Healthcare-Associated Infections Advisory Committee
January 24, 2008, 10:00 a.m. to 3:00 p.m.
Location: California Department of Public Health, Sacramento

Attendees: Kim Delahanty (Chair), April Alexander, Ray Chinn, Letitia Creighton, Charles Derby, Enid Eck, Anne Marie Flood, Donna Fox, Eric Frykman, T Warner Hudson, Lilly Labar, Marian McDonald, Mary Mendehlson, Shelly Morris, Carole Moss, Rekha Murthy, Frank Myers, Terry Nelson, Shannon Oriola, Debby Rogers, Julia Slininger, Jonathan Teague, Dawn Terashita, Francesca Torriani, Anvarali Velji, Lisa Winston, Dave Witt

Staff: Sam Alongi, Sue Chen, Roberto Garces, Jon Rosenberg

Agenda Items/Discussion	Action/Follow-up
Call to Order and Introductions Committee Chair Kim Delahanty convened meeting at 10:00 a.m. Introductions of members and public attendees were made around the room and at satellite (Los Angeles). Committee members were thanked for their participation on the Advisory Committee and for contributing their time and efforts in this process.	
Approval of Minutes **Discussion** Members submitted minor edits to staff for revisions to November minutes. **Motion to Approve Minutes with Suggested Revisions (McDonald)** **Motion Seconded (Winston)** **Motion Passed**	Staff to make minor revisions to November minutes based on member notes and comments.
Progress on Implementation of NHSN Chen – Meetings and communications to date include: 1. Meeting with APIC chapters (eight of 12 completed) and will present a talk to Kaiser nurses on February seventh. 2. Request to know who the facility administrators are. Thus far, 25% response to that request. 3. Sent email requesting the SCIP survey be filled out; thus far a 25% response on that. At some point we're going to have to decide what to do when hospitals are not complying (because they are so busy.) We had changed deadline on this from January first to February first, but even that date appears unrealistic. Rogers offered (accepted by Chen) for California Hospital Association to send out a memo directly to the CEOs of hospitals that have not yet enrolled. McDonald – Requested the memo be customer friendly, and with requirements clearly identified.	Member(s) need to nominate Chen or CDPH for NHSN.

Eck – One of the delays in people responding I've heard is "we report both to Joint Commission and CMS and that was not a choice to check on the survey." There wasn't an instruction that said 'Check all that apply'; that may be part of the delay. Chen – The next steps for NHSN is that someone needs to nominate CDPH as a group. I will then send out specific instructions saying: "you must join this group – here's the number you use to join this group and this is the data you will need to give us permission to see." That message won't be sent before March. NHSN has approved the modules that you have seen, however, they have not released them publicly because they are putting out the education around them prior to release. The CDC anticipates release of those modules on the NHSN website sometime in February. Rogers – Let's (Chen and Rogers) have an offline conversation about giving an overview on that process at our next hospital quality committee meeting. Chen – I've been asked to write an article for your newsletter. I will follow up with Julia on the SCIP survey and see how we can make that a little more friendly. Eck – Entities are enrolling but need a 'heads up' about identifying CDPH. Chen – This was explained in the November all facilities letter (AFL). I can reinforce it; but the actual instructions on joining will be reiterated in another AFL. The first letter to CEOs will be sent before the AFL.	
Public Story **Dave Witt** Described the recent hospitalization of his brother for septic arthritis. As a result of an inadequately treated severe staph infection that was treated like MRSA, Dr. Witt's brother ended up with multiple hospitalizations, surgeries, and residual muscle and speech deficiencies. While the condition was community-associated, it shed light on the sometimes lack of consideration of the consequences of clinic actions taken by healthcare workers and the many things that can go wrong. "Because of the panic and lack of general knowledge, he received inadequate treatment. This illustrates how underestimated Staph aureus (SA) is and I think that is a global issue. When a hospital calls a physician to report SA, they're already planning the discharge. But that is not the appropriate course—the patient should stay at the hospital at least a week until they're really afebrile. In my experience this is a ubiquitous thing we can use to promote general knowledge." **Discussion** Rosenberg – A study on SA just published from Baylor found that 60% were MRSA, but they did pulse field gel electrophoresis on the 40% that were MSSA and 100% were USA300 strains; the only difference	Thank you letter to Dave Witt

between the two strains was methicillin resistance. So basically they are the same pathogenic organism. Even where there is 60% methicillin resistance, 40% of the infections are still MSSA. Surveillance often ignores that, but the antibiotic treatment should be different. Winston – At our hospital, 2008 surveillance will include both MRSA and MSSA regardless of what goes forward here. Chinn – One of the strategies to prevent MRSA in post-operative surgical site infections is to identify the carrier before the surgery. Given the underestimating of MSSA, screening should be for MSSA as well as MRSA. People have the perception that vancomycin is the strongest antibiotic but really it isn't; for MSSA it's an inferior drug. Chair – Thank you Dr. Witt.	
Presentation of Annual Report for Approval Chen presented a draft HAI AC Annual Report to the Committee (Annual Report on HAI website). Suggestions were made to state • That the Legal Subcommittee (rather than CHA) suggested legislation. • Note that not all hospitals report to Lumetra. Lumetra will assist those hospitals not already reporting to CMS who need information on how to report • Informational: military and Veteran's Administration hospitals are excluded from SB 739. **Motion to accept report with suggested revisions (Rogers)** **Motion Seconded (Winston)** **Motion Passed**	
Guidance on Subcommittee Meetings Chen – There was an instance where some guests were invited to call in to a subcommittee meeting. Subcommittee meetings are not public meetings. Committee members need to be able to discuss things offline, and this does not become part of public record, so they are not open to the public. What I have done in this memo (on HAI AC website) is give the legal background. According to the Bagley Keene Open Meeting Act 2004, everything is open and public if a majority of members are attending. A majority of members for the committee would be 16 members. However, the interpretation put out by the California Attorney General's Office allows for study sessions that are not public so long as there is less than a quorum of two-thirds, which for HAI AC is 21 members. This is not to say that guests cannot be invited. Inviting guests to subcommittees is perfectly appropriate. This must be cleared with the subcommittee chair prior to the meeting. If an unauthorized person is on the call/meeting, the subcommittee chair should invite them to excuse themselves. If they refuse to do so, the chair may cancel and reschedule the call.	Edit guidance

