical information system using an integrated patient data base built up from public domain modules. It is meeting its requirements by acquiring computers without locking itself into a single vendor, based on their performance in operating these ANS MUMPS based systems.

The Veterans Administration (VA) has recently taken steps to become more effective through its mass, by using ANS MUMPS systems and principles of decentralization. It is creating a medical information system using an integrated patient data base built up from public domain modules. It is meeting its requirements by acquiring computers without locking itself into a single vendor, based on their performance in operating these ANS MUMPS based systems.

The size of this effort is substantial, as the VA supports 169 medical facilities. The VA's mission of providing quality health care in the most efficient manner possible becomes more challenging as workloads increase and constraints are imposed on fiscal and personnel resources. The effective use of computer technology to meet the challenges has become one of the VA's major priorities.

Until now, the VA has had great difficulty in implementing computer systems in hospitals, which resulted in a lack of adequate, modern computer technology for the VA's hospitals. Despite the complex organizational battles, both within and external to the VA, a small tight-knit group of creative individuals were developing software to handle critical clinical and administrative hospital functions. These individuals worked in a number of VA hospitals across the country and became known as the "Underground Railroad". Their computer systems were developed with strong considerations for portability and device independence.

Despite a lack of funding and encouragement, the applications were developed using a common data dictionary the group had devised. The "underground" functioned as a close network of bright and dedicated people who developed programming conventions and data element standards for the VA. Their creativity and persistence have made MUMPS the VA's predominant programming language and data management system for hospital applications.

The Scope and Method of the VA's Program—The VA's new direction for its hospitals is known as the Decentralized Hospital Computer Program (DHCP). The principles of decentralization recognize that an automation program for VA hospitals will never succeed if directed centrally with little or no input from the hospitals across the country. The hospitals' creative energies are necessary for application development, for managing and operating the computer systems, and for overall program decision-making.

The attempt to automate all the VA's hospitals presents a large scale operational problem. Past attempts to centrally direct and manage automating this operation has repeatedly met with failure. Decentralization is an approach that provides a means of exploiting the economies and organizational power of "bigness", while simultaneously allowing the productivity of "smallness".

One of the members of the "Underground Railroad", Tom Munnecke recently defined the advantages of decentralization for the VA:

- The speed with which decisions can be made
- The democracy of management and its informality

Articles, Reviews and Reports, cont.

- The absence of a gap in the executive group between the "privileged few" and "great many"
- The supply of good and experienced leaders
- The absence of "edict management" wherein nobody quite knows why he does what he is ordered to do.

The VA hopes to exploit the advantages of decentralization to identify dedicated, creative and highly motivated individuals who can contribute to making the VA modern in its use of computer technology and helping it become the creative laboratory environment it always had the potential to be.

The Tools for Decentralization-ANS MUMPS is well suited for our applications because of its easy and simple methods of program creation, modification and debugging. Our developers work closely with the clinician and in a relatively short period of time produce a product that can be useful for the hospital. They freely design both the content and structure of data to best fit the application, with strict adherence to the data dictionary.

The VA's File Manager was developed to meet the need for a database system and a set of application generators of utilities that a variety of users could use in an interactive mode. The File Manager is a powerful tool that provides users, even those who have little or no programming experience, an ability to define applications and message data to meet their own needs. It also serves as a model for dialogue control, database design and application coding. The design philosophy of this tool is now being expanded into a kernel that will be a combination of the File Manager, user logon/security, optical readers, electronic mail, computer assisted instruction, programmer support utilities, and word processing.

The VA is now using ANS MUMPS in the great majority of its development activities for the clinical and administrative functions of the hospitals. This has permitted us to be vendor independent. Any hardware manufacturers who support ANS MUMPS may provide equipment resources for the VA's Decentralized Hospitals Computer Program. Transporting applications programs from one computer manufacturer to another can be accomplished with minimal disruption to the operating environment and our applications code.

The foundation for our development approach has two components:

- A common database structure as represented by the data dictionary
- Conventions mutually agreed upon and adhered to involving:
 - Programming style and techniques
 - User/system interaction methods.

The VA hospital applications which have been developed with ANS MUMPS are tightly integrated by modern principles of database design. Data descriptions are "roadmaps", providing the clinician, the clerk, the programmer and the computer with a common view of the information being manipulated. From the perspective of management, the database approach allows many different users and analysts at different sites to participate in the evaluation of new applications. Also, a psychologist exploring diagnostic categories and a pharmacist putting his formulary in order both use the same ANS MUMPS and File Manager programs to do their jobs, because both the diagnoses and the drugs are instances of data files.

Public Domain Software-Since the VA is a public agency, the software being developed is entirely in the public domain. We are rigorously adhering to the ANS MUMPS standard, and writing programs to be as easily portable and free from proprietary "hooks" as possible. We encourage the shared use of software, and would hope that any who wishes to join the VA's efforts in public domain software contact us. We feel that the broader the standardization of data and programming methods, the easier it will be for future "small scale" clinical applications to be economically feasible. The Veterans Administration is strongly supportive of standardization, and perhaps can become a critical mass towards higher levels of data and program standardization.

Future Plans-As our hospital information systems and management information systems grow, we will be exploring ways to network various information systems within the hospital environment. Networking various data systems within the hospital for providing an information system to meet a hospital's total needs represents our ultimate goal. Through communications capabilities, management information can be reported in a "bottom-up" manner through the VA's health care system hierarchy. Management information reporting points begin at the service level in the hospitals and progress upward to the hospital directors, medical

district and medical regional directors, and finally to central management levels.

In order to meet these totally integrated hospital data needs, we are looking into the use of local area networks. These networks would provide flexibility and interfaces to connect compatible hospital data systems, computers, word processors, and office automation equipment. Local area networks are still in their early stages of development and use, but they hold considerable promise for future use in our hospitals. We intend to conduct tests and prototypes of local area networks in some of our hospitals in the immediate future to determine how we might best use this technology.

The Veterans Administration is pleased to become a more active partner in the MUMPS community. MUMPS has had a stunning success in solving problems we have been struggling with for many years.

¹Copyright for this article is held by MUG Users Group, College Park, Maryland 20740. We extend thanks to the Editor of the *MUG Quarterly* for permission to reprint some of the material contained here.

The VA Mental Health Information System Package: Version 1 by Kenrick W. Hammond, Chief, Inpatient Psychiatry, Jerry L. Pettis Memorial Veterans Hospital, 11201 Benton St., Loma Linda, CA 92357 and Douglas K. Gottfredson, ADP Verification and Development Center, VA Medical Center, 500 Foothill Blvd., Salt Lake City, Utah.

Introduction-Beginning 1984 the Veterans Administration will introduce a series of mental health-oriented clinical computer applications to its 172 field sites. These programs constitute the Mental Health Information System Package and will assist in the rapid gathering and storage of clinical information for patients with emotional and vocational problems. The system is totally integrated with the "core" VA software packages developed for pharmacy, laboratory, admissions, discharges, transfers, and scheduling. These applications were developed by VA personnel and run in the MUMPS (Massachusetts General Utility Multi-Programming System) language, on minicomputers. Below we trace the development and scope of this system.

Background-The Mental Health Information System package caps more than a decade of evolution of clinical computer systems for psychiatric/psychological assessment and care in the VA. Beginning in 1972 programs for administering and scoring psychological tests were developed at the Salt Lake City VA Medical Center. Other applications followed, and the Psychological Assessment Unit, providing computer-assisted inpatient screening and diagnostic services, was founded there. Independently, at the Bay Pines, Fla. VA, Robert Lushene, Ph.D. developed an efficient and flexible testing program written in assemble language.

In 1979, under the guidance of T.H. O'Neill and Martin Johnson of VA Central Office, key programmers and equipment were sent to half a dozen field sites with a mandate to commence decentralized but coordinated development of hospital information systems. MUMPS was selected as a common language and a coordinated strategy for information storage. The result has been an exciting set of integrated clinical and administrative applications. Cooperative development was effective because workers adhered to software portability standards. The important result has been a VA-wide "Patient" data base and a system of ANS MUMPS applications which run on machines ranging from \$2000 8-bit microcomputers to the latest \$350,000 VAX. This year, the VA is poised to install the "core" in most of its facilities.

As a result of the 1979 expansion, Salt Lake and Bay Pines acquired new equipment and converted their systems to standard MUMPS. MUMPS systems were installed at Loma Linda and Ft. Howard, MD in 1980 and at Dallas in 1981. A common computer language and clinical setting facilitated collaborative software development and assured program portability. Intense clinician involvement in system planning and excellent cross-disciplinary cooperation has produced the most advanced programs yet developed for patient care in the VA.

Contents of the Package-The package is organized into three areas: (1) Patient, (2) General, and (3) Vocational. Each component assists the collection and management of clinical information and offers a means to communicate this information rapidly to mental health clinicians and hospital staff. Some of the applications have been in use for several years at some sites and others are fairly new. Each VA site receiving the package will be allowed to choose the components it needs. Local modifications will be allowed, but the basic data dictionary structure will be preserved.

Articles, Reviews and Reports, cont.

Patient Options

History of Present Illness. This is entered by a clinician or clerk as free text with prompts for the headings from VA standard form 504, "History - part I." Chief complaint, history of present illness, and current medications sections are included. Authorized clinicians may update the history. Addenda are identified by date and source.

Review of Systems. This section is completed on-line by the patient or a clinician. Essentially an extension of the testing routine, the Review of Systems generates a report of positive findings from a structured, branching health questionnaire.

Physical Examination. This routine may either prompt an examiner during the examination or serve as a data entry method once the examination is completed. Prepared statements of normal findings are available. Abnormalities are typed in as free text. The report summarizes normal and abnormal findings. Two to five minutes of entry time are required.

Progress Notes. These are entered by a clinician or clerk as free text using a VA-developed word processor. Printouts collect the patient's notes for a day and display the author of the note and dates and time of entry. A clinician may edit his own note but no one else's.

Psychodiagnostic Tests and Interviews. This includes the testing package developed by Lushene. 80 tests and 20 interviews are presently available. Access to raw test data and machine interpretations is limited to authorized clinicians to avoid misuse of data. Many of the tests are proprietary and sites using copyrighted instruments must do so with publisher's permission. Until the VA Central Office accomplishes a general agreement with publishers, obtaining proper authorization to use certain tests will remain a local responsibility.

Diagnosis Entry and Decision Logic. The system supports rapid entry and retrieval of DSM-III diagnoses. In addition, a teaching program originally developed by Harold Erdman of the University of Wisconsin permits selection of a DSM-III diagnosis through interactive queries about symptoms. Careful attention has been given to assuring that diagnoses are entered or changed only by qualified, designated staff.

Brief Treatment Plan. This application permits the formulation of a plan addressing a patient's clinical problems, treatment goals and methods. Responsible staff and time frames are designated. Free text entries will be used to express problems and goals. Treatment methods may be selected from a master list prepared by treatment staff.

