

Foothills and Mile High RETAC Regional Medical Liaisons



PROJECT:	ANALYSIS OF CALL COMPLAINT AND PROVIDER PRIMARY IMPRESSION
TYPE:	DATA ANALYSIS
EFFECTIVE:	9/3/2014
REVIEWED:	ANNUALLY
APPROVED BY:	

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Objective

To perform an analysis of the call complaint (complaint reported by dispatch) and primary provider impression at a regional level.

What do we want to accomplish?

To acquire an understanding of what types of calls for service EMS agencies are responding to in the region.

Benefit

1. Protocol development and updating – Information from this analysis will be used to help determine need for additional protocol development and assist in updating any existing protocols.
2. Funding – Analysis of this information will be used to determine if funding needs for equipment, training, personnel, etc. are being met at the regional level.
3. Training – Provide guidance that training needs for specific call types are being met at the regional level.
4. State data comparison – Data from the agencies will be compared to the data submitted to the CEMIS database to look for ways to improve on the

Additional notes

This project is not intended to take a significant amount of the participating agencies time to complete. Contact the Regional EMS Coordinator if you have concerns regarding obtaining the data from your electronic patient care reporting system.

Evidence based sources

Call Complaint Distribution and Rate – Emergency Medical Services Performance Measures: Recommended Attributes and Indicators for System and Service Performance; NHTSA, December 2009

Regional Call Type Analysis

Performance Measure Name:	Performance Measure Question:
Call complaint count	What is the number of complaints reported by dispatch to which EMS responds in the region?
Call complaint distribution	What is the percentage of complaints reported by dispatch to which EMS responds in the region?
Provider provider's primary impression count	What is the number of primary provider's impression to which EMS responds?
Provider provider's primary impression distribution	What is the percentage of primary provider's impression to which EMS responds?
Comparison of complaint reported by dispatch and provider's primary impression	What is the count of actual primary provider's impression compared to the complaint reported by dispatch

EVIDENCE BASED SOURCE: [Emergency Medical Services Performance Measures: Recommended Attributes and Indicators for System and Service Performance; NHTSA, December 2009. 17.1 \(CD\) and 17.2 \(CD\)](#)

DATA FIELDS

NEMESIS SECTION	NEMESIS v2DATA	NEMESIS DATA TITLE	HIGH PLAINS REPORT	HIGH PLAINS DATA TITLE	ZOLL DATA REPORT	ZOLL DATA TITLE
E03: Unit/Call Information	E03_01	Complaint reported by dispatch	Dispatch	Complaint reported by dispatch		
E09: Situation	E09_15	Provider's primary impression	Patient Care	Provider's primary impression		

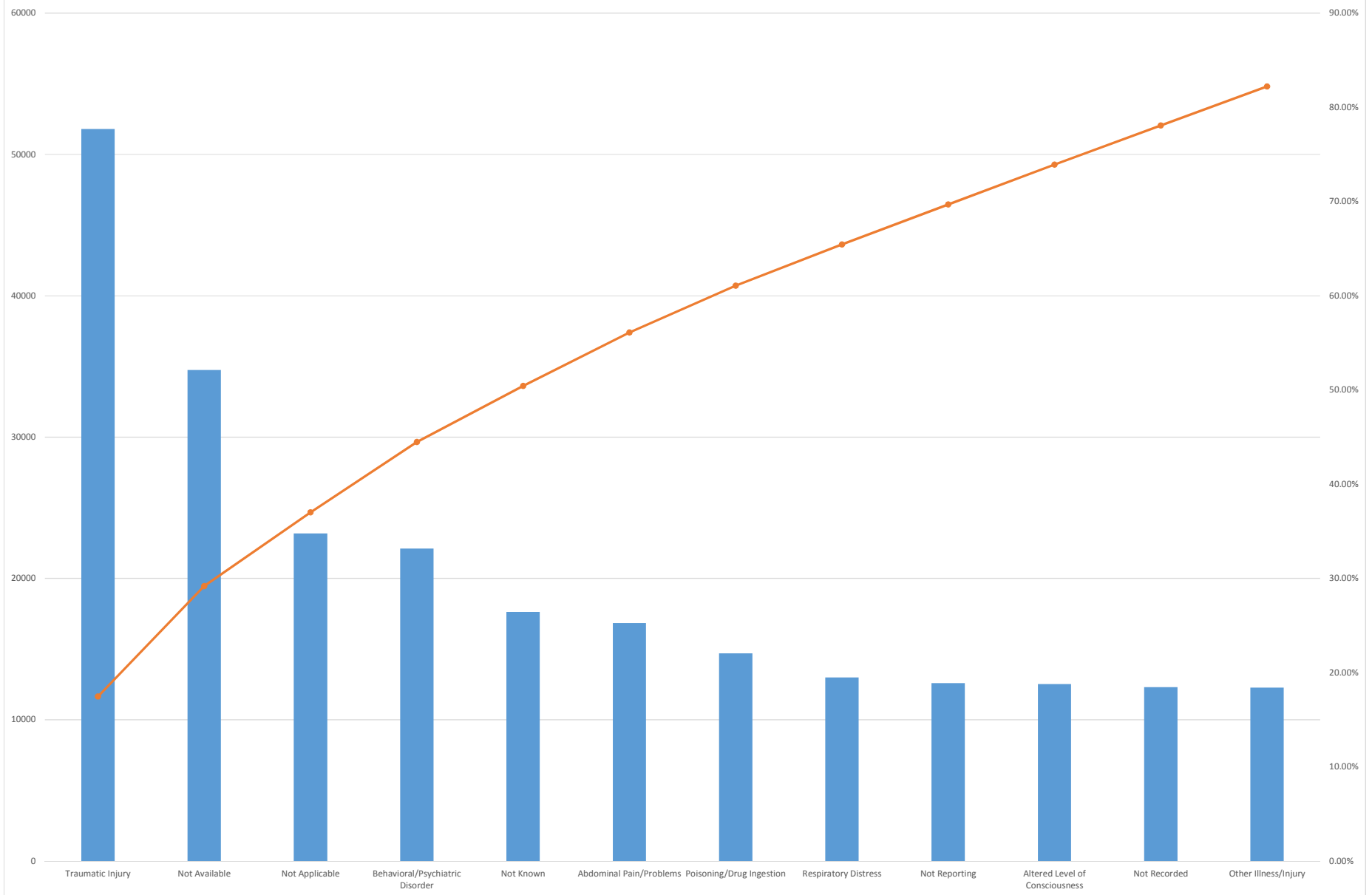
CRITERIA

DATA TITLE	INCLUSION CRITERIA	EXCLUSION CRITERIA
Unique identifier	Unique number that links complaint reported by dispatch to the provider's primary problem	Cannot be an identifier that can be linked back to a specific agency call or patient
Complaint reported by dispatch	All data included	None
Provider's primary impression	All data included	None

CALCULATIONS

DATA TITLE	Calculation
Call complaint count	Count only; no calculation
Call complaint distribution	Complaint reported by dispatch count ÷ total count = Percentage of complaint reported by dispatch
Provider's primary impression	Count only; no calculation
Provider's primary impression distribution	Provider's primary impression count ÷ total count = Percentage of provider's primary impression
Comparison of complaint reported by dispatch and provider's primary impression	Count of provider's primary impression per complaint reported by dispatch

Foothills and Mile High RETAC Region
Primary Provider Impression 2013
n=296438



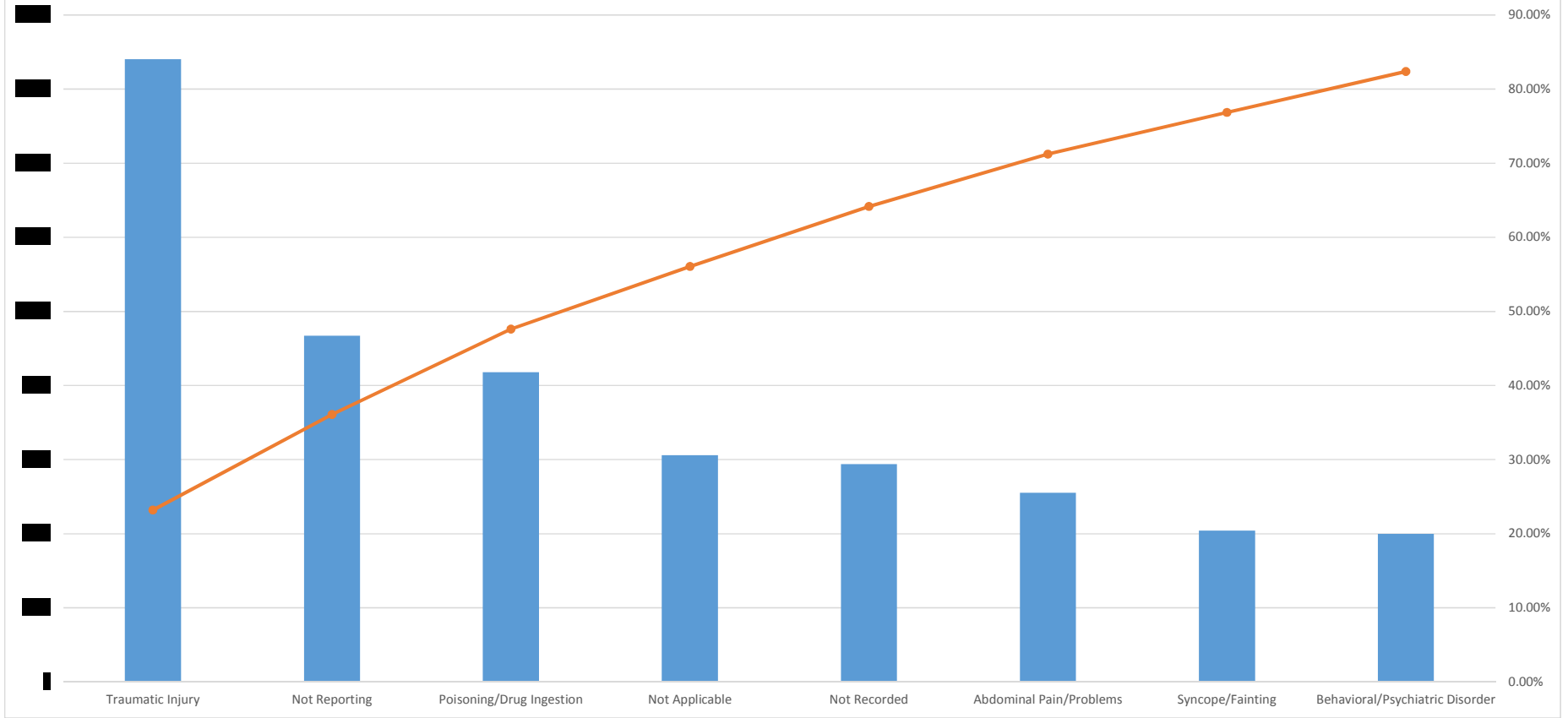
Foothills and Mile High RETAC Region
Primary Provider Impression
2013

