NeoData Product Information

Product Description

Overview

The **NeoData NICU Patient Data System** is a computerized, multi-user data system designed to assist physicians and other medical care providers in the clinical management of patients from admission through discharge and to produce major NICU patient documentation, including:

- **Admission summaries**
- **Progress notes**
- **Discharge summaries**
- **Report sheets for rounds**
- **TPN and other fluid orders**

In the process, a broad range of clinical information is captured and available for data reports and analysis.

The NeoData program runs on standard PC's using the **Windows XP, or Windows Vista** operating systems. It is designed for use over a network to accommodate multiple data entry workstations.

NeoData is designed so that all data entry may be performed by the NICU medical staff on workstations located in the NICU area. Documents are printed immediately upon completion of data entry, signed, and placed directly in the patient chart. These tasks are performed as part of the daily patient care routine, in precisely the same manner as if notes were handwritten. This approach requires no dictation, filling out of forms, or involvement of clerical staff.

The NeoData system provides a number of benefits, including:

- Consistent terminology, standard formatting, and increased legibility of documentation;
- Improved tracking of data and management plans;
- Data analysis using the built-in Query and Report module;
- Support for billing operations;
- Significant time savings.

Note that NeoData is not intended to completely replace the standard paper chart. Similar to pen and paper, it is a tool for tracking information and producing paper documents for inclusion in the official chart. With no further effort, it also stores substantial amounts of information for queries and reports.

The design of NeoData is based on several major principles:

- The most reliable and efficient way to capture in computerized form large amounts of patient information for later analysis is to design a data entry system for use directly by the medical staff as part of routine patient care, since virtually all important patient information is eventually processed in some form by these personnel.
- To be consistently and reliably used, a data entry system intended for use by busy medical staff **must be perceived by its users as benefiting them directly**, such as by improving patient care or by saving time.

The requirement that a data system handle a large amount and range of information, coupled with the goal of having virtually all data entry able to be performed directly by the medical staff, demands a carefully designed system which has been proven in real-world use in active NICUs. This is what NeoData offers.

Data Entry Screens

NeoData includes 16 major **forms**, or data entry screens. The main screen, the **Select Patient Form**, allows users to perform the following functions:

- Maintain a list (the **Current Patient List**) of all patients currently admitted to the NICU service;
- Select patients from the Current Patient List for data entry or viewing;
- Search for any patient previously entered into the system, including discharged patients, for data entry or viewing.

At any given time, one patient is the **currently selected patient**. To insure data integrity, only one workstation on the network can enter data for a given patient at a time.

The other 15 forms are the actual **Data Entry Forms**. While the program is running, any form may be selected by clicking on its **index tab**.

The 16 major forms and their functions are listed here; click on the form name to view a screen shot of the form:

Select Patient	Selection of patients and management of the Current Patient List.
Pregnancy Information	Maternal information, pregnancy, and labor.
Birth Information	Delivery, birth information, patient identification, resuscitation, and delivery addendum.
Admission Information	Admission information and measurements, prior hospitalizations, transport addendum, and admission addendum.
Physical Exam	Daily measurements, vital signs, and physical findings.
Respiratory Support	Current respiratory support settings, blood gas results, apnea and bradycardia, and ECMO information.
Daily Fluids	IV fluids and TPN, feedings and supplements, and extensive nutritional calculations.
Other Daily Information	Additional fluid intake information, daily progress note addendum, and procedure or supplemental progress notes.
Tracking Information	Ophthalmologic screening, hearing screening, state newborn screening, immunizations, and discharge planning.
Problems and Diagnoses	Problem and diagnosis list with associated medications, procedures, and plans for each problem.
Radiology Studies	Radiologic studies.
Lab Results 1	Hematology and chemistry lab results.
Lab Results 2	Cultures, drug levels, and other lab results.
Discharge Information	Discharge information, measurements, treatment, follow-up, and addendum.
Discharge Summary	Status of ophthalmologic screening, hearing screening, state newborn screening, and immunizations as of discharge; respiratory and nutritional support chronologies during the admission.
Other Patient Information	Final outcome and miscellaneous patient information.

At the bottom of the NeoData screen, always visible, is a **display panel** which can show any one of the following:

- Basic patient information including name, birthdate, birthweight, gestation, admission date, and admission weight;
- A section of document text for the data currently being edited as it will appear in a summary or progress note;
- Any lab results for the currently selected patient.

Printed Documents

NeoData generates all standard patient documentation and other reports and printouts. Examples of the **first pages** of the following documents printed by the NeoData program may be viewed by clicking on the document name:

Admission Summary	Admission summary.
Progress Note	Daily progress note.
Discharge Summary	Discharge or transfer summary.
Round Sheets	Sheets with current respiratory, fluid, laboratory, and other information for all patients in the NICU, 3-4 patients to a page. May be photocopied to give a set to each person on rounds.
Daily Fluid Orders	Fluid orders (including TPN, other IVs, and feedings) based on the information in the **Daily Fluids Form**.

Note: The precise page layout used for each type of document depends on a number of configuration settings. Among other options, you may configure the document to include or not include the header, footer, background frame, imprint area, logo, etc. Notice that the Admission Summary and Progress Note are formatted with these features turned on, while the Discharge Summary is formatted with most of them turned off.

Queries and Reports

NeoData includes a powerful and flexible **Query and Report Module** which allows you to rapidly create a variety of user-defined **queries** (data searches) and **reports** (printouts of query results). With this feature, you can review and analyze patient information stored in the NeoData data file directly from within the program. Once configured, queries can be stored for repeated use.

Three different types of reports can be produced by the NeoData Query Module:

- **Spreadsheet Report:** A Spreadsheet report creates a vertical list of the patients or admissions in the Query Results list with one or more items of information for each arranged in columns. Information for a single patient or admission is displayed on a single line:

Pt Last Name	Pt First Name	Sex	Twin	Med Rec ID	Birth Date	Birth Weight	Gest Age
Patient2784		Female		27842784	5/8/04	0.547	23
Patient2764		Female		27642764	4/25/04	1.256	28
Patient2756		Female		27562756	4/18/04	1.109	28
Patient2748		Female	B	27482748	4/14/04	0.596	24
Patient2744		Female	A	27442744	4/14/04	0.749	25
Patient2728	Hannah	Female		27282728	4/6/04	1.116	31
Patient2720		Female		27202720	4/1/04	0.57	24
Patient2660		Female		26602660	3/1/04	0.573	23
Patient2476	Cierra	Female	B	24762476	1/13/04	0.79	25
Patient2456	Amber	Female	B	24562456	1/2/04	0.995	26
Patient2780		Male		27802780	5/5/04	0.856	24
Patient2672	Jamron	Male		26722672	3/11/04	1.204	28
Patient2656	Alexander	Male	B	26562656	2/26/04	1.42	32
Patient2648	Eduardo	Male	A	26482648	2/24/04	0.825	24
Patient2644	Marcus	Male		26442644	1/8/04	0.72	25

- **Statistics Report:** In a Statistics report, each cell in the report table displays statistical information pertaining to the patients or admissions which meet the cell's respective column and row conditions. A typical example of one type of Statistics report would be a crosstabulation of **admission outcomes** (discharged home, transferred, died, etc.) arranged horizontally (columns) versus **birth weight ranges** (500-1000 grams, 1001-1500 grams, etc.) arranged vertically (rows). The resulting table would show the number patients who had each particular outcome within each birth weight range:

	Discharged Home	Transfer Of Service	Acute Transfer	Convalescent Transfer	Died	Chronic Care	Totals
Birth Weight 501 - 1000	0 (0)	0 (0)	2 (3.28)	0 (0)	0 (0)	0 (0)	2 (3.28)
Birth Weight 1001 - 1500	7 (11.5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	7 (11.5)
Birth Weight 1501 - 2000	12 (19.7)	0 (0)	0 (0)	2 (3.28)	0 (0)	0 (0)	14 (23.0)
Birth Weight 2001 - 2500	6 (9.84)	2 (3.28)	0 (0)	0 (0)	1 (1.64)	0 (0)	9 (14.8)
Birth Weight 2501 - 3000	3 (4.92)	5 (8.20)	1 (1.64)	0 (0)	0 (0)	0 (0)	9 (14.8)
Birth Weight 3001 - 3500	3 (4.92)	3 (4.92)	1 (1.64)	0 (0)	0 (0)	0 (0)	7 (11.5)
Birth Weight 3501 - 4000	3 (4.92)	5 (8.20)	0 (0)	1 (1.64)	0 (0)	0 (0)	9 (14.8)
Totals	34 (55.7)	15 (24.6)	4 (6.56)	3 (4.92)	1 (1.64)	0 (0)	57

- **Multiline Report:** Like a Spreadsheet report, a Multiline report creates a vertical list of the patients or admissions in the Query Results list. However, the information for each patient or admission can be displayed over multiple lines. In addition, Multiline reports can include one or more Subreports; these are supplemental tables of information (lab results, medications and dosages, etc.) that are included in each patient or admission section. In the example below, 6 report columns (on 2 lines) and 2 subreports (medications and procedures) are included in the report:

Last Name	First Name	Sex	Twin	Admission ID
Patient2652		Male		27342734

Current Diagnoses
hydronephrosis, apnea of prematurity, gastroesophageal reflux, bronchopulmonary dysplasia, at risk for RSV

Admission Medications	Start Date	End Date	Dose
ampicillin	2/26/04	2/28/04	185mg IV q 12hr
gentamicin	2/26/04	2/28/04	8.3mg IVx1 dose
caffeine citrate	2/26/04	4/5/04	12mg IV q12 hrs.

Admission Procedures	Date	Comments/Results
surfactant therapy	2/26/04	1st dose at 70 minutes of life; 2 doses total
volume expansion	2/26/04	NS 10cc/kg

Last Name	First Name	Sex	Twin	Admission ID
Patient2660		Female		27422742

Current Diagnoses
bronchopulmonary dysplasia, apnea of prematurity, necrotizing enterocolitis, status post ileostomy, nutritional support, retinopathy of prematurity stage 1

Admission Medications	Start Date	End Date	Dose
ampicillin	3/1/04	3/3/04	57mg IV q12hrs
gentamicin	3/1/04	3/3/04	2.8mg IVx 1 dose
Aquaphor	3/1/04	3/11/04	to skin per protocol
phenobarbital	3/1/04	3/1/04	6mg IVx1
dopamine	3/1/04	3/3/04	3mcg/kg/min

Admission Procedures	Date	Comments/Results
surfactant therapy	3/1/04	first dose at 20 min of age; 2 doses total
UAC placement	3/1/04	
volume expansion	3/1/04	10cc/kg normal saline x2
blood transfusion	3/1/04	
UVC placement	3/1/04	
phototherapy	3/1/04	restarted: 11/30, 12/2

In addition, queries can be generated using **Microsoft Access** or most other Windows-based data management software. Access is a particularly good choice since it is both powerful and easy-to-use, includes extensive querying capabilities and excellent support for the industry-standard SQL language, and can be used with both **Access** and **SQL Server** databases.