General Options

Special Care Patients. Ward patients needing special attention in discharge planning may be identified by scanning the data base for specific selection criteria. At Salt Lake, patients over 70 years with three or more hospitalizations in the previous 12 months are flagged in a daily report for the Social Work Service. Other criteria can be set with ease, limited only by the presence of the specified information in the data base.

Wait Lists. This utility program sets up a waiting list with veteran's name, phone number and eligibility category and manages priorities automatically.

Text Entry and Listing. Functions as a word processor. This is useful for free text reports, notes and correspondence.

Psychological Testing Utilities. This application assists the manager of a testing lab to survey monthly activity, know what tests and interviews have been done and identify discontinued testing sessions.

Vocational Rehabilitation

Vocational Package. Currently under development, the vocational rehabilitation applications will be available later in 1984. Components of the system will query veterans about vocational needs at the time of application for care. This will generate a list of patients for vocational counselors to visit. A case management program will handle counseling assignments and track the patients' progress through their rehabilitation.

Future Developments—Along with the vocational package several other applications are planned. These were identified as needed by VA mental health clinicians in a conference in April 1983. They include: a problem-oriented comprehensive Treatment Planner, and automated Referral Form with information for outside agencies, a Seclusion and

Restraint Record, a data-driven Discharge Summary, an Assessment Survey providing a quick scan of abnormal findings on file. Physician Order Entry, a Program Census for inpatient and outpatient services. Treatment Team assignment, consultation tracking and logging, and administrative reporting utilities for Day Hospital, Day Treatment, Mental Hygiene and Out-patient Substance Abuse programs.

With the exception of Physician Order Entry, each of the applications mentioned now operates at one or another VA hospital. Effort and time, though, is required to test these programs, prepare them for general distribution and assure that exportability standards are met.

Relevance—We have traced the evolution and briefly surveyed the contents of the VA Mental Health Package. We doubt that any setting will use all of the programs, but consider it essential that clinicians and administrators in the free world's largest mental health care delivery system become available. 1984 will mark an unprecedented influx of clinical computing potential to the VA. Administrative and non-mental health services will be competing for data processing resources. We believe that the package described will help mental health services in the VA take the initiative in the first round of hardware distribution. In the first round of hardware distribution.

For success, careful planning will be necessary. How will a given department best use the tools available? How many workstations will be needed for patient registration, for testing and interviews? Where will terminals be located? How will staff be trained to use new methods?

These questions cannot be answered here. Each site has different needs and clinical styles. We do recommend, though, that potential users focus on a discrete segment of the package such as testing. As experience is gained, other areas may be targeted. Keep in mind the importance of tapping the entire hospital data base. Allow time for learning and don't expect miracles. Although rapidly available data is useful and timesaving it must be accurately entered by **someone!** "Computerizing" a clinical service involves much more than installing hardware and software and flipping a switch to "on." Successful implementation of computer technology will affect every part of the care delivery system. Consequently, each part must be carefully examined and thoroughly analyzed with regard to performance goals, inputs and outputs. We hope that the package will provide a useful set of tools and that our experience with it will help mental health maintain momentum and leadership in VA clinical information technology.

Automated Directory of State Welfare Systems by Philip J. Smith, Director of Information Systems, Oklahoma Teaching Hospitals, Oklahoma Department of Human Services.

Abstract

MUMPS has been applied to the age-old problem of providing current up-to-date information, this time for the American Association of Public Welfare. Any member organization may use a dial-up terminal to obtain information about systems in development or use by other members. This paper describes how a systems group developed an automated directory.

Many national associations are formed with information exchange as one of their foremost goals. One such association is the American Association of Public Welfare Information Systems Management (AAPW/ISM). The principal method of disseminating information has been through its annual national conference. Once conferees have returned to their jobs in state social services agencies, however, they have no easy way of knowing what other states are doing. Knowing of what is already available in other states makes it possible to avoid unnecessary development—"re-inventing the wheel." After years of struggling with ways to fulfill this need and the AAPW/ISM has come up with a simple on-line computer approach.

Utilizing a computer in Oklahoma, programmed in MUMPS, the association has built a data base of brief descriptions (abstracts or "profiles") of automated systems in the welfare field. These profiles are indexed by keywords for search purposes. A member agency interested in developing an automated system on electronic billing, for example, has the profiles of electronic billing systems in a number of states to choose from.

Access to this directory of information is provided through dial-up ASCII terminals. For the price of a long distance call members may search the directory and print out those of interest. Detailed information may be obtained by writing or calling the contact person listed in the directory.

Some years ago the AAPW/ISM published a directory of state systems. It was quite helpful and well received, but soon fell prey to its own obsolescence. Written directories inherently contain lag time

Articles, Reviews and Reports, cont.

to acquire a database and to publish. Updating such a publication is a task involving a large ad hoc group or dedicated staff. As new technologies have been developed in recent years with accompanying price reductions, on-line automated approaches have become feasible. The expanding use of MUMPS in the Oklahoma Teaching Hospitals provided this writer an excellent environment within which to tackle this problem. Utilizing an existing DEC PDP-1134 with Intersystems MUMPS, this writer and a staff member developed a prototype system in less than one week. The system provides for states to enter and update their information directly into the computer. They may also inquire into the entire collection of profiles maintained by all states.

Interestingly, the system may be used as an easy method of maintaining current mailing lists or telephone numbers of members of the organization. By clever use of keywords such as "OFFICER", "REGIONAL REPRESENTATIVE", ect. particular groupings of officers and committees may be pulled up directly. When a state wished to make a contribution to a data base, or to edit a previous contribution, a separate sign-on and password is utilized. This provides for protection of that state's contribution. As an aid in composing and editing, a word processor is utilized in the text portion of the profile.

The system operates with no standing staff at the host site. Coordination on a national basis is through APWA, headquartered in Washington D.C. Through this arrangement costs at the host site are extremely limited.

Initial positive response from states and particularly state welfare directors, suggests that the system is currently needed and well received.

MUMPS on Microcomputers by Richard F. Walters, Division of Computer Science, U. of California, Davis CA 95616.

Among the many unique features of the MUMPS language, one that is often overlooked is the fact that it was originally designed to run on minicomputers as they existed in the late 1960's. Because of this feature, MUMPS can run without modification on today's microcomputers (unlike FORTRAN, COBOL and PL/I, which require large mainframe compilers or else must be modified to fit into small systems). As a result, code that runs on a larger system can run without change on microcomputers, and vice versa. The world of compatibility thus gets a major boost, and the possibilities for distributed computing are endless.

In 1976, when the first microcomputers were just starting to appear, we decided to embark on a MUMPS implementation project. We wanted to design our implementation strategy so that it would be as machine-independent as possible, enabling us to move to new hardware and also to incorporate new language features as they were approved by the MUMPS Development Committee. For this reason, we used something called a Transition Diagram Language (TDL), used in the ANSI Standard definition text, as the basis for our implementation. By implementing this definition on one level, adding processor-specific definitions of the language at a different level, and adding a minimal amount of handwritten assembly language code (for math, I/O, and some utilities), we were able to use the same definition of MUMPS for several different versions.

Our first version, released early in 1978, proved that MUMPS could run on microcomputers, but it left much to be desired. It did, however, serve to attract some attention, and also to gain us some supporters from around the world, and our project was boosted by assistance first from John Althouse of London and later Wolfgang Giere (Frankfurt), Ichiro Wakai (Nagoya) and John Lewkowicz (Cornell University). Together with Steve Johnson, who did most of the work here at Davis, we have continued to work on the refinement of MicroMUMPS and on its extension to other microprocessors. By the end of 1983, we had released version 4.0, a system that incorporates all features of the 1983 ANSI Standard and runs at speeds roughly comparable to a moderately loaded minicomputer version. We now have individually tailored versions, all maintained by the same definition of MUMPS, running on the 8080, Z80 and 8086/88 microprocessors, and running under CP/M2.0, CP/M3.0, CP/M86, IBM's PDCOS, MSDOS and even MP/M operating systems. These versions will run on virtually any hardware configurations for which these operating systems exist, provided that the object code is transferred to the appropriate disk format. In addition, we have added utilities that permit editing and other functions, and we distribute several standard application packages, including the Veterans Administration File Manager, a general purpose database system.

One of the important features of MicroMUMPS is its ability to communicate with other systems (both mini and micro) within the MUMPS language. By adding utilities to serve these functions, we have created an environment where MicroMUMPS can become a full partner in a heterogeneous MUMPS environment, transferring code and data files between multiple systems.

Our current efforts are directed towards further improvements, especially in the 16-bit versions, where there are many opportunities for using new processors. We are also working on fully distributed MUMPS, an effort that will require extension of the language to permit working with remote as well as local data, and for sending messages to users on other systems. We expect our next release to be completed for distribution sometime late in 1984.

A Micro-Computer Based System for Senior Citizen Community Services by Carl E. Helm, Dept. of Environmental and Community Medicine, William D. Clark, Dept. of Family Medicine, and Hank Lubin, Medical Student, University of Medicine & Dentistry of New Jersey, Rutgers Medical School, Piscataway, NJ 08854.

A database system has been designed and implemented in Z-80 MUMPS for a project to develop an integrated system of community services for the health maintenance needs of young (65-70 yrs) senior citizens. The system, which runs on a TRSBO model II under CP/M-2.2e, handles the entry of initial assessment data, self reports, and case manager contacts. It provides reports and summaries as well as instant access to "client" data for case managers and project management staff.

Background-Many local communities have, or have access to many kinds of social services for the elderly. There may be as many as 10 agencies providing services in a region, with considerable overlap and very little coordination. There is almost nothing known about how these services are used or how they impact the quality of life, morbidity and mortality of the elderly. We decided to work with "young" elderly who are generally in good health. This provided a unique opportunity to establish baseline values for a wide range of physiological and sociological variables and if funding would continue, to carry out a longitudinal study.

Our group is comprised of some 490 residents of Middlesex County, New Jersey from 65 to 70 years of age. The participants were solicited through outreach organizations for the elderly, mailings to Blue Cross policy holders and media announcements. Services provided to the participants (at no charge) are an initial comprehensive health assessment, a follow-up assessment, seven two-hour health education sessions, and on-going case management services. The case manager serves as the link between the participant and the social service agencies available in the community. Social and health services are "brokered" and the case manager is the focal point for referrals and continuity of care. In addition the case manager may provide counseling and education.

A short term project goal is to improve the effectiveness of the agencies providing services for the elderly by providing coordination and interagency linkages. This is being achieved in part through the case management process at the participant level and in part through the micro-computer based information system which makes it possible to evaluate and coordinate the activities of the agencies at a management level.

