

Decreasing Incidence of Skin and Soft Tissue Infections With a Seasonal Pattern at an Academic Medical Center, 2006–2014

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Background. The incidence of skin and soft tissue infections (SSTIs) in the United States increased sharply after 2000 with the emergence of USA300 methicillin-resistant *Staphylococcus aureus*. We examined trends in SSTI incidence in 2006–2014 at the University of Chicago Medicine (UCM).

Methods. Data were obtained for patient encounters at UCM with an *International Classification of Diseases, Ninth Revision*-coded SSTI diagnosis between January 1, 2006 and March 31, 2014. Incidence density was calculated per 1000 encounters by quarter and year. Encounters were stratified by inpatient, outpatient clinic and emergency department (ED) encounters and by age group, gender, and race. Poisson regression was used to assess change over time.

Results. In 2006–2014, data were collected for 38 201 SSTI-associated encounters among 31 869 subjects. Among all patients treated at UCM, there was a decrease of 1% per year in the incidence of SSTIs during 2006–2013, with an overall decrease of 16%. There was a significant decrease in SSTI-related encounters among inpatients (rate ratio [RR] = 0.97; 95% confidence interval [CI], .96–.98), ED patients (RR = 0.98; 95% CI, .97–.98), adults (RR = 0.98; 95% CI, .97–.98), children (RR = 0.96; 95% CI, .95–.97), and African Americans (RR = 0.99; 95% CI, .98–.99). There was an annual seasonal trend, with the peak incidence occurring during the late summer.

Conclusions. The incidence of SSTIs at UCM decreased in children and adults with seasonal variation, peaking during the summer months. This suggests a reversal of the massive increase in SSTI incidence in the United States after 2000.

Keywords. decline; *S aureus*; skin and soft tissue infection.

The incidence of skin and soft tissue infections (SSTIs) in the United States increased sharply in both the inpatient and outpatient settings after the year 2000 [1, 2]. SSTIs, often caused by *Staphylococcus aureus*, are routinely encountered by physicians treating children and adults [3] and include a range of conditions from uncomplicated folliculitis, skin abscess, or cellulitis to severe, life-threatening infections such as necrotizing fasciitis. They accounted for more than 14 million outpatient visits in the United States in 2005 [2] and for approximately 7%–10% of all North American inpatient hospital admissions in 2000 [4]. According to data from the National Inpatient Sample (NIS) of the US Healthcare Cost and Utilization Project, the incidence of SSTIs increased by 29% among US hospitalized inpatients from 2000 to 2004 [5]. This increase can be attributed

to an epidemic of community-associated (CA) methicillin-resistant *S aureus* (MRSA) infections, and especially those caused by the USA300 MRSA strain type [6–8]. More than 30% of patients who have a CA-MRSA SSTI are diagnosed with a recurrent SSTI within 1 year, compounding the epidemic [9–11]. Few published data are now available about the trends in US SSTI epidemiology after 2011.

We set out to examine temporal trends in incidence density of SSTIs from 2006 to 2014 at the University of Chicago Medicine (UCM). We hypothesized that the incidence of SSTIs decreased during this period because we and our colleagues in emergency departments (EDs) elsewhere in the US anecdotally noted a recent decrease in the number of SSTIs in our clinical practices. We examined changes in SSTI incidence at UCM overall and also in specific demographic strata of patients.

METHODS

The UCM is an academic medical center located on the South Side of Chicago serving the local population for primary care, and it is also a tertiary referral center. University of Chicago Medicine has 617 inpatient beds (161 pediatric and 456 adult), including 126 intensive care unit (ICU) beds, with approximately 23 500 annual adult admissions and 6500 annual

Received 17 May 2016; accepted 23 August 2016.

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pediatric admissions. The ED serves approximately 43 000 adult and 28 000 pediatric encounters annually. The study was approved by the Institutional Review Board of the Biological Sciences Division of the University of Chicago.

