# Appendix D

# The Evaluation Databases

This appendix contains the relational databases that each volunteer group designed and implemented based on the clinical data set. The definition of each database consists of the Sybase data-definition language commands that each group used to create the schema and the set of codes that each group used to populate the schema.

Note that each schema contains a set of table definitions that was generated by the database-design groups ("`Original Database Tables`") *plus* a set of table definitions that was added subsequently to facilitate the mapping of the relational schema to the FER schema ("Mapping Tables"). For example, each schema contains a table named "`DIAGNOSIS_CODES`" among the coding tables; this table was added *ex post facto* to map the terms that each group used to represent clinical diagnoses to the entity-type names that the FER-schema designer used to represent the same diagnoses. For example, a row in the `DIAGNOSIS_CODES` table might associate the site-specific diagnosis code "D2-51000" to the FER entity type "Asthma." Although tables were *added* to the relational schemas to facilitate the mapping process, none of the existing tables in the schemas were modified in any way.

## D.1 Database 1

This database is notable in that (1) all of the allergies that a patient has are represented in the single text field "`allergy`" of the table "`wpatient`," and (2) the chief complaint and medical history for each patient are represented as free-text narratives in the fields "`cc`" and "`history`," respectively, of the table "`wadmin`." In each of these cases, the text strings stored in the database fields must be parsed in order to extract the individual allergies, presenting complaints, and past diagnoses.

### D.1.1 Schema for database 1

```
/*******************************************************/
/* Original Database Tables */
/*******************************************************/

create table wpatient
(mrno              char(11)          not null,
 lname             varchar(20)       not null,
 fname             varchar(20)       not null,
 dob               datetime,
 sex               char(1),
 race              varchar(15),
 h_addr            varchar(50),
 h_phone           char(13),
 allergy           text              null)


create table wphysician
(dea               int               not null,
 lname             varchar(20)       not null,
 fname             varchar(20)       not null,
 dob               datetime,
 o_addr            varchar(50),
 o_phone           char(13),
 h_addr            varchar(50),
 h_phone           char(13),
 speciality        varchar(30))

create table wadmin
(mrno              char(11)    not null,
 date              datetime    not null,
 dea               int         not null,
 cc                text,
 history           text        null,
 location          varchar(10),
 tdate             datetime    null)

create table wmed
(mrno              char(11)    not null,
 date              datetime    not null,
 medcd             char(2)     not null,
 dose              float,
```

```
 route            varchar(18),
 frequency        varchar(20))

create table wmedcd
(medcd            char(2)     not null,
 drug             varchar(20),
 units            varchar(20) null)

create table wlabcd
(code             varchar(3)  not null,
 cdesc            varchar(35),
 units            varchar(20))


/*****************************************************/
/* Mapping Tables*/
/*****************************************************/

/* TABLE FOR ASSOCIATING CLOTTING TESTS WITH THEIR CONTROL TIMES */

create table CLOT_TEST_CONTROL (
   clot_code            char(3)     not null,
   control_code         char(3)     not null )


/* CODING TABLES */

create table DIAGNOSIS_CODES (
        dgx_code        varchar(50)             NOT NULL,
        ent_type        varchar(50)             NOT NULL)

create table PROCEDURE_CODES (
        proc_code       varchar(50)             NOT NULL,
        ent_type        varchar(50)             NOT NULL)

create table LAB_TEST_CODES (
        test_code       varchar(50)             NOT NULL,
        ent_type        varchar(50)             NOT NULL)

create table PHYSIOLOGIC_PARM_CODES (
        parm_code       varchar(50)             NOT NULL,
        ent_type        varchar(50)             NOT NULL)

create table MEDICATION_CODES (
        med_code        varchar(50)             NOT NULL,
        ent_type        varchar(50)             NOT NULL)
```

```
/** ADDITIONAL TABLES FOR VOCABULARY MAPPING AND TYPE HIERARCHY **/

create table FER_TYPE_HIERARCHY (
        ent_type                varchar(50)     not null,
        desc_ent_type           varchar(50)     not null)

create table ENTITY_TYPE_NAMES (
        ent_type                varchar(50)     not null,
        ent_type_name           varchar(50)     not null)
```

