## Economic Burden of Hospital Admissions for Patients With Acute Bacterial Skin and Skin Structure Infections in the United States

**Supplemental Materials** 

## **Supplementary Table 1. Excluded Secondary Diagnoses**

Diagnosis Category/Description	ICD-9-CM Code
Accidents due to natural and environmental factors	
Poisoning/toxic react due to venom animals/plants	E905.X
Other injury caused by animals	E906.X
Acute respiratory infections	
Acute nasopharyngitis (common cold)	460.XX
Acute sinusitis	461.XX
Acute pharyngitis	462.XX
Acute tonsillitis	463.XX
Acute laryngitis/tracheitis	464.XX
Acute upper respiratory infection of multiple/unspecified sites	465.XX
Acute bronchitis/bronchiolitis	466.XX
Acute rheumatic fever	
Rheumatic fever without mention of heart involvement	390.XX
Rheumatic fever with heart involvement	391.XX
Rheumatic chorea	392.XX
Appendicitis	
Acute appendicitis	540.XX
Unqualified appendicitis	541.XX
Other appendicitis	542.XX
Other diseases of appendix	543.XX
Arthropathies and related disorders	
Arthropathy associated with infections	711.XX
Arthropod-borne viral diseases	
Yellow fever	060.XX
Dengue	061.XX
Mosquito-borne viral encephalitis	062.XX
Tick-borne viral encephalitis	063.XX

Viral encephalitis from other/unspecified arthropods	064.XX
Arthropod-borne hemorrhagic fever	065.XX
Other arthropod-borne viral disease	066.XX
Chronic obstructive pulmonary disease and allied conditions	
Bronchitis, not specified as acute or chronic	490.XX
Chronic rheumatic heart disease	
Rheumatic disease of endocardium, valve unspecified	397.9
Complications mainly related to pregnancy	
Infection of genitourinary tract antepartum	646.63
Other specified maternal infection/parasitic disease, antepartum	647.83
Unspecified maternal infection/infestation, antepartum	647.93
Unspecified maternal infection/infestation complicating pregnancy/birth/postpartum	647.94
Complications of surgical and medical care, NEC	
Infection/inflammation due to internal device/implant/graft	996.6X
Ventilator associated pneumonia	997.31
Postoperative shock, septic	998.02
Bloodstream infection due to central venous catheter	999.32
Infection following other infusion/injury/transfusion/vaccination	999.39
Complications of the puerperium	
Major puerperal infection, unspecified, postpartum condition or complication	670.04
Puerperal sepsis, postpartum condition or complication	670.24
Other major puerperal infection, postpartum condition or complication	670.84
Puerperal pyrexia of unknown origin, postpartum condition or complication	672.04
Infection of breast/nipple associated with childbirth	675.XX <sup>a</sup>
Diseases of blood and blood-forming organs	
Neutropenia due to infection	288.04
Diseases of esophagus, stomach, and duodenum	
Infection of gastrostomy	536.41
Infection due to gastric band procedure	539.01

Diseases of male genital organs	
Acute prostatitis	601.0
Abscess of prostate	601.2
Orchitis/epididymitis	604.XX
Diseases of oral cavity, salivary glands, and jaws	
Periapical abscess without sinus	522.5
Periapical abscess with sinus	522.7
Abscess of salivary glands	527.3
Cellulitis/abscess of oral soft tissue	528.3
Diseases of the ear and mastoid process	
Unspecified perichondritis of pinna	380.00
Acute perichondritis of pinna	380.01
Unspecified infective otitis externa	380.10
Acute infection of pinna	380.11
Other acute infection of external ear	380.13
Other acute otitis externa	380.22
Unspecified acute nonsuppurative otitis media	381.00
Acute serous otitis media	381.01
Acute eustachian salpingitis	381.51
Acute suppurative otitis media	382.0X
Unspecified suppurative otitis media	382.4
Unspecified otitis media	382.9
Acute mastoiditis	383.0X
Petrositis	383.2X
Unspecified mastoiditis	383.9
Acute myringitis without otitis media	384.0X
Vestibular neuronitis	386.12
Cerebrospinal fluid otorrhea	388.61