Data were obtained from the UCM Clinical Data Research Warehouse for all SSTI-associated inpatient, outpatient clinic and ED encounters at UCM that were coded with a diagnosis of an SSTI between January 1, 2006 and March 31, 2014. Skin and soft tissue infection-associated encounters were defined as having at least a single SSTI-associated code of the *International Classification of Diseases, Ninth Revision (ICD-9)* in billing records (see Table 1). An ED encounter was included in the study if a subject was coded for an SSTI during a visit to a UCM ED and was not admitted to the hospital. Outpatient encounters were those in which an SSTI ICD-9 code was assigned during a visit to any outpatient clinic at UCM, whereas inpatient encounters included any inpatient admission with at least a single SSTI-associated ICD-9 code. The dataset was limited to the first occurrence of an SSTI-associated encounter per patient per year.

Demographic and Risk Characteristics

Variables collected for each patient encounter included age, sex, ethnicity, race, identification of infection type, type and date of encounter, stay in ICU, inpatient or outpatient surgery,

presence of a central line, and end-stage renal disease (ESRD). An ICU admission was defined as an ICU stay at any point during an inpatient encounter. Inpatient and outpatient surgery were recorded if a subject had the corresponding type of surgery during an encounter. All SSTI cultures that grew MRSA or methicillin-susceptible *S aureus* reported in laboratory data at UCM from an SSTI-associated encounter were also recorded from the UCM Data Warehouse.

Analysis

Skin and soft tissue infections were tabulated by quarter and year. Incidence density of SSTIs was calculated by quarter and year per 1000 patient encounters. The denominator used to calculate incidence per 1000 patient encounters for all analyses appropriately reflected the stratified category (eg, incidence per 1000 adult patient encounters, incidence per 1000 inpatient encounters, etc). Quarterly incidence density per 1000 encounters, including data for the first quarter of 2006 through the first quarter of 2014, was plotted for all encounters at UCM, stratified by pediatric (ie, <18 years of age) versus adult encounters and stratified by ED, outpatient clinic, and inpatient encounters.

Three types of regression analysis were performed. First, we performed separate stratified Poisson regression analyses by age group (pediatric or adult), sex, ethnicity, race, and encounter type (ie, inpatient, outpatient, and ED) to examine the change in the incidence density of SSTIs in the study period within these specific patient strata. Second, unadjusted Poisson regression was used to assess the relationship between the incidence of SSTIs and each of the following categories: age group, sex, ethnicity, race, and encounter type. Third, a multivariable Poisson regression model was used to assess SSTI incidence, controlling for variables found to be significantly associated with SSTIs in univariate analysis. Unadjusted and adjusted Poisson regression analyses were used to quantify the relationship between the risk of SSTIs and each of the demographic variables. All Poisson regression analyses were limited to data collected in the period January 1, 2006–December 31, 2013 because we examined variables related to changes in incidence density on an annual basis. All covariates identified in univariate models as statistically significant at the $P \leq .05$ level, using the Wald test statistic, were included in the multivariable regression model. Analyses were performed in Stata 14.0 (StataCorp, College Station, TX) [12].

RESULTS

In January 2006–March 2014, data were collected for 38 201 patient encounters from 31 869 subjects with an ICD-9 code for an SSTI as a primary or secondary diagnosis, representing an incidence density of 5.88 SSTI-related encounters per 1000 patient encounters. The SSTI rates differed by encounter type, with 2.83 per 1000 outpatient clinic encounters, 25.57 per 1000 inpatient encounters, and 25.62 per 1000 ED encounters. The majority of SSTI-associated encounters had the following

Table 1. Distribution of SSTI-Associated ICD-9 Codes From Inpatient, Outpatient Clinic and Emergency Department Encounters From January 1, 2006 Through March 31, 2014 at University of Chicago Medicine That Determined Study Inclusion (n = 38 201)