Other Features

Some of the other features of the NeoData program are listed here. If the name of the feature is underlined, you may click on the name to see an example:

Billing Support	Automatic and manual entry of CPT billing codes and printout of weekly charge sheets and other billing reports.
TPN Worksheet	Complete TPN order entry module with built-in overrange warnings.
Nutritional Calculations	On-screen display of extensive nutritional calculations, based on the information in the **Daily Fluids Form**. These may also be included on the **Growth Charts**.
Vermont Oxford Database Support	Direct interface to the Vermont Oxford Network's **eNICQ** software providing automated enrollment of eligible patients and extraction of most VON data items from the inpatient database.
Weekly Patient Summaries	Printout of weekly patient summaries for billing support or for updates to referring physicians.
FollowUp Clinic Module	Patient enrollment, information tracking, and printout of clinic visit summaries.
Growth Charts	On-screen display and printout of growth and nutritional intake charts using various time scales.
Lab Results Graphs	On-screen display and printout of graphs of various lab values (e.g., WBC, serum sodium, arterial pO2).
Blood Gas Module	Complete data entry system for blood gas results designed for use by NICU blood gas lab personnel; includes automated transfer of specimen results from a blood gas analyzer.
Macros	Predefined blocks of text which can be entered into a field with a few mouse clicks.
Templates	Predefined entries for entire groups of fields (physical exam, xrays, procedures) which can be recalled with a few mouse clicks.
Spelling Checker	Spell checking as data is entered with full control over which fields are checked.
Patient Alerts	Display informational messages, reminders, or warnings, and optionally insert standard text into progress notes, based on current patient status.
Consults	Enter information on consults outside the NICU (delivery room attendance, normal nursery consults, prenatal consults, etc.) and print notes for the chart. Billing charges can be entered and charge sheets printed for each consult.
Management Protocols	On-screen display of patient management protocols and/or any other text documents.
Address List	Rapid entry and recall of names and addresses.
Calculators	Medication drip calculator, gestational age calculator, standard arithmetic calculator, and general-purpose formula evaluator.
Patient Export/Import	Exporting and importing of patient information to or from an external file for use when transferring a patient between facilities.
Support for Multiple NICU Teams	Support for multiple teams or services with separate patient lists, creation and storage **of multiple progress notes per day**, and support for different user categories (e.g., Attendings, Residents, NNP's) with different data entry privileges and different progress notes.

Configuration

Given the complexity of a data system which attempts to capture most of the patient information handled by the NICU medical team each day, the ability to configure, or adapt, the program to the needs and work habits of a given NICU is crucial to the usefulness of the program. The program allows a **system administrator** (that person or persons responsible for the installation and management of the system) to configure the program in a number of ways.

Adding configurability to the program is and will continue to be an ongoing priority for MetaSoft. We welcome suggestions from users as to which features might be made configurable; wherever possible, we will add such capabilities as each new version is developed.

Some of the available configuration settings are listed below:

General Program Behavior

- Patient identifier definitions
- Data entry customizations
- Macro definitions
- Control over which data items are carried forward from day to day
- Spell checking settings

Data Entry Screens

- Number and order of data screens
- Organization of fields within screens
- Ability to create new data screens and to add new fields

Documents

- Fonts, margins, borders, logos, imprint areas, barcodes, and other formatting options
- Control over document sections, their headings, and their order within the document
- Customization of most document text
- Creation of electronic documents for inclusion in hospital CPR
- Customization of **Round Sheets**

Fluids

- Data entry customizations for TPN and other IVs
- Content of **Daily Fluid Orders**
- TPN additive defaults (vitamins, trace elements, etc.)
- Out-of-range alerts for nutritional calculations (e.g., total potassium)

Drop-down Lists

- Content of all drop-down lists
- List names

Field Parameters

- On-screen field labels
- Drop-down lists associated with text fields

- Out-of-range alerts for numeric fields
- Field status (normal, disabled, hidden, or required)

Billing Features

- Customization of the **Daily Charge Sheet**
- Automatic entry of bundled and procedure charges

Security

- Password protection of access to configuration screens and other functions
- Program login settings
- User login names and passwords
- User categories and associated privileges for all program functions
- Database type and login settings
- Auditing of logins, data viewing, and data entry

HL7 Interface

The **NeoData HL7 Module** is an optional add-on tool for exchanging information with other hospital systems.

NeoData uses the HL7 standard so that it can exchange information with any system that also supports HL7. This means that separate links to different hospital information systems (HIS) such as Cerner, EPIC, Meditech, etc. are not necessary. A single interface serves the purpose of linking to all these systems.

The **NeoData HL7 Module** supports the receipt of admissions and some labs and the sending of Patient Note text.

The **NeoData HL7 Module** receives admission information from the hospital system and converts it into a format that can be used by NeoData. The user can review admissions that were received from the interface and accept or reject the information that was received. They can also add to the information as they accept the patient into NeoData.

The **NeoData HL7 Module** receives lab values for existing patients from the hospital system and converts them into a format that can be used by NeoData. The lab values are made available for review by a clinician. In many cases, not all lab values will be accepted - just those that are appropriate for that day's progress note.

The core of NeoData provides the ability to generate electronic versions of patient notes and save them as files. These files can be in different formats such as RTF (Microsoft Word) and PDF (Adobe Acrobat). These files can be import into the hospital system for storage or even for electronic signatures.

HL7 also provides a standard for exchanging patient notes. The **NeoData HL7 Module** uses that standard to provide a means to send the text of a Patient Note directly to the hospital system.

For more information on the **NeoData HL7 Module**, including the detailed HL7 specification, contact Isoprime Sales at 630-955-0022.

Licensing & Pricing

Licensing

Licensing for the NeoData system is per NICU. The software may be installed on any number of computers and may be used by any number of people as long as all operations are in support of a licensed NICU and the terms of the license are otherwise protected.

Several different licenses are available based on the maximum daily census which can reasonably be expected in your NICU. Note that you will need a license for the **maximum** number of patients expected on any given day. See the **Pricing** section below.

A **license agreement** signed by both parties is required. A **maintenance agreement** is an integral part of each license; this agreement provides for unlimited technical support and program upgrades. Your site will be invoiced for an annual maintenance fee based on the amount of the original license fee. The first maintenance fee is due 12 months after signing of the license agreement.

Multi-site licensing is available with pricing discounts for the additional units.

Pricing

License	License Fee	Maintenance Fee
Core System License (Uses Access or SQL Server database engine)		
Limited (15 beds)	$10,000	$1,500
Limited (25 beds)	$12,000	$1,800
Limited (45 beds)	$15,000	$2,250
Unlimited	$18,000	$2,700
HL7 Interface Module		
One test server and one production server	$7,000	$1,050
Multi-Site		
Contact Isoprime Sales	630-955-0022	

Using the Demo Program

Isoprime provides a **Demonstration Version** of NeoData free of charge; you may request a copy on our **web site** or by contacting **Isoprime**.

After installing the demo program:

1. Review the **Installation Notes**.
2. Review the **Getting Started Tutorial**. The tutorial can be accessed from within the program itself via the **Help menu**.
3. Familiarize yourself with the **NeoData Help document**. The Help document can be accessed by selecting **NeoData Help** from the NeoData Demonstration program folder or from within the program itself via the **Help menu**.
4. For information on configuring the program, see the chapter titled **System Administration** in the Help document.

Note: **Administration functions** and **billing functions** each require a **password**; these passwords are case-insensitive (they may be entered in either uppercase or lowercase) and may be changed if desired. The default passwords are:

Administration Password: nicu4321

Billing Password: charges

Further Information

Isoprime Web Site:

If you are interested in a more detailed look at the NeoData system, we recommend that you obtain a copy of the **Demonstration Version** of the program. You can request a copy of the demo program on our web site at:

http://www.isoprime.com

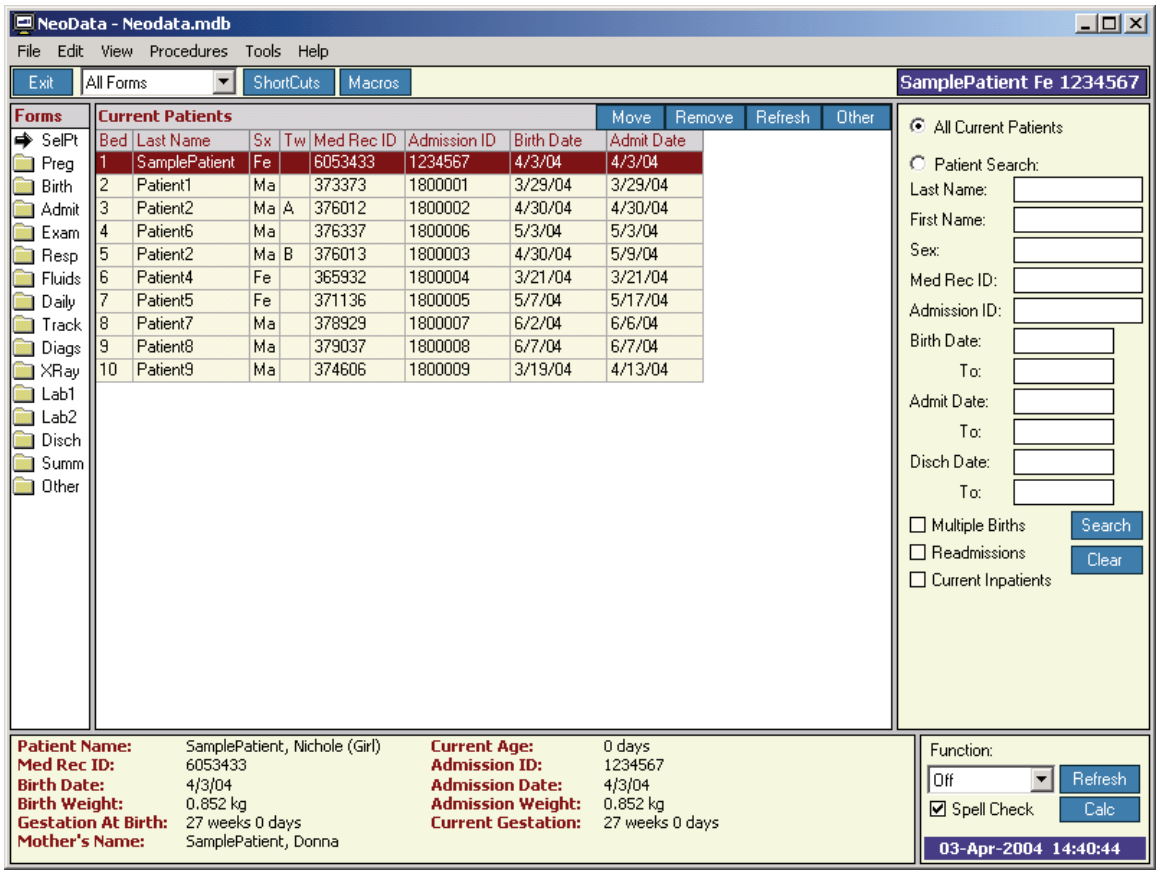
Contacting Isoprime:

