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SCIENCE

Internship Program
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Science Internship Program
A Qualitative Survey of the Correlation Between Patient-Doctor Communications and Referrals Into the Emergency Department

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Background

- The amount of patients in the ED has increased for several reasons.
- Previous studies demonstrate that elderly patients with a Primary Care Physician (PCP) visit the ED infrequently\textsuperscript{4}.
- Studies from other countries suggest that those without access to PCP’s visit the ED more often\textsuperscript{1}.
- Other studies suggest that approximately 50\% knew their complaint could have been addressed in an alternate venue, but chose the ED\textsuperscript{3}.
Hypothesis

• The increase in patients visiting the ED was potentially thought to be a result of patients using the ED as a source for primary care.

• It is probable that the majority of the participants did not attempt to contact any other physician before their ED visit, thus arriving without referrals from medical professionals.
Abstract

• Determine the reason behind which patients increasingly visit the ED for issues that could be treated by a PCP.

• Convenience survey was created to establish patient interactions with other physicians prior to ED visits.

• Although most patients had PCP’s, less than half attempted to contact other physicians.

• It is essential in urban areas to encourage the contact of other physicians before going to the ED.
Methodology

• Direct face-to-face survey instrument consisting of six patient-answered questions.
  – Information regarding demographics and triage level of acuity were collected from the EMR.

• IRB approved; exempt from informed consent.

• Kept in a HIPAA certified manner.

• Convenience sample.
  – Patients with stable mental state.
  – Patients extremely ill (Triage Level 1) exempted.
Limitations

- Single care site (CCF Main Campus Emergency Department).
  - Quaternary level hospital with integrated health system.
- Public Hospital in an urban area (Cleveland, Ohio).
- Convenience sample.
  - Day hours.
  - Week days (Mon-Thurs).
  - Ages 18+.
Data

- 467 patients were approached; 364 agreed to participate.
  - 21 of the patients were employees and were exempted from the data because they were referred by colleagues with medical backgrounds.
  - This left 343 patients as the data pool.
- The surveys were answered by patients, family members and friends of patients.
Triage Level refers to the relative level of pain a patient feels on a specific scale created by The Cleveland Clinic.
Data

Demographic Statistics of Patients referred and self-referred by physicians.

<table>
<thead>
<tr>
<th></th>
<th>Referred</th>
<th>Not Referred/ Self-Referred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age:</td>
<td>Mean±STD</td>
<td>56.02±17.94</td>
</tr>
<tr>
<td>Gender:</td>
<td>Male</td>
<td>65/145 (44.83%)</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>80/145 (55.17%)</td>
</tr>
<tr>
<td>Race:</td>
<td>Black: 175/343 (51.02%)</td>
<td>48/145 (33.10%)</td>
</tr>
<tr>
<td></td>
<td>White: 156/343 (45.48%)</td>
<td>92/145 (63.45%)</td>
</tr>
<tr>
<td></td>
<td>Other: 12/343 (3.50%)</td>
<td>5/145 (3.45%)</td>
</tr>
</tbody>
</table>
## Data

<table>
<thead>
<tr>
<th></th>
<th>Referred</th>
<th>Not Referred/ Self Referred</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contacted MD prior to ED visit</strong></td>
<td>117/139 (84.17%)</td>
<td>22/139 (15.83%)</td>
</tr>
<tr>
<td><strong>Have a PCP: 277/343 (80.76%)</strong></td>
<td>130/277 (46.93%)</td>
<td>147/277 (53.07%)</td>
</tr>
<tr>
<td><strong>Last saw PCP: 252/277 were referred or self-referred.</strong></td>
<td></td>
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</tr>
<tr>
<td>Less than 3 months ago</td>
<td>98/252 (38.89%)</td>
<td>107/252 (42.46%)</td>
</tr>
<tr>
<td>Between 4-12 months ago</td>
<td>12/252 (4.76%)</td>
<td>19/252 (7.54%)</td>
</tr>
<tr>
<td>More than 1 year ago</td>
<td>10/252 (3.97%)</td>
<td>6/252 (2.38%)</td>
</tr>
</tbody>
</table>
Results

• Of the 343 consenting patients, only 143 (41.69%) contacted a medical professional prior to their visit to the ED.

• Only 145/343 (42.27%) of the patients arrived with medical referrals.

• However, 277/343 (80.76%) of the patients had PCP’s.
Conclusions

• These findings support the former assumption that most patients in the ED come without professional recommendation, however a significant minority arrive with referrals.

• The data also serves as evidence that the majority did not contact other physicians before deciding to visit the ED.

• However, the data discredits the belief that most patients lacked a PCP given that over 80% did indeed have a PCP.
Recommendations

• Conducting a survey that is not a convenience sample.
  – Differing the time of day, including weekends, and encompassing community/suburban hospital surveys as well.

• Understanding why medical providers referred the patients.
  – Determining if the referrals were appropriate for the issue at hand.
References


Special Thanks

To…

• Dr. Fertel, my primary mentor who taught me so many invaluable lessons and kept learning fun.

• Dr. Mace, my co-mentor who aided me with data analysis and compilation.

• Morgan Jennings, my partner who worked alongside me throughout the duration of the 9 weeks.

• Cleveland Clinic Main Campus Emergency Department Staff who allowed my partner and I to carry out our research without any problems.
Special Thanks
To...

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