

HCAHPS PERCENTILES

December 2013

Hospital Percentile*	Communication with Nurses	Communication with Doctors	Responsiveness of Hosp. Staff	Pain Management	Comm. About Medicines	Cleanliness of Hospital Env.	Quietness of Hospital Env.	Discharge Information	Overall Hospital Rating	Recommend the Hospital
TOP-Box Score¹										
95 th (near best)	88	90	83	79	76	87	78	91	84	86
90 th	85	88	79	77	72	83	73	90	81	82
75 th	82	85	72	73	67	78	67	88	76	77
50 th	79	81	66	70	63	72	60	85	70	71
25 th	75	78	61	68	60	68	54	82	65	65
10 th	72	75	57	65	56	64	48	80	59	58
5 th (near worst)	69	73	53	62	54	61	45	77	55	54
BOTTOM-Box Score²										
5 th (near best)	1	1	2	3	9	2	2	9	2	1
10 th	2	2	4	4	12	4	4	10	4	2
25 th	3	3	6	5	16	6	6	12	5	3
50 th	4	4	9	6	19	8	9	15	7	4
75 th	6	5	12	8	22	11	13	18	10	7
90 th	8	7	15	11	25	14	17	20	13	9
95 th (near worst)	10	8	18	12	27	16	20	23	16	11

* Percentiles for HCAHPS "Top-box" and "Bottom-box" scores of the 3,939 hospitals publicly reported on Hospital Compare in December 2013. Surveys are from patients discharged between April 2012 and March 2013. Scores have been adjusted for survey mode and patient-mix.

¹ The "**Top-box**" is the most positive response to HCAHPS survey items. Percentiles indicate how often patients gave positive assessments of their hospital experience. *With "Top-box" scores, the higher, the better.* For example, on "Communication with Nurses," 5% of hospitals scored 88 or higher (95th percentile) in the "Top-box," while 5% scored 69 or lower (5th percentile). The median (50th percentile) score on this measure was 79.

² The "**Bottom-box**" summarizes the least positive responses to HCAHPS survey items. Percentiles indicate how often patients gave negative assessments of their hospital experience. *With "Bottom-box" scores, the lower, the better.* For example, on "Communication with Nurses," 5% of hospitals scored 1 or lower (5th percentile) in the "Bottom-box," while 5% scored 10 or higher (95th percentile). The median (50th percentile) score on this measure was 4.

Citation:

HCAHPS Percentiles. www.hcahpsonline.org. Centers for Medicare & Medicaid Services, Baltimore, MD. Originally posted January 16, 2014.

HCAHPS Survey

SURVEY INSTRUCTIONS

- ◆ You should only fill out this survey if you were the patient during the hospital stay named in the cover letter. Do not fill out this survey if you were not the patient.
- ◆ Answer all the questions by checking the box to the left of your answer.
- ◆ You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

- Yes
 No → *If No, Go to Question 1*

You may notice a number on the survey. This number is used to let us know if you returned your survey so we don't have to send you reminders.

Please note: Questions 1-25 in this survey are part of a national initiative to measure the quality of care in hospitals. OMB #0938-0981

Please answer the questions in this survey about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.

YOUR CARE FROM NURSES

1. During this hospital stay, how often did nurses treat you with courtesy and respect?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴ Always
2. During this hospital stay, how often did nurses listen carefully to you?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴ Always

3. During this hospital stay, how often did nurses explain things in a way you could understand?

- ¹ Never
- ² Sometimes
- ³ Usually
- ⁴ Always

4. During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?

- ¹ Never
- ² Sometimes
- ³ Usually
- ⁴ Always
- ⁹ I never pressed the call button

YOUR CARE FROM DOCTORS

5. During this hospital stay, how often did doctors treat you with courtesy and respect?
- ¹ Never
² Sometimes
³ Usually
⁴ Always
6. During this hospital stay, how often did doctors listen carefully to you?
- ¹ Never
² Sometimes
³ Usually
⁴ Always
7. During this hospital stay, how often did doctors explain things in a way you could understand?
- ¹ Never
² Sometimes
³ Usually
⁴ Always

