

Epi HOSP

AGENDA

- 8:30 Registration
- 9:00 Introductions and Logistics
- 9:15 The Utility of Hospital Discharge Data for Monitoring Childhood Morbidity at the Local Level
- 9:30 Technical Issues in Using Hospital Discharge Data
- 10:00 Review the EpiHOSP Manual and Learning Modules
- 10:15 Break
- 10:30 Install and Navigate EpiHOSP
- 10:45 Import and Browse Hospital Discharge Data
- 11:05 Generate Pre-Programmed and Custom Tables and Reports
- 11:35 Generate Pre-Programmed and Custom Graphs
- 12:00 Lunch
- 1:00 Use EpiHosp to Explore and Understand Trends; Approach to Analysis
- 2:30 Break
- 2:45 Practice and Discussion
- 3:30 Confidentiality Issues in Reporting Data on Hospital Discharges
- 3:45 Evaluation and Feedback
- 4:00 Adjourn



The Utility Of Hospital Discharge Data in Monitoring Child Health

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Family Health Outcomes Project (FHOP)
EpiHOSP 2.0

Hospital Discharge Data

- **Population-based data source which is widely available (at least 39 states)**
- **Many ICD9 codes correspond to Healthy People 2010 objectives**
- **Individual patient records abstracted using a uniform reporting format (the UB92)**
- **Maintained by state agencies and available for public use**

Hospital Discharge Data - a rich data source for:

- **Monitoring Child Health status/outcomes/utilization**
- **Performing Injury Surveillance (E-codes collected by 27 states)**
- **Monitoring costs**

Hospital Discharge Data - a rich data source for:

- **Linking to other population-based datasets e.g. vital records, EPSDT**
- **Measuring access to care by looking at preventable hospitalizations (Ambulatory Care Sensitive diagnoses, ACS)**
- **Monitoring & evaluating the impact of managed care**

Data Elements in HDD

- **Demographic**
- **Diagnostic & treatment information**
- **Descriptors of access**
- **Financial information**
- **Indicators of severity**

DATA ELEMENTS: Demographic

- **Birth date**
- **Gender**
- **ZIP code of residence**
- **SSN**
- **Race**
- **(White**
- **African American**
- **Hispanic**
- **Native American/
Eskimo**
- **Asian**
- **Other unknown)**

DATA ELEMENTS: Diagnostic & Treatment Information

- **Principal diagnoses**
- **Principal E-codes**
- **Principal procedures**
- **Other diagnoses**
- **Other E-codes**
- **Other procedures**

DATA ELEMENTS: Descriptors of Access

- **Source of Admission**
- **Type of Admission (emergency, urgent, elective)**
- **Hospital ID**
- **Hospital ZIP**

DATA ELEMENTS: FINANCIAL INFORMATION

- **Expected principal source of payment (payor source)**
- **Total Charges**
- **DRGs**

DATA ELEMENTS: Indicators of Severity

- **Length of Stay**
- **Discharge Date**
- **Time between admission & principal procedure**
- **Dates and types of procedures**
- **Disposition**

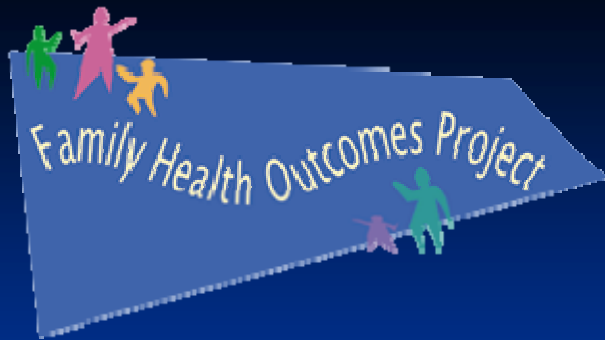
INDICATOR	ICD9 CODES
Rates of Vaccine Preventable Conditions Defined as: IZ conditions	032-033.9, 037, 045, 055, 056, 072, 320, 138
Homicide rate	E960.0 - R968.9
Incidence of low Hgb/Hct	280.1, 280.8, 280.9
Tuberculosis rate	010.0 - 018.9

Issues for Local Health Jurisdictions in Using Hospital Discharge Data

- **Lack of timeliness-1.5 to 2 year delay in data availability**
- **IRB approval needed for files with DOB, encoded SSN and ZIP**

