



Prehospital Care of Behavioral Emergencies

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ALAMEDA COUNTY EMS AGENCY

Emergency Medical Services Use Among Patients Receiving Involuntary Psychiatric Holds and the Safety of an Out-of-Hospital Screening Protocol to “Medically Clear” Psychiatric Emergencies in the Field, 2011 to 2016

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Study objective: Patients with acute psychiatric emergencies who receive an involuntary hold often spend hours in the emergency department (ED) because of a deficit in inpatient psychiatric beds. One solution to address the lack of prompt psychiatric evaluation in the ED has been to establish regional stand-alone psychiatric emergency services. However, patients receiving involuntary holds still need to be screened and evaluated to ensure that their behavior is not caused by an underlying and life-threatening nonpsychiatric illness. Although traditional regional emergency medical services (EMS) systems depend on the medical ED for this function, a field-screening protocol can allow EMS to directly transport a substantial portion of patients to a stand-alone psychiatric emergency service. The purpose of this investigation is to describe overall EMS use for patients receiving involuntary holds, compare patients receiving involuntary holds with all EMS patients, and evaluate the safety of field medical clearance of an established field-screening protocol in Alameda County, CA.

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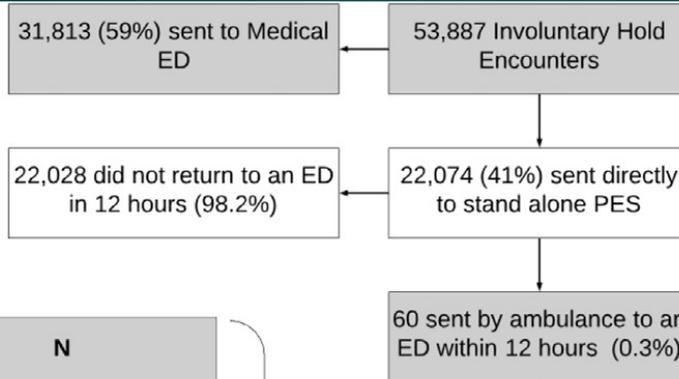
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EMS and Behavioral Emergencies

- ▶ Behavioral Emergencies make up 10% of our total EMS calls
- ▶ Most communities use a combination of law enforcement transport and EMS transport
- ▶ EMS Transport is mostly commonly to an ED
- ▶ Alameda County EMS Agency
 - ▶ All patients on a psychiatric hold are transported by EMS
 - ▶ 40% of EMS transported psychiatric patients are taken directly to a Psychiatric Emergency Service hospital
 - ▶ 60 (0.3%) of these patients needed medical care



	N
Developed or Reported a New Symptom	13 (24%)
Effect of Administered Medication	10 (19%)
Seizure with history of seizure disorder	8 (15%)
Staff requested medical clearance, asymptomatic	7 (13%)
Staff requested medical clearance, mental status changes	6 (11%)
Patient had New Traumatic Injury	5 (9%)
Patient called EMS after discharge from PES	5 (9%)



Time spent at PES	
0 minutes	51 F, found have glucose of 40 mg/dL on arrival to PES. Glucose was not obtained initially. Family had reported patient was acting "like a schizophrenic"
2 minutes	66 F, transported immediately after arrival to PES. Staff requested transport given violation of protocol due to age
7 minutes	53 F Initial blood glucose was 63 mg/dL and GCS was 13. On arrival to PES, glucose was 56 mg/dL, and she was transported to an ED.
131 minutes	55 M, transported from PES to an ED for disorientation. Patient documented as disoriented at initial paramedic assessment, pulse documented over 120, and reported to be alert and oriented only to person
325 minutes	32 F, staff discovered patient was in "late stages of pregnancy," and requested medical evaluation. Instructions for this situation were not defined in the protocol for psychiatric emergencies.
330 minutes	53 F, for whom staff developed concerns about level of alertness hours after PES arrival. Initial paramedic report documented GCS 14 and noted depressed mental status

EMS and Behavioral Emergencies

- ▶ Psychiatric Hold Patients (5150) can be safely sent directly to a Psychiatric Emergency Service Hospital
- ▶ 10% of EMS Calls are for an involuntary hold
- ▶ These were younger, more likely to be male, and less likely to be insured as compared to the general EMS population
- ▶ These same patients on an involuntary hold also had an average of two other EMS transports and accounted for a total of 24% of all EMS encounters



alameda
county
care
connect



Olanzapine 10 mg Oral Disintegrating Tablets



Community Assessment and Transport Team (CATT)

- ▶ Mental Health First Responder
- ▶ Integrated with 911 Dispatch
- ▶ Mental Health Worker and EMT
- ▶ Alternate Destinations
- ▶ Fewer Involuntary Holds
- ▶ Integrated with Alameda County Care Connect

Law Enforcement Navigation of Behavioral Health Patients



David Miramontes MD FACEP FAEMS

CJ Winckler MD LP

Office of the Medical Director



Bring The stakeholders together !!!!

