

## Introduction

- Emergency departments (ED) are becoming increasingly overwhelmed by patient inflow.
- EMS alternative destination pathways could provide an opportunity for redirection of low-acuity patients from the ED.
- Currently very little clinical research exists into accuracy of paramedic suspected diagnoses. A study at our institution determined accuracy of paramedic suspected diagnosis was 67%, with almost 8% being deemed “critical misses” leaving ample room for feedback and education.

## Objective

- As an extension of the above noted study on paramedic diagnostic accuracy we aimed to determine paramedic interest in feedback on patient diagnosis and examine attitudes and behaviours after receiving this feedback.

## Methods

- At ED patient handover, paramedics completed a survey recording their suspected diagnosis. Paramedics were asked if they would like to receive feedback on the patient’s final ED diagnosis after discharge.
- Paramedics were asked to complete two follow-up surveys approximately 1-week and 3 months later which focused on paramedic demographics, feelings regarding receiving feedback as an educational tool and if they sought any additional learning.

## Results

In 317/493 (64.3%) of calls, paramedics requested feedback

### 1 week follow-up survey

Table 1. 1 week follow-up survey results (147/317 (46.4%) completed the 1-week) follow-up survey

	Strongly Agree/Agree	Neither Agree or Disagree	Strongly Disagree /Disagree	Did not answer
Receiving information regarding my patient’s diagnosis has caused me to reflect on the way the call was handled	117 (79.6%)	19 (12.9%)	11 (7.4%)	---
<b>Learning about my patient’s outcome has helped me feel closure about the call.</b>	126 (85.7%)	17 (11.6%)	2 (1.4%)	2 (1.4%)
After receiving information about my patient’s diagnosis, I believe I will have an increased level of confidence when managing a similar case in the future.	120 (81.6%)	23 (15.6)	1 (0.7%)	3 (1.4%)

### 3 month follow-up survey

Table 2. Paramedic demographics

	N (%)
Level of Certification	
PCP	76 (74.5)
ACP	26 (25.5)
Years as a paramedic	
0-5	34 (33.3)
6-10	22 (21.6)
11-15	17 (16.7)
16-20	7 (6.9)
20+	21 (20.6)

Table 3. 3 month follow-up survey responses (102/173 (58.9%) of individual paramedics completed)

	Strongly Agree/Agree	Neither Agree or Disagree	Strongly Disagree /Disagree	Did not answer
The possibility of learning there might be a difference between my impression of a patient’s problem and the Emergency Department’s diagnosis has caused an increase in my occupational stress/anxiety.	11 (10.8%)	26 (25.5%)	64 (62.7%)	1 (1.0%)
Learning about my patient outcomes has been beneficial to me as a clinician, as it has helped me improve my differential diagnostic skills.	93 (91.2%)	8 (7.8%)	1 (1.0%)	0 (0.0%)
<b>If information regarding patient diagnosis was made available to me on a regular basis, I would utilize it as a learning tool.</b>	98 (96.1%)	2 (2.0%)	1 (1.0%)	1 (1.0%)
Receiving information regarding patient diagnosis is useful as an educational tool in the field of Paramedicine.	99 (97.0%)	3 (2.9%)	0 (0.0%)	0 (0.0%)

“Very beneficial for closure purposes”

“Has improved my clinical assessment and judgement.”

“Tremendous value”

“Huge learning tool!”

“Amazing education and opportunities to improve!”

“Please keep doing this!”

“You cannot fix mistakes if you do not know that you are making them.”

## Conclusions

Receiving feedback on patient diagnosis was a valuable learning tool for paramedics in this study. Efforts should be made to include patient diagnosis as regular feedback to paramedics in order to increase educational opportunities and improve differential diagnoses.