



Eastern PA EMS Council Year-end DAAM & Ketamine Review

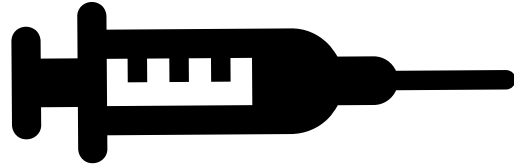
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Eastern Region PI Committee





Ketamine by the numbers





Ketamine
Administration

326

Total
Patients

137

Agitation

98

Pain

91

DAAM



3

Burns

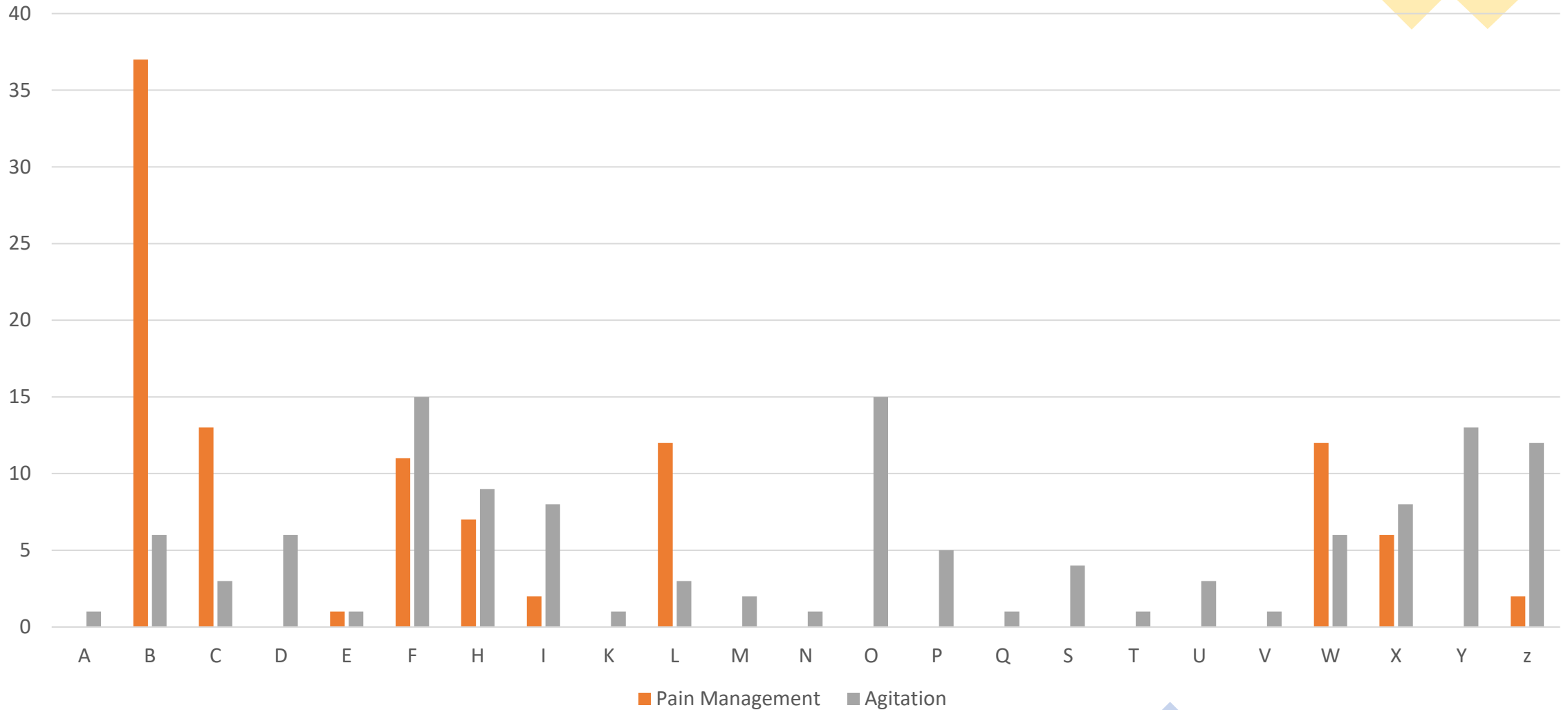
58

MSK Pain

37

Non-traumatic
Pain

Frequency of Ketamine Administration By Agency



Ketamine for the Agitated Patient

Route of Administration	Sedated	Unable to Sedate	Total	Success
Intramuscular	108	14	122	88.52%
Intravenous	9	--	9	100.00%
Total	117	14	131	89.31%

