

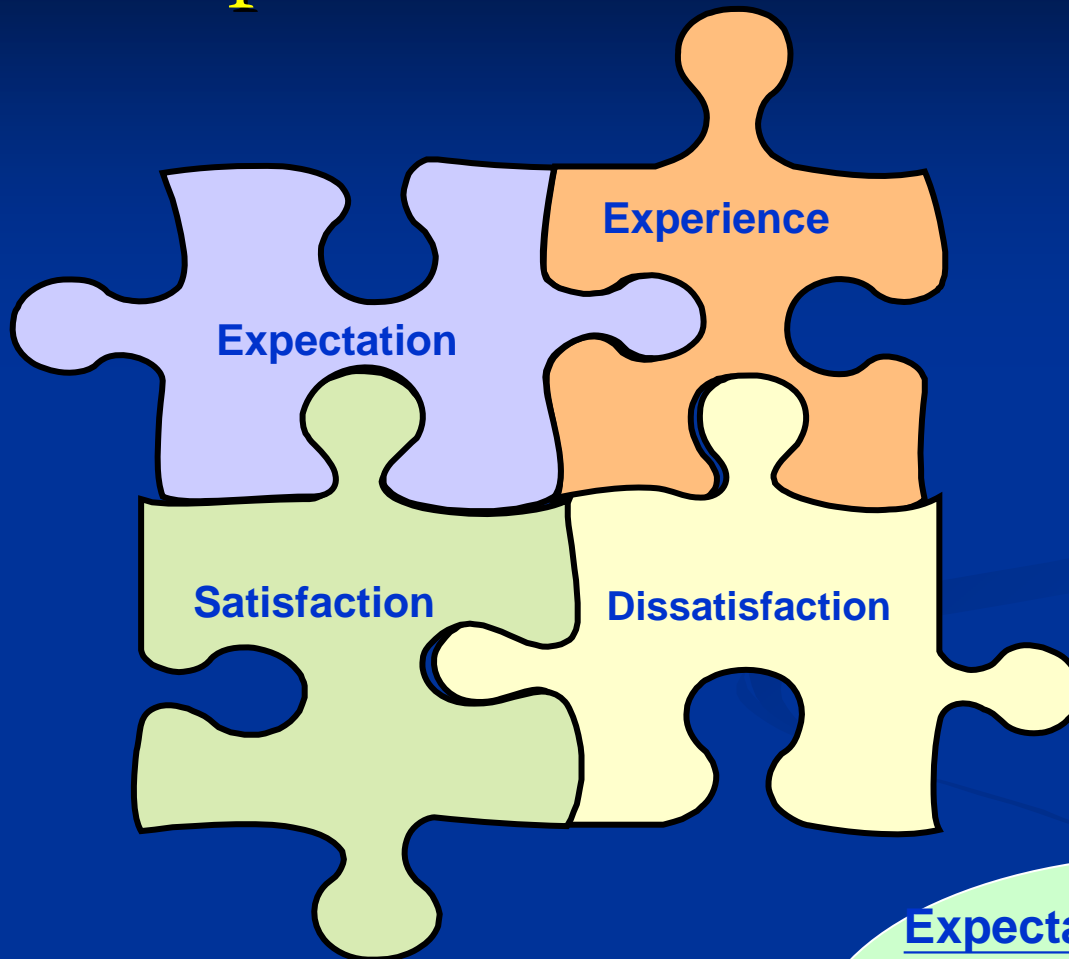
# A New Instrument for Measuring Surgical Patient Satisfaction in Hong Kong: Development and Reliability

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# Concept of Patient Satisfaction



- (1) Very satisfied: Experience > Expectation
- (2) May/may not satisfy: Experience ~ Expectation
- (3) Dissatisfied: Experience < Expectation

Expectation depends on  
(1) Cultural values  
(2) Beliefs/ thoughts about hospital stay  
(3) Personal needs