Analysis of the System Requirements-We concluded that MUMPS on a microcomputer would be able to handle the task at a reasonable cost and that we could implement a system within the time constraints. A further justification for MUMPS was based on our experience with other clinically oriented research projects in which we have encountered a continuing need to add new variables and files, to produce very different kinds of analyses and reports on short notice, and in general to be able to respond rapidly to continually changing requirements. MUMPS is one of the few database systems with the needed flexibility and certainly the only one available for small computers.

Hardware and System Software Acquisition-A TRS80 model II computer with three drives and a printer were acquired along with CP/M-2.2e and MUMPS 2.50. While there were several problems with the MUMPS processor at that time, it was entirely adequate for systems development. The current release appears to be solid and has performed flawlessly on this project and several others.

System Design: File Structure-There are three major categories of information presently in the system: basic demographic data, self-reports and case manager contacts. Additional categories which will be added to the database in the near future include social assessment data and information on medical problems, medications, laboratory results and physical findings. At the present time all of the information on clients is in one file. At the present time there are 30 variables in the initial registration file, nine variables in the case manager contact file and an average of eight in the self-report file. The case manager and self report files are updated monthly for each participant. There

are several "inverted" files to facilitate rapid retrieval of records. Participant-last-name and zip code are two such files and others are added to the system as they are needed.

System Design: Program Structure-The system is hierarchically structured and menu driven with help screens available on all of the menus. MUMPS encourages structured design and most routines are small. The menus are all accessed via cursor control with sub-menus being called up in some cases. The highly structured organization of the system together with the flexibility of MUMPS makes it very simple to add options and their routines at any point. It of course simplifies the process of program verification as well.

Conclusions-Our objective to design and implement a small database system quickly and inexpensively has been achieved using Z-80 MUMPS and a Radio Shack Model-II micro-computer. The design and implementation of the system has taken about three man-months so far, with almost all of the programming being done by a medical student during part of a summer vacation and in spare time. It would have taken much less time if this had not been the first exposure to MUMPS for all of us. (For another project a comprehensive purchase order creation and processing, inventory control, and general ledger system was begun and completed over Christmas vacation.) We will be adding new data entry forms, reporting functions and statistical procedures.

One of the goals of the project is to make a version of the software available to communities for the management of social services for the elderly. It is becoming apparent that this can be an effective tool for improving the delivery of services.

Psychological Tests for MicroMUMPS by Micro-Psych, Inc., 9932 South 2270 East; Sandy, Utah 84092.

The following Psychological Tests and Interviews are available on micro-diskettes for psychologists who have access to a micro computer which will run in standard MUMPS. Micro-Psych, Inc. can furnish MUMPS for Apple and IBM P.C. (and compatible) Computers.

There are two versions of the software. The first version does not store copyrighted text items and is used with clerk entry of the results from a paper-pencil completed test to score the test and print a report. Testing materials must be purchased from the copyright holder or authorized distributor to use this version. Diskettes for this version are available as a one-time purchase and can be used to score any number of tests.

The second version does contain the copyrighted test items and is used to administer, score and in some cases interpret tests results. The diskettes are available for a discrete number of administrations after which the testing information is automatically deleted. Additional diskettes must be purchased for further test administration and scoring. Copyright holders receive royalty fees from the sale of the diskettes.

There are also some tests on the list which are in the public domain. These tests can also be used with on-line administration as well as scoring. Like the non-copyrighted version, they can be used for any number of tests with a one-time purchase. The public domain tests are indicated with an asterisk (*) on the following list. All of the interviews are in the public domain.

In the following list, the price for a one time purchase is listed in the CLERK ENTRY column. The copyrighted version tests are sold in increments of \$50.00 per diskette, e.g. \$50.00, \$100.00, \$150.00, etc. The price per administration is shown in the ON-LINE ENTRY column. Micro-Psych presently does not have a license for on-line administration of some tests. In these cases an "N/A" appears in the column. For public domain tests and "INC" appears in the column, indicating that on-line entry is included in the price of the diskette. Each time a test is given the amount for the administration is subtracted from the beginning balance. When the balance becomes zero, the information for test administration is erased and no more tests can be given. Reports from previously administered tests can still be printed, however. Since all of the interviews include on-line entry at no additional cost, there is no entry in the on-line entry column on the list.

List of Current Tests

CODE	TEST NAME	CLERK ENTRY	ON-LINE ENTRY
16PF	Sixteen Personality Factor Test	\$200.00	N/A
ACL	Adjective Check List	\$100.00	\$1.00
AOR	Analysis of Relationships	\$100.00	\$1.00
ATQ	* Automatic Thoughts Questionnaire	\$ 50.00	INC
AUI	Alcohol Use Inventory	\$150.00	N/A
BECK	* Beck Depression Scale	\$ 50.00	INC
BIPL	Bipolar Psychological Inventory	\$250.00	\$3.00
BPRS	* Brief Psychiatric Rating Scale	\$ 25.00	INC
BRAS	* Behavioral Type-A Scale	\$ 25.00	INC
BUSS	* Buss-Durkee Anger Inventory	\$100.00	INC
CMT	Concept Mastery Test	\$200.00	N/A
CORN	Cornell Index	\$100.00	N/A
CPI	California Psychological Inventory	\$300.00	\$2.00
CRS	Carroll Rating Scale for Depression	\$ 50.00	N/A
EPPS	Edwards Personal Preference Schedule	\$200.00	N/A
EPQ	Eysenck Personality Questionnaire	\$100.00	N/A
EWI	Experiential World Inventory	\$150.00	N/A
EYSN	Eysenck Personality Inventory	\$ 50.00	N/A
FEAR	Fear Inventory	\$100.00	N/A
FIRO	FIRO	\$150.00	\$3.00
HENM	Henmon-Nelson Test of Mental Ability	\$100.00	N/A
HLOC	* Health Locus of Control Scale	\$ 25.00	INC
HOPL	* Hopelessness Scale	\$ 25.00	INC
HSCS	* Hopkins Symptom Checklist	\$100.00	INC
IBT	Irrational Beliefs Test	\$100.00	N/A
ICL	* Leary Interpersonal Check List	\$100.00	INC
JAS	Jenkins Activity Survey	\$ 50.00	N/A
KUDR	Kuder Vocational Pref. Inventory	\$250.00	N/A
MARR	Marriage Adjustment Inventory	\$ 50.00	N/A
MAT	Motivation Analysis Test	\$150.00	N/A
MATE	MATE	\$100.00	\$1.00
MCM	Millon Clinical Multiaxial Inventory	\$200.00	N/A
MENA	* Menstrual Attitude Scale	\$ 50.00	INC
MENS	* Menstrual Distress Questionnaire	\$ 50.00	INC
MILL	Millon Behavioral Health Inventory	\$150.00	N/A
MMPI	Minnesota Multiphasic Pers. Inv.	\$400.00	N/A
MMPR	MMPI Form R (Included with MMPI)	N/A	N/A
MOON	Mooney Problem Check List	\$200.00	N/A
MYER	Myer-Briggs Type Indicator	\$100.00	\$2.00
OPI	Omnibus Personality Inventory	\$250.00	N/A
POMS	Profile of Mood States	\$ 50.00	N/A
PRF	Personality Research Form	\$250.00	N/A
PSI	Psychological Screening Inventory	\$100.00	N/A
RLOC	Rotter Locus of Control	\$ 50.00	N/A
SDES	* Crowne-Marlowe Social Desirability	\$ 50.00	INC
SEXK	Sex Knowledge Inventory	\$100.00	N/A
SOW	* Status of Women Scale	\$ 25.00	INC
STAI	State-Trait Anxiety Scale	\$ 50.00	INC
STRN	Strong-Campbell Interest Inventory	\$300.00	\$3.00
VPI	Vocational Preference Inventory	\$150.00	N/A
ZUNG	* Zung Depression Scale	\$ 25.00	INC

List of Current Interviews

ALCO	Alcohol History	\$200.00	
ANGR	Anger Questionnaire	\$ 50.00	
APPB	Appearance Concerns	\$ 25.00	
CRIS	Crisis Events	\$100.00	
EATP	Eating Problems	\$100.00	
HX2	Family Medical History	\$ 50.00	
HX3	Review of Systems	\$ 50.00	
LEGL	Legal Problems	\$ 25.00	
MARP	Marriage Problems	\$ 50.00	
MEDH	Medical History	\$300.00	
PAIN	Pain Questionnaire	\$150.00	
PHYD	Physical and Mental Symptoms	\$ 50.00	
PROB	Major Problems	\$ 25.00	
SEX	Sexual Functioning	\$200.00	
SEXH	Sexual History	\$400.00	
SEXS	Sexual Problems	\$100.00	
SLEP	Sleep-Related Problems	\$ 50.00	
SOCW	Social History	\$100.00	
SOMP	Somatic Problems	\$ 25.00	
TENS	Tension Questionnaire	\$100.00	
TRMT	Previous Treatment	\$100.00	

Order Form for MicroMUMPS Version 4.0

Items Requested:

8" single density system disk - 8080 CP/M 2.2	\$55.00 _____	MicroMUMPS for IBM PCDOS (single sided disk)	\$55.00 _____
8" single density system disk - Z80 CP/M 2.2	\$55.00 _____	File Manager PCDOS (double sided disk ONLY)	\$55.00 _____
8" single density system disk - Z80 CP/M 3.0	\$55.00 _____	Sub Total	_____
TRS80 Pickles and Trout	\$55.00 _____	6% Sales Tax	_____
Osborne disks with Z80 CP/M 2.2 adapted for Osborne	\$55.00 _____	(Calif. Residents Only)	_____
APPLE Z80 disks with Z80 CP/M 2.2	\$55.00 _____	TOTAL	_____
File Manager (version 15.95 or most recent available) 2 disks plus documentation, 8" single density disks	\$55.00 _____		
8086 CP/M 86 MUMPS - 8" single density disk	\$55.00 _____		
MicroMUMPS for IBM PCDOS (double sided disk)	\$55.00 _____		

Please make checks payable to: Regents, University of California
Send this form with check to: Richard F. Walters, Ph.D. Division of Com-
puter Science, University of California, Davis CA 95616. Prices quoted
above are not applicable to Europe, Japan and Brazil. Other foreign
countries excluded at present.