Provider Impression	# of Times	% of Times	Cum Per
Traumatic Injury	51800	17.47%	17.47%
Not Available	34752	11.72%	29.20%
Not Applicable	23182	7.82%	37.02%
Behavioral/Psychiatric Disorder	22117	7.46%	44.48%
Not Known	17633	5.95%	50.43%
Abdominal Pain/Problems	16841	5.68%	56.11%
Poisoning/Drug Ingestion	14699	4.96%	61.07%
Respiratory Distress	13000	4.39%	65.45%
Not Reporting	12590	4.25%	69.70%
Altered Level of Consciousness	12532	4.23%	73.93%
Not Recorded	12299	4.15%	78.08%
Other Illness/Injury	12278	4.14%	82.22%
Chest Pain/Discomfort	10973	3.70%	85.92%
Syncope/Fainting	8831	2.98%	88.90%
Seizure	7941	2.68%	91.58%
Diabetic Symptoms (Hypoglycemia)	2876	0.97%	92.55%
Stroke/CVA	2635	0.89%	93.44%
Cardiac Rhythm Disturbance	2481	0.84%	94.27%
Cardiac Arrest	2055	0.69%	94.97%
Allergic Reaction	1697	0.57%	95.54%
Unknown	1345	0.45%	95.99%
Other Cardiovascular Problem	1247	0.42%	96.41%
Pregnancy/OB Delivery	1242	0.42%	96.83%
Pain	971	0.33%	97.16%
Alcohol Intoxication	825	0.28%	97.44%
Obvious Death	714	0.24%	97.68%
Airway Obstruction	551	0.19%	97.86%
No Apparent Illness/Injury	547	0.18%	98.05%
Hypovolemia/Shock	451	0.15%	98.20%
Other	445	0.15%	98.35%
Nausea/Vomiting (Unknown Etiology)	397	0.13%	98.49%
Other Abdominal/GI Problem	350	0.12%	98.60%
Weakness	344	0.12%	98.72%
Vaginal Hemorrhage	316	0.11%	98.83%
Back Pain (Non-Traumatic)	306	0.10%	98.93%
Respiratory Arrest	277	0.09%	99.02%
Hyperthermia	222	0.07%	99.10%
Hypothermia	204	0.07%	99.17%
COPD (Emphysema/Chronic Bronchitis)	175	0.06%	99.23%
Fever	148	0.05%	99.28%
G.I. Bleed	148	0.05%	99.32%
Stings/Venomous Bites	130	0.04%	99.37%
Other Endocrine/Metabolic Problem	127	0.04%	99.41%
Headache	123	0.04%	99.45%

Foothills and Mile High RETAC Region
 Primary Provider Impression
 2013

Inhalation Injury (Toxic Gas)	123	0.04%	99.49%
Other OB/Gyn	113	0.04%	99.53%
Sexual Assault/Rape	103	0.03%	99.57%
Diabetic Hyperglycemia	89	0.03%	99.60%
Epistaxis (Non-Traumatic)	88	0.03%	99.63%
Unconscious	83	0.03%	99.66%
Diarrhea	82	0.03%	99.68%
Asthma	79	0.03%	99.71%
ETOH Abuse	77	0.03%	99.74%
General Malaise	75	0.03%	99.76%
Unknown Problem	73	0.02%	99.79%
GU-Urinary Problem	64	0.02%	99.81%
Bowel Obstruction	60	0.02%	99.83%
CHF (Congestive Heart Failure)	57	0.02%	99.85%
Dehydration	57	0.02%	99.87%
TIA (Transient Ischemic Attack)	56	0.02%	99.88%
Hypertension	48	0.02%	99.90%
OB/Delivery	46	0.02%	99.92%
Hypotension	44	0.01%	99.93%
Substance/Drug Abuse	35	0.01%	99.94%
Cancer	25	0.01%	99.95%
Other CNS Problem	22	0.01%	99.96%
Patient Assist Only	18	0.01%	99.96%
Overdose - ETOH	17	0.01%	99.97%
Toxic Exposure	14	0.00%	99.98%
Altitude Sickness	12	0.00%	99.98%
Electrocution	12	0.00%	99.98%
Heat Exhaustion/Stroke	12	0.00%	99.99%
Sepsis	12	0.00%	99.99%
Other GU Problems	10	0.00%	99.99%
Migraine	8	0.00%	100.00%
Smoke Inhalation	7	0.00%	100.00%
Total	296438		

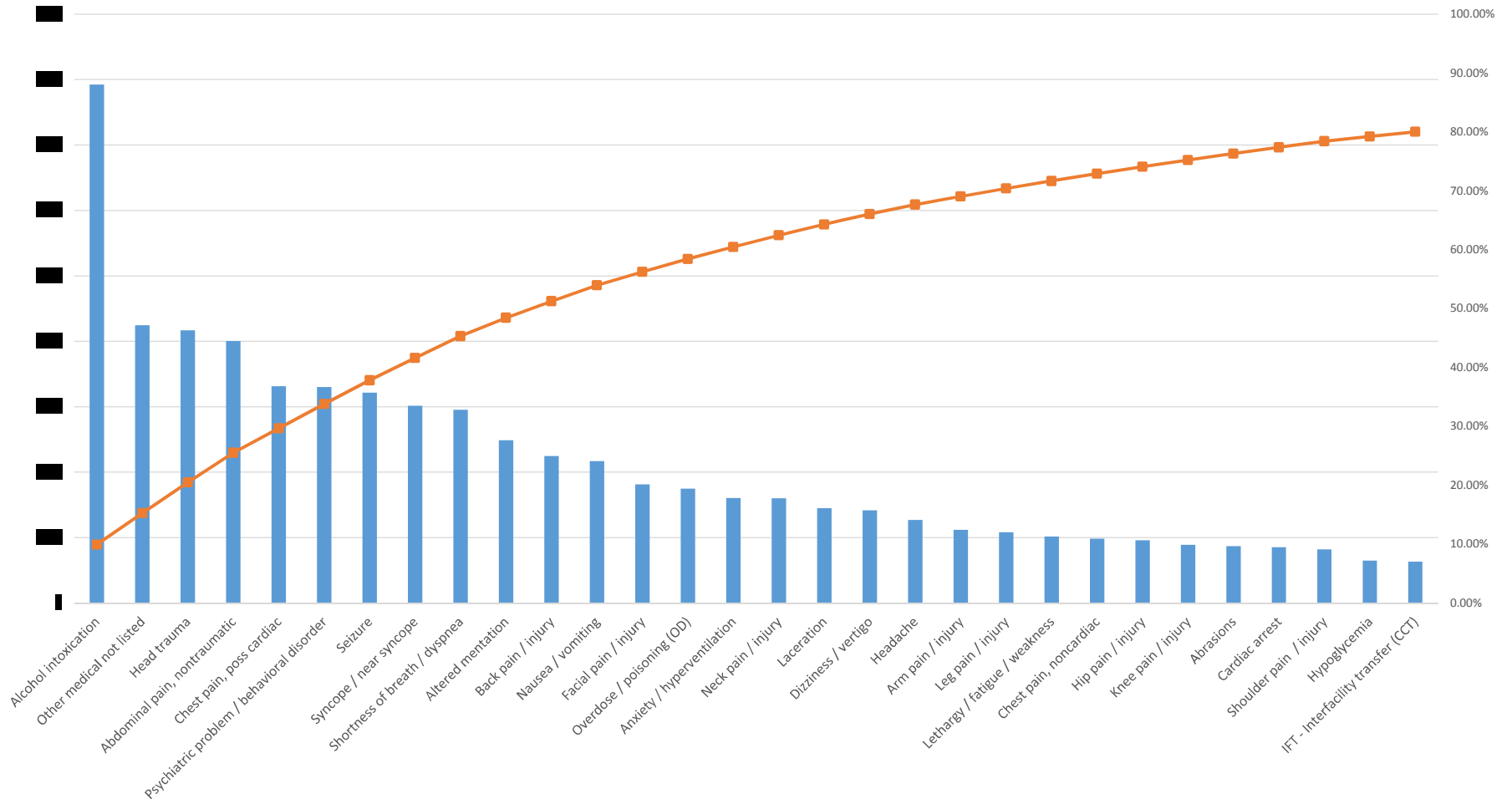
Agency A
From Colorado State Data
2013



Agency A
From Colorado State Submitted Data
2013

Provider Impression	# of Times	% of Times	Cumulative %
Traumatic Injury		23.19%	23.19%
Not Reporting		12.89%	36.08%
Poisoning/Drug Ingestion		11.53%	47.61%
Not Applicable		8.45%	56.06%
Not Recorded		8.11%	64.17%
Abdominal Pain/Problems		7.05%	71.22%
Syncope/Fainting		5.64%	76.86%
Behavioral/Psychiatric Disorder		5.52%	82.38%
Respiratory Distress		3.82%	86.20%
Seizure		3.29%	89.49%
Chest Pain/Discomfort		3.15%	92.64%
Altered Level of Consciousness		2.61%	95.25%
Cardiac Arrest		0.99%	96.24%
Diabetic Symptoms (Hypoglycemia)		0.85%	97.09%
Allergic Reaction		0.81%	97.90%
Stroke/CVA		0.58%	98.48%
Pregnancy/OB Delivery		0.46%	98.94%
Cardiac Rhythm Disturbance		0.45%	99.39%
Vaginal Hemorrhage		0.18%	99.57%
Airway Obstruction		0.14%	99.71%
Hypothermia		0.07%	99.78%
Inhalation Injury (Toxic Gas)		0.06%	99.84%
Sexual Assault/Rape		0.06%	99.90%
Stings/Venomous Bites		0.04%	99.94%
Respiratory Arrest		0.03%	99.97%
Hyperthermia		0.01%	99.98%
Electrocution		0.01%	99.99%
Hypovolemia/Shock		0.00%	99.99%
Unknown		0.00%	99.99%
Total			

