

# MEDLITE ID EFFICIENCY STUDY DSU SCHOOL OF NURSING

## MedLite ID Clinical Mannequin Testing at DSU School of Nursing

MedLite ID is a simple-to-use, disposable medical device enabling clinicians to accurately and efficiently identify the primary / emergency medication infusion line versus similar infusion lines in all light settings.

The nursing students that participated in the study found that the MedLite ID not only helped them to identify the line much faster, they said it also reduced the stress they experienced in locating that line.

## Methodology

Ten DSU School of Nursing students were used for this study. The study consisted of four infusion lines attached to a mannequin, one of which was the primary / emergency medication line.

Each of the students were asked to inject a relaxing into the patient's med line prior to taking that patient to radiology. Each student was timed, starting when the student knocked on the door to enter the room until he/she found the primary / emergency medication line and began injecting the medication.

After exiting the room, the nursing student was taken to another room and shown the MedLite ID and instructed on how to use it. The four infusion lines were then switched around with the MedLite ID added to the primary / emergency medication line, and the student was asked to go back into the patient's room and inject the medication into the med line.

All four lines were changed, not to replicate the prior situation. The student was once again timed from the door knock on the patient's door until the medication was injected into the primary / emergency medication line. This was done exactly the same for ten nursing students individually, so there was no cross over of information from one student to another.



34% improvement
identifying the
primary / emergency
medication line
with MedLite ID
while reducing
clinician stress

### Results

All ten nursing students decreased the time it took them to find the primary / emergency medication line with an overall time savings of 34%, or nearly one minute. All ten nursing students also expressed how the MedLite ID reduced their stress levels.

- 34% improvement identifying primary / emergency medication line with MedLite ID
- Average time savings per trial was 57.3 seconds with just four lines
- Overall 51% nursing productivity / efficiency improvement
- Greatly reduces stress of healthcare professional identifying primary / emergency medication line



#### **DSU Clinical Lab Source Data**

	Seconds	Seconds	Seconds	Mn/Sec	Percentage	Efficiency
Trial Number	Without	With	Improvement	Improvement	Time Savings	Improvement
Trial #1	213	101	112	1:52	52.58%	111%
Trial #2	200	148	52	0:52	26.00%	35%
Trial #3	89	61	28	0:28	31.46%	46%
Trial #4	139	93	46	0:46	33.09%	49%
Trial #5	120	110	10	0:15	8.33%	9%
Trial #6	190	149	41	0:56	21.58%	28%
Trial #7	118	87	31	0:31	26.27%	36%
Trial #8	228	89	139	2:19	60.96%	156%
Trial #9	188	144	44	0:44	23.40%	31%
Trial #10	160	110	50	0:50	31.25%	45%
Totals	1645	1092	553	9:33	33.62%	51%



MedLite ID, Inc. Atwood Innovation Plaza 453 S 600 E, St. George, UT 84770