Issues for Local Health Jurisdictions in Using Hospital Discharge Data

- **Complexity & cost of pre-processing**
- **Difficulty in unduplicating records**
- **Cost of intercensal denominator data**
- **No Census ID and Changing ZIPS**



EpiHOSP 2.0

**A HOSPITAL DISCHARGE DATA
ANALYSIS AND
PRESENTATION PROGRAM**

Developed By:

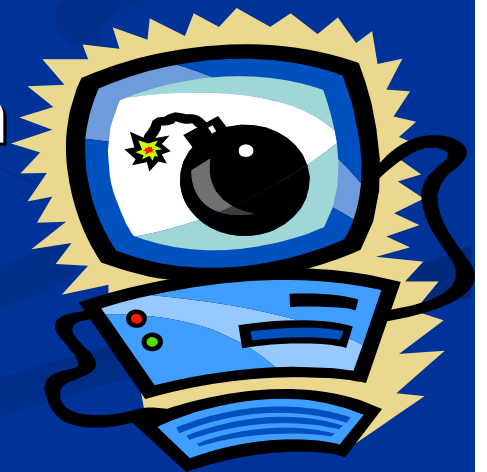
**Family Health Outcomes Project
University of California, San Francisco**

and

**Marc Strassburg, Dr. P.H.
Epidemiologic Consulting Services**

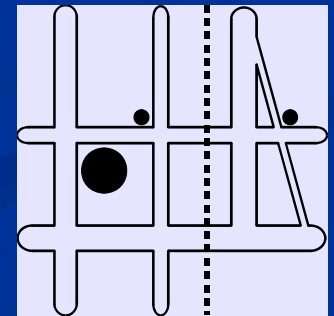
Rationale for an Easy-To-Use Automated Analysis Program

- Limited staff resources
- Lack of funds for other analytic software
- Varying data analysis & data utilization skills
- Program staff unfamiliar with or afraid of automated systems



What EpiHOSP 2.0 Can Do For You!!

- Assists in conducting a needs assessment
- Offers a standard method of monitoring health outcomes over time
- Assists in pinpointing potential problems and target populations
- Assists MCH Directors/Coordinators in better constructing their programs and focus existing programs



Epi Info

- CDC developed public domain software
 - It's free!
- Updated on a regular basis by CDC
- Ongoing technical support by CDC
- Trainings available on this new version are being offered throughout the US
- List Serve for interested users provides information on new features, and applications as well as the opportunity for input to CDC on fixes

What Is EpiHOSP 2.0 ?

- ✓ **Is based on current version of EpiInfo**
- ✓ **Is an easy-to-use data analysis software**
- ✓ **Contains pre-programmed reports, graphs and maps that answer most of the data needs of county MCH programs**
- ✓ **Allows for simplified training and maintenance**

EpiHOSP 2.0 Advantages

- Built within the latest Windows version of Epi Info
- Fully Windows compatible and uses Access compatible database files
- Public domain software – *free!*
- Contains high quality graphing capability that enables use of output in reports and presentations



EpiHOSP 2.0 Advantages

- **Output is generated in standard HTML compatible files and can be easily imported into word processing documents**
- **Uses data files prepared by FHOP**
- **Provides standardized variables compatible with the National Center for Health Statistics Data format**
- **Users have a choice of using the pre-programmed features or the more advanced analytical features of EpiInfo including logistic regression.**

Limitations

- Data processing for large data bases can be slow
- Improvements in EpiHOSP 2.0 software functionality are limited by the CDC's willingness to make revisions that enable these enhanced functions



EpiHosp 2.0

Technical Issues with Hospital Data

UCSF Family Health Outcomes Project

Sacramento, CA

January 11, 2007

Technical Team:

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Technical Issues

- Changes over time in
 - medical knowledge and technology
 - case definition
 - variable definition
- Influence EpiHosp design
- Changes in hospital structure limit use of EpiHosp for longitudinal hospital-level studies

Changing Knowledge and Technology

- New diseases have been diagnosed
 - AIDS
 - Avian flu, SARS
- New medical technologies have been created
 - Surgery to laser, eg, discectomy
 - Advanced imaging to permit early surgery to repair birth defects
- These need more finely defined categories to capture increased complexity

Variable Changes

- Codes are added, discontinued, and redefined as clinical knowledge increases and practices change