Moss – Each time you form a subcommittee and it's always under 20 (per your guidelines) you could probably assume that the meeting is set up to not allow in the public. As far as what we're doing today, this is supposed to be a public meeting and the things that we do and discuss, are public topics that should be heard by the public. Chen – The subcommittee does not make decisions for the HAI AC. Subcommittee recommendations are brought to the full Committee, at which time they are open to the public for discussion. Subcommittee recommendations do not mean anything until the full HAI AC approves them. If the whole dialogue was made public, pieces could be misused. Moss – Many people can't be here; they are still healing from the issues that they've dealt with. They're not able to get here or dial in, and they're not able to attend subcommittee meetings. We're trying to come up with solutions, and yes we all have experts and consultants, but if you interpret this, it looks like you're trying to keep things separate. Chen – The subcommittees do not make any final decisions. The public is welcome to HAI AC meetings, and is invited to participate in discussion of recommendations. Slininger – I understand that the intent of the subgroups is not to be secret, but rather to be a workgroup to take what we learned here—with the public's help—and to convene between Committee meetings to figure out how best to address needs. These suggestions are brought back at the full Committee for consideration. Terashita – I have a suggestion on how we might address this. When the HAI AC discusses subcommittee recommendations, that seems like an ideal opportunity for the public to ask questions such as "how did your subcommittee arrive at that?" These process-oriented questions can help everyone understand the context. Winston – The main intent is logistics. If you have a subcommittee, by definition, it needs to be a relatively small number of people who can discuss things with each other in an efficient manner. Workgroups should have free, unimpeded discussion where they can bring up things that may very well not make it into the recommendations. McDonald – When we had these subcommittees, the goal was to be productive. When we have subcommittee members working together we have a better shot at producing strong recommendations. Eck – If I identified a subject matter expert, I would just contact the chair in advance of the meeting and give that information and my reason for wanting to invite that person in. I'm not seeing anyplace where we're trying to keep people away. Chen – The subcommittee chair has a lot of leeway in deciding whether people are invited in, whether or not they stay in, and whether it's detrimental to the productivity of the committee.	

Moss – The subcommittee chair and also CDPH decide? Chen – I expect that the subcommittee chair would contact CDPH with any concerns. Eck – So that we're all clear and there's equity, fairness and transparency within the groups – it would be valuable to have some criteria by which the decision is made to clear someone to join a subcommittee call/meeting. Witt – I support this with some ambivalence; I think we trade off transparency for actually being able to broach difficult issues that will not be broached in a fully public setting. I think the recourse is that the rationale of the subcommittee is open to public interrogation in the form of the HAI AC meeting. Chair – What I hear being asked is to rework criteria/guidance for clearing invited guests and then we will resubmit it for review. **Motion (Nelson, as Restated by Chair): #2 stands 'as is'; we're adding language that the subcommittee chair may, in consultation with CDPH staff and/or HAI AC Chair, make decisions to approve guests to subcommittee <u>meetings</u> or portions of that meeting, and to accept these guidelines today.** **Motion Seconded (Murthy)** **Motion Passed**	
Subcommittee Presentation: CLIP CLIP recommendations were presented by Enid Eck. Eck – The CLIP Subcommittee met several times to consider options for reporting to NHSN because of the extensive number of items that are mandated on the CLIP form and the rules for maintaining enrollment in NHSN. We offer an approach with two options which gives hospitals some choice in their participation. Option 1 is that the hospital would submit their complete CLIP data – all the asterisked items mandated on the CLIP form for all ICUs at that facility. If the facility does not have an ICU, they would identify an area (such as a medical surgical unit) where patients have central lines whereby they would report that in lieu of an ICU. Under Option 2 hospitals would submit a subset of the mandatory process measures and they would report those for all of their ICUs. In order to maintain NHSN enrollment (because you have to submit a complete module and those choosing Option 2 would not be submitting a complete CLIP module), they would also report their catheter related bloodstream infections (BSI) per the NHSN dataset. In order to assure the CLIP elements are submitted in the subset of categories, the CLIP subcommittee recommends standardizing those elements which are focused around the IHI bundle, with these additions: 1. Occupation of the inserter, which was felt to provide additional information for potential prevention interventions, education, etc. 2. Specific central line type because there are concerns that certain lines are more prone to infections and that may be a place where additional prevention efforts can be made.	Complete the writing of the approved recommendations

3. That hospitals institute a process whereby a licensed care provider performs a daily assessment of line necessity. 4. That reporting begin July 1, 2008. This will allow hospitals the opportunity to educate, establish processes, and validate collection of required CLIP data elements and compliance with NHSN reporting requirements for submission of six months data during calendar year 2008. Rogers – Who would do the assessment and would that be documented on the NHSN form or a different form? Eck – NHSN has said that hospitals would have to figure out how to document that component. Rogers – It would be a process measure but it wouldn't be reported? Eck – Correct. When surveyors come in, they can ask, "you're only submitting a subset of CLIP data, so talk to us about what you're doing for daily line assessment"; or "you're submitting the entire CLIP data, tell us how you're doing the daily line assessment". Oriola – If a PICC line is inserted by an RN, does that still need to be monitored? Also, is this all lines, all months? Eck – We considered all central lines. So a PICC nurse inserting a PICC line would have to complete the documentation about what was done. Torriani – We're saying, in an ICU setting, whoever inserts the line has to provide the documentation. Eck – Hospitals need time to get these processes in place. A PICC nurse, inserting a PICC line in an ICU, there's going to be someone there to observe that practice. Oriola – Is it all lines all months? When you report in July what period of time are you asking for? I think you said all central venous catheters you're observing, but what months? Eck – NHSN requires hospitals to report six of every 12 months. Oriola – But if you're already an NHSN facility and you're customizing it, do you still have to report six months? Do you want everyone to be consistent on what time they're observing? And when I say all lines, I don't mean all types, I mean every single line inserted. Chen – The Subcommittee is recommending that hospitals monitor central line insertions in ICUs for 6 months in order to fulfill NHSN requirements. However, that decision will be made by CDPH, and right now it's looking like ICUs for the remainder of this year and then we'll consider further guidance. We need a track record so that we get meaningful data. A future consideration will be how often data will be reported.	

