

A Failure to Communicate?

By Nancy Hays

With the right software programs, your facility can more easily track patient care and assessments, select assistive technology, bill for services, conduct inventories, and perform outcomes studies. But unless the programs for each activity can communicate with the others and share data, the activities remain isolated, and your facility may not run at its optimum level.

Imagine you've just admitted a client who is transferring from another facility. With the large hard copy file comes a disk that contains all the patient care data and technology needs. So, instead of sifting

through 10 pounds of paperwork and re-entering data, all you have to do is open the file and merge the data with your facility's software.

But the other facility uses a different software program, and it can't "talk" to yours. In other words, you can't look at the client's files in your program.

What could have been a fairly simple computer task turns into hours of laborious and painstaking manual work.

Scenarios like these have led some in the rehab profession to call for rehab software standards. "We're trying to make the programs have predictable characteristics," says Nigel Shapcott, University of Pittsburgh, one of the leaders in the call for software standards.

"The thought of integrating software is not foremost on your mind when developing software programs," Shapcott says. "Standards are pretty boring stuff, but the work needs to be done." The challenge, he continued, is getting the right expertise into a consensus group, reviewing existing protocols, and defining something that makes sense

A Proposal

By Nigel Shapcott

The proposed communications protocols for software standards would provide a protocol for the exchange of electronic information between software associated with assistive technology data collection, evaluation, reporting and analysis. It would also set a protocol for other related software tools, such as design, development, education, evaluation, data collection, justification, ordering, billing, third-party funding, customized manufacturing, outcomes measurement, and communication between participating parties.

Aims and Reason

- To develop a voluntary standard to allow software to identify and exchange certain data storage parameters and data across platforms with other software complying with the standard.
- To define protocols to allow straightforward

data exchange between this software to enable either planned or serendipitous combinations of software to improve the delivery of appropriate assistive technology.

- Improvement of the speed and accuracy of communications by reducing the production and handling of unnecessary paperwork and related delays.

Interested Parties

- Those involved in the development and marketing of software related to the provision of assistive technology.
- Those involved in the collection of data related to the provision of assistive technology.
- Those involved in assistive technology funding.
- Those involved in the development and marketing of assistive technology.

Feasibility

There are no technical factors that would hinder this standard. The standard would be derived from existing standards and protocols and would involve the definition of a small software-based signature file that will be placed in the public domain. Every attempt will be made for this standard to be compatible with existing software and programs.

Benefits

- Will enable software designers to combine features to enhance software performance.
- Will enable exchange of data, text, graphics, still and moving pictures, and numerical data.
- Will further the use of the Internet to exchange information between experts independent of location, of all types of data and users.

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and that will enable software packages to exchange information between each other with relative ease

Shapcott has proposed the development of such standards to the RESNA's Technical Guidelines committee. RESNA is the Rehabilitation Engineering and Assistive Technology Society of North America. Once approved as a work item, a consensus group of rehab professionals, software developers and manufacturers will be identified to write the software standards. The proposed Stan-

dards will then be submitted to the American National Standards Institute for feedback and approval. After that, they would be published and available to software developers. The standards would be a voluntary compliance measure.

The need for standards goes beyond the technology to what the rehab profession has to do.

— Syd Gubin

"Software standards are a great idea," says the University of Wisconsin's Roger Smith, Ph.D., O.T., developer of OT Fact. Smith admits, however, that it might be difficult to agree on what fields need to go into databases, and current software may not conform to those standards.

"Making sure programs can read each other's data would definitely make sense," says William Blozan, managing partner of Fast Answers, San Diego. "If we're going to have different programs do different parts of the business (e.g., accounting, assessment and ordering), each piece of data should be kept in only one place once." That means programs must be relational. For example, all departments access one file with address information, so if a client moves, the information is changed only once, instead of within each department's files. This eliminates retyping and potential errors.

"If everyone starts using an agreed-upon relation structure that created homogeneity to look at and access other software, it would make the end-user's life easier," Blozan says.

The need for standards goes beyond the technology to what the rehab profession has to do, says Syd Gubin, Home Health Supply, Palm Springs, Calif. He developed The Rehab Manager, a program for rehab technology sup-

Business Software Products

Aspcwin

DB Consultants Inc.
198 Tabor Road
P.O. Box 5B0
Ottsville, PA 1B942
610/847-5065
E-mail: dondbc@dbconsultants.com
Web site: <http://www.dbconsultants.com>
Runs on: Windows, DOS
Software can be used by: Therapists
Price: \$3,400+ for one user
Training: On-site training; DO5 tutorial

Description: DB Consultants offers its Practice Management Software Modules, including a Managed Care Supplement, Custom Reports System, SOAP Notes and electronic claims systems.

Axiom

Axiom
21601 Devonshire St., Suite 219
Chatsworth, CA 91311
818/998-0527
Fax: 818/998-2529
Runs on: Windows, Pen/Right field units
Software can be used by: Therapists, case managers
Price: Varies
Training: On-site and on-line training; user's group; help screens; customer support

Description: Axiom provides a field documentation system on a pen computer that captures information for medical records. Care planning and progress reporting features allow staff to identify and track patient problems, interventions and goals, and to demonstrate measurable outcomes.