THE HOSPITAL ENVIRONMENT

8. During this hospital stay, how often were your room and bathroom kept clean?
- ¹ Never
² Sometimes
³ Usually
⁴ Always
9. During this hospital stay, how often was the area around your room quiet at night?
- ¹ Never
² Sometimes
³ Usually
⁴ Always

YOUR EXPERIENCES IN THIS HOSPITAL

10. During this hospital stay, did you need help from nurses or other hospital staff in getting to the bathroom or in using a bedpan?
- ¹ Yes
² No → If No, Go to Question 12
11. How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted?
- ¹ Never
² Sometimes
³ Usually
⁴ Always
12. During this hospital stay, did you need medicine for pain?
- ¹ Yes
² No → If No, Go to Question 15
13. During this hospital stay, how often was your pain well controlled?
- ¹ Never
² Sometimes
³ Usually
⁴ Always
14. During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?
- ¹ Never
² Sometimes
³ Usually
⁴ Always

15. During this hospital stay, were you given any medicine that you had not taken before?

¹ Yes

² No → If No, Go to Question 18

16. Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?

¹ Never

² Sometimes

³ Usually

⁴ Always

17. Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?

¹ Never

² Sometimes

³ Usually

⁴ Always

WHEN YOU LEFT THE HOSPITAL

18. After you left the hospital, did you go directly to your own home, to someone else's home, or to another health facility?

¹ Own home

² Someone else's home

³ Another health facility → **If Another, Go to Question 21**

19. During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?

¹ Yes

² No

20. During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?

¹ Yes

² No

OVERALL RATING OF HOSPITAL

Please answer the following questions about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.

21. Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?

⁰ 0 Worst hospital possible

¹ 1

² 2

³ 3

⁴ 4

⁵ 5

⁶ 6

⁷ 7

⁸ 8

⁹ 9

¹⁰ 10 Best hospital possible

22. **Would you recommend this hospital to your friends and family?**

- Definitely no
- Probably no
- Probably yes
- Definitely yes

UNDERSTANDING YOUR CARE WHEN YOU LEFT THE HOSPITAL

23. **During this hospital stay, staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left.**

- Strongly disagree
- Disagree
- Agree
- Strongly agree

24. **When I left the hospital, I had a good understanding of the things I was responsible for in managing my health.**

- Strongly disagree
- Disagree
- Agree
- Strongly agree

25. **When I left the hospital, I clearly understood the purpose for taking each of my medications.**

- Strongly disagree
- Disagree
- Agree
- Strongly agree
- I was not given any medication when I left the hospital

ABOUT YOU

There are only a few remaining items left.

26. **During this hospital stay, were you admitted to this hospital through the Emergency Room?**

- Yes
- No

27. **In general, how would you rate your overall health?**

- Excellent
- Very good
- Good
- Fair
- Poor

28. **In general, how would you rate your overall mental or emotional health?**

- Excellent
- Very good
- Good
- Fair
- Poor

29. **What is the highest grade or level of school that you have completed?**

- 8th grade or less
- Some high school, but did not graduate
- High school graduate or GED
- Some college or 2-year degree
- 4-year college graduate
- More than 4-year college degree

- 30. Are you of Spanish, Hispanic or Latino origin or descent?**
- ¹ No, not Spanish/Hispanic/Latino
 - ² Yes, Puerto Rican
 - ³ Yes, Mexican, Mexican American, Chicano
 - ⁴ Yes, Cuban
 - ⁵ Yes, other Spanish/Hispanic/Latino

- 31. What is your race? Please choose one or more.**
- ¹ White
 - ² Black or African American
 - ³ Asian
 - ⁴ Native Hawaiian or other Pacific Islander
 - ⁵ American Indian or Alaska Native

- 32. What language do you mainly speak at home?**
- ¹ English
 - ² Spanish
 - ³ Chinese
 - ⁴ Russian
 - ⁵ Vietnamese
 - ⁶ Portuguese
 - ⁹ Some other language (please print): _____

THANK YOU

Please return the completed survey in the postage-paid envelope.