ICD-9 Code ^a	Description	N (%)
373.13	Abscess or cellulitis, eyelid	408 (1.1)
607.2	Abscess or cellulitis, penis	48 (0.1)
608.4	Cellulitis, male genital organs	131 (0.3)
611.0	Abscess breast, non-puerperal	962 (2.5)
616.4	Abscess, vulva	345 (0.9)
675	Infections of the breast and nipple associated with childbirth	4 (0.01)
680	Carbuncle and furuncle	1692 (4.4)
681.x	Cellulitis and abscess of finger and toe	2589 (6.8)
682.x	Other cellulitis and abscess	23 638 (61.9)
683	Acute lymphadenitis	9 (0.02)
684	Impetigo	60 (0.2)
685	Pilonidal cyst with abscess	21 (0.05)
686	Other local infections of skin and subcutaneous tissue	899 (2.4)
704.8	Folliculitis, perifolliculitis	6018 (15.8)
705.83	Hidradenitis	1114 (2.9)
728.0	Infective myositis	162 (0.4)
771.4	Omphalitis of newborn	98 (0.3)
771.5	Abscess, breast, newborn	3 (0.01)

Abbreviations: ICD-9, *International Classification of Diseases, Ninth Revision*; SSTI, skin and soft tissue infection.

^a Includes all subcategories for each listed ICD-9 code when “.x” is present (eg, “682.x” includes 682.0, 682.1, 682.3 . . .).

ICD-9 codes: 681.x (cellulitis and abscess of finger and toe), 682.x (other cellulitis and abscess), or 704.8 (folliculitis, perifolliculitis) (Table 1).

Among SSTI encounters (Table 2), females (n = 23 681; 57.3%) and African Americans (n = 27 320; 67.9%) predominated. The mean age of SSTI patients was 36.6 years (range, 0–109 years). Skin and soft tissue infections were recorded in 1234 (3.23% of all SSTI-associated encounters) ICU encounters, 769 (2.0%) inpatient surgery encounters, 720 (1.9%) outpatient surgery encounters, 1014 (2.7%) encounters for subjects with a central line, and 558 (1.5%) encounters for subjects with an ESRD-associated ICD-9 code. It is notable that only 11.2% percent of our SSTI cohort had an *S aureus* isolate cultured during the SSTI-associated encounter. A similar number of total patient encounters were recorded at UCM for all diagnoses in each year of the study (Supplementary Table 1).

The overall incidence density of SSTIs decreased 16.9% in 2006–2013, from 6.17 to 5.13 per 1000 encounters (rate ratio [RR] = 0.97; 95% confidence interval [CI], .97–.98) (Table 3). In stratified Poisson analyses, SSTI incidence density decreased significantly in 2006–2013, from 26.41 to 21.66 per 1000 inpatient

encounters (RR = 0.97; 95% CI, .96–.98) and from 27.99 to 22.96 per 1000 ED encounters (RR = 0.98; 95% CI, .97–.98). SSTIs increased significantly only among outpatient clinic encounters, and the increase was small, from 2.59 to 2.73 per 1000 encounters from 2006 to 2013 (RR = 1.01; 95% CI, 1.00–1.02).

Using data from 2006 to 2013, the annual incidence density of SSTIs at all sites of care at UCM combined decreased significantly among adults (RR = 0.98; 95% CI, .97–.98), children (RR = 0.96; 95% CI, .95–.97), females (RR = 0.99; 95% CI, .98–1.00), males (RR = 0.99; 95% CI, .98–1.00), non-Hispanics (RR = 0.99; 95% CI, .98–1.00), and African Americans (RR = 0.99; 95% CI, .98–.99) (Table 3). However, this was not true for all types of encounters; the incidence density of SSTIs between 2006 and 2013 increased significantly from 2.64 to 2.76 per 1000 outpatient clinic encounters in adults (RR = 1.01; 95% CI, 1.00–1.02) and from 2.23 to 2.52 per 1000 outpatient clinic encounters in children (RR = 1.02; 95% CI, 1.00–1.05). In contrast, the incidence density of SSTIs decreased significantly among adult ED encounters (29.44–22.86; RR = 0.96; 95% CI, .95–.97), but not pediatric ED encounters (25.54–23.12; RR = 0.99; 95% CI, .98–1.00).