Agency A
Primary Provider Impression 2013



Agency A
Primary Patient Problem
2013

Primary Patient Problem (Provider's Impression)	Count	Percent	Cumulative
Alcohol intoxication		9.94%	9.94%
Other medical not listed		5.33%	15.26%
Head trauma		5.23%	20.49%
Abdominal pain, nontraumatic		5.02%	25.51%
Chest pain, poss cardiac		4.16%	29.67%
Psychiatric problem / behavioral disorder		4.14%	33.81%
Seizure		4.03%	37.84%
Syncope / near syncope		3.78%	41.62%
Shortness of breath / dyspnea		3.70%	45.32%
Altered mentation		3.12%	48.44%
Back pain / injury		2.82%	51.26%
Nausea / vomiting		2.72%	53.98%
Facial pain / injury		2.28%	56.26%
Overdose / poisoning (OD)		2.19%	58.45%
Anxiety / hyperventilation		2.01%	60.46%
Neck pain / injury		2.01%	62.47%
Laceration		1.82%	64.29%
Dizziness / vertigo		1.78%	66.06%
Headache		1.59%	67.65%
Arm pain / injury		1.40%	69.05%
Leg pain / injury		1.36%	70.41%
Lethargy / fatigue / weakness		1.27%	71.68%
Chest pain, noncardiac		1.24%	72.92%
Hip pain / injury		1.20%	74.12%
Knee pain / injury		1.12%	75.24%
Abrasions		1.09%	76.32%
Cardiac arrest		1.07%	77.39%
Shoulder pain / injury		1.03%	78.42%
Hypoglycemia		0.81%	79.23%
IFT - Interfacility transfer (CCT)		0.79%	80.02%
Chest injury		0.76%	80.78%
CVA / TIA / stroke		0.74%	81.53%
Ankle pain / injury		0.71%	82.23%
Flu-like symptoms		0.64%	82.88%
Hand pain / injury		0.61%	83.49%
Fever		0.56%	84.04%
Flank pain / injury		0.55%	84.59%
Foot pain / injury		0.53%	85.12%
Allergic reaction		0.51%	85.63%
GI bleed		0.48%	86.11%
Epistaxis / nosebleed		0.47%	86.58%
Exacerbation of preexisting condition		0.45%	87.04%
Alcohol withdrawal		0.44%	87.48%
Drug reaction		0.44%	87.92%
Hyperglycemia		0.43%	88.35%
Pain, nontraumatic / chronic		0.42%	88.78%
Cough		0.41%	89.19%
Hypertension (HTN)		0.40%	89.59%
Asthma		0.40%	89.99%
Abdominal trauma		0.38%	90.37%
Bleeding		0.35%	90.72%

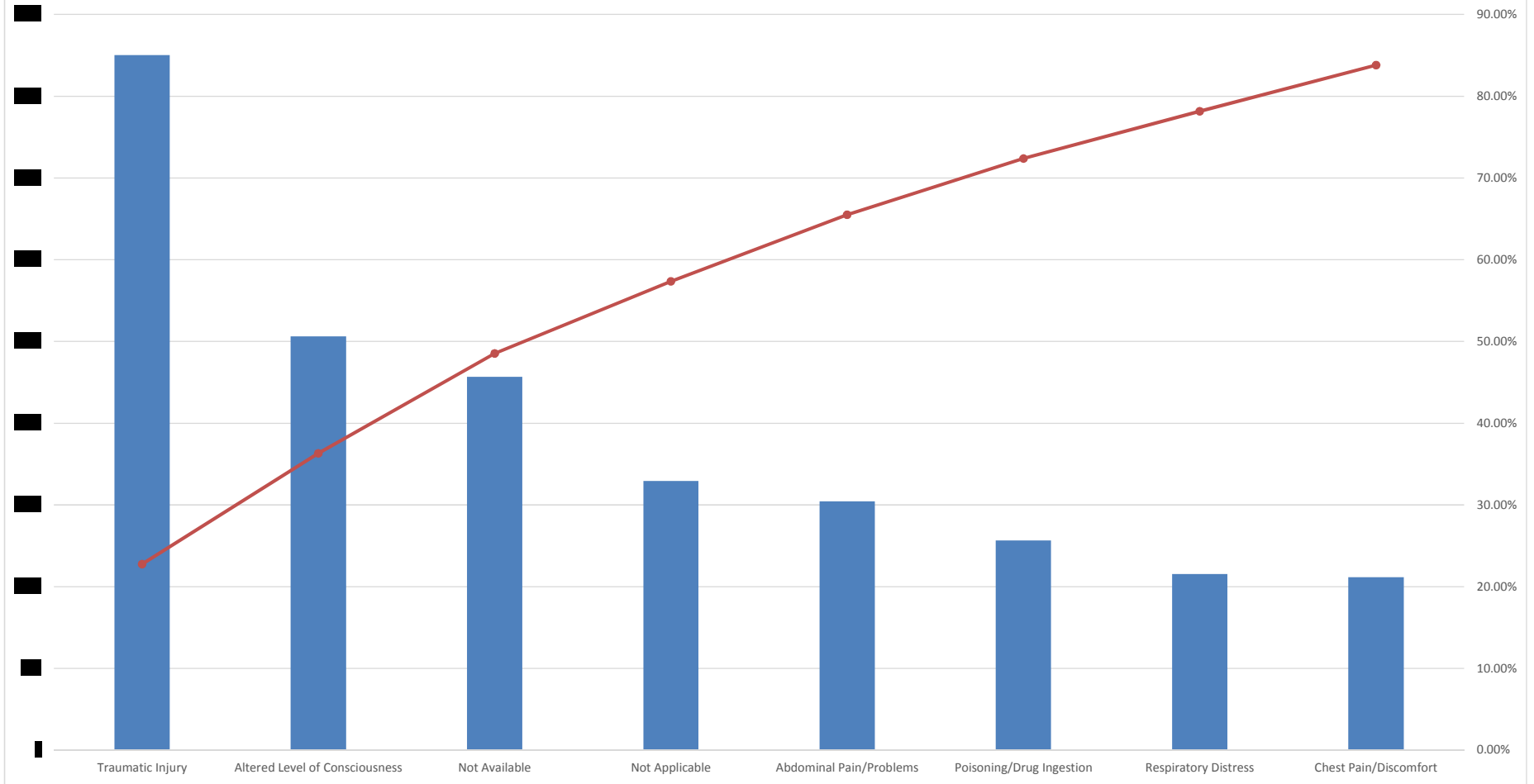
Agency A
Primary Patient Problem
2013

Unconsciousness	0.35%	91.08%
Arrhythmia / cardiac disturbance	0.34%	91.42%
Diabetic problem / complications	0.32%	91.74%
COPD Exacerbation	0.30%	92.04%
Pneumonia	0.30%	92.33%
Failure to thrive	0.29%	92.63%
Eye pain / injury	0.29%	92.91%
Palpitations	0.27%	93.18%
Hypotension	0.26%	93.44%
Pregnancy complications, other	0.25%	93.70%
Hematoma	0.25%	93.95%
Injury, other location not listed	0.24%	94.19%
Diarrhea	0.23%	94.42%
Multi-system trauma	0.22%	94.64%
Combative behavior	0.22%	94.86%
Airway obstruction / choking	0.21%	95.07%
Finger pain / injury	0.20%	95.27%
Labor / threatened premature labor	0.20%	95.46%
Stab wound	0.19%	95.66%
Cellulitis / infection / abscess	0.19%	95.85%
Kidney stone	0.19%	96.04%
Vaginal bleeding	0.18%	96.22%
Illness	0.17%	96.39%
Dehydration	0.16%	96.56%
Fracture	0.15%	96.71%
Edema	0.15%	96.86%
Gunshot wound (GSW)	0.15%	97.01%
Epigastric pain	0.15%	97.16%
Burns	0.15%	97.30%
Genitourinary problem, other	0.14%	97.44%
Jaw pain / injury	0.11%	97.55%
Sepsis	0.10%	97.65%
Genitourinary pain / injury	0.10%	97.75%
Extremity numbness	0.10%	97.84%
Sexual assault	0.09%	97.93%
Frostbite / cold injury	0.09%	98.02%
Cardiac alert	0.08%	98.10%
Rash	0.08%	98.18%
Pulmonary embolism (PE)	0.07%	98.25%
Child birth, prehospital	0.07%	98.32%
ALTE	0.07%	98.39%
Congestive heart failure	0.07%	98.46%
Buttock pain / injury	0.06%	98.52%
Dislocation	0.06%	98.59%
Bowel obstruction	0.06%	98.65%
Contusion / bruise	0.06%	98.71%
Chronic / terminal illness	0.06%	98.77%
Hematemesis	0.06%	98.83%
Foreign body	0.05%	98.88%
Bradycardia	0.05%	98.93%
Dental pain / injury	0.05%	98.98%
Hematuria	0.05%	99.03%

Agency A
Primary Patient Problem
2013

Hypothermia	0.05%	99.07%
Miscarriage (SAB)	0.05%	99.12%
Bronchitis	0.05%	99.17%
Penetrating trauma, other	0.05%	99.21%
Sting / venomous bite	0.05%	99.26%
CO poisoning / smoke inhalation	0.04%	99.30%
Excited delerium	0.04%	99.34%
Gynecological problem, other	0.04%	99.38%
Renal failure	0.03%	99.41%
DVT / blood clot	0.03%	99.45%
Anaphylaxis	0.03%	99.48%
Croup	0.03%	99.51%
Ascites	0.03%	99.54%
Myocardial infarction, acute	0.03%	99.57%
Hyperthermia / heat emergency	0.03%	99.60%
Apnea / respiratory arrest	0.03%	99.62%
Hanging	0.03%	99.65%
Liver failure	0.03%	99.68%
Diaphoresis	0.02%	99.70%
Cancer	0.02%	99.72%
Dysuria	0.02%	99.74%
Pulmonary edema	0.02%	99.76%
Spinal pain / injury	0.02%	99.78%
Electrolyte problem	0.02%	99.80%
Newborn infant care	0.02%	99.81%
Hemoptysis	0.02%	99.83%
Appendicitis	0.01%	99.84%
Drowning / near drowning	0.01%	99.86%
Non-accidental trauma (NAT)	0.01%	99.87%
Aspiration	0.01%	99.88%
Amputation	0.01%	99.89%
Cyanosis	0.01%	99.90%
Eclampsia / pre-eclampsia	0.01%	99.91%
HazMat exposure	0.01%	99.92%
Parkinson's related problem	0.01%	99.93%
Abandoned newborn	0.01%	99.93%
Ectopic pregnancy	0.01%	99.94%
Meningitis	0.01%	99.95%
Shock, medical	0.01%	99.95%
Aortic aneurysm	0.01%	99.96%
Crush injury	0.01%	99.96%
Electrical injury	0.01%	99.97%
Jaundice	0.01%	99.97%
Pallor	0.01%	99.98%
Pneumothorax / tension pneumothorax	0.01%	99.98%
Quadriplegia / paraplegia / paralysis	0.01%	99.99%
Hepatitis	0.00%	99.99%
Epiglottitis	0.00%	99.99%
Intracranial bleeding	0.00%	100.00%
Lightning strike	0.00%	100.00%
DUI blood draw	0.00%	100.00%
Total		