If you have any other questions, you can contact Isoprime as follows

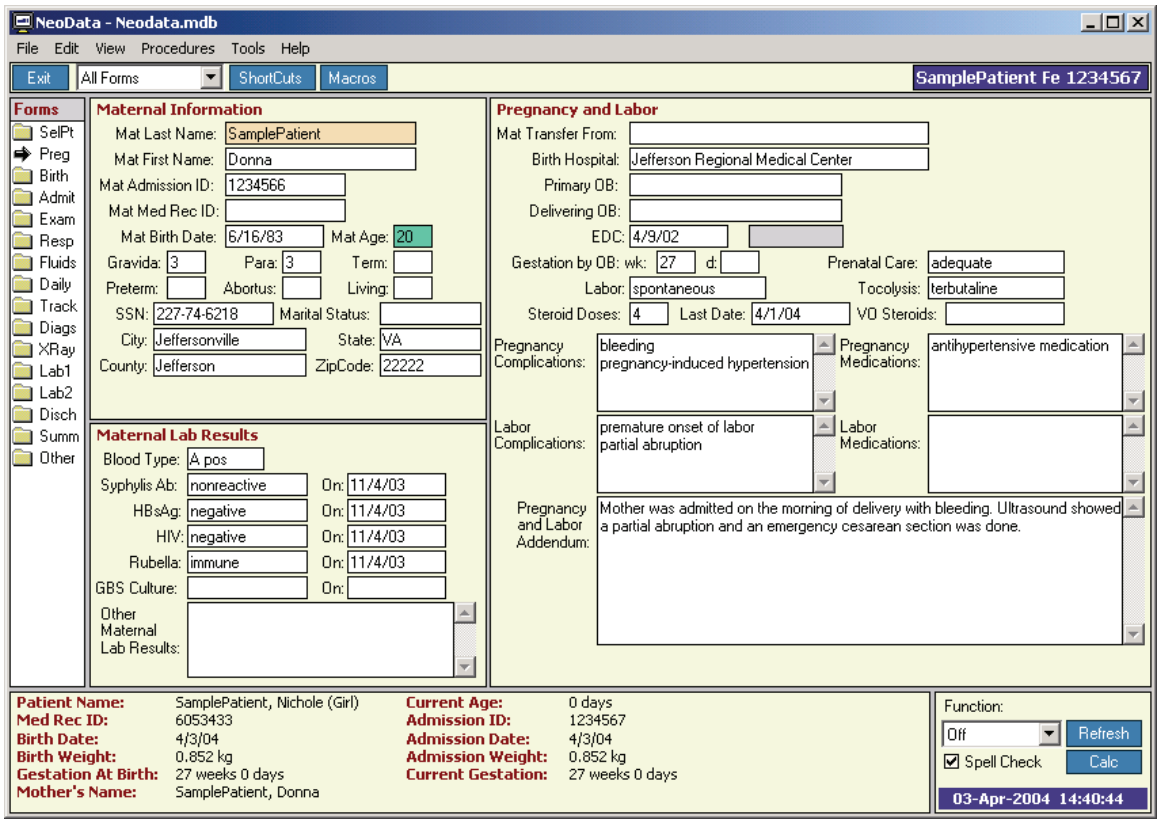
Address:	Isoprime Corporation 4300 Commerce Court Suite 315 Lisle, IL 60532
Office Phone:	630-955-0022
Office Fax:	630-955-0088
Email:	isosupport@isoprime.com

