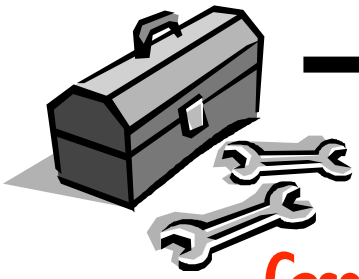
TAI NEWS

TRI-ANALYTICS, INC.

Spring 1999 Vol. 6, No. 2

Highlights

Case Matching Methodology
TAI Wins New Contract with the AHA
Backing Up Your Data
Y2K updates



Add Case Matching Methodology to Your CQI Toolkit

There is a growing need for more cost effective and accurate methods for identifying opportunities to improve trauma patient care or outcomes. Preventable deaths are costly and require significant time and expertise. ***Case matching methodology***, when used with a substantial statewide database, could add significant value to institutional CQI programs by identifying patients worthy of peer review which may have been overlooked by more traditional methods such as audit filters.

Recently, the ability of audit filters to accurately identify patients worthy of peer review has been seriously questioned. Scores such as the ISS, Revised Trauma Score (RTS), TRISS, and ASCOT which are used to quantitate injury severity, are often used for CQI activities. However, these methods often focus on predictions and evaluations of patient survival. Other factors such as the occurrence of complications and ICU and hospital lengths of stay (LOS), have not been evaluated despite their importance in the current cost-conscious healthcare environment. Case matching methodology is used to identify patients for focused peer review of unexpected outcomes of deaths, complications, and prolonged ICU or hospital LOS. Certain criteria are used to find matching patients: similar etiology (cause of injury), age group, physiology and intubation status on ED admission, pre-existing conditions (high risk, moderate risk, or low risk group), and pattern and severity of anatomic injuries using Anatomic Profile components. Furthermore, only patients from a different institution can be used as matches.

In a study funded by the Pennsylvania Trauma Systems Foundation to evaluate the possible importance of other data such as complications or LOS, trauma surgeons from the Medical College of Pennsylvania (MCP) Hahnemann School of Medicine and researchers from TAI applied case matching methodology to identify MCP patients who might be worthy of peer review because of unexpected survival/death, unexpectedly long ICU or hospital LOS, or the occurrence of unexpected complications. For each MCP patient studied, matching patients from the Pennsylvania Trauma Outcome Study (PTOS) database were sought who were not treated at MCP. The outcomes of an MCP patient were compared to those of its matching PTOS patients.

Five unexpected deaths were identified by case matching. Peer review of these cases determined

continued on page 2...

Tri-Analytics Awarded New National Contract

Tri-Analytics has been selected by the American Heart Association to design and manage the new National Registry of Cardiopulmonary Resuscitation (NRCPR). NRCPR has been developed by experts in Emergency Medicine and Cardiology to collect data from in-hospital resuscitation events.

Complying with new JCAHO standards for monitoring performance in resuscitation events is only one of the benefits of participation. Standardized, national information will encourage performance comparisons between similarly sized institutions with similar patient populations and allow benchmarking against national norms. Data will also be used in research projects. The NRCPR reporting system is based on the Utstein-style guidelines for reporting in-hospital resuscitation.

The AHA has already completed a pilot program for data submission; many of the necessary

Regional Training Courses This Quarter

Collector training courses are offered throughout the year in various regions. Individual training courses are also available at TAI. Call us for details!

To sign up for a training session, contact Saron Mack at 410-879-6767 ext. 119, fax: 410-838-1148 or smack@trianalytics.com.

Most training courses have registration deadlines. Be sure to sign up as soon as possible to guarantee your spot!

California

May 11 - 12
California Collector Trauma Registry software training in Riverside, CA. Contact TAI to sign-up.

Individual Training

TAI offers one-on-one training at Tri-Analytics, Inc. in Bel Air, MD to meet your individual training needs. Contact TAI for available dates and prices.

Other Sessions TBA

Next quarter has several training sessions. Watch for updated information in the next newsletter.

Join Us For Our 5th Annual TAI User Conference!