MUMPS Users' Group Order Form

Ship to: (Please print or type)

Name _____

Organization _____

Street Address _____

City _____ State (Province) _____ Post Code (ZIP) _____

Country _____ Telephone Number _____

Date _____ Member ID # _____

	UNIT PRICE	MEMBERS' DISCOUNT PRICE*	TOTAL QUANTITY	AMOUNT
Computer Programming in ANS MUMPS (1981)	\$17.50	\$14.00		
Introduction to Standard MUMPS (1979)	\$15.00	\$12.00		
MUMPS Primer (1983) Revised	\$15.00	\$12.00		
Standard MUMPS Pocket Guide (1983)	\$2.50	\$1.50		
MUMPS Programmers' Reference Manual (1983)	\$17.50	\$14.00		
MUMPS Information Packet (1982)	\$7.50	\$7.50		
Proceedings of previous MUG Meetings specify year	\$15.00	\$10.00		
ANSI Language Standard (1977)	\$15.00	\$12.00		
Transactions of the MDC—1 year subscription	\$20.00	\$20.00		
Stretching Microcomputer Power with ANS MUMPS, MUG Quarterly X(4)	\$7.25	\$5.75		
The Micros are Coming, MUG Quarterly X(3)	\$3.50	\$2.50		
Integrating Distributed Information Resources, MUG Quarterly XI (1)	\$5.25	\$4.50		
The Silent Revolution in Business Data Processing, MUG Quarterly XI(2/3)	\$6.00	\$5.00		
Medical Information Systems, MUG Quarterly XI(4)	\$6.00	\$5.00		
MUMPS Implementations Issue, MUG Quarterly XII(1)	\$6.00	\$5.00		
Hospital-wide Computer Systems, MUG Quarterly XII(3)	\$6.00	\$5.00		
MUMPS Office Automation Systems, MUG Quarterly XII(4)	\$6.00	\$5.00		
ANS MUMPS Software Engineering Evolution, MUG Quarterly XIII (2)	\$6.00	\$5.00		
MUG PAL: File Manager Tape and Machine-readable Documentation	Available	\$50.00		
File Manager Documentation Only	only to	\$15.00		
Nutritive Analysis	Members	\$50.00		

Check here for information on Psychodiagnostic Testing Package,
available only to professional psychologists and psychiatrists.

SUBTOTAL

Purchase Order invoicing charge, add \$2.00 per order

Bank processing fee for payment in non-U.S. currency including Canada, add \$5.00 per order

Shipment overseas by airmail, add \$7.00 per book, \$10.00 for MDC Transactions

Shipping, add 10% of subtotal

NOTE: Payment or Purchase order must be included with order

TOTAL

Make checks payable to: MUMPS Users' Group, Inc.

Address Orders to:

MUMPS Users' Group Publications • 4321 Hartwick Rd., Suite #308 • College Park, MD 20740 • (301) 779-6555

*MUMPS Users' Group members receive a discount on most MUG Publications.

Individual members may purchase up to five copies per book at the member rate.

Getting Started in ANS MUMPS

The MUMPS Users' Group has available several books and other aids that are helpful for getting off to a fast start in using the ANS MUMPS programming language.

Computer Programming in ANS MUMPS: A Self-Instruction Manual for Non-Programmers (1981), by *Dr. Arthur F. Krieg and Lucille K. Shearer*. This self-instruction text is aimed at the full range of potential users. It is studded with examples, providing the vicarious experience of programming, even to the reader without a terminal. It provides a cumulative learning experience, covering commands, operators, and functions in easy incremental stages.

Introduction to Standard MUMPS (1979), by *Joan Zimmerman, Ph.D.* This introductory text, designed for those who have little or no previous experience in computer programming, provides a step by step assimilation of MUMPS programming methods. Suitable for self-instruction or course work, this text anticipates many of the practical problems and questions beginners have when learning to program in MUMPS.

MUMPS Primer Revised (1983), by *Drs. Richard Walters, Jack Bowie and Jerome Wilcox*. This text provides a comprehensive treatment of MUMPS from the perspective of computer science and software engineering. The sequence of chapters follows an evolutionary development of the basic language concepts first, followed by progressive explanations and illustration of the more complicated concepts and structures.

Standard MUMPS Pocket Guide (1978), by *Joel Achtenberg*. This booklet provides a concise summary of Standard MUMPS, with short examples and explanatory sections on all aspects of the programming language. Intended for quick reference and for refreshing one's understanding of the elements of the language, this booklet has great practical usefulness both for beginners and experienced programmers.

MUMPS Programmers' Reference Manual, by *Melvin E. Conway, Ph.D.* (Revised by David Sheretz 1981/83). As a definitive reference volume on all semantic and syntactic features of ANS MUMPS, this volume is the fundamental source of detailed interpretations of the formal specifications of the language.

MUMPS Information Packet (1983). This packet provides introductory information on MUMPS, the MUMPS Users' Group, and the MUMPS Development Committee. It contains lists of (1) Standard MUMPS Implementations, (2) MUMPS applications and institutions, and (3) vendors of MUMPS software and services. It also includes a copy of the Standard MUMPS Pocket Guide.

Proceedings of the MUG Meetings. These books contain complete papers submitted by the presenters at the MUG Meeting Technical Sessions. Topics include: medical applications, hardware/software systems, hospital information systems, database systems, and many others.

ANSI Language Standard (1977) This document contains the formal ANSI approved specifications for the MUMPS computer language.

Transactions of the MDC. This subscription service provides minutes of the MUMPS Development Committee meetings, held approximately three times per year.

The Micros Are Coming (Aug. 1980). This issue of the MUG Quarterly contains articles on MUMPS for microcomputers, a description of a general-purpose database management system, advice to the MUG member, and a report from the MUMPS Development Committee.

Stretching Microcomputer Power with ANS MUMPS (Nov. 1980). Edited by *Ruth E. Dayhoff, M.D.* This special 88-page issue of the MUG Quarterly covers all areas of interest to the microcomputer MUMPS user. It contains introductory material for those unfamiliar with MUMPS or microprocessors, as well as technical information for the experienced user.

Integrating Distributed Information Resources with ANS MUMPS (Jan-Mar 1981). Edited by *Dr. Ruth E. Dayhoff*. This issue of the MUG Quarterly describes the more than 20 existing MUMPS implementations. This issue covers MUMPS portability, innovative implementation techniques, system back-up methods, generalized programming for data base management and routine generation, and includes COSTAR survey results.

The Silent Revolution in Business Data Processing (MUG Quarterly Special Issue, 1981). This special issue of the MUG Quarterly describes the information processing needs of business, and it gives examples of MUMPS on-line interactive systems which are meeting these needs. It also provides information on how to plan and develop an ANS MUMPS corporate resource base.

Hospital Medical Information Systems (Winter 1981-82). Edited by *Ruth E. Dayhoff, M.D.* This issue of the MUG Quarterly features articles on the controversy over the cost of the medical information systems. The cost-saving characteristics of MUMPS are described and ten articles cover current advances in medical information systems. System security is discussed in a section on technical issues in developing medical information systems.

MUMPS Implementation Issue 1982 (Spring 1982). Edited by *Ruth E. Dayhoff, M.D.* This issue of the MUG Quarterly describes the more than 41 existing MUMPS implementations. Also included are articles covering benchmarking, system management, text processing, and the future of MUMPS.

Hospital-wide Computer Systems (Fall 1982). Edited by *Ruth E. Dayhoff, M.D.* A special feature article entitled "Hospital-wide Computer Systems: The Market and The Vendors" by Stanley E. Jacobs, Ph.D., presents for the first time a history of the commercial hospital information systems industry in North America. Additional articles describe public health, laboratory, radiology, and other information systems.

MUMPS Office Automation Systems (Winter 1982-83). Edited by *Ruth E. Dayhoff, MD*. This issue of the MUG Quarterly describes existing MUMPS office automation systems. Fourth and fifth generation language capabilities are discussed, and a section covers the process of evolution of the MUMPS language.

ANS MUMPS Software Engineering Evolution/MUMPS Implementation Issue 1983 (Summer 1983). Edited by *Ruth E. Dayhoff, M.D.* This issue of the MUG Quarterly describes the 45 existing MUMPS implementations. Also included are articles covering the proposed revised Standard, the evolution of the MUMPS language and software engineering methods.

File Manager Tape or Diskette and Documentation (1982)—*Version 15.5*. The File Manager is a package of on-line computer routines written in Standard MUMPS which can be used as a stand-alone data base management system or as a set of applications utilities. The approximately 91 routines are distributed on 7-inch reels of magnetic tape, unlabelled, 800 bpi, ASCII, 1024 bytes per physical record. Both user and technical documentation (computer readable) is provided with the tape or may be purchased in printed form separately. The %INDEX automatic documentation routines and an appointment scheduling package are also provided with the File Manager.

Nutritive Analysis Tape (1982). The nutritive analysis tape contains two sets of routines for creation, maintenance, and inquiry of a nutrient database. These can be used to calculate the nutritive content of diets, menus, etc. The first set of routines contains a database based on USDA Handbook 456-1977 and uses 17 nutrients. The second set of routines uses a specialized, limited database created with the File Manager (must be purchased separately) which may be modified by the user. The routines are distributed on 7-inch reels of magnetic tape, unlabelled, 800 bpi, ASCII, 1024 bytes per physical record.

Summary of CUSS 2nd Annual Software Survey

Product	Visicalc (Advanced Version)	Metafile	Perfect Writer	ResQ	Microstat 3.0	CPM
Cost	\$345	\$995	\$275	\$395	\$395	\$4,000
Type	Spreadsheet	Relational date base	Editing and Word Processing	Data Base Manager	Statistics	
Capabilities	254 rows x 64 columns	Includes data base, word processing, spread-sheet, communications	Editing and Formatting		Desc. Stat., Chi Sq, ANOVA, Corr, Mult. Reg. Nonpar tests	Accounting, Payroll, fund-raising
Hardware	Apple IIe, 128K	IBM PC, 128K 2 drives or Vector Graphic	IBM, others, 64K minimum, 128K preferred	IBM PC	64K, dual disc drives	Xerox 820 II
Operating System		MS/PC-DOS	MS-DOS, CP/M	PC-DOS	CP/M	
Strengths	Screen prompts, Speed, and Help Menus	Powerful data base; integrated word processing	Indexes, builds table of contents, footnotes, enumerates	Very easy to use		Durable, easy to use
Weaknesses	Only 70K of memory available for input; Much to learn if starting from scratch	Can be complicated to learn	Cannot modify formatted output; Weak user support	None Yet	Cannot recode No "select if" No alpha data	Lack of flexibility
Recommend?	Yes	Yes	Yes/No	Yes	Yes	Yes
Reservations?			May not need sophisticated formatting			
Other Comments?	Using tutorial is essential; can be time consuming to learn	Similar to dBase II, but more powerful				

Ratings

Usefulness	E	E	G	E	G
Ease of Use	S	S	G	E+	E
Ease of Installation	E	E	F	E	G
Freedom from Bugs/Errors	E	E	S	E	E
Vendor Service		E	P	E	E
Documentation	E	G	S	E+	E
Overall Satisfaction	G	E	S	E+	E

Notes on Survey

Visicalc is a product of Visicorp, Inc., reviewed by James Boskey, Newark, New Jersey

Metafile is a product of Sensor-based Systems, Inc., Chatfield, Minnesota, reviewed by Wallace Gingerich, Milwaukee, Wisconsin

Perfect Writer is product of Perfect Software, Berkeley, California, reviewed by F. Dean Luse, Park Forest, Illinois.