Sample Data Screens

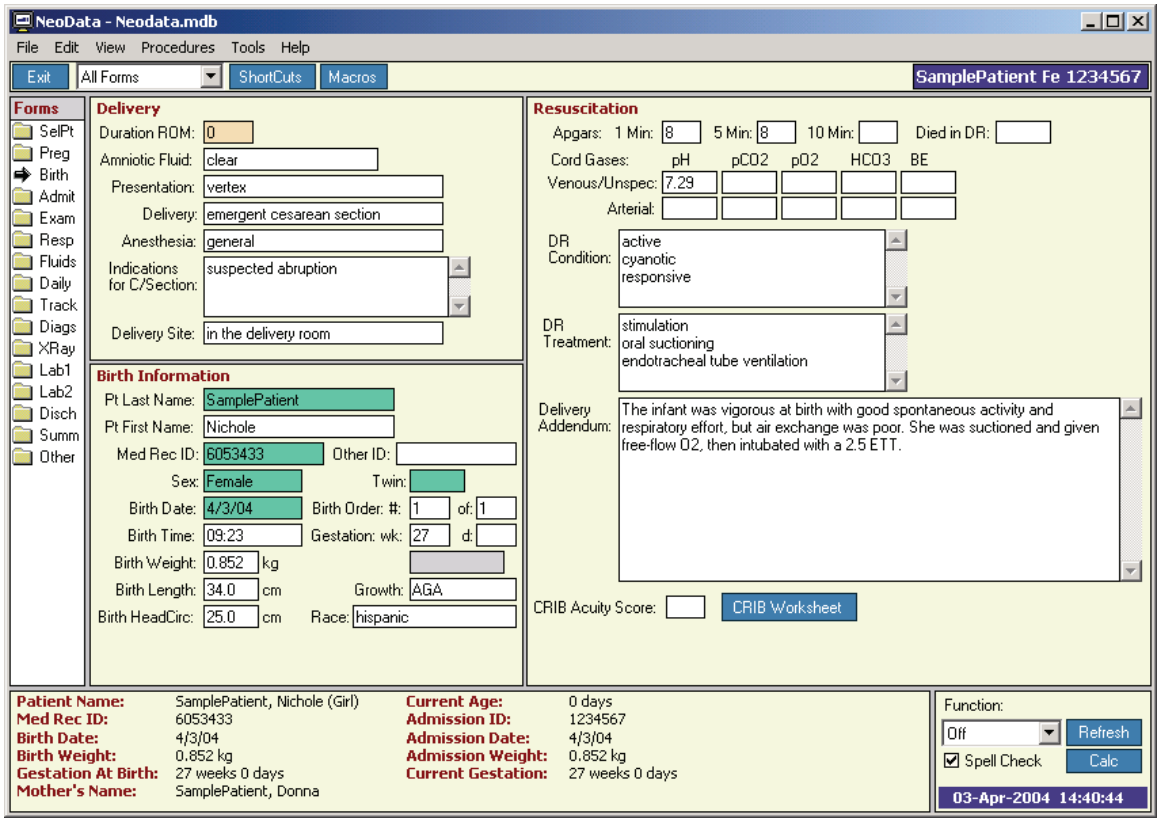
Select Patient Form



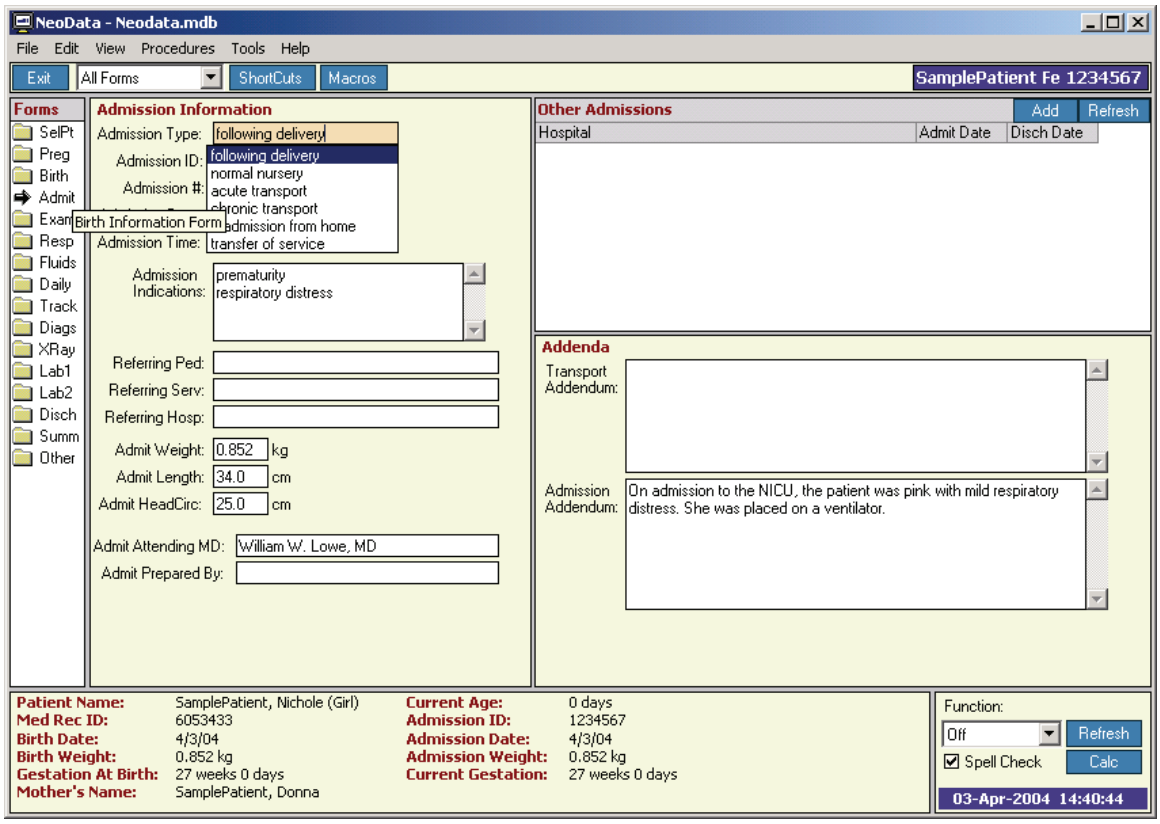
Pregnancy Information Form



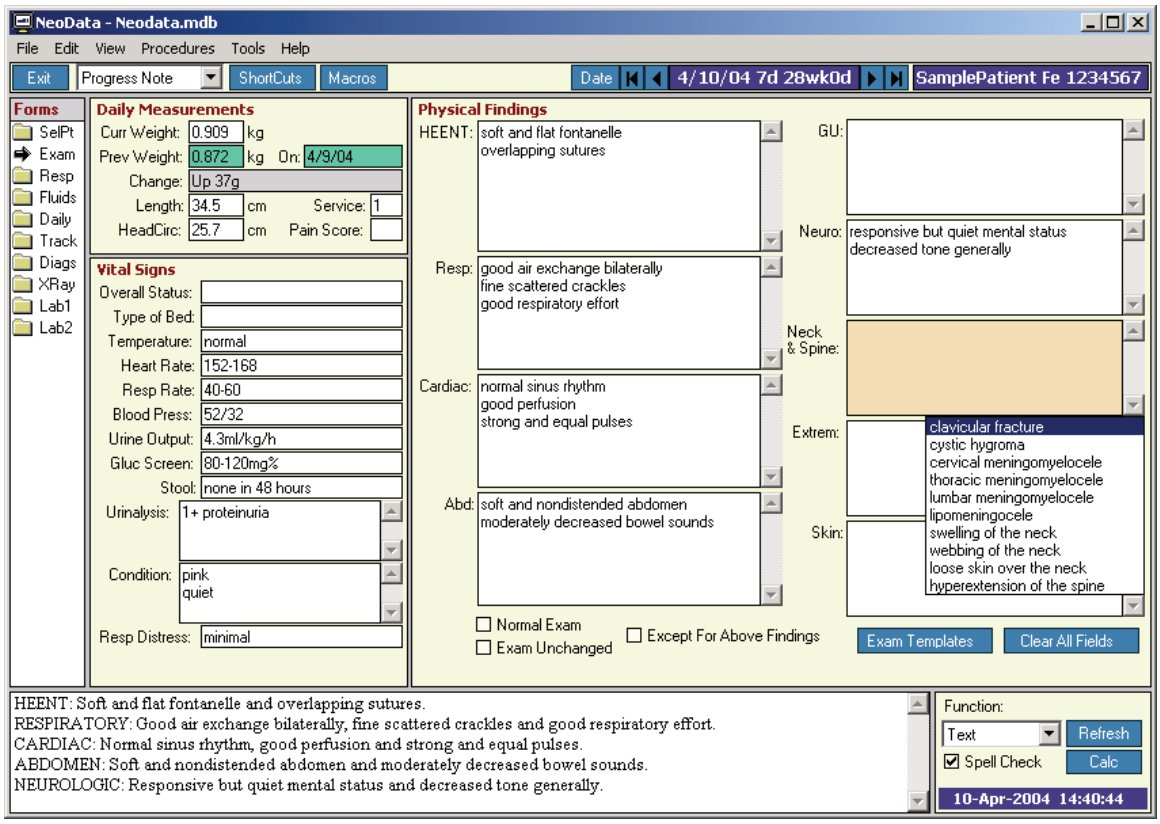
Birth Information Form



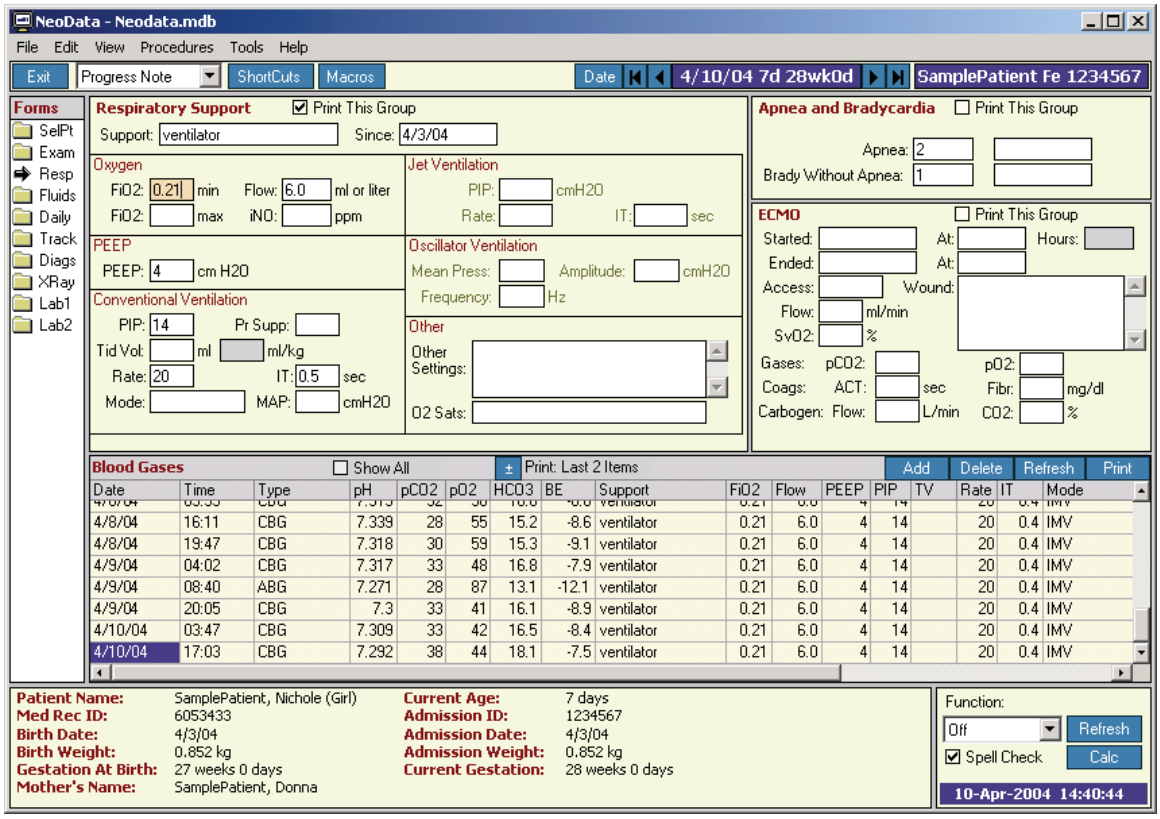
Admission Information Form



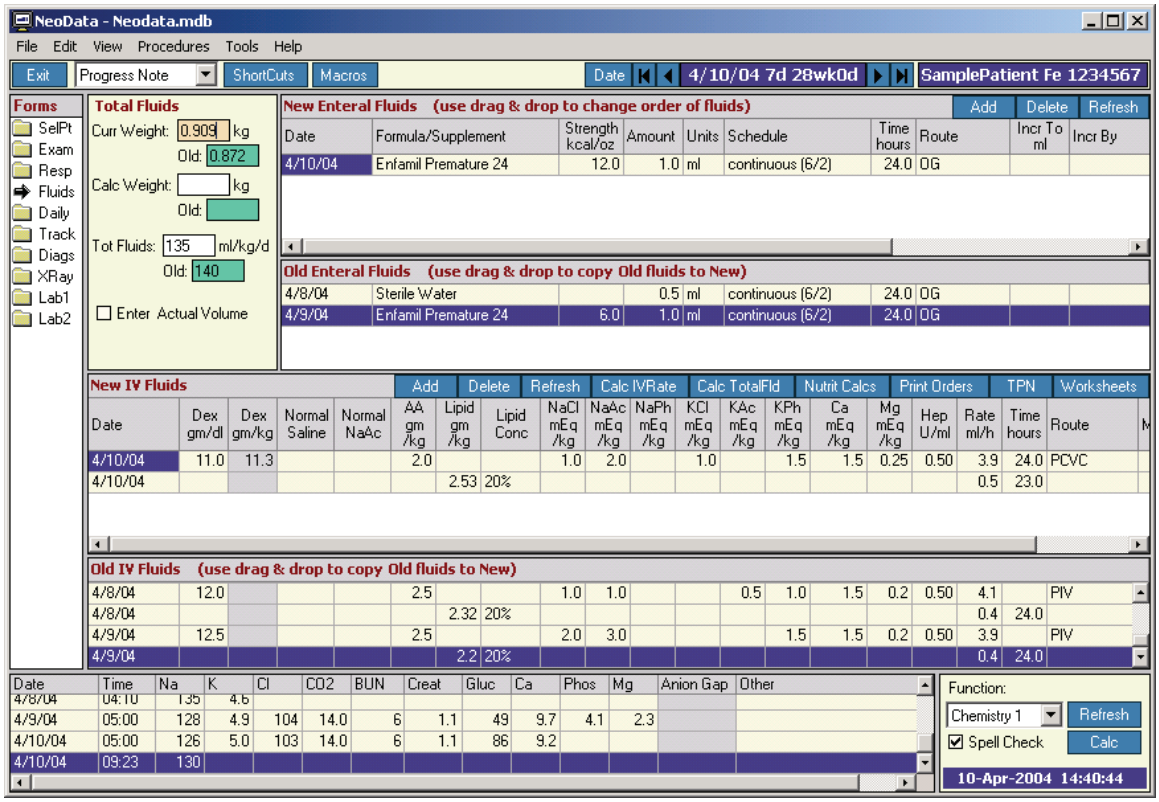
Physical Exam Form



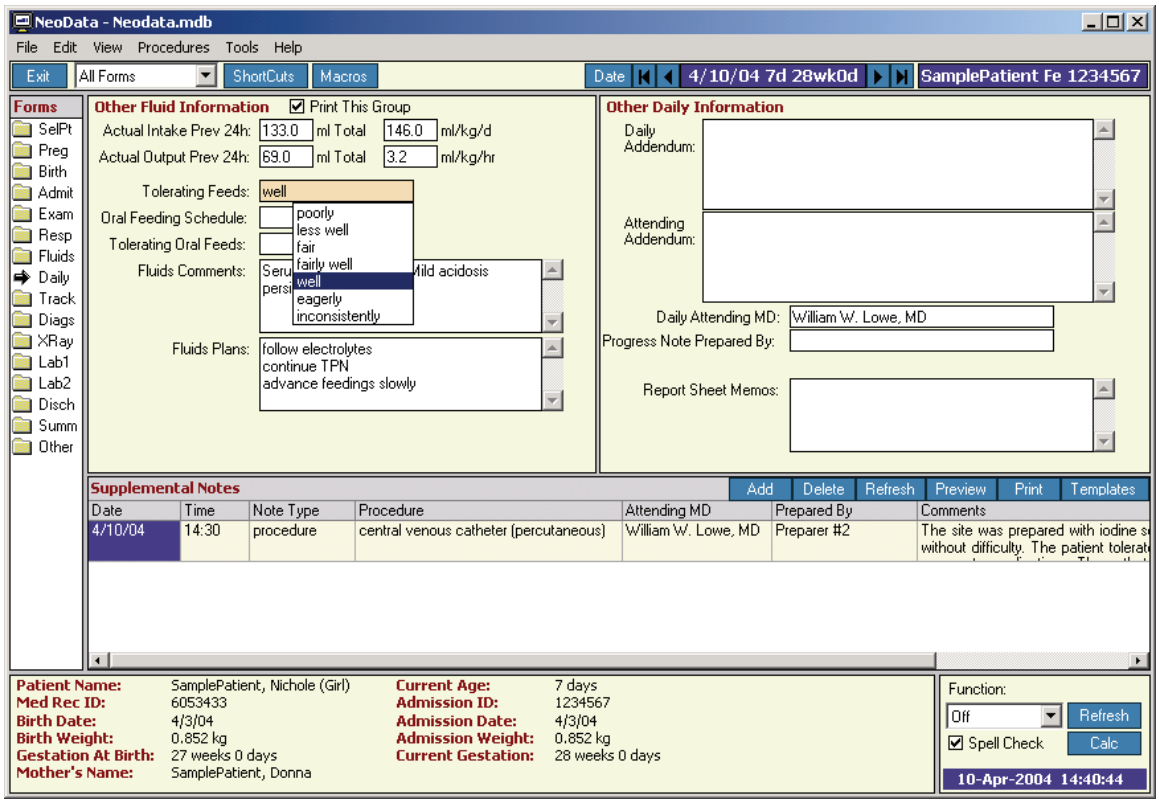
Respiratory Support Form



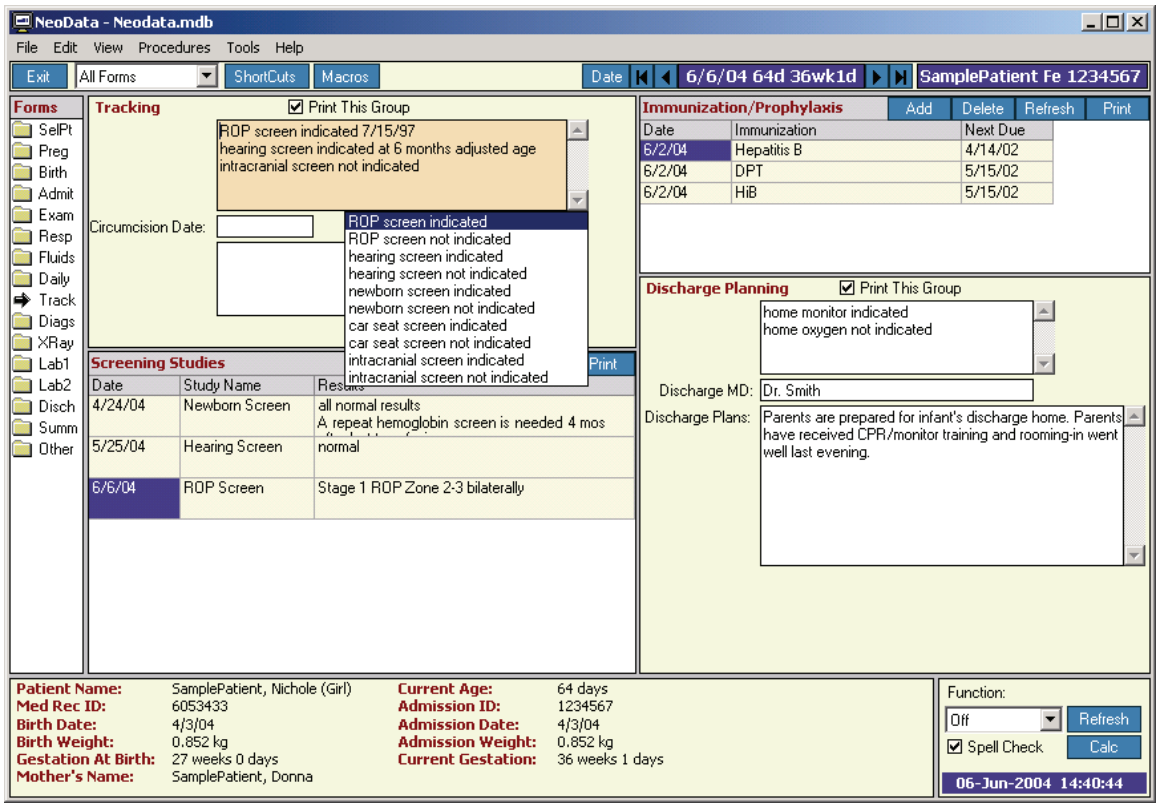
Daily Fluids Form



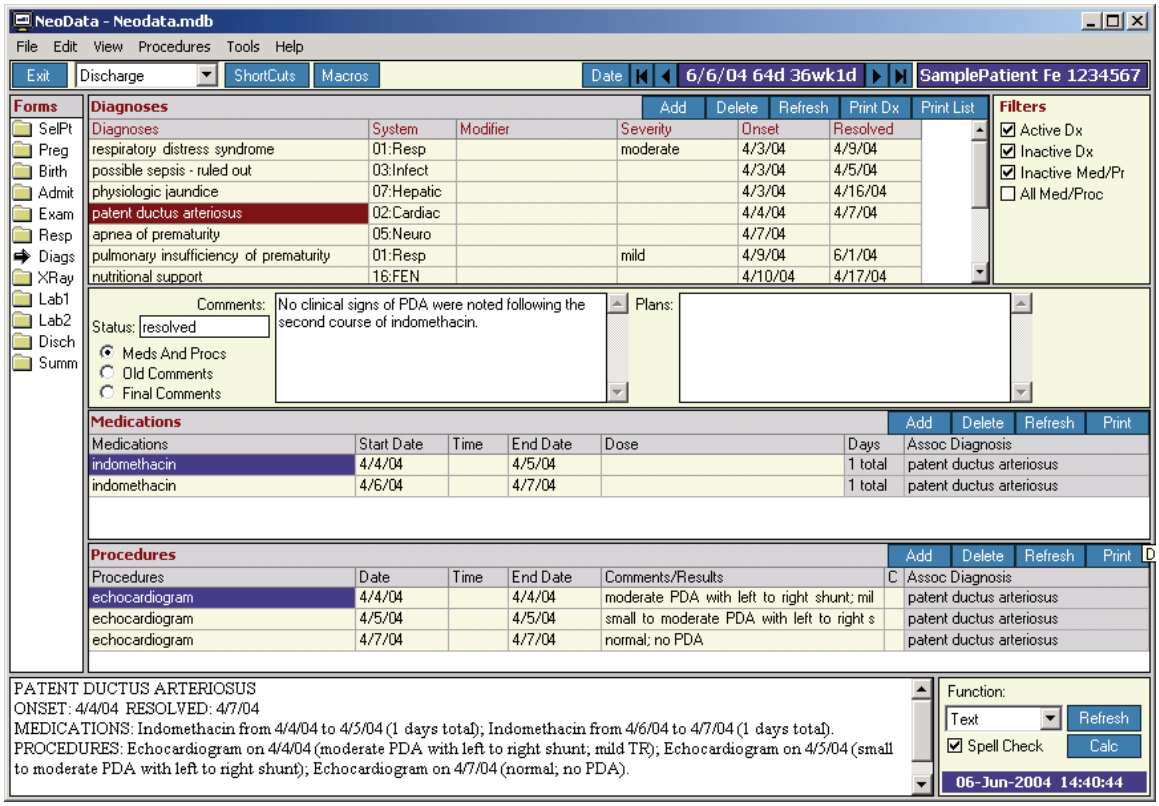
Other Daily Information Form



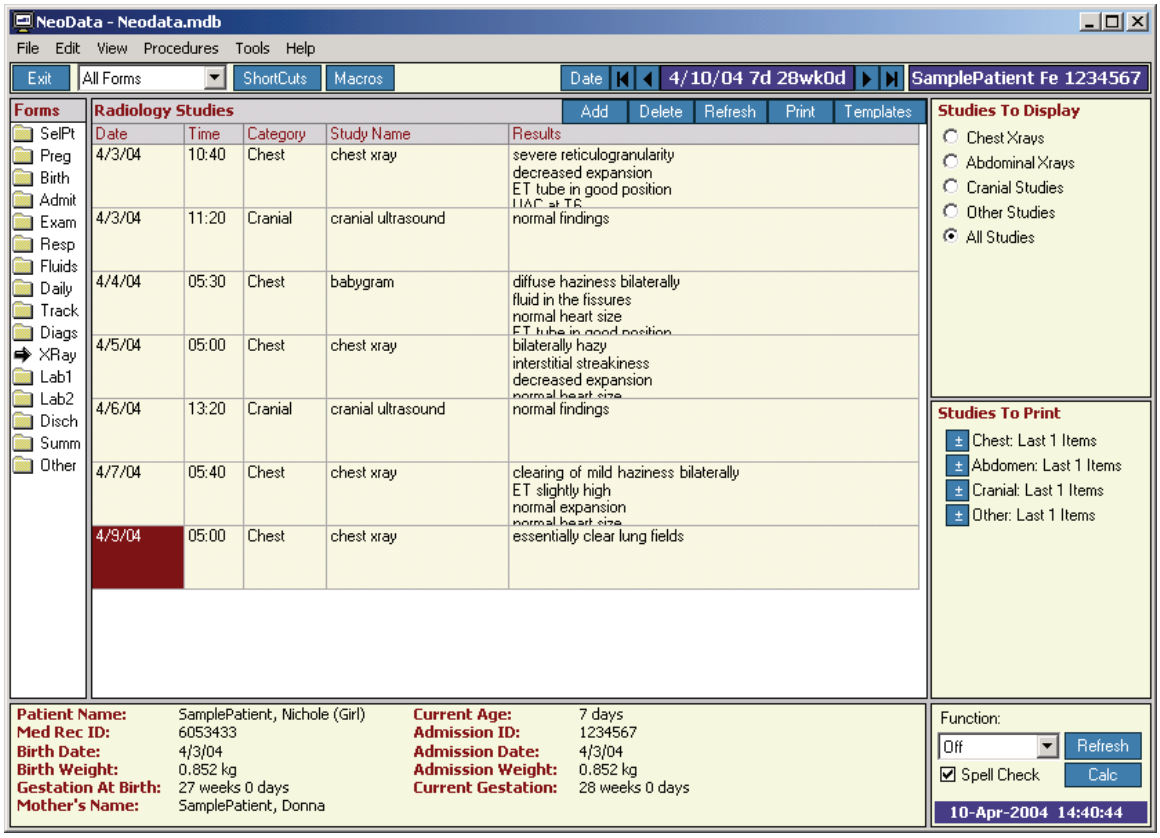
Tracking Information Form



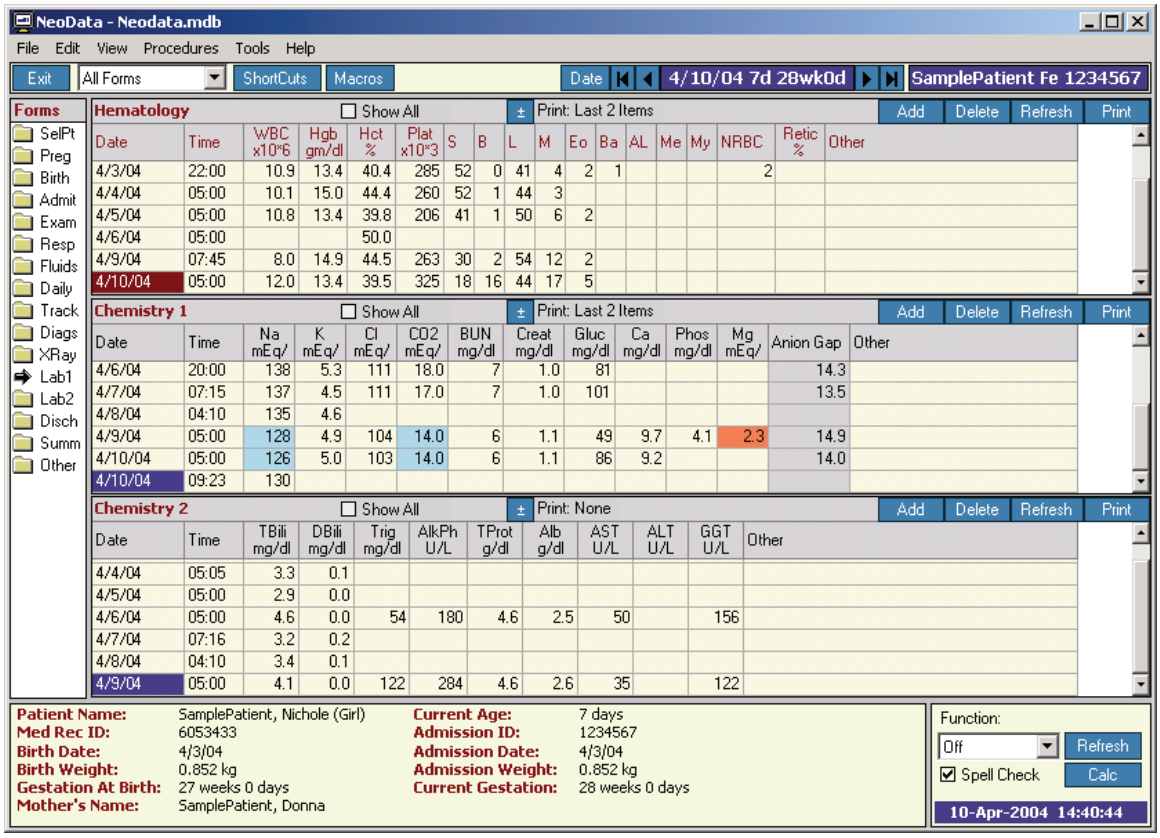
Problems and Diagnoses Form



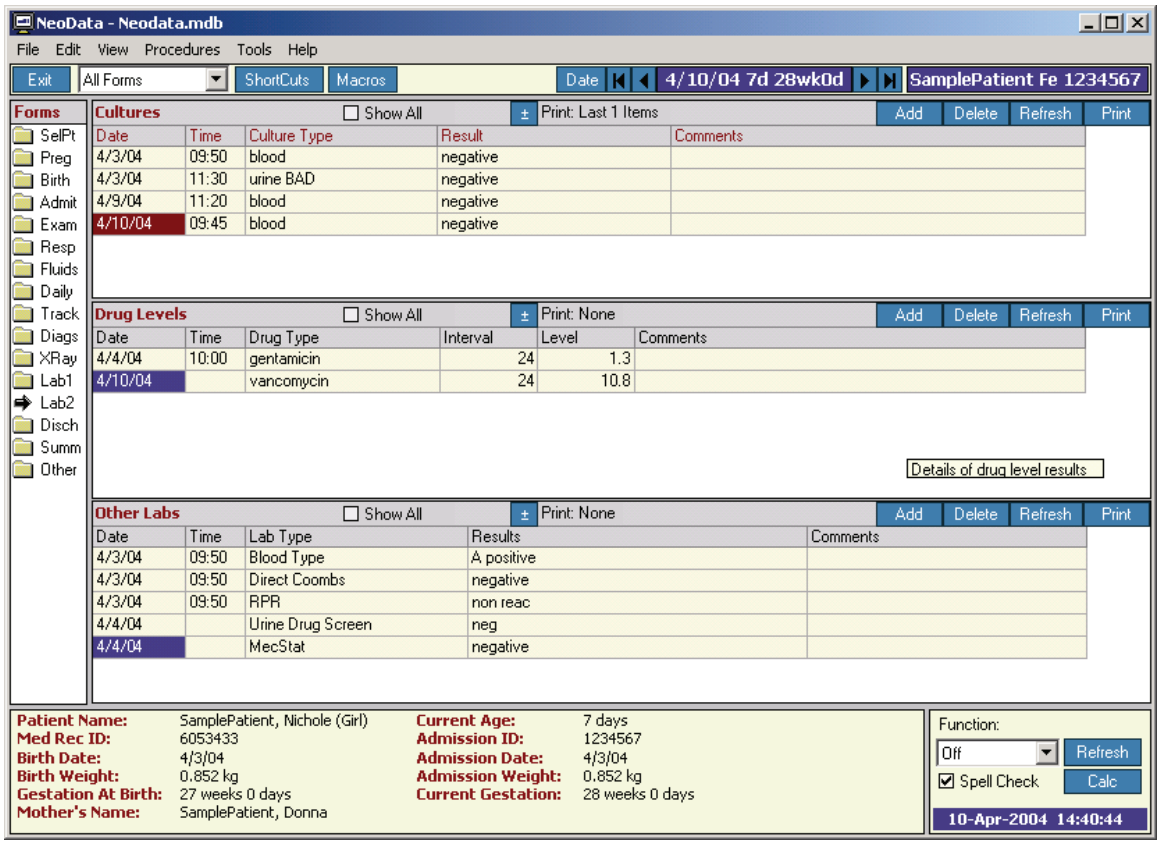
Radiology Studies Form



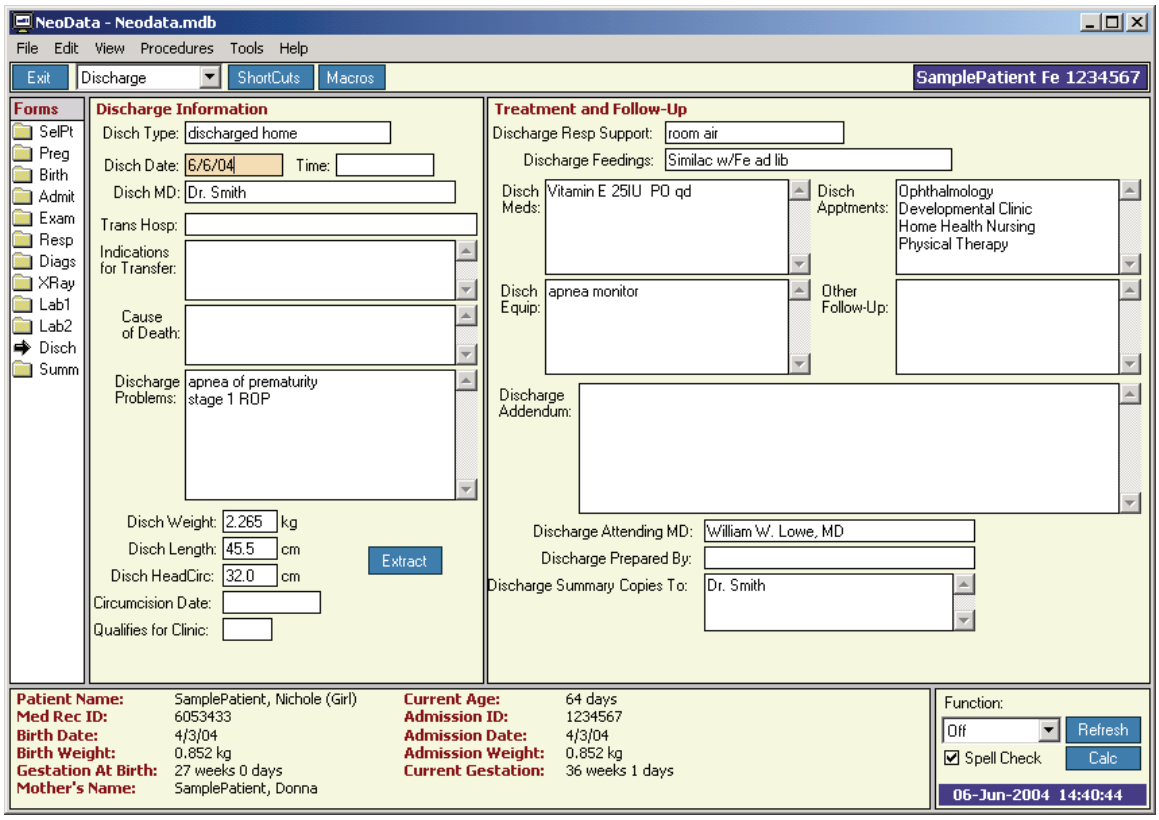
Lab Results 1 Form



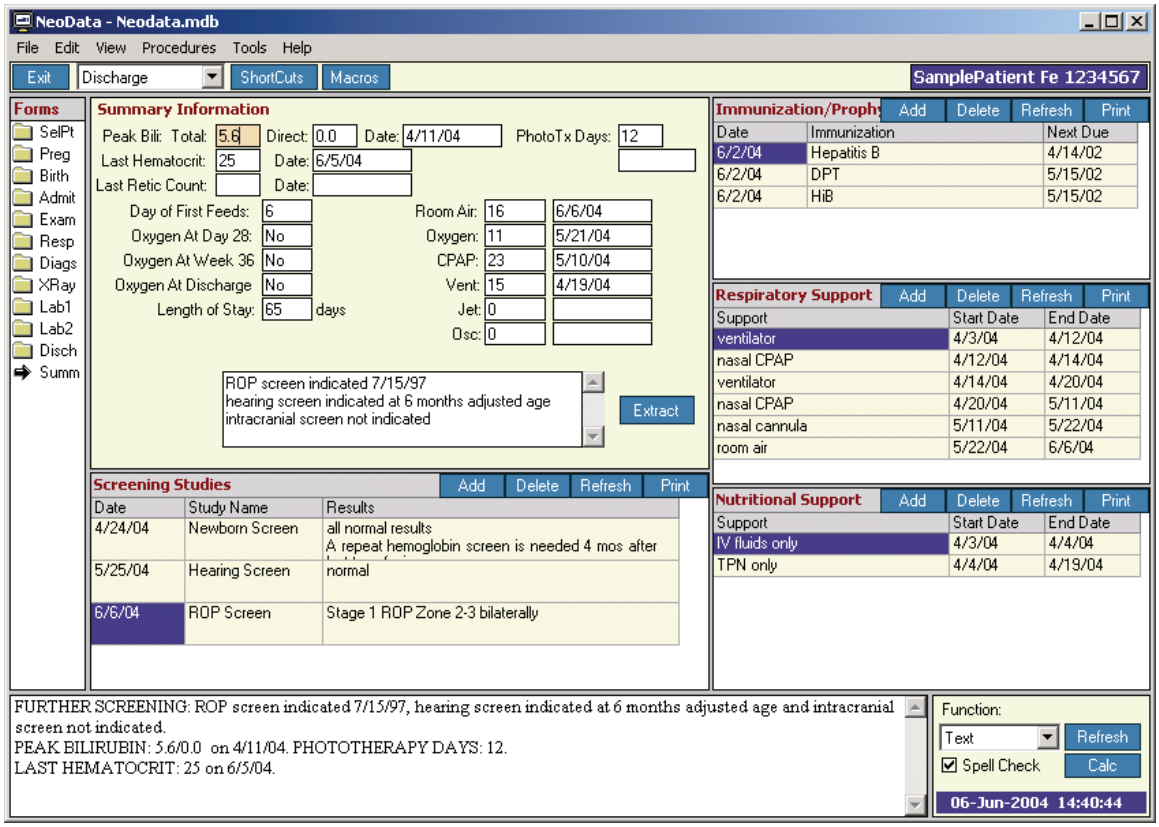
Lab Results 2 Form



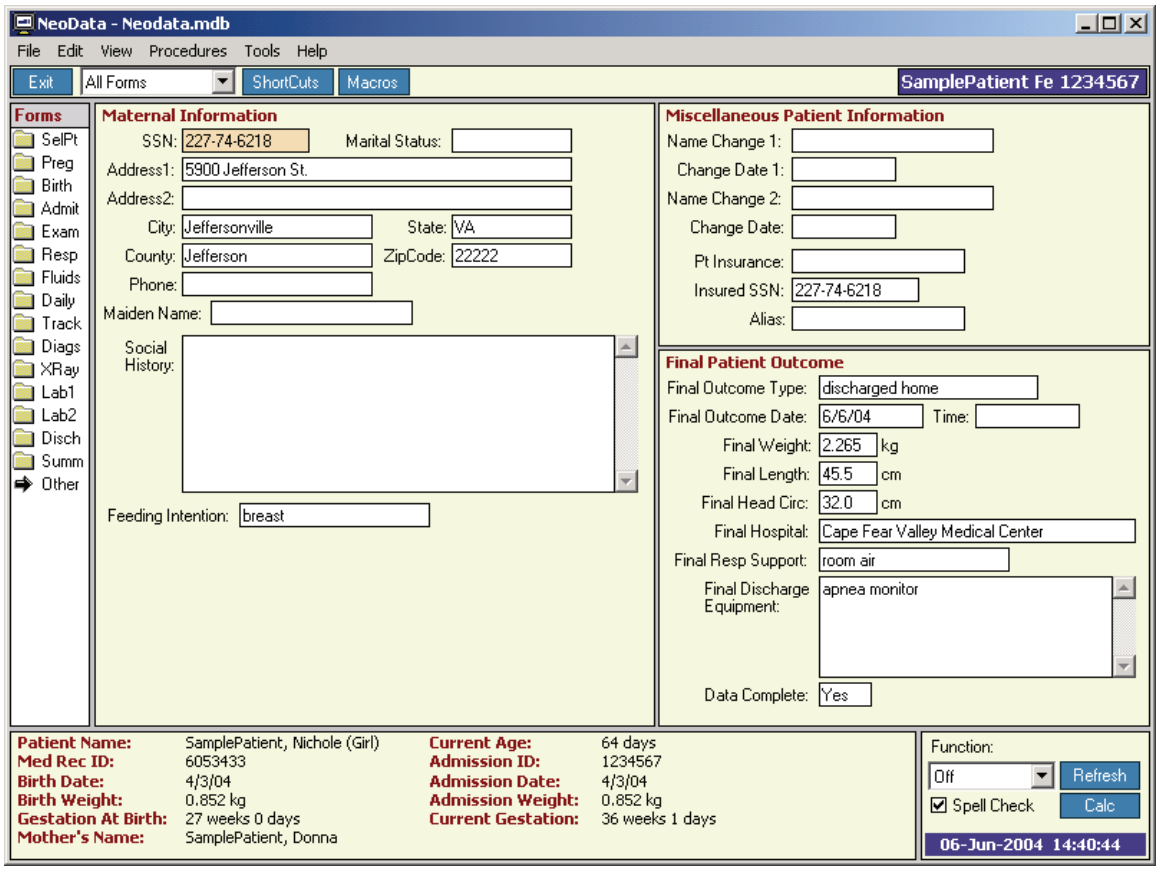
Discharge Information Form



Discharge Summary Form



Other Patient Information Form



Sample Documents

Admission Summary

Cape Fear Valley Medical Center

SAMPLEPATIENTFE 1234567	ADMISSION SUMMARY PAGE 1 OF 2	04/03/2004

Saturday, April 3, 2004
Printed: 7/5/04 10:32h

NAME: SamplePatient, Nichole (Girl)
ADMITTED: 4/3/04

ADMISSION ID: 1234567
MED REC ID: 6053433

PREGNANCY & LABOR

MATERNAL AGE: 20 years. G/P: G3 P3.
PRENATAL LABS: BLOOD TYPE: A pos. SYPHILIS SCREEN: Nonreactive on 11/4/03. HEPATITIS SCREEN: Negative on 11/4/03. HIV SCREEN: Negative on 11/4/03. RUBELLA SCREEN: Immune on 11/4/03.
ESTIMATED DATE OF DELIVERY: 4/9/02. ESTIMATED GESTATION BY OB: 27 weeks. PRENATAL CARE: Adequate.
PREGNANCY COMPLICATIONS: Bleeding and pregnancy-induced hypertension. PREGNANCY MEDICATIONS: Antihypertensive medication. ANTENATAL STEROID DOSES: 4.
LABOR: Spontaneous. TOCOLYSIS: Terbutaline. BIRTH HOSPITAL: Jefferson Regional Medical Center. LABOR & DELIVERY COMPLICATIONS: Premature onset of labor and partial abruption.
Mother was admitted on the morning of delivery with bleeding. Ultrasound showed a partial abruption and an emergency cesarean section was done.

BIRTH

DATE: 4/3/04 TIME: 0923 hours
WEIGHT: 0.852kg LENGTH: 34.0cm HC: 25.0cm
GEST AGE: 27 weeks GROWTH: AGA