- **WE DEVELOPED A SYSTEM**

- Letter of Agreement
- MEDCOM navigation process
- LEO's know sick...call EMS only when needed.
- Fire Only or EMS eval- Call the medical Director before release
- LEO's Call MEDCOM to coordinate and Load balance Psych Hospital transports



Psych Facilities	Behavioral Female Child Age <12	Behavioral Male Child Age <12	Behavioral Female ADO Age 12-17	Behavioral Male ADO Age 12-17	Behavioral Adult Age 18-64	Behavioral Geriatric Age >=55	Comment	Last Update
Baptist Medical Center BH	N/A	N/A	N/A	N/A	Diversion	N/A		25 Feb 2018 08:30
CHCS Crisis Care Center BH-Frio	N/A	N/A	N/A	N/A	Open	Open	CCC No longer on diversion. I CCC No lon...	23 Feb 2018 15:21
Clarity Child Guidance Center BH	Diversion Override	Diversion Override	Diversion Override	Open	N/A	N/A		25 Feb 2018 07:29
Laurel Ridge Treatment Center BH	Diversion Override	Diversion Override	Diversion Override	Diversion	Diversion	Diversion		25 Feb 2018 11:06
Methodist Specialty & Transplant BH	N/A	N/A	N/A	N/A	Open	Open		23 Feb 2018 02:08
Nix BH Babcock	Diversion Override	Diversion Override	Diversion Override	Diversion	Open	N/A		25 Feb 2018 07:29
Nix BH Downtown	N/A	N/A	N/A	N/A	N/A	Open		23 Feb 2018 16:59
Nix BH PES-Babcock	N/A	N/A	N/A	N/A	Open	N/A		24 Feb 2018 13:49
Nix BH Vance Jackson	N/A	N/A	N/A	N/A	Open	Open		22 Feb 2018 18:47
Northeast Baptist Hospital BH	N/A	N/A	N/A	N/A	N/A	Open		25 Feb 2018 06:56
SA Behavioral Healthcare Hospital	N/A	N/A	Diversion Override	Diversion	Open	Open		25 Feb 2018 08:56
Southwest General BH	N/A	N/A	N/A	N/A	Open	Open		21 Feb 2018 14:51
University Hospital BH	N/A	N/A	N/A	N/A	Open	N/A		24 Feb 2018 16:56
State & Fed Psych Facilities	Behavioral-Adult (State/Fed)			Behavioral-Geri (State/Fed)			Comment	Last Update
Audie Murphy VA BH	Open			N/A				23 Feb 2018 07:19
San Antonio Military Medical Center BH	-			N/A				
San Antonio State Hospital BH	Long-term Diversion			Long-term Diversion				04 Oct 2017 16:51

**STRAC MEDCOM**
Southwest Texas Regional Advisory Council

**Law Enforcement Navigation
of Behavioral Health Protocol**

CALL EMS and FIRE (manpower) for **EMERGENT** response if:

- Excited delirium, severe agitation or violent behavior
- Mental status changes or confusion (change from baseline)
- Recent trauma, ingestion or overdose

Call EMS **only** Evaluation for **URGENT** response if:

- Officer impression indicates patient needs medical assessment
- Patient complains of medical illness
- Patient requests a medical evaluation

If patient has **no acute medical issues and is medically stable**, contact MEDCOM for Navigation to the appropriate psychiatric facility by Law Enforcement:

- Provide Patient Name and DOB
- Provide location
- Is patient pregnant? Gestation greater than 20 weeks?
- Call MEDCOM (24/7) for navigation to the appropriate psychiatric facility

MEDCOM (24/7): (210) 233-5933

Rev 9_21_17

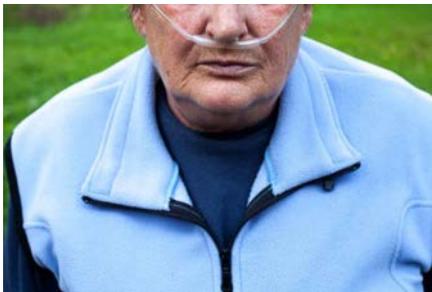
Medical Director Driven Fire/EMS Medical Stability Evaluation

Patients **MAY NOT** be released for MEDCOM Law Enforcement navigation to a Free Standing Psychiatric Hospital if they have:

1. Lacerations, significant abrasions, wounds or Trauma (need ER eval and Tx)
2. Any history of any ingestion/OD (they must be medically cleared in an ER)
3. Significant intoxications, agitation, delirium, or aggressive behavior such that they cannot walk or participate in a psychiatric interview.
4. Any peg tubes, implanted ports, lines or Medical problems that are not under control (*such as asthma/copd exacerbation, Glucose >400, Hypertension > 200 systolic*)

PI – What Really Matters

- The four deadly sins
 1. Alcohol Intoxication
 2. Ingestion/Overdose
 3. Trauma/wounds
 4. Lines/tubes/chronic med problems and wheelchairs
- Where to draw the line?



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LAW ENFORCEMENT NAVIGATION:

JAN 2018 – OCT 2018

MH Warrant: Nav to Psych, 104, 1%

MH Warrant: LE Self Navigated,
4, 0%

Emerg Det: LE to Magistrate/Jail,
124, 1%

Emerg Det: LE to Gen Hospital,
148, 1%

Emerg Det: LE Self Navigated,
418, 3%

Emerg Det: EMS to Gen Hospital,
1199, 9%

Canceled by LE, 21, 0%

**Emerg Det: LE to
Psych, 7541, 55%**

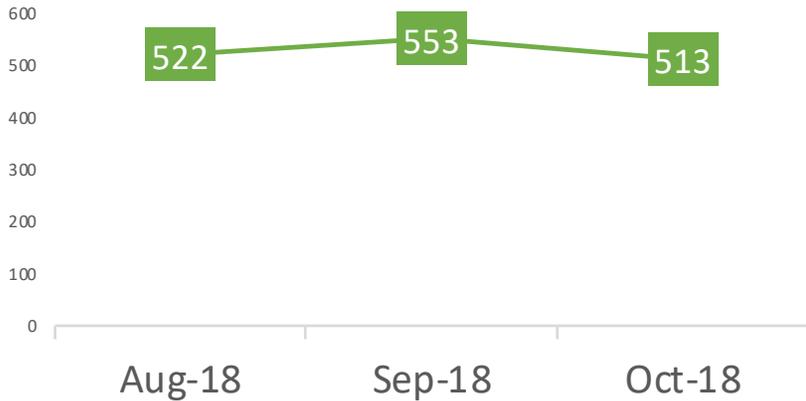
**Emerg Det: In Hospital,
4093, 30%**

IN
THE FIELD
(70%)
n=9559

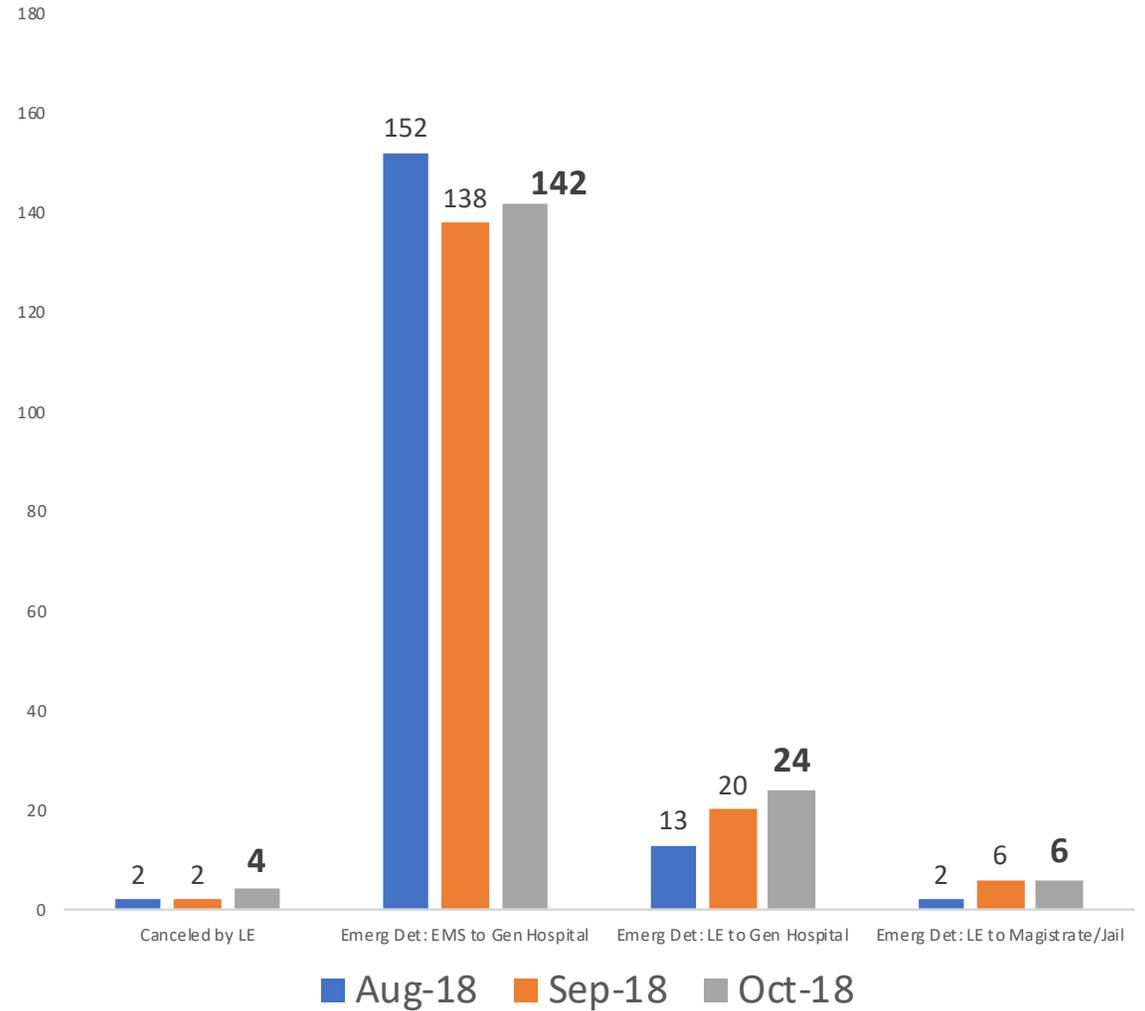
NOT IN
THE FIELD
(30%)
n=4093

**TOTAL
13,652
CASES**