Flood – We didn't want to stipulate a process, because every institution is going to have their own methodology, their own culture. We want to make it as easy as possible for the hospitals to comply. The idea behind the daily assessment was that the hospitals consider it, come up with a process that works for them and that meets patient safety standards. Winston – This document doesn't specify that this only pertains to the ICU, so I would add that. I would add a statement saying that this pertains to short-term lines that you might remove while the person is in the ICU. Consider phrasing this is as a guideline for hospitals, since hospitals will set their own policy around it. Eck – There are two parts of the daily assessment piece: 1) Monitoring line necessity itself, and 2) Assuring that the line is being cared for, cleaned, dressed and maintained. We reinforced the value of the line maintenance piece and caring for the site, etc. I propose that we include language reinforcing the importance of correct management of inserted lines. Winston – The people who are documenting the necessity of the line and the people who are documenting proper maintenance of the line may not be the same people. Morris – What about pediatric ICUs, neonatal ICUs? Eck – The language for the general acute care hospital is that they would have to at least select an adult ICU. If it was a pediatric hospital, a pediatric ICU. At some point, it makes sense, to potentially look at NICUs, but we needed to start somewhere. Slininger – For all ICUs for six months, is the idea that all the ICUs report simultaneously? Or, for large hospitals, for instance, would they pick an ICU each month or are they surveying all of the patients all of the time? Eck – The recommendation is <u>all</u>. If you have multiple ICUs, for the process measure side of it, these are practices for prevention that would be applicable in any ICU. Slininger – Similar to surgical case review for SCIP measures, sampling is allowed among hospitals because although they are required to review every surgery, the sheer burden for typing in the information for every surgical patient is so extreme that sampling is allowed and is expected to represent the way care is given to all patients all the time. A similar process might be considered if the group wanted to consider allowing a different ICU to be chosen each month. Eck – An alternative may be a 10% or 20% subset from all ICUs. Moss – Since NICUs are so important to hospitals, it should be noted that a movement in that direction will be forthcoming. Chair – I just want to clarify, the language is talking about the NICU as	

a subset when it relates to the reporting of outcomes. We will expect that they do these preventative measures; they are included in the prevention and monitoring, etc. It's when we get to the criteria and stratification of infant special care that is so intricate that we would need to build that in a separate piece and consult experts in this field to help address this stratification. Oriola – NICUs, if you are not part of an NHSN facility, you do not have to report outcomes but you do have to report CLIP for NICU line insertions. Eck – Every hospital will be NHSN, so if it is too difficult to report every element on the CLIP form, then you would report this subset. Oriola – It would be difficult to sample because most lines are inserted in the Operating Room or in the Emergency Department before the patient hits the unit. Sampling actually minimizes the capture of the process. Hospitals need to address assessing the line outside of the ICU particularly in a long-term line like a PICC. Eck – Yes. But being able to capture that information in a reliable way will take hospitals some time. The subcommittee's intention was to not delay the process of actually getting some reporting done; hospitals must have a process in their ICU because there certainly are lines that do get inserted in the ICU. [Discussion on the viability of daily line assessment on every line in the hospital.] Torriani – Assessing line necessity should be an important practice and hospitals should have their methodology available, without us dictating how they should do it. We're not asking hospitals to demonstrate and give us data. We're just saying that if a surveyor comes, hospitals need to have a process in place. Myers – Regarding the suggestion that each hospital has to decide for itself, unfortunately this sometimes leads to poor quality data. Data may not be predictive of the quality of care that patients receive, but a hospital that forgot to gather data one day but actually has a very rigorous methodology ends up not looking good. Fox – Quality of patient care is the overriding priority and data gathering is secondary; the intent of the legislation is to be as comprehensive and inclusive as possible for all patient care quality concerns. How much can we put in writing now so that it is very clear that we have a comprehensive expectation? Chair – I remind everyone that as an advisory committee we will make recommendations to CDPH. HAI AC recommendations may or may not be implemented by CDPH. Fox – "All ICUs" is comprehensive. Do we have a consensus perspective that we would then say, in the next fiscal year we would add med/surg.	

Can we codify as much as possible so that it's an institutional priority from the initial stages? Chen – If someone is doing Option #2, why would we exclude a NICU from outcome reporting? How many people do not monitor bloodstream infections in their NICUs? You have to stratify it, but don't pediatric hospitals already do that? Oriola – They didn't exclude pediatric hospitals, just NICU and the outcome. Part of it is that there are five birth-weight categories. Chen – How do others do that? [Several respond that they also use the five birth-weight categories.] You have an extremely vulnerable population there, so why exclude them if you're going to go with Option #2? I think when you say ICU it means ICU. Labar – NHSN came out in June of 2007; hospitals have worked hard to get the additional birth-weight stratifications, but getting processes and systems for this takes time. I anticipate that we will be reporting this data out. I think when we said all ICUs, we knew we could count on the ICUs and that NICUs would be a subset of that. Eck – We just need to be clear. By the time you hammer out those pieces for an NICU, you could delay getting information from adult ICU or even a pediatric ICU. The breakdowns are not as difficult. Chen – What CDPH could say is that there will be a set lag-time for NICUs. Eck – The expectation is that we're starting here, but these are practices that are important for patient care and may be expanded to all places that insertions are done. The daily line assessment should be expanded. We tried to factor in having comparable data that could be reported, and we would have some reliable guidance on next steps. Myers – I'd prefer tracking the insertion technique in every part of the hospital, including EDs and ORs, rather than have a checkbox which is arbitrarily defined by hospitals. Moss – When we're coming up with language, we should list every place that will eventually fall under the recommendations, so that hospitals are prepared. Witt – We want reporting that is reproducible, concrete and as comprehensive as possible. What is the reasoning for Option #2? Torriani – Many elements of the NHSN form are not pertinent to the quality of the work done. They're for data collection and research purposes and therefore wouldn't advance the purpose of this Senate Bill or the purpose of this committee. Therefore we have Option #2 available for hospitals. Witt – We're not collecting the BSIs; are these just for NHSN?	