Table 2. Characteristics of Patients With Encounters Having an SSTI-Associated ICD-9 Code at University of Chicago Medicine, and the Number of SSTI-Associated Encounters by Year and Site of Care, January 1, 2006–March 31, 2014

Characteristic	Total SSTI (n = 38 201)	Outpatient SSTI (n = 15 987)	Inpatient SSTI (n = 5909)	ED SSTI (n = 15 776)	P Value ^a
Age ^b , mean (range)	36.6 (0–109)	43.6 (0–102)	43.9 (0–109)	26.9 (0–104)	<.001
Female ^b , n (%)	23 681 (57.3)	9765 (60.6)	3623 (48.0)	9978 (58.5)	<.001
Hispanic ethnicity ^b , n (%)	1401 (3.7)	599 (3.9)	397 (5.9)	392 (2.5)	<.001
Race ^b , n (%)					<.001
African American	24 899 (65.2)	8085 (50.6)	3394 (57.4)	13 420 (85.1)	
White	7852 (20.6)	5169 (32.3)	1932 (32.7)	751 (4.8)	
Am. Indian/Alaska Native	755 (2.0)	583 (3.6)	89 (1.5)	83 (0.5)	
Other	3135 (8.2)	1611 (10.1)	477 (8.1)	1047 (6.6)	
Organism cultured ^b , n (%)					<.001
MRSA ^c	2929 (7.7)	331 (2.1)	1188 (20.1)	1406 (8.9)	
MSSA ^c	1370 (3.6)	316 (2.0)	605 (10.2)	444 (2.8)	
No <i>S aureus</i> isolated ^d	33 902 (88.7)	15 340 (95.9)	4116 (69.7)	13 962 (88.3)	
Year, n					<.001
2006	4985	1837	871	2277	
2007	4961	1864	867	2230	
2008	4733	1734	763	2236	
2009	4344	1909	648	1787	
2010	4469	1978	622	1869	
2011	4407	2027	630	1750	
2012	4326	1997	662	1667	
2013	4360	2066	649	1645	
2014 ^e	1195	582	255	343	

Abbreviations: Am., American; ED, emergency department; ICD-9, *International Classification of Diseases, Ninth Revision*; MRSA, methicillin-resistant *Staphylococcus aureus*; MSSA, methicillin-susceptible *S aureus*; SSTI, skin and soft tissue infection.

^a Using the χ^2 test.

^b Summary statistics reflect a percentage of the total SSTI-associated encounters by encounter types (ie, inpatient, outpatient clinic or ED).

^c Determined from laboratory culture data when a culture was sent and there was growth of *S aureus*.

^d No culture was obtained from the patient or a culture was obtained but did not grow *S aureus*.

^e Only includes data for first quarter of 2014.

Table 3. Annual Change in SSTI Incidence Stratified by Demographic Group and Site of Care^a, University of Chicago Medicine, 2006–2013 (N = 6 300 509 Encounters)

Demographic Group or Site of Care	Stratified RR (95% CI)
Age group	
Adult	0.98 (.97–.98)*
Pediatric	0.96 (.95–.97)*
Sex	
Female	0.99 (.98–1.00)*
Male	0.99 (.98–1.00)*
Ethnicity	
Hispanic	0.99 (.98–1.00)*
Non-Hispanic	1.00 (.98–1.02)
Race	
African American	0.99 (.98–.99)*
White	1.00 (.99–1.01)
Am. Indian/Alaska Native	1.00 (.97–1.03)
Other	0.99 (.98–1.01)
Encounter type/site of care	
Outpatient	1.01 (1.00–1.02)*
Inpatient	0.97 (.96–.98)*
Emergency department	0.97 (.97–.98)*

Abbreviations: Am., American; CI, confidence interval; RR, rate ratio; SSTI, skin and soft tissue infection.

^a Utilizing Poisson regression.

* $P < .005$.