Vitreous abscess	360.04
Sympathetic uveitis	360.11
Abscess of eyelid	373.13
Other infective dermatitis of eyelid	373.5
Unspecified dacryocystitis	375.30
Acute dacryocystitis	375.32
Orbital osteomyelitis	376.03
Inflammation (infection) of postprocedural bleb, unspecified	379.60
Disorders of the peripheral nervous system	
Acute infective polyneuritis	357.0
Ectopic and molar pregnancy and other pregnancy with abortive outcome	
Genital tract and pelvic infection following abortion or ectopic/molar pregnancies	639.0
Homicide and injury purposely inflicted by other persons	
Assault by human bite	E968.7
Infections of skin and subcutaneous tissue	
Acute lymphadenitis	683.XX <sup>a</sup>
Inflammatory disease of female pelvic organs	
Acute salpingitis/oophoritis	614.0
Salpingitis/oophoritis not specified as acute/chronic	614.2
Acute parametritis/pelvic cellulitis	614.3
Acute or unspecified pelvic peritonitis, female	614.5
Acute inflammatory disease of uterus, except cervix	615.0
Abscess of Bartholin's gland	616.3
Other abscess of vulva	616.4
Other specified inflammatory diseases of cervix/vagina/vulva	616.8X
Unspecified inflammatory diseases of cervix/vagina/vulva	616.9
Inflammatory diseases of the central nervous system	
Bacterial meningitis	320.XX
Meningitis due to other organisms	321.XX

Nonpyogenic meningitis	322.0
Unspecified meningitis	322.9
Encephalitis/encephalomyelitis in viral diseases classified elsewhere	323.01
Infectious acute disseminated encephalomyelitis	323.61
Intracranial/intraspinal abscess	324.XX
Late effects of intracranial abscess/pyogenic infection	326.XX
Intestinal infectious diseases	
Cholera	001.XX
Typhoid/paratyphoid fever	002.XX
Other salmonella infection	003.XX
Shigellosis	004.XX
Other food poisoning (bacterial)	005.XX
Amebiasis	006.XX
Other protozoal intestinal disease	007.XX
Intestinal infection due to other organism	008.XX
Ill-defined intestinal infection	009.XX
Late effects of infectious and parasitic diseases	
Late effects of viral encephalitis	139.0
Late effects of other/unspecified infectious/parasitic diseases	139.8
Mycoses	
Dermatophytosis	110.XX
Other/unspecified dermatomycosis	111.XX
Candidiasis	112.XX
Coccidioidomycosis	114.XX
Histoplasmosis	115.XX
Blastomycotic infection	116.XX
Other mycoses	117.XX
Opportunistic mycoses	118.XX

Acute glomerulonephritis with proliferative lesion	580.0
Acute glomerulonephritis in diseases classified elsewhere	580.81
Osteopathies, chondropathies, and acquired musculoskeletal diseases	
Osteomyelitis/periostitis/other bone infections	730.XX
Other accidents	
Accidental human bite	E928.3
Other bacterial diseases	
Leprosy	030.XX
Other mycobacterial disease	031.XX
Diphtheria	032.XX
Whooping cough	033.XX
Streptococcal sore throat/scarlet fever	034.XX
Meningococcal infection	036.XX
Tetanus	037.XX
Septicemia	038.XX
Actinomycotic infection	039.XX
Other bacterial disease	040.XX
Other diseases due to viruses and chlamydiae	
Viral hepatitis	070.XX
Rabies	071.XX
Mumps	072.XX
Ornithosis	073.XX
Coxsackie viral disease	074.XX
Infectious mononucleosis	075.XX
Trachoma	076.XX
Other conjunctivitis due to virus/chlamydiae	077.XX
Other disease due to virus/chlamydiae	078.XX
Viral/chlamydial infection elsewhere classified/NOS	079.XX
Other diseases of digestive system	