ResQ is a product of Key Software, Des Plaines, Illinois, reviewed by Joan DiLeonardi, Chicago, Illinois

Microstat is a product of Ecosoft, Inc., Indianapolis, Indiana, reviewed by Carol Schreter, Baltimore, Maryland.

CPM is a product of Xerox, Inc., reviewed by John Eckenberger, Gore, Oklahoma.

As you have noticed, the response to the annual software survey has not been overwhelming. Of the 6 people who returned the survey this year, none were using software specifically designed for human services. Thus, we are re-thinking the usefulness of the software survey in its present form. Your ideas on this would be appreciated. Our thoughts are to presently request software and have it reviewed through the software clearinghouse headed by Walter LaMendola (see front cover). If you are willing to review new software, contact Walter with the details, e.g., computers you have access to, human service specialty areas, packages you would like to review.

Human Service Network Projects Funded by Apple Computer. This cycle represents an increase in the number of grants which includes hardware, software training and follow-up support. For grant guidelines and additional information on funded projects, write Mark Vermilion, Community Affairs, Apple Computer M/S 23-L, 2525 Mariani Ave., Cupertino, CA 95014.

The Virginia Ru-Urban Food Bank Network. This network is increasing efficiency among five Virginia foodbanks in sharing inventory and compiling statistical analysis of each agency's performance. The result thus far has been improved collaboration between five urban and rural foodbanks with vastly different areawide needs and resources.

Yolo County Mental Health Apple Network. This network is of three organizations serve Yolo County residents by providing immediate access to accurate and current information on public and private mental health resources, self-help and support groups, emergency and community social services and volunteer skillbanks.

Network for Nursing Home Reform. A means to be more effective in its efforts to improve the quality of life of residents in long term care facilities is the purpose of four organizations of the Network for Nursing Home Reform.

Apples in Partnership Network. In Alameda County, California, this network provides up-to-date referral information on employment and training, emergency food and shelter, and many other human services available to the 200,000 clients served by the participating organizations.

Children's Cancer Outreach Network. By networking, three organizations in Missouri are more effective in providing for the needs of the young cancer victims and their families. Their database includes information on expensive drugs that are available on a donation basis.

Westside Human Services Network. Four agencies in Southern California provide the low income members of the community in need of psychological or health services with access to the wide range of services available to them in the area.

Aging Information Network System. The Aging Information Network System is facilitating the exchange of information between four agencies in Out-Wayne County, Michigan, in order to better serve the elderly.

The Hartford Human Services Network. By networking, five organizations serving the elderly are better able to coordinate services, resources, and activities for their clients in Hartford, Connecticut.

Consortium for Volunteerism. This networking project minimizes the difficulties of matching a volunteer with a volunteer station in order to fulfill citizen and community needs in Chemung County, New York.

VOLNET. VOLNET establishes and maintains a five part database for the purpose of matching willing appropriately skilled volunteers with the pressing human resource needs of organizations throughout Champaign County, Illinois.

Tidewater Human Services Network. This network of four organizations serving the handicapped population of four regions in Southeastern Virginia has developed a data bank on community resources for funding, treatment, volunteers, training and referrals.

Hawaii Youth Shelter Network. This network links five youth shelters on the four major islands that are collecting program statistics, maintaining comparative community residential costs, and maintaining an inventory of available space for clients.

Apple Cart. Five organizations in Northern Alameda County have developed an inter-agency referral network serving six major Asian groups that service needs in employment, training, legal services, family counseling and health services.

Residential Cooperative. By networking, the Residential Cooperative is increasing the efficiency of service provision to the developmentally disabled, insuring more timely and thorough dissemination among member agencies through the use of data-communications, and acting as a state model to show effectiveness of computerization and increased agency collaboration.

"Apple Tree". By networking, three organizations in Connecticut have developed therapeutic and prevocational applications within the respective agencies, and are providing information on residential opportunities and volunteer job openings along with other vocational development opportunities.

Developmental Disabilities Advocacy Network. The Developmental Disabilities Advocacy Network is disseminating information to handicapped Oregonians and their families so they are able to enhance their ability to function independently, and are able to participate at the policy-making level in designing and modifying services to meet their needs.

Software Reviewers Needed

Anyone willing to review human service software for the new journal **Computers in Human Services** should send their name, address, equipment available and software areas of interest to Walter LaMendola, U. of Denver, GSSW, Denver, CO 80208. Suggestions for software to review are also welcome.

Members Comments and Activities

International

England — Technology for Grass Roots Community Mobilization from Chris Jones, 89 Mitchell St., Rochdale, Lance OL12 6SH, England.

I am interested in anything to do with grass roots community mobilization; especially those initiatives which move beyond particular localities and single issues to a wider constituency and social and political analysis.

Having said that, I am also very interested to learn about particular community experiments and innovations. I would dearly like to be kept informed about the use and development of new technologies by community organizations and groups.

Any info in these areas would be warmly welcomed.

I have enclosed a copy of the latest issue of the **Bulletin** which I co-publish. The **Bulletin** is a radical publication which is produced three times a year and carries a range of articles and book reviews which critically examine official state policies and ideologies. The focus is primarily on the U.K., but it also carries a growing number of contributions from the U.S. and Canada. Subscription rates are \$6 for individuals and \$10 for institutions (international money orders please). (Editor's note: The publication is first rate and 40% cheaper than the CUSS newsletter!!! Slave labor or a third world sweat shop must be used for printing.)

Canada — Child Welfare Information System On-line from Joyce Archibald, User Project Manager, Social Services and Community Health, 10030-107 St., Edmonton, Alberta, Canada.

The Child Welfare Information System (CWIS) Project has developed over the last six months, an on-line interactive computer system designed to be used directly by social workers. The Project started by taking already existing forms (which had gone through an extensive user requirement stage three years earlier), and, using Fourth Generation software (ADS On-line) put these screens onto a computer screen. From this model, user requirements for the on-line interactive system evolved. Using ADS On-line, it was fast and easy to make changes to the screens, add fields, create edits, etc. One District Office from each of the six regions was mainly involved in this designing and changing. So far, 90% of the social workers who have seen the prototype actually working have been very enthusiastic. The complete provincial child welfare file is now available on-line, (but is being updated through an existing remote data entry batch system) and both inquiry and updating can be demonstrated. For the first time in my career I have seen a computer system which social workers enjoy using and see as useful to them. It is so simple to use that District Office social workers who have never seen the system before or never worked on a keyboard before can demonstrate the system to their fellow workers.

Another very attractive feature of the system is the ease and speed of getting management reports from it. Reports on any combination of the data base elements may either be generated on-line or printed the following day.

The next stage, which is the real test, is to pilot the system in eight locations for three months from August to October. At the end of this pilot, an assessment will be made to determine if the system increased the accuracy of information, saved staff time and was of benefit to front line and management staff. We will also know how much it cost in terms of processing and line charges and equipment.

As I will be resigning prior to completion of this pilot to take up a position as Chief Social Worker at Royal Perth Hospital, Perth, Western Australia, people interested in hearing more about its development could contact me in Australia, or about the results of the pilot, the person replacing me in Alberta, Myrna Lee.

Canada — Seeking Someone with Native Community Mental Health Experience from Robin Johnson, Lesser Slave Lake Indian Regional Council, Box 1740 High Priarie, Alberta, Canada.

I am presently employed by the Lesser Slave Lake Indian Regional Council as a Co-ordinator of their Mental Health Program. L.S.L.I.R.C. is a member of the CUSS network. L.S.L.I.R.C. is in the early phases of establishing a community-based Mental Health Program for eight reserves. In conjunction with completing a mental health needs assessment I am presently seeking to gather information that will assist in designing a mental health program. I am hoping that someone may be able to put me in touch with any individuals and/or agencies that are currently involved with active and viable native community mental health programs. Our basic objective is to provide holistic health services meeting spiritual and emotional needs with a major focus on prevention.

Canada — Software Needed for Case Worker Management from William Barger, Program Co-ordinator, 1700 Assumption St., Windsor, Ontario NBY 4S2.

Our agency is presently in the process of computerization. We have a commitment to the utilization of the computer as a case work management tool and are looking to obtain software which would be appropriate for our needs.

We are a child welfare agency responsible for the care and protection of the Roman Catholic children and their families in Essex County, Ontario, Canada. Type of cases may involve child abuse, family therapy, children in care, supervision of children in their own homes, adoption, fostering and so on.

Research Projects and Reports

Interactive Videodisc for AFDC Eligibility Specialists from Patricia Lynett, Director, Office for Interactive Technology and Training, Social Work Dept., U. of W. Florida, Bldg. 77, Pensacola, FL 32561.

For the past two years a major focus of The University of West Florida's Office for Interactive Technology and Training has been the creation of an extensive training program for the Florida Department of Health and Rehabilitation Services (HRS).

In early 1981 HRS contracted with UWF to develop a comprehensive pre-service training program for use with more than 1,000 public assistance eligibility specialists in the state. The training program teaches these workers to determine a client's eligibility to receive financial aid through the Aid for Families to Dependent Children (AFDC) program. The development has spanned two and one-half years at a contract cost of over \$3 million. Funds are provided by Title IV-A of the United States Social Security Act.

The final script includes over 15,000 pages and is organized into nine instructional modules designed for a level III interactive system. The program is contained on 85 floppy discs, nine 30-minute videodiscs, eight ancillary reference books, and a trainer's manual. The individualized program requires approximately 160 hours of actual system use. The material is designed for use on the Apple DVA-3-based Colony Intelligent Learning System, 80 of which have been purchased for distribution to 11 HRS districts throughout Florida.

The very large scope of this project dictates a certain "humanity" of the material; the staff writers contend that if the material isn't enjoyable to develop, it probably won't be enjoyable to learn. Underneath the entertainment, however, is a carefully-conceived competency-based program in which each competency is reinforced in simulated on-the-job client interactions at three levels of learning.

Each job-specific module consists of an introduction, lessons based on HRS policy, a lesson on pertinent records and forms, a practice lesson, and a final test. The Reference Manual provides a clear guide to information, and by itself contributes a significant tool to the train and on-the-job specialist. Critical sections of the AFDC Policy Manual are brought into focus in a quiz section called "Meet the Challenge." Trainees have an opportunity to review this basic information before applying it. Competencies missed in the applications section are taught again and retested.

There is ample opportunity for trainees to review competencies throughout the instruction, and, in fact, no trainee is allowed to take the final test before demonstrating the necessary competencies. The instruction is specific, complete and judicious.

Trainees are given frequent breaks, and commercials vary the intensive regimen of study and reinforce the predisposition of trainees to use the AFDC manuals. TESS, a mythical surrogate trainer, provides continuity throughout the lesson purposes, and humanizes the impersonal appearance of the videodisc and computer.

