



# NEWSLETTER

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## VERMONT OXFORD NETWORK 2002 ANNUAL MEETING

The Vermont Oxford Network 2002 Annual Meeting was held on Saturday, December 7, 2002 in Washington, DC. Over 450 physicians, nurses, neonatal nurse practitioners, respiratory therapists and other neonatal health care professionals from newborn intensive care units around the world were in attendance. The meeting truly reflects the multidisciplinary nature and international character of the Vermont Oxford Network.

### Tribute in Memory of Douglas K. Richardson, MD

The Vermont Oxford Network 2002 Annual Meeting opened with a moving tribute to Douglas K. Richardson, MD by his close friend and colleague, DeWayne Pursely, MD, Neonatologist-in-Chief at the Beth Israel and Deaconess Hospital in Boston, MA. Doug was a brilliant scientist, a respected teacher and mentor, a dedicated and compassionate clinician, a loving father and husband, and a truly fine human being. His tragic and untimely death at the age of 51 leaves a terrible void for his family and friends, and for all of us in the field of neonatology.

DeWayne recounted Doug's many accomplishments and gave personal insights into Doug's tremendous dedication to the patients and families he served. Doug Richardson was always ready to pitch-in and help those around him. In recognition of Doug's selfless dedication to his patients and their families, his students, colleagues, coworkers, and community, the Beth Israel Deaconess Medical Center has established the "Douglas K. Richardson How Can I Help You Award".

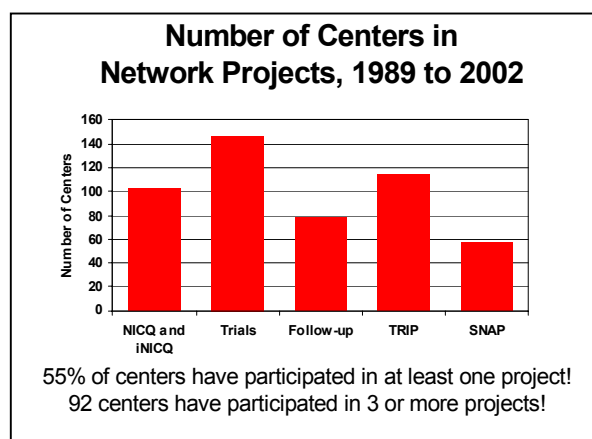
The Vermont Oxford Network 2002 Annual Meeting was dedicated to Doug's memory.

### Overview and Update

Jeffrey D. Horbar, MD presented an overview of the Network's mission, activities, and plans. The Vermont Oxford mission is to improve the quality and safety of medical care for newborn infants and their families through a coordinated program of research, education, and quality improvement. In

support of this mission, the Network maintains the Very Low Birth Weight Database which now enrolls over 35,000 infants 401 to 1500 grams each year and the Expanded Database for all NICU infants with a birth weight over 401 grams (started in 2000) which has an enrollment of over 13,000 infants from 63 of the approximately 400 participating Network centers.

Although data are absolutely necessary to achieve the Network mission, alone they are not enough. Therefore the Network conducts a broad range of studies and projects intended to discover new knowledge and translate that knowledge into routine practice. Dr. Horbar reported that since 1989, 55% of the approximately 400 member institutions, have participated in at least one Network project not including the Databases, and 92 member institutions have participated in 3 or more projects. This voluntary multidisciplinary participation in research and quality improvement distinguishes the field of neonatology and is the key to the Network's success.



The figure above shows the total number of centers in the Vermont Oxford Network that have participated in various Network projects other than the Databases from 1989 to 2002. One hundred and three centers have participated in Network quality improvement projects (NICQ or iNICQ); 146 centers have participated in at least one of the five completed or ongoing Network randomized controlled trials; 79 centers have participated in follow-up (Extremely Low Birth Weight Infant Follow-Up Projects). One hundred fourteen centers have

participated in the recently completed "TRIP" trial, a cluster randomized trial of a multifaceted intervention designed to promote evidence-based surfactant practice; and 58 centers are participating in the pilot project of the SNAP II severity score.

### **Trials and Follow-Up**

Roger F. Soll, MD and Jeanette Conner, PhD reviewed the Network's clinical trials program. They provided an update on the now completed trial of Early Surfactant Replacement for infants over 1500 grams and discussed the plans for an ambitious randomized trial to evaluate the effectiveness of three different delivery room management strategies in extremely low birth weight infants.

Charles Mercier, MD reviewed the progress and plans for long-term neurodevelopmental follow-up of infants in the Network database. He presented the health and developmental status of 1080 extremely low birth weight infants who survived and were evaluated at 2 years adjusted age.

Maureen Reilly, RRT, RRCP, briefly presented initial ideas for the Heat Loss Prevention Trial (HeLP). The purpose of this trial is to determine if a polyethylene occlusive plastic wrap applied immediately after delivery will reduce mortality and prevent heat loss.

### **Hospital Characteristics and Patient Outcomes**

The morning session concluded with a segment devoted to exploration of hospital factors and their influence on patient outcomes. Dr. Horbar introduced the session by describing the wide variation in hospital characteristics within the Network and outlining the importance of understanding how these factors may relate to the quality and safety of neonatal intensive care. Douglas Staiger, PhD, an Associate Professor of Economics at Dartmouth College, presented preliminary results of a study evaluating the association between the number of very low birth weight infants treated in a unit annually and patient outcomes at that unit. In many areas of clinical medicine, particularly cardiac and other complex surgeries, institutions with higher volumes of patients have been found to have better outcomes. The results for neonatal intensive care have not been as clear. Using data from the Vermont Oxford Network, Dr. Staiger, reported preliminary results showing that there was a statistically significant association between patient volume and outcome for very low birth weight infants. Units treating fewer than 40 to 60 very low birth weight infants each year appeared to have a higher mortality rate than units treating more than this number of infants. Although the results were statistically significant even after

adjusting for differences in case-mix among the units, volume only explained a small fraction of the observed variation in mortality. Within each volume category there was still a large variation in outcomes. There were small units with excellent outcomes and large units with poor outcomes.

Ciaran Phibbs, PhD, Associate Director of the Health Economics Resource Center at VA Medical Center in Menlo Park, CA and an authority in health services research in neonatology, discussed the current Leapfrog group standards for neonatal intensive care ([www.leapfrog.com](http://www.leapfrog.com)). The Leapfrog Group, a coalition of more than 100 public and private organizations that provide health care benefits to employees, was created to mobilize employer purchasing power to initiate breakthrough improvements in the safety of health care and to give consumers information to make more informed hospital choices. One of the Leapfrog standards for hospital referral includes delivery of infants under 1500 grams or 32 weeks gestation at a regional neonatal intensive care unit with an average daily census of 15 or more patients. Dr. Phibbs discussed the rationale for this standard.