Our thanks to those of you who signed up early for TAI's 1999 User Conference! Signing up early lets us lock in lower prices from our suppliers, allowing us to charge the lowest possible fees. *Deathtrap*, a special TAI evening event, hosted by members of TAI staff, is already "sold out!" If you haven't already signed up for the conference, we encourage you to join us in our hometown for an exciting time of learning, networking, and fun!

Lecture topics include: Integrating Collector with Other Databases, ACS Site Surveys, Pre-hospital Collector and its applications, Outpatient Trauma Registries, Research, and more!

Don't miss the excitement! Get the 1999 TAI User Conference into your budget! Call 800-706-0337, email info@trianalytics.com, or check out www.trianalytics.com for more information. **We look forward to seeing you there!**

Methodology

continued from page 1

that each death was not preventable. Fourteen MCP patients were identified as having unexpected complications but only four had undergone concurrent peer review. Retrospective peer review identified 2 preventable and 7 potentially preventable complications. Thirty-five MCP patients had prolonged stays in hospital and 24 had prolonged stays in ICU. Peer review identified 17 patients with hospital LOS prolonged by disposition issues, 5 cases with extended ICU LOS related to occurrence of complications, and 6 cases with ICU LOS prolonged by disposition issues.

Retrospective case matching identifies patients for peer review that were not identified by the concurrent process. However, it also has the potential to concurrently estimate expected stays in hospital and ICU and the likely occurrence of preventable complications. This methodology may be applied to identify potential centers of excellence in the care of patients with selected type of injury. Case matching methodology is currently being used to revise discharge planning policy to decrease extended ICU and hospital LOS. Other applications are being pursued.

The associated paper was presented at the 1999 Meeting of the Eastern Association for the Surgery of Trauma: *Case Matching Methodology as an Adjunct to Trauma Performance Improvement for Evaluating Length of Stay and Complications.* Contributing authors were Stanley Trooskin, MD and Thomas Santora, MD from MCP; Wayne Copes, PhD and Lawrence Bain, from TAI.

TAI Wins AHA Contract

continued from page 1

data elements are in place, and beta testing will start in early June. Data submission will begin in the fall and the first reports will be available in the first quarter of 2000. Data can be submitted using convenient AHA software or a faxable form. TAI is exploring security issues involved in making reports available via the Internet; institutions without Internet access may receive their reports on diskette.

Whether your organization wants to examine QI issues internally, meet the new JCAHO mandates, or simply needs reliable data to improve resuscitation procedures, the AHA NRCPR registry is designed to meet those needs in an affordable way. To find out more about how your institution can sign up, please phone the AHA Data Line at 888-820-DATA for pricing or more information.

TAI Project Updates

Project IMPACT

Project IMPACT released its ODBC Companion Database Loader software last month in response to some participants' request to easily use third-party products (e.g. Microsoft (MS) Access 97) on their Project IMPACT data. The Loader creates an ODBC-compliant MS Access 97 database from Project IMPACT data, which can be directly accessed by any ODBC-compliant commercial product. Project IMPACT looks forward to hearing how participants utilize this additional tool.

Dear Tech Nerd:

Q: How do I back up my data?

A: There are many effective tools used to back up data on a computer. The most common are tape backups, zip/jazz drives, floppy disks, or copying files to a network drive.

We strongly recommend that you perform a daily or at least weekly backup of your data. If anything should happen to your computer or the network it is on, you may need to restore your data from a backup. Collector software users should backup the CDB, USR, and SYS directories to save their data (CDB), queries/reports (USR), and menu/configuration changes (SYS).

Tape Backups

Tape backups are usually reliable and easy to use. However, retrieving data from a tape backup can be time-consuming and difficult depending on the system. Check with your systems administrator to determine if a tape backup is available for your computer.

Zip/Jazz Drives

Zip and Jazz Drives have become increasingly popular in the last year. They are easy to use, cost-effective, and extremely transportable methods of backing up data. Each disk can hold anywhere between 100 to 1,000 MB of data (depending on the brand/type). To back up information on these disks, you will need a Zip or Jazz drive and the appropriate type of disk(s).