Eck – Correct; this is just to maintain membership. Witt – In the future we may get the outcome measure? Eck – In the future we may get NHSN to modify the CLIP form and identify fewer items as mandatory. McDonald – Where hospitals are required to develop a process, I think we should add a permissive statement, not a "require" statement – hospitals "may" put something into their assessment process about lines with a planned duration. So the hospitals "may" address lines of planned duration to opt them out of daily assessment. Creighton – When we meet with a facility, we ask "What is your process? This is the regulation; how do you meet the intent?" <u>How</u> they do it is up to them. Eck – If you had a situation where you have Dr. X saying "leave the line in, in case they need it", the reliability of that process in terms of good line assessment could be questioned. McDonald – I agree with not being prescriptive. Addition of the permissive statement is for good customer service, to help hospitals comply. Labar – In-dwelling versus the short term, it should be all lines. If there isn't daily assessment, the line may not be taken out. Winston – Yes, but is this a good use of people's time? We're asking people to do so many things now. Member – My comment is more to CDPH. Maybe when we start looking at NICUs, we have the California Children's Hospital quality initiative which is already collecting outcomes data. Maybe we can work with them for collecting this data. Chair – Could we have a summary of the discussion? Eck – The CLIP subcommittee will meet during the break to consider discussed items: 1. Process measures for the full CLIP form would be submitted for all ICUs; 2. Hospitals would begin with ICUs; the recommendation will make clear that this would be expanded to where all lines are inserted; 3. Hospitals could elect, if they deem it necessary, to submit a subset of the CLIP form. HAI would prescribe the subset so that data will be comparable; then, to comply with NHSN rules, they would have to submit BSI data for ICUs; 4. At this point, for outcome reporting, BSIs are not speaking to NICU although you would do insertion practices on the NICU and recommendations would be built in the future to look at outcome reporting for NICUs;	

5. The recommendation will make clear in the process of doing the daily line assessment that the hospital has to have a process in place, so that it can demonstrate to a surveyor compliance with either Option. 6. There is not yet consensus on whether it would be all lines or just short-term lines. 7. There is not yet consensus on adding language in that daily line assessment paragraph clarifying that the hospital could define their program in such a way that they made that distinction – of "we only do daily line assessments on short-term lines." Rosenberg – Regarding non-CDPH required elements on the CLIP module: NHSN recognizes that not all elements pertain to the prevention of central line infections. NHSN has added these elements in order to collect this data on a national basis. Eck – The problem is that elements such as the application of antiseptic ointment on the line site are contradictory to CDC published guidelines. Chair – CLIP will convene during lunch. [Lunch Break—CLIP met to integrate discussed items] Eck – We will strengthen and clarify the language so that it will read: Option 1: They will submit the complete CLIP data set as set by CDC and NHSN for all ICUs including adult, pediatric and NICU in their facility. If they do not have an ICU, another area— such as med/surg where patients have central lines used—will be selected for reporting. Option 2: If a facility cannot obtain all of those data elements for the CLIP process, we will underline and insert language that "all ICUs including adult, pediatric, and NICUs" for the first portion of that, and we will separate out in the paragraph so that it is clearer that: "however, to maintain their enrollment in NHSN they must complete the module set of data, so they would have to submit the related BSIs per that data set. For the daily checking of lines, we will clarify the daily assessment of line necessity to read "for all ICUs"; also, rather than "by a physician", it will read "by a licensed caregiver", to accommodate for ICU teams. We will insert language that speaks to: "this will be expanded in the future to include other units in the hospital where lines are used." Although timeframes are under CDC and CDHS purview, we will select a date (within a reasonable time frame) by which reporting will be expanded to other hospital units. **Motion to approve changes (Oriola)** **Discussion** Fox – So no date is specified because that is CDPH's authority? Eck – Yes, but we will express our expectation that this occurs sooner rather than later.	

Moss – I recommend that we should put a date in as a recommendation to CDPH: further additions to will come within a year, or whatever dates are chosen. Eck – We don't have authority to impose a date. As an advisory committee, what we could say is that CDPH has to identify the expansion date by a particular date, say January 2009. Chair – Clarification: So it will say that by January 2009 CDPH needs to specify a date for the expansion of CLIP monitoring and data submission. **Motion Seconded (Nelson)** **Motion passed.**	
Subcommittee Presentation: Influenza Influenza discussion led by Ray Chinn. Item #1: Mandatorily report vaccination/declination rates of employees. There was discussion whether employees should be expanded to include other members of the healthcare worker community. For this first year, we'll report declination/vaccination rates for employees. There was some concern that employees do not include physicians, but what we're really talking about are the volunteers and the licensed independent practitioners (LIPs). There was a motion suggesting that LIPs go through the same screening process as employees, meaning that they attest to the fact that they're declining vaccination or that they have received vaccination. That is going to tie in to the credentialing process. The model for this is tuberculosis (TB) screening. That is a big move in terms of the charge of the subcommittee and that something we can discuss and vote on later. Item 2: some institutions get their declinations in the non-influenza season. So basically, a hospital may comply with the law but not with the intent of why we're doing this whole legislation – that is to get healthcare workers vaccinated. We've added a clause to stipulate that the vaccination/declination form can only be obtained during the influenza season (September – March). Item 3: Some California hospitals participate in the community-acquired pneumonia complement reporting. That module contains pneumococcal and influenza vaccination. For this first year, we would like to follow the reporting tool the CMS has developed for those institutions that participate in reporting of influenza vaccination during October – March. One issue with this approach is that only patients 50+ who are admitted for pneumonia are captured. This is slightly outside CDC guidance – CDC says that <u>anyone</u> 50+ should receive a vaccine. For the first year, instead of creating a whole new tool, we could use that guideline. For those institutions that do not participate in CMS reporting, we have a form that they can fill out and send to CDHS. Item #4: for the issue of LIP vaccination/declination, we have a form for	Subcommittee to meet to finalize approved recommendations, and to discuss modifications to other recommendations

Committee review. There is a piece of passed legislation, AB106, which directs acute hospitals to administer influenza vaccine to inpatients 55+ and it also includes pneumococcal vaccine. While it does include all inpatients; the disparity is that it falls outside of CDC guidelines that recommend patients age 50+ gets the vaccination. We don't yet know how we're going to merge these. **Discussion** Slininger – It is not possible to just select out pneumonia patients. We do the pneumococcal vaccine and influenza vaccine screening and administration on all patients, not just pneumonia patients. The group can be confident that what's reported on *HospitalCompare* (HC) is only that smaller population. In addition, the CDC measure will change to not be just pneumonia patients. We can expect that HC will reflect the wider population. Chinn –To summarize, we can really delete the pneumonia stipulation and create a form that just targets 50+. Oriola –Could you do it step-wise in order to reduce reporting burden for this year – could you say in 2008 you report what CMS is taking now, knowing that CMS in 2009 is going to move forward? Chinn – For hospitals reporting to CMS for pneumonia, are you able to tease out whether the target population is met? Is there some way to get the rate of those without pneumonia? (Slininger—No) Maybe the best approach is to have a form like this – identify patients 50+, the number of vaccinations/declination screenings done and the number of vaccinations (regardless of where it was administered). That would streamline this into one process. Myers –When you're saying everyone 50+ and we don't have a third party (Lumetra or CMS) giving us a random number generator selection, you do then have to go through every case, which is unreasonably burdensome. Chinn – How many institutions have a format where every patient 50+ is screened for influenza vaccination during the influenza season? This is already being done. I don't know if this is not the time to push ahead because vaccination rates are so very disappointing. Myers –Who compiles the numerator and denominator data? Chinn – The quality person gets all that information and generates a rate. Is it our purpose to work out the specifics of the data gathering? This is a good practice which will enhance patient health. We should include as part of our recommendation to CDPH that any person admitted (50+) should be screened for influenza vaccination. Nelson – I suggest that we substitute "inpatient" for "hospitalized patient." Are we including long term care or any other facilities? Chinn – Long term facilities have their own vaccination programs.	

