Alternative Destinations for EMS Patients

Jefferson G. Williams, MD MPH
Deputy Medical Director
Wake County EMS System, Raleigh, NC

Special Thanks

- Michael Bachman, MHS, EMT-P
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  - District Chief, APP program

aka

“They don’t ALL have to go to the Emergency Department in an Ambulance”
The Past

You Call,
We Haul (to the ED),
That’s All…

The Future of Health Care

“Get the right resource to the right patient at the right place at the right time”

Modern ERs offer two competing views of the future. One, driven by deteriorating access to care, is a future where primary care is unavailable, specialty care is unaffordable, and no one answers the phone after 4 p.m. It’s a future where a trip to the ER is a perilous journey filled with lengthy waits, harried staff, non-existent privacy, and the prospect that any patient may fall victim to medical error.\(^2\)

The alternate view is much brighter. It’s a future where health care is centered on the needs of patients, not the convenience of providers. Health information flows readily and securely from a patient’s home to his or her doctor’s office, the ER, or the hospital — wherever and whenever it’s needed. Thanks to teamwork and a powerful commitment to safety, care transitions are seamless and risk-free. As a result, patients consistently get the right care at the right time in the right place.

“... a future where health care is centered on the needs of patients, not the convenience of providers... Thanks to teamwork and a powerful commitment to safety, care transitions are seamless and risk-free. As a result, patients consistently get the right care at the right time in the right place.”


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So, how does this apply to EMS?

+ All patients don’t need to get transported to the ED in an ALS Ambulance!

+ Multiple ways that this can happen:
  - Patient Refuses (not ideal)
  - Declination (Paramedics decline transport- yikes!)
  - Alternative Transport (ex. to the ED BLS, or in a cab)
  - ALTERNATIVE DESTINATION
    - Patient goes to a destination other than the ED that is more appropriate for his or her care.

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Alternative Destination

+ We are in the business of unscheduled medicine as well as emergency medicine.

+ Some issues (more for another time):
  - Is non-transport (refusal, declination) different from alternative destination? Either way, the patient does not end up at the ED.
  - Payment based on transport to the hospital
  - How do we safely separate unscheduled medicine from emergency medicine once 911 has been called?
January, 2001

**POSITION PAPER**

**ALTERNATE AMBULANCE TRANSPORTATION AND DESTINATION**

National Association of EMS Physicians / American College of Emergency Physicians Joint Position Paper

“Emergency Medical Services systems may encounter patients who do not need advanced life support (ALS) level care or evaluation at an emergency department. In these circumstances, transportation by alternate means or to an alternate destination may be appropriate.”

(continued) “Key elements of such alternate transport and destination programs should include:”

- EMS physician medical director oversight
- EMS physician-led development, quality improvement, RESEARCH designed to “ensure patient safety and appropriateness of any alternate transport or destination decisions.”
- Not an easy task for many/most systems?

**PARAMEDIC DETERMINATIONS OF MEDICAL NECESSITY: A META-ANALYSIS**

Lawrence H. Brown, EMT-P, MPH & TM, Michael W. Hubble, PhD, MBA, NREMT-P; David C. Cone, MD, Michael G. Mallin, MD, MPH; Brian Schwartz, MD; P. Daniel Patterson, PhD; MPH; EMT-B; Brad Greenberg, MD; MPA; Michael E. Richards, MD, MPA

PEG 2009: 13.516-27

- Evaluated studies of paramedics’ ability to determine necessity of ambulance transport; the included studies were published 1992-2006.
- NPV for paramedic determinations of medical necessity 0.91, LCL 0.71 (i.e. the undertriage rate may be as high as 29%)
- NPV for paramedic determinations of medical necessity for ED evaluation 0.68, LCL 0.48.
- Conclusion: Insufficient evidence to support paramedic determinations of medical necessity for ambulance transport.
10 years later: April, 2011 NAEMSP Position Statement:

**EMS Provider Determinations of Necessity for Transport**

National Association of EMS Physicians

“... in certain select situations, when it is validated to be safe in the peer reviewed literature, EMS providers should be able to determine the necessity of transport.”

“There may be potential for EMS providers to avert unnecessary emergency department visits by providing a medical assessment to determine whether patients can safely be managed without emergency transport to an acute care facility.”

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**EMS Provider Determinations of Necessity for Transport and Reimbursement for EMS Response, Medical Care, and Transport: Combined Resource Document for the National Association of EMS Physicians Position Statements**

Michael G. Millis, MD; MPI, Lawrence H. Brown, MPH&IM, Brian Schwartz, MD

- “Insufficient evidence to support widespread implementation” of non transport and alternate destination protocols.