There are at least 16 identifiable learning activities scattered throughout the training, many of which are take-offs on familiar television programs. "Point-Counterpoint", for example, presents an entire sequence of statements and rejoinders before asking the trainee to evaluate each one. "The Possible Mission" poses a simulated job problem for the trainee for solution. There is a "Press Conference" activity, an "AFDC Hotline" activity, and a variety of others. Field tests show that trainees find these helpful, to the point, and enjoyable.

The competency approach requires a versatile computer disk file system. As the learner moves from floppy disk to floppy disk, files recording progress and missed competencies are also passed from disk to disk. At turn-on time, the system automatically starts at the point of last completion. It was, and is, our goal to make the computer system as transparent as possible to the learner. Programming is done in Pascal, with additional routines in 6502 Assembler. This choice of language

Members Comments and Activities, cont.

became clear to us when the complex instruction design had been determined.

Formative evaluation for each module is a four-stage, 21-step process conducted with HRS in the field, in-house reviews, and with selected expert consultants. Adequate evaluation and record keeping are essential in this program, because if a trainee fails to meet the specified degree of competency at any one of the eight testing points, employment can be terminated — a severe test for both trainee and the training program.

Research on Attitudes, Cognitive Style and Impact from Sheldon Blitsstein, Supervisor, Mt. Vernon District, 9 W. Prospect Ave., Mt. Vernon, NY 10550.

I am a doctoral student at Wurzweiler School of Social Work, Yeshiva University, New York City. I am working on a dissertation proposal for a case study on the impact of computerization on my agency.

Are you aware of other studies that have researched attitudes, cognitive styles, or social impact related to computerization of human service organizations? I thought someone might have come across similar research studies.

Education/Training

IBM PC Use for Child Abuse/Neglect Curriculum from Doug Nystrom, Office of Training, Illinois Department of Children and Family Services, Room 315, 160 No. LaSalle St., Chicago, IL 60601.

Co-workers and I will soon begin efforts to adapt child abuse and neglect training curriculum (e.g. how to investigate and identify child abuse and neglect) to computer assisted instruction (CAI), using IBM PC's and the Personal Computer Instructional System (developed by Computer Systems Research, Inc., but marketed by IBM) authoring software. Users will be staff of our statewide public child welfare agency.

We are seeking contact with persons who have engaged in earlier efforts with this same curriculum content, adapted to micro use. Our short-term goal is a limited field test of CAI; our long-term goal is delivery of a variety of agency in-house curricula which are developed on a micro and delivered throughout the state. Any advice regarding adaptation of child abuse and neglect curriculum to CAI would especially help.

SIGGY — System of Interactive Guidance and Instruction from Zack Prince, UTA Admissions Office, Arlington, TX 76019

A newcomer named "Siggy" arrived on campus this January. Siggy is the affectionate name for SIGI, which stands for the System of Interactive Guidance and Instruction, a computerized career decision-making program for individuals who are deciding upon their futures and, by consequence, their majors as well. What makes SIGI unique is that it is a values oriented approach to career decision-making. Many people who are planning a career are aware of how important interests and abilities are, but few are aware of how values interact in the process. Values are the rewards and satisfaction that guide individuals in choices they make.

SIGI will plot out a graph of a person's values, generate a list of occupations based on a person's values system, provide general information for any questions on a career that an individual may have, and allow the individual to compare the desirability of three different careers simultaneously. One other thing, Siggy is fun too! Students can play a game with Siggy to help clarify their values. By going to an imaginary employment office, they are assigned to an imaginary job. Job candidates are commonly assigned positions as moguls or bucksters. Once a job has been provided some very interesting situations arise; these will challenge even the most experienced of career decision-makers.

SIGI works on an IBM-PC. It usually requires two 1½ hour sessions. Sessions are arranged by appointment only through the Counseling, Testing and Career Placement Office. Student evaluations of SIGI have been most positive. A week's notice is needed to reserve a time with Siggy. Siggy is one newcomer who has made a lot of friends in a hurry.

Computer Narrows Distance to Campus from Cornell DeJong, Professor of Social Work, Northern Michigan University, Marquette, Michigan (home address: 563 Plymouth Drive, Alpena, Michigan 49707).

I am in an unusual situation in that I am living 260 miles from campus. I am teaching one semester per year plus summer courses. During those periods, I commute weekly between home and school. I use an Apple IIe both at home and on campus. I am currently in the pro-

cess of acquiring the necessary peripherals to link up with the IBM mainframe on campus for doing SPSS and SAS analysis on large data sets. I would appreciate being put in touch with others who may have experience with this type of situation.

Health & Mental Health

Kaypro 4 as a Testing and Actuarial Tool from Joe Bavonese, 27710 Cordoba Dr. #2305, Farmington Hills, MI 48018.

I am interested in using computers as an actuarial tool to aid in assessment of clients. I own a Kaypro 4. To date, I have found one program to automate the DSM-III.

Reflections on Installing Mental Health Systems from Michael Gorodezky, 1401 Grizzly Peak, Berkeley, CA 94708.

After a long delay, I thought it time I provide the Network with an update on my current activities.

For the past year I have been working with Poolman, Shih and Platon, Inc., an information system consulting firm specializing in Public Health, Mental Health and Substance Abuse information systems. My work involves the implementation of a City-Wide mental health information system for the City of San Francisco. The system ties together 5 mental health districts and involves billing and patient tracking for patients served by a 38 million dollar per year Community Mental Health Service. The system is currently implemented in 4 centers and we are now bringing on the last center. By July, 1984 there will be some 90 providers tied together with on-line terminal access for some 60 sites around the city.

Moving among the multi-cultural environment of San Francisco has been an exciting experience. In some cases we have replaced existing MIS operations and in other instances we are installing the first computer applications for particular agencies.

My general impression is that we are now past much of the resistance I saw 10 years ago when we first began proposing computers in the human services. Clinical, administrative and clerical staff all now seem to accept the need for automated processing of information. There is, of course, anxiety that accompanies change but I see much more positive anticipation that computer technology will be of help to clinic management and general administration. Clerical staff have been enthusiastic as they properly see a new system with on-line access providing them with an opportunity to learn about a new technology.

So far the hectic pace of implementation here in San Francisco has prevented much pause for reflection. I hope to share more of my thoughts about our implementation in future issues of your Newsletter.

Disabilities

MASH in Its Newest and Most Futuristic Form — The Computer Network reprinted from Network, the Newsletter of the New Jersey Self-Help Clearinghouse, 4(1) Spring 84, St. Clare Hospital CMHC, Den-ville NJ 07834.

Every Wednesday night a meeting takes place of people who have various disabling conditions. The discussion is similar to that of other self-help groups. But the leader for this discussion group is both deaf and blind, and, what is even more amazing, those participating in these meetings don't leave their homes located all across the country. This is but one example of how people are sharing common concerns, practical information and even emotional support, by using their home computers to participate in local and national computer networks.

The "on-line conference" previously described, takes place weekly on one of the national computer networks, called Compuserve. Georgia Griffin, who facilitates that meeting, uses a braille printer to read what is transmitted. A variety of other devices have been developed to enable the disabled to use computers for telecommunications. For example, on one computer network for disabled persons in Maryland called HEX (Handicapped Educational Exchange), we have read messages from disabled persons who use speech synthesizers that directly reproduce their spoken word on to the computer in phonetically-spelled text. As home computers become more affordable, they will open up new possibilities for mutual-help, overcoming some of the traditional problems of transportation, rarity of condition, and the limitations of the disabilities themselves, which have prohibited the development of many self-help groups.

It is not just for the disabled that computer networks have shown MASH potential. On the same Compuserve system, there are separate SIG's, or Special Interest Groups, for family matters, women's issues, human sexuality, health, and more. There are separate SIG's for professionals, such as those in medicine or education. The Clearinghouse

Members Comments and Activities, cont.

has already answered dozens of requests on these SIG's, referring people to national self-help groups and local self-help clearinghouses. People who use computers show no less a need for face-to-face personal contacts. We have also used the computer system to network those who share rare illnesses and problems.

In addition to conferences (which Clearinghouse staff have been asked to host), the computer networks also provide other options: scanning, reading and posting messages; reading newsletter texts; sending/receiving electronic mail; reading/posting bulletins; or accessing dozens of different information databases (the Clearinghouse has contributed to several that list helplines and self-help groups). For example, on any one of the SIG's one can post an inquiry message which will be read by hundreds of people. The next time one enters the same SIG, the computer will immediately advise the person of any responses.

In addition to the large national networks (which charge for use — a charge offset by their providing local telephone access lines), there are thousands of smaller free BBS (Bulletin Board System) databases that can be called 24 hours a day. They are run very much like the SIG's. While most of their discussion is currently focused on computer issues, an increasing number deal with human problems and needs. The Clearinghouse hopes to develop the first BBS for MASH group information and networking within the next several months, utilizing primarily our national database.

While many might think of computer networks as impersonal and superficial, when seeing it in action, one can not help but develop a real appreciation for the potential that this "will-miracles-never-cease" technology will bring to networking and mutual aid. It is estimated that by the end of this decade, the majority of American families will have home computers. Some of the New Jersey self-help groups, e.g. Camden Head Injury Support Group, are already using home computers to simplify mailings and newsletters to its members. But we foresee many of the national and regional self-help groups establishing their own BBS systems as computer networking becomes a more affordable and common form of personal and business communication. While not a panacea, computer telecommunications will in the years ahead revolutionize society, increasing the linkage of people, ideas and concerns, and providing innovative ways in which many people will find and develop the mutual aid self-help support they need.

Child Welfare

Field Testing Adoption Bulletin Board from Jill Jasper, Director, Northwest Adoption Exchange, 909 N.E. 43rd, Suite 208, Seattle, WA 98105.

The Northwest Adoption Exchange acquired a personal computer last summer, and we have been using it to maintain files on the children we serve. We are also the field test site for the beginnings of a national telecommunication network between adoption exchanges. We will be using electronic bulletin boards to share information on children who wait for adoption and families who might be resources for them.

Model Micro System for Child Welfare from David Bresnick, Center for Management, Baruch College, CUNY, 17 Lexington Ave., Box 520, NY, NY 10010.

The Center for Management at Baruch College and the Child Welfare Information Services, Inc. are pleased to announce the reorganization of AIMS, the Agency Information Management Service, to meet the information management needs of the not-for-profit sector. The first major joint project will be the development of a model microcomputer system for child welfare agencies in New York City which is being supported by the Greater New York Fund. Participating in this demonstration are: Sheltering Arms Children's Service, Queensboro Society for the Prevention of Cruelty to Children, and Leake and Watts.