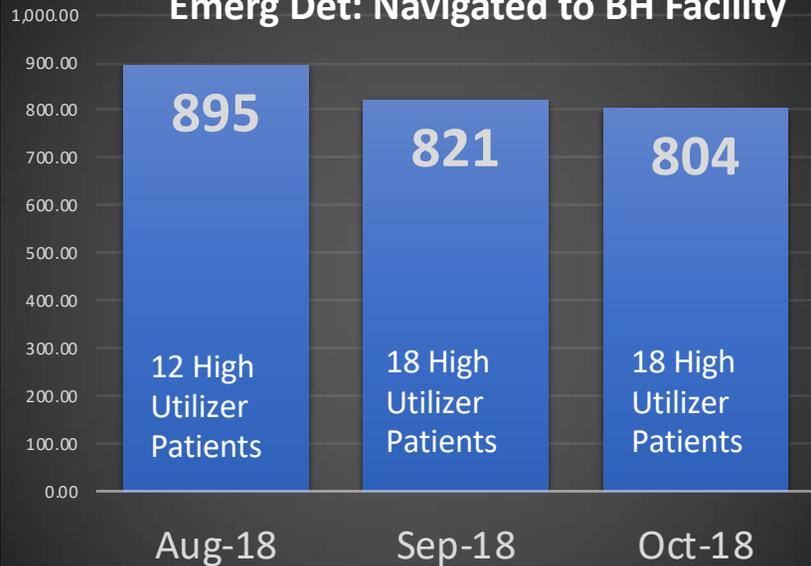
Emergency Detentions: In Hospital



Emerg Det: **Not** Transported to BH Facility



Emerg Det: Navigated to BH Facility

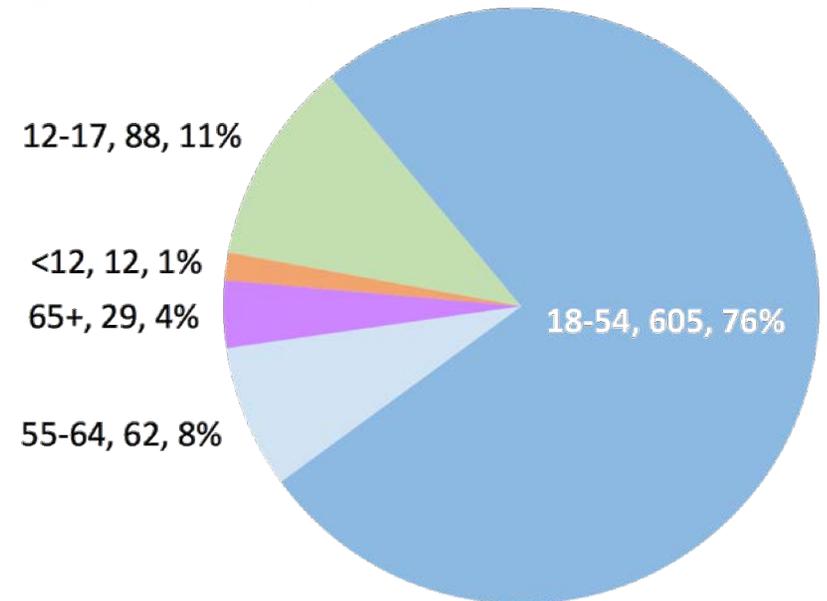
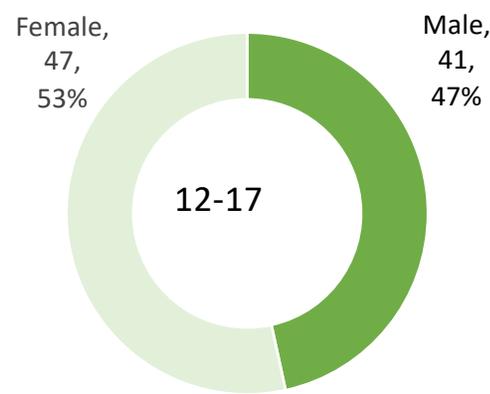
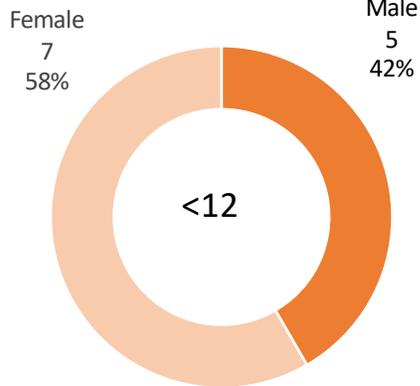


LAW ENFORCEMENT TRANSPORTED TO PSYCH, MEDCOM NAVIGATED BY DEMOGRAPHICS

OCTOBER 2018

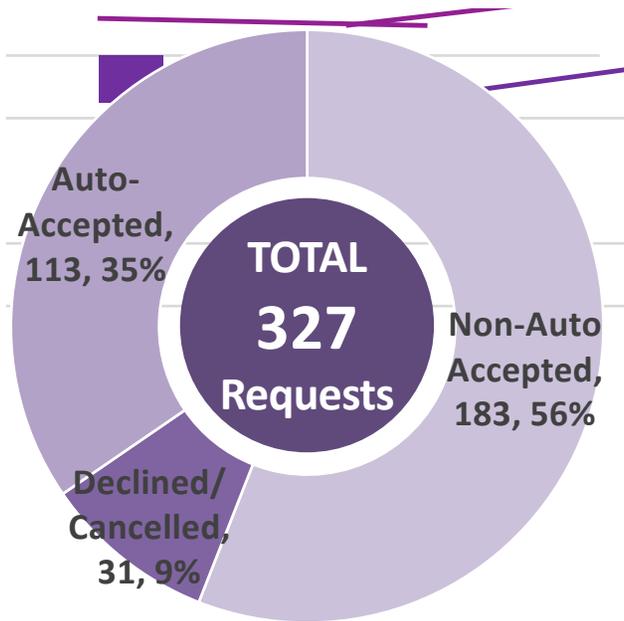


	<12	12-17	18-54	55-64	65+	OB<20WKS	OB>20WKS
Male	5	41	391	33	14	0	0
Female	7	47	214	29	15	4	2
Subtotal	12	88	605	62	29	4	2