Ann Stark, MD, from the Harvard Medical School, presented the proposed statement of the Committee on Fetus and Newborn of the American Academy of Pediatrics regarding uniform definitions of levels for neonatal care. She reviewed the current classification of basic, specialty and subspecialty units as defined in *Guidelines for Perinatal Care* (AAP 2002) and described the new classification being considered by the Committee which will build on that framework. The proposed basic category will include level 1 newborn nurseries. There will be two levels of specialty nurseries, level 2a units which care for physiologically immature, moderately ill or convalescing infants over 1500 grams or 32 weeks gestation, and level 2b units which can also provide brief periods of mechanical ventilation or CPAP for these infants. Level 3 newborn intensive care units (subspecialty) will be classified in three categories. Level 3a units can provide sustained life support (conventional ventilation) to infants over 1000 grams or 28 weeks gestation and may perform minor surgical procedures. Level 3b units can provide comprehensive care for infants under 1000 grams or less than 28 weeks gestation, can provide advanced life support such as HFOV and nitric oxide therapy, and have prompt on-site access to a full range of pediatric subspecialty and surgical consultants. Level 3c units can also provide ECMO and surgical repair of complex congenital heart defects. The adoption of a new uniform classification system has significant implications for the regional organization,

certification and regulation of neonatal care. It is important that our members understand the AAP plans and present their ideas to the appropriate decision makers.

Murray Pollack, MD, Professor of Pediatrics and Chair of Critical Care Medicine at Children's National Medical Center, Washington, DC, reviewed research findings regarding associations between the organizational structure and culture of intensive care units and the quality of care they provide. Using a set of constructs originally developed by Steven Shortell, which include measures of unit leadership, coordination, communication and conflict resolution, Dr. Pollack presented data suggesting that in the NICU these factors do make a difference to outcomes.

The final presentation in the morning session was by David Goodman, MD, MS, Associate Professor of Pediatrics from Dartmouth Medical School. He provided a regional perspective on neonatal intensive care based on his important work defining 246 neonatal intensive care regions within the United States. These are areas within which very low birth weight infants receive care with little "border crossing". He reported that neonatal intensive care capacity is distributed among these areas idiosyncratically (unrelated to risk), that beyond the second quintile of capacity having more neonatologists in an area is not associated with additional survival, and that bed capacity within neonatal intensive care regions makes no difference to survival. He ended with the following question: "If resources are limited, and perinatal health needs remain unmet, where should we encourage further growth in health care?" Dr. Goodman's research is helping to address this important question.

### **Translating Research into Practice**

The afternoon session began with a segment titled, Translating Research into Practice. John C. Sinclair, Professor of Pediatrics at McMaster, University of Texas and Yale and Editor of the Cochrane Neonatal Review Group, discussed the systematic reviews in the Cochrane Collaborative. He showed that of the randomized trials in neonatology included in a Cochrane review, 50% had a sample size of 53 subjects or less and 90% had a sample size of 248 or less. This suggests that most of the trials in neonatology are small and that collaborative Networks such as ours can contribute significantly to the body of evidence by conducting large multicenter randomized trials.

Michael Bracken, PhD, Professor of Epidemiology and Head of Chronic Disease Epidemiology, Yale

University, addressed the gaps between evidence and routine practice, or as he quoted, "There is many a slip 'twixt cup and lip." Dr. Bracken presented the ideal sequence of events: high quality RCT, rapid replication of the trial results, rapid high quality systematic review of the trials, rapid introduction of a high quality clinical practice guideline based on the evidence and finally rapid, widespread adoption of the practice. His illuminating discussion outlined the things that can go wrong in the real world which prevent this ideal sequence from occurring. He ended with a discussion of the paradoxical rapid adoption of repeated courses of antenatal steroids, another example of a gap between evidence and practice.

Jeffrey D. Horbar, MD discussed the Vermont Oxford Network cluster randomized trial, Evidence-Based Surfactant Therapy for Preterm Infants. This trial, funded by the Agency for Healthcare Research and Quality, evaluated a multifaceted quality improvement intervention designed to promote evidence-based surfactant therapy. The specific aims were to determine if the multifaceted intervention resulted in earlier surfactant use and decreased mortality and pneumothorax for 23 to 29 week infants. The study used a novel cluster randomized design whereby hospitals, rather than infants, were the units of randomization. One hundred and fourteen hospitals enrolled and were randomly assigned to an intervention or control group. Intervention hospitals received individualized feedback reports on surfactant practices from the Network database, were invited to send a neonatologist and nurse to a 2-day workshop where the evidence for surfactant use was reviewed and quality improvement training provided (56 of 57 teams attended), and had access to facilitated conference calls and to a project e-mail discussion list. Each intervention site set its own measurable aims. Effects on practices and outcomes for 23 to 29 week infants without birth defects born in 2001 were analyzed using the Network database, accounting for clustering of infants within hospitals. An abstract reporting the results of the trial has been submitted for presentation at the 2003 Pediatric Academic Societies Meeting.

### **Breakout Sessions**

This year we tried something new. Meeting attendees pre-registered for one in a series of simultaneous breakout sessions. These sessions were designed to allow extended discussion and interaction among the members and meeting faculty. The following sessions were held:

*Delivery Room Management Trial:*

Roger F. Soll, MD and Jeanette Conner, PhD

*Meet the Database Advisory Committee:*

Meena LaCorte, MD and Committee

*SNAP II Pilot Study:* John Zupancic, MD, ScD

*Leapfrog Standards for NICUs:* Ciaran Phibbs, PhD

*International Members:*

Jeffrey D. Horbar, MD and Jerold F. Lucey, MD

We would greatly appreciate your comments regarding these breakout sessions. Your feedback will assist us as we plan next year's program.

### Open Discussion

The final segment of the day was an open discussion period for the members and Network Directors (Drs. Horbar, Soll and Lucey) to engage in dialogue. As always, a variety of viewpoints were expressed and the members offered a number of excellent suggestions.

We would like to extend our sincere thanks to everyone who attended the meeting for your insightful questions and ideas and to the excellent speakers for their informative and thought provoking presentations.

Please let us know your ideas for the 2003 Network Annual Meeting to be held in Washington, DC on Saturday, December 6, 2003. J Horbar

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## 3<sup>RD</sup> ANNUAL QUALITY CONGRESS FOR NEONATOLOGY

This year's Congress held in Washington, DC on December 8, 2002 focused on the theme, **Team Learning for Quality and Safety**. Attended by 500 health professionals from NICUs around the world, the Congress included a morning of plenary presentations with smaller group breakout sessions and a poster symposium in the afternoon.

Richard Bohmer, MD, from the Harvard Business School addressed "Speeding Up Team Learning". He described research he and colleague, Amy Edmundson, have been doing to understand the factors that influence a team's ability to rapidly take up innovation. Their work is summarized in the Harvard Business Review (Edmundson AC, Bohmer R, Pisano GP. Speeding Up Team Learning, HBR October 2001):

"The authors studied how surgical teams at 16 major medical centers implemented a difficult new procedure for performing cardiac surgery. The setting was ideal for rigorously focusing on how teams learn

and why some learn faster than others. The authors found that the most successful teams had leaders who actively managed the groups' learning efforts. Teams that most successfully implemented the new technology shared three essential characteristics. They were designed for learning; their leaders framed the challenge so that team members were highly motivated to learn; and an environment of psychological safety fostered communication and innovation. The finding that teams learn more quickly if they are explicitly managed for learning poses a challenge in many areas of business."

and I would add in NICUs as well!

