

## Delivering Feedback to Residents Using a Documentation Assessment Tool

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## Financial Disclosures

We have no financial disclosures.



## Background

- Feedback is a crucial element of resident education, and pediatric residents at our institution (as well as many others), wish for more feedback.
- Inpatient progress notes are a key component of patient care for hospitalized patients, though resident progress notes can be inaccurate and imprecise
  - As such, the Accreditation Council for Graduate Medical Education (ACGME) has emphasized high-quality documentation for residents.



## Objectives

- The objectives of this study were to:
  - Provide frequent, high-quality faculty feedback to residents regarding their progress notes using a standardized tool, the Physician Documentation Quality Instrument 9-item version (PDQI-9).
  - Evaluate Pediatric Hospital Medicine (PHM) faculty's perceived ease and effectiveness of the tool.
  - Assess faculty clinical teaching evaluation scores before and after initiation of this process.



## PDQI-9

- Developed by Dr. Paul Stetson (Columbia University)
- Validated for H&Ps and inpatient progress notes for internal medicine residents
- Obtained from a published article in 2012.
  - Stetson, P.D. et al. 2012. *Assessing Electronic Note Quality Using the Physician Documentation Quality Instrument (PDQI-9)*. *Applied Clinical Informatics*. 3(2): 164–174



## PDQI-9 Tool

Attribute	Score	Description of Ideal Note
1. Up-to-date	Not at all 1      2      3      4      Extremely 5	The note contains the most recent test results and recommendations.
2. Accurate	Not at all 1      2      3      4      Extremely 5	The note is true. It is free of incorrect information.
3. Thorough	Not at all 1      2      3      4      Extremely 5	The note is complete and documents all of the issues of importance to the patient.
4. Useful	Not at all 1      2      3      4      Extremely 5	The note is extremely relevant, providing valuable information and/or analysis.
5. Organized	Not at all 1      2      3      4      Extremely 5	The note is well-formed and structured in a way that helps the reader understand the patient's clinical course.



## PDQI-9 Tool

<b>6. Comprehensible</b>	Not at all 1	2	3	4	Extremely 5	The note is clear, without ambiguity or sections that are difficult to understand.
<b>7. Succinct</b>	Not at all 1	2	3	4	Extremely 5	The note is brief, to the point, and without redundancy.
<b>8. Synthesized</b>	Not at all 1	2	3	4	Extremely 5	The note reflects the author's understanding of the patient's status and ability to develop a plan of care.
<b>9. Internally Consistent</b>	Not at all 1	2	3	4	Extremely 5	No part of the note ignores or contradicts any other part.
<b>Total Score:</b>						



## Previous Work

- Analyzed resident scores on each of the 9 attributes on the PDQI-9 tool from data collection October 2015 to June 2016.

**Table 1: PDQI-9 Scores**

n = 145	Total Score	Up-to-Date	Accurate	Thorough	Useful	Organized	Comprehensible	Succinct	Synthesized	Internally Consistent
Mean (Standard Deviation)	39.74 (4.24)	4.30 (0.70)	4.54 (0.60)	4.38 (0.68)	4.35 (0.64)	4.52 (0.63)	4.66 (0.56)	4.23 (0.76)	4.24 (0.71)	4.52 (0.66)
Median (Interquartile Range)	40.0 (6)	4.0 (1)	5.0 (1)	4.0 (1)	4.0 (1)	5.0 (1)	5.0 (1)	4.0 (1)	4.0 (1)	5.0 (1)

- Resident PDQI-9 total scores statistically correlated with resident evaluation scores pertaining to documentation.
  - Evaluation score was drawn from interpersonal communication skills subcompetency 6 (ICS-6) of the AAP/ACGME pediatric milestones, with the locally revised version stating: "Maintains comprehensive and timely medical records."<sup>1</sup>



1. The Pediatrics Milestone Project. January 2012. Collaboration of the AAP and ACGME.



## Methods

- Before initiating the use of the PDQI-9 tool as a framework for feedback on documentation, education was provided:
  - To residents regarding high-quality documentation.
  - To PHM faculty on the use of the PDQI-9 tool.



## Methods

- Beginning October 2016, PHM faculty were asked to:
  - Evaluate one progress note per week for each daytime intern on the PHM rotation using the PDQI-9.
  - Fill out an electronic version of the tool (available for resident review).
  - Provide dedicated feedback to the resident (verbal or email).



## Methods

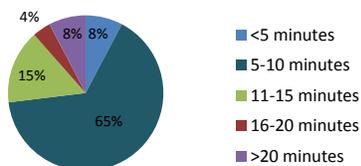
- Surveys were sent monthly to faculty regarding:
  - Satisfaction regarding the process.
  - Time spent on this process.
  - Whether or not the resident progress notes improved.
  - Whether or not the faculty's own progress notes improved.
- Clinical teaching evaluations of PHM faculty by pediatric residents from before and after the intervention were assessed.



## Results

- Faculty were surveyed from February 2016 to December 2016 resulting in 45 responses.
  - 75% return rate
- 87% of faculty indicated they were “extremely satisfied” or “mostly satisfied” with the process.
- Survey data indicated that 62% of faculty gave feedback with varying amount of time spent.

**Time Taken to Give Feedback**  
(n = 26 responses)



## Results

- 50% of faculty perceived that resident notes improved over the course of the month.
- 73% felt that their own documentation improved as a part of this process.



## Results

- Faculty evaluation scores were analyzed:
  - Likert scale of 1 (Major Strength) to 5 (Major Weakness)
  - Analyzed using ANOVA

	Pre-Intervention October 2014-September 2015	Post-Intervention October 2015-September 2016	p-value
Provided Timely and Constructive Feedback	1.81	1.59	<0.008
Overall Teaching Effectiveness	1.66	1.56	<0.126
Answered Questions Clearly	1.50	1.45	<0.414

## Conclusions

- After launching the use of the standardized tool (PDQI-9) as a framework for faculty feedback of progress notes, the majority of PHM faculty delivered feedback to residents on their progress notes.
- The amount of time taken to give feedback was generally low.
- Satisfaction with the process was noted to be high.
- There were statistically significant improvements in resident evaluation scores of faculty pertaining to feedback.



## Limitations

- Few survey responses (small sample size).
- Skipped answers on completed surveys (data incomplete).
- Many inputs go into resident clinical evaluation scores of faculty, so cannot completely attribute improvement in scores to this process.

## Next Steps

- As more data is collected, future plans include:
  - More dedicated analysis of the trajectory of resident PDQI-9 total scores and individual attribute scores, both across a given rotation and over the course of an academic year
  - Validation of the PDQI-9 tool for pediatric residents (the tool is validated in internal medicine residents only).
  - Expanding this initiative to other inpatient pediatric services and to senior resident and student notes.



Thank you!



Questions?