Diagnoses	1983	8,000	2005	14,000
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MDC	1983	471	2005	559
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- More variables are needed to provide more information about the same admission:

Diagnoses	1983	20	2005	24
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E-Codes	1983	0	1990	4
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Case Definitions Change

- Ambulatory-care-sensitive (ACS)
- Injury (Intentional, Unintentional)
- Pregnancy (Normal Delivery, C-Section)
- Mental Illness/Substance Abuse
- Medical (Bronchitis, Lymphoma)
- Surgical (Discectomy, Appendicitis)
- Care quality (pressure sores, falls, infections)

Solution:

Agency for Healthcare Research and Quality

- Mission: To improve the quality, safety, efficiency, and effectiveness of health care for all Americans.
- Software: To uniformly classify discharge data by clinical condition and outcome longitudinally from 1983 forward
- Reports: On healthcare disparities and healthcare quality
- At: <http://www.ahrq.gov/qual/index.html>

Hospital Changes

- Closures and (sometimes) reopenings
- Name/facility identifier/ownership changes
- Move in same (and sometimes other) counties
- Consolidation make it appear as if hospital closed (sometimes unconsolidated/reappears)
- Change from general acute to specialty care, closing obstetric and pediatric units
- See: The impact of changing public policy on California's hospital infrastructure and children's hospital outcomes - 1983-2000, available at:
http://www.ucsf.edu/fhop/_htm/publications/index.htm

Major Processing Steps

- Read discharge data into SAS
- Develop and maintain longitudinal format libraries
- Develop macros to classify longitudinal clinical data to meet current Federal standards
- Develop rules and procedures to maintain longitudinal continuity for non-clinical data
- Develop criteria to select cases
- Process data for research purposes
- Process research files for EpiHosp and DataBooks

Pre-Processing: Read Data into SAS

- Problem: Over time files have arrived
 - in different forms (text, already in SAS)
 - for different environments (mainframe, work station)
 - with different combinations of variables and same variables with different names
 - differently defined and named
- Solution: develop SAS macros and expand use of spreadsheets to uniformly define data longitudinally regardless of original form, content, definition, environment

Pre-Processing:

Develop and maintain format libraries

- Problem: Over time since 1983, discharge data
 - Added variables
 - Differently defined same variables
 - Added new codes to same variable
 - Differently defined same clinical conditions or outcomes
- Solution: Expand use of spreadsheets to cross-classify diagnoses and procedures and develop macros to create formats from spreadsheets

Pre-Processing:

Classify to current Federal standards

- Problem: Clinical knowledge has changed
- Solution : FHOP
 - Incorporated AHRQ software into spreadsheets
 - Used spreadsheets to create format libraries
 - Used format libraries to create analysis variables
 - Created longitudinal consistency from 1983 forward based on 2005 AHRQ definitions
 - Reduced need for county analysts to have ICD-9 expertise

Pre-Processing: Non-Clinical Longitudinal Rules

- Problem: Changing values for same variable
- Solutions:
 - **Complexity Rule:** Return more complex definitions to least complex. E.G., Admission source to 1983 definition.
 - **Race/Ethnicity:** Follow Federal guidelines for bridging race/ethnicity longitudinally and follow California DOF rules to get to 1983 definition. Use American Indian/Native American cases to calculate totals but do not use as analysis variable.
 - **Hospital Survivor:** Use current name assigned to ID.
 - **Hospital –Level Outcomes.** EpiHosp NOT recommended for longitudinal studies of hospital-level outcomes

Basic Criteria to Select Cases

- California resident
- 28 days to 24 years at admission, with pregnancy-related discharges through age 19
- Defined gender (male, female)
- All types of care
- Exclude unlikely records (we may have missed some so tell us when you find them)
 - Infant with senile dementia
 - Female prostatectomy
 - 10 year old with breast implants

Research Files – 1983 forward

- Select cases using defined criteria
- *Clinical Variables*: Apply current AHRQ software to all years of data
- *Non-Clinical Variables*: Apply defined solutions
- *Charges*: Impute where missing or unlikely given the DRG, using all years of available data
- *Current Charges*: Inflate charges to current dollars, using the Western Urban Medical Care CPI

EpiHosp Files – 1991 Forward

- Remove confidential data elements and create categorical variables to reduce confidentiality risks
- Create character-string variables summarizing AHRQ formatted ICD-9 values
- Output county file in DBF structure with
 - 1 record for every resident admitted to any hospital anywhere in California
 - 1 record for any non-resident admitted to any hospital in the county
 - Fewer diagnoses (4) and 1 procedure (Principle)