Brian Hazelhurst, PhD, a cognitive anthropologist and medical informatics researcher at the Kaiser Permanente Center for Health Research discussed "How Teams Think: Distributed Cognition in the NICU". Brian did his doctoral studies with Edwin Hutchins, a pioneer in the field of distributed or group cognition (Hutchins E. Cognition in the Wild, MIT Press, 1995). Hutchin's book is based on a study of a navigational team aboard a coast guard ship. He describes:

"This book is an attempt to put cognition back into the social and cultural world. In doing this I hope to show that human cognition is not just influenced by culture and society, but that it is in a very fundamental sense a cultural and social process. To do this I will move the boundaries of the cognitive unit of analysis out beyond the skin of the individual person and treat the navigation team as a cognitive and computational system."

Brian has taken these ideas and applied them in his research to distributed cognitive tasks in the medical setting. His presentation at the Congress was an attempt to begin understanding the NICU team as a cognitive and computational system.

MK Key, PhD, an organizational management specialist and author (Deal TE, Key M. Corporate Celebrations, Berrett-Koehler, 1998) presented an informative and highly entertaining exploration of the role of celebration in the workplace. In her presentation titled Celebration: Reviving Team Spirit at Work, MK used a series of video clips showing different types of celebrations in a wide variety of work settings which provided the Congress with a wealth of ideas that can be applied in the NICU to revitalize team spirit.

The final presentation of the morning by Jeffrey D. Horbar, MD, described the work that the Vermont Oxford Network is doing to improve the quality and safety of NICU care. He described the NICQ Improvement Collaboratives, the new iNICQ Internet

based collaborative and described the voluntary anonymous error reporting system developed by the Vermont Oxford Network and available to Collaborative participants through the improvement website, NICQ.org. With the support of the Agency for Healthcare Research and Quality and the Center for Disease Control, the Network is working to expand its improvement efforts and truly become the "Vermont Oxford Improvement Network". He described the goal of having multidisciplinary improvement teams in place at several hundred member NICUs, working together to apply the 4 key habits (change, evidence-based practice, systems thinking and collaborative learning) to improve the quality and safety of medical care for newborn infants and their families.

The theme of the morning, Team Learning for Quality and Safety, reinforced the multidisciplinary team nature of NICU care. By focusing on how teams learn, think, build team spirit, and apply the key habits for improvement in their daily work, the Congress hopefully will encourage participants to assess and strengthen their own NICU teams.

The afternoon included a series of smaller group breakout sessions:

*The Habit for Change: Rapid Cycle Improvement*  
by Paul Plsek

*Patient Safety in The NICU* by Gautham Suresh  
*Potentially Better Staffing Practices*  
by Barbara Bauman and Elaine Hartmann

*The Habit for Evidence-Based Practice*  
by Jack Sinclair and Michael Bracken

*Improving Team Performance* by MK Key

The Congress ended with a poster symposium in which 48 multidisciplinary teams from NICUs in the NICQ 2002 Improvement Collaborative presented case studies of actual improvements in quality and safety from their NICUs. Thank you to all of the teams! J Horbar

We are now preparing the agenda for the 4<sup>th</sup> Annual Quality Congress for Neonatology to be held on Sunday, December 7, 2003. Please let us know if you have suggestions for the program.

**RESERVE THESE DATES!**

**2003 Annual Meeting and  
4<sup>th</sup> Annual Quality Congress in Neonatology  
December 6 and 7, 2003**

**NIC/Q 2000 QI SUPPLEMENT TO BE PUBLISHED  
ON-LINE IN *PEDIATRICS* APRIL 2003!**

**"Evidence-Based Quality Improvement in Neonatal and Perinatal Medicine: The NIC/Q 2000 Experience"** is a collection of original articles commissioned by the Vermont Oxford Network. It is the second in a series of electronic supplements that began in January 1999 with the electronic supplement in Pediatrics entitled "Evidence-Based Quality Improvement in Neonatal and Perinatal Medicine" found on the web at:

[www.pediatrics.org/content/vol103/issue1/index.shtml#SUPPLE1](http://www.pediatrics.org/content/vol103/issue1/index.shtml#SUPPLE1). The premise of this series is that the quality, safety and cost of medical care for newborn infants and their families can be dramatically improved using methods of modern quality improvement coupled with the evidence-based perspective of clinical science.

The current collection presents the work of the NIC/Q 2000 Evidence-Based Quality Improvement Collaborative for Neonatology. This collaborative, sponsored by the Vermont Oxford Network, was comprised of multidisciplinary teams from thirty-four neonatal intensive care units across the United States. These teams worked intensively together from May 1998 through October 2001 under the guidance of an expert faculty and staff to identify, test and implement improvements in quality and safety in a broad range of clinical, operational, and organizational domains of neonatal intensive care. Their work was based on four key habits for clinical improvement: the habit for change, the habit for evidence-based practice, the habit for systems thinking and the habit for collaborative learning. The supplement includes detailed articles organized around the six focus-group topic areas chosen by the participating centers: chronic lung disease and lung injury, family-centered care, neonatal nutrition, multidisciplinary teamwork, brain injury, and nosocomial infection.

The articles in this collection provide one of the most detailed descriptions published to date on how a multi-institutional improvement collaborative actually functions. We believe, that it will be of interest not only to health professionals in neonatal intensive care, but to all professionals with an interest in collaborative quality improvement.

Congratulations to all NIC/Q 2000 Collaborative participants on a job well done!  
Look for the supplement in the April 2003 issue of *Pediatrics* on-line at [www.pediatrics.org](http://www.pediatrics.org). Printed copies are available upon request from Kathy Leahy ([Kathy@vtxford.org](mailto:Kathy@vtxford.org)) for \$49.95. K Leahy

## **iNICQ SERIES OF WEB CONFERENCES ON IMPROVEMENT AND SAFETY A SUCCESS**

The Vermont Oxford Network is pleased to report that multidisciplinary teams comprised of nearly 1000 individuals from 63 neonatal intensive care units in North America and around the world are currently participating in the first iNICQ Internet based improvement collaborative. The collaborative includes a series of 4 interactive web conferences and access to a dedicated e-mail discussion list. Each web conference focuses on a critical topic in quality improvement and safety directly tailored to the NICU environment. Presented by nationally recognized experts in health care improvement and building on the learning and materials from the Network's successful NIC/Q Quality Improvement Collaborative, each web conference provides formal teaching in improvement techniques and an opportunity for interactive discussion. Prior to each conference, participating teams are provided with materials and prework assignments designed to prepare the team for action.

### **Reducing Nosocomial Infection**

October 16, 2002: Participants received an overview of the change model, learned strategies for reducing fungal infection in the neonate as well as potentially better practices aimed at reducing nosocomial infection. Among the presenters were infectious disease specialist and authority on nosocomial infection, Dr. Donald Goldmann from Children's Hospital Boston; Betsi Anderson, neonatal nurse and ICN Project Coordinator at Children's Mercy Hospital in Kansas City, MO; and Dr. Richard Powers, Associate Neonatologist and Medical Director of Quality Improvement at Children's Hospital and Research Center at Oakland, CA.

