

Neurophysiology Research and Education Consortium Database

The Neurophysiology Research and Education Consortium (NREC) is a non-profit corporation that is primarily interested in improving the field of intra-operative neurophysiologic monitoring through collection of multicenter outcomes data. The NREC has worked for the last 2 years to create a HIPAA compliant website that can be used to collect data regarding intra-operative neurophysiologic monitoring. This site is now ready for data entry.

The creation of a multicenter outcomes database is a very important step in the development of the field of intra-operative neurophysiologic monitoring as it was for the field of cardiac surgery (which created the Society of Thoracic Surgeons database many years ago). Since complications of surgeries such as the correction of scoliosis are rare but devastating, only in the study of large amounts of information from many different centers can we begin to objectively prove the value of intra-operative neurophysiologic monitoring.

Why Should I Participate?

There are many benefits to participation in the NREC process. First, the field of IONM as a whole will benefit from the information that the NREC will produce. The NREC will generate information on the interpretative criteria used by different practitioners along with the incidence of significant intra-operative changes in the recorded neurophysiologic signals. This will lead to information about how the interpretative criteria influence IONM. It will also provide information on the frequency with which changes are seen in various monitored variables in different surgical procedures. Collecting outcomes information may, especially if significant data on cases where monitoring was aborted is entered, provide information on the overall utility of various monitoring modalities. All of this information will be of vital importance as a tool to support the use of IONM to insurance companies, hospitals and surgeons. As information on the skills of the practitioner involved in the case are acquired as well, information on the how the credentials and education of practitioners affect the surgical outcome will be also available. This will be important not only to practitioners themselves but to educational programs in the field. The data will be made available to the public through publications at regular intervals as the size of the database grows to significant numbers to analyze statistics and trends.

Second, individuals who submit more than 50 cases in a year may request that the NREC provide them with comparisons between their practice and that of the average practitioner in the NREC database. This information will be extremely valuable for confidential internal quality assessment/quality improvement purposes, although no information derived from the NREC can be released for publication in any form whatsoever without prior written approval of the NREC.

Third, individuals who submit more than 50 cases in a year may submit a request to add or modify questions used in the study.

How Do I Enter Data?

In order to enter data, first find out from your local institutional review board (IRB) whether they will require an application prior to entering data. If you need to submit such an application, contact Mark Stecker (mmstecker@gmail.com) and the NREC can provide you with information about our approval status with the University of Texas and can provide more details about the database. If IRB approval is required, typically only expedited approval would be required, however; this decision is made by the local IRB.

The address of the website is <https://www.nrec.info> . If you are new to the site, you may create a user name and password. It is important that as a part of that registration process, you enter information about the way that you practice IONM and that you enter contact information. The contact information CANNOT be seen by any of the investigators and can only be seen by a third party who cannot see any of the patient data. This third party can be contacted by the investigators to verify data integrity with the person who entered the data. No patient data should ever be given to any representative of the NREC by email or by voice, only by entry onto the secure database. The investigators will regularly check the database for problems and completeness.

As part of the registration questionnaire, you must acknowledge that you have read and understand the information in this document.

Is the Data I Enter Secure?

Protecting patient information and preventing information about specific hospitals and practitioners from being inadvertently released is of vital importance to the NREC process.

The NREC data collection process has been approved by the University of Texas at Dallas Institutional Review Board and great care has been taken to minimize the possibility of releasing any identified confidential patient information. First, the site is accessible only through a secure, encrypted, hypertext transfer protocol (“https”) that is commonly used when critical personal information such as credit card information is entered in order to prevent inadvertently revealing the information sent to the website. Second the NREC web site and the NREC have undergone extensive evaluations by Digicert to obtain the extended validation certificate that turns the address bar green when connecting to the NREC site as an additional indication of security. Always make sure that you do see the address bar turn green prior to entering any data.

Third, the only patient identifier entered is a code number known only to the data collector. The investigators cannot see this identifier and as an additional level of security, the investigators cannot see or access either the name of the person who collected and entered the data, or any of their contact information. A third party who is not one of the investigators can access the contact information and the patient identifier but cannot access any of the patient data. This third party called the “honest broker”, may be contacted by the investigators when they note that data is incomplete or inconsistent so they can request that the data collector update or check information related to a patient associated with a given identifier. Thus, neither the investigators nor the third party can access

identified patient information. It is important to be aware of the fact that although the data collector may be contacted by the “honest broker” if the investigators note a problem with the entered data, the NREC will NEVER contact the data collector to obtain any information about a patient over the phone or by email. Data collectors MUST NOT communicate patient information to the NREC except through the web site.

When data from the NREC database are reported in publications, no specific information regarding the identity, affiliation, or location of the collector will be mentioned. However, data may be segregated by broad categories such as the experience, training and credentials of the data collector.

What If I Have Questions?

Please feel free to contact Mark Stecker (mmstecker@gmail.com) with any questions.