[Discussion on screening and rates, including: *1) Generation of rates* *2) Capturing data for any inpatient who has been vaccinated during the current influenza season. Need to account for frequently hospitalized patients* *3) Screening to remove contraindicated patients out of the rate calculation* *4) Collection of screened and vaccinated data* *5) Collection of vaccination data during flu season for all inpatients]* Labar – I think it's great you've included physicians, the ones that are non-employees, as part of this vaccination program. But why didn't we include volunteers? Chinn – We will. Volunteers as a general rule are very compliant (in terms of TB skin testing). But it wasn't until we actually mandated TB screening that we were able to increase physician screening. We thought that physicians would be a nice target to hit and then broaden the scope. Myers – The issue, specifically around physicians, was how to handle the affiliated staff, courtesy staff, and specialists who are on staff who may not be in the hospital for the entire influenza season. Given that credentialing of physicians occurs every two years, the inherent challenge of gathering and reporting the data. Chinn – We're not asking that the physician have documentation that they've received the vaccine in the hospital. We're asking for an attestation; you attest to the fact that you have a contraindication or that you've received the vaccine this year. McDonald –What we agreed was that we would vaccinate/declinate employees now and produce rates on them because of the availability of denominator data. We would certainly offer vaccination/declination to physicians now, but we would not count them in rates now due to the difficulty in gaining denominator data. Later, we may include LIPs, volunteers, etc. in our rate if the denominator becomes accessible. Moss – Why would there be a different rule for physicians than for anybody else? McDonald – Because of the difficulty in getting denominator data. Chinn – An attestation is required. Even though you won't generate a rate, in order to be on staff you have to comply with this. In order to get privileges, a physician has to fill out this form. McDonald –Are you saying with this attestation form that physicians fill out would be required for staff certification? (Chinn –Yes) So if you have the attestation form, you could get a rate. Member – Many physicians are on staff at multiple hospitals so the	

initial concern is that you wouldn't have a denominator because of that confusion. Whereas an employee is in one hospital and a patient at that time is one hospital. That's the initial concern about the denominator. If you use the attestation and demand it on a yearly basis, it provides you with a denominator and is a solution to the problem in this case. Nelson – In the credentialing process, you will be looking for two attestations, one per year. I have a different viewpoint on the staff versus employee; I see volunteers as non-paid employees. Government agencies often consider them as non-paid employees. I suggest volunteers be included in the employee group. Does your statement specifically include non-clinical employees? Chinn – It is not the intent to exclude volunteers. We're at the end of the flu season and we'd like to get information by the end of January. This does not mean we're not going to expand the scope in the future. The reason we focused on physicians is that they're a major group of healthcare providers that may not be as compliant as others. The term 'employees' encompasses everybody. We're not stipulating that the category of employees includes only those who have intimate patient contact. The broad category of employees includes people who don't have direct patient contact. Slininger –SB 739 requires the hospitals to report only on employees and I think that's all we should require as far as reporting data. Myers – We haven't addressed contracted service workers, who often have significant patient contact (security services, food services, etc.) We didn't really address that those individuals may not be offered free influenza vaccine. Chinn – We have to generate a rate for this year. I think employees would be a good place to start. This does not mean that the recommendation is static; next year we may include volunteers and other components. Moss – I suggest adding to set the date of 2009 that volunteers would fall into the employee category as well as doctors and staff. I would add to this recommendation volunteers, physicians and contract services for this year. Chair – I'd like to bring the attention back to the charge of SB 739 to address employees. The proposal should address the implementation of SB 739 requirements and then we can add an addendum to that. Moss – I'd like to add to that, as noted in the November meeting, a person in the room who was part of the committee that initially scripted the language of SB 739 indicated that the intent of that was to include doctors as employees. Witt – I think under this section of SB 739, it's restricted to vaccination of employees, but in the broader recommendations for process or outcome measures it's clearly in the domain. I second the motion for	

2009. Chinn –Clarification: For this year we're doing employees; next year we can define the healthcare worker better. Eck –Cal OSHA views physicians as employees. So there is precedence for including them. The language should be clear that the denominator is reflective of the group of patients that have not had the vaccine and are eligible to be vaccinated. Rosenberg – The SB 739 language that the offering of vaccination free of charge is only to employees; the reporting of influenza vaccination is of healthcare personnel. It is reasonable to assume that's a deliberate difference and acknowledges the fact that it's the hospital's responsibility to ensure that all healthcare personnel are vaccinated. Chair – We need to focus on what we need to do this year, with an addendum to continue this to go forward as we did with CLIP. **Restated motion: In 2009, all healthcare personnel are to be screened and included in the rate; and the rate included in reporting and available to the public.** **Motion Seconded (Witt)** **Motion passed.** Chair – We will review the four Influenza recommendations. Chinn – **Motion #1: for 2008, mandate public reporting of influenza vaccination/declination rates for employees.** **Motion Seconded (Torriani)** **Discussion** Chen – For 2007? Chair – The motion is: for the 2007-08 flu season, mandate public reporting of influenza vaccination/declination rates for employees. Dr. Torriani seconds that motion, is there any discussion? Member – Are we sure that hospitals are going to have this for the current influenza season that started in September 2007? Chair – This was a JCAHO standard that they had to start collecting last year. Chen – We haven't informed them that they had to start reporting that data yet. My impression is that the earliest we could do this is 2008-09. Member – JCAHO was very clear that data collection on this was coming. Chen – We didn't inform them that they would be responsible for retroactive reporting. Rogers – We need to get the letter out to hospitals as soon as we can.	