# Patient satisfaction

- From hospital's perspective, patients' view of care is important to both clinical and management staff
  - Predictive of future behavior
    - Compliance with treatment (Ware 1983, Gray 2004, Hirsh 2005)
    - Intent to return to the same hospital (Weisman 1985, Linn 1982, Francis 1969)
- An important indicator of performance for healthcare system and primary care
- Enhance and improve holistic patient care



# Methods of collecting patients' views

- Complaints
  - Patient Relation Officer
- Opinion survey
  - Common in evaluation of a new encounter/ service => lack of psychometric properties
- Feedback from patient groups
- Patient satisfaction survey

# Development of surgical patient satisfaction instrument

- Western measures: ? culturally appropriate for HK Chinese patients
- No validated tool for Chinese surgical inpatients
- ? Applicable to public hospital system in HK
- Robust measure must be based on culture values/ beliefs in context and local setting

# Study Objectives

## ■ Phase I

- Qualitative study- focus group
- To understand what matters to surgical patients whilst in hospitals from patients' perspectives
- To transform the ideas and opinions into measurable scales
- To develop a robust patient satisfaction instrument for local population

## ■ Phase II

- To test reliability and validity of our new instrument

# Phase I- qualitative study

- 3 focus groups
- 21 subjects aged 20-80 recruited from SUR OPDs between Aug-Sep 2007
- ~ 7-8 informants per group
- A mix of female and male subjects in each FGD

# Inclusion and exclusion criteria

- Inclusion criteria:
  - Had operation at PWH within last 6 months
  - Had hospital stay  $\geq 4$  days
  - Cognitive
  - Cantonese speaking
- Exclusion criteria:
  - Deaf or unable to speak
  - Mentally impaired



# Focus groups

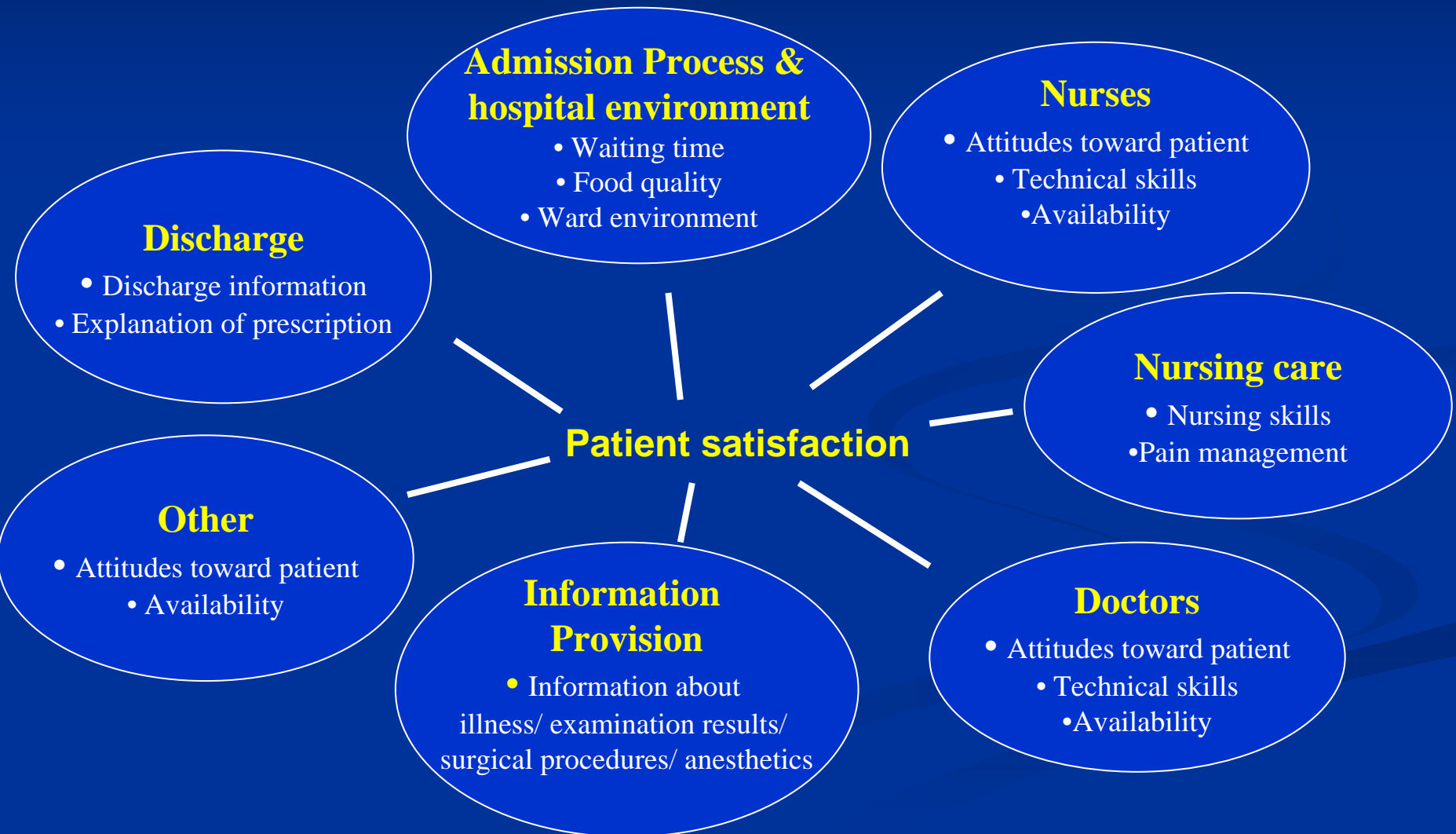
- ~7-8 informants per group
- Moderator to facilitate discussion
- Interview lasted for 1.5 hrs



