Quality Improvement of Procedural Services in Family Medicine Residency Clinics

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PROBLEM
Performing common procedures in our Family Medicine (FM) residency clinics is often a difficult and inefficient process.

BACKGROUND
- There is great variety in the expectations of family medicine residencies in terms of required procedures
- A 2008 STFM consensus statement on procedural training found higher job satisfaction and better financial compensation for Family Physicians who performed procedures
- Patient satisfaction is likely increased when minor procedures are able to be performed by their primary clinician
- Given our identified problem, this would suggest a disconnect between the known benefits of providing procedural services and the ability of our residency clinics to provide those services in an efficient manner

OBJECTIVE
To assess clinician and staff comfort with performance of common FM procedures and implement an intervention to improve the efficiency of procedure performance in the clinic setting.

METHODS
- Phase 1: Pre-intervention survey was distributed to physicians, residents, and staff at Aurora FM residency clinics
  - Survey evaluated comfort level of providers in performing common procedures and identifying proper equipment needed to perform procedures
  - The comfort level was rated on a scale from 1 to 5 with 1 meaning not comfortable at all, 2 being somewhat comfortable, 3 being neutral, 4 being comfortable and 5 being very comfortable
  - Data was compiled in Excel; statistical analysis was performed using ordinal, logistic, and binary regression
- Phase 2: Procedures instructional manual was created for 15 common procedures and provided to clinics
  - The manual included procedure instructions, equipment pictures and information regarding further resources
- Phase 3: Post-intervention survey was distributed after providers had access to procedures manual for 3 months

CONCLUSIONS
Pre-intervention survey demonstrated that overall providers felt neutral with regard to their level of comfort performing procedure signifying potential room for improvement.

Given small sample size we focused on the raw data and comments to support moving forward with our project. Based on the consensus of the comments provided there seemed to be multiple barriers to performing procedures. Thus, the provision of a comprehensive instructional resource in the form of a procedures manual provided at the point of care was chosen as the intervention.

Results of our study demonstrated that our targeted intervention to improve the efficiency of procedure performance in the clinic setting was well-utilized. Therefore a definitive conclusion about the ability of the intervention to improve the efficiency of procedure performance was not able to be made.

Potential reasons for poor utilization:
- Poor promotion of manual
- Inability to access manual when necessary or in an alternative format (electronically)
- Perception that issues with procedures performance are related to other factors such as clinic efficiency and scheduling difficulty

Future areas of focus:
- Better promotion of manual
- Improving ease of access to procedural manual
- More frequent education about contents of manual
- Ability to access procedural manual electronically
- Focus on additional barriers such as scheduling issues and availability of supplies

REFERENCES

Example Procedure Instructions

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<th>Procedure</th>
<th>Instructions</th>
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<td>Skin lesion: shave biopsy</td>
</tr>
<tr>
<td>Incision &amp; Drainage of abscess</td>
<td>Skin lesion: punch biopsy</td>
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<td>Laceration &amp; Incision Repair</td>
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<td>Lipoma Removal, Simple</td>
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RESULTS
PRE-SURVEY
- 28 respondents: 10 faculty and 18 residents
- Median comfort level for performing procedures in clinic was 3.0 (3-neutral)
- Further breakdown demonstrated that residents were more comfortable than faculty in performing procedures (p-value 0.041)
- Pre-intervention comments regarding barriers revealed:
  - Need for correct supplies and instructions
  - Need for better communication and coordination with scheduling
  - Lack of experience in performing procedures
  - Lack of knowledge regarding what tools to use
  - Too much time to perform procedures

POST INTERVENTION SURVEY
- 18 respondents: 0 Faculty and 18 residents
- 4 respondents reporting using the procedure manual
- Given low number of respondents unable to perform statistical analysis
- Post Intervention comments revealed:
  - Request to make manual electronic
  - Concern regarding complexity of manual with regards to staff usage