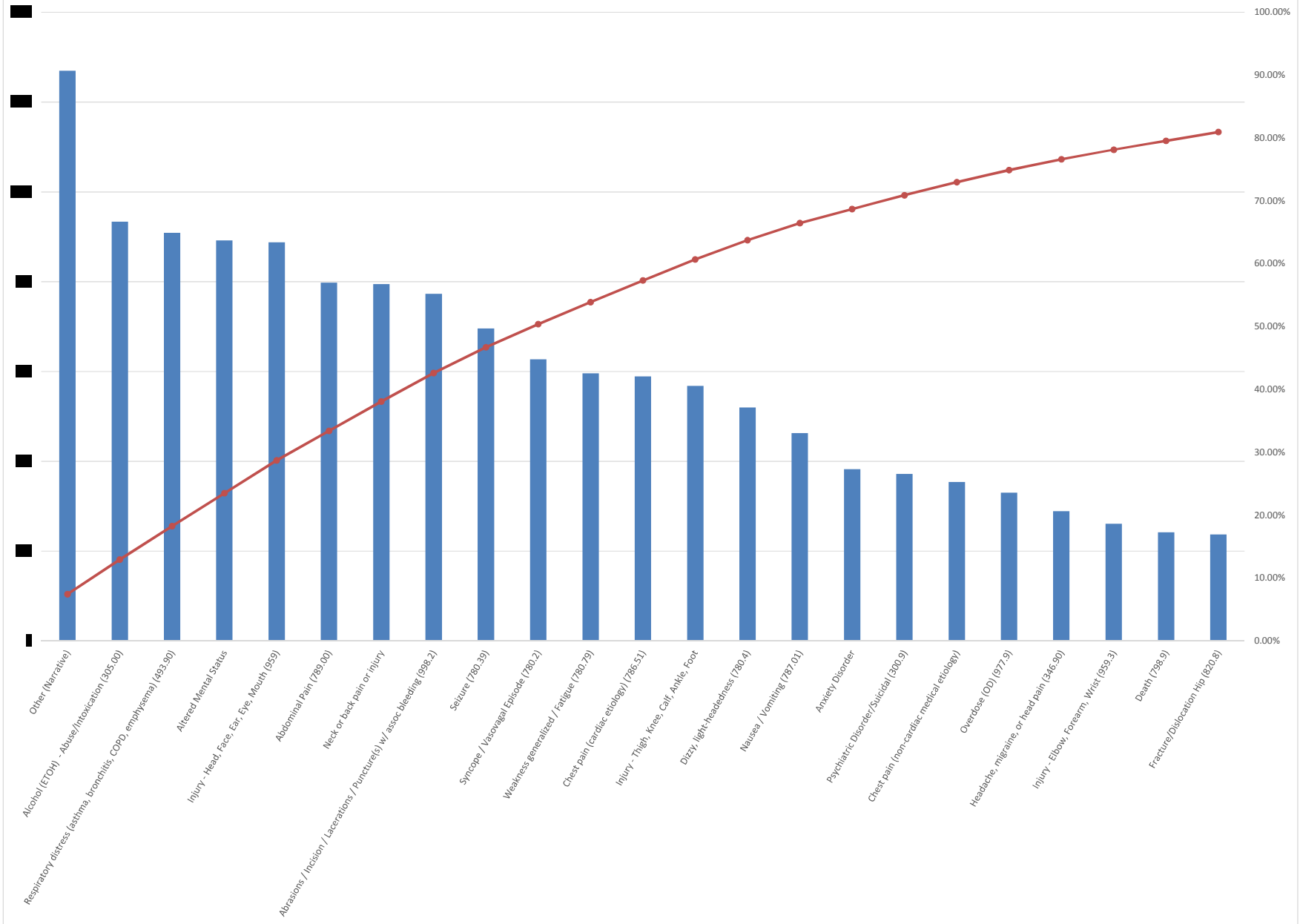
Agency B
From Colorado State Data
2013



Agency B
From Colorado State Data
2013

Provider Impression	# of Times	% of Times	Cumulative %
Traumatic Injury		22.76%	22.76%
Altered Level of Consciousness		13.56%	36.32%
Not Available		12.22%	48.54%
Not Applicable		8.82%	57.36%
Abdominal Pain/Problems		8.15%	65.51%
Poisoning/Drug Ingestion		6.87%	72.38%
Respiratory Distress		5.77%	78.15%
Chest Pain/Discomfort		5.66%	83.81%
Behavioral/Psychiatric Disorder		4.50%	88.31%
Seizure		3.99%	92.30%
Diabetic Symptoms (Hypoglycemia)		1.42%	93.72%
Obvious Death		1.30%	95.02%
Stroke/CVA		1.14%	96.16%
Cardiac Rhythm Disturbance		0.83%	96.99%
Allergic Reaction		0.62%	97.61%
Hyperthermia		0.56%	98.17%
Cardiac Arrest		0.56%	98.73%
Hypovolemia/Shock		0.46%	99.19%
Pregnancy/OB Delivery		0.22%	99.41%
Stings/Venomous Bites		0.17%	99.58%
Inhalation Injury (Toxic Gas)		0.14%	99.72%
Vaginal Hemorrhage		0.14%	99.86%
Respiratory Arrest		0.07%	99.93%
Hypothermia		0.04%	99.97%
Not Recorded		0.01%	99.98%
Unknown		0.00%	99.98%
Total		100%	