Table 4. Change in Overall Number of SSTI Encounters Adjusted by Selected Patient or Encounter Characteristics, University of Chicago Medicine, by Year, 2006–2013 (N = 6 300 509 Encounters)

Variable	Univariate Analyses ^a RR (95% CI) ^b	Multivariate Analysis ^a RR (95% CI)
Overall	0.97 (.97–.98)*	0.99 (.98–.99)*
Age group		
Adult	Ref	Ref
Pediatric	1.81 (1.77–1.85)*	0.89 (.87–.92)*
Sex		
Female	Ref	—
Male	0.98 (.96–1.00)	—
Ethnicity		
Hispanic	Ref	—
Non-Hispanic	1.00 (.98–1.01)	—
Race		
African American	Ref	—
White	1.00 (.97–1.03)	—
Am. Indian/Alaska Native	1.04 (.96–1.12)	—
Other	1.01 (.97–1.05)	—
Encounter type/site of care		
Outpatient	Ref	Ref
Inpatient	9.07 (8.80–9.35)*	9.20 (8.92–9.48)*
Emergency department	9.22 (9.01–9.42)*	9.50 (9.28–9.72)*

Abbreviations: Am., American; CI, confidence interval; Ref, referent category; RR, rate ratio; SSTI, skin and soft tissue infection.

^a Utilizing Poisson regression.

^b Each RR represents a separate model in this column.

* $P < 0.005$.

In unadjusted Poisson analyses (Table 4), there was a significant decrease among all studied subjects in the incidence of SSTIs (RR = 0.97; 95% CI, .97–.98) between 2006 and 2013. Children, compared with adults, had a significantly higher likelihood of having an SSTI-associated encounter (RR = 1.81; 95% CI, 1.77–1.85) (Figure 1). Compared with outpatient encounters, there was a significantly higher rate of SSTIs among both inpatient (RR = 9.07; 95% CI, 8.80–9.35) and ED encounters (RR = 9.22; 95% CI, 9.01–9.42) (Figure 2).

In adjusted Poisson analysis (Table 4), accounting for age group and type of encounter (ED, outpatient, or inpatient), there was a significant decrease in the incidence density of SSTIs during the study period among all patients in all treatment settings considered together (RR = 0.99; 95% CI, .98–.99). After adjusting for year and type of encounter, compared with adults, children had a significantly lower incidence of SSTIs (RR = 0.89; 95% CI, .87–.92).

During the study period, both all pediatric and all ED SSTI-associated encounters exhibited a strong seasonal pattern each year, with the peak incidence of SSTIs occurring during the third quarter (ie, July, August, and September). We also noted a distinct seasonal pattern in each year for all inpatient SSTI-associated encounters (except for 2013) and for all adult SSTI-associated encounters (except for 2006), with the peak incidence density of SSTIs occurring in the first quarter of the year (ie, January, February, and March).

DISCUSSION

Among more than 30 000 patients treated at UCM for an SSTI in 2006–2013 among 6.3 million encounters, there was a decreased SSTI incidence of 16.9%. This was a remarkable reversal from the rapidly increasing incidence trend for SSTIs that was recorded at many medical centers in the United States after the year 2000 [1, 13]. This represented a 1% decrease on average per year from 2006 to 2013. This decrease was not limited to a single demographic group. Instead, we observed a significant drop in SSTI incidence density at UCM during the study period in children, adults, African Americans, whites, inpatients, and patients who were treated in the ED and discharged.

Unlike many previously published studies, we examined the incidence of SSTIs in all clinical settings and among both children and adults. Children, who were first found to have CA-MRSA infections at our center in the 1990s [14], compared with adults, had a significantly higher unadjusted incidence density of SSTIs among the patients treated at our center. After adjusting for year and encounter type, however, children had a significantly lower incidence density of SSTIs, likely due to the fact that all children treated at UCM are less likely than adults to have chronic medical conditions for which adult patients are often admitted. We also showed that the burden of SSTIs was higher among both inpatient and ED patients than