RUPTURE OF MEMBRANES: At delivery. AMNIOTIC FLUID: Clear. PRESENTATION: Vertex. DELIVERY: Emergent cesarean section. INDICATION: Suspected abruption. SITE: In the delivery room. ANESTHESIA: General.
APGARS: 8 at 1 minute, 8 at 5 minutes. CORD pH: 7.29. CONDITION AT DELIVERY: Active, cyanotic and responsive.
TREATMENT AT DELIVERY: Stimulation, oral suctioning and endotracheal tube ventilation.
The infant was vigorous at birth with good spontaneous activity and respiratory effort, but air exchange was poor. She was suctioned and given free-flow O2, then intubated with a 2.5 ETT.

ADMISSION

ADMISSION DATE: 4/3/04 TIME: 09:30 hours
ADMISSION TYPE: Immediately following delivery. ADMISSION INDICATIONS: Prematurity and respiratory distress.
On admission to the NICU, the patient was pink with mild respiratory distress. She was placed on a ventilator.

ADMISSION PHYSICAL EXAM

WEIGHT: 0.852kg LENGTH: 34.0cm HC: 25.0cm
TEMP: 97.2. HR: 160. RR: 44. BP: 39/24. GLUCOSE SCREENING: 40-80mg%.
CONDITION: Pink and quiet in mild.
HEENT: Soft and flat fontanelle, opposed sutures, ET tube in place, red reflex bilaterally and patent nares.
RESPIRATORY: Mild-moderate retractions, good air exchange bilaterally and moderate scattered rales.
CARDIAC: Normal sinus rhythm, good perfusion, strong and equal pulses and no murmur.
ABDOMEN: Soft and nondistended abdomen and no organomegaly.
GU: Normal preterm female features and patent anus.
NEUROLOGIC: Responsive mental status, normal muscle tone for gestational age, fair Moro reflex and good grasp reflex.
EXTREMITIES: No hip click.

ADMISSION LABORATORY STUDIES

4/3/04 09:50h: WBC 9.0X10^3 Hgb: 14.3 Hct: 43.4 Plt: 274X10^3 S: 19 B: 4 L: 62 M: 7 Eo: 4 AL: 4 NRBC: 8
4/3/04 09:50h: blood culture: pending
4/3/04 11:30h: urine BAD: pending
4/3/04 09:50h: RPR: nonreactive

SAMPLEPATIENTFE 1234567	ADMISSION SUMMARY PAGE 1 OF 2	04/03/2004

Jefferson Regional Medical Center	SamplePatient, Nichole (Girl) Admission ID: 1234567 Birth Date: 4/3/04 Admit Date: 4/3/04

Progress Note

Cape Fear Valley Medical Center

SAMPLEPATIENTFE 1234567	PROGRESS NOTE PAGE 1 OF 2	04/10/2004

Saturday, April 10, 2004
Printed: 7/5/04 10:51h

AGE: 7d. ADJ GEST AGE: 28wk 0d. WEIGHT: 0.909kg (Up 37g).

VITAL SIGNS & PHYSICAL EXAM