Agency B
 Primary Provider Impression
 2013



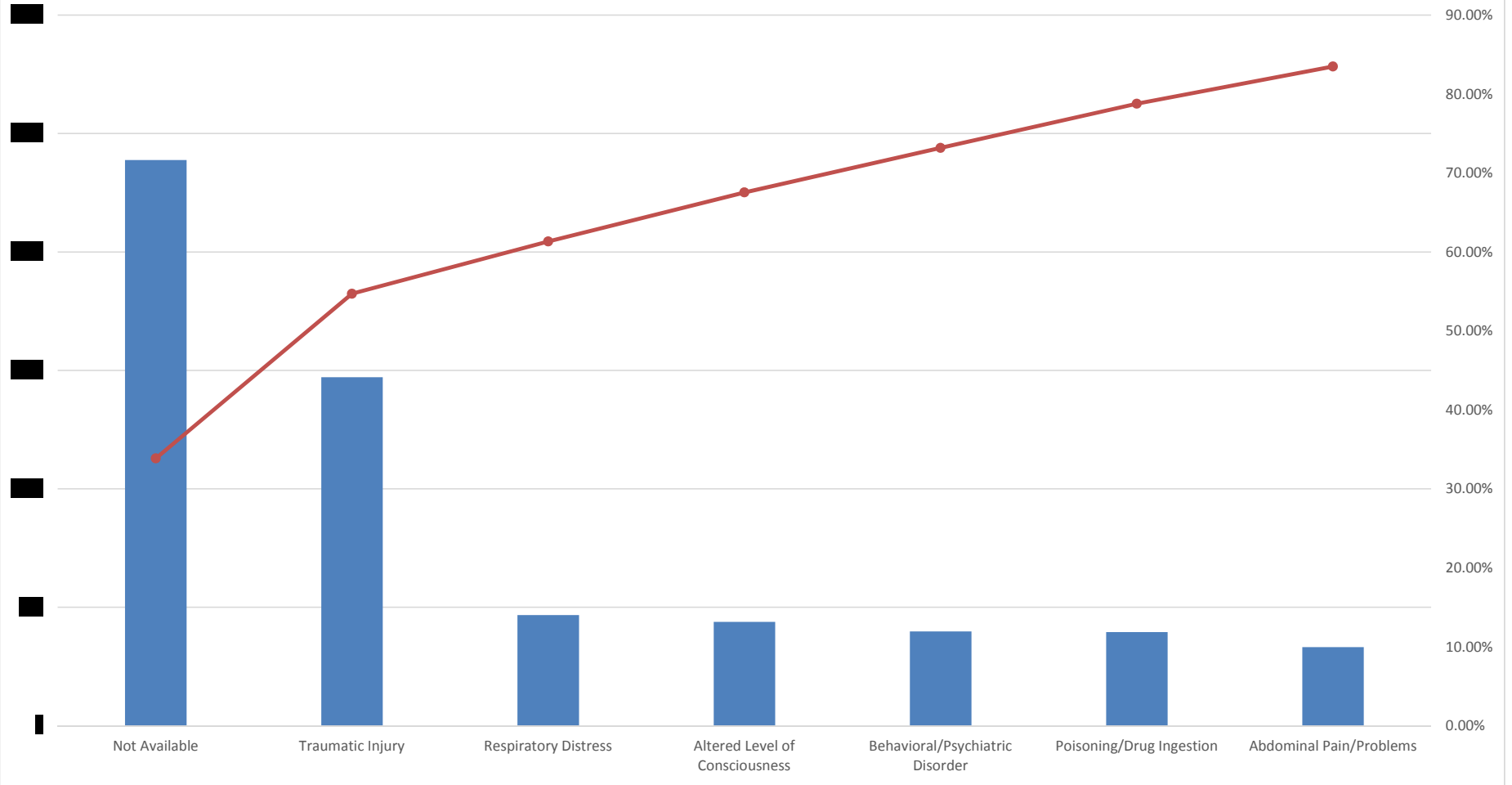
Agency B
Primary Patient Problem
2013

Primary Patient Problem (Provider's Impression)	Count	Percent	Cumulative
Other (Narrative)		7.46%	7.46%
Alcohol (ETOH) - Abuse/Intoxication (305.00)		5.48%	12.94%
Respiratory distress (asthma, bronchitis, COPD, emphysema) (493.90)		5.34%	18.28%
Altered Mental Status		5.24%	23.52%
Injury - Head, Face, Ear, Eye, Mouth (959)		5.21%	28.73%
Abdominal Pain (789.00)		4.69%	33.42%
Neck or back pain or injury		4.67%	38.09%
Abrasions / Incision / Lacerations / Puncture(s) w/ assoc bleeding (998.2)		4.54%	42.62%
Seizure (780.39)		4.09%	46.71%
Syncope / Vasovagal Episode (780.2)		3.68%	50.39%
Weakness generalized / Fatigue (780.79)		3.50%	53.89%
Chest pain (cardiac etiology) (786.51)		3.46%	57.35%
Injury - Thigh, Knee, Calf, Ankle, Foot		3.34%	60.69%
Dizzy, light-headedness (780.4)		3.05%	63.74%
Nausea / Vomiting (787.01)		2.72%	66.46%
Anxiety Disorder		2.25%	68.71%
Psychiatric Disorder/Suicidal (300.9)		2.18%	70.89%
Chest pain (non-cardiac medical etiology)		2.08%	72.97%
Overdose (OD) (977.9)		1.94%	74.91%
Headache, migraine, or head pain (346.90)		1.70%	76.61%
Injury - Elbow, Forearm, Wrist (959.3)		1.53%	78.14%
Death (798.9)		1.42%	79.56%
Fracture/Dislocation Hip (820.8)		1.39%	80.95%
CVA or TIA (435.9)		1.25%	82.20%
Unconsciousness / Semiconsciousness (780.09)		1.20%	83.40%
Hypoglycemia (251.2)		1.16%	84.56%
Closed head injury, Concussion (850.9)		1.07%	85.63%
Epistaxis (784.7)		0.87%	86.50%
Injury - Chest, Thorax, Thoracic (911.8)		0.79%	87.29%
Anaphylaxis, Allergic reaction		0.68%	87.97%
Chest pain (traumatic)		0.68%	88.65%
Gastrointestinal (GI) bleed (578.9)		0.63%	89.28%
Cardiac arrest (Medical) (427.5)		0.57%	89.85%
Fever (not seizure) (780.6)		0.57%	90.42%
Fracture/Dislocation Shoulder girdle		0.56%	90.97%
Choking or airway obstruction (933.1)		0.55%	91.52%
Respiratory distress (cardiac, CHF) (518.4)		0.48%	92.00%
Suicidal Attempt or Tendencies (300.9)		0.45%	92.45%
Genital-urinary (kidney stones, bladder infection, etc)		0.42%	92.87%
Fracture/Dislocation Leg/Foot (835.00)		0.41%	93.28%
Fracture/Dislocation Arm/Hand (818.10)		0.41%	93.69%
Hyperglycemia, DKA (790.6)		0.40%	94.09%
Cardiac Dysrhythmia (427.9)		0.37%	94.46%
Influenza (487.1)		0.31%	94.77%
Diarrhea (787.9)		0.31%	95.08%
Spasms - Back (724.8)		0.30%	95.38%
Fracture - Leg (any bone) (828.1)		0.29%	95.67%
Seizure - Febrile (780.3)		0.29%	95.97%
Numbness / Parasthesia (782.0)		0.28%	96.25%
Sepsis or Septic Shock (995.9)		0.25%	96.49%
Hypotension / Shock (458.9)		0.23%	96.72%
Pneumonia (486)		0.22%	96.95%
Abdominal trauma		0.21%	97.15%
Fracture Rib(s) / Clavicle - Flail Chest (807.00)		0.19%	97.35%
Dehydration (276.5)		0.19%	97.54%
Alcohol Withdrawl (291.8)		0.19%	97.73%
Bite or sting (human, animal, insect - non-allergic reaction)		0.18%	97.91%
Infection or ulcers (localized)		0.18%	98.09%

Agency B
Primary Patient Problem
2013

Primary Patient Problem (Provider's Impression)	Count	Percent	Cumulative
Labor / Delivery / Birth (644.20)		0.16%	98.26%
Hyperventilation (786.01)		0.16%	98.42%
Vaginal bleeding (all etiologies) (623.8)		0.15%	98.57%
Bowel obstruction (560.9)		0.14%	98.71%
Burns		0.13%	98.84%
Carbon Monoxide Poisoning (986)		0.10%	98.94%
Poisoning - Non-Food		0.09%	99.04%
Respiratory Arrest (799.1)		0.08%	99.12%
Miscarriage (SAB) (634.9)		0.08%	99.20%
Fracture Pelvis (808.8)		0.08%	99.28%
Visual Problems - Blurred (368.8)		0.07%	99.35%
Congestive Heart Failure (CHF) (428.0)		0.06%	99.41%
Alzheimer's Disease (331.0)		0.05%	99.47%
Inhalation - Gas, fumes, smoke or vapors (987.9)		0.05%	99.52%
Respiratory distress (traumatic)		0.05%	99.57%
Hypothermia / cold related injury		0.05%	99.61%
Hyperthermia / Heat related illness (992)		0.05%	99.66%
Fracture - Mandible/Maxilla/Nasal bones (802)		0.04%	99.70%
Foreign Body - Eye(s) (930.8)		0.04%	99.74%
Hemoptysis (coughing blood) (786.3)		0.04%	99.77%
Sore - Skin unspecified		0.04%	99.81%
Cardiac Arrest (Trauma)		0.03%	99.84%
Hypovolemia (276.5)		0.03%	99.86%
Poisoning - Food (005.9)		0.02%	99.89%
Abdominal Aortic Aneurism (AAA) (441.4)		0.02%	99.91%
Amputation		0.02%	99.94%
Croup or epiglottitis		0.02%	99.96%
AIDS (042)		0.01%	99.97%
Drowning or near drowning		0.01%	99.98%
Lightning - struck by (994.0)		0.01%	99.99%
Meningitis (322.9)		0.01%	99.99%
Appendicitis, acute		0.01%	100.00%
Total			

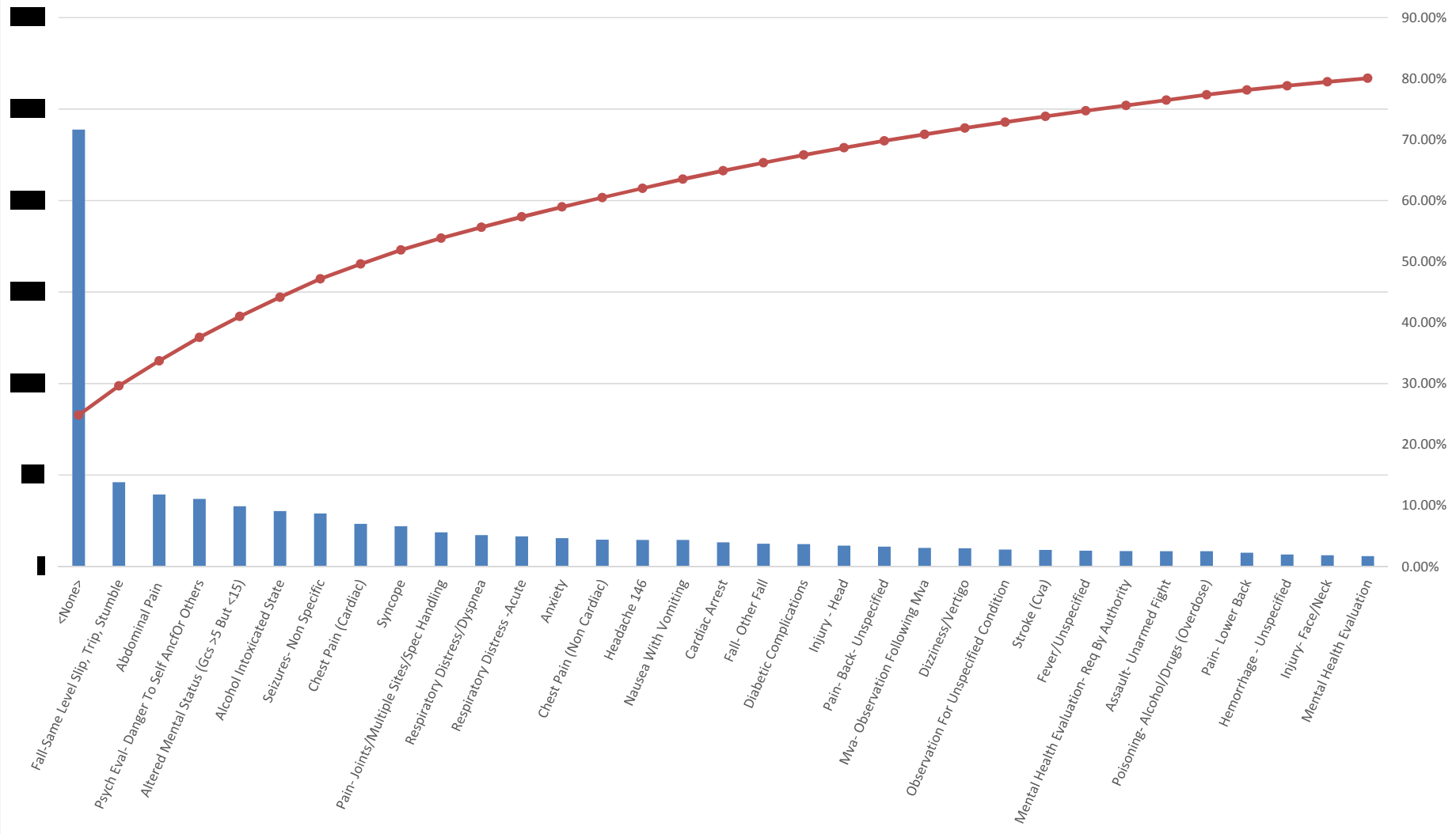
Agency C
Primary Provider Impression 2013
Data from State