[NAME OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]

[RETURN ADDRESS OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]

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OREGON

HEALTHCARE ASSOCIATED INFECTIONS

PROGRESS



Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. The **standardized infection ratio (SIR)** is a statistic used to track HAI prevention progress over time; lower SIRs indicate better progress. The infection data are collected through CDC's National Healthcare Safety Network (NHSN). Oregon requires hospitals to publicly report at least one HAI to NHSN, and HAI data for nearly all U.S. hospitals are published on the Hospital Compare website.

✓ CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS

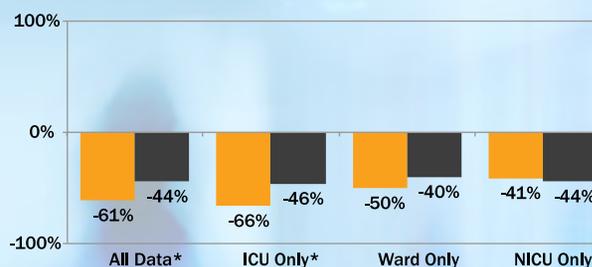
CLABSIs ↓ 61% LOWER COMPARED TO NAT'L BASELINE

A **central line** is a tube that a doctor usually places in a large vein of a patient's neck or chest to give important medical treatment. When not put in correctly or kept clean, central lines can become a freeway for germs to enter the body and cause deadly infections in the blood.

Oregon hospitals did not report a significant change in CLABSIs between 2011 and 2012.

0 ZERO Oregon hospitals have an SIR worse than the national SIR of 0.56.

Changes in CLABSI vs. 2008 National Baseline



LEGEND

- State
- National
- ✓ State examines data and reviews medical charts for this infection to confirm accuracy and completeness
- Q State investigates data for this infection to assess completeness and quality
- * Statistically significant difference
- v Fewer than 5 facilities reported data

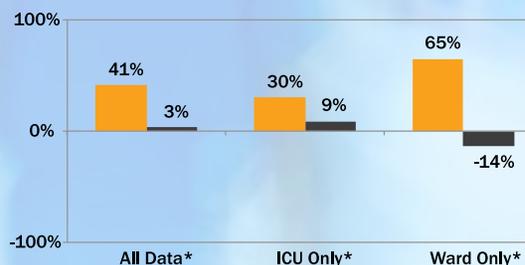
CAUTIs ↑ 41% HIGHER COMPARED TO NAT'L BASELINE

When a urinary catheter is not inserted correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and cause a **catheter-associated urinary tract infection** in the urinary system, which includes the bladder and kidneys.

11% 11% of Oregon hospitals have an SIR worse than the national SIR of 1.03.

CATHETER-ASSOCIATED URINARY TRACT INFECTIONS

Changes in CAUTI vs. 2009 National Baseline



SSIs: COLON SURGERY ↓ 25% LOWER COMPARED TO NAT'L BASELINE

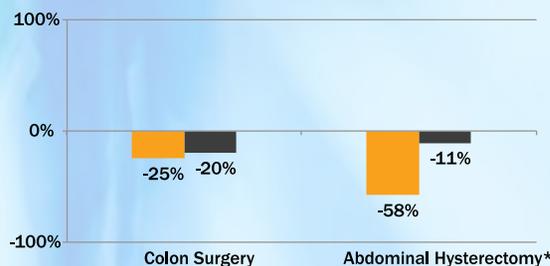
SURGICAL SITE INFECTIONS: COLON SURGERY AND ABDOMINAL HYSTERECTOMY SURGERY

When germs get into an area where surgery is or was performed, patients can get a **surgical site infection**. Sometimes these infections involve the skin only. Other SSIs can involve tissues under the skin, organs, or implanted material.

0 ZERO Oregon hospitals have a colon surgery SIR worse than the national SIR of 0.80.

SSIs: ABDOMINAL HYSTERECTOMY ↓ 58% LOWER COMPARED TO NAT'L BASELINE

Changes in SSI vs. 2008 National Baseline



Not enough data to report how many Oregon hospitals have an abdominal hysterectomy SIR significantly worse than the national SIR of 0.89.