Making DataBooks

- Use pre-processed research files and AHRQ definitions to select and summarize cases for hospital-based Healthy People 2010 indicators:
 - Asthma
 - Injury
 - Mental Health
- Calculate county-level population variables using DOF data, applying post-2000 bridging rules
- Use JoinPoint to calculate longitudinal trends
- Output results in county-level Excel files

Summary: EpiHosp and Databooks

- Use the same pre-processed research files
- Available for similarly defined time periods
- Have longitudinally consistent clinical and non-clinical variables.
- Both used for surveillance
- Results can be compared to state and national studies
- EpiHosp can be used to describe and perhaps understand underlying basis for Databook trends

DATA DICTIONARY – ORGANIZED BY SUBJECT

EpiHosp 2006 Field Name	Field Description	Indicator Type	Definition Source	Page number
ID	Sequential record number		FHOP	
Geographic Variables				
HCNTY	Hospital County of Location—a 2-digit number assigned alphabetically to each California county.	Geography	OSHPD	79
PCNTY	Patient County of residence—a 2-digit number assigned alphabetically to each California county	Geography	OSHPD	79
OSHPDID	A unique six-digit identifier assigned to each facility by the Office of Statewide Health Planning and Development. The first two digits indicate the county in which the hospital is located. The last four digits are unique within each county. A - 99 = 01-58 = County Codes B - 9999 = 0001-9999 = Unique Hospital Identifier (within county)	Geography	OSHPD	80
TYPECAR(L)	Licensure of the bed occupied by an inpatient as defined by the California Health and Safety Code. <u>Code</u> <u>Label</u> 1 = Acute Care 3 = Skilled Nursing/Intermediate Care 4 = Psychiatric Care 5 = Chemical Dependency Recovery Care 6 = Physical Rehabilitation Care All other values for Type of Care are not considered valid.	Geography	FHOP	81
HZIPC5	Hospital Zip Code—a unique code assigned to a specific geographic area by the US Postal Service at a given point in time.	Geography	OSHPD	82
PZIPC5	Patient ZIP code of residence—a unique code assigned to a specific geographic area by the US Postal Service at a given point in time.	Geography	OSHPD	82
Demographic Variables				
AGEADM(L)	Age in years at admission, classified into US census age groups. <u>Code</u> <u>Label</u> 0 = 00-00 Years 1 = 01-02 Years 3 = 03-04 Years 5 = 05-09 Years 10 = 10-14 Years 15 = 15-17 Years 18 = 18-19 Years 20 = 20-24 Years	Demographic	FHOP	83

EpiHosp 2006 Field Name	Field Description	Indicator Type	Definition Source	Page number
AGEADMD(L)	<p>For children age 28 days to less than 3 years at admission, age in days is classified into 3-month categories.</p> <p><u>Code</u> <u>Label</u> 1 = 01-02 Mos 3 = 03-05 Mos 6 = 06-08 Mos 9 = 09-11 Mos 12 = 12-14 Mos 15 = 15-17 Mos 18 = 18-20 Mos 21 = 21-23 Mos</p>	Demographic	FHOP	84
SEX(L)	<p>Gender of the patient.</p> <p><u>Code</u> <u>Label</u> 1 = Male 2 = Female 3 = Other 4 = Unknown</p>	Demographic	OSHPD	85
RACEDOF(L)	<p>Race/ethnicity of the patient recoded to reflect a uniform longitudinal definition following rules of the California Department of Finance.</p> <p><u>Code</u> <u>Label</u> 1 = White non-Hispanic 2 = Black non-Hispanic 3 = Hispanic all race 4 = Asian non-Hispanic 5 = Non-Hispanic American Indian/Native American</p>	Demographic	FHOP	86
AGEAGRPL	<p>Age in years at admission, classified into fewer age groups for monitoring.</p> <p><u>Label</u> 00-00 Years 01-04 Years 05-09 Years 10-14 Years 15-19 Years 20-24 Years</p>	Demographic	FHOP	83
Time Variables				
YEAR	Year of patient discharge = File Year	Time	FHOP	89