- “... some of these data are encouraging enough that EMS systems with exceptional educational resources, strong medical oversight, and comprehensive quality management programs may elect to implement paramedic-initiated nontransport (or alternate-transport) policies...”

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**What we do in Wake County: Alternative Destination for MH/SA**

- Patient has a mental health crisis and/or substance abuse issue as the primary complaint

- Patient does not require sedation and is not agitated, meets several screening criteria, and does not want to go to the ED

- Advanced Practice Paramedic (APP- highly trained, experienced, single responder) contacts alternate site and evaluates for placement
Well Person Check

- No medical complaint, primary MH/SA issue
- "Assist," someone else called

- Check Vitals

- Ask again- no medical complaint

- Unit contacts on-duty APP for possible MH/SA Alternative destination
Exclusion Checklist

- Acute Medical Issue or trauma with bleeding or need for wound repair
- BAC > 0.35 or too intoxicated to take po, The Healing Place will take < 0.40
- Pulse > 120
- Unexplained altered mental status
- Unable/Unwilling to take usual meds
- Has taken meds outside of Rx and cannot be cleared by poison center.
- Cannot perform ADLs independently
- Blood glucose > 300 or evidence of DKA

Our Initial Experience in 2011

- 1084 MH/SA patients screened in 12 months
  - 724 failed the screening criteria
  - 360 passed the screening criteria
  - 156 of those who passed refused the Alt Dest
  - 204 achieved alternate destination
    - 2 patients subsequently transported out to the ED; medically cleared there (one did so 3 times!)

Our Initial Experience in 2011

- In our system, mental health patients consume 14 ED bed hours on average (2,448 hours)
- Chest pain patients consume 3 ED bed hours
- Thus, we opened beds for 816 chest pain patients in 12 months, and saved ~$350,000 in health care costs for this population
2011 Data

- In 2011, observational data indicated an average length of stay of 35 hours in the crisis and assessment unit.

- The actual savings is not only the ED bed hours saved but also the in-patient bed hours for mental health “holds” prior to psych admission.

2012 Data

- 8,000 system calls

- If eligible for MHSA alternative destination screening? (MPDPS cancellations off of MPDS 25-outrage or 26-PSYCH cards)

- 1,000 patients screened
- 886 Not eligible
- 434 Met Criteria for Alternative Destination

- 433 Refused offer of Alternative Destination
- 301 Achieved Alternative Destination

- 11 patients later transported out to the ED

The 11 transports out to the ED

- 6 patients transported to the ED on the same day after eval at Alternative Destination
- 5 the next day

- Various reasons: “medical clearance,” pain, altered mental status, hypertension

- 7 of these 11 patients “medically cleared” from the ED
The 11 transports out to the ED

- 4 patients unable to be cleared from the ED (to the satisfaction of psych)
- One 29 y/o F observed for chest pain rule-out, dc’ed to psych same day
- One admitted to med-psych due to feeding tube
- One admitted to medicine for Altered Mental Status, dc’ed the next day (to psych)
- One admitted for fever after arrival at Alt Dest, WBC 3, dc’ed (to psych) with viral illness on HD 4 (after ID and heme consults)

The Bottom Line

- 11 of 241 (5%) transported from their alternative destination to the ED within 2 days of the initial EMS call
- No instances of immediate transport due to screen failure
- We feel the screen is safe; there will always be some degree of provider subjectivity for these patients.

Wake EMS Alternative Destination Patients 2011-2012

- Number of Patients
- Patients Screened
- Met Criteria for Alt Dest
- Alt Dest Achieved
2011-2012 Data

- 15% increase in screenings, 18% increase in placement from 2011 to 2012
- Ambulance is returned to service < 10 minutes 78% of the time.
- Of patients screened overall 2011-2012:
  - 66% failed the screen
  - 19% successfully placed
  - 15% met criteria for alternative destination but didn’t go- mostly refusals (and no beds, etc)

Future Directions

- Continue to analyze reasons for failed referrals from crews and failed completion of the screen.
- Can we screen more people?
- Safely increasing the proportion of patients who achieve an alternate destination.
- Can we change the screening criteria?
- Should we not allow people to refuse?
- Expand Alternate Destination locations and increase community partnerships.
- Can we find more non-ED options for patients?

Take Home Points

- Health care is changing: focus on getting the right resource to the right patient at the right place at the right time, rather than rote transport to the ED.
- Some patients or groups of patients may not need to go to the ED, or go in an Ambulance; SAFE triage of these patients is a challenge and strong community partnerships for Alternative Destinations are paramount.
- Alternative Destination programs MUST have exceptional education, meticulous quality assurance, and strong EMS physician oversight.
Questions?