Abscess of liver	572.0
Other diseases of intestines and peritoneum	
Abscess of anal/rectal regions	566.XX
Other suppurative peritonitis	567.2X
Retroperitoneal infection	567.3X
Other specified peritonitis	567.8X
Unspecified peritonitis	567.9
Abscess of intestine	569.5
Infection of colostomy/enterostomy	569.61
Pouchitis	569.71
Other diseases of respiratory system	
Pleurisy with effusion, with mention of a bacterial cause other than TB	511.1
Abscess of lung/mediastinum	513.XX
Respiratory bronchiolitis interstitial lung disease	516.34
Infection of tracheostomy	519.01
Other diseases of skin and subcutaneous tissue	
Pressure ulcer	707.0X <sup>a</sup>
Ulcer of lower limbs, except pressure ulcer	707.1X <sup>a</sup>
Chronic ulcer of other specified sites	707.8X <sup>a</sup>
Chronic ulcer of unspecified site	$707.9X^a$
Other diseases of the upper respiratory tract	
Peritonsillar abscess	475.XX
Cellulitis of pharynx/nasopharynx	478.21
Parapharyngeal abscess	478.22
Retropharyngeal abscess	478.24
Cellulitis/perichondritis of larynx	478.71
Other diseases of urinary system	
Kidney infection	590.XX
Cystitis	595.XX

Infection of cystostomy	596.81
Urethritis (non-STD)/urethral syndrome	597.XX
Urethral stricture due to unspecified infection	598.00
Urinary tract infection, site not specified	599.0
Other forms of heart disease	
Acute pericarditis	420.XX
Acute/subacute endocarditis	421.XX
Endocarditis, valve unspecified	424.9X
Other infectious and parasitic diseases	
Toxoplasmosis	130.XX
Trichomoniasis	131.XX
Pediculosis/phthirus infection	132.XX
Acariasis	133.XX
Other infestation	134.XX
Sarcoidosis	135.XX
Other/unspecified infectious/parasitic disease	136.XX
Other spirochetal diseases	
Leptospirosis	100.XX
Vincent's angina	101.XX
Yaws	102.XX
Pinta	103.XX
Other spirochetal infection	104.XX
Pneumonia and influenza	
Viral pneumonia	480.XX
Pneumococcal pneumonia	481.XX
Other bacterial pneumonia	482.XX
Pneumonia due to other specified organism	483.XX
Pneumonia in infectious diseases classified elsewhere	484.XX
Bronchopneumonia, organism unspecified	485.XX

Pneumonia, organism unspecified	486.XX
Influenza	487.XX
Influenza due to certain identified flu viruses	488.XX
Polio & other non-arthropod-borne viral diseases of CNS	
Acute poliomyelitis	045.XX
Slow virus infection/prion disease of CNS	046.XX
Enteroviral meningitis	047.XX
Other enterovirus disease of CNS	048.XX
Other nonarthropod-borne viral disease of CNS	049.XX
Rheumatism, excluding the back	
Infective myositis	728.0
Necrotizing fasciitis	728.86
Unspecified fasciitis	729.4
Rickettsioses and other arthropod-borne diseases	
Louse-borne (epidemic) typhus	080.XX
Other typhus	081.XX
Tick-borne rickettsioses	082.XX
Other rickettsioses	083.XX
Malaria	084.XX
Leishmaniasis	085.XX
Trypanosomiasis	086.XX
Relapsing fever	087.XX
Other arthropod-borne disease	088.XX
Superficial injury	
Infection nonvenomous insect bite on face/neck/scalp	910.5
Infection nonvenomous insect bite on trunk	911.5
Infection nonvenomous insect bite on shoulder/upper arm	912.5
Infection nonvenomous insect bite on elbow/forearm/wrist	913.5
Infection nonvenomous insect bite on hand excluding finger alone	914.5