OREGON

HEALTHCARE
ASSOCIATED
INFECTIONS
PROGRESS

Learn how your hospital is preventing infections: www.medicare.gov/hospitalcompare
For more information:

- 2012 HAI Progress Report: www.cdc.gov/hai/progress-report/
- Preventing HAIs: www.cdc.gov/hai
- NHSN: www.cdc.gov/nhsn
- HAIs in Oregon: public.health.oregon.gov/DiseasesConditions/CommunicableDisease/HAI/Pages/index.aspx



HEALTHCARE-ASSOCIATED INFECTION (HAI) DATA gives healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

WHAT IS THE STANDARDIZED INFECTION RATIO?

The **standardized infection ratio (SIR)** is a statistic used to track healthcare-associated infection prevention progress over time. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

- ✓ **Q** In some cases, states that work to validate, or double check, HAI data may have higher SIRs since they are actively looking for infections.

WHAT DOES THE STANDARDIZED INFECTION RATIO MEAN?

IF THE STATE SIR IS:

- MORE THAN 1** There were more infections reported in the state in 2012 compared to the national baseline data, **indicating there has been an increase in infections.**
- 1** There were about the same number of infections reported in the state in 2012 compared to the national baseline data, **indicating no progress has been made.**
- LESS THAN 1** There were fewer infections reported in the state in 2012 compared to the national baseline data, **indicating progress has been made in preventing infections.**

WHAT IS OREGON DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Oregon is one of 10 state health departments participating in CDC's Emerging Infections Program, which allows for extra surveillance and research of HAIs. Oregon has a state mandate to publicly report at least one HAI to NHSN.

Oregon has several prevention efforts (known as prevention collaboratives) to reduce specific HAIs, including:

- Central line-associated bloodstream infections
- Surgical site infections
- *Clostridium difficile*, deadly diarrheal infections
- MRSA infections
- Multidrug-resistant organism infections

Oregon implemented and led prevention efforts to improve antibiotic stewardship.

⁺ Not all hospitals are required to report these infections; some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

NUMBER OF OREGON HOSPITALS THAT REPORTED DATA TO CDC'S NHSN IN 2012 Total Hospitals: 64 ⁺		STATE SIR	NAT'L SIR
CLABSI 47 hospitals	Oregon's 2012 state CLABSI SIR is significantly better than the 2012 national SIR.	0.39	0.56
CAUTI 46 hospitals	Oregon's 2012 state CAUTI SIR is significantly worse than the 2012 national SIR.	1.41	1.03
SSI, Colon Surgery 49 hospitals	Oregon's 2012 state Colon Surgery SSI SIR is similar to the 2012 national SIR.	0.75	0.80
SSI, Abdominal Hysterectomy 46 hospitals	Oregon's 2012 state Abdominal Hysterectomy SSI SIR is significantly better than the 2012 national SIR.	0.42	0.89

The collaborative defined “avoidable ER visits” as visits with a primary diagnosis that matches the diagnosis codes selected by the collaborative. The collaborative did not select many additional diagnosis codes that could also represent an avoidable ER visit. The rate of avoidable ER visits used in Measure II represents the percentage of all ER visits that match the selected diagnosis codes.

Plans were required to use the following data specifications when collecting baseline data for the avoidable ER visits measure:

- ◆ The denominator is determined by the total number of visits from the HEDIS ER measure, excluding infants (less than 12 months of age)
- ◆ The numerator represents ER visits containing any of the collaborative-designated primary diagnosis codes (Table A-1)
- ◆ The numerator excludes visits for members younger than 12 months of age
- ◆ Plans identify the Medi-Cal client index number (CIN), Medi-Cal ethnicity, Medi-Cal language, primary diagnosis, date of service, and Medi-Cal Aid Code.
- ◆ Plans calculate and include the age (on the date of service) and total length of plan enrollment (as member months) in their data collection.

The Baseline Measurement Period:

- ◆ The 12-month calendar year (January 1, 2007, through December 31, 2007)^{A-1}

Numerator:

- ◆ Represented by the total number of avoidable ER visits for members 1 year of age or older

Denominator:

- ◆ The total number of HEDIS ER visits for members 1 year of age or older per 1,000 member months

Rate:

- ◆ The percentage of all ER visits defined as avoidable

^{A-1} The baseline measurement period is based on the revised collaborative time frame.