### **Improving Nutrition And Growth**

December 18, 2002: Participants discussed aims and measurement in a model for effecting change and discussed potentially better practices aimed at improving nutrition and growth in the neonate. Among the presenters were Dr. Gautham Suresh, Assistant Professor and Neonatologist at Vermont Children's Hospital at Fletcher Allen Healthcare, and Barbara Kuzma-O'Reilly, a neonatal nutritionist for Mercy Children's Hospital at St. Vincent Mercy Medical Center.

### **Bringing About Change in Your NICU**

January 30, 2003: Participants discussed the Habit for Change as a model for bringing about change as well as learning to understand the barriers to change, and identifying strategies to overcome those barriers. This conference was presented by Paul Plsek, an internationally known authority on quality

improvement in health care as well as a noted lecturer, consultant, and author.

### **Providing Family Centered Care**

February 18, 2003: Participants will learn about potentially better practices in providing family-centered care in the NICU, as well as the process of creating a sequence of Plan Do Study Act cycles for change. Among the presenters will be William Edwards, Pediatrician, Neonatologist, and Associate Professor of Pediatrics at the Dartmouth Medical School; Marie Abraham, formerly a policy and program specialist for the Institute for Family Centered Care in Bethesda, MD; Deb Sims Neonatal nurse and Clinical Supervisor at Children's Hospital at Providence Alaska, Anchorage, AK; and Tim Warren from Portland, Oregon, parent of a NICU graduate.

In addition to the 4 web conferences, participants received access to a dedicated list serve, free CME, Contact Hours and CRCE Credits and the "Vermont Oxford Network Tools For Improvement Series": *Reducing Nosocomial Infection, Nutrition Practices To Promote Growth and Enhancing Family Centered Care.*

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## **iNICQ SAFETY COLLABORATIVE COMING SOON**

The Vermont Oxford Network is pleased to announce the second in a series of Internet-based improvement collaboratives sponsored by the Vermont Oxford Network under the direction of Jeffrey D. Horbar, MD and Paul E. Plsek, MS beginning April 2003. The first iNICQ series has been very successful with close to 1000 individuals from 63 neonatal intensive care units in North America and around the world participating. Comments from participating centers have been very positive:

"Once again, we found yesterday's web conference to be very helpful and plan to use the information in our NICU Quality Council."

"Thank you for providing this information in the comfort and convenience of our own facilities."

We hope your center will be able to join us as we begin the iNICQ Safety Collaborative!

Each iNICQ web conference will focus on *Improving Patient Safety in Your NICU*. The collaborative will include a series of 5 interactive web conferences and access to an e-mail discussion list for participants and faculty only. Each web conference will focus on an important topic in patient safety designed for the NICU environment. This second series will be presented by nationally recognized experts in health

care improvement, will build on the learning and materials from the Network's successful NIC/Q Quality Improvement Collaborative, and will provide formal teaching and opportunities for interactive discussions. Prior to each conference participating teams will be provided with the Vermont Oxford Network's "Tools for Improvement Series" *Patient Safety* as well as with prework assignments designed to prepare the team for action.

The cost for institutional participation in the iNICQ Safety Collaborative is \$1195 if registered prior to March 1, 2003 and \$1495 for those registrations received after the priority deadline. One speakerphone and a single computer station will allow each center to have as many participants involved as are interested. The conferences will be recorded live and then available for later viewing on the web. In this way everyone at your center, even those not able to attend the live conference, will have access to the learning opportunities. In addition to the 5 web conferences, participants will receive access to a dedicated listserv and free CME, Contact Hour and CRCE Credits.

The topic areas of the iNICQ Safety Collaborative are as follows:

**Introduction: Collaborative Improvement**

*(required for new teams)* April 29, 2003:  
Overview of Vermont Oxford Improvement Projects;  
4 Key Habits; Model for Improvement, and Web conferencing technical training

**Session 1: Overview on Safety** May 21, 2003:  
Keynote speaker: Lucian Leape, MD, MPH,  
Professor of Health Policy, Harvard School of Public Health.

General background and overview of safety in medicine; What is known about NICU errors; Tools to get started; Examples and case studies from NICQ Organizational Culture Workbook

**Session 2: Organizational Culture for Safety**

June 24, 2003:  
Keynote speaker: Don Berwick, MD, President and CEO, Institute for Healthcare Improvement.  
Overview of organizational culture and safety, Examples and case studies from the NICQ Organizational Culture Workbook, Families and NICU Safety.

**Session 3: Human Factors** Late September 2003:  
Overview of human factors and safety, Concepts and case studies from NICQ human factors checklists; Introduction to NICQ.org voluntary error reporting.

**Session 4: JCAHO Safety Goals in the NICU**

November 6, 2003:

Keynote speaker: Paul Schyve, MD, Senior Vice President, Joint Commission on Accreditation of Health Care Organizations.

JCAHO Safety Initiative; Overview of 6 JCAHO safety goals for 2003; Examples, tools and case studies from NICQ; New JCAHO safety goals for 2004; Next steps for the Collaborative.

For more information or to register for the iNICQ Safety Collaborative please contact Pam Ford (e-mail: [pam@vtoxford.org](mailto:pam@vtoxford.org), phone: 802-865-4814 x204)

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**CENTER FOR PATIENT SAFETY**

The Center for Patient Safety in Neonatal Intensive Care was started in 2001 with funding from the Agency for Healthcare Research and Quality (P20 HS11583-01, Jeffrey D. Horbar, Principal Investigator). It is a public-private consortium comprised of the University of Vermont College of Medicine (Jeffrey Horbar, MD, Gautham Suresh, MD, Jerold Lucey, MD), Children's Hospital, Boston - Harvard Medical School (Donald Goldmann, MD), Beth Israel Deaconess Medical Center (James Gray, MD, Robert Ursprung, MD), Dartmouth Medical School (William Edwards, MD), and The Vermont Oxford Network (Paul Plsek, MS, Pat Shiono, PhD). Recently, a parent representative, Julianne Nickerson, joined the faculty of the Center.

The Center's core mission is to conduct research aimed at finding ways to effectively learn from and prevent the medical errors that occur during the care of high-risk newborn infants and to actively communicate that information to health care professionals and families. The Center's focus is "*Learning from Errors and Communicating that Information.*" The Center's ultimate goal is to eliminate preventable medical errors in the care of high-risk infants. To achieve this mission, a multidisciplinary team has been formed that is capable of conducting fundamental research in patient safety, by developing strong collaborative ties to the Vermont Oxford Network. This team will also create and disseminate educational programs to translate research into practice.

Partnership between the Center and the Vermont Oxford Network will provide a crucial linkage for the Center to perform research and promote patient safety at a broad range of NICUs from around the country. Research currently being designed at the Center includes a project on obtaining a multifaceted view of NICU errors using a combination of voluntary

reporting by medical professionals, web-based surveying of the parents of infants who are in the NICU, and by structured chart reviews and interviews of NICU staff by trained professionals. The Center is also compiling an extensive collection of publications, media and resources on medical errors and patient safety. One of the first products of the Center will be a research paper describing and summarizing the medical errors that were submitted voluntarily and anonymously by participants in the NICQ/2000 and NICQ/2002 collaborative projects on [www.nicq.org](http://www.nicq.org). This paper is in the final stages of preparation and will soon be submitted for publication.