Infection nonvenomous insect bite on finger	915.5
Infection nonvenomous insect bite on hip/thigh/leg/ankle	916.5
Infection nonvenomous insect bite on foot/toe	917.5
Infection nonvenomous insect bite, other/multiple/unspecified site	919.5
Symptoms	
Gangrene	785.4
Syphilis and other venereal diseases	
Congenital syphilis	090.XX
Symptomatic early syphilis	091.XX
Latent early syphilis	092.XX
Cardiovascular syphilis	093.XX
Neurosyphilis	094.XX
Other symptomatic late syphilis	095.XX
Latent late syphilis	096.XX
Other/unspecified syphilis	097.XX
Gonococcal infection	098.XX
Other venereal disease	099.XX
Tuberculosis	
Primary tuberculosis infection	010.XX
Pulmonary tuberculosis	011.XX
Other respiratory tuberculosis	012.XX
Tuberculosis of meninges/CNS	013.XX
Tuberculosis of intestines/peritoneum	014.XX
Tuberculosis of bone/joint	015.XX
Tuberculosis of genitourinary system	016.XX
Tuberculosis of other organs	017.XX
Miliary tuberculosis	018.XX
Viral diseases accompanied by exanthem	
Smallpox	050.XX

Zoonotic bacterial diseases	
Plague	020.XX
Tularemia	021.XX
Anthrax	022.XX
Brucellosis	023.XX
Glanders	024.XX
Melioidosis	025.XX
Rat-bite fever	026.XX
Other zoonotic bacterial disease	027.XX

ABSSSI=acute bacterial skin and skin structure infection; CNS=central nervous system; FDA=US Food and Drug Administration; *ICD-9-CM=International Classification of Diseases, Ninth Revision, Clinical Modification*; NEC=not elsewhere classified; NOS=not otherwise specified; STD=sexually transmitted disease.

<sup>&</sup>lt;sup>a</sup>Excluded only for primary diagnoses of ABSSSI consistent with FDA guidance.

## **Supplementary Table 2. Spectrum of Activity of Antibiotic Agents**

Therapeutic Class/Antibiotic Agent	Spectrum of Activity
Aminoglycoside	
Amikacin	Non-MRSA coverage
Gentamicin	Non-MRSA coverage
Kanamycin	Non-MRSA coverage
Neomycin	Non-MRSA coverage
Netilmicin	Non-MRSA coverage
Streptomycin	Non-MRSA coverage
Tobramycin	Non-MRSA coverage
Carbapenem	
Doripenem	Non-MRSA coverage
Ertapenem	Non-MRSA coverage
Imipenem	Non-MRSA coverage
Meropenem	Non-MRSA coverage
Cephalosporin	
Cefaclor	Non-MRSA coverage
Cefadroxil	Non-MRSA coverage
Cefamandole	Non-MRSA coverage
Cefazolin	Non-MRSA coverage
Cefdinir	Non-MRSA coverage
Cefepime	Non-MRSA coverage
Cefixime	Non-MRSA coverage
Cefoperazone	Non-MRSA coverage
Cefotaxime	Non-MRSA coverage

Cefotetan	Non-MRSA coverage
Cefoxitin	Non-MRSA coverage
Cefpodoxime	Non-MRSA coverage
Cefprozil	Non-MRSA coverage
Ceftaroline	MRSA coverage
Ceftazidime	Non-MRSA coverage
Ceftizoxime	Non-MRSA coverage
Ceftriaxone	Non-MRSA coverage
Cefuroxime	Non-MRSA coverage
Cephalexin	Non-MRSA coverage
Cephalothin	Non-MRSA coverage
Cephradine	Non-MRSA coverage
Fluoroquinolone	
Cinoxacin	Non-MRSA coverage
Ciprofloxacin	Non-MRSA coverage
Gatifloxacin	Non-MRSA coverage
Levofloxacin	Non-MRSA coverage
Moxifloxacin	Non-MRSA coverage
Norfloxacin	Non-MRSA coverage
Ofloxacin	Non-MRSA coverage
Trovafloxacin	Non-MRSA coverage
Glycopeptide/Lipopeptide	
Daptomycin	MRSA coverage
Telavancin	MRSA coverage
Vancomycin	MRSA coverage

