

# 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

**Performance  
Evaluation**

**Disconfirmation  
Of  
Expectations**

**Affect  
Based  
Assessment**

**Equity  
Based  
Assessment**

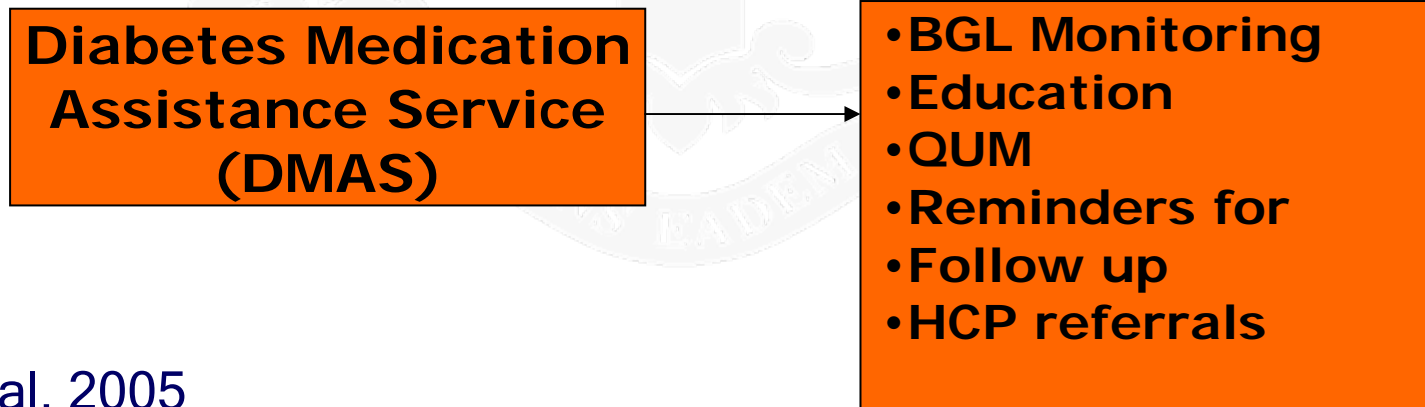
# MEASUREMENT OF CONSUMER SATISFACTION

## *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

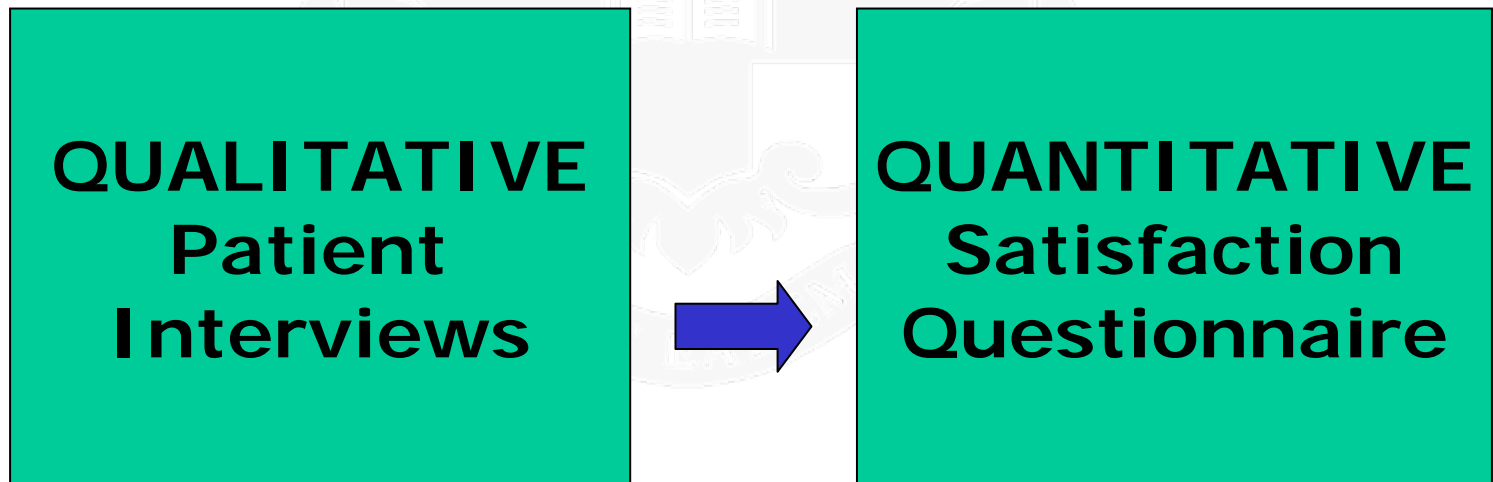
# OBJECTIVES

- 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



Holman, 1992, Casebeer et al. 1997

# 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 RES

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

*"I have better control  
an*

*"Pharmacy location is  
convenient"*

*"The service in the  
pharmacy was easy"*

*...to  
keep me motivated  
and thinking about  
diabetes"*

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

# SUMMARY

**SATISFACTION**

**PERFORMANCE  
EVALUATION**

**AFFECT BASED  
ASSESSMENT**

**BEHAVIOUR  
CHANGE**

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

**Disease State  
Management  
Satisfaction  
Questionnaire**

- Self efficacy
- Gratitude

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 vaues > 1)
- Final solution - 4 factors explaining 53% of total variance