89.3%

Success Rate

Avg IMCRASS Reduction

3.15

45 patients with adverse events

ADVERSE EVENT RATE: 33%

13 (9.9%) patients needed addl sedation

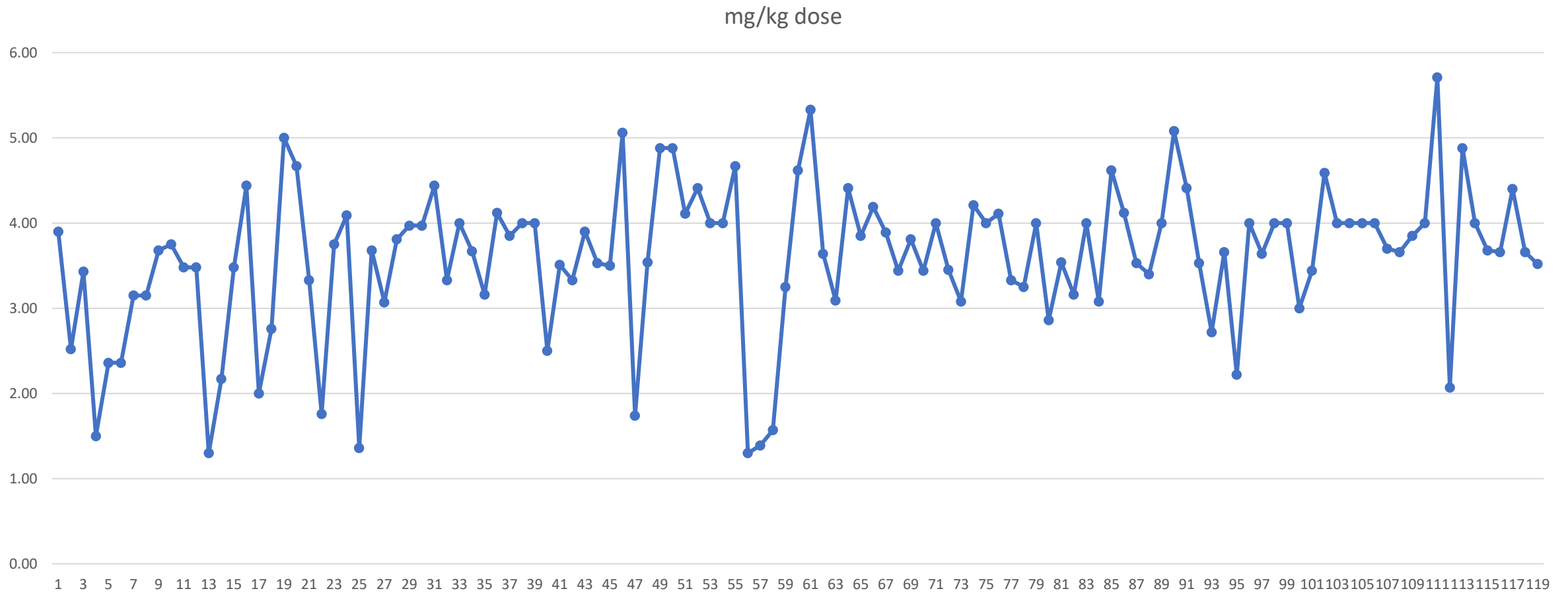
- IM Ketamine Avg Dose: 3.5 (n=10)
- IV Ketamine Avg Dose: 2.34 (n=3)
- 9/13 developed complications

Serious Adverse Events

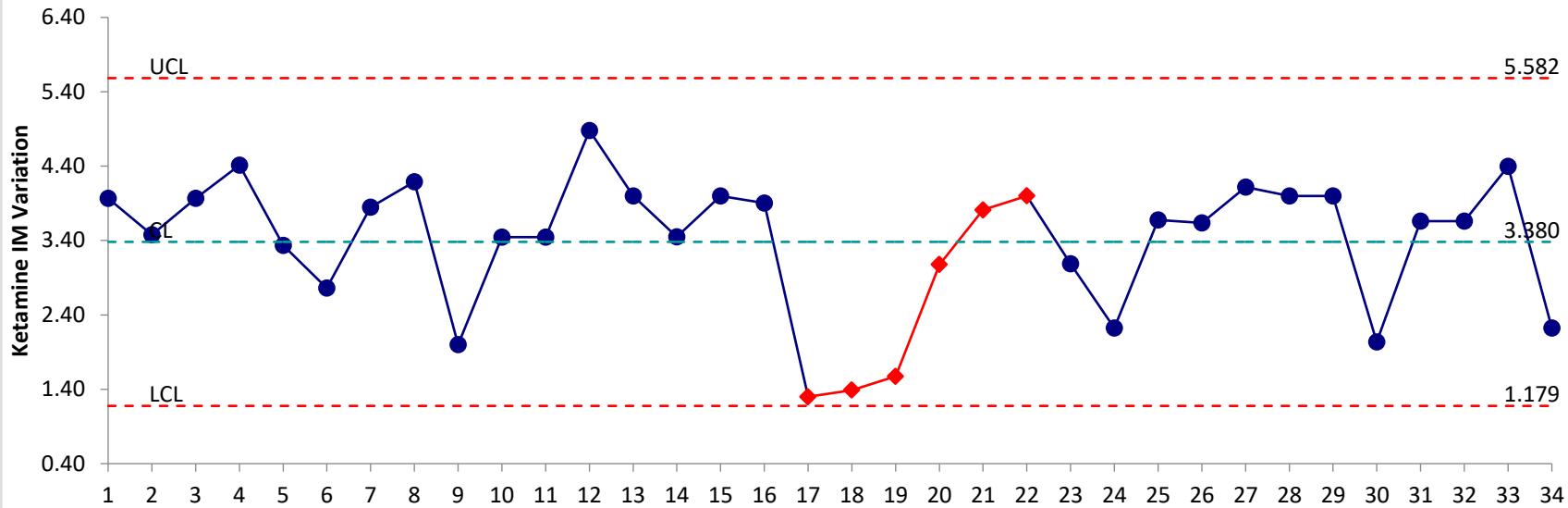
Hypotension	1
Any Airway Management (other than O2)	9
Intubation	5