ER Collaborative Avoidable Visits ICD-9 Diagnosis Codes

Medi-Cal ICD-9 Diagnosis Codes for Avoidable ER Visits	ICD-9 Code No Decimal	ICD-9 Code Decimal
Dermatophytosis of body	1105	110.5
Candidiasis of mouth	1120	112.0
Candidiasis	112	112
Candidal vulvovaginitis	1121	112.1
Candidias urogenital NEC	1122	112.2
Cutaneous candidiasis	1123	112.3
Candidiasis – other specified sites	1128	112.8
Candidal otitis external	11282	112.82
Candidal esophagitis	11284	112.84
Candidal enteritis	11285	112.85
Candidiasis site NEC	11289	112.89
Candidiasis site NOS	1129	112.9
Acariasis	133	133
Scabies	1330	133.0
Acariasis NEC	1338	133.8
Acariasis NOS	1339	133.9
Disorders of conjunctiva	372	372
Acute conjunctivitis	3720	372.0
Acute conjunctivitis unspecified	37200	372.00
Serous conjunctivitis	37201	372.01
Ac follic conjunctivitis	37202	372.02
Pseudomemb conjunctivitis	37204	372.04
Ac atopic conjunctivitis	37205	372.05
Chronic conjunctivitis, unspecified	37210	372.10
Chronic conjunctivitis	3721	372.1
Simpl chr conjunctivitis	37211	372.11
Chr follic conjunctivitis	37212	372.12
Vernal conjunctivitis	37213	372.13
Chr allrg conjunctivis NEC	37214	372.14
Parasitic conjunctivitis	37215	372.15
Blepharoconjunctivitis	3722	372.2
Blepharoconjunctivitis, unspecified	37220	372.20
Angular blepharoconjunct	37221	372.21
Contact blepharoconjunct	37222	372.22
Other and unspecified conjunctivitis	3723	372.3
Conjunctivitis, unspecified	37230	372.30
Rosacea conjunctivitis	37231	372.31
Conjunctivitis NEC	37239	372.39
Other mucopurulent conjunctivitis	37203	372.03
Xeroderma of eyelid	37333	373.33
Suppurative and unspecified otitis media	382	382
Acute suppurative otitis media without spontaneous rupture of ear drum	38200	382.00

ER Collaborative Avoidable Visits ICD-9 Diagnosis Codes

Medi-Cal ICD-9 Diagnosis Codes for Avoidable ER Visits	ICD-9 Code No Decimal	ICD-9 Code Decimal
Acute suppurative otitis media	3820	382.0
Ac supp om w drum rupt	38201	382.01
Chr tubotympan suppur om	3821	382.1
Chr atticoantral sup om	3822	382.2
Chr sup otitis media NOS	3823	382.3
Suppur otitis media NOS	3824	382.4
Otitis media NOS	3829	382.9
Ac mastoiditis-compl NEC	38302	383.02
Acute nasopharyngitis	460	460
Acute pharyngitis	462	462
Acute laryngopharyngitis	4650	465.0
Acute upper respiratory infections of multiple or unspecified sites	465	465
Acute URI mult sites NEC	4658	465.8
Acute URI NOS	4659	465.9
Acute bronchitis	4660	466.0
Acute bronchitis and bronchiolitis	466	466
Chronic rhinitis	4720	472.0
Chronic pharyngitis and nasopharyngitis	472	472
Chronic pharyngitis	4721	472.1
Chronic nasopharyngitis	4722	472.2
Chronic maxillary sinusitis	4730	473.0
Chronic sinusitis	473	473
Chr frontal sinusitis	4731	473.1
Chr ethmoidal sinusitis	4732	473.2
Chr sphenoidal sinusitis	4733	473.3
Chronic sinusitis NEC	4738	473.8
Chronic sinusitis NOS	4739	473.9
Chronic tonsillitis and adenoiditis	4740	474.0
Chronic tonsillitis	47400	474.00
Chronic disease of tonsils and adenoids	474	474
Chronic adenoiditis	47401	474.01
Chronic tonsils&adenoids	47402	474.02
Hypertrophy of tonsils and adenoids	4741	474.1
Tonsils with adenoids	47410	474.10
Hypertrophy tonsils	47411	474.11
Hypertrophy adenoids	47412	474.12
Adenoid vegetations	4742	474.2
Chr T & A Dis NEC	4748	474.8
Chr T & A Dis NOS	4749	474.9
Cystitis	595	595
Acute cystitis	5950	595.0
Chr interstit cystitis	5951	595.1