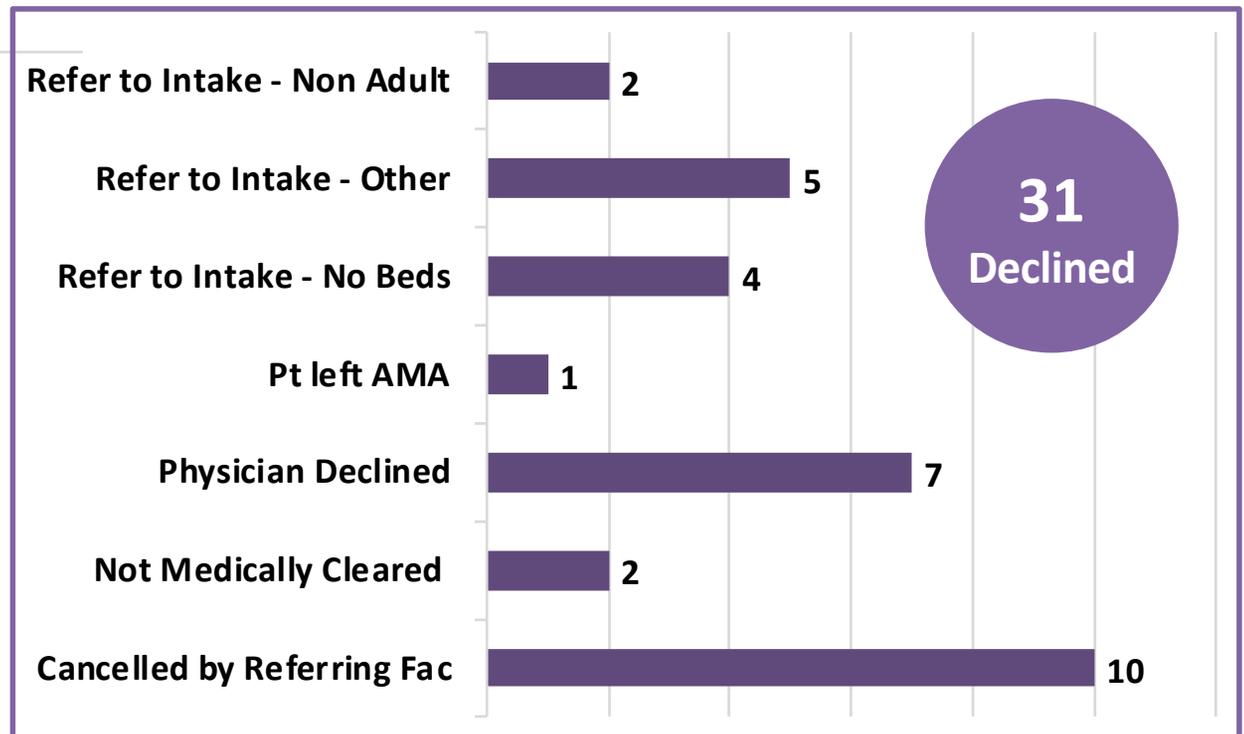


NIX PES MEDCOM TRANSFERS by Requests

October 2018



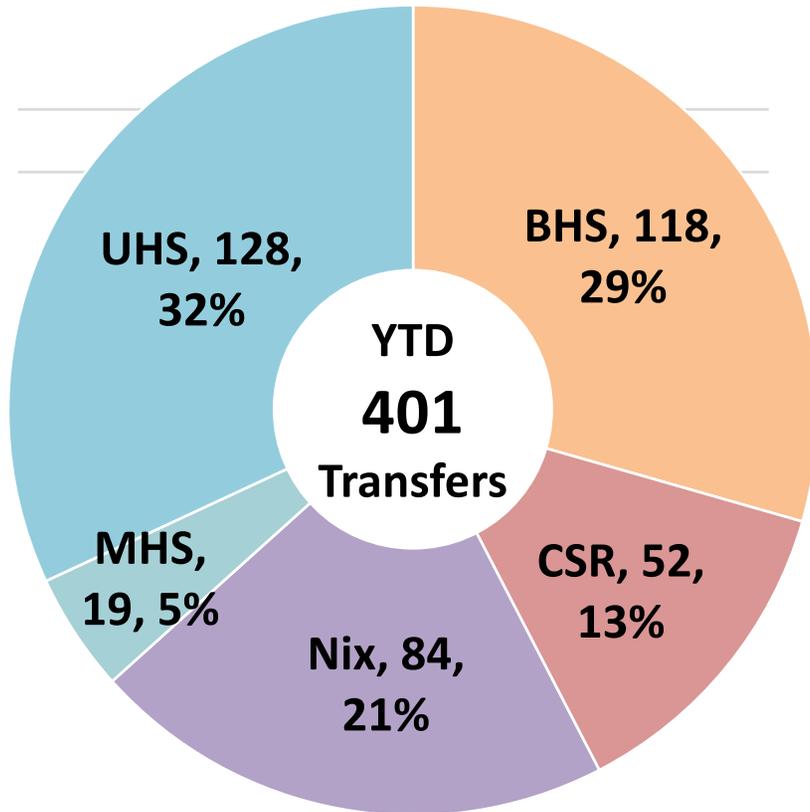
10% ER to PES Auto Accept Transfers Declined/Cancelled