3.82%

Ketamine Dose Variation

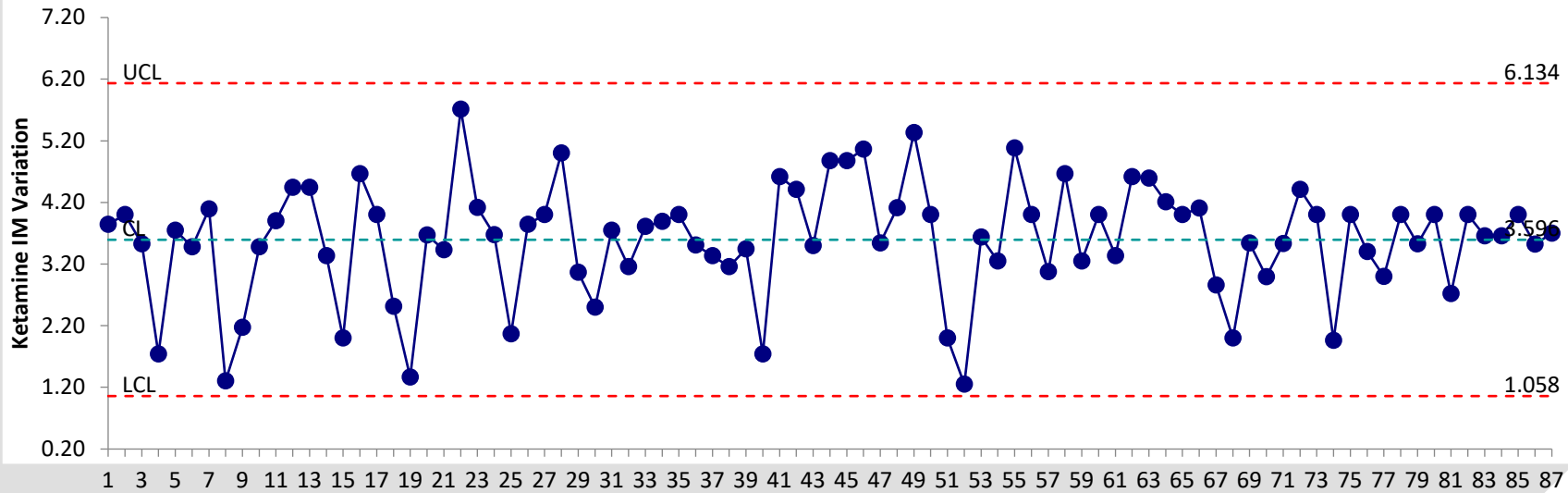


Ketamine IM Variation - X Chart



Ketamine
Dose
Variation

Ketamine IM Variation W Command - X Chart



Ketamine for Pain Management

Reason for Pain Management		
Traumatic Indications	Patients	Avg mg/kg dose
Not listed	10	0.38
Acute back pain	4	0.26
Extremity pain	19	0.46
Extremity pain, Acute thoracic pain	1	0.30
Suspected extremity fracture	24	0.31
Suspected extremity fracture, Acute back pain	1	0.31
Non-Traumatic Indications		
Not listed	21	0.29
Acute abdominal pain	11	0.30
Acute abdominal pain, Acute pelvic pain	1	0.30
Flank pain	5	0.29
Flank pain, Acute abdominal pain	2	0.30

98

Pain

72 with >2pt reduction in pain¹

85%

87

Documented Pain Scores

% Reduction in Pain

Median 63%

Average 64%



7 patients needed oxygen

1 episode of hypotensive

1 episode of hallucinations

¹Bijur PE, Latimer CT, Gallagher EJ. Validation of a verbally administered numerical rating scale of acute pain for use in the emergency department. Acad Emerg Med. 2003;10(4):390-392

Drug Assisted Airway Management

Medication	No	Yes	Total
Etomidate	6	20	26
Ketamine	10	45	55
Total	16	65	81

	No	Yes	Total
Etomidate	23%	77%	26
First Pass		65%	17
Ketamine	18%	82%	55
First Pass		65%	36
Grand Total	16	65	81

FPS = 65.43%

Drug Assisted Airway Management



Oxygen Sat <94%
at Induction 44/80



SBP <100 at
induction 11/80



Shock Index >0.8 26/80



Shock Index >1.0 11/80

Post Intubation Findings

28/80 with hypoxia O2 <94%

Avg 80%