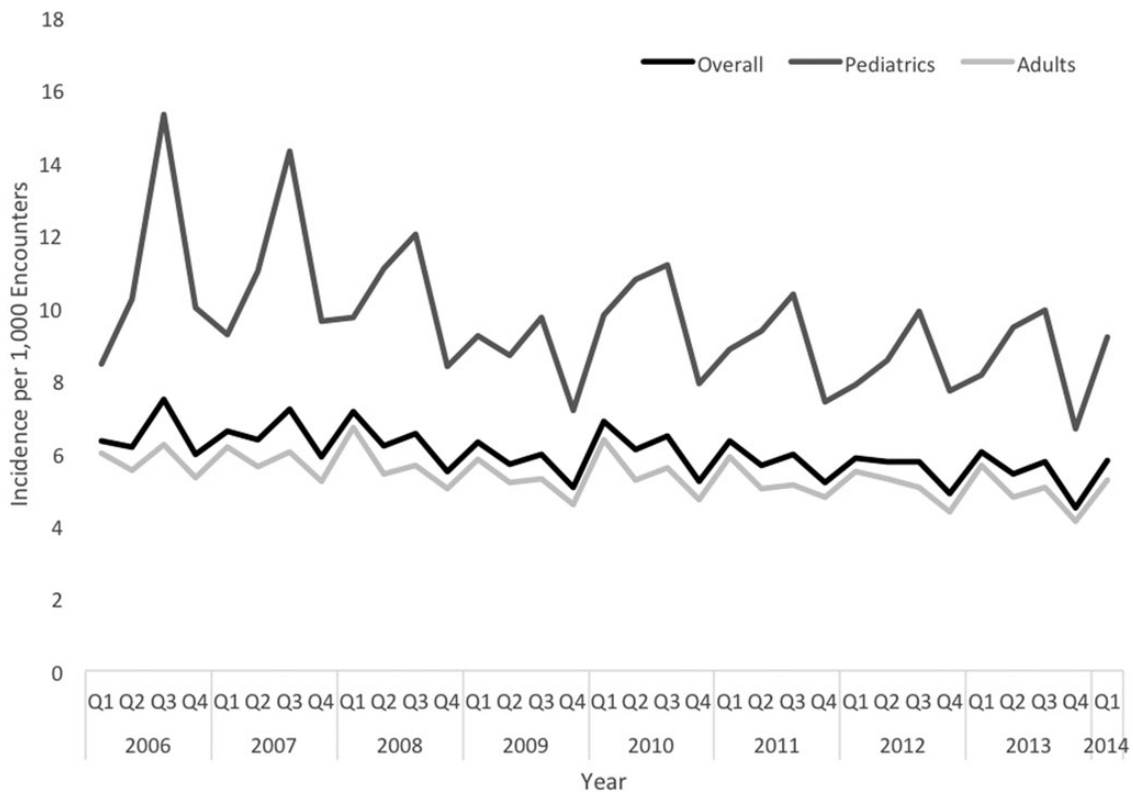


Figure 1. Incidence (per 1000 encounters) of skin and soft tissue infections at University of Chicago Medicine, first quarter of 2006 to the first quarter of 2014, overall and stratified by pediatric and adult incidence density (N = 6 500 549 encounters). Note that the adult incidence density closely tracks with the overall incidence density over time.

among patients served by outpatient clinics. Notably, our data demonstrated that the observed decrease in SSTI incidence density at UCM began as early as 2007 and continued at least through 2013.

Until recently, research studies on the incidence of SSTIs after the 1990s in the United States and Canada have consistently found an increasing trend driven by an increase in the incidence of CA-MRSA and other *S aureus* infections as well as any SSTIs, and particularly infections caused by the USA300 MRSA strain type [8, 15–20]. Comparing 2004–5 with 2008, we previously documented at UCM that there was a shift among infecting MRSA isolates, from a predominance of healthcare acquired (HA)-MRSA (CC5, *SCCmec* type II, Panton-Valentine leukocidin [PVL]-negative) to CA-MRSA (ST8, *SCCmec* type IV, PVL-positive, corresponding to USA300) strain types. This was accompanied by a shift from the predominance of epidemiologically defined HA-MRSA to CA-MRSA infections [21]. The increased incidence of MRSA infections among treated SSTIs during the first years of the present century was demonstrated by many authors. For example, in 2000–2004, according to data from the NIS, SSTIs among hospitalized US patients increased 29% [5]. Skin and soft tissue infections caused by MRSA at a Los Angeles area ED increased 19% in 2001–2002 and 64% in 2003–2004 [13], suggesting an

acceleration in the rate over time. During the period 1998–2006, SSTI incidence increased among US inpatient encounters and surgical visits [22] and among hospitalized children [23]. By 2005, the incidence density of SSTIs across all US healthcare settings had increased significantly, to 48.1 per 1000 visits, compared with 32.1 per 1000 visits in 1997 [2].