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### CDs ARE COMING!!!

As requested by many members, in February we will be mailing annual reports on compact disk to each Report Contact for centers that participated in 2001. The CD will contain the text, tables, and figures in your 2001 Annual NICU Quality Management Report (QMR), as well as the Vermont Oxford Network 2001 Annual Database Summary, in portable document format (PDF).

Just load the CD in a Windows computer and it will automatically display the startup screen with instructions and a link to a menu interface. You will be able to view and print any of the QMR text, tables and figures you choose.



Also included on the CD will be an all-years combined data file for your Center's data in Microsoft Excel format. This file will allow you to view and use all the Vermont Oxford Network Data submitted by your Center, from the beginning year of participation through 2001. For centers that participated in the Expanded Database in 2001, the CD will also include PDF files and a menu interface for the text, tables and figures in your 2001 Annual NICU Quality Management Report for Expanded Database Centers, as well as for the Vermont Oxford Network Expanded Database Summary.

Please evaluate the CD for your center, and let us know what you think. Send your comments to Joe Carpenter ([joe@vtoxford.org](mailto:joe@vtoxford.org)).

### CD-ROM VERSION OF THE QUALITY MANAGEMENT REPORT FOR 2003

We are pleased to announce that beginning with the 2002 Quality Management Report (available September 2003) members will have the choice of receiving their QMR either as a CD-ROM OR as a printed report. There will be a fee of \$250 for members who would like to receive their QMR in BOTH formats.

We will be asking you for your choice later in the year, so please review the 2001 CD-ROM in preparation for this decision.

### VERMONT OXFORD NETWORK DATA ENTRY SOFTWARE

The Vermont Oxford Network is now developing a software application for use by our members. The application will be available for use beginning in January 2004. It will support the collection and electronic submission of Network data and will include optional modules that will support specific quality improvement initiatives.

The basic system will allow members to collect and submit data for the Network's database for infants 401 to 1500 grams and for participating members for the expanded database for all NICU infants. The optional modules will allow centers to dig deeper in specific areas of focus for quality improvement such as nutrition and growth, infection and respiratory care. These modules, as well as modules supporting Network trials and follow-up projects, will be introduced based on user preferences.

For those members currently using another software application to collect and submit data, please don't worry. The policy of the Vermont Oxford Network is unchanged. We will continue to accept electronic data submissions from any system that supports the export formats described in the Member Instructions for Submitting Electronic Data. This will include locally developed systems and any proprietary systems that support the Network's electronic file standard.

If you have questions or suggestions, please contact Joe Carpenter, Director of Technical Operations ([joe@vtoxford.org](mailto:joe@vtoxford.org)).

### HELP US CHOOSE A NAME FOR THE NEW SOFTWARE APPLICATION

Send your suggestions to Nancy Morse, Network Electronic Data Coordinator ([nancy@vtoxford.org](mailto:nancy@vtoxford.org)).

## INTERNATIONAL MEMBERSHIP GROWING

The Vermont Oxford Network now has nearly fifty international members representing 19 countries.



As international membership continues to grow we want to be sure to find ways to meet the needs of our international members. During the 2002 Annual Meeting, Drs. Lucey and Horbar met with the international members for an open discussion and dialogue. The meeting was attended by representatives of the following countries:

### Austria

Landeskrankenhaus, Academic Teaching Hospital, Feldkirch  
Kinderklinik, Graz  
University Klinik F. Kinder, Innsbruck  
Landeskinderklinik, Linz  
Neonatologiezentrum-LKH, Salzburg  
Kinderabteilung KH, St. Polten  
Danube Hospital-SMZ-Ost, Vienna  
Kinderklinik Glanzing im Wilhelminenspital, Vienna  
University Hospital Vienna – AKH, Vienna

### Belgium

Zol St. Jan, Genk

### Canada

IWK Health Centre, Halifax, Nova Scotia  
Royal Victoria Hospital, Montreal, Quebec  
OH-CHEO, Ottawa, Ontario  
Janeway Children's Hosp. Centre, St. John, Newfoundland  
Mt. Sinai Hospital, Toronto, Ontario  
Sunnybrook & Women's College, Toronto, Ontario

### China

Queen Mary Hospital, Hong Kong

### Czech Republic

University Hospital Motol, Prague

### Finland

Hospital for Children & Adolescents, Helsinki  
Oulu University Hospital, Oulu  
Tampere University Hospital, Tampere  
Turku University Hospital, Turku

### Germany

Charite-Mitte, Berlin

University Children's Hospital NICU, Greifswald

### Ireland

Coombe Women's Hospital, Dublin

National Maternity Hospital, Dublin

Rotunda Hospital, Dublin

### Italy

NICU Ospedale S. Anna, Como

Ospedale di Lecco, Lecco

ICP, Milan

Macedonio Melloni Maternity Hospital, Milan

Neonatologia-Trento/Ospedale S. Chiara, Trento

### Malaysia

University Kebangsaan Malaysia, Kuala Lumpur

### New Zealand

Waikato Hospital, Hamilton

### Portugal

Hospital de S. Joao, Gaia

Fernando Fonseca Hospital, Lisbon

Hospital de Santa Maria, Lisbon

Maternidade Dr. Alfredo Da Costa, Lisbon

### Saudi Arabia

Neonatology - Saudi Aramco, Dhahran

Riyadh Armed Forces Hospital, Riyadh

### Singapore

K.K. Women's & Children's Hospital

### Slovakia

Novor. dd. NsP., Nove Zamky

### South Africa

Sandton Medi-Clinic, Bryanston

Panorama Medi-Clinic, Panorama

### Spain

Hospital Sant Joan de Deu, Barcelona

### Switzerland

University Hospital, Zurich

### Turkey

Gazi University Hospital, Ankara

### United Arab Emirates

Al Corniche Hospital, Abu Dhabi

### United Kingdom

Southmead Hospital, Bristol

St. Michaels Hospital, London

Winnicott Baby Unit-St. Mary's Hospital, London

It was interesting to hear about the variety of challenges and organizational models that are being tried around the world as different countries work to organize their neonatal care providers and to assess and improve the quality of care. The Vermont Oxford Network is committed to supporting these efforts with services and resources that will allow these local efforts to thrive.



### **SPECIAL RECOGNITION**

The Data Management Team at Vermont Oxford Network would like to give special recognition to the Data Contacts at the following 19 Centers for completing their 2001 data before May 1st, more than a month early! To acknowledge their commitment of time, energy and hard work, each Data Contact received a Vermont Gift Basket. Thank you!