### D.1.2 Codes for database 1

| Observation-Code | Observation | Units |
|---|---|---|
| 4 | ventilator alarms suspended | NA |
| 7 | EKG heart rate | bpm |
| 19 | mean arterial pressure | mm Hg |
| 20 | arterial line systolic BP | mm Hg |
| 21 | arterial line diastolic BP | mm Hg |
| 22 | arterial line heart rate | bpm |
| 59 | arterial O2 saturation | % |
| 80 | respiratory rate | breaths/min |
| 81 | tidal volume | cc/breath |
| 83 | PIP | cm H2O |
| 84 | mean airway pressure | cm H2O |
| 135 | SGPT | U/L |
| 124 | Arterial O2 Saturation | % |
| 125 | Arterial Bicarb Conc | mEq/L |
| 123 | Arterial pH | NA |
| 128 | SGOT | U/L |
| 101 | BUN | mg/dl |
| 103 | Blood Glucose | mg/dl |
| 112 | HCT | % |
| 117 | Hemoglobin Conc | g/dl |
| 118 | Mean Corpuscular Hemoglobin | pg |
| 114 | Mean Corpuscular Hemoglobin Conc | g/dl |
| 108 | MCV | fl |
| 102 | PTT-Control | sec |
| 106 | PTT | sec |
| 122 | PaCO2 | mmHg |
| 121 | PaO2 | mmHg |
| 104 | Plasma CO2 Content | mEq/L |
| 109 | Plasma Fibrinogen | mg/dl |
| 115 | Platelet Count | /mm^3 |
| 116 | Prothrombin Time-Control | sec |
| 100 | Prothrombin Time | sec |

| | | |
|---|---|---|
| 107 | RBC | million/mm^3 |
| 132 | Serum Albumin | g/dl |
| 134 | Serum Ca++ | mEq/L |
| 105 | Serum Cl- | mEq/L |
| 113 | Serum Creatinine | mg/dl |
| 130 | Serum Inorganic Phosphate | mg/dl |
| 120 | Serum Ionized Ca++ | mEq/L |
| 111 | Serum K+ | mEq/L |
| 126 | Serum Mg+ | mEq/L |
| 119 | Serum Na+ | mEq/L |
| 127 | Serum Total Protein | g/dl |
| 131 | Serum Triglycerides | mg/dl |
| 133 | Total Bilirubin | mg/dl |
| 110 | WBC | /mm^3 |
| 129 | Whole Blood Ammonia | mcg/dl |
| 140 | Diff Polymorphonuclear cells | % |
| 141 | Diff Band cells | % |
| 142 | Diff Lymphocytes | % |
| 143 | Diff Monocytes | % |
| 144 | Diff Eosinophils | % |
| 145 | Theophylline assay | mcg/ml |
| 200 | Terbutaline | mcg/kg/min |
| 201 | Pavulon | mg/hr |
| 202 | Versed | mg/hr |
| 203 | Fluid Out | cc/hr |
| 204 | Dopamine | mg/kg/min |
| 205 | Fluid In | cc |
| 206 | Fentanyl | mcg/hr |
| 207 | Temp | C |
| 208 | Zantac | mg/hr |
| 90 | systolic BP | mm Hg |
| 91 | diastolic BP | mm Hg |

| Medication-Code | Medication | Units |
|---|---|---|
| 14 | nystatin | |
| 4 | ativan | mg |
| 3 | Amphotericin | |
| 20 | ventolin | |
| 12 | Maalox | cc |
| 19 | terbutiline | microgram/kg/min |
| 15 | Pavulon | mg/hour |
| 21 | versed | mg/hour |
| 11 | fentanyl | microgram/hour |
| 10 | dopamine | mg/kg/hr |
| 2 | Albuterol MDI | puffs |
| 18 | Theodur | mg |