EpiHosp 2006 Field Name	Field Description	Indicator Type	Definition Source	Page number
ADM DOW(L)	Day of week the patient was admitted to hospital. <u>Code</u> <u>Label</u> 1 = Sunday 2 = Monday 3 = Tuesday 4 = Wednesday 5 = Thursday 6 = Friday 7 = Saturday	Time	OSHPD	87
ADM MO(L)	Month the patient was admitted to hospital. <u>Code</u> <u>Label</u> 1 = January 2 = February 3 = March 4 = April 5 = May 6 = June 7 = July 8 = August 9 = September 10 = October 11 = November 12 = December	Time	OSHPD	88
ADM YR	Year patient was admitted to hospital.	Time	OSHPD	89
Diagnosis Variables				
DX(L)	Principal Diagnosis established, after study, to be the chief cause of the admission of the patient to the facility for care using detailed ICD-9 code.	Diagnosis	ICD-9	91
DX1	Conditions that coexist at the time of admission, develop during the hospital stay, affect the treatment received, or affect the length of stay.	Diagnosis	ICD-9	91
DX2	Conditions that coexist at the time of admission, develop during the hospital stay, affect the treatment received, or affect the length of stay.	Diagnosis	ICD-9	91
DX3	Conditions that coexist at the time of admission, develop during the hospital stay, affect the treatment received, or affect the length of stay.	Diagnosis	ICD-9	91

EpiHosp 2006 Field Name	Field Description	Indicator Type	Definition Source	Page number
DXCCH(L)	<p>Principal Diagnosis established, after study, to be the chief cause of the admission of the patient to the facility for care as classified by the higher-level CCS Major Diagnosis Class.</p> <p><u>Code</u> <u>Label</u></p> <p>1 = Infectious/Parasitic DX 2 = Neoplasm DX 3 = Endocr Nutri Metab Immun DX 4 = Blood/Blood-Forming Organs DX 5 = Mental Disorders DX 6 = Nervous System Sense Organs DX 7 = Circulatory System DX 8 = Respiratory System DX 9 = Digestive System DX 10 = Genitourinary System DX 11 = Preg Birth Puerperium DX 12 = Skin/Subcutaneous Tissue DX 13 = Musculoskel Connect Tissue DX 14 = Congenital Anomalies DX 15 = Perinatal Conditions DX 16 = Injury/Poisoning DX 17 = Other Conditions DX 18 = E Code DX</p>	Diagnosis	CCS	92
DXCCH1(L)	Conditions that coexist at the time of admission, develop during the hospital stay, affect the treatment received, or affect the length of stay, as classified by the higher-level CCS Major Diagnosis Class.	Diagnosis	CCS	92
DXCCH2(L)	Conditions that coexist at the time of admission, develop during the hospital stay, affect the treatment received, or affect the length of stay, as classified by the higher-level CCS Major Diagnosis Class.	Diagnosis	CCS	92
DXCCH3(L)	Conditions that coexist at the time of admission, develop during the hospital stay, affect the treatment received, or affect the length of stay, as classified by the higher-level CCS Major Diagnosis Class.	Diagnosis	CCS	92
DXCCL(L)	Principal Diagnosis established, after study, to be the chief cause of patient admission to the facility for care, as classified by the lower-level CCS Diagnosis Class. For a list of 280 categories see page 22 of <i>Data Element Definitions</i> .	Diagnosis	CCS	93
DXCCL1(L)	Conditions that coexist at the time of admission, develop during the hospital stay, affect the treatment received, or affect the length of stay, as classified by the lower-level CCS Diagnosis Class.	Diagnosis	CCS	93