More recent research has suggested that the incidence of SSTIs, and also the incidence of MRSA infections, may be on the decline in the United States [24–26]. Dantes et al [27] found a decrease in the incidence of invasive MRSA infections in 9 US metropolitan areas in 2011, compared with 2005, among HA community-onset (27.7%), hospital-onset (54.2%), and CA (5.0%) MRSA infections. In another large study of US Department of Defense TRICARE beneficiaries in 2005–2010, among all *S aureus* SSTIs, the proportion of community-onset MRSA SSTIs decreased significantly [28]. These findings are consistent with our more recent data, in which we demonstrated a decrease in SSTI incidence in 2006–2013 in all demographic categories and all patient settings at UCM with the exception of patients treated at outpatient clinics. Taken together, our results and those of others suggest that there may have been a peak in the number of SSTIs in the United States driven by the emergence of USA300 MRSA during the first decade after the year 2000, and subsequently this incidence may have decreased.

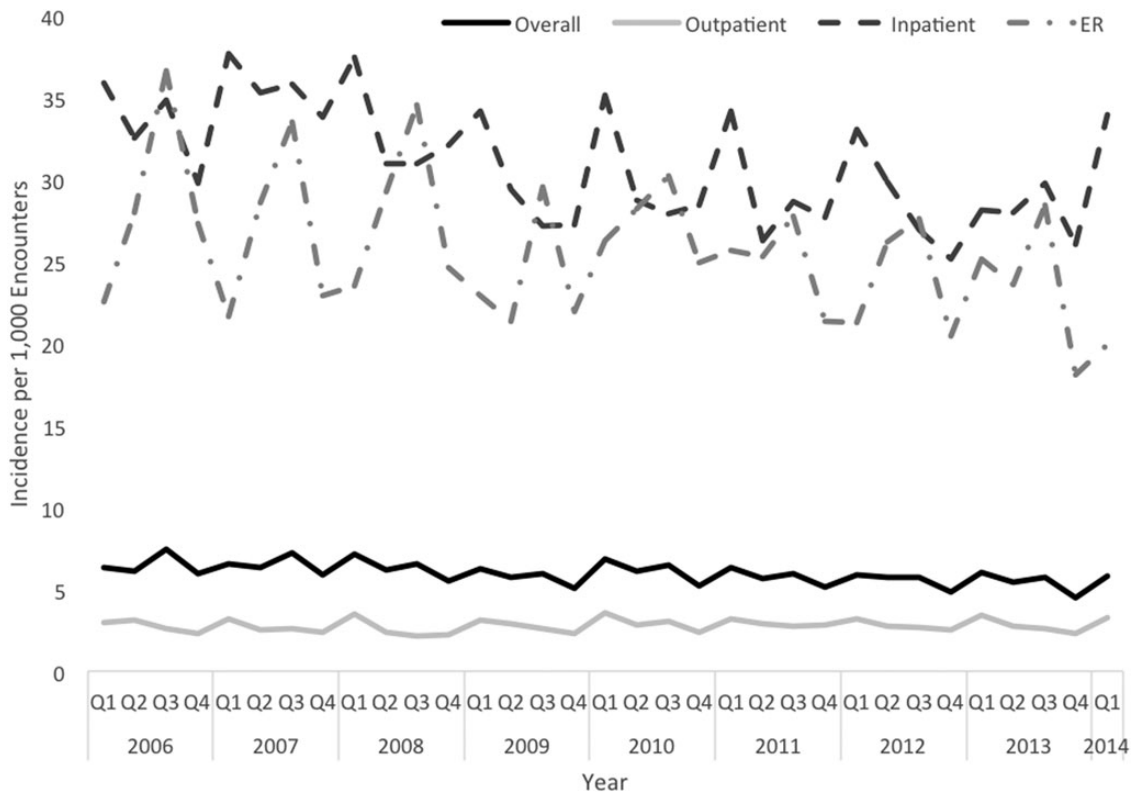


Figure 2. Incidence (per 1000 encounters) of skin and soft tissue infections at University of Chicago Medicine, first quarter of 2006 to the first quarter of 2014, overall and stratified by inpatient, outpatient clinic and emergency department incidence density (N = 6 500 549 encounters). Abbreviation: ER, emergency room.

The finding of seasonal variation in the incidence of SSTIs has been found previously by other authors. Significantly more ED visits for a MRSA infection were observed during the second 2 quarters of the year (July–December), compared with the first 2 quarters (January–June) at the Rhode Island Hospital in 2001–2010 [29]. In the same study, significantly more HA-MRSA infections occurred in pediatric encounters during the second 2 quarters compared with the first 2 quarters of the year [29]. We found a similar pattern, with all pediatric and, separately, all ED SSTI-associated encounters peaking in the third quarter of the year. One study has suggested that a consistent weekly average maximum temperature of 33°C (91.4°F) is ideal for the development of both SSTIs and MRSA infections and that as the temperature increases, so does the occurrence of MRSA infections [30]. Further research is needed to examine the association of ambient temperature and SSTI risk.

Our study has many strengths. We examined SSTI-associated encounters at all clinical sites for the provision of care among children and adults. In addition, our data included an extended period of 7 years at UCM, a medical center serving a diverse urban population for primary and tertiary care. Some previous studies have had limited sensitivity in defining a cohort of subjects with SSTIs by relying only on laboratory data. This