Agency C
From Colorado State Data
2013

Provider Impression	# of Times	% of Times	Cumulative %
Not Available		33.9%	33.9%
Traumatic Injury		20.9%	54.7%
Respiratory Distress		6.6%	61.3%
Altered Level of Consciousness		6.2%	67.5%
Behavioral/Psychiatric Disorder		5.6%	73.2%
Poisoning/Drug Ingestion		5.6%	78.8%
Abdominal Pain/Problems		4.7%	83.5%
Chest Pain/Discomfort		4.2%	87.7%
Seizure		3.1%	90.8%
Syncope/Fainting		2.3%	93.1%
Diabetic Symptoms (Hypoglycemia)		1.8%	94.9%
Cardiac Arrest		1.4%	96.3%
Stroke/CVA		0.9%	97.2%
Cardiac Rhythm Disturbance		0.9%	98.1%
Allergic Reaction		0.8%	98.8%
Airway Obstruction		0.5%	99.3%
Hypovolemia/Shock		0.3%	99.6%
Pregnancy/OB Delivery		0.2%	99.8%
Hypothermia		0.1%	99.9%
Not Known		0.1%	99.9%
Respiratory Arrest		0.1%	100.0%
Unknown		0.0%	100.0%
Total		100.0%	

Agency C Primary Provider Impression 2013



Agency C
Primary Patient Problem
2013

Primary Impression	Count	Percent	Cumulative
<None>		24.84%	24.84%
Fall-Same Level Slip, Trip, Stumble		4.79%	29.63%
Abdominal Pain		4.10%	33.73%
Psych Eval- Danger To Self AncfOr Others		3.85%	37.58%
Altered Mental Status (Gcs >5 But <15)		3.43%	41.01%
Alcohol Intoxicated State		3.15%	44.16%
Seizures- Non Specific		3.02%	47.18%
Chest Pain (Cardiac)		2.43%	49.61%
Syncope		2.29%	51.90%
Pain- Joints/Multiple Sites/Spec Handling		1.94%	53.84%
Respiratory Distress/Dyspnea		1.79%	55.63%
Respiratory Distress -Acute		1.72%	57.35%
Anxiety		1.61%	58.96%
Chest Pain (Non Cardiac)		1.53%	60.49%
Headache 146		1.52%	62.01%
Nausea With Vomiting		1.52%	63.53%
Cardiac Arrest		1.37%	64.90%
Fall- Other Fall		1.30%	66.20%
Diabetic Complications		1.28%	67.48%
Injury - Head		1.19%	68.66%
Pain- Back- Unspecified		1.13%	69.80%
Mva- Observation Following Mva		1.06%	70.86%
Dizziness/Vertigo		1.04%	71.90%
Observation For Unspecified Condition		0.97%	72.87%
Stroke (Cva)		0.95%	73.81%
Fever/Unspecified		0.90%	74.72%
Mental Health Evaluation- Req By Authority		0.88%	75.60%
Assault- Unarmed Fight		0.87%	76.47%
Poisoning- Alcohol/Drugs (Overdose)		0.87%	77.35%
Pain- Lower Back		0.79%	78.14%
Hemorrhage - Unspecified		0.69%	78.82%
Injury- Face/Neck		0.64%	79.47%
Mental Health Evaluation		0.59%	80.06%
Injury- Major Trauma/Accident/Fall/Mva/Unspecified		0.56%	80.62%
Cardiac Dysrhythmia- Palpitations		0.55%	81.18%
Fall- From Other Furniture		0.55%	81.73%
Pain- Upper Back		0.55%	82.28%
Fall- On Or From Stairs/Steps		0.53%	82.81%
Allergic Reaction		0.51%	83.32%
Nausea		0.50%	83.82%
No Patient		0.50%	84.32%
Near Syncopal Episode		0.46%	84.77%
Choking		0.42%	85.19%
Failure To Thrive/Adult		0.38%	85.57%

Agency C
Primary Patient Problem
2013

Pneumonia -Organism Unspecified	0.38%	85.96%
Gi Bleed	0.37%	86.33%
Copd	0.36%	86.70%
Hypotension- Unspecified	0.36%	87.06%
Aloe -Temporary (Gcs 4-5)	0.35%	87.42%
Drug Abuse Other- Nondependent	0.34%	87.76%
Abdominal Tenderness	0.33%	88.09%
Pain- Chest/Rib	0.33%	88.42%
Drug Intox - (Psych) Delusions/Side Effects	0.32%	88.75%
Not Applicable	0.32%	89.07%
Vomiting Alone	0.30%	89.37%
Epistaxis	0.27%	89.64%
Patient Safety-Requires Stretcher	0.27%	89.91%
Asthma	0.26%	90.17%
Fall- On Or From Sidewalk Curb	0.25%	90.42%
Hypoxia/Abnormal Vital Signs	0.24%	90.66%
Dehydration	0.23%	90.89%
Fall- From Commode	0.22%	91.11%
Fx - Hip/Pelvis	0.22%	91.33%
Fx- Leg (Lower/Tibia Fibula)	0.22%	91.54%
Contusion· Face, Scalp, Neck	0.21%	91.75%
Motor Vehicle Nontraffic Accident	0.21%	91.96%
Allergic ReactionfHives, Rash, Swelling,	0.20%	92.16%
Combativeness	0.20%	92.36%
Cutting Or Piercing Injury	0.20%	92.55%
Lack Of Coordination- Muscular/Safety Risk	0.20%	92.75%
Assault- UnspecifiedfAdult Maltreatment	0.19%	92.94%
Atrial Fibrillation	0.19%	93.13%
Dislocation- Other	0.19%	93.31%
Swelling- Leg Or Arm (Limb)	0.19%	93.50%
Pregnancy Complication- Unspecified	0.18%	93.68%
Abdominal Pain-With Swelling, Mass Or	0.17%	93.84%
Animal Bite/Attack	0.16%	94.00%
Diabetic Coma	0.16%	94.15%
Withdrawal- Drugs/Narcotics	0.16%	94.31%
Abnormality Of Galt - Nervous/Muscular	0.15%	94.46%
Cancer· Unspecified	0.15%	94.60%
Cramping- Extremity	0.15%	94.75%
Drug Intoxicaton -Anxiety	0.15%	94.89%
Personal History Presents Hazards To Health	0.15%	95.04%
Aloe -Coma (Gcs <3)	0.14%	95.17%
Injury -Trunk/Flank	0.14%	95.31%
Late Effects Of Injury	0.14%	95.44%
Renal Disease -Acute (Kidney)	0.14%	95.58%
Congestive Heart Failure	0.12%	95.70%

Agency C
Primary Patient Problem
2013

Fx -Arm (Radius/Ulna)	0.12%	95.83%
Bowel Obstruction	0.11%	95.94%
Dislocation -Knee	0.11%	96.06%
Disruption Of Wound- Unspecified	0.11%	96.17%
BacterialInfection-Hiv/StaphInfluenza	0.10%	96.28%
Diabetic Ketoacidosis	0.10%	96.38%
Dislocation- HIp	0.10%	96.48%
Hypothermia	0.10%	96.59%
Penetrating Trauma-stabbing	0.10%	96.69%
Aloe - Persistant Vegetative State (Gcs 4-5)	0.09%	96.79%
Bradycardia	0.09%	96.88%
Burn~ Unspecified	0.09%	96.97%
Cognitive Deficits	0.09%	97.07%
Delirium- Confusional State/Phychosis	0.09%	97.16%
Pain- Groin	0.09%	97.25%
Heart Failure· Unspecified	0.08%	97.34%
Hyperventilation	0.08%	97.42%
Hypoglycemia Coma- (Non Diabetic)	0.08%	97.50%
Withdrawal -Alcohol Tremors	0.08%	97.59%
Contusion· Knee	0.07%	97.66%
Fx - Knee	0.07%	97.73%
Injury- Chest	0.07%	97.81%
Pregnancy- Labor	0.07%	97.88%
Respiratory Arrest	0.07%	97.95%
Cocaine Abuse	0.06%	98.01%
Fall- From Ladder	0.06%	98.08%
Fx - Clavicle	0.06%	98.14%
Fx- Humerous/Closed (Upper Ann)	0.06%	98.20%
Withdrawal- Alcohol	0.06%	98.26%
Complications To Surgical Site	0.05%	98.32%
Contusion· Eye	0.05%	98.37%
Contusion -lower Leg	0.05%	98.42%
Fx - Back (Possible)	0.05%	98.47%
Injury- Eyeball {Open}	0.05%	98.52%
Mi- Acute/Unspecified Site	0.05%	98.58%
Open Wound, Lower Limb WI Thigh	0.05%	98.63%
Pulmonary Congestion/Pneumonia	0.05%	98.68%
Stroke- Thrombotic	0.05%	98.73%
Tachycardia	0.05%	98.78%
Abdominal Rigidity	0.04%	98.82%
Angina Pectoris	0.04%	98.87%
Dental Emergency	0.04%	98.91%
Hallucinogen Abuse- Bad Trip	0.04%	98.95%
Pulmonary Edema -Acute	0.04%	98.99%
Sprain/Strain - Lumbar Back	0.04%	99.03%