EpiHosp 2006 Field Name	Field Description	Indicator Type	Definition Source	Page number																																								
DXCCL2(L)	Conditions that coexist at the time of admission, develop during the hospital stay, affect the treatment received, or affect the length of stay, as classified by the lower-level CCS Diagnosis Class.	Diagnosis	CCS	93																																								
DXCCL3(L)	Conditions that coexist at the time of admission, develop during the hospital stay, affect the treatment received, or affect the length of stay, as classified by the lower-level CCS Diagnosis Class.	Diagnosis	CCS	93																																								
DXFHH(L)	Principal Diagnosis established, after study, to be the chief cause of the admission of the patient to the facility for care as classified by the higher-level FHOP Major Diagnosis Class. <table border="0"> <thead> <tr> <th><u>Code</u></th> <th><u>Label</u></th> <th><u>Code</u></th> <th><u>Label</u></th> </tr> </thead> <tbody> <tr> <td>1 =</td> <td>ACS</td> <td>10 =</td> <td>Digestive</td> </tr> <tr> <td>2 =</td> <td>Injury</td> <td>11 =</td> <td>Endocrine</td> </tr> <tr> <td>3 =</td> <td>Pregnancy</td> <td>12 =</td> <td>Genito-Urinary</td> </tr> <tr> <td>4 =</td> <td>Mental</td> <td>13 =</td> <td>Infection</td> </tr> <tr> <td>5 =</td> <td>Anomalous Cond</td> <td>14 =</td> <td>Musculo-Skeletal</td> </tr> <tr> <td>6 =</td> <td>Blood</td> <td>15 =</td> <td>Respiratory</td> </tr> <tr> <td>7 =</td> <td>Cancer</td> <td>16 =</td> <td>Skin</td> </tr> <tr> <td>8 =</td> <td>Circlulatory</td> <td>17 =</td> <td>Symptoms</td> </tr> <tr> <td>9 =</td> <td>Nervous System</td> <td>18 =</td> <td>Adverse Event</td> </tr> </tbody> </table>	<u>Code</u>	<u>Label</u>	<u>Code</u>	<u>Label</u>	1 =	ACS	10 =	Digestive	2 =	Injury	11 =	Endocrine	3 =	Pregnancy	12 =	Genito-Urinary	4 =	Mental	13 =	Infection	5 =	Anomalous Cond	14 =	Musculo-Skeletal	6 =	Blood	15 =	Respiratory	7 =	Cancer	16 =	Skin	8 =	Circlulatory	17 =	Symptoms	9 =	Nervous System	18 =	Adverse Event	Diagnosis	FHOP	95
<u>Code</u>	<u>Label</u>	<u>Code</u>	<u>Label</u>																																									
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DXFHH1(L)	Conditions that coexist at the time of admission, develop during the hospital stay, affect the treatment received, or affect the length of stay, as classified by the higher-level FHOP Major Diagnosis Class.	Diagnosis	FHOP	95																																								
DXFHH2(L)	Conditions that coexist at the time of admission, develop during the hospital stay, affect the treatment received, or affect the length of stay, as classified by the higher-level FHOP Major Diagnosis Class.	Diagnosis	FHOP	95																																								
DXFHH3(L)	Conditions that coexist at the time of admission, develop during the hospital stay, affect the treatment received, or affect the length of stay, as classified by the higher-level FHOP Major Diagnosis Class.	Diagnosis	FHOP	95																																								
DXFHL(L)	Principal Diagnosis established, after study, to be the chief cause of admission to the facility for care as classified by the lower-level FHOP Diagnosis Class. For a list of 292 categories see page 25 of <i>Data Element Definitions</i> .	Diagnosis	FHOP	96																																								
DXFHL1(L)	Conditions that coexist at the time of admission, develop during the hospital stay, affect treatment received, or affect length of stay, as classified by the lower-level FHOP Diagnosis Class.	Diagnosis	FHOP	96																																								
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EpiHosp 2006 Field Name	Field Description	Indicator Type	Definition Source	Page number
DXFHL3(L)	Conditions that coexist at the time of admission, develop during the hospital stay, affect treatment received, or affect length of stay, as classified by the lower-level FHOP Diagnosis Class.	Diagnosis	FHOP	96
ASTHANY	Any diagnosis field is asthma. <u>Code Label</u> 0 = No 1 = Yes	Diagnosis	FHOP	98
ASTHPRI	Primary diagnosis is asthma. <u>Code Label</u> 0 = No 1 = Yes	Diagnosis	FHOP	98
ASTHSEC	All secondary diagnosis fields searched to identify if any have an asthma diagnosis. <u>Code Label</u> 0 = No 1 = Yes	Diagnosis	FHOP	98
MENANY	Mental Illness. Any diagnosis field contains the DXCCL range 69-75. <u>Code Label</u> 0 No 1 Yes	Diagnosis	FHOP	98
MENPRI	Mental Illness. Primary diagnosis in the DXCCL range 69-75. <u>Code Label</u> 0 No 1 Yes	Diagnosis	FHOP	98
MENSEC	Mental Illness. All secondary diagnosis fields searched to find if any are in the DXCCL range 69-75. <u>Code Label</u> 0 No 1 Yes	Diagnosis	FHOP	98
SUBSPRI	Substance abuse. Primary diagnosis in the DXCCL range 66-67 <u>Code Label</u> 0 = No 1 = Yes	Diagnosis	FHOP	98