LCPSTAT 1.5

TecSolutions
P.O. Box 2446
Madison, MS 39130
800/733-9101
Fax: 601/952-0072
E-mail: lcpstat595@aol.com
Web site: <http://www.nlcii.com>
Runs on: Windows, Mac
Software can be used by: Case managers
Price: \$1,250 for one user
Training: Tutorial

Description: The software is designed for life care planning, and for tracking resources, cost, vendors, job openings and complications. It also has a Lexicon database.

Rehab Management and Outcomes System

KMS Systems
30220 Rancho Viejo Road, Suite 8
San Juan Capistrano, CA 92675
714/488-9700
Fax: 714/488-9707

Runs on: Windows
Software can be used by: Therapists, case managers, office personnel
Price: Varies
Training: On-site
Description: The Rehab Management and Outcomes System software program is for client data, clinician reporting and outcomes studies. The Facility Management System portion is for documentation reporting, collecting outcomes and developing clinical pathways. The Central Management System portion manages client data.

Conquest 1 .0

Agency for Health Care Policy and Research
2101 E. Jefferson St., Suite 502
Rockville, MD 20852
301/594-1349
E-mail: conquest@po3.ahcpr.gov
Web site: <http://www.ahcpr.gov/research/conquest.htm>
Runs on: Windows 3.1 (Microsoft Access)
Software can be used by: Therapists, case managers
Price: Free
Training: Available online

Description: Conquest (Computerized Needs-Oriented Quality Measurement) contains information on approximately 1,200 clinical performance measures. It links clinical conditions to condition and measure databases to create customized searches and reports. Measures can be adapted to other clinical conditions, populations or care settings.

Fast!Rehab

Fast Answers
7153 Forum St.
San Diego, CA 92111-3439
619/279-9192
Fax: 619/279-9191
E-mail: sales@fastanswers.com
Web site: <http://www.fastanswers.com>
Runs on: Windows
Software can be used by: Dealers
Training: On-site, on-line, user's manual
Price: \$3,995

Description: Fast!Rehab is designed for patient assessment, chair specification, project tracking, facility status reports, automatic CMNs, patient invoicing, and vendor purchase orders.

OT Fact

American Occupational Therapy Association
4720 Montgomery Lane
P.O. Box 31220
Bethesda, MD 20824-1220
301/652-2682
fax: 301/652-7711
Run on: Windows, Mac
Software can be used by: Therapists

ts for Rehab Professionals

Price: \$370 to \$5,000, depending on AOTA membership and individual vs. site licenses
Training: Electronic manual, on-site

Description: OT Fact is a performance assessment software based on Human Occupational Performance Practice Integration Theory. It works via a taxonomy of functional performance via role integrations skills, activities of performance (e.g., self-care), integrated skills of performance (e.g., hand function) and underlying components of performance (e.g., strength, range of motion). Note: Software release planned for late 1996.

The Rehab Manager

Home Health Supply
1109 N. Palm Canyon Drive
Palm Springs, CA 92262
619/327-3378

Fax: 619/327-7365

Runs on: Windows

Software can be used by: Therapists, dealers

Training: Tutorial with package

Price: \$14,999 (leasing and rental programs available)

Description: The Rehab Manager takes a user through the client assessment and equipment specification process, generating a quotation,

invoice and purchase orders, as well as a documented CMN. The entire process is tracked.

PTOS 5 (Physical Therapy Off ice System); Report Master; APS Accounting

APS Professional Systems
18455 Burbank Blvd., Suite 408
Tarzana, CA 91356

800/824-4305, 818/705-0963

Runs on: Windows, DOS, network systems

Software can be used by: Therapists, office personnel

Price: Varies

Training: Support center with toll-free number

Description: PTOS 5 includes fully-integrated modules for electronic billing, documentation, rehab agency reporting, word processing and general ledger/accounts payable. Report Master allows the therapist to track patient evaluations, progress notes, functional capacity evaluations, and other documentation requirements, including reportsto physicians, filling in forms and writing letters. The APS Accounting Module allows the user to enter financial transactions and keep detailed lists of activity for various accounts.

pliers. "We need to come up with standards and protocols for gathering information. Some people start assessments with a purchase order. Others start with (the client's) range of motion."

It comes down to what people want, Gubin says. "Case managers are asking for outcomes. But we can't get outcomes if we're not gathering the same data. As we develop standards, people will either fit in with standards or they won't. That's what we need to do if the industry will progress."

Shapcott envisions the day when rehab professionals can open a program, extract information from a database of wheelchairs, seating and tie-down information, and make a "sensible decision" about what will work for a client. "Rather than have 15 different catalogs, if we have simple standards that enable interaction, it makes it possible to go to a world where a lot of mundane, routine decisions are made by a computer program," he says. "That makes for more cost-efficientcy and saves time."

But before that can exist, the standards-writing must be done. For more information, contact Shapcott at the Center for Assistive Technology, Forbes Tower, Suite 3010, University of Pittsburgh Medical Center, 200 Lothrop St., Pittsburgh, PA 15213-2582; 412/647-1316; fax: 412/647-1322; E-mail: Shapcott@pitt.edu ■