Through AIMS, advice will be provided on automation related issues, including hardware and software selection. In addition, as Automation Institute is being established to provide the not-for-profit community with access to information about automation, on-line information searches, demonstrations of hardware and software, and training and instruction.

By September 1st, a system providing for financial accounting, foster care payment and word processing will be ready for installation. Future planned additions include fundraising and case management systems.

General

Demographic and Statistics Software Needed for IBM PC from Marcia Hockett, Statistician, Lutheran Service of Iowa, 3116 U. Ave., Des Moines, IA.

We are presently looking for software we could use for our client demographics that could also be used for other statistical reports. Any information you might be able to provide us with would be greatly appreciated. We use IBM PC's.

Testing, Billing and Administrative Software for IBM PC-XT Needed from Edward Mialky, M.S.W., Director, The Guidance Center of CEMP Counseling Services Department, 137 North Bennett Street, Bradford, Pennsylvania 16701.

Our agency is an outpatient mental health center providing a variety of services to a rural Pennsylvania community. We recently purchased an IBM PC-XT. Although we are using it for word processing, we are actively looking for software to use for administration, scoring, and interpretation of psychological tests. Also, we would like to find software that is designed for billing insurance companies as well as clients.

IBM System 34 Software for Aging Agency Needed from Stan Mason, Financial Director, Athens Community Council on Aging, 230 S. Hull St., Athens, GA 30605-1197.

We are about to enter into an agreement with a local computer service organization utilizing a System 34 computer for financial and programmatic data processing. Can someone provide information as to available software using minicomputers such as the System 34?

Telecommunications and Fund Accounting Software from Donald M. Loving, Manager, Telecommunications, Applied Humanomics, Inc., 1421 Chapala Street, Santa Barbara, California 93101.

Applied Humanomics was formed with a core of human service professionals who believed that the new technology of computers can greatly improve the effectiveness and efficiency of services as well as being a tool for fund raising, advocacy, and improved management. I, for instance, was an adjunct assistant professor at the Graduate School of Social Work at the University of Arkansas at Little Rock. I was the Director of the Arkansas Youth Services Training Institute which was funded by Title XX and which was defunded after block grants to states came into practice.

Applied Humanomics provides three "products". They are:

1. A computer assisted telecommunication system, called Nexus. Established networks and associations of nonprofits as well as groups of people interested in human services will be our primary target group. The subscribers to CUSS certainly would fall into this latter category and may be interested in discussing with us the possibility of setting up a dedicated system for CUSS. This service is available now.
2. A fund accounting software program designed for the small nonprofit agency and which will run on a microcomputer. This program will be able to do cost allocation and other functions which are unique to the nonprofit field. The projected date it will be on the market is August 1984.
3. Consultation services to help agencies assess their need for computers and training about how to best utilize computers in their programs.

Resources and Materials

Funding Sources

The Easter Seal Research Foundation is seeking grant proposals that integrate research with the development or adaptation of technologies that help persons with disabilities to be independent. Proposals may be directed toward the development of assistive devices as well as "systems" such as those used for helping persons with disabilities to access computer technologies. Maximum funding is \$25,000 per year for 3 years. Applications are received 1 May and 1 August. Contact Reta McGaughey, National Easter Seal Society, 2023 W. Ogden Ave., Chicago, IL 60612.

Educational Grants for Universities from Apple Education Foundation.

The Apple Education Foundation is an expression of Apple Computer's commitment to the improvement of education and enhancement of human learning through the innovative use of microcomputer technology. Since 1979, the Education Foundation had made grants of microcomputer equipment to educators and educational institutions whose ideas for the development of educational software and courseware were judged to be innovative and useful to other educators.

Resources and Materials, cont.

In 1983, the Apple Education Foundation changes the focus of the grants to larger projects involving curriculum development and teacher training which exemplify the potential of the microcomputer to enhance learning.

The Apple Education Foundation is particularly interested in, but not limited to:

- Use of microcomputers to develop intuition in science, mathematics, history, etc.
- Use of computer-generated graphics to facilitate concept development and the understanding of ideas
- Interesting and compelling new uses of microcomputers in music, art, computer-aided drafting, simulations
- Finding ways to help teachers and students make productive use of personal computer tools - database, spreadsheets, and graphing programs, etc. in becoming more active and creative learners
- Building students' ability to reason about data and information

The Foundation is looking for projects which include all of the following attributes. Not all of these must be described in the Concept Paper, but the project should be well thought out prior to submission of the Concept Paper.

Projects must:

- Be designed by educators from both the school and university levels, creatively working together using the best of the expertise in subject matter content, learning theory, and practical classroom experience to develop an innovative and substantive idea
- Be from institutions which consider the goal they propose to accomplish to be of sufficient importance to warrant the investment of substantial amounts of their own resources, both people and dollars
- Clearly and succinctly define the learning to be enhanced through use of the microcomputer
- Propose uses for microcomputers which are clearly related to the learning goal.
- Focus on learning concepts, learning to process information and knowledge—not just acquire it—and on learning to transfer ideas across different curriculum domains
- Use microcomputers to create environments in which students are producers as well as consumers of knowledge
- Include plans for interesting and productive uses of telecommunications
- Produce materials (not necessarily software) which will be useful to other educators
- Include training for preservice and inservice teachers
- Provide plans for clear and appropriate evaluation procedures
- Be written by the people who will carry out the proposal

NOTE: Proposals for computer literacy and computer awareness projects, or for drill and practice applications are NOT eligible.

Equipment requests can be for either Macintosh or Apple II family computers. The burden of proof of what equipment is needed and why, rests with the applicant. Equipment requests which are inappropriate to the goal of the project will detract from the strength of your proposal.

Modems will be included in the equipment grant for each project and all project sites will be networked with one another and with the Foundation. Communication, information and resource sharing via this network will be an important aspect of the Apple Education Foundation projects.

The equipment remains the property of the Apple Education Foundation for a period of two years or until the terms of a grant contract with the Foundation have been satisfied. Upon successful completion of the project the equipment will be considered granted to the institution to which it was shipped.

NOTE: Should you receive an equipment grant award, you may expect to receive equipment no earlier than December 1984 for the 10th cycle and May 1985 for the 11th cycle.

All accredited public and private elementary and secondary schools, licensed preschools, Headstart Centers, colleges, and universities in the continental United States, Alaska, and Hawaii which can provide evidence of the following:

- Collaboration (a team effort) between the pre-school of K-12 school(s) and college or university.
- 501 (c) (3) status or similar non-profit IRS tax status.
- Allocation of resources by school district and college/university which demonstrate their commitment to the success of this project.

Prior to submitting a full proposal, applicants are required to complete and submit a "Concept Paper." Based upon an evaluation of the concept papers, approximately 50 applicants will be invited to submit full proposals. Concept papers are due December 14, 1984.

Grants will be extremely competitive. In our last grant cycle, one grant was awarded for every 100 concept papers submitted.

For forms and guidelines, write (do not call) **Wheels for the Mind**, Apple Education Foundation, 10201 N. De Anza Blvd. M/S 23U, Cupertino, CA 95014.

Electronic Information Utilities and Networks

A Data Base about Data Bases Data Base User Service allows subscribers to access online a directory of publicly available online databases, providing detailed descriptions so that anyone can pinpoint the databases most perfectly suited to their needs and learn how to access them in the most cost-efficient way. From Knowledge Industry Publications, Inc., 701 Westchester Ave., White Plains, NY 10604.

Eyenet, an online database containing the latest eye disease treatments and new or unusual cases, is available from the Am. Society of Contemporary Ophthalmology whose director stated "if we don't have this kind of information available, we run the risk of negligence. I don't see how a doctor could ignore this (system) with the risk of malpractice."

Free Micro Bulletin Board by Richard D'Aleo. The National Bureau of Standards (NBS) Institute for Computer Sciences and Technology (ICST) supports an electronic bulletin board system (EBBS) to provide a mechanism to share and exchange microcomputer-related information. Microcomputer Electronic Information Exchange (MEIE) is its official name. The system is available 24 hours a day, 7 days a week, and it's **free**. The MEIE is an initiative of the ICST in its continuing effort to provide guidance on the acquisition, management, and use of small computers, and to encourage and facilitate the exchange of related information. It will serve as a model for additional ICST EBBS and for others that could use this cost-effective way of exchanging information.

- What and Who is ICST
- Available ICST Publications
- Micro Related Programs/Activities
- Sources of BBS Inventory
- List of Federal Government BBS Systems
- List of Micro Newsletters
- List of Micro Related Magazines, Journals, etc.
- "Yellow Pages" of Micro Related Sources
- List of Major Telecomputing Services
- List of Conferences, Seminars, Classes
- Federal ADP Users Group Meeting Announcements
- Hardware Comparison Articles
- Software Comparison Articles
- Listing of Federal Publications
- Listing of Special Publications

To connect to the bulletin board the procedure is:

1. Set your terminal or computer—it must be ASCII—to: 300 or 1200 baud, 8 or 7 data bits, even or odd parity, 1 stop bit.
2. Dial 301-948-5718 or 948-5718 if in the Washington, D.C. area. If a connection is not established at the end of two rings, or if the line is busy, hang up and try again.
3. After you "CONNECT" strike the CARRIAGE RETURN twice and the system will be accessed. No preestablished accounts are required to use the bulletin board.

Resources and Materials, cont.

4. After the welcome you will be asked if you would like to see the bulletins. As a first-time user these will help to understand the system. The help files can be accessed as you need them.

For further information on the MEIE, or if you have a problem, call Lynne Rosenthal or Lin Frankel at 301-921-3485.

A Data Management Information Exchange (DMIE) EBBS should be available this month. It will include data management and data base management systems information. Its dial-up number is 301-948-2048. For further information, contact Charles Sheppard at 301-921-2431.

Newsletters, Magazines & Journals

Raised Dot Computing Newsletter (for the visually impaired) 310 S. 7th St., Lewisburg, PA 17837.

Computer-Disability News the computer resource quarterly for people with disabilities is available c/o The National Easter Seal Society, 2023 W. Ogden Ave., Chicago, IL 60612.

Using Personal Computers in Nonprofit Agencies is a monthly newsletter from James Masters, Editor, Center for Local and Community Research, POB 5309, Elmwood Sta., Berkeley, CA 94705. User groups are also available in areas such as fund raising and data base management.

Association of Birth Defect Children published quarterly by the 3201 E. Crystal Lake Ave., Orlando FL 32806.

Computers, Environment, and Urban Systems from Pergamon Press, Inc., Maxwell House, Fairview Park, Elmsford, NY 10532.

