

Vermont Oxford Network
***eNICQ* Software Resource Kit**

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**Vermont Oxford Network
eNICQ Software Resource Kit
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Introduction

The **eNICQ** software provides a system for Vermont Oxford Network (VON) members to enter, store and submit electronic data for VON data forms. Available at no cost to VON members, **eNICQ** has been designed to simplify the tasks associated with submission of complete and accurate data for the VON data forms. The software provides utilities for error checking, status reporting, user access control, on-line help and secure upload of files to VON via the Internet.

Since release of the software in January 2004, the number of methods being used to employ eNICQ within hospital networks has increased substantially. Although a relatively simple application, some of the employment options for **eNICQ** may require IT technical support. The various options and employment considerations are discussed below. The purpose of this resource kit is to organize the available information about **eNICQ** use, capabilities and support for existing users and for members that are considering use of **eNICQ** at their center.

It should be noted that **the Vermont Oxford Network does not collect any personal identifiers or protected healthcare information**, as defined by the U.S. Health Insurance Portability and Accountability Act of 1996 (HIPAA). Although the software allows the center to collect personal identifier data for use at the center, none of these identifiers are exported to VON.

Comments or suggestions about this resource kit may be forwarded to the VON [eNICQ Coordinator](#).

**Vermont Oxford Network
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Internet Links to eNICQ Resources**

The following resources are publicly available on the Vermont Oxford Network web site.

eNICQ Features: <http://www.vtoxford.org/home.aspx?p=enicq/index.htm>

eNICQ Detailed Overview: <http://www.vtoxford.org/enicq/eNICQOverview.pdf>

eNICQ Online Help: http://www.vtoxford.org/enicq/help/enicq_guide.htm

eNICQ User's Guide:

http://www.vtoxford.org/enicq/eNICQ_Users_Guide.pdf

eNICQ Software Request Form:

<http://www.vtoxford.org/enicq/softwarerequestform.pdf>

eNICQ Upgrade Center:

<http://www.vtoxford.org/enicq/version.aspx>

VON Member Instructions for Submitting Electronic Data in 2005:

http://www.vtoxford.org/eds/eds_instructions_6_05.pdf

VON Manual of Operations for Infants Born in 2005:

<http://www.vtoxford.org/tools/2005manualwithlinks.pdf>

**Vermont Oxford Network
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eNICQ Support**

Support Staff:

[Nancy Morse](#): eNICQ Coordinator / EDS Coordinator
[Ted Kreider](#): eNICQ Technical Support / Programmer
[Dan Morris](#): eNICQ Programmer / Support Staff,
[Joe Carpenter](#): eNICQ Support Staff,

Obtaining Software:

Centers may obtain a [software request form](#) from the web and fax the completed form to the eNICQ Coordinator at the number on the form. Upon receipt of a valid request, the eNICQ Coordinator prepares a CD and sends it to the requestor at the center.

Centers with Microsoft Access 2000 or later versions already installed on their computer(s) where eNICQ will be used can download eNICQ from the web. The setup program installs the eNICQ software and includes the eNICQ User's Guide.

Obtaining Support:

Centers may submit support requests on-line by completing the eNICQ Software [Support Request Form](#). To send the form requires a valid [EDS password](#). Notifications of requests are sent to the eNICQ Coordinator and to eNICQ Technical Support. The goal is to substantively respond to support requests within four business hours.

**Vermont Oxford Network
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User Feedback**

User's of **eNICQ** software may report software problems or provide suggestions or recommendations in several ways:

- By contacting the [eNICQ Coordinator](#) directly. This is the usual method for reporting problems and for notifying VON of technical support requirements.
- By completing the [eNICQ Suggestion Form](#) on the VON web site. Suggestions submitted via the Internet are entered into a database, and the **eNICQ** support staff is notified.
- By responding to the annual survey of **eNICQ** User's. This survey is distributed in the fall of each year and the results considered prior to the VON annual meeting in December.
- By participating in the **eNICQ** Software User's Group Meeting, held in December of each year in conjunction with the VON annual meeting.