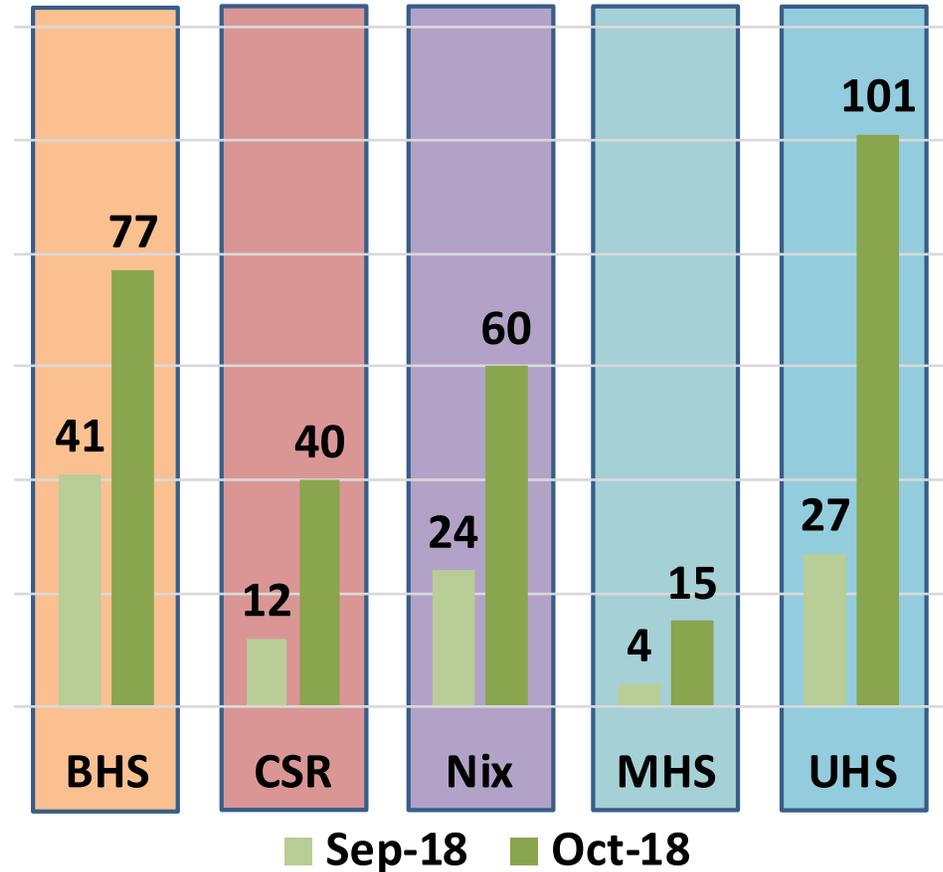
NIX PES MEDCOM TRANSFERS by System Utilization

October 2018

Nix PES Transfers starting 9/18/18



Nix PES Transfers by Month



Performance Improvement Process

- Performance Improvement Committee:
 - STCC (South Texas Crisis Collaborative) @STRAC
 - MedCom (STRAC patient Movement/Helios)
 - Psychiatric Facilities
 - Law Enforcement
 - Office Medical Director /SAFD
- Secondary Transfers are a Red Flag



MEDCOM

Law Enforcement Navigation

Questions

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Seeing is Believing: Treatment through TelePsych

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Medical Director, Charleston County EMS

Financial disclosures

- Dr. French – none to report



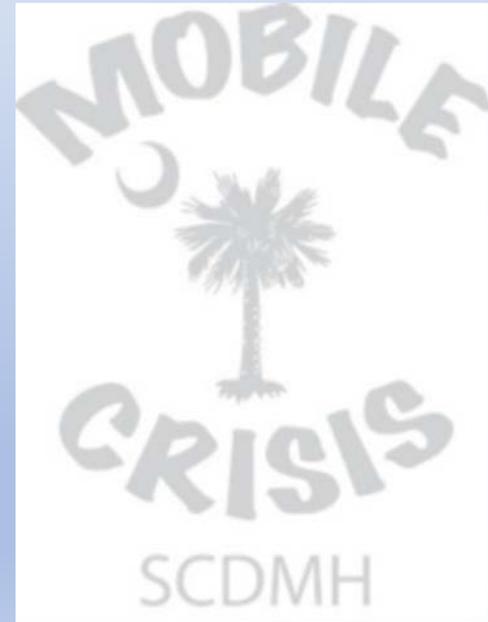
Charleston County EMS

- Cover 1400 square miles
- Over 60,000 calls annually
- Over 5000 MH calls
- 80% transported to ED



Mobile Crisis

- 24/7/365 mobile assessment team
- Onsite evaluations
- 45 - 50 minutes to arrive
- Called 4 - 5 times per year
- Outpatient clinic
- Involuntary commitments
- Direct admissions
- Link to community care



TelePsych

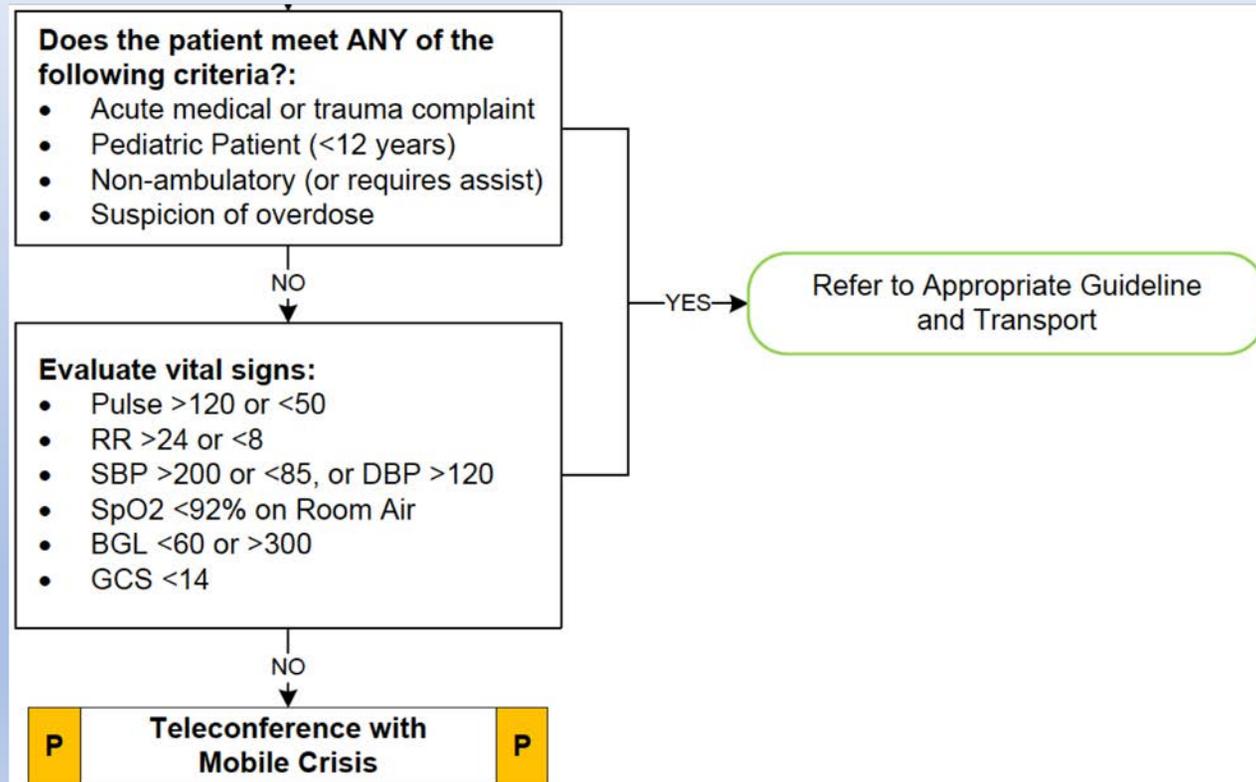
- Connect EMS to Mobile Crisis via telehealth
 - Vidyo software on laptops, phones
 - Low bandwidth
 - Meeting room technology for assessments
- Assessment initiation:
 - 45 ➤ 5 minutes



