Decision Support Tool Screen Shots



## Waiting for Patient Type Selection



Steps 1 and 2: Select patient category and the pulse state.



Steps 3 and 4: Determine if patient is unstable. If so, complete initial instability management.





**Steps 5 and 6:** Perform systems-based assessment and select leading diagnosis from a common list within that area of instability. The diagnosis can be selected through the systems-based assessment or through the search function. In this case, 'Toxins' and then 'Local Anesthetic Systemic Toxicity' were selected. If the question presented is answered 'Yes,' then the user proceeds to Step 7.



**Steps 7 and 8:** After selecting that the patient had received a bolus of local anesthetic, the DST prompts the user to complete the initial emergency management. After completion of these steps, a series of further evaluation questions appear to help confirm whether the indicated diagnosis fits the clinical picture.



**Steps 9 and 10:** After completing the initial management steps for a given protocol, the user is presented with subsequent management steps. Certain steps include integrated choices or timing. For instance, after the first dose of lipid emulsion is given, the step is logged as 'Done' and the DST knows to prompt the user to consider assessment of hemodynamic instability after 1 minute and consider a second bolus dose. Additionally, an assessment for seizure activity is included with general treatment options presented.



**Steps 11 and 12:** At any time, the user can select the 'Reassess' button in the top left and return to the pulse assessment screen (Step 2). If 'no' is selected at that point then the user is taken to a rhythm assessment screen. If a shockable rhythm is selected, the user is then taken to a page in which he or she is instructed to deliver the appropriate energy. The top view also depicts that video (with audio) of the event is recorded, which can be used for immediate post-event debriefing.



**Step 13:** Appropriate management steps are then shown in a subsequent page after shocking or resuming CPR in a pulseless state. The DST has built-in timers for CPR cycles such that a pulse/rhythm check is prompted every 2 minutes (Step 1). As steps are selected as being completed, the button next to them will change from 'Due Now' or 'Due' to 'Done.'



**Steps 14 and 15:** Selecting the tabs at the bottom right of the DST reveals screens on which additional management information can be recorded as time permits during a management event. In this case, the airway tab is shown and the appropriate selections made concerning airway management during the event. The same is also shown for intravascular access. Selecting 'record airway data' or 'record line data' will record the selected information at the bottom of the screen and on the event log. This information can be updated with new recordings throughout the event, such as if additional lines are placed.



Steps 16 and 17: Selecting the tabs at the bottom right of the DST reveals screens on which additional management information can be recorded as time permits during a management event. In this case, the labs tab is selected (at top) and shows which labs have been sent. If this system is linked to the medical record, then labs will be immediately updated within 5 seconds of being available in the system. Additionally, the last recorded labs prior to the event that are in the electronic medical record will automatically populate. Finally, the bottom screen shows the ongoing event summary as steps are logged through the course of an event.



**Step 18:** If 'End Event' is selected, the user is presented with a choice to designate the disposition of the patient.

Add General Comment       Add Missing Event         11:53:47       Called for help.       Call         11:53:48       Attached defibrillator.       Call         11:53:54       Gave Oxygen.       Call         11:54:08       Patient has received a recent local anesthetic bolus.       Call         11:54:17       Management step completed: Discontinue injection or infusion.       Call         11:54:18       Management step completed: Consider alerting cardiopulmonary bypass team/institution.       Call         11:54:25       Management step completed: Call for 20% lipid emulsion (e.g., intralipid).       Call         11:54:29       Management step completed: Obtain/confirm large bore IV access.       Call         11:54:39       Patient assessed as NOT responsive.       Call         11:54:44       Patient assessed as having acute dysrtythmia.       Call         11:54:45       Patient assessed as having respiratory arrest.       Call         11:54:46       Patient assessed as having attered mental status.       Call         11:54:50       Patient assessed as NOT naving had a seizure.       Call         11:54:50       Patient assessed as NOT having had a seizure.       Call         11:54:50       Patient assessed as NOT having had a seizure.       Call         11:54:50       Patient assessed as N	IIII AT&	ा रू	11:56 AM	≱ 52% 💷
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Step 19: At this point, the Event Log can be reviewed, comments can be added, missing events can be added, or the code event can be uploaded to a database for later review.



**Step 20:** Prior to uploading the event log, the video can be reviewed that is time-linked with the events recorded so that one can jump to any point in the video to review specific events. Additionally, the entire event can be replayed for debriefing purposes.