| | | |
|---|---|---|
| 5 | Azmacort | puffs |
| 1 | Albuterol | cc |
| 13 | NS | cc |
| 6 | Brokosol | |
| 8 | Cholorpherinamine | |
| 9 | D5NS | cc/hr |
| 16 | Ranitidine | mg/min |
| 17 | Solumedrol | mg |
| 7 | Cefotetan | gm |

## D.2 Database 2

This database is notable in that (1) there is no explicit representation of admission and discharge diagnoses, only the interval of each diagnosis (in the table "`Diagnosis`") and the interval of each admission (in the table "`Admission`"), and (2) the medications for each patient are *normalized* across the tables "`Therapy`" (which contains the identities of the medications taken by each patient) and "`Therapy_Types`" (which contains the characteristics of all medications, regardless of the patients who are taking them).

### D.2.1 Schema for database 2

```
/*****************************************************************/
/*  Original Database Tables */
/*****************************************************************/

create table Patient (
        mr_number               char(11)        not null,
        last_name               varchar(15)     null,
        first_name              varchar(15)     null,
        street_address          varchar(30)     null,
        city                    varchar(15)     null,
        state                   char(2)         null,
        zip                     char(5)         null,
        tel_number              char(12)        null,
        birthdate               datetime        null,
        race                    varchar(15)     null,
        gender                  char(1)         null )

create table Physician (
        dea_number              char(6)         not null,
        last_name               varchar(15)     null,
        first_name              varchar(15)     null,
```

```
        wk_street_address       varchar(30)     null,
        wk_city                 varchar(15)     null,
        wk_state                char(2)         null,
        wk_zip                  char(5)         null,
        wk_tel_number           char(12)        null,
        hm_street_address       varchar(30)     null,
        hm_city                 varchar(15)     null,
        hm_state                char(2)         null,
        hm_zip                  char(5)         null,
        hm_tel_number           char(12)        null,
        birthdate               datetime        null,
        specialty               varchar(20)     null )

create table Admission (
        mr_number               char(11)        not null,
        dea_number              char(6)         not null,
        admit_datetime          datetime        not null,
        location                varchar(10)     null,
        discharge_datetime      datetime        null )

create table Diagnosis (
        mr_number               char(11)        not null,
        diagnosis_name          varchar(30)     not null,
        start_datetime          datetime        not null,
        end_datetime            datetime        null )
create table Therapy (
        mr_number               char(11)        not null,
        med_code                char(3)         not null,
        start_datetime          datetime        not null,
        end_datetime            datetime        null,
        quantity                varchar(6)      null,
        frequency               varchar(15)     null,
        condition               varchar(15)     null )

create table Therapy_Types (
        med_code                char(3)         not null,
        med_name                varchar(30)     null,
        route                   varchar(10)     null,
        units                   varchar(15)     null )

create table Allergy (
        mr_number               char(11)        not null,
        allergy_name            varchar(30)     not null,
        start_date              datetime        null,
        manifestation           varchar(30)     null )
```

```
create table Observations (
        mr_number               char(11)        not null,
        obs_datetime            datetime        not null,
        obs_code                varchar(3)      not null,
        obs_value               varchar(10)     null )

create table Observation_Types (
        obs_code                char(3)         not null,
        obs_text                varchar(40)     not null,
        obs_units               varchar(15)     null )

/******************************************************************/
/* Mapping Tables */
/******************************************************************/

/* TABLE FOR ASSOCIATING CLOTTING TESTS WITH THEIR CONTROL TIMES */

create table CLOT_TEST_CONTROL (
        clot_code       char(3)     not null,
        control_code    char(3)     not null )

/* CODING TABLES */

create table DIAGNOSIS_CODES (
        dgx_code     varchar(50)       not null,
        ent_type     varchar(50)       not null)

create table PROCEDURE_CODES (
        proc_code    varchar(50)       not null,
        ent_type     varchar(50)       not null)

create table LAB_TEST_CODES (
        test_code    varchar(50)       not null,
        ent_type     varchar(50)       not null)

create table PHYSIOLOGIC_PARM_CODES (
        parm_code    varchar(50)       not null,
        ent_type     varchar(50)       not null)

create table MEDICATION_CODES (
        med_code     varchar(50)       not null,
        ent_type     varchar(50)       not null)
```

```
/** ADDITIONAL TABLES FOR VOCABULARY MAPPING AND TYPE HIERARCHY **/

create table FER_TYPE_HIERARCHY (
        ent_type             varchar(50)     not null,
        desc_ent_type        varchar(50)     not null)

create table ENTITY_TYPE_NAMES (
        ent_type             varchar(50)     not null,
        ent_type_name        varchar(50)     not null)
```