To back up data, open Windows Explorer or My Computer, highlight the files you wish to back up (to select multiple files, hold down the CTRL key while clicking with the mouse), copy the files (Edit | Copy), click on the Zip or Jazz drive, and paste them (Edit | Paste). To retrieve the data, simply reverse the process. Note: you can also click and use "drag & drop" to copy the files from your computer to the disk.

Floppy Disks

Floppy disks are simple to use but are limited by the amount of information they can store. Each floppy disk can hold a maximum of 1.44 MB of data. If your data file is larger than 1.44 MB, it will not fit on the floppy disk. To back up data on a floppy disk, follow the instructions for Zip drives (see above) but copy the data files to the floppy drive instead.

If your data files are too large to fit on one disk, you will need to use a compression tool such as **PKZIP** (DOS or Windows), **WinZip,** or **Backup** to allow the data to be stored on multiple disks. PKZIP is available for free as shareware, WinZip can be purchased for about $30, and Backup is included on most Windows 95/98/NT machines (Start | Programs | Accessories | System Tools). We strongly recommend using PKZIP or WinZip due to superior compression and recovery abilities. Contact your systems administrator and check out **http://www.pkware.com** and **http://www.winzip.com** for more details.

Network

If your computer is on a network, you can copy your data files from your computer to a personal directory on the network that is backed up nightly. This method is fairly easy to use, but data retrieval will depend on your IS department's willingness to quickly provide needed data files from a backup tape. Contact your systems administrator for details on how to copy data from your computer to a network drive. Since many IS departments are overloaded with pressing issues (such as Y2K readiness), we recommend that you have the ability to back up and restore your data files without their assistance using a different method of back up.

Any of the above methods will work for backing up your data. Choose the one that is easiest and most reliable for you. Whichever method you choose, don't let another day go by without backing up your data. Unsaved data lost, is lost forever.

If you have a question for the Tech Nerd, send it to:

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What's New?

Y2K Progress Update

Y2K conversions continue at DI. These Collector systems are Y2K-compliant:

- ACC Trauma Registry (New Zealand)
- Auckland Trauma Registry (NZ)
- Corpus Trauma Registry (TX)
- Emanuel Trauma Registry (OR)
- Fort Worth Trauma Registry (TX)
- Maryland Trauma Registry
- Ontario Trauma Registry
- Standard Trauma Registry
- Standard Pennsylvania Trauma Registry
- Standard Texas Trauma Registry
- Swedish Trauma Registry
- Texas Children's Trauma Registry
- Texas Methodist Trauma Registry
- Texas RAC Trauma Registry
- USCTR Trauma Registry (SC)
- Waikato Trauma Registry (NZ)

To be released in April:

- Alberta Trauma Registry
- Desert Trauma Registry (CA)
- Loma Linda Trauma Registry (CA)
- Newfoundland Trauma Registry
- Washington Trauma Registry (WA)
- Washington EMS Registry (WA)

To be released in May:

- Missouri Trauma Registry
- St. Luke's Trauma Registry (MO)

The rest of the Collector Y2K-compliant Windows versions will be released in June. If you have a **DOS** version of the COLLECTOR Trauma or EMS Registry software, it **will not be Y2K-compliant**! Upgrade to the Windows version to receive the Y2K-compliant version of your software.

For more information, call Andy Copes at 800-706-0337 or email: acopes@trianalytics.com. Contact DI at 800-344-3668 or email: support@dicorp.com

TAI Web Site Revision

TAI will be upgrading **www.trianalytics.com** over the next few months. We would like to include informative links to other sites as well as links to your hospital's web site. If you have any ideas or suggestions for improving the site or new areas to include, email smack@trianalytics.com. We'd love to have your valuable input!

Change of Name/Address?

Please phone 800-706-0337 or email: newsletter@trianalytics.com Thank you for your help!

Ideas & Suggestions

If there are topics you'd like to have addressed in future newsletters, please contact TAI at 800-706-0337 or email us at newsletter@trianalytics.com.