

APPENDIX A – DRAFT REQUIREMENTS SPECIFICATION DOCUMENT (RSD) REQUIREMENTS

The following Hand Hygiene requirements are to serve as an initial starting point for the hand hygiene portion of the existing RSD:

1	RTLS shall provide hand hygiene monitoring, reminding, and reporting capability for properly tracking hand hygiene events within a facility.
2	RTLS shall utilize an active tag solution in the form of a badge for all technology-monitored healthcare workers.
3	RTLS active tag for hand hygiene shall provide an LED light or other visual indicator.
4	RTLS shall provide the capability to associate a technology-monitored healthcare worker with a badge.
5	RTLS shall provide hand hygiene monitoring of RTLS equipped hand hygiene stations.
6	RTLS shall monitor workflow near equipped hand hygiene stations.
7	Hand hygiene workflow shall monitor for technology-monitored healthcare workers executing hand hygiene events.
8	RTLS hand hygiene solution shall comply with the overarching RTLS reliability requirements.
9	RTLS shall provide a false positive rate of no more than 1 in 100 hand hygiene events. False positive is defined as RTLS detecting a successful hand hygiene event occurred where no hand hygiene action took place.
10	RTLS shall provide a false negative rate of no more than 1 in 100 hand hygiene events. False negative is defined as RTLS detecting a failed hand hygiene event when a successful hand hygiene event occurred.
11	For each hand hygiene event, RTLS shall detect if a technology-monitored healthcare workers sanitized their hands.
12	RTLS shall provide the capability to detect soap for hand washing method for completing hand hygiene.
13	RTLS shall provide the capability to detect the alcohol from dispenser's method for completing hand hygiene.
14	For hand hygiene events using soap for hand washing method, RTLS shall record how long a technology-monitored healthcare worker sanitized their hands.
15	RTLS shall detect that a technology-monitored healthcare worker has successfully performed a necessary hand hygiene event.
16	RTLS shall record the time and location when a technology-monitored healthcare worker has successfully performed a necessary hand hygiene event.
17	RTLS shall detect that a technology-monitored healthcare worker has not performed a necessary hand hygiene event.
18	If a technology-monitored healthcare worker has failed to perform a necessary hand hygiene event, RTLS shall provide a reminder within a set time interval to the worker that they need to perform a hand-hygiene event.
19	The reminder time interval shall be configurable by the Systems Administrator.
20	The reminder time interval shall default to 1 second.
21	RTLS shall provide the capability to remind the technology-monitored healthcare worker via visual indicator.
22	RTLS shall provide the capability to remind the technology-monitored healthcare worker via tactile indicator.
23	RTLS shall provide the capability to remind the technology-monitored healthcare

	worker via audible indicator.
24	If after receiving a reminder, the technology-monitored healthcare worker does not perform a necessary hand hygiene event, RTLS shall record the time and location of the missed hand hygiene event.
25	RTLS shall provide a visual indicator (LED on staff badge) to a patient indicating whether a technology-monitored healthcare worker has successfully completed a necessary hand hygiene event.
26	RTLS shall create a time-stamped record of a hand hygiene event associated with the entrance of a patient care zone.
27	RTLS shall create a time-stamped record of a hand hygiene event associated with the exit of a patient care zone.
28	RTLS shall provide the capability to disassociate a technology-monitored healthcare worker from a badge.
29	RTLS shall maintain a minimum of 18 months of Hand Hygiene data available for reporting.
30	RTLS shall provide the capability for users to run reports that show technology-monitored worker hand-hygiene compliance.
31	RTLS shall provide the capability for users to run reports that show contact between specific technology-monitored healthcare workers and patients at a detailed level (room/bed/patient zone). Note that patient data is not required for the report.
32	RTLS shall provide selectable times within reports as shifts, days, weeks, months, quarters, and fiscal years.
33	RTLS shall provide the capability for users to run reports that show rates of hand hygiene compliance for categories (roles) of technology-monitored healthcare workers.
34	RTLS shall provide the capability for users to run reports that show rates of hand hygiene compliance by the name of the staff of technology-monitored healthcare workers.
35	RTLS shall provide the capability for users to run custom reports that show hand hygiene compliance rates for user selectable time periods.
36	RTLS shall provide the capability for users to run reports that show contact between patients and staff by means of room/bed-level proximity.
37	RTLS shall provide the capability for users to run reports that show hand hygiene compliance rates of a specific ward.
38	RTLS shall provide the capability for users to run reports that show hand hygiene compliance rates of a specific unit.
39	RTLS shall provide the capability for users to run reports that show hand hygiene compliance aggregate compliance rates for technology-monitored areas.
40	RTLS shall provide the capability for users to run reports that show rates of hand hygiene compliance for individual technology-monitored healthcare workers.
41	RTLS shall provide the capability to export hand hygiene report results to Microsoft Excel.
42	RTLS shall provide the capability to export hand hygiene report results to Comma Delimited (*.CSV).
43	RTLS shall provide the capability to export hand hygiene report results to Adobe PDF.