DocID: A Photographic Intervention to Improve Patient Care Delivery

Divya Ramaraju MD, Ashwin Kurian MD
Faculty advisor: Baber Ghauri MD
Research Advisor: Mary Naglak PhD
Department of Medicine
Abington Memorial Hospital
Introduction

- Inpatient admission disorienting experience
- Patient confronted by a multitude of health care providers
- 80 hour work week fragments patient’s overall health care experience
- Hospitalist assume inpatient care
Background and Significance

- Encourages self-management
- Active involvement and better outcomes
- Inability to identify -associated with poor understanding and poor patient engagement in care plan

Background and Significance

- Maniaci et al
  - Constant visual representation of physician’s name increases ability to correctly recall name of attending physician
- Francis et al
  - Included photograph of the entire primary team
  - Ability to identify inpatient attending physician correlates with increased patient satisfaction
Scope of the Problem

- How many patients can identify their inpatient primary attending physician by their name?
- Understand the role the attending physician plays in their care? Who is coordinating their care?
- Are patients satisfied with the level of communication with their inpatient attending physician?
Definitions

- Inpatient Attending physician
- Attending consultant
- Outpatient Primary doctor
- Physicians in training
- Physician extenders

The attending physician’s role is to coordinate various specialties and inpatient services, to provide high quality and safe health care for the patient.
Hypothesis

- Patient education and a photographic display of their inpatient attending physician would:
  - Increase physician identification rates
  - Improve physician-patient communication
  - Patient satisfaction
Study Design and Methods

- Randomized prospective trial
- Intension to treat analysis
- Patients admitted to an acute medical service at Abington Memorial Hospital

- **Control group** – standard patient room with no physician identification display
Study Design and Methods

- **Intervention group**
- Patients educated about concept of primary Attending
- Physician display
  - Color photograph of Primary Attending- printed on consumer-grade printer
  - Name of Primary Attending
  - Physician service name
  - Telephone number of contact person
  - Placed in clearly visualized position
Study Design and Methods

Inclusion Criteria

- Hospitalist service where the Attending is not their Primary Care Physician
- Patients on general medical floor
- Between 18 and 70 years of age
- Able to read English

Exclusions Criteria

- Diagnosis of dementia
- Neurologic or ocular pathology that would preclude being able to visualize or retain the information on the display
- Intensive care unit admission
Study Design and Methods

- Psychometric Likert scale based survey administered

- **Control group** - at least 24 hours after admission

- **Intervention group** - 24 hours after patient education and placement of primary attending identification display
Study Design and Methods

- Descriptive statistics were reported using means and frequencies.
- Univariate analysis was performed using the independent t-test and the chi-square test where appropriate.
- P-value <0.05 considered statistically significant.
## Demographics

<table>
<thead>
<tr>
<th></th>
<th>Control N = 35</th>
<th>Intervention N = 35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age (yrs)</td>
<td>44.1 ± 1.5</td>
<td>47.1 ± 1.3</td>
</tr>
<tr>
<td>Males</td>
<td>51.4%</td>
<td>44.1%</td>
</tr>
<tr>
<td>Mean days since admission</td>
<td>3.0 ± 1.0</td>
<td>3.0 ± 1.4</td>
</tr>
<tr>
<td>Previous admissions</td>
<td>1 ± 1.4</td>
<td>1.06 ± 2.0</td>
</tr>
<tr>
<td>Named Out Patient Primary Doctor</td>
<td>86.5 %</td>
<td>78.1 %</td>
</tr>
<tr>
<td>Un-referred patients</td>
<td>27.8 %</td>
<td>33.3 %</td>
</tr>
</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th></th>
<th>Control N = 35</th>
<th>Intervention N = 35</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knew concept of one Primary Attending</td>
<td>60 %</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Able to identify Attending by name</td>
<td>29.7%</td>
<td>82.4%</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Able to identify Inpatient Attending’s physician name with help</td>
<td>24.3%</td>
<td>5.9%</td>
<td></td>
</tr>
<tr>
<td>Picked wrong name/ could not remember</td>
<td>46%</td>
<td>11%</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Satisfied or extremely satisfied with attending communication</td>
<td>59.4%</td>
<td>88.3%</td>
<td>0.003</td>
</tr>
</tbody>
</table>
Results

94%

• Responded important or very important to know who their Primary inpatient attending physician’s name

85%

• In the intervention group responded that the physician display was either helpful or extremely helpful in identifying their attending physician

84%

• Display was either helpful or extremely helpful in improving communication
Conclusions

Patient education and a photographic display of the inpatient attending physician can:

- Increase physician identification rates
- Improve physician-patient communication
- Patient satisfaction
Conclusion

Served as reminder to physicians to introduce themselves
Discussion

- Easily applicable
- One person to focus on
- Photographic representation
  - Maniaci et al. Increasing a patient’s ability to identify his or her attending physician using a patient’s room. *Arch Intern Med.* 2010 Jun 28;170(12)
Limitations

- Single institution study
- Physicians not blinded to study
- Long-term patients not studied; multiple hospitalist attendings not involved in patient care
- Any attempt to study behavior tends to modify behavior (Hawthorne Effect)
Recommendation

Reinforcement via repeated visualization of the attending physician’s name, photograph, service name and service contact details.
Questions