EpiHosp 2006 Field Name	Field Description	Indicator Type	Definition Source	Page number
SUBSSEC	Substance abuse. All secondary diagnosis fields searched to find if any are in the DXCCL range 66-67 <u>Code</u> <u>Label</u> 0 = No 1 = Yes	Diagnosis	FHOP	98
PREGANY	Any Pregnancy related hospitalizations where Pregnancy is defined as CLINCSL = 3	Diagnosis	FHOP	98
SUBSANY	Substance abuse. Any diagnosis field contains the DXCCL range 66-75. <u>Code</u> <u>Label</u> 0 = No 1 = Yes	Diagnosis	FHOP	98
CLINCLS(L)	Records assigned to mutually exclusive categories based on combinations of diagnoses and DRGs. <u>Code</u> <u>Label</u> 1 = Ambulatory care-sensitive condition 2 = Injury 3 = Pregnancy 4 = Mental health/substance abuse 5 = Medical condition 6 = Surgical condition	Diagnosis	FHOP	114
ACSANY	Ambulatory Care Sensitive primary diagnosis as classified by Billings and others.	Diagnosis	FHOP	98
INJTYPL	Short summary of injury intent <u>Label</u> <u>Definition</u> UNINT Unintentional injury INTENT Intentional injury UNKNOWN Intent unknown	Diagnosis	FHOP	102
Injury Variables				
ECD	Principal External Cause of Injury (E-Code)—a supplemental series of codes in the range E800-E999 that describe the external cause of injuries, poisonings and adverse effects.	Injury	ICD-9	91
ECDCLS(L)	A shortened cross-classification between injury mechanism and intent, with injuries lacking a principal E-code assigned to 215 (Other undetermined intent). See: http://www.ecosa.org/csi/ecosa2003.nsf/glossary	Injury	FHOP	101
MECH(L)	Data element which describes the way in which the injury was sustained, i.e. how the person was hurt.	Injury	CCS	101

EpiHosp 2006 Field Name	Field Description	Indicator Type	Definition Source	Page number
INTENT(L)	Data element which describes the role of human purpose in the injury event. See: http://www.ecosa.org/csi/ecosa2003.nsf/glossary <u>Code</u> <u>Label</u> 1 = Unintent 2 = Self-inf 3 = Assault 4 = Undeterm 5 = Other 6 = Adverse 7 = Place	Injury	CCS	105
Indicators of Severity Variables				
PX(L)	Principal Procedure performed for definitive treatment rather than for diagnostic or exploratory purposes; or the one necessary to take care of a complication. The principal procedure is the procedure most related to the principal diagnosis.	Severity	ICD-9	107
PXCLS(L)	Summary Procedure Class for Principal Procedure. <u>Code</u> <u>Label</u> 0 = No procedure 1 = Minor diagnostic 2 = Minor therapeutic 3 = Major diagnostic 4 = Major therapeutic	Severity	CCS	108
PXMAD	Any Major Diagnostic Procedure in a <i>secondary</i> position. <u>Code</u> <u>Label</u> 0 = No 1 = Yes	Severity	CCS	108
PXMAT	Any Major Therapeutic Procedure in a <i>secondary</i> position. <u>Code</u> <u>Label</u> 0 = No 1 = Yes	Severity	CCS	108
PXMID	Any Minor Diagnostic Procedure in a <i>secondary</i> position. <u>Code</u> <u>Label</u> 0 = No 1 = Yes	Severity	CCS	108
PXMIT	Any Minor Therapeutic Procedure in a <i>secondary</i> position. <u>Code</u> <u>Label</u> 0 = No 1 = Yes	Severity	CCS	108