### D.2.2  Codes for database 2

| Observation-Code | Observation | Units |
|---|---|---|
| 4 | ventilator alarms suspended | NA |
| 6 | Pulse | bpm |
| 7 | EKG heart rate | bpm |
| 19 | mean arterial pressure | mm Hg |
| 20 | arterial line systolic BP | mm Hg |
| 21 | arterial line diastolic BP | mm Hg |
| 22 | arterial line heart rate | bpm |
| 59 | arterial O2 saturation | % |
| 80 | respiratory rate | breaths/min |
| 81 | tidal volume | cc/breath |
| 83 | PIP | cm H2O |
| 84 | mean airway pressure | cm H2O |
| 90 | systolic BP | mm Hg |
| 91 | diastolic BP | mm Hg |
| 100 | Prothrombin Time | sec |
| 100 | Weight | kg |
| 101 | BUN | mg/dl |
| 102 | PTT-Control | sec |
| 103 | Blood Glucose | mg/dl |
| 104 | Plasma CO2 Content | mEq/L |
| 105 | Serum Cl- | mEq/L |
| 106 | PTT | sec |
| 107 | RBC | million/mm^3 |
| 108 | MCV | fl |
| 109 | Plasma Fibrinogen | mg/dl |
| 110 | WBC | /mm^3 |
| 111 | Serum K+ | mEq/L |
| 112 | HCT | % |
| 113 | Serum Creatinine | mg/dl |
| 114 | Mean Corpuscular Hemoglobin Conc | g/dl |
| 115 | Platelet Count | /mm^3 |
| 116 | Prothrombin Time-Control | sec |
| 117 | Hemoglobin Conc | g/dl |

| | | |
|---|---|---|
| 118 | Mean Corpuscular Hemoglobin | pg |
| 119 | Serum Na+ | mEq/L |
| 120 | Serum Ionized Ca++ | mEq/L |
| 121 | PaO2 | mmHg |
| 122 | PaCO2 | mmHg |
| 123 | Arterial pH | NA |
| 124 | Arterial O2 Saturation | % |
| 125 | Arterial Bicarb Conc | mEq/L |
| 126 | Serum Mg+ | mEq/L |
| 127 | Serum Total Protein | g/dl |
| 128 | SGOT | U/L |
| 129 | Whole Blood Ammonia | mcg/dl |
| 130 | Serum Inorganic Phosphate | mg/dl |
| 131 | Serum Triglycerides | mg/dl |
| 132 | Serum Albumin | g/dl |
| 133 | Total Bilirubin | mg/dl |
| 134 | Serum Ca++ | mEq/L |
| 135 | SGPT | U/L |
| 140 | Diff Polymorphonuclear cells | % |
| 141 | Diff Band cells | % |
| 142 | Diff Lymphocytes | % |
| 143 | Diff Monocytes | % |
| 144 | Diff Eosinophils | % |
| 145 | Theophylline assay | mcg/ml |
| 200 | Terbutaline | mcg/kg/min |
| 201 | Pavulon | mg/hr |
| 202 | Versed | mg/hr |
| 203 | Fluid Out | cc/hr |
| 204 | Dopamine | mg/kg/min |
| 205 | Fluid In | cc |
| 206 | Fentanyl | mcg/hr |
| 207 | Temp | C |
| 208 | Zantac | mg/hr |
| 300 | Renal ultrasound | |

