

# **FACTS ABOUT JOINING THE NORTH CAROLINA TRAUMA REGISTRY August 2005**

Hospitals join the North Carolina trauma registry and become involved in the registry for a variety of reasons. Some specific benefits of the registry are as follows:

- Reference data for benchmarking
- Data for quality review processes
- Data and support for research projects
- Assistance with analyzing data for research projects
- Forum for discussing trauma care
- Potential savings and improved care (i.e., elimination of the pediatric trauma score; reduction of operative treatment of blunt splenic injuries, etc.)
- Identification of the frequency and outcomes of traumatic injuries
- Identification of referral patterns, ages & demographics of injured patients
- Information to aid in the triage of trauma patients
- Information for injury prevention efforts
- Enhanced educational offerings for trauma personnel

The North Carolina Office of Emergency Medical Services (OEMS) has statutory responsibility for the maintenance of the statewide trauma system, which includes the trauma registry. In this capacity, OEMS oversees compliance with the state rules requiring hospitals seeking initial state trauma center designation to participate in the registry at least six months prior to an anticipated site visit date, and continuously once designated. A hospital's trauma registry is vital for the state's use in conducting thorough site visits for initial or renewal designations.

North Carolina's trauma registry has been in operation since late 1987, with the state requiring every trauma center to record data on its trauma patients through utilization of the current state approved software. Originally, North Carolina used a customized software package but, in 1994, migrated to the NTRACS® software originally offered through the American College of Surgeons. As of May 2005, this software is now supported by Digital Innovations, Inc. (DI) whose web site is <http://www.dicorp.com>.

Today our NTRACS® users have the ability to enter over 250 data points on each trauma patient and, currently, 15 hospitals (including all eleven trauma centers) use this software. But for many of our non trauma centers, it is unrealistic to think they would have the staff or time to enter this degree of data on each of their trauma patients, many of whom are less severely injured than patients transferred to the trauma centers. Therefore, by the late '90's, OEMS began to search for a way to capture at least key data points on trauma patients from non-participating hospitals (about 117). By 2003, OEMS began to offer, free of charge, a mechanism to capture a smaller version of the larger trauma registry from these hospitals. With approximately 35 datapoints, this mechanism (called ISSAC) of the registry is now in use by 17 hospitals. More hospitals are being added each month. The state now has over 185,000 patients (just since 1994) entered via NTRACS® and over 200,000 submitted through the ISSAC mechanism.

To assist with the registry, OEMS currently subcontracts with UNC - Chapel Hill to serve as the primary data collection agency. In this capacity, UNC also assists with research endeavors, processes trauma registry reports, provides some in-state training, recruits new hospitals to the registry, etc. OEMS also contracts with DI for day-to-day technical support for any hospital in North Carolina using NRACS®.

Currently, OEMS maintains an umbrella licensing agreement with DI that has been negotiated through 2007. DI charges a set participation fee each year that allows any hospital in North Carolina the right to utilize the NTRACS® software. The fee is partially paid by OEMS, with the remaining amount being evenly divided among those hospitals that are on the registry in January of each year. The more hospitals on the registry, the less cost to each hospital each year. In each of the last ten years, the individual

hospitals have paid a participant fee that has been consistently around \$1,200 to \$1,300.

However, each hospital needs to be aware of other costs it might incur as a participant in the registry. Paying the salary of a trauma registrar(s) is a somewhat obvious expense, but participation also requires the following:

(1) Additional hardware and software expenses: These are listed on the attached sheet or on the trauma registry section of the OEMS web site at [www.ncems.org](http://www.ncems.org). Some of these expenses may not apply if the hospital already has these resources in-house. But a few things should be kept in mind that might increase costs. First, the requirements are largely based upon a single user version (which does not include the additional costs a hospital with burn beds might need for the burn software). A multi-user version of NTRACS® is also available, and you will want to discuss your individual needs with DI. The "multi-user" version provides for the concurrent use of data entry and reporting. Second, since DI has just recently taken over support for NTRACS®, it is likely that some of DI's new product modules will not be included in the standard set-up provided via the original contract with the state. While the state will probably consider incorporating one or more of the new modules (not yet priced or available at the date of this writing) into future contracts, some of the module costs may fall to the hospital.