- Reading Hospital and Medical Center, Reading PA-*  
**Gerard D. Brown DO**
- Providence St Vincent Medical Center Portland OR-*  
**Betty Campbell BSN**
- Kaiser Permanente-Harbor City, Harbor City CA-*  
**Paula Miller**
- Yakima Valley Memorial Hospital, Yakima WA-*  
**Veronica Schafer**
- Fitzgerald Mercy Medical Center, Darby, PA-*  
**David L. Schultzman MD**
- Lehigh Valley Hospital, Allentown PA-*  
**Sue Micek**
- St. Vincent Hospital and Health Center, Billings MT-*  
**Kathleen Stevens MD**
- St. Joseph's Health Center, Syracuse NY-*  
**Phyllis Palla RNC, CNRP**
- Little Company of Mary Hospital, Torrance CA-*  
**Meg Shan RN**
- Janeway Children's Hospital, St. John,  
Newfoundland-Canada-*  
**Faye Hickey**
- Bryn Mawr Hospital, Bryn Mawr PA-*  
**Robert Stavis MD**
- Children's of Orange County, Orange CA-*  
**Ken Schubert RN**
- California Pacific Medical Center, San Francisco CA-*  
**Terri A. Slagle MD**
- Ventura County Medical Center, Ventura CA-*  
**Lillian Davis**
- Memorial Hospital, South Bend IN-*  
**Karen Samuels**
- Kaiser Foundation Los Angeles, Los Angeles CA-*  
**Paula Miller**
- St. Mary's Medical Center, Long Beach CA-*  
**Brenda Leymaster RN**
- Baptist Memorial Hospital for Women, Memphis TN-*  
**Esmond I. Arrindell MD**
- Al Cornish Hospital, Abu Dhabi-United Arab  
Emirates-***Gregory Samson MD**

**You could find your name here, too! We will continue to highlight centers for special reasons in the future.**

### **CLOSING 2002 DATA ACCOUNTS**

In January 2003, Vermont Oxford Network Account Managers began the close-out process for 2002 data.

Please submit all outstanding data and revisions. Inform your Account Manager if you have ID numbers that will not be used in 2002. When the first and last ID numbers for the entire 2002 year can be confirmed, please let your Account Manager know.

Please make every effort to finalize your center's 2002 data as soon as possible. We will provide special instructions for 2002 infants who remain hospitalized as of May 1, 2003.



### **ALERT**

If your center has not submitted any 2002 data by **May 1st, 2003**, it will not be represented in the Annual NICU Quality Management Report for 2002.

### **MEMBERSHIP SURVEY AND DATA VERIFICATION PLAN**

As a participant in the 2002 database it is essential that we have the 2002 Membership Survey information from your center when we complete the Annual Quality Management Report later this year. This survey information is required for the Network to report an up-to-date detailed and accurate description of the membership.

The Data Verification Plan is a form that each participating center is required to fill out and update each year. Its purpose is to insure that all eligible infants have been reported to the Network and are included in the Database. Every center must have their plan on file before they can be included in the Annual Quality Management Report.

The 2002 Membership Survey and Data Verification Plan were mailed to the participating member's Data Contact in January and must be completed and returned to the Network by May 30<sup>th</sup>. Please contact A. Lynn Stillman at 802-865-4814 or [lynn@vtoxford.org](mailto:lynn@vtoxford.org) if you have any questions on the status of your center's 2001 Membership Survey or Data Verification Plan.

## INFANTS BORN PRIOR TO 2002

As a result of the HIPAA regulations taking effect in April of this year, all revisions and new records for infants born prior to 2002 must be submitted on **PAPER FORMS** by March 1, 2003. No data for infants born prior to January 1, 2002 will be accepted after March 1, 2003. Please contact your Account Manager if you have further questions.

### IMPORTANT DATES TO REMEMBER

**March 1, 2003:** Last date that data on infants born prior to January 1, 2002 will be accepted.

**April 7, 2003:** Deadline for submitting data to be included in the First Quarter Report for 2003.

**May 30, 2003:** Deadline for 2002 Membership Survey and 2003 Data Verification Plan due from participating Database Members.

**June 1, 2003:** *Final Deadline* for complete and correct 2002 data for the Annual Quality Management Report.

**July 7, 2003:** Deadline for submitting data to be included in the Second Quarter Report for 2003.

### ELECTRONIC DATA SUBMISSIONS

The number of centers submitting data via electronic media is continually on the rise. There are currently 116 centers certified to submit electronic data and another 28 centers in the process of becoming certified.

There are many time saving benefits to submitting data electronically, including a quick turn around for receiving data status summaries from your Account Manager.

If your center is interested in submitting data electronically for the Very Low Birth Weight or Expanded Database, please visit our website at [www.vtoxford.org](http://www.vtoxford.org) to review the Member Instructions for Submitting Electronic Data in 2003 or contact Nancy Morse at 802-865-4814, ext 208 or email: [nancy@vtoxford.org](mailto:nancy@vtoxford.org) for more information.

### BIRTH YEAR AND DATA FORMS

Be sure you are using data forms with the correct BIRTH YEAR on the top. If 2003 data are submitted on a 2002 form, the form will be returned and you will be instructed to resubmit on the proper form.

[WWW.VTOXFORD.ORG](http://WWW.VTOXFORD.ORG)

Please visit our web site! You can read our mission statement and find a wealth of information about Vermont Oxford Network. Find out about our ongoing clinical trials, electronic data submission, our Manual of Operations and get more information about Quality, Safety and the NICQ/2002 and iNICQ improvement collaboratives...you can even download data forms ....try it.....you'll like it!!!

### WARNINGS

Warnings listed on your "Error and Warning Report" are for your internal review only. They generally reflect an answer that is 'out of the usual range' and is questioned by our system's logic. It does not necessarily mean the item is wrong; we would just like you to double check. If a warned item is correct, you do NOT need to respond to us regarding that item. Do not resubmit forms that do not require correction.

### DUPLICATE SUBMISSION OF DATA FORMS

If you fax data forms, please do NOT mail duplicate hard copies. If you mail hard copies, please do NOT fax duplicate forms. Thank you.

### DPT ACCOUNT MANAGER INFORMATION

Please contact your Account Manager with any questions. If your Account Manager is not available, you may speak with any of the managers listed below.

*Paula Beales* [Paula@vtoxford.org](mailto:Paula@vtoxford.org)  
802.865.4814 ext . 214

*Annie Blanchette* [Ablanchette@vtoxford.org](mailto:Ablanchette@vtoxford.org)  
802.865.4814 ext. 218

*Michelle Charron* [Michelle@vtoxford.org](mailto:Michelle@vtoxford.org)  
802.865.4814 ext. 215

*Jeannie Fitts* [Jeannie@vtoxford.org](mailto:Jeannie@vtoxford.org)  
802.865.4814 ext. 213

*Joan Schillhammer* [Joan@vtoxford.org](mailto:Joan@vtoxford.org)  
802.865.4814 ext. 224

*Ellen Wilhite* [Ellen@vtoxford.org](mailto:Ellen@vtoxford.org)  
802.865.4814 ext. 216

We welcome your feedback, comments and suggestions.