EpiHosp 2006 Field Name	Field Description	Indicator Type	Definition Source	Page number
PXCCH(L)	Principal Procedure as classified by the higher-level CCS Major Procedure Class. <u>Code</u> <u>Label</u> 1 = Nervous System PX 2 = Endocrine System PX 3 = Eye PX 4 = Ear PX 5 = Nose Mouth Pharynx PX 6 = Respiratory System PX 7 = Cardiovascular System PX 8 = Hemic/Lymphatic System PX 9 = Digestive System PX 10 = Urinary System PX 11 = Male Genital Organs PX 12 = Female Genital Organs PX 13 = Obstetric PX 14 = Musculoskeletal PX 15 = Integumentary PX 16 = Misc Diag/Therapeutic PX	Severity	CCS	109
PXCCL(L)	Principal Procedure as classified by the lower-level CCS Procedure Class.	Severity	CCS	110
DRG(L)	Diagnosis Related Groups DRGs are case-mix assignments grouping hospital patients to categories based on diagnostic, therapeutic and demographic characteristics for the purpose of reimbursement.	Severity	ICD-9	112
MEDSURG	A dichotomous variable where "M" means the DRG is medical, and (S) means the DRG is surgical	Severity	ICD-9	112
MDC(L)	Mutually exclusive categories containing all possible principal diagnosis areas. The diagnoses in each MDC correspond to a single major organ system or etiology, and in general are associated with a particular medical specialty.	Severity	ICD-9	113
ANYADV	Any diagnosis, procedure, or E-code which by definition reflects an adverse outcome of care. <u>Code</u> <u>Label</u> 0 = No 1 = Yes	Severity	CCS	115
DXN	Number of secondary diagnoses	Severity	FHOP	116
PXN	Number of secondary procedures.	Severity	FHOP	116

EpiHosp 2006 Field Name	Field Description	Indicator Type	Definition Source	Page number
LOSC(L)	<p>Total number of days from admission date to discharge date of each patient.</p> <p><u>Code</u> <u>Label</u> 1 = 1 day 2 = 2 days 3 = 3 days 4 = 4 days 5 = 5-7 days 8 = 8-14 days 15 = 15-21 days 22 = 22-28 days 29 = 29+ days</p>	Severity	FHOP	117
DISPNF(L)	<p>The consequent arrangement or event ending a patient's stay in the reporting facility.</p> <p><u>Code</u> <u>Label</u> 1 = Routine 2 = Short-Term Acute 3 = ICF/SNF/Other Fac 4 = LAMA 5 = Home Health 6 = Died</p>	Severity	FHOP	118
Indicators of Access Variables				
SOURCEF(L)	<p>Source of admission—the physical site from which the patient was admitted or the area in the hospital where the patient was located just prior to admission.</p> <p><u>Code</u> <u>Label</u> 1 = Routine 2 = Emergency Room 3 = Short-Term Acute 4 = Other Facility</p>	Access	FHOP	119
Financial Variables				
PAYSRCF(L)	<p>A code indicating the expected principal source of payment for services rendered to the patient in the hospital.</p> <p><u>Code</u> <u>Label</u> 1 = Medi-Cal/Care 2 = Private Insur 3 = HMO/PHP 4 = Other Govt 5 = Self/Indgt/Char</p>	Financial	FHOP	120

EpiHosp 2006 Field Name	Field Description	Indicator Type	Definition Source	Page number
PAYTYPE(L)	<p>A code indicating the type of coverage for the following: Medicare, Medi-Cal, Private Coverage, Workers' Compensation, County Indigent Programs, and Other Government.</p> <p><u>Code</u> <u>Label</u> 1 = Managed Care - K-K/MCOHS 2 = Managed Care - Other 3 = Traditional Coverage</p>	Financial	OSHPD	121
PAYPLAN(L)	<p>A four-digit code referring to the name of plans licensed under the Knox-Keene Healthcare Service Plan Act of 1975 or designated as a Medi-Cal County Organized Health System (MCOHS).</p>	Financial	OSHPD	122
TOTCHARG	<p>Total charges including all charges for services rendered during the full stay for patient care at the facility, based on the hospital's full established rates.</p>	Financial	OSHPD	124
TOTC2005	<p>Total charges including all charges for services rendered during the length of stay for patient care at the facility, based on the hospital's full established rates, imputed where charges were missing or extreme, adjusted longitudinally to current dollars using the 2005 Western Urban Medical Care Consumer Price Index.</p>	Financial	FHOP	125
TOTCI	<p>Flags records with imputed charges.</p>	Financial	FHOP	125
TOT2005C	<p>Charges categories for simple monitoring.</p> <p><u>Label</u> Lt 5,000 5,000-9,999 10,000-19,999 20,000-39,999 40,000-59,999 60,000 +</p>	Financial	FHOP	125

Attention: Variable with the suffix "L" provides a labeled description of the numeric variable.