(2) Training Costs. Hospitals joining the registry are advised to have appropriate staff (usually the trauma registrar and/or trauma nurse coordinator) participate in an initial NTRACS® training class. This can be accomplished in a variety of ways: (a) by attending a free class at DI's offices in Maryland; (b) by partaking in a web-based training program (which has a connection cost associated with it); (c) by paying to have staff from DI conduct training on-site at your facility; or (d) by taking a class during DI's annual user's conference (usually held in Sept/Oct in various locations around the country).

For on-site training, the hospital (or hospitals that band together) pays a fee of \$500-1,000 per day, per DI staff member, and all travel and out-of-pocket expenses for the staff. Computer access would also have to be arranged. But for those opting to train at the DI offices in Maryland, there is often no fee for the training of an initial four people per facility (and up to two people per facility in subsequent years). Only expenses such as for transportation, meals and lodging would be additional costs. Training classes at DI's site can often be arranged with a few weeks advance notice and can consist of one or two days. Additional specifics on the above training options can be found on the DI web site under client services.

We should mention that taking advantage of an advanced report-writing class during the training is an option, but can be a bit overwhelming if this is the user's first orientation to the software. Often report-writing classes (conducted by DI or someone from the state's central data collection agency) are offered in-state at a relatively low cost since numerous hospitals can share the costs. OEMS can tell you if such classes are scheduled to take place any time soon. Below is a contact number for OEMS.

(3) The Annual Participation Fee: This is for upgrades, technical support, reports, etc. It also provides toll-free telephone support (via an 800 telephone number) to all registry users in the state. When modem support is necessary, DI will initiate the call to the site, if desired. Significant assistance (e.g., in the creation of custom reports) will be billed at \$75/hour.

(4) Meeting Expenses: In addition, a hospital's trauma registrar and trauma program manager/trauma nurse coordinator are encouraged to become active in the Trauma Registrar and Trauma System Leaders (Trauma Nurse Coordinator) meetings that meet quarterly (usually in High Point). Many also attend the State Trauma Advisory Council (STAC) meetings that are held the same day. Through these meetings, hospital staff can assist in the registry's development; take advantage of additional training sessions; obtain ongoing support with your hospital's trauma program and data collection; remain apprised of/participate in trauma research conducted from the registry database; and be actively involved in the development of the state's trauma system. Hospitals do not have to be actively participating on the registry before they begin attending these meetings. Please contact OEMS for details on dates and locations.

Trauma centers are required (by state rules) to send their trauma registry data to the state four times a year. Non trauma centers are also urged to do so. Confidentiality of any one hospital's data is of highest priority.

Data for research are never released in a manner to allow identification of any one hospital. While each hospital may conduct research from the aggregate database, specific procedures are followed to ensure confidentiality and validity of the data. Each year there is also a call for data on the national level and each hospital on the registry is asked to forward its data to the National Trauma Data Bank (NTDB™).

Please feel free to contact OEMS (see contact person below) with any questions you might have regarding trauma registry or trauma system participation. If you desire, the DI office will forward specific information on its most current NTRACS® software. If, after reviewing the materials, you wish to proceed with an order for the registry software simply contact OEMS (see contact person below) for an invoice. DI will forward the software once the check is received by OEMS.

Should you decide to proceed with registry participation, please be sure to advise the contact person listed below as soon as possible so OEMS can begin to forward all trauma registry meeting notices to you. OEMS will also be happy to provide a list of the research endeavors to-date and a North Carolina trauma contact list since many of the individuals on the list will be of assistance as you proceed with your trauma program plans. Many of these same items can be found on OEMS' very active web site for the trauma program at <http://www.ncems.org/trauma.htm> and for the state trauma registry at [http://www.ncems.org/trauma/trauma\\_registry.htm](http://www.ncems.org/trauma/trauma_registry.htm). If a hospital desires, OEMS will also be happy to contact the trauma registrar group to identify a seasoned trauma registrar "mentor," free of charge, to assist your registrar. The state's trauma registry group is very active and maintains a web site at <http://www.nctrauma.org> that can also be accessed as a link at the OEMS trauma registry web site.

We hope this information has been of assistance to you and look forward to working with you in the future.

**OEMS CONTACT PERSON:**

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