

**Supplementary Appendix A** Manual chart review for patients meeting IPSO severe sepsis criteria but no BPA fired

ID	Reviewer-1 sepsis	Reason for meeting sepsis definition	Reviewer-2 sepsis	Reviewer-3 sepsis (if applicable)	Reason for determination
1	Yes	Sepsis huddle completed, on sepsis algorithm	Yes	NA	
2	Yes	Sepsis huddle completed, on sepsis algorithm	Yes	NA	
3	No	Did not meet sepsis definition (influenza only)	No	NA	
4	No	Did not meet sepsis definition (respiratory viral infection)	No	NA	
5	Yes	Sepsis huddle completed, on sepsis algorithm	Yes	NA	
6	Yes	Sepsis huddle completed, on sepsis algorithm	Yes	NA	
7	Yes	Diagnoses of septic shock	Yes	NA	
8	No	Sepsis huddle completed, on sepsis algorithm	Yes	Yes	Sepsis huddle completed and on sepsis algorithm. Difficult to find documentation
9	Yes	Sepsis huddle completed, on sepsis algorithm	Yes	NA	
10	Yes	Sepsis huddle completed, on sepsis algorithm	Yes	NA	
11	No	Did not meet sepsis definition	No	NA	
12	No	Did not meet sepsis definition	Yes	No	Patient had clear reasons for meeting IPSO criteria that were not sepsis (diagnosis hemophagocytic lymphohistiocytosis)
13	Yes	Sepsis huddle completed, on sepsis algorithm	Yes	NA	
14	Yes	Sepsis huddle completed, on sepsis algorithm	Yes	NA	
15	No	Did not meet sepsis definition (hemorrhage)	No	NA	
16	No	Did not meet sepsis definition	Yes	No	Patient had clear reasons for meeting IPSO criteria that were not sepsis (diagnosis dehydration)
17	No	Did not meet sepsis definition (heart failure)	No	NA	
18	No	Did not meet sepsis definition (status epilepticus on high sedation)	No	NA	
19	No	Did not meet sepsis definition (liver failure)	No	NA	
20	Yes	Diagnoses of septic shock	Yes	NA	
21	Yes	Diagnoses of septic shock	Yes	NA	
22	No	Did not meet sepsis definition (foreign body)	No	NA	
23	No	Did not meet sepsis definition (heart failure)	No	NA	
24	Yes	Sepsis huddle completed, on sepsis algorithm	No	Yes	Sepsis huddle was completed and started on sepsis algorithm just difficult to find documentation
25	No	Did not meet sepsis definition (status epilepticus on high sedation)	No	NA	
26	No	Did not meet sepsis definition (respiratory viral infection)	No	NA	
27	Yes	Sepsis huddle completed, on sepsis algorithm	Yes	NA	
28	No	Did not meet sepsis definition (heart failure)	No	NA	
29	Yes	Diagnoses of septic shock	Yes	NA	
30	Yes	Diagnoses of septic shock	Yes	NA	
31	No	Did not meet sepsis definition (vasoplegia)	Yes	No	Patient had clear reasons for meeting IPSO criteria that were not sepsis (diagnosis heart failure)
32	No	Did not meet sepsis definition (heart failure)	No	NA	

Abbreviations: BPA, best practice alert; IPSO, improving pediatric sepsis outcomes; NA, not available.

**Supplementary Appendix B** 2 × 2 tables

	Sepsis positive	Sepsis negative
CDS intervention (BPA)+	392	460
CDS intervention (BPA)–	32	9,921
	IPSO severe sepsis positive	IPSO severe sepsis negative
CDS intervention (BPA)+	44	808
CDS intervention (BPA)–	32	9,921
	IPSO severe sepsis positive + chart review	IPSO severe sepsis negative + chart review
CDS intervention (BPA)+	44	808
CDS intervention (BPA)–	16	9,937

Abbreviations: BPA, best practice alert; CDS, clinical decision support PICU, pediatric intensive care unit.