WEIGHT: 0.909kg LENGTH: 34.5cm HC: 25.7cm
TEMP: Normal. HR: 152-168. RR: 40-60. BP: 52/32. URINE OUTPUT: 4.3ml/kg/h. GLUCOSE SCREENING: 80-120mg%. STOOL: None in 48 hours. URINALYSIS: 1+ proteinuria.
CONDITION: Pink and quiet in minimal.
HEENT: Soft and flat fontanelle and overlapping sutures.
RESPIRATORY: Good air exchange bilaterally, fine scattered crackles and good respiratory effort.
CARDIAC: Normal sinus rhythm, good perfusion and strong and equal pulses.
ABDOMEN: Soft and nondistended abdomen and moderately decreased bowel sounds.
NEUROLOGIC: Responsive but quiet mental status and decreased tone generally.

LABORATORY STUDIES
4/9/04 07:45h: WBC:8.0X10**3 Hgb:14.9 Hct:44.5 Plt:263X10**3 S:30 B:2 L:54 M:12 Eb:2
4/10/04 05:00h: WBC:12.0X10**3 Hgb:13.4 Hct:39.5 Plt:325X10**3 S:18 B:16 L:44 M:17 Eb:5
4/10/04 05:00h: Na:126 K:5.0 Cl:103 CO2:14.0 BUN:6 Creat:1.1 Gluc:86 Ca:9.2
4/10/04 09:23h: Na:130
4/10/04 09:45h: blood culture: negative

RADIOLOGY STUDIES
Cranial ultrasound on 4/6/04 at 13:20h: Normal findings.
Chest xray on 4/9/04 at 05:00h: Essentially clear lung fields.

CURRENT MEDICATIONS
Caffeine citrate 8.5mg IV q12h started on 4/7/04 (completed 3 of 57 days)
Vancomycin 17.5mg IV q24h started on 4/9/04 (completed 1 days)
Cefotaxime 45mg IV q12h started on 4/9/04 (completed 1 days)

RESPIRATORY SUPPORT
SUPPORT: Ventilator since 4/3/04
FiO2: 0.21 RATE: 20 PIP: 14cmH2O PEEP: 4cmH2O IT: 0.50sec FLOW: 6l/min
CBG 4/10/04 03:47h: pH:7.309 pCO2:33 pO2:42 Bicarb:16.5 BE:-8.4
CBG 4/10/04 17:03h: pH:7.292 pCO2:38 pO2:44 Bicarb:18.1 BE:-7.5

CURRENT PROBLEMS & DIAGNOSES
PULMONARY INSUFFICIENCY OF PREMATURITY MILD
ONSET: 4/9/04 STATUS: Evolving
PROCEDURES: Blood transfusions (multiple) on 4/4/04 (last transfused 5/23).
SUSPECTED SEPSIS
ONSET: 4/10/04 STATUS: Active
MEDICATIONS: Vancomycin 17.5mg IV q24h started on 4/9/04 (completed 1 days); Cefotaxime 45mg IV q12h started on 4/9/04 (completed 1 days).
COMMENTS: Patient was started on antibiotics because of a change in respiratory status in conjunction with an abnormal CBC.
PLANS: Continue antibiotics and follow drug levels.
AT RISK FOR APNEA
ONSET: 4/7/04 STATUS: Active
MEDICATIONS: Caffeine citrate 8.5mg IV q12h started on 4/7/04 (completed 3 of 57 days).
