Surgeon Perceptions of the Integration of Patient-Reported Outcome Measures into Clinical Practice

Brittni Driscoll, Laura D. Leonard, MD, Alexandra Kovar, MD, Joshua Billings, MD, Sarah E. Tevis, MD, Simon P. Kim, MD, and Ethan Cumber, MD

Background

Patient Reported Outcome Measures (PROMs):
- Come directly from the patient
- Standardized, validated tools
- Report the status of a health condition
- Integrated into clinical practice

PROMs can:
- Supplement existing objective data
- Enable a more holistic approach that emphasizes shared decision making
- Implemented throughout the care continuum
- Previous PROM usage has primarily been in research
- Adoption into clinical surgical practice has been limited

Aim: To develop a better understanding of surgeons’ perceptions of integrating patient reported outcomes into clinical practice

Methods

Interviews:
- Semi-structured following Protocol 19-0894
- November 2019 to August 2020
- All interviews were recorded and transcribed verbatim

Thematic Saturation:
- Defined as three consecutive interviews with no new codes

Qualitative Analysis:
- Inductive approach
- Two independent reviewers transcribed and coded interviews in Atlas.ti
- Codes were compared together to generate themes
- Separate reviewer ‘approved’ themes based on interview content
- Three reviewers were involved in novel insight generation

Determination of Thematic Saturation

Number of Additional Unique Codes per Interview:

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Inductive Analysis

PROM Data Can Transform Surgical Practice on an Individual and Institutional Level

Implementation of PROMs into Clinical Practice Requires a Strong Leadership Team to Guide the Integration Process

Surgeons Believe Clinical Use of PROMS Advance Personalized Medicine, but Successful Integration is Dependent on Customization and Attention to Unintended Consequences

Surgeons Appreciate the Challenges of Integrating PROMs into Surgical Practice, Including Risks of Incorrect Use or Interpretation

Surgeons view PROMs as the Next Stage of Advancing Patient Care

A PROM Platform Must be Adaptable - to the Diversity within Surgery and to Unique Physician Workflows

Determinants of Thematic Saturation

- Patient’s idea of our own grasp of our own informatics is way beyond what we do. They are like ‘what are your outcomes’ and you have to make up a number. You have no idea.”
- “Very different practices, very different expectations, and very different situations where one is going into a planned limb saving procedure. So you have to be really careful when you try to compare all surgeons across that same platform.”
- “I think that until we understand how we are using the data and we understand what the data mean for our patients and how the data impact our clinical practice and what the validity of the data is in terms of actually changing our patient’s outcomes...it just further complicates it for patients without it being particularly meaningful or helpful for them.”

Conclusions

PROM integration:
- Improve patient satisfaction, compliance, and ultimately clinical patient outcomes
- Identify at risk patients in the post-operative period
- Better inform patients during pre-operative discussions
- An essential component of advancing patient-centered care

Concrete Recommendations:
1. Surgical leaders must be engaged in the change management process of organizational PROM integration
2. Collection and reporting of PROM data at the individual patient levels needs to be seamlessly integrated into a routine clinical workflow within the EMR with close attention to human-factor engineering and its impact on clinician workload
3. Surgeons need flexibility to determine which PROM questions are relevant to their practice and a strong multidisciplinary referral system to act on the PROM data
4. Surgeons need the ability to examine PROM results at population levels with data visualization functionality capable of filtering by individual procedures and patient characteristics
5. Data should not be displayed or used in a fashion that could prompt decisions on comparative effectiveness of surgeons or hospitals by patients or payers until additional research has been performed

Next Steps

Pilot Study:
- Implement PROM data with a small group of surgeons
- Follow up with structured interviews of at 3, 6 and 12 months
- Discuss the impact of PROM data with patients

Limitations:
- PROM integration into EPIC
- Surgeons understanding of how to apply the PROM platform and data

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