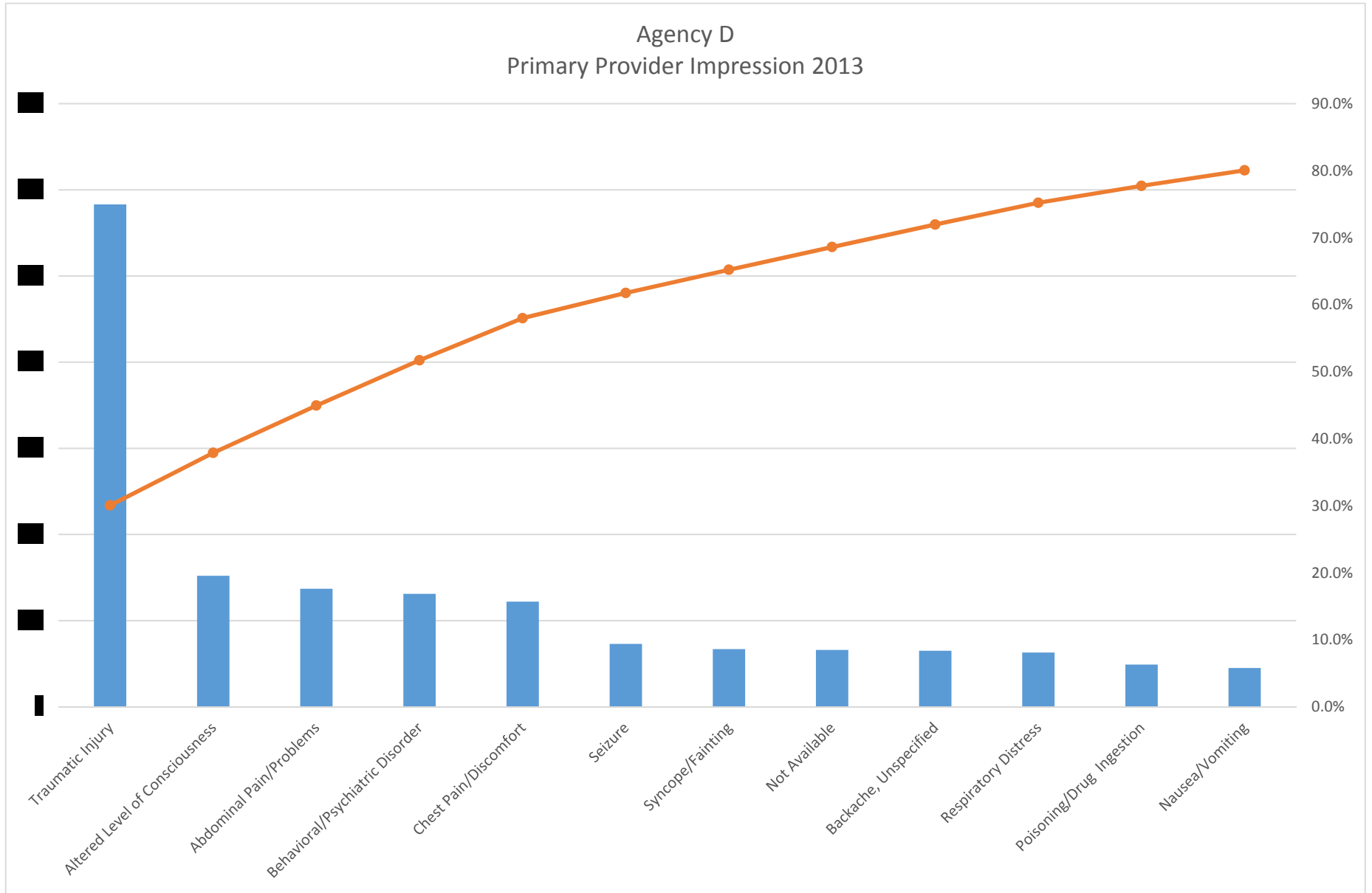
Agency C
Primary Patient Problem
2013

Tx For Abnormal Lab Results	0.04%	99.07%
Ataxia- Acute	0.03%	99.11%
Foreign Body- Swallowed	0.03%	99.14%
Hemorrhoids - Bleeding	0.03%	99.17%
Late Effects Of Injury By Assault	0.03%	99.20%
Personal History Of Poisoning	0.03%	99.23%
Pulmonary Embolism- Other	0.03%	99.26%
Renal Abscess	0.03%	99.29%
Sprain/Strain- Back, Unspecified	0.03%	99.32%
Staph Infection Skin/Soft Tissue	0.03%	99.36%
Svt	0.03%	99.39%
Bed Confinement- Indicate Reason In	0.02%	99.41%
Bundle Branch Block ~ Left	0.02%	99.43%
Cancer- Stomach (Unspecified)	0.02%	99.45%
Contracture- Joints	0.02%	99.47%
Cyanosis/Abnormal Skin Signs	0.02%	99.49%
Dvt	0.02%	99.51%
Esophageal Obstruction	0.02%	99.53%
Fx - C Spine/Unknown Spinal Cord Damage	0.02%	99.55%
Fx- Femur (Closed)	0.02%	99.57%
Fx - Leg (Upper/Thigh)	0.02%	99.59%
Gangrene- Unspecified Site	0.02%	99.62%
Gtube/PEG/J-Tubes -Complications	0.02%	99.64%
Gunshot- Paintball Gun	0.02%	99.66%
Hallucination- Non Psych	0.02%	99.68%
Heat Stroke	0.02%	99.70%
Hypoglycemia/Pancreatic Secretions (Non Diabetic)	0.02%	99.72%
Injury -Abdominal (Not Abd Pain)	0.02%	99.74%
Oxygen Or Iv -With Drugs Running	0.02%	99.76%
Shock- Unspecified	0.02%	99.78%
Ulcer- Decubitus	0.02%	99.80%
Anaphylactic Shock	0.01%	99.81%
Appendicitis- Acute	0.01%	99.82%
Autoimmune Disease	0.01%	99.83%
Cancer • Pharynx	0.01%	99.84%
Drownin{J}Near Drowning	0.01%	99.85%
Fx-C Spine With Spinal Cord Damage	0.01%	99.86%
Fx- Head Closed	0.01%	99.88%
Fx - Head Open	0.01%	99.89%
Fx - Ulnar (Closed)	0.01%	99.90%
Heat Exhaustion- Syncope	0.01%	99.91%
Injury -Open Head	0.01%	99.92%
Isolation -Infectious Disease (Mrsa)	0.01%	99.93%
Labor- Unspecified 1	0.01%	99.94%
Pulmonary Embolism/Infarction	0.01%	99.95%

Agency C
Primary Patient Problem
2013

Sleep Walking		0.01%	99.96%
Strangulation/Suffocation/Asphyxiation		0.01%	99.97%
Suicide & Self-Inflicted Injury- Hunting Rifle		0.01%	99.98%
Toxic Effect Of Petroleum Products		0.01%	99.99%
Ventricular Premature Beats		0.01%	100.00%
Total			

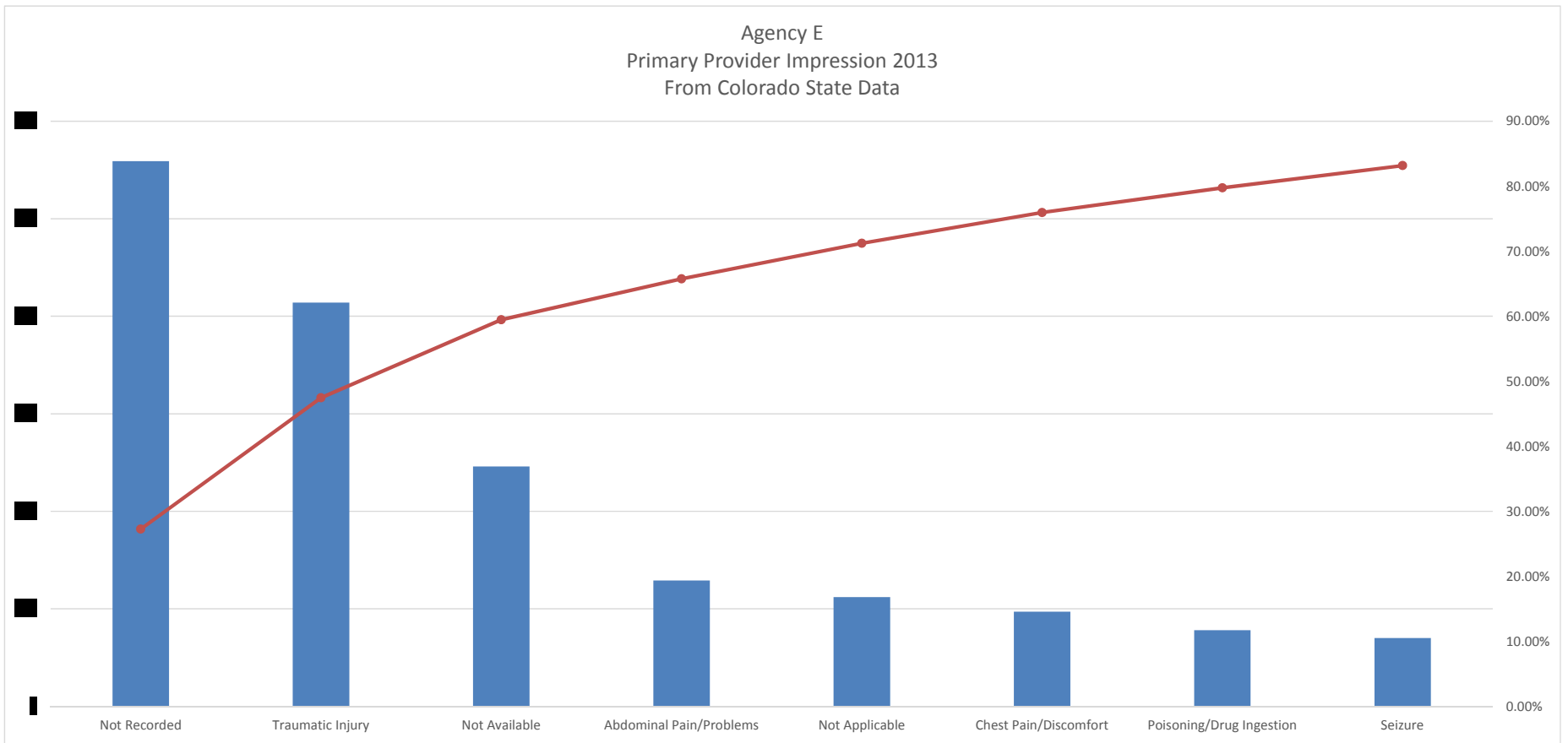
Agency D Primary Provider Impression 2013



Agency D
 Primary Provider Impression
 2013

Diagnosis	Count	Percent	Cumulative Percent
Traumatic Injury		30.1%	30.1%
Altered Level of Consciousness		7.8%	37.9%
Abdominal Pain/Problems		7.1%	44.9%
Behavioral/Psychiatric Disorder		6.8%	51.7%
Chest Pain/Discomfort		6.3%	58.0%
Seizure		3.8%	61.8%
Syncope/Fainting		3.5%	65.2%
Not Available		3.4%	68.6%
Backache, Unspecified		3.4%	72.0%
Respiratory Distress		3.2%	75.2%
Poisoning/Drug Ingestion		2.5%	77.7%
Nausea/Vomiting		2.3%	80.1%
Cardiac Rhythm Disturbance		2.0%	82.0%
Head Injury		1.8%	83.8%
Diabetic Symptoms (Hypoglycemia)		1.8%	85.6%
Fever		1.5%	87.1%
Headache		1.4%	88.5%
Stroke/Cva		1.4%	89.8%
Cardiac Arrest		1.3%	91.2%
Obvious Death		1.1%	92.3%
Not Applicable		1.0%	93.4%
Resp. Distress, Asthma		1.0%	94.3%
Hemorrhage, Unspecified		0.8%	95.1%
Allergic Reaction		0.7%	95.8%
Acute Myocardial Infarction		0.6%	96.3%
Resp. Distress, COPD		0.5%	96.9%
Airway Obstruction		0.5%	97.3%
Hypovolemia/Shock		0.4%	97.7%
Pregnancy/OB Delivery		0.4%	98.1%
Hyperthermia		0.3%	98.5%
Not Known		0.3%	98.8%
Hypothermia		0.3%	99.0%
Burn		0.2%	99.2%
CHF, Pulmonary Edema		0.2%	99.4%
Respiratory Arrest		0.2%	99.6%
Inhalation Injury (Toxic Gas)		0.1%	99.7%
Stings/Venomous Bites		0.1%	99.8%
Diabetes w/ Ketoacidosis		0.1%	99.8%
Pulmonary Edema, Acute		0.1%	99.9%
Sexual Assault/Rape		0.1%	99.9%
Vaginal Hemorrhage		0.1%	100.0%
Total			