COMMENTS: Started on caffeine on 4/18/97 in anticipation of extubation.

SAMPLEPATIENTFE 1234567	PROGRESS NOTE PAGE 1 OF 2	04/10/2004

Jefferson Regional Medical Center	SamplePatient, Nichole (Girl) Admission ID: 1234567 Birth Date: 4/3/04 Admit Date: 4/3/04

Discharge Summary

SAMPLEPATIENT FE 123456DISCHARGE SUMMARY PAGE 1 OF 4 **06/06/2004**

NAME: SamplePatient, Nichole (Girl)
ADMITTED: 4/3/04
DISCHARGED: 6/6/04

ADMISSION ID: 1234567
MED REC ID: 6053433

PREGNANCY & LABOR

G/P: G3 P3.
PRENATAL LABS: BLOOD TYPE: A pos. SYPHILIS SCREEN: Nonreactive on 11/4/03. HEPATITIS SCREEN: Negative on 11/4/03. HIV SCREEN: Negative on 11/4/03. RUBELLA SCREEN: Immune on 11/4/03.
ESTIMATED DATE OF DELIVERY: 4/9/02. ESTIMATED GESTATION BY OB: 27 weeks. PRENATAL CARE: Adequate. PREGNANCY COMPLICATIONS: Bleeding and pregnancy-induced hypertension. PREGNANCY MEDICATIONS: Antihypertensive medication. ANTENATAL STEROID DOSES: 4.
LABOR: Spontaneous. TOCOLYSIS: Terbutaline. BIRTH HOSPITAL: Jefferson Regional Medical Center. LABOR & DELIVERY COMPLICATIONS: Premature onset of labor and partial abruption.
Mother was admitted on the morning of delivery with bleeding. Ultrasound showed a partial abruption and an emergency cesarean section was done.

BIRTH

DATE: 4/3/04 TIME: 09:23 hours
WEIGHT: 0.852kg LENGTH: 34.0cm HC: 25.0cm
GEST AGE: 27 weeks GROWTH: AGA
RUPTURE OF MEMBRANES: At delivery. AMNIOTIC FLUID: Clear. PRESENTATION: Vertex. DELIVERY: Emergent cesarean section. INDICATION: Suspected abruption. SITE: In the delivery room. ANESTHESIA: General
APGARS: 8 at 1 minute, 8 at 5 minutes. CORD pH: 7.29. CONDITION AT DELIVERY: Active, cyanotic and responsive.
TREATMENT AT DELIVERY: Stimulation, oral suctioning and endotracheal tube ventilation.
The infant was vigorous at birth with good spontaneous activity and respiratory effort, but air exchange was poor. She was suctioned and given free-flow O2, then intubated with a 2.5 ETT.

ADMISSION

ADMISSION DATE: 4/3/04 TIME: 09:30 hours
ADMISSION TYPE: Immediately following delivery. FOLLOW-UP PHYSICIAN: Dr. Smith. ADMISSION INDICATIONS: Prematurity and respiratory distress.
On admission to the NICU, the patient was pink with mild respiratory distress. She was placed on a ventilator.