Phone: 802.865.4814

Fax: 802.865.9613

Website: [www.vtoxford.org](http://www.vtoxford.org)

General info: [email@vtoxford.org](mailto:email@vtoxford.org)

**LOOK FOR OUR SEMI-ANNUAL DATA PROCESSING TEAM NEWSLETTER  
ARRIVING IN LATE SPRING AND EARLY FALL!**

### HAPPY NEW YEAR!

We hope the New Year finds you all well. We have many projects to report on as we begin 2003. After two and a half years of enrollment, the Early Surfactant Replacement Trial has completed enrollment with 268 infants! Now we are rolling up our sleeves and working on the first phase of the Delivery Room Management Clinical Trial. The Extremely Low Birth Weight Follow-Up Project has progressed well and we were able to report neurodevelopmental outcomes on over 1000 infants at two years adjusted age. A short summary of each project follows.

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#### EARLY SURFACTANT REPLACEMENT TRIAL

At long last, enrollment has been met! 268 infants weighing 1501-2500 grams have been enrolled in the ESRS Trial. In order to get this data set cleaned up and ready for analysis, we will be calling and requesting the final study data on those enrolled infants. We hope to submit a "late breaking" abstract to the American Pediatric Society/Society for Pediatric Research, to be held in Seattle, Washington, May 2003.

A big thanks to those centers that stuck in there with us and kept enrolling infants. A basket of goodies was sent to Albany Medical Center and The Reading Hospital and Medical Center for their superb success in enrollment.

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#### DELIVERY ROOM (DR) MANAGEMENT TRIAL

The DR Management Trial has begun. This is a complex and timely study that will evaluate three distinct approaches to stabilization and support of premature infants at high risk of respiratory distress syndrome. The study will be carried out in three stages:

Phase 1: developing competency with nasal CPAP

Phase 2: piloting the three methods of delivery room stabilization of the trial

Phase 3: launching the trial and allowing enrollment for those centers successful in Phases 1 and 2.

As of January 1<sup>st</sup>, we have launched Phase 1. For the next 3 to 4 months neonatal staff participating in the trial will be trained in building and applying nasal

CPAP. Participating centers will receive a teaching tool kit that includes the NCPAP Education and Training manual and a CD that includes the protocol, consent form, and a series of teaching slides. In addition to these teaching aids, participating staff will need to join in a series of web conferences about nasal CPAP. Details of these conferences will be sent to the Center Core Investigator Team.

At this time we have 110 centers that have expressed interest in the trial, and 48 centers ready to get started. Updates on the study will be made available through Vermont Oxford Network website.

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#### FOLLOW-UP DATA REMINDER HIPAA Related Change

As of January 1, 2003, Follow-up data must be submitted on the new de-identified data forms. We will not accept any data forms with patient identifiers (date of birth, date of developmental evaluation). Please be sure to submit your data on the new 2001 de-identified forms.

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#### EXTREMELY LOW BIRTH WEIGHT INFANT FOLLOW-UP

The ELBW Follow-Up Project for infants born during 1998 and 1999 has been tremendously successful. The Follow-Up Database now contains the survival status at two-years adjusted age on 1,557 infants (out of 1,840 infants) who survived and were discharged home. Of those infants, 1,080 had neurodevelopmental evaluations conducted. A brief overview of the data is as follows:

The majority of infants evaluated were from two-parent homes (76%) with nearly two-thirds of the parents having some college education (61%). Forty-four percent of these infants were rehospitalized after discharge with 28% requiring support after discharge, and 32% requiring surgery.

Thirty-four percent of infants demonstrated poor weight gain (weight <3<sup>rd</sup> percentile), 14% had microcephaly (OFC <3<sup>rd</sup> percentile), 8% had bilateral blindness, and 28% had hearing impairment requiring amplification.

Overall, 32% of infants were identified as having severe disability defined as having at least one of the following: cerebral palsy, inability to walk, cognitive delay (MDI <70), hearing loss requiring amplification, or visual impairment of bilateral blindness.

## CLINICAL TRIALS & FOLLOW-UP PROJECTS

We found that centers with high reporting rates of follow-up ( $\geq 60\%$ ) had more infants with severe disability (35% vs 26%) compared to centers with low reporting follow-up rates ( $< 60\%$ ).

Due to the success of the Follow-Up Project, we will continue to support centers in conducting and reporting follow-up at two year adjusted age.



**ATTENTION DELIVERY ROOM  
MANAGEMENT TRIAL  
PARTICIPANTS**

Mark your calendar with the dates of the three education and training Web conferences:

**Tues., February 25, 2003, 1:00 - 2:30 pm**  
**Tues., March 18, 2003, 1:00 - 2:30 pm**  
**Tues., April 15, 2003, 1:30 - 3:00 pm**

**NOTE: Times are Eastern Standard Time**

### NEONATAL SKIN CARE TRIAL

The manuscript for the NSCS Trial has been revised and is being re-submitted for publication. We will notify the investigators when the paper has been accepted for publication.

### HEAT LOSS PREVENTION (HELP) TRIAL

The Heat Loss Prevention (HeLP) Trial was proposed by Network members at Sunnybrook and Women's College Hospital in Toronto. A brief outline of the trial was presented at the Annual Meeting last December. The purpose of the trial is to determine if polyethylene occlusive wrap applied immediately after delivery has an impact on mortality and morbidity in very preterm infants born at  $\leq 28$  weeks gestation. In small studies, polyethylene occlusive wrapping at delivery has been shown to prevent heat loss and increase admission temperatures in premature infants.

The trial is in early stages of development. We are looking for centers interested in participating, and are seeking a funding source.

If you are interested in participating in this trial, please contact Maureen Reilly [Maureen.Reilly@swchsc.on.ca](mailto:Maureen.Reilly@swchsc.on.ca) or Jeanette Conner, [jeanette@vtoxford.org](mailto:jeanette@vtoxford.org)

### VERONATE™ TRIAL PHASE II CLINICAL TRIAL

The Veronate™ Phase II Clinical Trial is a trial being conducted by Inhibitex, Inc. This trial is not conducted or sponsored by the Network. We are providing this notice as a service to our members.

Veronate™ is a donor-selected intravenous immune globulin under study for prevention of staphylococcal infections in premature infants with birth weight 500 to 1250 g. It contains high titers of antibodies against staphylococcal surface proteins responsible for adherence of bacteria to host tissues. In preclinical studies, Veronate™ demonstrated significant opsonic activity against staphylococci compared to control intravenous immune globulin (IVIG) and was protective in two animal models of *S. epidermidis* infection.

A Phase I safety trial of Veronate™ recently completed enrollment. Pending Phase I data review by a data safety monitoring board, a Phase II clinical trial will begin in December 2003.

For further information, contact Seth Hetherington, MD, Chief Medical Officer, Inhibitex, Inc., Alpharetta, GA, [shetherington@inhibitex.com](mailto:shetherington@inhibitex.com)

### CLINICAL TRIALS STAFF CONTACT INFORMATION

**Jeanette Conner, PhD, MS**  
[jeanette@vtoxford.org](mailto:jeanette@vtoxford.org)

**Julie Morris**  
[julie@vtoxford.org](mailto:julie@vtoxford.org)

**Roger Soll, MD**  
[roger.soll@vtmednet.org](mailto:roger.soll@vtmednet.org)

**WELCOME NEW NETWORK STAFF MEMBERS!!!**

Vermont Oxford Network welcomes our newest staff members to its team:

**Kathy Arcovitch:** Kathy joined the Network Data Processing team in December 2002, and is also our new receptionist. She has a degree in Accounting from Champlain College and was previously employed in the billing department of Timberlane Dental Group and at a physical therapy group in the Burlington area. In her spare time, Kathy enjoys cooking, reading, working on needlepoint projects and walking. She lives in Essex Junction, Vermont with her husband Joe, and their two sons.