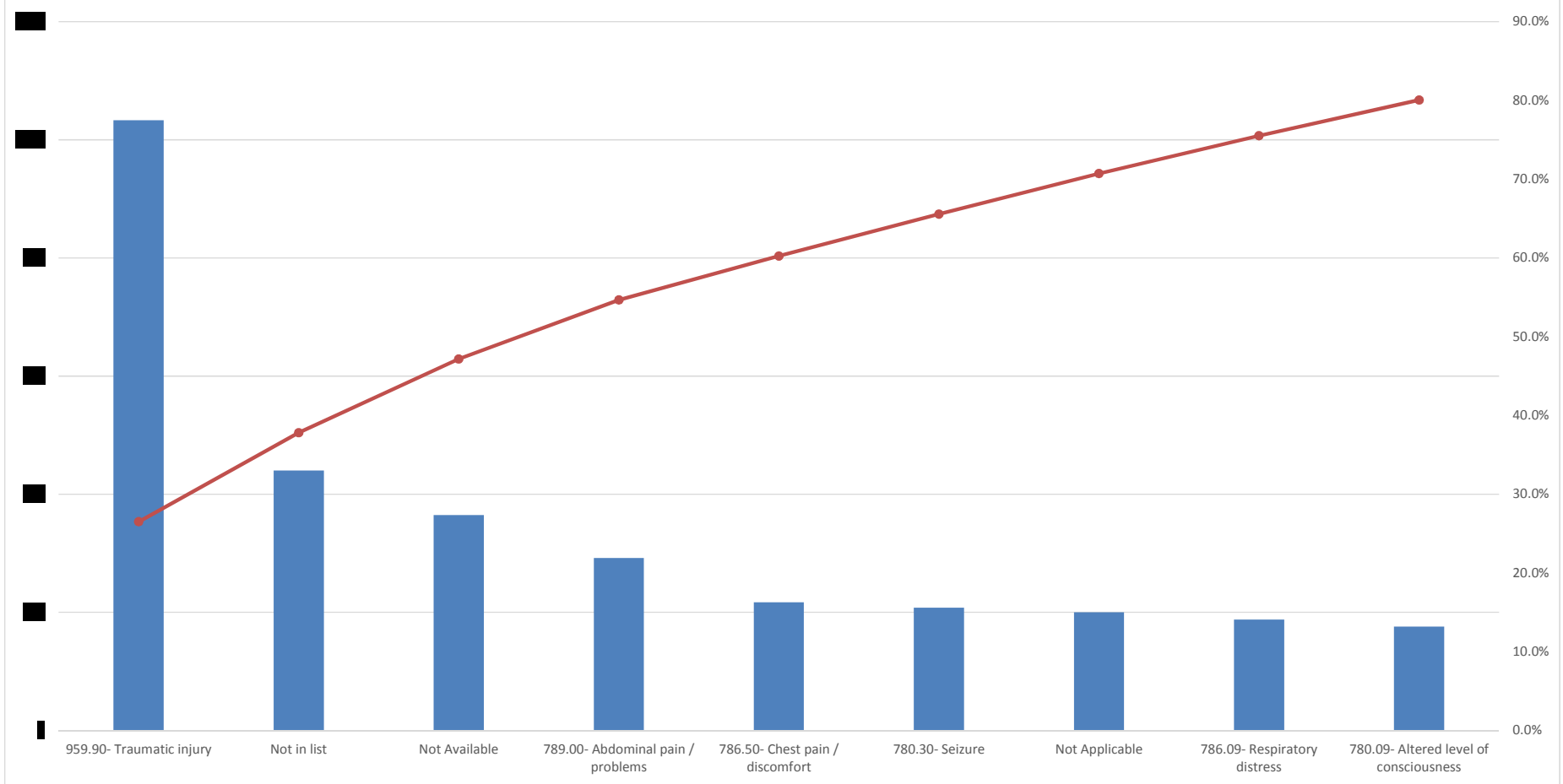
Agency E
Primary Provider Impression 2013
From Colorado State Data



Agency E
From Colorado State Data
2013

Provider Impression	# of Times	% of Times	Cum Per
Not Recorded		27.27%	27.27%
Traumatic Injury		20.20%	47.46%
Not Available		12.00%	59.46%
Abdominal Pain/Problems		6.29%	65.76%
Not Applicable		5.46%	71.22%
Chest Pain/Discomfort		4.73%	75.95%
Poisoning/Drug Ingestion		3.80%	79.76%
Seizure		3.41%	83.17%
Altered Level of Consciousness		3.27%	86.44%
Respiratory Distress		3.17%	89.61%
Behavioral/Psychiatric Disorder		2.24%	91.85%
Syncope/Fainting		1.95%	93.80%
Diabetic Symptoms (Hypoglycemia)		1.17%	94.98%
Obvious Death		0.98%	95.95%
Stroke/CVA		0.78%	96.73%
Not Known		0.78%	97.51%
Cardiac Arrest		0.63%	98.15%
Cardiac Rhythm Disturbance		0.39%	98.54%
Pregnancy/OB Delivery		0.34%	98.88%
Airway Obstruction		0.29%	99.17%
Hypovolemia/Shock		0.20%	99.37%
Hyperthermia		0.20%	99.56%
Allergic Reaction		0.20%	99.76%
Vaginal Hemorrhage		0.10%	99.85%
Inhalation Injury (Toxic Gas)		0.10%	99.95%
Hypothermia		0.05%	100.00%
Unknown		0.00%	100.00%
Total		100%	

Agency E
Provider Primary Impression 2013



Agency E
 Primary Provider Impression
 2013

Provider_descpt	Count	Percent	Cumulative Percent
959.90- Traumatic injury		26.5%	26.5%
Not in list		11.3%	37.8%
Not Available		9.4%	47.2%
789.00- Abdominal pain / problems		7.5%	54.7%
786.50- Chest pain / discomfort		5.6%	60.2%
780.30- Seizure		5.3%	65.6%
Not Applicable		5.1%	70.7%
786.09- Respiratory distress		4.8%	75.5%
780.09- Altered level of consciousness		4.5%	80.1%
977.90- Poisoning / drug ingestion		4.2%	84.2%
312.90- Behavioral / psychiatric disorder		3.3%	87.6%
780.20- Syncope / fainting		2.4%	90.0%
250.90- Diabetic symptoms (hypoglycemia)		2.0%	92.0%
798.99- Obvious death		1.5%	93.5%
Not Known		1.3%	94.8%
436.00- Stroke / CVA		1.2%	95.9%
427.50- Cardiac arrest		1.0%	96.9%
427.90- Cardiac rhythm disturbance		0.7%	97.6%
659.90- Pregnancy / OB delivery		0.5%	98.2%
995.30- Allergic reaction		0.5%	98.6%
519.80- Airway obstruction		0.3%	98.9%
785.59- Hypovolemia / shock		0.3%	99.2%
623.80- Vaginal hemorrhage		0.2%	99.4%
799.10- Respiratory arrest		0.2%	99.6%
780.60- Hyperthermia		0.1%	99.7%
780.90- Hypothermia		0.1%	99.8%
987.90- Inhalation injury (toxic gas)		0.1%	99.9%
989.50- Stings / venomous bites		0.1%	99.9%
959.90- Sexual assault / rape		0.1%	100.0%
Total		0.0%	

Foothills and Mile High RETAC **Regional Response Analysis Report** **Challenges and Improvements Summary**



The following is a list of challenges and possible ways to improve the collection of the regional call response data in the state database:

- With “Provider Impression” data some agencies are still submitting data based on an older list from the NEMSIS version 2. Agencies and some ePCR vendors that are submitting data to this older version were not aware that there was an updated list data could be mapped to. Possible area to look for improvement is a better line of communication about changes to individual agencies regarding changes to data tables. Even with the newer NEMSIS v2 list, many feel the list limits where they can map the data. It is recommended that efforts at improving mapping of data points should be withheld till the transition to NEMSIS v3.
- “Complaint reported by dispatch” is a data point that has had very limited submission of information to the state database. Most information submitted is “NULL”. Some agencies are not requiring this field to be completed. This is a field that can be directly mapped to data from an agency’s dispatch CAD system without requiring the field provider to complete on the ePCR utilizing EMD determinants. However, this will not work for many agencies because data from CAD is not mapped to load information into the agencies ePCR system. To accomplish this, it would be at a cost to the agency through their ePCR vendor and unfortunately many agencies do not have the budget to pay for the bridge between systems and some agencies communication centers are reluctant to have the interface built between systems.
- Lists of “Provider Impressions” for each agency varied greatly. Utilizing data from individual agencies when comparing to the state data that is submitted you can see the largest number of impressions were documented as “Other” or “None” in some agencies system as well as at the state level. For agencies with smaller lists of impressions “Other” was still in the top 80% but was lower on the data. Improving the impressions data is not something that can be easily improved. Many agencies have been using the same list since they started using an ePCR system and making changes has the potential to alter the impression of what providers have already documented in existing patient care reports. Changes to existing lists and data codes should usually be limited to spelling or grammatical errors. To make significant changes to these lists would require specific data codes to be “retired” and replaced with new data codes. These types of changes can greatly affect other areas of an agencies operations, especially billing.
- An item for consideration with this data is if the “Other” and “None” data points were removed from the lists, can it be assumed what remains are generally the most frequent provider impressions. Also, for the next reporting period, it should be considered adding secondary impressions to this analysis to provide even more information on the types of calls agencies are responding to in the Foothills and Mile High RETAC regions.
- Within the state database it was not possible to run a report comparing complaint reported by dispatch to provider impression. Recommend working with Imagetrend to develop some of standardized reports for use in the future that compares data on the same call.