TelePsych

- ALS Ambulance dispatched with QRV
- First ALS provider assesses patient
 - Adults only
 - No medical or trauma complaint
 - VS restrictions
- Cooperative patient offered assessment

TelePsych



TelePsych

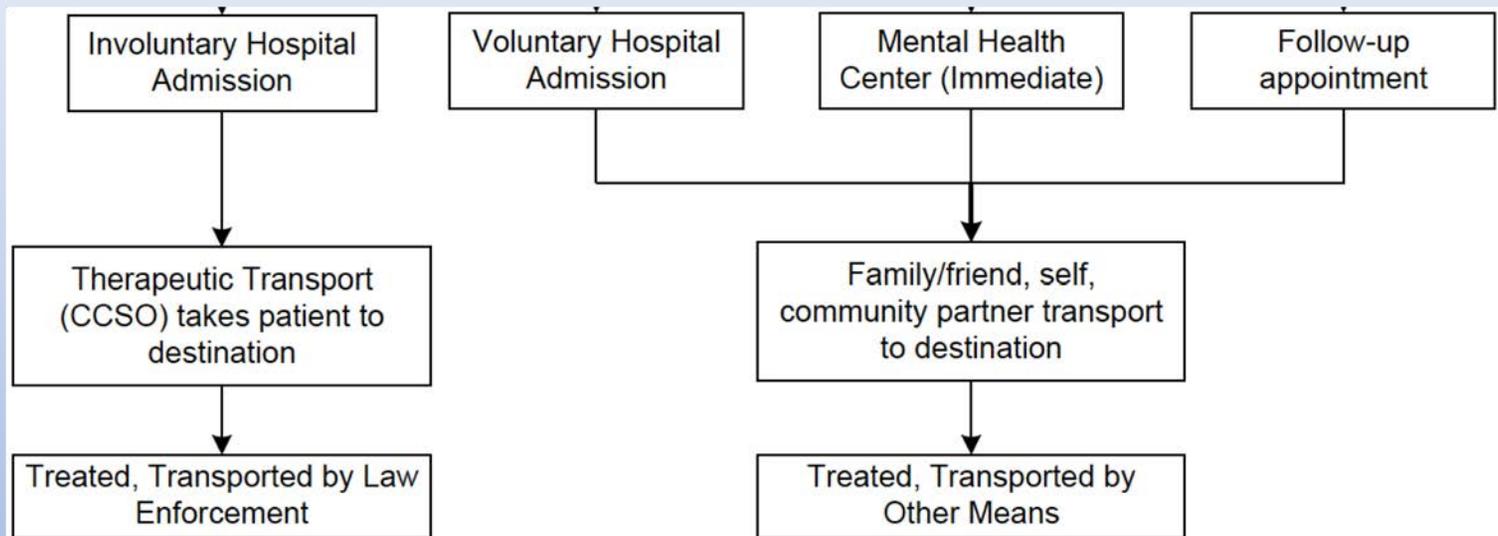
- Ambulance returns to service
- QRV stays with PD and patient
- Mobile Crisis assesses patient
 - Vidyo software meeting rooms
 - Can run more than one consult