ER Collaborative Avoidable Visits ICD-9 Diagnosis Codes

Medi-Cal ICD-9 Diagnosis Codes for Avoidable ER Visits	ICD-9 Code No Decimal	ICD-9 Code Decimal
Chronic cystitis NEC	5952	595.2
Trigonitis	5953	595.3
Cystitis in oth dis	5954	595.4
Other specified types of cystitis	5958	595.8
Cystitis cystica	59581	595.81
Irradiation cystitis	59582	595.82
Cystitis NEC	59589	595.89
Cystitis NOS	5959	595.9
Urinary tract infection, site not specified	5990	599.0
Inflammatory disease of cervix, vagina, vulva	616	616
Cervicitis and endocervicitis	6160	616.0
Vaginitis and vulvovaginitis	6161	616.1
Female infertility NEC	6288	628.8
Pruritic conditions NEC	6988	698.8
Pruritic disorder NOS	6989	698.9
Prickly heat	7051	705.1
Lumbago	7242	724.2
Backache NOS	7245	724.5
Disorders of coccyx	7247	724.7
Other back symptoms	7248	724.8
Headache	7840	784.0
Follow up examination	V67	V67
Surgery follow-up	V670	V67.0
Following surgery, unspecified	V6700	V67.00
Follow up vaginal pap smear	V6701	V67.01
Following other surgery	V6709	V67.09
Radiotherapy follow-up	V671	V67.1
Chemotherapy follow-up	V672	V67.2
Psychiatric follow-up	V673	V67.3
Fu exam treated healed fx	V674	V67.4
Following other treatment	V675	V67.5
High-risk Rx NEC Exam	V6751	V67.51
Follow-up exam NEC	V6759	V67.59
Comb treatment follow-up	V676	V67.6
Follow-up exam NOS	V679	V67.9
Encounters for administrative purposes	V68	V68
Issue medical certificate	V680	V68.0
Disability examination	V6801	V68.01
Other issue of medical certificates	V6809	V68.09
Issue repeat prescript	V681	V68.1
Request expert evidence	V682	V68.2
Other specified administrative purposes	V688	V68.8

ER Collaborative Avoidable Visits ICD-9 Diagnosis Codes

Medi-Cal ICD-9 Diagnosis Codes for Avoidable ER Visits	ICD-9 Code No Decimal	ICD-9 Code Decimal
Referral-no exam/treat	V6881	V68.81
Other specified administrative purposes	V6889	V68.89
Administrtrve encount NOS	V689	V68.9
General medical examination	V70	V70
Routine medical exam at health facility	V700	V70.0
Psych exam-authority req	V701	V70.1
Gen psychiatric exam NEC	V702	V70.2
Med exam NEC-admin purpose	V703	V70.3
Exam-medicolegal reasons	V704	V70.4
Health exam-group survey	V705	V70.5
Health exam-pop survey (population)	V706	V70.6
Exam-clinical research	V707	V70.7
General medical exam NEC	V708	V70.8
General medical exam NOS	V709	V70.9
Special investigations and examinations	V72	V72
Eye & vision examination	V720	V72.0
Ear & hearing exam	V721	V72.1
Encounter for hearing examination following failed hearing screening	V7211	V72.11
Encounter for hearing conservation and treatment	V7212	V72.12
Other examinations of ears and hearing	V7219	V72.19
Dental examination	V722	V72.2
Gynecologic examination	V723	V72.3
Routine gynecological examination	V7231	V72.31
Encounter for Papanicolaou cervical smear to confirm findings of recent normal pap smear following initial abnormal pap smear	V7232	V72.32
Preg exam-preg unconfirm	V724	V72.4
Pregnancy examination or test, pregnancy unconfirmed	V7240	V72.40
Pregnancy examination or test, negative result	V7241	V72.41
Pregnancy examination or test, positive result	V7242	V72.42
Radiological exam NEC	V725	V72.5
Laboratory examination	V726	V72.6
Skin/sensitization tests	V727	V72.7
Examination NEC	V728	V72.8
Preop cardiovsclr exam	V7281	V72.81
Preop respiratory exam	V7282	V72.82
Oth spcf preop exam	V7283	V72.83
Preop exam unspcf	V7284	V72.84
Oth specified exam	V7285	V72.85
Encounter blood typing	V7286	V72.86
Examination NOS	V729	V72.9