Chair – The motion has been stated. **Discussion (none)** **All in favor? ('Ayes')** **Opposed? (Chen)** **Motion passed.** Chinn – **Motion #2: add a clause stipulating that influenza vaccination/declination completed forms should be obtained only during the influenza vaccination season.** McDonald – Rather than forms "should be obtained" could we say, "should be offered"? **Motion Seconded (Rogers)** **Discussion (none)** **Motion passed.** Chinn –**Motion #3: That inpatients 50+ be targeted, excluding those previously vaccinated. The denominator would be anyone who is eligible for influenza vaccination (this would exclude those previously vaccinated).** Chair – **Restate: the motion is that influenza vaccination/declination rates for inpatients will be generated using a form that will be developed for reporting to CDPH.** Eck – Clarify with "for inpatient eligible for vaccination". The form and the definition for the numerator and denominator should spell that out. Rosenberg – For clarification, is the subcommittee recommendation for hospitals not to use NHSN module for influenza vaccination? Chinn – It is important for CDPH to have a grasp on the details, so filling out the form for specific components of NHSN is reasonable, but the entire module would be tedious. Eck – I'm hearing it to be "instead of NHSN". Chinn –As an option, we're picking out items from NHSN that will help us build demographics. The items we've chosen aren't overwhelming and any institution will have this information. Eck – The subcommittee did take into consideration data submission to NHSN, that you might want to format this the same way the CLIP group did. Option 1 is to submit all data; option 2 is to submit critical elements. Chinn – The problem is that if you use the influenza module for NHSN there's no way to get a rate. Chen – The other issue is that some hospitals don't do central lines, they are so small, so how will they meet the recommendation of enrolling and staying in NHSN?	

Eck – We could have them submit different data as an option, perhaps surgical site data. Chen – There's a hole in the law that doesn't consider these facilities. Slininger – We are talking about creating a whole mechanism and form, but are we creating a whole process that CMS is already going to be addressing? Chair – So are we bringing CMS back into #3? Chinn – No, we are just voting on the subcommittee developing the tool. Chair – **Restate: the motion is just for the development of the tool itself, and that the subcommittee will come back with that tool for discussion and approval.** **Motion Seconded (Torriani)** **Discussion (none)** **All in favor? (ayes)** **All Opposed? (none)** **Motion passed.** Chair—We've already discussed **Motion #4** with our first motion (for 2009 all healthcare personnel and physician attestation). That motion was passed.	
Subcommittee Presentation: SCIP SCIP discussion led by Shannon Oriola. Oriola – The SCIP subcommittee items don't need to take Committee time as we had resolution at the last meeting. The only issue was how to obtain data that's reported to CMS. Sue has been doing a lot of work on how to download the data from the *HospitalCompare* website, Julia has helped with some of the finer details. Julia is collecting the surveys we've all been asked to fill out: who do you report to? And if you don't report to CMS then what do you report and to whom do you report? These are details on how to get the data reported to the public that shouldn't take committee time. Chair – There is no motion to approve, as this information is just an update.	
MRSA Nelson – The subcommittee met for three conference calls. CDPH asked expert consultants to act in an advisory capacity to the MRSA subcommittee. They are: Dr. Elizabeth Bancroft, Dr. Henry Chambers, Dr. Kathleen Harriman, Dr. Susan Huang, and Dr. Ray Chinn. We're not talking about a physician group but expert consultants aside from the subcommittee. The subcommittee's recommendations by consensus are as follows:	

1. Report all laboratory-confirmed Methicillin-Resistant *Staphylococcus aureus* (MRSA) bloodstream infections (primary or secondary) in patients of acute care hospitals;
2. Identify reported cases as belonging to one of two categories (subsets): community onset of infection being present on admission or having an onset within first three days after hospital admission (hospital day one, two and three); hospital onset of infection having an onset after three days of admission (hospital day four and greater);
3. Express hospital rates as number of infections categorized as hospital onset over a denominator of 1,000 inpatient days for that facility.

Chair – It is imperative that we're really clear here; for recommendation #3, "MRSA bloodstream infections" should be clarified.

Nelson –

3. (continued) If possible, CDPH shall acquire the denominator data from another California Department that is already reporting this data such as the Office of Statewide Health Planning and Development.
4. Publicly report the number of community onset cases and the rate of hospital-onset MRSA bloodstream infections. Include in the report a statement to interpret and clarify this data for the public.
5. Provide public information and education to explain the difference between the two reporting categories.
6. Begin reporting of these data within sixty days from the date reporting methodology is established and disseminated by the Department.
7. Do not require further characterization of reported infections by presumption of community-association or healthcare-association at this time.

Early on we developed a task list – these are the things that we agree are under the HAI AC charge. We have had three meetings so far and there are still tasks on the list; we come to the Committee with these tasks seeking the Committee's opinion on prioritization and whether we should be considering these tasks.

Terashita – We're not sure these recommendations are best in terms of use of limited resources. The charge of the subcommittee was to come up with recommendations that could improve patient safety, and we agree with that. For the local health department going through normal reporting routes, it seems that MRSA is no different from any other reportable disease.

Torriani – Carole and I have been looking into the importance of having a date/timeline for CDPH to start so that our recommendations are placed into effect in a reasonable timeframe, whether that date is July of 2008 or January or July of 2009.

Rosenberg – The timeline to make the data mandatorily reportable is approximately a two month process, and it is not a formal regulatory adoption. CDPH would write a memo saying MRSA will be reportable, with a short justification. The request goes up the chain in CDPH; it then gets reviewed by the Office of Administrative Law. Again this is not a regulation but must still go through a review process. Once this process is complete, CDPH would send out the notice. Torriani – Could the recommendation schedule the time which we can expect that CDPH would act? Chen – A primary issue here is that CDPH lacks the resources to complete this. Rosenberg – The Committee doesn't need to address the resource issue. The Committee's role is to make public health recommendations that we think are reasonable and should be reported. If the resources are unavailable, CDPH will acknowledge that and choose how to proceed. Member –The issues are more complicated than just 'community onset' and 'hospital onset'. For instance, what about the patient colonized by MRSA admitted to the hospital with a BSI, but we know was previously colonized. What about the patient with a long-term in-dwelling line who had the line inserted in the facility, goes back out into the community, and returns to a hospital with an MRSA BSI? Nelson – For surveillance data, you will always have dropped categories. Without going through the detail of chasing down where this was possibly acquired, the subcommittee felt the best way to parse it was at the point of onset. It is fairly clear that if the onset occurs on the fourth day of the hospitalization, then that would be a reflection of something that occurred in the hospital. Rosenberg – The subcommittee said that there's this huge category of community onset. These are patients with in-dwelling lines, hemodialysis, previously healthy people who develop MRSA; this is a huge category. But it is too much to take on at this time for the infection control practitioner in the hospital. The key number here is the hospital onset, which is the responsibility of the hospital. Torriani – The subcommittee chose a minimum impact on the daily work of ICPs in terms of data that can be objectively gathered; we can say this is the status of MRSA bloodstream infections – community onset, hospital onset in California. Member – It will be difficult to prove to hospital administrators the value of this recommendation. Member –We don't have caveats for, say, the previously colonized child who comes in and on day four develops BSI and we call it 'healthcare associated BSI'. Member – I don't see the point. This is similar to the JAMA publication	

