MEASURING PATIENT SATISFACTION WITH A DIABETES CARE SERVICE

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PATIENT SATISFACTION

- Indicator of quality of service
- Patient’s evaluation of their care
- Ability of provider to meet patient’s needs
- Four conceptualisations of satisfaction
MEASUREMENT OF CONSUMER SATISFACTION

Performance evaluation

• Pharmacists’ services (MacKeigan and Larson, 1989, 2002)

• Diabetes specific instruments
  • Diabetes Treatment Satisfaction Questionnaire (DTSQ) (Bradley, 1994)
  • Diabetes Management Evaluation Tool (DMET) (Paddock et al. 2000)
  • Patients' Evaluation of the Quality of Diabetes Care (PEQD) (Pouwer F, Snoek F, 2002)
PHARMACY DIABETES CARE PROGRAM (PDCP)

- Randomised clustered controlled trial which evaluated a type 2 diabetes care model in Australian community pharmacies
- 30 intervention pharmacies in 4 Australian states

Krass et al, 2005
OBJECTIVES

• To investigate patient experiences with DSM service (DMAS)

• To develop and validate a measure of patient satisfaction with pharmacist delivery of DSM services
METHOD
Patient Satisfaction with DMAS

Combining qualitative and quantitative research is beneficial when developing measurement instruments

QUALITATIVE
Patient Interviews

QUANTITATIVE
Satisfaction Questionnaire

Holman, 1992, Casebeer et al. 1997

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QUALITATIVE METHODS
Patient Interviews

- Semi-structured interviews
- Five core issues
  - Overall experience
  - Patient understanding
  - Patient expectations
  - Pharmacist interaction
  - Future intentions

- Ascertain patient opinions/thoughts relating to experience
- Understand issues important to patients
- 16 DMET items used to assist satisfaction measurement
DATA ANALYSIS

DMAS

• Thematic analysis
• Identification of themes to develop item banks for questionnaire development
DMAS RESULTS

- 14 interviews
- Themes identified:
  - Evaluations of the service
  - Service impact
  - Provider preference
  - Perceived need for the service
  - Patient satisfaction

"I have better control and..."

"Pharmacy location is convenient"

"The service in the pharmacy was easy..."

"It provides terrific support and should definitely be available".
SUMMARY

SATISFACTION

PERFORMANCE EVALUATION
- Location
- Service Quality
- Relationship
- Impact on
- Knowledge

AFFECT BASED ASSESSMENT

BEHAVIOUR CHANGE
- Self efficacy
- Gratitude

Disease State Management Satisfaction Questionnaire

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Schommer, 1996
Bandura, 1986
Bandura, 1977
Validation study

Methods

• 165 DMS-Q questionnaires mailed
  - 135 DMAS participants (Krass et al, 2005)
  - 25 Continuity of Care Participants (Krass et al 2005)

• 2 waves
Data analysis

Construct validity

- Initial analysis using PCA
  - Oblimin
  - Scree plot

- Correlations with improvements in HbA1c

- Reliability - Cronbach’s alpha

- CFA used to test the validity of the model
Results

• Initial extraction 6 factors (Eigen values > 1)

• Final solution - 4 factors explaining 53% of total variance
## Results

<table>
<thead>
<tr>
<th>Factor</th>
<th>Number of items</th>
<th>Cronbach’s alpha</th>
<th>Spearman’s rho (change in A1c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with PCist service</td>
<td>5</td>
<td>0.77</td>
<td>-0.20</td>
</tr>
<tr>
<td>Positive impact on S/M</td>
<td>5</td>
<td>0.83</td>
<td>-0.26</td>
</tr>
<tr>
<td>Negative impact on S/M</td>
<td>6</td>
<td>0.82</td>
<td>0.40</td>
</tr>
<tr>
<td>Knowledge</td>
<td>4</td>
<td>0.76</td>
<td>-0.20</td>
</tr>
<tr>
<td>Question</td>
<td>Factor Loading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DDSMQ1: I am satisfied that the pharmacist was helpful during the service</td>
<td>.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DDSM7: I was satisfied with being able to reach the pharmacist when needed</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DDSMQ10: I appreciated receiving the service from the pharmacist</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSMQ22: I am pleased with the service I received</td>
<td>.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DDSMQ16: I am thankful for the time the pharmacist gave up to provide the service</td>
<td>.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DDSMQ14: I was satisfied with the convenience of the location during the service</td>
<td>.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DDSM2: The pharmacy was too public for the service</td>
<td>-.40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CFA Model: Patient satisfaction with DSM service in community pharmacy

Model Chi square = 153.2
df = 108; bootstrap p = .24

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Discussion

- Provides preliminary evidence of validity and reliability of the DDSM-Q
- Future validation with a larger sample
- Can be used as an outcome measure in future research on consumer satisfaction with Pharmacy Diabetes services.
Acknowledgement

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