| Medication-Code | Medication | Route | Units |
|---|---|---|---|
| 200 | Terbutaline | IV | mcg/kg/min |
| 201 | Pavulon | IV | mg/hr |
| 202 | Versed | IV | mg/hr |
| 204 | Dopamine | IV | mg/kg/min |
| 206 | Fentanyl | IV | mcg/hr |
| 208 | Ranitidine | IV | mg/min |
| 210 | Nystatin | Oral | |
| 211 | Ativan | IV | mg |
| 212 | Amphotericin Bladder Wash | Via Foley | |
| 213 | Ventolin | Nebulizer | |

| | | | |
|---|---|---|---|
| 214 | Maalox | Per NG | cc |
| 215 | Albuterol MDI | po | puffs |
| 216 | Theodur | po | mg |
| 217 | Azmacort MDI | po | puffs |
| 218 | Pulmonaid Nebulizer | po | cc/ .2 cc NS |
| 219 | Brokosol | po | |
| 220 | Chlorpheniramine | po | |
| 221 | D5 Normal Saline | IV | cc/hr |
| 222 | Solumedrol | IV | mg |
| 223 | Cefotetan | IV | g |

## D.3 Database 3

This database is notable in that it explicitly represents admission diagnoses, discharge diagnoses, problem lists, and procedures in separate tables; SNOMED codes are used to represent instances of each of these categories.