Lincosamide

Clindamycin MRSA coverage

Lincomycin Non-MRSA coverage

Macrolide

Azithromycin Non-MRSA coverage

Clarithromycin Non-MRSA coverage

Dirithromycin Non-MRSA coverage

Erythromycin Non-MRSA coverage

Other

Aztreonam Non-MRSA coverage

Chloramphenicol Non-MRSA coverage

Colistimethate Non-MRSA coverage

Fidaxomicin Non-MRSA coverage

Metronidazole Non-MRSA coverage

Quinupristin/dalfopristin MRSA coverage

Tigecycline MRSA coverage

Trimethoprim Non-MRSA coverage

Oxazolidinone

Linezolid MRSA coverage

Penicillin

Amoxicillin Non-MRSA coverage

Ampicillin Non-MRSA coverage

Dicloxacillin Non-MRSA coverage

Nafcillin Non-MRSA coverage

Oxacillin Non-MRSA coverage

Penicillin g	Non-MRSA coverage
Penicillin v	Non-MRSA coverage
Piperacillin	Non-MRSA coverage
Ticarcillin	Non-MRSA coverage
Penicillin/β-lactamase inhibitor	
Amoxicillin/clavulanate	Non-MRSA coverage
Ampicillin/sulbactam	Non-MRSA coverage
Piperacillin/tazobactam	Non-MRSA coverage
Ticarcillin/clavulanate	Non-MRSA coverage
Sulfonamide	
Sulfadiazine	Non-MRSA coverage
Sulfamethizole	Non-MRSA coverage
Sulfamethoxazole	Non-MRSA coverage
Sulfamethoxazole/trimethoprim	MRSA coverage
Sulfanilamide	Non-MRSA coverage
Sulfasalazine	Non-MRSA coverage
Sulfisoxazole	Non-MRSA coverage
Tetracycline	
Demeclocycline	Non-MRSA coverage
Doxycycline	MRSA coverage
Minocycline	MRSA coverage
Tetracycline	Non-MRSA coverage

MRSA=methicillin-resistant *Staphylococcus aureus*.

Supplementary Table 3. The 5 Most Common Secondary Diagnoses and Procedures for ABSSSI Patients in 2014

ICD-9 Diagnostic Code	Description	n (%) <sup>a</sup>
Secondary ICD-9 diagnostic codes		
401.9	Essential hypertension	23,824 (40.6)
272.4	Hyperlipidemia, other and unspecified	14,806 (25.2)
305.1	Tobacco use disorder	14,273 (24.3)
250.00	Type II diabetes mellitus, uncomplicated	11,025 (18.8)
530.81	Esophageal reflux	9039 (15.4)
ICD-9 procedure codes		
86.04	Other incision with drainage of skin and subcutaneous tissue	12,062 (20.6)
86.22	Excisional debridement of wound, infection, or burn	2963 (5.0)
38.93	Venous catheterization, NEC	2854 (4.9)
38.97	Central venous catheter placement w/ guidance	2717 (4.6)
99.21	Injection of antibiotic	2547 (4.3)

ABSSSI=acute bacterial skin and skin structure infection; *ICD-9=International Classification of Diseases, Ninth Revision*; NEC=not elsewhere classified.

<sup>&</sup>lt;sup>a</sup>Categories are not mutually exclusive, patients may have had more than one secondary diagnosis or more than one procedure.

Supplementary Table 4. Patient, Treatment, Hospital, and Economic Characteristics of ABSSSI Admissions in 2014 by Length of Stay

Characteristic	1 Day	2 Days	3 Days	4 Days	≥5 Days	P Value
Patient characteristics	· ·	•		-	•	
Number of hospital admissions	6736	12,641	13,118	9045	17,142	
Mean age, years	48.9	51.8	54.7	56.4	59.3	
Age group, %						
18–34 years	25.8	20.8	16.4	13.9	28.8	< 0.01
35–44 years	18.5	16.6	15.1	13.9	20.0	
45–54 years	19.8	19.6	19.4	18.3	21.6	
55–64 years	15.0	17.2	17.5	19.3	14.7	
65–74 years	10.2	12.6	14.4	15.9	8.3	
≥75 years	10.7	13.3	17.2	18.7	6.7	
Men, %	56.9	54.6	53.3	51.6	49.1	< 0.01
Mean CCI score	1.0	1.2	1.3	1.6	2.0	
CCI scores, %						
0	58.1	53.7	47.9	42.3	32.6	< 0.01
1	11.5	11.0	11.8	12.0	12.0	
2	17.7	19.8	21.2	22.2	22.4	
3	5.6	6.5	7.8	9.4	11.2	
≥4	7.2	8.9	11.4	14.2	21.8	