**Vermont Oxford Network
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Network Installations of eNICQ**

Although the current implementation of **eNICQ** was designed for use on a single computer, many hospitals are using the software on multiple workstations which are connected to a network. Appendix C of the [eNICQ User's Guide](#) explains how to install the software to accommodate use on multiple workstations. Some cautions associated with a network installation of **eNICQ** include:

- Special procedures must be followed during installation, as discussed in Appendix C.
- Only a single user can access the database at a time.
- **eNICQ** will only accommodate data for a single hospital. Users who process data for multiple hospitals should read page 94 of the User's Guide.

**Vermont Oxford Network
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Interfacing with Other Systems**

Users may want to move data from existing databases to **eNICQ** for a variety of reasons, including:

- When changing their VON data entry system to **eNICQ**. The **eNICQ** software provides an import utility which simplifies this data transfer. Procedures for importing data are discussed in the [User's Guide](#) on pages 18-20 and in Appendix A.
- To avoid double entry of data. Many hospitals are using software for maintaining patient data, which include some of the data items collected for the VON Database by **eNICQ**. To avoid double entry of the same data items, items in **eNICQ** can be automatically updated by other software. Developers implementing this approach may contact the [eNICQ support staff](#) if assistance is needed.

Interfacing in this way requires special precautions:

- All VON items collected must adhere to the definitions in chapter 8 of the VON [Manual of Operations](#). Users must be careful that the methods of data collection being used support this principle. If different criteria are applied for the items collected, data will not be comparable to other VON hospitals. It is important to only update the items in **eNICQ** which are defined as in the VON Manual.
- Since data are being maintained in two separate databases, users must be careful to keep the databases synchronized. If a change is made in **eNICQ**, for example, the change will not be reflected in the other database. In general, items which are available on the other system should only be added or modified on the other system. Items not available on the other system should only be added or modified in **eNICQ**. Deleted records must be deleted on both systems.

Vermont Oxford Network
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Using eNICQ with Group Data Centers

When states or groups of hospitals collect data for all their hospitals and forward the data in a combined file to VON, **eNICQ** can be used for data collection and error checking, but the normal method for exporting data must be modified. After creating the export file, the user must locate the export file on the computer and email the export file to the location designated by the group. There are issues to be considered, however.

- Personal identifiers are not included in the file exported by **eNICQ**. If personal identifiers are required by the group, a method must be created to extract these data from the **eNICQ** database and provide these to the data center.
- The group data center must provide facilities to receive the incoming files and extract the data.
- The group must coordinate with VON to provide a method of [data finalization](#) for each hospital.

**Vermont Oxford Network
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eNICQ and Annual Updates to the VON Database**

Changes to the Vermont Oxford Network Database are considered in the Spring of each year by the VON Database Advisory Committee. When data items are added to or removed from VON data collection forms, these changes are incorporated into an update to **eNICQ**. Although most changes made to **eNICQ** are made available as optional upgrades throughout the year, the version incorporating the annual update to the VON Database is a required update and should be installed by January 1st of the implementation year. Since some centers require substantial lead time for software upgrades, the target date for providing the annual update version of **eNICQ** is November 1st prior to implementation.

All updates to **eNICQ**, including the version implementing the annual update can be downloaded from the VON web site by visiting the [eNICQ Upgrade Center](#).