ADMISSION PHYSICAL EXAM

WEIGHT: 0.852kg LENGTH: 34.0cm HC: 25.0cm
TEMP: 97.2. HR: 160. RR: 44. BP: 39/24. GLUCOSE SCREENING: 40-80mg%.
CONDITION: Pink and quiet in mild.
HEENT: Soft and flat fontanelle, opposed sutures, ET tube in place, red reflex bilaterally and patent nares.
RESPIRATORY: Mild-moderate retractions, good air exchange bilaterally and moderate scattered rales.
CARDIAC: Normal sinus rhythm, good perfusion, strong and equal pulses and no murmur.
ABDOMEN: Soft and nondistended abdomen and no organomegaly.
GU: Normal preterm female features and patent anus.
NEUROLOGIC: Responsive mental status, normal muscle tone for gestational age, fair Moro reflex and good grasp reflex.
EXTREMITIES: No hip click.

ADMISSION LABORATORY STUDIES

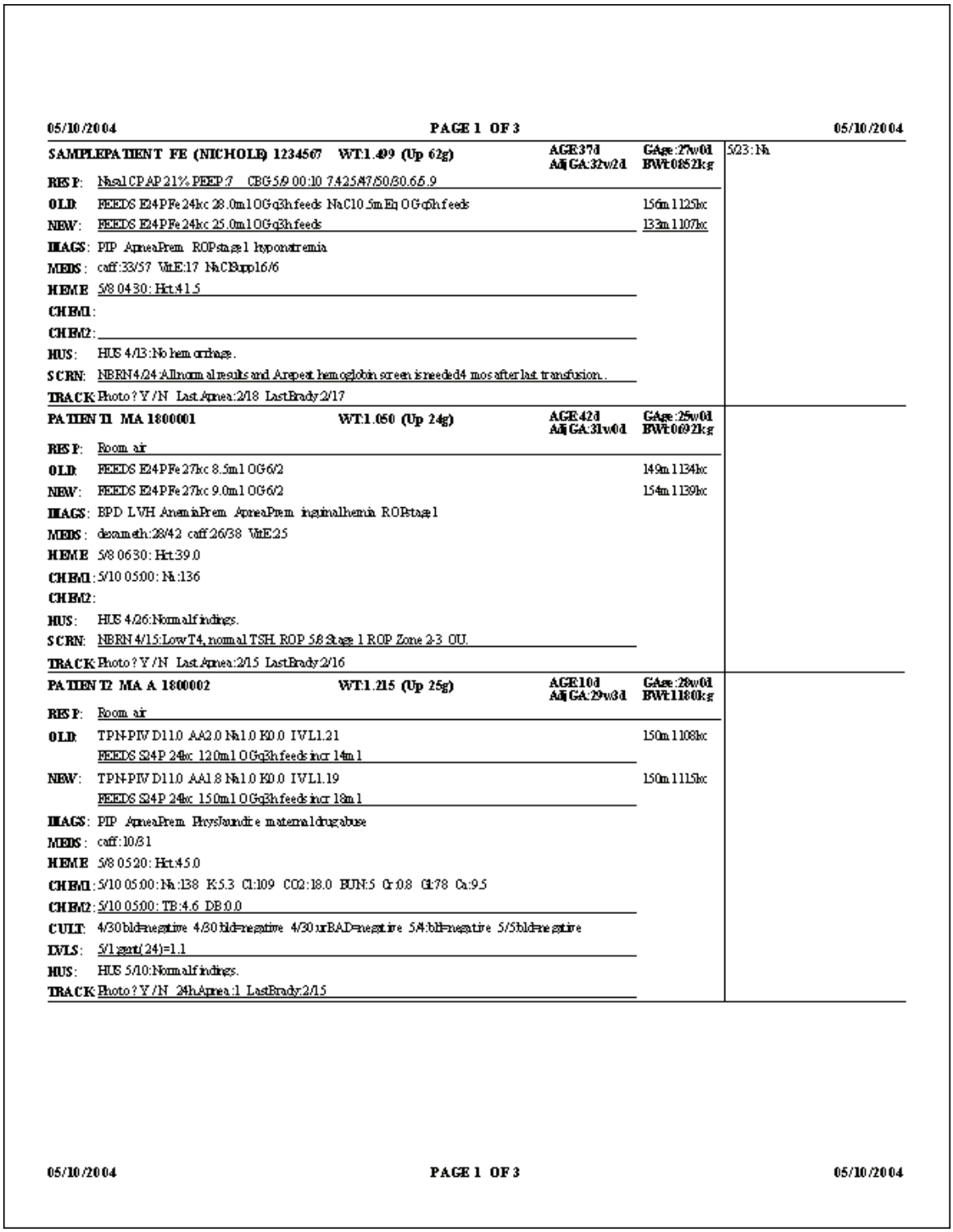
4/3/04 09:50h: WBC:9.0X10*3 Hgb:14.3 Hct:43.4 Plt:274X10*3 S:19 B:4 L:62 M:7 Eo:4 AL:4 NRBC:8
4/3/04 22:00h: WBC:10.9X10*3 Hgb:13.4 Hct:40.4 Plt:285X10*3 S:52 B:0 L:41 M:4 Eo:2 Ba:1 NRBC:2
4/3/04 22:00h: Na:134 K:4.3 Ca:8.5
4/3/04 22:00h: TBili:3.0 DBili:0.1
4/3/04 09:50h: RPR: nonreactive
4/3/04 09:50h: Direct Coombs: negative
4/3/04 09:50h: Blood Type: A pos

RESOLVED DIAGNOSES

RESPIRATORY DISTRESS SYNDROME MODERATE
ONSET: 4/3/04 RESOLVED: 4/9/04
PROCEDURES: UAC placement from 4/3/04 to 4/6/04; Surfactant therapy from 4/3/04 to 4/4/04 (4 doses).

SAMPLEPATIENT FE 123456DISCHARGE SUMMARY PAGE 1 OF 4 **06/06/2004**

Round Sheets



05/10/2004 PAGE 1 OF 3 05/10/2004

SAMPLEPATIENT FE (NICHOLE) 1234567 **WT:1.499 (Up 62g)** **AGE:37d** **GAge:27w0d** 5/23: Na
Adj GA:32w2d **BWt:0852kg**

RESP: Nasal CPAP 21% PEEP 7 CBG 5/9 00:10 7.425/47/50/30.6/5.9
OLD: FEEDS E24P Fe 24kc 28.0ml OG q3h feeds NaCl 0.5mEq OG q3h feeds 156ml 125kc
NEW: FEEDS E24P Fe 24kc 25.0ml OG q3h feeds 133ml 107kc
IMAGS: PIP ApneaPrem ROPstage1 hyponatremia
MEDS: caff:33/57 VitE:17 NaClSupp16/6
HEME 5/8 0430: Hct:41.5
CHEM1:
CHEM2:
HUS: HUS 4/13: No hemorrhage.
SCRN: NBRN4/24: All normal results and A repeat hemoglobin screen is needed 4 mos after last transfusion..
TRACK Photo? Y/N Last Apnea: 2/18 Last Brady 2/17

PATIENT1 MA 1800001 **WT:1.050 (Up 24g)** **AGE:42d** **GAge:25w0d**
Adj GA:31w0d **BWt:0692kg**

RESP: Room air
OLD: FEEDS E24P Fe 27kc 8.5ml OG 6/2 149ml 134kc
NEW: FEEDS E24P Fe 27kc 9.0ml OG 6/2 154ml 139kc
IMAGS: BPD LVH AnemiaPrem ApneaPrem inguinalhernia ROPstage1
MEDS: dexameth:28/42 caff 26/38 VitE:25
HEME 5/8 0630: Hct:39.0
CHEM1: 5/10 0500: Na:136
CHEM2:
HUS: HUS 4/26: Normal findings.
SCRN: NBRN 4/15: Low T4, normal TSH. ROP 5/8 Stage 1 ROP Zone 2-3 OU.
TRACK Photo? Y/N Last Apnea: 2/15 Last Brady 2/16

PATIENT2 MA A 1800002 **WT:1.215 (Up 25g)** **AGE:10d** **GAge:28w0d**
Adj GA:29w3d **BWt:1180kg**

RESP: Room air
OLD: TPN-PIV D11.0 AA2.0 Na1.0 K0.0 IVL1.21 150ml 108kc
FEEDS S24P 24kc 120ml OG q3h feeds incr 14ml
NEW: TPN-PIV D11.0 AA1.8 Na1.0 K0.0 IVL1.19 150ml 115kc
FEEDS S24P 24kc 150ml OG q3h feeds incr 18ml
IMAGS: PIP ApneaPrem Physfaundice maternal drug abuse
MEDS: caff:10/31
HEME 5/8 0520: Hct:45.0
CHEM1: 5/10 0500: Na:138 K:5.3 Cl:109 CO2:18.0 BUN:5 Cr:0.8 Gl:78 Ca:9.5
CHEM2: 5/10 0500: TB:4.6 DB:0.0
CULT: 4/30 bld=negative 4/30 bld=negative 4/30 urBAD=negative 5/4 bld=negative 5/5 bld=negative
IVLS: 5/1 gent(24)=1.1
HUS: HUS 5/10: Normal findings.
TRACK Photo? Y/N 24h Apnea: 1 Last Brady 2/15

05/10/2004 PAGE 1 OF 3 05/10/2004

Daily Fluid Orders

NAME: SamplePatient, Nichole (Girl) **DATE: 4/10/04** **Fluids: 135ml/kg/d** **Page 1**
ADMISSION ID: 1234567 **TIME: 10:57hr** **Weight: 0.909kg**
MED REC ID: 6053433

IV Fluid #1: TPN via PCVC to infuse at 3.9 ml/h over 24 hours (102.5 ml/kg)

Dextrose:	11 gm/100ml	(11.3 gm/kg)
TrophAmine 10%:	2 gm/kg	(1.95 gm/100ml)
NaCl:	1 mEq/kg	(0.98 mEq/100ml)
Na Acetate:	2 mEq/kg	(1.95 mEq/100ml)
KCl:	1 mEq/kg	(0.98 mEq/100ml)
K Phosphate:	1.5 mEq/kg as K+	(1.46 mEq/100ml as K+)
Calcium:	1.5 mEq/kg	(1.46 mEq/100ml)
OR Ca Elemental:	30 mg/kg	(29.25 mg/100ml)
Magnesium:	0.25 mEq/kg	(0.24 mEq/100ml)
OR Mg Elemental:	3.05 mg/kg	(2.97 mg/100ml)
Heparin:	0.5 Units/ml	(50 Units/100ml)
MVI Pediatric:	1.5 ml	(1.61 ml/100ml)
PTE4+Se (3:1):	0.4 ml/kg	(0.39 ml/100ml)
Cysteine HCl:	56 mg/kg	(54.61 mg/100ml) (28 mg/gm AA)

IV Fluid #2: IV Lipid to infuse at 0.5 ml/h over *23* hours (12.7 ml/kg)

Concentration:	20%	
Amount:	11.5 ml over 23h	(2.53 gm/kg)

Feeding #1

Formula:	Enfamil Premature 24
Strength:	12kcal/oz (0.5 strength)
Amount:	1ml OG hourly 6 hours on, 2 hours off

Signature: **Page 1**

Jefferson Regional Medical Center

SamplePatient, Nichole (Girl)
Admission ID: 1234567
Birth Date: 4/3/04
Admit Date: 4/3/04

Index