### D.3.1 Schema for database 3

```
/*****************************************************************/
/*  Original Database Tables */
/*****************************************************************/

create table SNOMED_CODES (
        CODE                    char(10)        not null,
        ECLASS                  char(2),
        ENOMEN                  char(200) )

create table patient_demographics (
        Med_Rec_No              char(10) not null,
        last                    char(20),
        first                   char(20),
        home_address            char(20),
        home_city               char(20),
        home_state              char(2),
        home_zip                char(20),
        race                    char(10),
        sex                     char(10),
        DOB                     char(20),
        home_phone              char(20),
        work_phone              char(20) null )
```

```
create table physician_demographics (
        DEA_Num                 char(10) not null,
        DOB                     datetime,
        last                    char(20),
        first                   char(20),
        Office_address          char(20),
        office_city             char(20),
        office_state            char(2),
        office_zip              char(20),
        office_phone            char(20),
        specialty               char(20),
        home_address            char(20),
        home_city               char(20),
        home_state              char(2),
        home_zip                char(20),
        home_phone              char(20) )
create table hospitalizations (
        Med_Rec_No              char(10)        not null,
        unit                    char(20),
        AdmitDate               datetime,
        DischargeDate           datetime        null,
        AttendingDEA            char(20) )

create table AdmitDiagnosis (
        Med_Rec_No              char(10)        not null,
        AdmitDate               datetime,
        Diagnosis               char(10) )

create table DischargeDiagnosis (
        Med_Rec_No              char(10)        not null,
        AdmitDate               datetime,
        Diagnosis               char(10) )

create table Procedures (
        Med_Rec_No              char(10)        not null,
        ProcedureDate           datetime,
        proced                  char(10) )

create table Problems (
        Med_Rec_No              char(10)        not null,
        ProblemStart            datetime        null,
        ProblemEnd              datetime        null,
        Problem                 char(10) )
```

```
create table observations (
        Med_Rec_No              char(10)        not null,
        ObservationDate         datetime,
        ObservationID           char(10),
        ObservationValue        char(10),
        ObservationUnits        char(10) )

create table observation_codes (
        ObservationID           char(10)        not null,
        ObservationDesc         char(40) )

create table Medications (
        Med_Rec_No              char(10)        not null,
        MedDate                 datetime,
        MedID                   char(10),
        MedAmount               char(10),
        MedUnits                char(10)        null,
        MedRoute                char(10),
        MedFrequency            char(20) )

create table Med_codes (
        ObservationID           char(10)        not null,
        ObservationDesc         char(20) )

/*****************************************************************/
/* Mapping Tables */
/*****************************************************************/

/* TABLE FOR ASSOCIATING CLOTTING TESTS WITH THEIR CONTROL TIMES */

create table CLOT_TEST_CONTROL (
     clot_code  char(3)  not null,
     control_code  char(3)  not null )

/* CODING TABLES */

create table DIAGNOSIS_CODES (
        dgx_code   varchar(50)       not null,
        ent_type   varchar(50)       not null)

create table PROCEDURE_CODES (
        proc_code  varchar(50)       not null,
        ent_type   varchar(50)       not null)
```

```
create table LAB_TEST_CODES (
        test_code  varchar(50)       not null,
        ent_type   varchar(50)       not null)

create table PHYSIOLOGIC_PARM_CODES (
        parm_code  varchar(50)       not null,
        ent_type   varchar(50)       not null)

create table MEDICATION_CODES (
        med_code   varchar(50)       not null,
        ent_type   varchar(50)       not null)

/** ADDITIONAL TABLES FOR VOCABULARY MAPPING AND TYPE HIERARCHY **/

create table FER_TYPE_HIERARCHY (
        ent_type           varchar(50)     not null,
        desc_ent_type      varchar(50)     not null)

create table ENTITY_TYPE_NAMES (
        ent_type           varchar(50)     not null,
        ent_type_name      varchar(50)     not null)
```

### D.3.2 Codes for database 3

| SNOMED-Code | Modifier | Definition |
|---|---|---|
| L-85B30 | 01 | Asian race |
| L-85B30 | 02 | Mongoloid |
| T-D0AA0 | 01 | Female, NOS |
| T-D0AA0 | 02 | Female individual, NOS |
| L-85B50 | 01 | European race |
| L-85B50 | 02 | Caucasian |
| L-85B50 | 02 | Caucasoid |
| D5-81100 | 01 | Hepatic failure, NOS |
| D5-81100 | 02 | Hepatic insufficiency, NOS |
| D5-81100 | 02 | Liver function failure, NOS |
| DC-60000 | 01 | Blood coagulation disorder, NOS |
| DC-60000 | 02 | Coagulation disorder, NOS |
| DC-60000 | 02 | Coagulopathy, NOS |
| D2-60100 | 01 | Adult respiratory distress syndrome, NOS |
| D2-60100 | 02 | ARDS |
| D2-60100 | 02 | Congestive atelectasis |
| D2-60100 | 02 | DaNang lung |
| D2-60100 | 02 | Post-traumatic pulmonary insufficiency |
| D2-60100 | 02 | Pulmonary insufficiency following shock |
| D2-60100 | 02 | Pulmonary insufficiency following surgery |
| D2-60100 | 02 | Pulmonary insufficiency following trauma |
| D2-60100 | 02 | Shock lung |

