

## AID-N System Evaluation Results March 2006

### *User feedback from EMS Today Conference and Maryland Task Force 1*

In order to ensure applicability of AID-N in the field, we have solicited evaluations of AID-N prototypes developed up through March 2006 from the emergency response community. On March 24, 2006, the AID-N team conducted surveys with attendees of the EMS Today Conference (Baltimore MD) and on March 26, 2006, AID-N team conducted surveys with paramedics at Maryland Task Force One (Gaithersburg MD). The audience included captains, platoon chiefs, and paramedics with over 100 years of combined experience in EMS.

**Methodology:** We demonstrated AID-N by either demonstrating or describing each feature to the subjects. Due to time constraints, some features were not demonstrated but just described with screenshots/pictures.

After completion of the demonstrations, an anonymous questionnaire was completed by each subjected about the perceived utility and functionality of different AID-N features. The questionnaire is composed of a list of. Subjects were asked to rank each feature along a 7 point likert scale (0 = never, 3 = sometimes, 6=always). At the top of the anonymous surveys, the subject was asked to write down the number of years of experience they had as paramedics. Upon completion of the questionnaire, the subjects were asked to toss their form into a bag of completed surveys.

**Data:** We sampled 12 subjects. Their demographics are as follows.

- 4 Paramedics from Maryland Task Force One, Montgomery County, MD
  - Reported positions: Lieutenant
  - Reported years of experience: 4, 22, 14
- 3 Paramedics from Richmond, VA
  - Reported positions: EMS instructor, supervisor
  - Reported years of experience: 14, 6, 4
- 3 Paramedics from Colorado
  - Reported years of experience: 15
- 2 Paramedics from Iceland
  - Reported positions: EMS District Officer
  - Reported years of experience: 15, 13)

**Results:** Average ratings from the surveys are showing in the following figures. The overall system was more positively received than our last demonstration in September 2005. Much of the feedback and suggestion from last year's demo was already integrated into our current prototypes.

Among the new features that were added this year, those that received the highest marks were: JavaGUI's ability to validate patient triage colors, tags ability to designate patients for transport by blinking, alerts are generated when patients depart the scene without being authorized to.

Survey results of older features were mostly in line with last year's survey results. Again, features that received highest ratings were those that facilitated triaging. We found the different wording of the questions between this year and last year's questionnaires to have a significant impact on results. For instance, last year, we asked users to rank "The wireless pulse oximeter is useful," while this year, we re-phrased the item to "the wireless pulse oximeter is a vast improvement to what I use now." These two phrases generated conflicting results: pulseox was rated most useful in the former survey and rated least useful in the latter survey. After getting results back from this latest survey, we found our re-phrasing to be misleading because the users may have a better pulse oximeter device than what we prototyped (even though it may not be wirelessly networked).