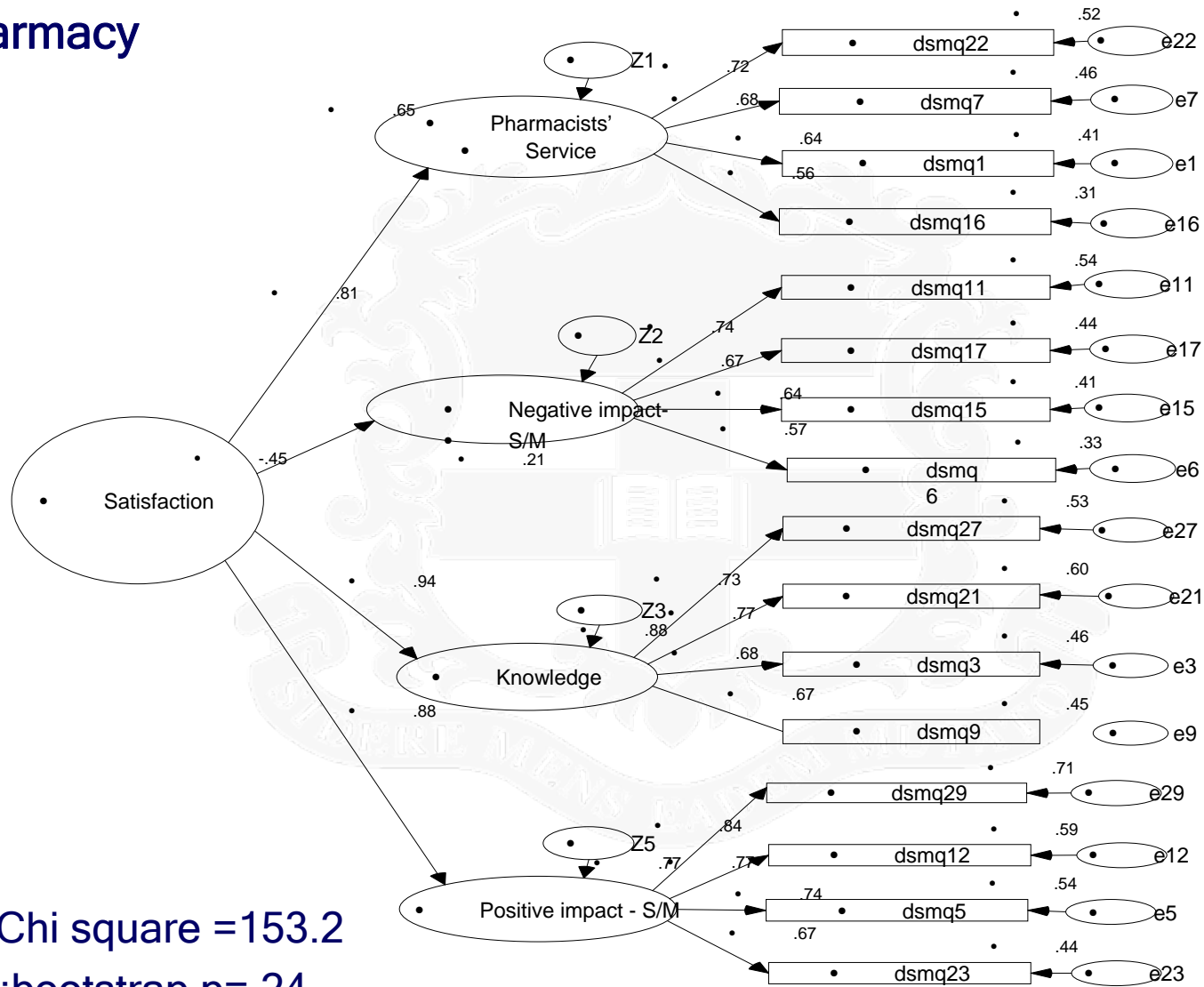
# Results

Factor	Number of items	Cronbach's alpha	Spearman's rho (change in A1c)
Satisfaction with Pcist service	5	0.77	-0.20
Positive impact on S/M	5	0.83	-0.26
Negative impact on S/M	6	0.82	0.40
Knowledge	4	0.76	-0.20

## Satisfaction with the Pharmacist Service - factor loadings

DDSMQ1: I am satisfied that the pharmacist was helpful during the service	.79
DDSM7: I was satisfied with being able to reach the pharmacist when needed	.64
DDSMQ10: I appreciated receiving the service from the pharmacist	.64
DSMQ22: I am pleased with the service I received	.62
DDSMQ16: I am thankful for the time the pharmacist gave up to provide the service	.54
DDSMQ14: I was satisfied with the convenience of the location during the service <sup>4</sup>	.47
DDSM2: The pharmacy was too public for the service	-.40

# CFA Model: Patient satisfaction with DSM service in community pharmacy



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



# 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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