| | | |
|---|---|---|
| D2-60100 | 02 | Traumatic wet lung |
| D2-60100 | 02 | Vietnam lung |
| D2-51000 | 01 | Asthma, NOS |
| D2-51000 | 02 | Allergic bronchitis, NOS |
| D2-51000 | 02 | Asthmatic bronchitis, NOS |
| D2-51000 | 02 | Bronchial asthma, NOS |
| D2-60250 | 01 | Acute respiratory distress, NEC |
| D2-60250 | 02 | Acute respiratory insufficiency, NEC |
| P1-KC001 | 01 | Kasai procedure |
| P1-KC002 | 01 | Renal Cyst Removal |
| P1-21310 | 01 | Simple excision of nasal polyps |
| P1-21310 | 02 | Nasal polypectomy |
| D2-01150 | 01 | Chronic sinusitis, NOS |
| D2-01150 | 02 | Chronic infection of sinus, NOS |
| D7-11013 | 01 | Chronic renal failure syndrome, NOS |
| D4-57010 | 01 | Congenital biliary atresia |
| P2-22200 | 01 | Mechanical ventilation, NOS |
| DE-19000 | 01 | Bacterial septicemia, NOS |
| D5-86430 | 01 | Ascending cholangitis |

| Observation-Code | Observation |
|---|---|
| 4 | ventilator alarms suspended |
| 7 | EKG heart rate |
| 19 | mean arterial pressure |
| 20 | arterial line systolic BP |
| 21 | arterial line diastolic BP |
| 22 | arterial line heart rate |
| 59 | arterial O2 saturation |
| 80 | respiratory rate |
| 81 | tidal volume |
| 83 | PIP |
| 84 | mean airway pressure |
| 90 | systolic BP |
| 91 | diastolic BP |
| 100 | Prothrombin Time |
| 101 | BUN |
| 102 | PTT-Control |
| 103 | Blood Glucose |
| 104 | Plasma CO2 Content |
| 105 | Serum Cl- |
| 106 | PTT |
| 107 | RBC |
| 108 | MCV |
| 109 | Plasma Fibrinogen |
| 110 | WBC |
| 111 | Serum K+ |

| | |
|---|---|
| 112 | HCT |
| 113 | Serum Creatinine |
| 114 | Mean Corpuscular Hemoglobin Conc |
| 115 | Platelet Count |
| 116 | Prothrombin Time-Control |
| 117 | Hemoglobin Conc |
| 118 | Mean Corpuscular Hemoglobin |
| 119 | Serum Na+ |
| 120 | Serum Ionized Ca++ |
| 121 | PaO2 |
| 122 | PaCO2 |
| 123 | Arterial pH |
| 124 | Arterial O2 Saturation |
| 125 | Arterial Bicarb Conc |
| 126 | Serum Mg+ |
| 127 | Serum Total Protein |
| 128 | SGOT |
| 129 | Whole Blood Ammonia |
| 130 | Serum Inorganic Phosphate |
| 131 | Serum Triglycerides |
| 132 | Serum Albumin |
| 133 | Total Bilirubin |
| 134 | Serum Ca++ |
| 135 | SGPT |
| 140 | Diff Polymorphonuclear cells |
| 141 | Diff Band cells |
| 142 | Diff Lymphocytes |
| 143 | Diff Monocytes |
| 144 | Diff Eosinophils |
| 145 | Theophylline assay |
| 208 | Zantac |
| 200 | Terbutaline |
| 201 | Pavulon |
| 202 | Versed |
| 203 | Fluid Out |
| 204 | Dopamine |
| 205 | Fluid In |
| 206 | Fentanyl |
| 207 | Temp |

| Medication-Code | Medication |
|---|---|
| 1 | Albuterol |
| 2 | Albuterol MDI |
| 3 | Amphotericin |
| 4 | ativan |
| 5 | Azmacort |

| | |
|---|---|
| 6 | Brokosol |
| 7 | Cefotetan |
| 8 | Cholorpherinamine |
| 9 | D5NS |
| 10 | dopamine |
| 11 | fentanyl |
| 12 | Maalox |
| 13 | NS |
| 14 | nystatin |
| 15 | Pavulon |
| 16 | Ranitidine |
| 17 | Solumedrol |
| 18 | Theodur |
| 19 | terbutiline |
| 20 | ventolin |
| 21 | versed |