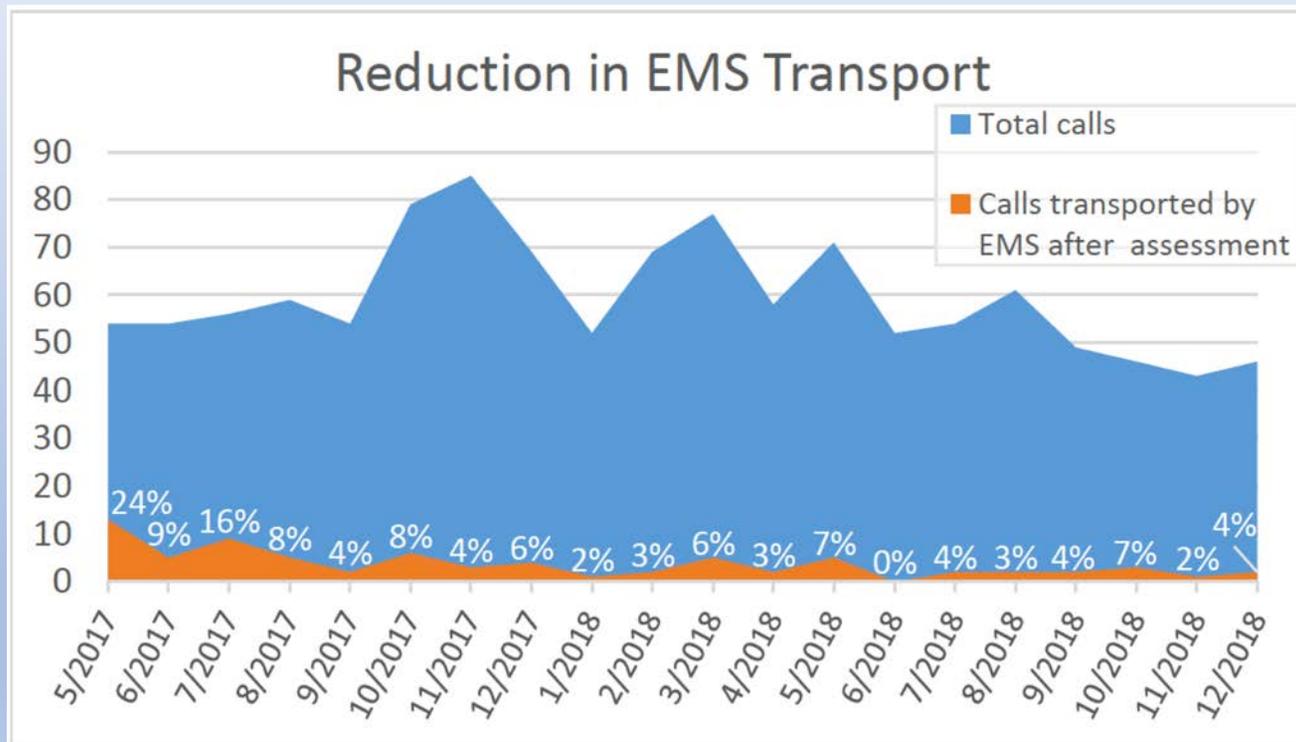
TelePsych

- Mobile Crisis determines disposition
 - Input from EMS and LE
 - Collateral information/history
- Four possible outcomes
 - Voluntary vs involuntary
 - EMS personnel Notary Publics for Part 1
 - Order of detention printed on-scene
 - LE transport

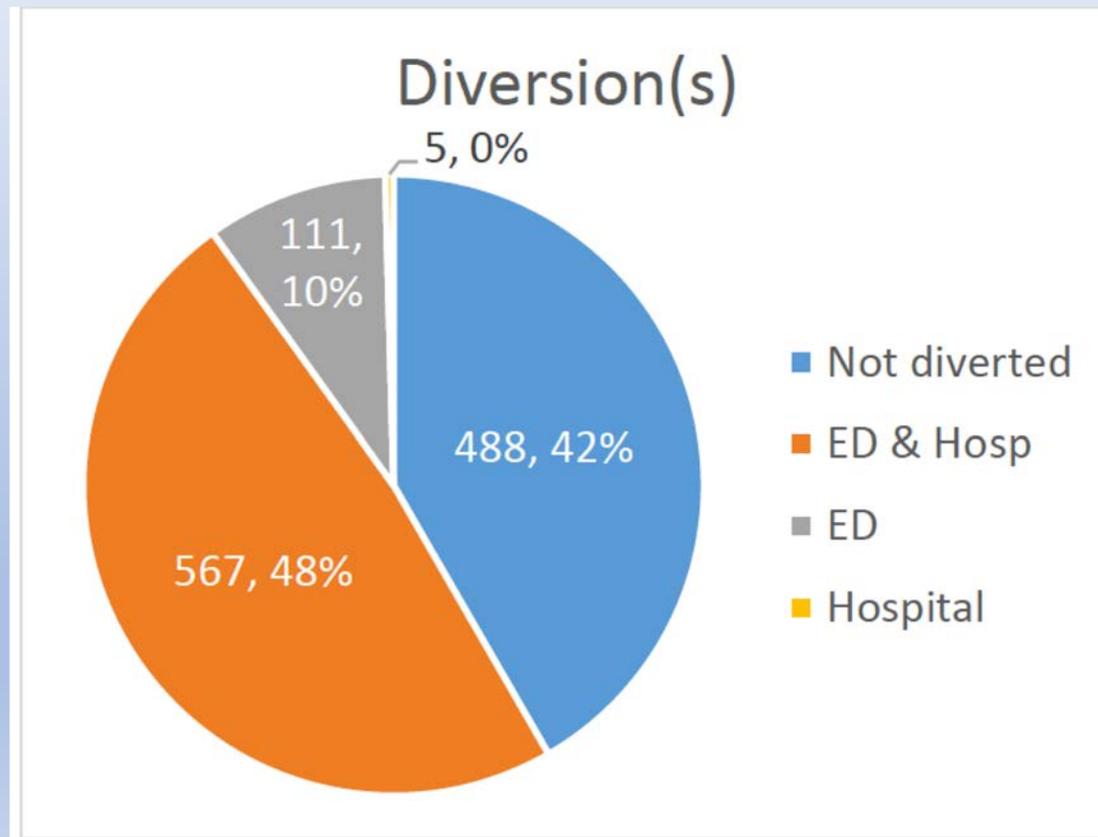
TelePsych



TelePsych



TelePsych



TelePsych

BEFORE MAY 1, 2017

- About 5 calls/year
- 80% EMS transports

THROUGH JANUARY 7, 2019

- 1200 calls
- 678 ED diversions
- 572 avoided hospitalization
- About 5% EMS transports

TelePsych

Estimated cost savings

\$1.8 + million

Based on \$2000 ED visit + \$350 EMS transport

TelePsych

- Expanding MC teams around the state
- Incorporating telehealth w/ EMS
- Telehealth w/ LE?
- Imbedding a clinician in dispatch
- Recent Medicare Innovations opportunity?

Contact

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