**Supplemental Materials**

**Figure S1.** SABER Alert Logic and Display. (A) The SABER electronic health record (EHR) alert was designed to pop-up when clinicians entered the charts of patients who have had over 36 hours since positive blood cultures for *S. aureus* without a complete or pending ID consult note in the EHR. (B) The SABER alert notified the clinician that the patient has SAB and that an ID consultation is highly recommended. The pop-up provided buttons to order an inpatient ID consult. If the clinician declined the ID consult, they were prompted to enter a reason for not ordering.

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| **Table S1. Themes and Exemplar Quotes from Clinicians who Experienced SABER** | | |
| Framework | Theme | Quote |
| People | Experienced or perceived reasons for alert to fire | * I think actually [the alert] was probably really important because he was clinically so well. It's so much easier to know that you need to act with urgency in a patient who is not doing well.” [*Physician Assistant*] * “So this patient’s case was one where [he] had a poor prognosis, and he was clear with us that he wasn't that interested in invasive interventions and prolonged hospitalizations and those sorts of things. And so I think that in this case the patient’s preferences and goals drove the team away from consulting with infectious diseases.” [*Attending*] * “I've often wondered when is it appropriate to call ID if I know that I can't act on certain things today, like, getting an ECHO? When is it helpful for ID to know about this patient that we're already covering with antibiotics and we're doing the initial next steps? And so this alert for me was useful because it told me that I should just call them.” [*Resident*] * “We were deciding what's going to be aggressively treated or we were going to move towards palliative care. . . And so it was one of those things. . . yeah, yeah, I know I need an ID consult if our goal is going to be treatment with the intent to cure.” [*Attending*] |
| Hardware & Software | Like delay in firing | * “I think the timelines are reasonable, because it gives us an opportunity to actually get more information. Do we know whether this is MRSA or MSSA?” [*Resident*] * “[The 36 hour delay in firing] is very wise…I think that design aspect will certainly help with BPA fatigue.” [*Attending*] |
| Design of SABER minimizes issues seen with use of many BPAs | * “This one at least is short and fits on one screen. There are some that are so long that I have to scroll through them. They're not designed cleanly, so it's hard to understand what they're trying to say…which means that we ignore them.” [*Attending*] * “What I've noticed with other alerts is that it alerts every time you open the chart and it's something that you are not involved with at all. And the good thing with this alert is it gives you the opportunity to opt out by saying you're not part of the primary team.” [*Resident*] * “I liked that I could put “not now” because I wanted to talk to my attending before I called Infectious Disease… sometimes the alerts don't have that option to just kind of silence it while I try to get my ducks in a row. This did, so that was helpful.” [*Physician Assistant*] |
| Clinical Content | Information is clear, concise, and conveys clinical urgency | * “It was helpful and succinct. So, it got the message across for me that it was something that I would need to address with the team.” [*Physician Assistant*] * “I think [a BPA] needs to fit on one screen when it pops up. It needs to be very clear about why it's there, and what it's trying to accomplish, and what the options are to make it go away. This one is very close to that.” [*Attending*] * “I think it makes sense and I felt the information in here is really helpful. I didn't realize that having an ID consult would have such a huge potential impact on the readmission and mortality.” [*Physician Assistant*] |
| Mixed opinion about adding a citation to support ID consultation, but need to avoid overloading text | * “I think that the thing it might be really useful for people to know there was a study published in this journal at this time that said this was helpful rather than… telling physicians how to practice.” [*Attending*] * “I don't know if the link would be helpful. Maybe it would be, but sometimes links get too messy in these BPAs. We already have so many links, it just gets sloppier.” [*Attending*] |
| Workflow & Communication | Alert encouraged discussion and action among care team | * “Once I saw it, it was an opportunity for me to make note that we’d discuss it today during rounds.” [*Resident*] * “We had a discussion during that time about this alert and specifically read this underlined phrase, that mortality can be decreased by 50% with an ID consultation. And I remember a point where we were like, how can you argue with that?” [*Attending*] * “It affected my workflow in that we went from talking about discharge planning. . . to talking about this clinical update. . . and whether infectious diseases should be consulted.” [*Attending*] * “When I saw that alert, I thought, ‘Okay, I got to talk to my attending about this,’ because I was always trained not to consult anyone without talking to my attending.” [*Physician Assistant*] |
| Human-Computer Interface | Functionality is usable, but options for ordering could be more streamlined | * “Very seamless basically.” [*Attending*] * “Another way that you can improve the alert and connect me with an ID clinician is providing a paging link to the actual page number or the contact info for the [ID] fellow.” [*Attending*] |