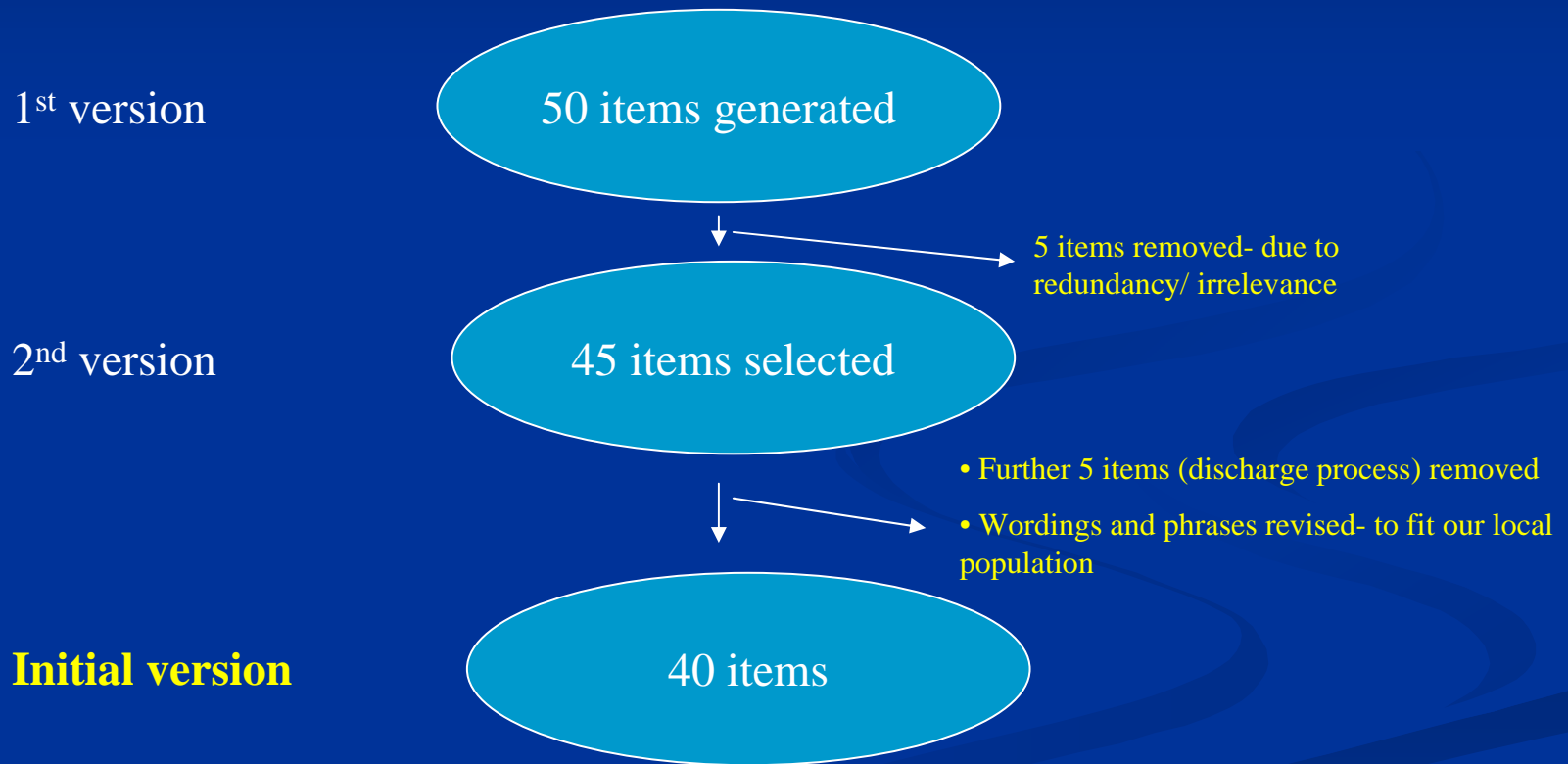
# Qualitative analysis

- The discussion content was transcribed and analyzed through thematic approach
- Findings were used to build conceptual framework of patient satisfaction for our local population

# Patient satisfaction is multi-dimensional in context



# Development of surgical inpatient satisfaction instrument



# HK Index of Inpatient Happiness (HK2Happ) 病人住院快樂指數

- Admission process & hospital environment (5-item)
- Information provision (7-item)
- Nursing care (4-item)
- Doctors (10-item)
- Nurses (7-item)
- Other (7-item)

## Adv of this instrument:

- Fit for surgical inpatients
- Applicable to HK public hospital setting
- Easy to administer (<10mins)