Most common comorbid conditions, %

Diabetes	23.0	26.0	29.1	32.9	37.1	< 0.01
Renal disease	8.2	10.6	13.4	15.9	24.5	< 0.01
Chronic pulmonary disease	10.3	9.8	10.2	10.5	12.1	< 0.01
Congestive heart failure	5.0	5.9	8.1	10.4	14.9	< 0.01
Peripheral vascular disease	3.5	4.3	5.6	7.0	9.8	< 0.01
Proxy severity of disease, %						
Admitted to the ICU	1.5	1.8	2.0	2.7	5.9	< 0.01
Used corticosteroids on admission days 1–2	5.5	7.1	6.8	6.4	5.8	< 0.01
Received parenteral nutrition on admission days 1–2	2.1	2.7	3.4	3.9	5.2	< 0.01
Used vasoactive medications on admission days 1–2	1.1	1.4	1.6	2.2	2.9	< 0.01
Insurance type, %						
Medicare	30.2	34.2	39.7	44.0	50.2	< 0.01
Medicaid	22.4	18.9	16.8	16.2	16.1	
Managed care/commercial indemnity	27.4	30.9	29.1	26.2	22.3	
Self-pay	14.3	10.2	9.0	8.1	6.5	
Other or N/A	5.8	5.9	5.5	5.5	4.9	
Admission type, %						
Emergency or urgent	91.7	90.1	89.9	89.3	88.5	< 0.01
Elective	7.6	9.1	9.3	10.0	10.6	

Trauma center	0.1	0.0	0.1	0.0	0.1	
Other or N/A	0.6	0.7	0.8	0.8	0.8	
Admission source, %						
Nonhealthcare setting	83.9	81.1	80.7	80.4	77.2	< 0.01
Clinic	7.1	9.2	9.2	9.1	9.8	
Transfer from other facility or other department within the same hospital	6.3	6.1	6.6	7.1	9.7	
Other or N/A	2.7	3.6	3.5	3.4	3.3	
Discharge status, %						
Home or self-care	86.1	83.3	74.2	65.5	50.3	< 0.01
Home health service	8.9	13.0	17.9	23.9	29.5	
Discharged/transferred to other facility (including planned readmission)	4.5	3.3	7.3	9.9	19.1	
Hospice	0.2	0.2	0.2	0.3	0.6	
Patient died	0.2	0.1	0.1	0.1	0.2	
Other or N/A	0.1	0.2	0.3	0.4	0.3	
Treatment characteristics						
Therapeutic class of antibiotic therapy receiv	ed on admission	n days 1–2, <sup>a</sup> %				
Glycopeptide/lipopeptide	65.0	72.1	75.5	77.8	76.6	< 0.01
Penicillin/β-lactamase inhibitor	34.8	37.4	39.1	40.0	41.9	< 0.01
Cephalosporin	24.8	29.1	31.4	32.1	31.4	< 0.01
Lincosamide	24.7	23.9	22.1	21.0	19.3	< 0.01

Fluoroquinolone	6.9	7.6	8.0	8.2	9.6	< 0.01
Other <sup>b</sup>	16.8	16.9	16.0	18.1	19.6	< 0.01
Received anti-MRSA antibiotic on admission days 1–2, <sup>a</sup> %	83.0	86.2	87.3	88.3	87.2	< 0.01
Hospital characteristics						
Geographic region, %						
New England	5.1	5.2	4.6	4.4	3.8	< 0.01
Middle Atlantic	18.1	15.8	14.8	14.5	15.8	
East-North Central	17.6	15.7	14.5	14.2	11.9	
West-North Central	5.0	5.8	5.4	5.3	4.5	
South Atlantic	29.7	30.4	32.2	33.2	32.7	
East-South Central	5.6	7.0	7.5	7.3	7.5	
West-South Central	8.7	9.5	10.5	10.6	12.4	
Mountain	1.8	2.4	2.7	2.4	2.4	
Pacific	8.4	8.3	7.9	8.1	9.1	
Hospital teaching status, %						
Teaching	44.2	39.3	37.4	37.2	39.6	< 0.01
Nonteaching	55.8	60.7	62.6	62.8	60.4	
Urban vs rural, %						
Urban	85.5	84.3	83.8	84.2	84.9	< 0.01
Rural	14.5	15.7	16.2	15.8	15.1	
Hospital size, %						

