



EMS Deployment Strategies: All ALS v. Tiered ...there's a question?

David Persse, MD

DISCLOSURE for Continuing Medical Education Purposes

- This activity has been planned and implemented in accordance with the accreditation requirements and policies of the *Accreditation Council for Continuing Medical Education (ACCME)* through the joint providership of White Coat Institute (d.b.a. *GetMyCME*) and the *Gathering of Eagles* alliance.
- The White Coat Institute is accredited by the ACCME to provide continuing medical education for physicians.
- None of the planners for this educational activity have relevant financial relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.



- Retrospective 12-Month Observational Study. Single Large System.
- Comparing Metropolitan Area v. Residential Periphery.



TABLE 1. Demographics by Deployment Type

	Uniform Response	Targeted Response	p – value	Odds Ratio (OR)	95% Confidence Interval
First Shocks Delivered by First Responder	10 (41.7%)	51 (28.2%*)	0.23	0.6	0.2 – 1.3
First Shocks Delivered by Paramedic	14 (58.3%)	123 (67.9%*)	0.36	1.5	0.6 – 3.6
Successful Intubation	22 (91.7%)	174 (99.4%**)	0.04	15.8	1.4 – 181.7
Successful IV	20 (83.3%)	178 (98.3%)	0.004	11.9	2.5 – 56.9



TABLE 2. Critical Intervention Rates by Deployment Type

	Uniform Response	Targeted Response	p – value	Odds Ratio (OR)	95% Confidence Interval
First Shocks Delivered by First Responder	10 (41.7%)	51 (28.2%*)	0.23	0.6	0.2 – 1.3
First Shocks Delivered by Paramedic	14 (58.3%)	123 (67.9%*)	0.36	1.5	0.6 – 3.6
Successful Intubation	22 (91.7%)	174 (99.4%**)	0.04	15.8	1.4 – 181.7
Successful IV	20 (83.3%)	178 (98.3%)	0.004	11.9	2.5 – 56.9

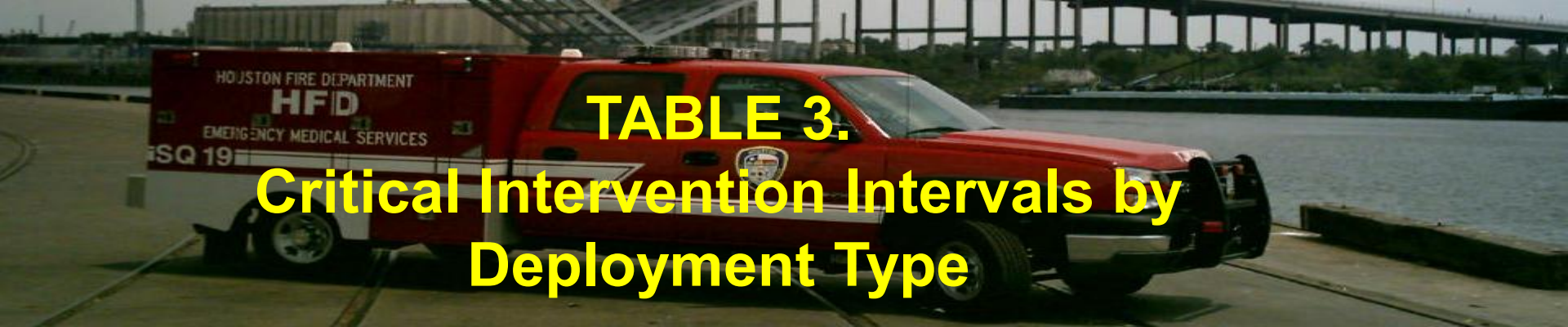


TABLE 3. Critical Intervention Intervals by Deployment Type

	Uniform Response	Targeted Response	p – value
Dispatch to IV Interval	18.8 min.	15.2 min.	0.02
Arrival to IV Interval	10.9 min.	7.8 min.	0.02
Dispatch to Intubation Interval	18.2 min.	14.4 min.	0.005
Arrival to Intubation Interval	9.8 min.	7.3 min.	0.03
Dispatch to Paramedic Shock Interval	13.3 min.	11.1 min.	0.29
Arrival to Paramedic Shock Interval	5.7 min.	4.8 min.	0.47



	Uniform Response	Targeted Response	p - value	Odds Ratio	95% CI
No. Resuscitation Attempts	24	181			
Return of Spontaneous Circulation	8 (33.3%)	101 (55.8%)	0.049	2.6	0.16 – 0.97
Survival to Hospital Admission	7 (29.2%)	92 (51.1%)*	0.05	2.5	0.16 – 1.01
Survival to Hospital Discharge	1 (4.2%)	43 (23.9%)*	0.03	7.2	0.02 – 1.06
Alive at One Year	0	27 (15.0%)*	0.05	8.8	0.5 – 148.6**