laboratory-based approach far underestimates SSTI incidence because many SSTIs are diagnosed without a bacterial culture being obtained. For example, although *S aureus* is thought to be the leading bacterial species causing human medically attended SSTIs, only 11.3% percent of our SSTI cohort, defined by ICD-9 coding data, were found to have an *S aureus* isolate cultured in microbiology data, as noted in Table 2. This is similar to the findings by Ray et al [31], in which just 23% of 471 550 episodes of SSTI underwent culture in a large integrated health plan in California.

Our study also has certain limitations. It was performed at a single center and thus may not be representative of all medical facilities in the United States. In addition, we used administrative data and ICD-9 codes to identify patient encounters in which an SSTI was diagnosed. It is possible that coding practices changed over time for the same clinical syndromes. However, our use of a fairly comprehensive list of SSTI-associated ICD-9 codes would likely capture SSTIs with any different codes. These data have a high sensitivity but a lower specificity [32] for identifying subjects with an SSTI than do detailed studies of medical records. However, we believe that although there may be error in the magnitude of our estimates of incidence density, it is less likely that there was error in the trends that we identified. It is also possible that there was a change in the

makeup of patients served at UCM that would confound the association of SSTI incidence density and year, but we are not aware of any such changes. Referral bias may have affected the observed decrease in SSTI incidence density if referral patterns to UCM for MRSA SSTIs changed over time.

CONCLUSIONS

We demonstrated a significant decrease in the incidence density of SSTIs at our medical center. Whether this decrease was due to a change in the epidemiology of *S aureus* infections at our institution, a change in behavior of patients, or a broader shift in epidemiologic patterns in the United States, especially after 2011, must be studied further. The lower incidence of SSTIs that we identified represents a substantial shift in the burden of a common infection syndrome that affects inpatient, outpatient clinic and ED practice.

Supplementary Data

Supplementary material is available online at *Open Forum Infectious Diseases* online (<http://OpenForumInfectiousDiseases.oxfordjournals.org/>).

Acknowledgments

Financial support. M. Z. D. is supported by funding from the National Institutes of Health National Institute of Allergy and Infectious Diseases (grant K23 AI095361).

Potential conflicts of interest. All authors: No reported conflicts. All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest.

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