Small, <100 beds	6.7	6.6	6.4	5.5	4.6	< 0.01
Medium, 100–399 beds	50.7	52.6	53.4	52.7	50.6	
Large, ≥400 beds	42.6	40.8	40.2	41.8	44.8	
Economic characteristics						
Mean total costs per admission, \$	2040	3382	4800	6234	11,652	< 0.01
Room costs	861	1713	2541	3406	6419	
Operating room, surgery, emergency services	414	515	626	799	1294	
Laboratory and diagnostic procedures and services	183	266	350	424	721	
Non-antibiotic medication acquisition	140	228	390	450	946	
Specialty and therapeutic procedures and services	118	165	228	294	631	
Antibiotic medication acquisition	95	183	261	340	667	
Radiology and imaging procedures and services	90	118	155	194	332	
Other	85	125	173	250	556	
Parenteral medication administration	54	68	75	77	88	

ABSSSI=acute bacterial skin and skin structure infection; CCI=Charlson Comorbidity Index; ICU=intensive care unit; MRSA=methicillin-resistant *Staphylococcus aureus*; N/A=not applicable. <sup>a</sup>The denominator for this section is the number of hospital admissions with antibiotic therapy on admission days 1–2.

<sup>&</sup>lt;sup>b</sup>Other includes aminoglycosides, carbapenems, macrolides, oxazolidinone, penicillin, sulfonamides, and/or tetracyclines.

## Supplementary Table 5. Treatment Characteristics of ABSSSI Admissions<sup>a</sup> in 2014

Treatment Characteristics, n (%)	Admissions (N=58,682)	
Received parenteral antibiotics with only MRSA coverage	17,397 (29.6)	
With oral antibiotics with MRSA coverage	1232 (2.1)	
With oral antibiotics without MRSA coverage	631 (1.1)	
With oral antibiotics with MRSA and non-MRSA coverage	112 (0.2)	
No oral or other antibiotics	15,057 (25.7)	
With other route <sup>b</sup>	365 (0.6)	
Received parenteral antibiotics with only non-MRSA coverage	8161 (13.9)	
With oral antibiotics with MRSA coverage	547 (0.9)	
With oral antibiotics with non-MRSA coverage	395 (0.7)	
With oral antibiotics with MRSA and non-MRSA coverage	61 (0.1)	
With no oral or antibiotics with other routes <sup>b</sup>	6931 (11.8)	
With other route <sup>b</sup>	227 (0.4)	
Received parenteral antibiotics with both MRSA and non- MRSA coverage (regardless of oral antibiotic received)	30,451 (51.9)	
Other <sup>c</sup>	133 (0.2)	
Did not receive antibiotics	2051 (3.5)	
Received only oral antibiotic therapy	489 (0.8)	
With MRSA coverage	296 (0.5)	
Without MRSA coverage	139 (0.2)	

IV=intravenous; MRSA=methicillin-resistant Staphylococcus aureus.

Categories and values in **boldface** represent the totals of their respective subcategories and are mutually exclusive.

<sup>&</sup>lt;sup>a</sup>Treatment assessed on days 1–2 of admission.

<sup>&</sup>lt;sup>b</sup>Refers to the Premier antibiotic route category of 'other', that is, nonoral and non-IV antibiotic therapy.

<sup>&</sup>lt;sup>c</sup>Refers to admissions in which the patient received both oral and antibiotic with other route or they received only antibiotics with other route.