Domain	Quote
	"Well, for the hospital as a whole is reimbursement. For patients, it's awful. It's devastating, yes. It's probably another hospitalization, another surgery, a PICC line, you name it, time off work…" "And I believe, it's my understanding, that that information is out there, that patients can see this information. So patients are shopping around."
Motivation and Goals	"…some of those big bundle committees and stuff, we get that information [*feedback on SSI rates*]. You know, I think it's important for people to know what these rates are, because it may cause people to think about it a little bit more…" "…when I started, everybody in the OR seemed like there was a career for them. This was what they chose to do… And there just seemed to be like there was a different feel to everybody. And now, it seems to me like the newer people are here because it's a job… and not necessarily a career … Like it's more of a stepping stone to go somewhere else, or they're just here collecting a paycheck. You know, I put in my eight hours, and I go home kind of thing." "I think the need, not that there isn't an importance to keep SSIs low, but occasionally that need can blindside maybe people who are not on the frontline. And that need for no SSIs can force them to make decisions that maybe aren't necessarily the best ones."
Emotion	"When you work with them every day, all day, it's kind of hard to step up and say something [*about break in sterile technique*] and be like, have a target on your back." "Then only time we get any feedback is when they *[SSI rates]* are too high." "…and it always seems like everything is pushed back onto the surgical team, that it was our fault that there's an SSI." "…and it's like, how did we have anything to do with patient getting an SSI two weeks out when they went home two hours after they had surgery? What kind of care did they have at home? … There's a lot of things we are not told, but we're told it's our problem because it's an SSI. And if we're not told all the particulars, how are we supposed to fix it?"

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1235. A Survey of Surgical Site Infection (SSI) Surveillance Practices in US Hospitals, and their Association with SSI Rates

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Background. Current US hospital reimbursement models rely on self-reported SSI rates. The impact of variability in SSI surveillance on publicly reported SSI rates is unknown.

Methods. Cross-sectional survey to US hospitals administered during November 18 – 2/19 through the Association for Professionals in Infection Control. We assessed SSI surveillance practices, and asked for self-reported facility standardized infection ratios (SIR) for hysterectomy and colon surgeries. We performed bivariate analysis and used Kendall's ranks correlation for trend analysis.

Results. Of the 2,851 hospitals surveyed, 491 (17.2%) responded. Table 1 shows facility descriptors. Critical Access Hospitals (OR 6.11 [3.12 – 11.750, $P < 0.005$) and Ambulatory Surgical Centers (OR 3.92 [1.68 – 8.64], $P < 0.001$) were more likely to have less than one full-time ICP. University Hospitals were more likely to have ≥4 ICPs (OR 12.15 [6.73 – 22.04, $P < 0.001$). The majority (83%) of the 477 respondents reported electronic software for SSI surveillance, with Epic (23%), Theradoc (22%), and Cerner (11%) as the most common packages used. Manual surveillance was more likely for Critical Access Hospitals (OR 2.80 [1.47 – 5.19], $P < 0.001$). University Hospitals were more likely to have higher rates in 2016 for colon surgery ($P = 0.02$) and hysterectomy ($P = 0.002$). Table 2 shows characteristics of SSI surveillance practices reported by study participants. Ambulatory Surgical Center ICPs were more likely to use reports from surgeons and/or surgical staff as the initial trigger for SSI surveillance. University Hospital ICPs were significantly more likely to spend increased time (mean hours/month 69.77 vs. 28.99, $P < 0.001$), and to use more data sources for SSI review (mean 4.58 vs. 3.99, $P = 0.001$). In our trend analyses, we found the number of data sources used for SSI surveillance to be positively associated with higher SSI rates: (K_T =0.14, $P = 0.028$ for colon SIR in 2017; $K_T = 0.20$, $P = 0.009$; $K_T = 0.25$, $P = 0.001$ for hysterectomy SIR in 2016 and 2017, respectively).

Conclusion. SSI surveillance practices across US hospitals vary significantly, and rigorous surveillance methods are associated with higher SSI rates. Standardizing SSI surveillance is necessary to accurately capture SSI burden of disease.

Table 1. Descriptors of health-care facilities participating in SSI surveillance survey.