NYU ED Algorithm

Background/Introduction

With support from the Commonwealth Fund, the Robert Wood Johnson Foundation, and the United Hospital Fund of New York, the NYU Center for Health and Public Service Research has developed an algorithm to help classify ED utilization. The algorithm was developed with the advice of a panel of ED and primary care physicians, and it is based on an examination of a sample of almost 6,000 full ED records. Data abstracted from these records included the initial complaint, presenting symptoms, vital signs, medical history, age, gender, diagnoses, procedures performed, and resources used in the ED. Based on this information, each case was classified into one of the following categories:

- Non-emergent - The patient's initial complaint, presenting symptoms, vital signs, medical history, and age indicated that immediate medical care was not required within 12 hours;
- Emergent/Primary Care Treatable - Based on information in the record, treatment was required within 12 hours, but care could have been provided effectively and safely in a primary care setting. The complaint did not require continuous observation, and no procedures were performed or resources used that are not available in a primary care setting (e.g., CAT scan or certain lab tests);
- Emergent - ED Care Needed - Preventable/Avoidable - Emergency department care was required based on the complaint or procedures performed/resources used, but the emergent nature of the condition was potentially preventable/avoidable if timely and effective ambulatory care had been received during the episode of illness (e.g., the flare-ups of asthma, diabetes, congestive heart failure, etc.); and
- Emergent - ED Care Needed - Not Preventable/Avoidable - Emergency department care was required and ambulatory care treatment could not have prevented the condition (e.g., trauma, appendicitis, myocardial infarction, etc.).

This information that was used to develop the algorithm required analysis of the full medical record. Since such detailed information is not generally available on computerized ED or claims records, these classifications were then "mapped" to the discharge diagnosis of each case in our sample to determine for each diagnosis the percentage of sample cases that fell into these four categories. For example, patients discharged with a final diagnosis of "abdominal pain" may include both patients who arrived at the ED complaining of stomach pain, as well as those who reported chest pain (an a possible heart attack). Accordingly, for abdominal pain, the algorithm assigns a specific percentage of the visit into the categories of "non-emergent", "emergent/primary care treatable", and "emergent/ED care needed-not preventable/avoidable" based on what we observed in our sample for cases with an ultimate discharge diagnosis of abdominal pain.

It is important to recognize that the algorithm is not intended as a triage tool or a mechanism to determine whether ED use in a specific case is "appropriate" (e.g., for reimbursement purposes). Since few diagnostic categories are clear-cut in all cases, the algorithm assigns cases probabilistically on a percentage basis, reflecting this potential uncertainty and variation.

Since the original development of the algorithm, users have expressed an interest in examining separately cases involving a primary diagnosis of injury, mental health problems, alcohol, or substance abuse. Accordingly, we have pulled these conditions out of the standard classification scheme, and tabulate them separately. There are also a residual of conditions (approximately 15%) where our sample was not of sufficient size to assign percentages for the standard classification - these conditions are also tabulated separately. See Attachment for schematic diagram of algorithm.