where they have the 72-hour cutoff; the difference is that the Committee is not doing the breakout of previous healthcare exposure in the prior year, as far as community onset. The point the subcommittee is trying to make is: what happened on this watch on this admission versus what was a community onset on admission, for now at least. Witt – The hospital is responsible for hospital onset cases, whether the patient was previously colonized or not. The idea is that it was an infection that wasn't prevented. Moss – Does this only cover bloodstream infections? (Yes) What percentage of MRSA cases would be picked up from blood tests? Winton – From previous data we find approximately 90% of sterile site infections are picked up by blood cultures. Rosenberg – But it will pick up very few of the skin and soft tissue infections that are hospitalized. Winston – And many of those skin and tissue infections would not have cultures done anyways. Rosenberg – The subcommittee said that this is a <u>starting point</u>; it is laboratory definable, and is not a clinical definition. And it is a subset. The numbers are manageable and it does represent some of the most severe outcomes and, most importantly, preventable ones for hospital onset. Moss – But this leaves out serious issues like VAP, and how do we cover MRSA pneumonia? When is the time we discuss MSSA, CDIF...when do we start including those pieces into the discussion? Winston –When the Committee addresses other healthcare associated pneumonias, MRSA will be included. Chair – The charge of the Committee is to focus on the charge per SB 739. Looking at prevention of hospital associated infections and increasing patient safety is all our goal and what we want to do, but we have to start somewhere to get where we want to be. This is a progressive committee and this will not be the end of our recommendations. This is our starting point. Once we have met the charge of this Committee, those issues that have been brought up (currently in the 'parking lot'), can be appended to our report. This language might be, "in addition to meeting SB 739 charge, we also need to discuss, in the future, expanding to other healthcare associated infections and issues including..." Moss – Back to my point on MRSA pneumonia, how will we address that? I want to make sure this is addressed because it's critical. Chinn – We're fortunate, in a sense, that we're not the first state to have public reporting of MRSA. Tennessee has reported for a few years; one of the key points they make is that if they had to do it all over	

again, they would report bloodstream infections because in doing that they capture severity and the frequency of MRSA. To answer your question about VAP – Missouri, as part of their public reporting initiative, included VAP as one of the initial goals. It was fraught with so many problems because of definitions, that they are taking it off public reporting. It's not that we don't think VAP is important. We would like to do things that have the science/evidence behind the reporting before we jump into something like that. I think looking at VAP globally makes more sense because the intent of VAP prevention is process right now, not the rates. Teague – The idea of looking at onset makes sense in terms of the delay. Is there another aspect to it? What happens to patients who are admitted and then show onset one to three days after discharge? Would we capture that as a hospital associated condition? If we were to recommend that, what would be the parameters to capture that data? Rosenberg –There are many healthcare associated, community onset bloodstream infections. It's just too much work for many facilities often just one infection control practitioner. Witt – This is excellent; this has low work intensity and high value; can be documented; and is a replicable measure of what is the depth of MRSA in the hospital. My questions: 1) Why is MSSA excluded? 2) What is the choice of the measure for community pressure of the number of infections? It seems to me that the better measure would be community bloodstream infections by admission date or whatever rate we're using as a denominator. What we see is the pressure of people coming into the hospital, in essence, in lieu of sampling. I'm sure these have been discussed. Eck – The subcommittee considered this at length and looked at the denominators that hospitals have access to that are already being reported in other ways and to other agencies in the state. If what we gave were the numbers to the health department, they have access to patient days, admit days, discharge days, and let them come up with the rate, then that would be a reasonable way to frame this. This would level the playing field, because not everybody knows where the patient has been and what healthcare exposure they might have had. And a case history won't be required, because it is strictly a timeframe from when they came in to when the condition showed up, that's all. Nelson – The reason we didn't address MSSA is that the charge given us was the reporting of MRSA. Chinn – I was wondering under item 2, for acute care hospitals, for the bloodstream infection should we make sure that these are not identical isolates? (Yes) If the charge is to assess acute care hospitals, perhaps we could include transfers from acute care hospitals where a bloodstream infection within the four days. Is it a lot of work to separate secondary and primary bloodstream infections? Then you can focus your target.	

Member – A fair amount of work. Chinn – When you're talking about public reporting rates – you can't compare a 15-bed hospital with a 300-bed hospital. We proposed for the toolkit to have certain demographics included in public reporting saying: this hospital has a burn unit, they do transplants, have oncology, have a high risk nursery. The consumer can't use this data to ascertain that one hospital is similar to another. Moss – People are going to be looking at what your hospital has done to improve; they'll consider your performance from last year to this year. Torriani – I'd like to come back to the reporting requirements to local public health. We as a subcommittee were not intending for a case report form to be developed. Moss – In regards to #5, it is important to bring up the fact that funds had been reinstated for our Committee. As we continue to refer back to not having resources, I understand that this is exactly why we requested $1.3m or $1.6m and at this point I'm curious why we haven't celebrated the fact that we will have an inflow of resources? Rosenberg –Not only were HAI program funds restored in the budget, they were done as a budget adjustment, not as a new program. There's no waiting until July, this is just in the budget. All the 10% cuts, since it's the 2007 July budget, didn't apply to it because the 10% cuts were to the budget for next year. In the proposed budget for next year, all of the 12 positions (remember we started with 16), and about $1.6-1.7 million, is in the budget, as a budget adjustment. There's no further review as a new program. This year the legislature will look at the program as it is in the budget. With (Senator Elaine) Alquist's Senate bill already introduced, (Senator Dean) Florez is going to introduce another HAI or MRSA bill. At this point, the money is not there until it is there, but we do anticipate having our positions and program there. Rosenberg – In terms of the community MRSA proposal, we're going ahead and instituting reporting. Moss – A request on the behalf of the public: the next time these conversations come up, that we actually have a representative fighting for us. In reviewing the minutes of what took place, as it relate to this committee, there was no one there on the public's behalf. I strongly request that we have extremely high visibility at the executive level here at the CDPH. McDonald – Can you help us know about that? People would probably show up if we knew about it. Rosenberg – Information on upcoming legislative hearings are posted for the public. Moss – There are budget discussions that are constantly and topics of discussion that will be on the agenda. If CDPH can help us get that	

