Using PROMs & PREMs to Impact Clinical Care

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W21C Board Room

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Disclosure

❖ ABJHI receives funding from:
  ▪ Bone & Joint Health Strategic Clinical Network
  ▪ Canadian Institutes of Health Research
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  ▪ Restricted & unrestricted industry donations
  ▪ Private health clinics
  ▪ Philanthropy

❖ Data presented is real
PROMs & PREMs in Elective Total Joint Arthroplasty

Captured routinely:
- WOMAC: Functional status
- EQ-5D: Quality of life
- Patient feedback

Often used:
- QOL:
  - SF-12/36
  - HUI-3
- Functional status:
  - Harris Hip Score
  - Knee Society Score
  - HOOS & KOOS
- Hospital Experience:
  - HAPSQ

Our core values: accountability, collaboration, continuous improvement, ethics, evidence, innovation, integrity, passion, privacy, respect
Application of PROMs

To describe

Goals are but progress markers along the journey of betterment; improvement should have no end.
Application of PROMs

- To inform

All change in healthcare should be supported by evidence that it improves the quality of care.

Figure 21. Pre- and post-surgery WOMAC scores (Site X)

Figure 19. Incidence of PONV and effectiveness of treatment
Application of PROMs

- To predict

Healthcare is a shared responsibility; improvement requires a united effort.

<table>
<thead>
<tr>
<th>Table 1. Relationship between obesity and pre- and post-surgery WOMAC scores</th>
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<tbody>
<tr>
<td>WOMAC Score (n=2761)</td>
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<tr>
<td>Pre-surgery (avg):</td>
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<tr>
<td>3 months post-op (avg):</td>
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<tr>
<td>Point change (avg):</td>
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<td>3 mos post-op ≥ 90 (%)</td>
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Application of PROMs

❖ To predict

Table 2. Logistic regression predicting WOMAC 3 months post-op

| WOMAC Score @ 3 Months                  | Coefficient | Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|----------------------------------------|-------------|-----------|-------|-----|---------------------|
| Obese (Y vs N)                         | -0.16       | 0.89      | -0.18 | 0.860 | -1.90               | 1.59                |
| Pre-Surg WOMAC                         | 0.21        | 0.02      | 9.31  | <0.001 | 0.17                | 0.25                |
| Age                                    | 0.01        | 0.04      | 0.22  | 0.824 | -0.08               | 0.10                |
| Male vs. Female                        | 1.47        | 0.87      | 1.68  | 0.092 | -0.24               | 3.17                |
| Knee vs. Hip                           | -6.97       | 0.89      | -7.86 | <0.001 | -8.70               | -5.23               |
| 1 Pre-Surg Risk Factor vs. 0           | -0.70       | 0.99      | -0.70 | 0.483 | -2.65               | 1.25                |
| 2+ Pre-Surg Risk Factors vs.0          | -1.47       | 1.10      | -1.33 | 0.182 | -3.62               | 0.69                |
Closing the Quality Loop

- Monitor provincially
- Identify potential issue(s)
- Evaluate change(s) to care path
- Present findings to clinical committee(s)
- Investigate (“deep dive”)
- Inform individual clinician(s)
Questions?

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