**Vermont Oxford Network
eNICQ Software Resource Kit
EDS Certification for eNICQ User's**

- A. **Initial Certification.** Each center must be certified in order to submit electronic data to VON. For **eNICQ** User's the process is simplified, with the following steps.
1. Complete an **eNICQ [Software Request Form](#)**. After this form is completed, the software and User's Guide will be sent to the requestor. The User's Guide includes installation instructions.
 2. Complete a **[Request for EDS Certification Form](#)**. After this form is completed, the requestor will be contacted to coordinate administrative details, including **[Start Birth Date](#)**, **[Start VON ID](#)**, **[EDS Password](#)** and, if submitting Expanded Data, the location of each **[NICU](#)** in the center where intensive care is provided to any eligible infant.
 3. After receiving the notification of EDS certification, complete the **eNICQ Center [Administration Screen](#)** using the information included in the notification. Completion of this screen is required before exporting data to VON.
- B. **Change of Database Certification.** If a center changes from submitting data only on VLBW infants (401 to 1500 grams or 22 to 29 weeks gestation) to the Expanded Database (including infants over 1500 grams) or from the Expanded Database to the VLBW Database, re-certification is required, including the following steps.
1. Complete a **[Request to Change Database Submission](#)** Form. After this form is completed, the requestor will be contacted to coordinate administrative details, including the dates of database submission change and the start and ending ID numbers. Note that centers may not choose the VLBW Database option for part of a birth year and the Expanded Database option for another part of the same birth year.
 2. After receiving the notification of the change of database certification, complete the **eNICQ Center [Administration Screen](#)** using the information included in the notification. Completion of certain items on this screen is required before the new database option will take effect.

**Vermont Oxford Network
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eNICQ Modules**

Although **eNICQ** was developed as a data entry and submission tool for VON Database items, it will also be useful for collecting data for quality improvement research. **eNICQ** “modules” will allow centers participating in QI projects to collect detailed data in specific clinical areas. The modules will be implemented as optional components of **eNICQ** which are activated in the **eNICQ** [Administration Screen](#). In 2005, work is ongoing to create modules for the following:

- Encephalopathy Registry
- Nutrition
- Obstetrics

Data collected in **eNICQ** modules will be exported to VON via the Internet using a method similar to that being used to export VON Database items. Data verification and analysis will be done by VON staff.

Vermont Oxford Network eNICQ Software Resource Kit Definitions

Administration Screen: An **eNICQ** form which must be completed while setting up the software. It includes information about the center and other items required for exporting data to VON.

The screenshot shows a window titled "Center Administration Screen" with a blue title bar and a close button. The window contains several tabs: "General", "Security", "Import Data", and "Version". The "General" tab is active, showing the following sections:

- Center Information:** Center Number: 9999, Center Name: Test Center, Starting Birth Date: 1/1/2002, Starting Network ID: 1.
- Medical Record ID:** Medical Record ID Mask: [] Optional.
- File Export:** Export File Directory: F:\Joe\export\, Encryption Password: abcd1234, Starting File Number: 1, Starting Export ID: 1, Starting Export Year: 2002. A checkbox "Disable Upload to Vermont Oxford" is checked.
- Expanded Data:** Submit Expanded Data: checked. Starting Birth Date: 1/1/2002, Starting ID: 1, Ending Birth Date: [], Ending ID: [].

On the right side of the window, there is a logo for Vermont Oxford Network (VON) and two vertical panels of buttons:

- Forms:** Patient Info, 28 Day, Discharge, Transfer, Supplemental.
- Actions:** Print Form, Print All Forms, Error Check, Delete Record, New Record, Patient Log, Menu, Exit, Help.

Data Finalization: Prior to preparing the annual Quality Management Report (QMR) for member centers, all submitted data must be complete and correct. The data finalization process provides timelines, reports and procedures for assuring data completeness and accuracy. [Data Finalization Guidelines](#) are published each year to inform centers of data finalization requirements. The **eNICQ** software facilitates this process by providing comprehensive error checking and real time reports of record status.

EDS Password: An electronic data submission (EDS) password is assigned to each center when the center is certified to submit electronic data. When **eNICQ** uploads files automatically to VON, the software includes the EDS password with the submission. The EDS Password is also used when submitting support requests.

Expanded Data: Centers submitting Expanded Data collect the additional data items on the Supplemental Data Form for all eligible infants, including those eligible for the VLBW Database, as well as eligible infants with birth weights over 1500 grams.

NICU: A Neonatal Intensive Care Unit is any location in the hospital in which newborn infants received continuous positive airway pressure (CPAP) or intermittent mandatory ventilation (IMV).

Start Birth Date: The beginning date of birth for electronic submission. Data for all eligible infants born on or after the Start Birth Date are submitted electronically.

Start VON ID: The beginning VON ID number for electronic submission. Data for all eligible infants with a VON ID number equal to or greater than the Start VON ID are submitted electronically.