Computers in the Schools from Haworth Press, 28 E. 22nd St., NY, NY 10010. Write for free issue. Contents of the first issue include:

"Educational Computing: Current Status and Future Directions," "Hardware and Software Selection and Evaluation," "Computers in Education: Books to Begin with," "Educational Microcomputing: The Need for Research," "The Computer: Humanistic Considerations," "Psychology and the Computer Revolution," "Computers in Education: A Question of Access," "Computer Literacy: Wave of the Future—Or Relic of the Past?," "The Educational Promise of Logo," "Computer-Assisted Instruction: Current State of the Art." The journal will occasionally feature special issues devoted to a single topic. Upcoming special issues include "Logo in the Schools," "Educational Computing for the Gifted and Talented Child," and "Humanistic Perspectives on Computers in the Schools."

Computer Education News is a biweekly newsletter on education and technology for all levels of education. For sample issue write Capitol Publications, 1300 N. 17th St., Arlington, VA 22209. A sampling of Vol 1 follows.

Harvard University's Gutman Library staff will have a directory available by the start of school next year to help educators select software. The directory will attempt to cover every microcomputer program available for elementary, secondary and college instruction. Information will be gathered through questionnaires to all school districts and state school boards and through inquiries to magazines and journals. Anyone with programs for the listing should contact Mary Smith, project director, at Gutman Library, 6 Appian Way, Cambridge, Mass. 02138, (617) 495-9021.

Articles

"Microcomputers and Behavior Therapy: A Powerful Alliance," (April 84), "Microcomputers in Behavior Therapy: A Sampler of Applications," (May 84) "Computers as an Adjunct to Therapy and Research in Behavioral Medicine" (June 84) in *The Behavior Therapist*, a newsletter from the Association for Advancement of Behavior Therapy, 15 W. 36 St., NY, NY 10018.

"Statistical Software for Microcomputers" BYTE, April 1984.

"Enabling Computers (for the disabled)" several articles written by the disabled in the Summer 84 issue (pp 46-52) of the *Whole Earth Software Review* POB 27956, San Diego, CA 92128.

"Getting Started in Psychiatric Computing: An Introduction and Overview in outline form" (8pp) and "Advanced Psychiatric Computing: An Introduction and Overview in outline form" (7pp) from Wandal Winn, M.D., Dept. of Psychiatry, D6-290-C, U of WI, 600 Highland Ave., Madison, WI 53792.

Books and Reports

Computers for the Disabled: Discovery '83 Conference Papers, Materials Development Ctr., School of Education & Human Services, Vocational Rehab. Institute., U. of WI—Stout, Menomonie, WI 54751. \$15.

Proceedings on the National (1983) Conference on the User of Microcomputers in Special Education, Council for Exceptional Children, 1920 Assn. Dr., Reston, VA 22091.

Microcomputer Resource Book for Special Education by Dolores Hagen, Reston VA: Reston Publishing Co. 1984.

Financial Planning in Transit: Use of Commercially Available Microcomputer Software from Transportation Systems Center, 55 Broadway, Cambridge, MA 02142 (Nov 83).

Computers for Professional Practice by E.J. Neiberger from Ardent Press, 1000 N. Ave., Waukegan, IL 60085 is a book/guide for physicians, dentists, accountants, lawyers and business people using or considering computers for their offices. (281 pp, 108 ill, 1984, \$14.95).

Using Computers in Nursing by M.J. Ball & K.J. Hannah, Reston Publishing Co., Reston VA. 1984, \$21.90, 303pp.

Accounting and Budgeting Systems for Mental Health Organizations by J. Sorensen, G. Hanbery & A. Kucic., DHHS, PHS, ADAMHA, NIMH, Series FN #6, Pub. No. (ADM) 83-1046, Washington, D.C., Supt. of Docs., U.S. Govt. Printing Office. 1983, 160pp.

Software Announcements

Grassroots Software for community based campaigns, write 819 W. 33rd St., Baltimore, MD 21211.

Automated Social History for Criminal Justice Agencies from Anderson Pub. Co., 646 Main St., Cincinnati, OH 45201 800/543-0883.

COPE self-help software for controlling stress, fear of flying, overeating, public speaking, insomnia and self confidence from Cabononics, POB 10534, Rochester, NY 14610.

Telecommunications & Fund Accounting Software from Applied Humanomics, 1421, Chapala St., Santa Barbara, CA 93101.

Training Software for most popular software packages and groups of packages e.g., databases, spreadsheets from American Training International, 12638 Beatrice St., Los Angeles, CA 90066 800/421-4827. For educational discounts, call 800/543-0487.

Fit and Trim a computerized, educational and counseling program for weight control from Ardetn Inc., 1000 N. Ave., Waukegan, IL 60085.

GrantsPRO and **The Sales Edge** are fund raising software tools from Public Management Institute, 358 Brannan St., San Francisco, CA 94107.

For a listing of over 135 disks of public domain and user supported software for the IBM PC, write PC Software Interest Group, 1556 Halford Ave., Suite #130, Santa Clara, CA 95051.

Call for Papers

Activities, Adaptation & Aging, a journal stressing an interdisciplinary approach to the provision of activities to the aging, announces a special issue on *Computer Technology and the Aged: Implications and Applications for Activity Programs*. The issue will include articles in four areas: descriptions of programs currently using computers and/or video games; research related to the effectiveness of computers/video games in treatment and rehabilitation; "thought pieces" projecting applications for computers/video games and exploring their potential in activity programs; articles reviewing hardware and software useful in activity programs.

All interested individuals are invited to submit manuscripts by November 15, 1984, to: Francis A. McGuire, Department of Parks, Recreation and Tourism Management, 282B Lehotsky Hall, Clemson University, Clemson, South Carolina 29631.

Upcoming Events, Conferences and Meetings

Computer Technology for the Handicapped, September 13-16, 1984, Minneapolis, MN. Contact c/o Closing the GAP, P.O. Box 68, Hender-son, MN 56044.

Frontiers of Engineering and Computing in Health Care 6th Annual Conference, IEEE Engineering in Medicine and Biology Society, Sept. 15-16, Los Angeles Hilton. Contact W. Welkowitz, Dept. of EE, Rutgers U., Piscataway, NJ 08854.

Technology for Disabled Persons, Oct. 1-3, 1984 at McCormick Inn, Chicago IL, a national conference with workshops and exhibits on com-puters and other technological products and services for people with disabilities. Write U. of WI-Stout, Office of Continuing Ed., Menomonie, WI 54751.

The Evaluation Network and the Evaluation Research Society an-nounce their 4th Annual Joint Meeting in San Francisco, October 11-13, 1984. The theme is Toward the Excellence: The Role of Evaluation. For further information, contact Dr. Robert Ingle, 571 Enderis Hall, P.O. Box 413, University of Wisconsin-Milwaukee, Milwaukee, WI 53201 (414-963-4729).

8th Annual MSIS National Users Conference, October 18-19, 1984. Orangeburg, NY, 10962 (15 miles from Manhattan). The theme is The Chronic Patient: Changing Service Delivery Patterns. Held at the Nathan S. Kline Institute for Psychiatric Research, which provides compre-hensive management information systems support for human service organizations. Write Linda J. Kline, Director, Liason Dept., (914) 359-1050, ext. 2517.

3rd International Conference on Augmentative and Alternative Com-munications, Oct 18-20, MIT, Cambridge, MA. Contact H. Shane, Children's Hosp. Medical Center, 300 Longwood Ave., Boston, 02115.

Microcomputers in Human Services, Oct. 22-23, The Hilton at Mer-rimack, Merrimack, NH. Co-sponsored by the Office of Human Develop-ment Services—Region 1 and the New Hampshire Social Welfare Coun-cil. Registration \$20. Write Lucy Metting, NHSWC, Box 1225, Concord, NH 03301 (603) 228-0571.

International Conference on Rural Rehabilitation Technologies, Oct. 23-25, 1984. U. of N. Dakota Campus. Write ICRRT, Box 8103, U. of N. Dakota, Grand Fork, ND.

Automating the Not-for-Profit Sector sponsored by the Center for Management of Baruch College and CWIS/AIMS. October 26, 1984 in New York City. Sessions on specific applications for non-profit en-vironment (fundraising, financial and case management, word process-ing); current hardware/software info.; demonstrations. For further in-formation contact Center for Management, 17 Lexington Ave., Box 520, N.Y., N.Y. 10010, (212) 725-3156.

Technology and Development Disabilities is the theme of the National Convention of the Association for Retarded Citizens of the U.S., Nov. 1-3, Nashville, TN. An exhibit area is planned; Write ARC/US, 2501 Ave. J., Arlington, TX 76011.

Symposium on Computer Applications in Medical CARE (SCAMC) November 4-7, 1984, Washington, D.C. Hilton. Write AAMSI, Suite 4021, 4405 East West Highway, Bethesda, MD 20814.

FutureCare, A Symposium on Clinical Applications of Technology to Rehabilitation, Mar 4-6, 1985, San Antonio, TX. Write Medical School Continuing Ed. Services, UT Health Science Ctr., 7703 Floyd Curl Dr., San Antonio, TX 78284.

World Conference on Computers in Education/85, July 29-Aug 2, 1985 Norfolk, VA. Paper deadline is August 1, 1985. Write John McGregor, Computer Science Dept. Christopher Newport College, Newport News, VA 23606.

Computers in Psychiatry/Psychology

The essential quarterly for clinicians using computers

Featuring articles and software reviews on diagnosis, testing, research, office management, and therapy.

Bibliography, calendar, reader activities.

Volumes I-V: \$40/year

All five volumes: \$170

Volume VI (quarterly commencing January 1984): \$40

Computers in Psychiatry/Psychology

26 Trumbull Street
New Haven, CT 06511

Please send me Vols. _____ of CP/P.
(add \$10 for outside USA & Canada)

My check for \$ _____ is enclosed.

Name _____

Address _____

City _____ State _____ Zip _____

Note: The date of your last paid issues is On Your Mailing Label. Check it to make sure your membership is current. Other codes are as follows:

Due means you requested to be billed, your bill has been sent and CUSSN is waiting for your payment.

Ex means you receive the CUSSN Newsletter because of your position or in exchange for services. However, dues are still welcome.

I wish to join the CUSS Network. Send to:

Dick Schoech, UTA, POB 19129, Arlington, TX 76019.

In Australia, send to Floyd Bolitho, La Trobe U, Social Work, Bundoora, Victoria, Australia 3083.

In England, send to Lawrence Moseley, Computer Science Dept., University College, Singleton Park, Swansea, United Kingdom SA2 8pp.

In France, send to Alain Mazart, 10, Boulevard Gambretta, 87000 Limoges, France.

Name _____ Title/Occupation _____

Organization _____

Address _____

City _____ State _____ Zip _____

Dues: I enclose _____ (see front cover). Make checks payable to CUSS Network.

4/2

Dick Schoech
CUSS Network Coordinator
The University of Texas at Arlington
P.O. Box 19129
Arlington, TX 76019 - 0129

Non-Profit Org.
U.S. Postage
PAID
Arlington, Texas
Permit No. 81

Address correction requested
56-184