**Marilyn Eick:** Marilyn joined the Network Data Processing Team in August 2002. Prior to joining the Network, she worked as an independent consultant for a variety of market research projects and was a family advocate at a community mental health clinic. Marilyn graduated from the University of Minnesota with a B.S./B.A. in English and Education. She lives in Shelburne, Vermont with her husband. They have two children.

**Pete Warner:** Pete joined the Network in early December as the newest member of the IT Team and focuses on multi-media, systems administration, and on other technical projects for the Network. He is a graduate of Hamilton College and earned his masters in Outdoor Recreation from Southern Illinois University. Prior to coming to Vermont Oxford Network, Pete worked in many capacities at an on-line adventure travel book store, wrote a book on rock climbing in Acadia National Park, and invented a board game on hiking the Appalachian Trail. In his leisure time, Pete enjoys anything having to do with the outdoors and physical activity, paying particular attention to rock climbing.

**NEWSLETTER ARTICLES**



Vermont Oxford Network welcomes Network members to contribute articles for publication in the Vermont Oxford Network Newsletter. Submission of

articles for consideration should be sent via email to Nancy Morse as an attachment to: [nancy@vtoxford.org](mailto:nancy@vtoxford.org)

**RECENT OR UPCOMING PUBLICATIONS**

Horbar JD, Badger GJ, Carpenter JH, Fanaroff A, Kilpatrick S, LaCorte M, Phibbs R, and Soll RF. Trends in Mortality and Morbidity for Very Low Birth Weight Infants, 1991-1999. *Pediatrics* 2002; 110: 143-151.

Evidenced-Based Quality Improvement in Neonatal and Perinatal Medicine: The NIC/Q 2000 Experience. Horbar JH, Plsek PE, Schriefer J, Leahy K (editors). *Pediatrics* (in press)

Conner, J. M. Physical Activity and Well-Being in M. H. Bornstein, L. Davidson, C. L. M. Keyes, K. A. Moore, & The Center for Child Well-being (Eds.). In *Well-being: Positive development across the life course*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc. 2003.

Conner, J. M. and Dewey, J. E. Reproductive Health in M. H. Bornstein, L. Davidson, C. L. M. Keyes, K. A. Moore, & The Center for Child Well-being (Eds.). In *Well being: Positive development across the life course*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc. 2003.

**DON'T FORGET TO MARK YOUR CALENDAR FOR 2003!**

- Dec 6: Vermont Oxford Network Annual Mtg
- Dec 7: Quality Congress in Neonatology
- Dec 7 - 9: Hot Topics in Neonatology

DECEMBER						2003
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

# Announcing: iNICQ Safety Collaborative

The Vermont Oxford Network is pleased to announce the second in a series of Internet-based improvement collaboratives sponsored by the Vermont Oxford Network under the direction of Jeffrey D. Horbar, MD and Paul E. Plsek, MS. The first iNICQ collaborative now in progress is fostering the 4 key habits of improvement among multidisciplinary teams from 63 NICUs. The second iNICQ collaborative on Patient Safety will begin in April 2003.

## Learn to Improve Patient Safety in Your NICU

- Interactive Internet Collaborative
- Teams Participate in 5 Web Conferences
- Receive Vermont Oxford Safety Tools
- Dedicated e-mail discussion list
- Free CME, Nursing Contact Hour and CRCE Credits
- \$1195 per team for the entire series if registered by March 1, 2003

The registration fee is \$1495 after March 1, 2003. NIC/Q 2002 Collaborative members may join for the reduced rate of \$995. Each web conference will consist of presentations by iNICQ faculty followed by questions and discussion. You will view the live presentations over the web while participating in the audio portion of the program via conference call. All that is needed is a telephone and a computer connected to the Internet. The fee entitles a team to one operator assisted telephone (bridge) connection and one Internet connection. Each center is responsible for its own long distance fees. Since teams may participate as a group by speakerphone with the Internet presentations projected using a digital projector, we encourage your entire NICU team to participate for a single fee. iNICQ provides a less intensive and therefore lower cost introduction to collaborative quality improvement.

A description of the planned web conferences and timeline for the iNICQ Safety Collaborative is listed below. Also enclosed is a registration form. **Space is limited. Please use the attached form to register your center for the iNICQ Safety Collaborative. International Participants Welcome!** Please contact Pam Ford, iNICQ Coordinator, (e-mail: [pam@vtxford.org](mailto:pam@vtxford.org), phone: 802 865 4814 x204), with any questions. We look forward to hearing from you!

## Introduction: Collaborative Improvement (required for new teams) April 29, 2003

- Overview of Vermont Oxford Improvement Projects
- 4 Key Habits
- Model for Improvement
- Web conferencing technical training

## Session 1: Overview on Safety May 21, 2003

*Keynote Speaker:* Lucian Leape, MD, MPH, Professor of Health Policy, Harvard School of Public Health

- General Background and Overview of Safety in Medicine
- What is known about NICU errors?
- Tools to get started
- Examples and case studies from NICQ Organizational Culture Workbook

## Session 2: Organizational Culture for Safety June 24, 2003

*Keynote Speaker:* Don Berwick, MD, President and CEO, Institute for Healthcare Improvement

- Overview of Organizational Culture and Safety
- Examples and case studies from NICQ Organizational Culture Workbook
- Families and NICU Safety

## Session 3: Human Factors Late September 2003

- Overview of Human Factors and Safety (Keynote address by invited expert)
- Concepts and case studies from NICQ human factors checklists
- Introduction to NICQ.org voluntary error reporting

## Session 4: JCAHO Safety Goals in the NICU November 6, 2003

*Keynote Speaker:* Paul Schyve, MD, Senior Vice President, Joint Commission on Accreditation of Healthcare Organizations

- JCAHO Safety Initiative
- Overview of 6 JCAHO safety goals for 2003
- Examples, Tools and case studies from NICQ
- New JCAHO safety goals for 2004
- Next steps for the Collaborative



# iNICQ Safety Collaborative Registration Form

Please register my center to participate in the iNICQ Safety Collaborative

- \$1195 if registered by March 1, 2003
- \$1495 if registered after March 1, 2003

Contact Person: \_\_\_\_\_

Institution: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

E-Mail Address \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Please submit this form by mail, e-mail or fax by March 1, 2003 to:

Pam Ford, iNICQ Coordinator  
Vermont Oxford Network  
33 Kilburn Street Burlington, Vermont USA 05401  
Phone: 802 865 4814, extension 204  
Fax: 802 865 9613 Email: [pam@vtoxford.org](mailto:pam@vtoxford.org)

