LESSONS LEARNED

Our project identified a need for improved structure and standardization of EMS handoffs.

While patient ID, chief complaint, and pertinent vital-sign findings are usually reported, many handoffs fail to consistently include other background information such as PMHx, allergies, and medications.

When this ancillary information is delivered, it is often done so in an inconsistent order.

This leads to redundancies during handoffs, such as interruptions or clarifying questions.

While many other barriers to effective handoffs exist, patients report a general lack of organization and a lack of time to organize their report.

The more organized the report is, the easier it is to recall later and ensure the information is complete.

There is a need to consider ongoing provider-patient handoff training.

PROJECT AIM

By 2024, all Pitt County EMS providers will receive standardized training in patient handoffs using the "IMIST-AMBO" mnemonic, resulting in an improvement of at least 20% in handoff satisfaction, and more consistent verbalization of important patient information.

PROJECT DESIGN/STRATEGY

- Measured satisfaction with current handoffs through anonymous online surveys distributed to both Pitt County EMS and ECU Health ED nursing staff.
  - Collected information on training & expertise, multiple questions on a Likert scale, a 5-star rating system, and a comment section.
- Directly observed 21 EMS handoffs in the ED to record current handoff content, structure, duration, and number of interruptions.
- Interviewed 10 EMS and ED supervisors regarding satisfaction, potential benefit, and suggestions with the "IMIST-AMBO" mnemonic.
- Will create a formal training module as well as reference materials (posters, badge cards) for EMS and ED providers to use.
- Will pilot the module and reference materials with one select EMS station, study our measures, and make any necessary changes before rolling out to the rest of the agency.

CHANGES MADE (PDSA CYCLES) & RESULTS

PDSA 1: Survey of EMS & ED providers to gauge satisfaction/suggestions with current handoff process

Notable free response comments:

- “I feel that a more structured approach to the patient report and handoff process would make the transfer of important information easier.”
- “Provide badge cards in addition to posters in the ED.”
- “It is difficult to keep track of patient information when delivering handoffs.”
- “I usually have to ask for vital signs.”
- “I often find that I am repeating myself during patient handoff.”
- “Certain EMS providers will provide an extremely well and detailed report, however others not so much.”
- “I usually feel rushed to give report.”
- “I often find myself trying to remember patient information.”
- “There is no consistency among providers with patient handoff information.”

PDSA 2: Direct observation/evaluation of handoffs to understand existing structure & challenges

PDSA 3: Gathering support and suggestions for IMIST-AMBO

References/acknowledgements:


- Mahmood, A. (2013). Improving EMS Handoffs: Using the “IMIST-AMBO” Mnemonic to provide Standardized Structure & Organization. LINC Scholar, ECU Brody SOM; ECU Department of Emergency Medicine; Pitt County EMS.

- Mahmood, A. (2014). Improving EMS Handoffs: Using the “IMIST-AMBO” Mnemonic to provide Standardized Structure & Organization. LINC Scholar, ECU Brody SOM; ECU Department of Emergency Medicine; Pitt County EMS.


- Mahmood, A. (2016). Improving EMS Handoffs: Using the “IMIST-AMBO” Mnemonic to provide Standardized Structure & Organization. LINC Scholar, ECU Brody SOM; ECU Department of Emergency Medicine; Pitt County EMS.


- Mahmood, A. (2019). Improving EMS Handoffs: Using the “IMIST-AMBO” Mnemonic to provide Standardized Structure & Organization. LINC Scholar, ECU Brody SOM; ECU Department of Emergency Medicine; Pitt County EMS.

- Mahmood, A. (2020). Improving EMS Handoffs: Using the “IMIST-AMBO” Mnemonic to provide Standardized Structure & Organization. LINC Scholar, ECU Brody SOM; ECU Department of Emergency Medicine; Pitt County EMS.


- Mahmood, A. (2022). Improving EMS Handoffs: Using the “IMIST-AMBO” Mnemonic to provide Standardized Structure & Organization. LINC Scholar, ECU Brody SOM; ECU Department of Emergency Medicine; Pitt County EMS.