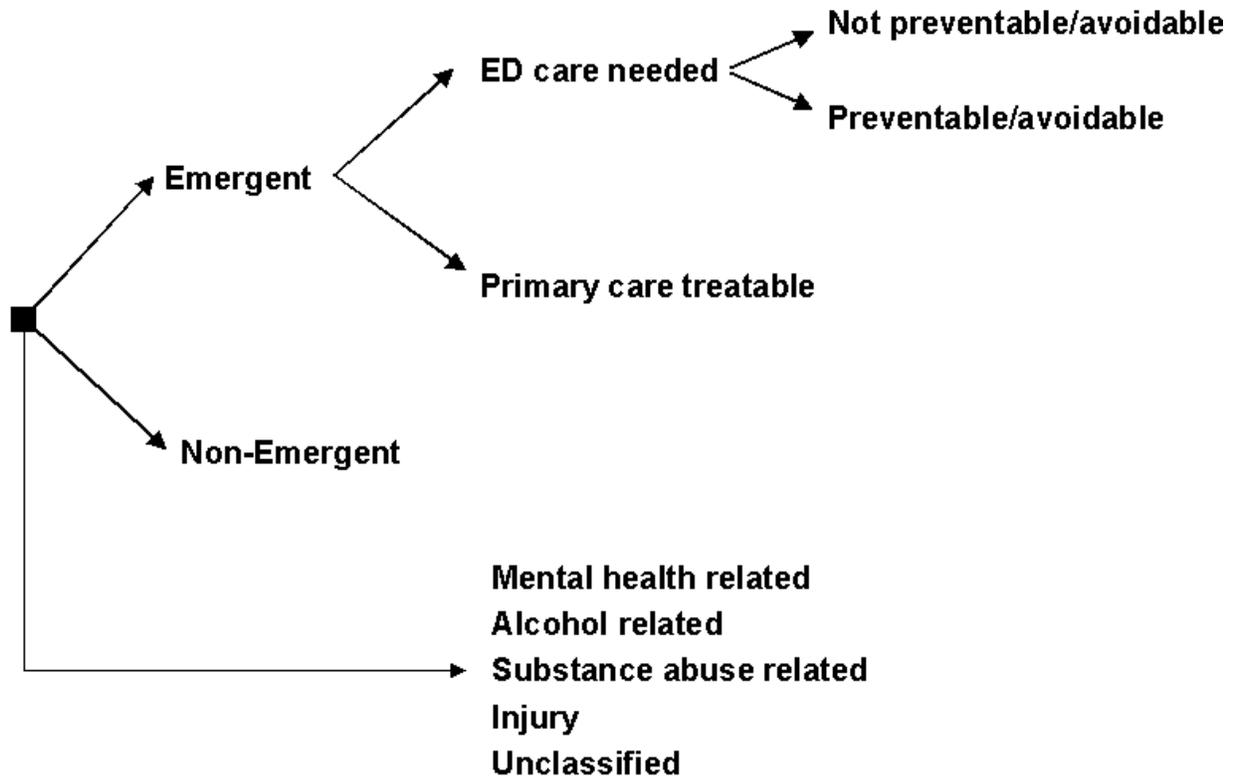
Applying the Algorithm to an ED Data Base

We have developed software for applying the algorithm using three different software applications: SAS, SPSS, and ACCESS. Detailed instructions on how to use the algorithm are included in Download section of this website. All three applications produce an output data set that adds a new set of variables to your original data set - the names of the new variables are:

- ne = "Non-emergent"
- epct = "Emergent/Primary Care Treatable"
- edcnpa = "Emergent ? ED Care Needed ? Preventable/Avoidable"
- edcnnpa = "Emergent ? ED Care Needed ? Not Preventable/Avoidable"
- injury = "Injury principal diagnoses"
- psych = "Mental health principal diagnoses"
- alcohol = "Alcohol-related health principal diagnoses"
- drug = "Drug-related health principal diagnoses (excluding alcohol)"
- unclassified = "Not classified - not in one of the above categories"

For each ED encounter, the numbers in the new fields represent the relative percentage of cases for that diagnosis falling into the various classification categories. For example, in the case of urinary tract infections (ICD-9-CM code 599.0), each case is assigned 66% "non-emergent", 17% "emergent/primary care treatable", and 17% "emergent - ED care needed - preventable/avoidable". The sum of the data new data fields will always total 1", and the injury, psych, alcohol, drug, and unclassified fields are always binary (equal to 1" or 0").

In addition, the ACCESS program produce output files in EXCEL format that profiles ED use by hospital, payor group, zip code area, and by patient race/ethnicity. For SAS and SPSS applications, this output can be obtained by simply aggregated these values to find the total percentage of cases by hospital, payor group, zip code, race/ethnicity, etc.



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