information, we can all group together and be there to support what we're all behind. Rosenberg –We'll let you know when there are legislative hearings that address that part of the budget. Chair – We still have to approve these recommendations. We need to make a motion based on the addition of where ever it's "MRSA infection", "bloodstream" is put in there throughout the document. That was one recommendation. Anywhere it says "MRSA infection", it needs to say "MRSA bloodstream infection" in the whole document. On #6, "community onset" is to go in front of "MRSA" as well. Those are the only recommended changes on #1-6. Moss – On #5, I recommend including a suggestion on the 60 days from the date of reporting methodology, I would caveat that by the subcommittee recommending 'not to exceed six months from approval'. McDonald – What if we said July 1, 2008? Holding as a goal. "Recommending July 1, 2008 as a goal"? Chair – The Committee is voting on all 6 with the amendments discussed, including the July 1, 2008 date for #5. If we approve this as is, they have 60 days from the date we approve. Nelson – The intent of the statement was that from the point in time that the methodology is established and disseminated by the department, at that point the hospitals will be required within 60 days to be reporting. Member – Carole and Marion are making the recommendation that we start reporting in July which is the committee's strong recommendation that we all get it together and make it happen. Chair – It would be better to remove the '60 days' and just make it 'July 1, 2008'? Member – How about, "CDPH, on July 1, 2008, will establish a methodology and reporting system. Hospitals will be expected to comply within 60 days after that." *[Discussion on target date and/or potential target date]* Rosenberg – We just have to say what is reportable; this takes approximately a two months. We don't have to say <u>how</u> it will be reported. We don't have to refine any definitions. All we need to recommend is that MRSA will be made reportable. After the two month period, it becomes officially reportable, but no hospital can report until we select what exactly is going to be reported. So the recommendation is that the details will be worked out by May 1st so that reporting can begin on July 1, 2008. Eck – How about this language: California acute care hospitals shall	

begin reporting these data by July 1st having been given at least 60 days notification of the reporting methodology that is established and disseminated by CDPH. Chair – With all said recommendations including "bloodstream" throughout the document and to include "community onset" on #6 in front of "MRSA" plus the timeline Enid just eloquently stated, is there a motion to approve? **Nelson – Motion to approve.** **Member – Second** **All in favor (Aye)** **Opposition (None)** **Motion Passed**	
Discussion Eck – Clarification, and this is back to parking lot issues. One issue in the White Paper of December 2006 was a recommendation that the health department begin work to revise those sections of Title 22 that speak to infection control resources and the adequacy of those in acute care hospitals. There is work that needs to be done between the hospitals and the health department around what's needed to support all this work. Rosenberg – Based on Minnesota's experience, we estimate around 125 cases per year of ICU admissions or death in previously healthy people statewide. SB 739 specifies that CDPH look to the HAI AC for advice on the public reporting side.	
Action Items and Next Meeting Chair –Action items are: - **CHA will work on communication to all hospitals who haven't responded to HAI AC data request.** - **The California Children's Hospital quality group will work on sidebar with the infant special care issue around bloodstream infections.** - **We will disband subcommittees CLIP, SCIP, and MRSA because we've come to consensus, and would ask that all subcommittee chairs please submit a final copy of all of the things that we've just approved.** - **CDPH, in reference to the six month issue around the MRSA, has to write a memo with justification of why they want MRSA reportable.** It goes up the chain of command, submitted as a regulation and it takes about two months. After that two months, some time after that the letter goes out from CDPH to all facilities. *[Discussion on potential frequency and methods of reporting]* Torriani –For all these process and outcome measures, **the Committee should consider how public reporting will be accomplished. How is the reported data going to be analyzed? Will HAI AC as a group to see this data and have input on how it's publicly**	**Action Items are listed in bold font under the "Action Items and Next Meeting" section on the left side of this table row.**

reported? Chair – **The Committee will consider this as one of our primary agenda items for our next meeting**. No subcommittee for that is needed at that point since we've achieved consensus on the bulk of the recommendations. We can develop those questions and issues to the agenda for our next meeting. Eck – **Suggestion: create a subcommittee that would make recommendations to CDPH as it relates to public education regarding, not just MRSA, but resistant organisms in general.** Chair **– We will add it to the agenda for our next meeting. Please contact me with other topics for our next agenda.** The next HAI AC meeting will take place on March 3, 2008. The meeting will be held in Sacramento, with teleconference connections in Richmond, Los Angeles, and San Diego. Meeting adjourned at 3:00 p.m.	

Acronyms

AFL	All Facilities Letter
ARDS	Acute Respiratory Distress Syndrome
BSI	Bloodstream Infection
CART	CMS Abstraction and Reporting Tool
CDIF	*Clostridium difficile*
CDPH	California Department of Public Health
CLIP	Central Line Insertion Practices
CMS	Centers for Medicare and Medicaid Services
DIC	Disseminated Intravascular Coagulation
ED	Emergency Department
HAI AC	Healthcare Associated Infections Advisory Committee
ICP	Infection Prevention and Control Professional
ICU	Intensive Care Unit
IHI	Institute for Healthcare Improvement
JAMA	Journal of the American Medical Association
LIP	Licensed Independent Practitioner
MRSA	Methicillin-Resistant *Staphylococcus aureus*
MSSA	Methicillin-Sensitive *Staphylococcus aureus*
NHSN	National Healthcare Safety Network
NICU	Neonatal Intensive Care Unit
OR	Operating Room
PICC	Peripherally Inserted Central Catheters
RN	Registered Nurse
SA	*Staphylococcus aureus*
SB 739	Senate Bill 739
SCIP	Surgical Care Improvement Project
TB	Tuberculosis
UVC	Umbilical Venous Catheter
VAP	Ventilator-Associated Pneumonia
VRE	*Vancomycin-Resistant Enterococcus*