Characteristic	N	Percent
Facility type		
Community Hospital	310	63
University Hospital	74	15
Critical Access Hospital	65	13
Ambulatory Surgical Center	39	8
Veterans Affairs Hospital	3	1
Full time Infection Control Preventionists per facility		
< 1	58	12
1 - 2	199	41
2 - 3	89	18
3 – 4	46	9
4 – 5	42	8
≥ 5	57	12
Total	**491**	**100**
Use of Infection Control Surveillance Software		
Yes	394	83
No (all surveillance performed through manual review)	83	17
Total	**477**	**100**
Surgical Site Infection Incidence*		
2016 colon SIR, mean	0.62	
2016 colon SIR, median	0.49	
2017 colon SIR, mean	0.65	
2017 colon SIR, median	0.59	
2016 hysterectomy SIR, mean	0.47	
2016 hysterectomy SIR, median	0.00	
2017 hysterectomy SIR, mean	0.46	
2017 hysterectomy SIR, median	0.00	

SIR = Standardized Infection Ratio (observed number of infections/predicted number of infections) for each facility; *Number of participants reporting SIR rates for their facility: 2016 colon SIR: N = 128; 2017 colon SIR: N = 134; 2016 hysterectomy SIR: N = 110; 2017 hysterectomy SIR: N = 114.

Table 2. Characteristics of SSI surveillance methods and practices reported by ICP study participants.

Characteristic	N	Percent
Estimated time performing SSI surveillance (hours/month)		
Mean	35.09	
Median	20	
Range	0.5 – 1,000	
Estimated number of patient charts reviewed per month		
Mean	66.93	
Median	20	
Range	0 – 1,400	
Number of different data sources used for SSI surveillance		
Mean	4.08	
Median	4	
Range	1 - 7	
Confidence in capturing SSI presenting to an outside hospital		
1 (Least confident)	48	10
2	80	16
3	160	32
4	147	31
5 (Most confident)	54	11
Total	489	100
Most common initial data source used to trigger full chart review for SSI surveillance		
Microbiology culture reports	331	69
Reports from surgeons or surgical staff	47	10
Discharge summaries and/or post-op re-admissions	31	6
Post-discharge surgical follow-up notes	31	6
Electronic or data mining alerts	21	4
ICD-10 procedure or diagnostic codes	12	2
Postoperative antibiotic use	3	1
Other	7	2
Total	483	100

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1236. Staphylococcus aureus Surgical Site Infection: Epidemiology in Europe (SALT)

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Background. We conduct a retrospective, multinational cohort study with a nested case–control (NCT03353532). Data from all patients undergoing any surgical procedure in 2016 are collected within the cohort, comprising more than 150,000 procedures. *S. aureus* SSI cases are documented in an electronic database and matched 1:1 to controls within each center. Criteria for matching include epidemiological data and type of procedure. Participating sites are 14 major surgical centers in France, Germany, Italy, Spain, and the UK. We here present preliminary data from the interim analysis.

Methods. We conduct a retrospective, multinational cohort study with a nested case–control (NCT03353532). Data from all patients undergoing any surgical procedure in 2016 are collected within the cohort, comprising more than 150,000 procedures. *S. aureus* SSI cases are documented in an electronic database and matched 1:1 to controls within each center. Criteria for matching include epidemiological data and type of procedure. Participating sites are 14 major surgical centers in France, Germany, Italy, Spain, and the UK. We here present preliminary data from the interim analysis.

Results. We determine overall and procedure-specific incidence of *S. aureus* SSI. To date, 619 cases have been documented with a mean age of 59.0 years, 50,7% male and 49.3% female. Chronic cardiovascular disease (23%), diabetes (22%), and solid tumors (18%) are the most frequent comorbidities. Overall length of hospitalization is 19 days. A total of 20% SSI cases were treated at the intensive care unit, 49% were readmitted to the hospital, and 47% patients needed revision surgery.

Conclusion. The study includes all surgical procedures at participating centers allowing us to determine the incidence for all common surgical procedures aiming to better understand the risk of certain procedures. Furthermore, the study will analyze the risk composition of the surgical patient population to enable the calculation of the number of patients at risk in the overall surgical population in Europe. Predictive factors for *S. aureus* SSIwill be analyzed and thus allow future investigation into targeted prophylactic strategies such as *S. aureus* vaccines.

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