### 住院病人快樂指數

我們希望瞭解多一些關於你在最近期住院時接受護理時的情況。答案沒有對或錯之分。請回答所有問題，並圈出最切合你情況的答案。你所提供的資料均絕對會被保密。

關於你最近期住院時情況，請圈出最切合你的答案：

機構及環境：	非常 不同意	不同意	中立	同意	非常同意
1. 入院時等候病房床位的時間是可以接受的	1	2	3	4	5
2. 晚上嘈吵聲騷擾到我	1	2	3	4	5
3. 醫院食物的質素是可以接受的	1	2	3	4	5
4. 病房是乾淨的	1	2	3	4	5
5. 病房是舒適的	1	2	3	4	5
醫療資訊：	非常 不同意	不同意	中立	同意	非常同意
6. 醫生講比我知關於我病情的資料是足夠的	1	2	3	4	5
7. 醫生講比我知關於治療的資料是足夠的	1	2	3	4	5
8. 醫生講比我知關於化驗結果的資料是足夠的	1	2	3	4	5
9. 醫生講比我知關於手術的風險及好處的資料是清楚的	1	2	3	4	5
10. 清楚講解在手術期間會進行什麼程序	1	2	3	4	5
11. 清楚講解怎樣進行麻醉	1	2	3	4	5
12. 清楚講解當我回家時要怎樣服用藥物(如：幾時服用)	1	2	3	4	5
護理：	非常 不同意	不同意	中立	同意	非常同意
13. 一般護理(如：量體溫、脈搏)是幾好的	1	2	3	4	5
14. 進行注射的程序是專業的	1	2	3	4	5
15. 護理傷口的程序是恰當的	1	2	3	4	5
16. 有效地舒緩手術後的痛楚	1	2	3	4	5
醫生：	非常 不同意	不同意	中立	同意	非常同意
17. 我對醫我的醫生有信心及信任	1	2	3	4	5
18. 醫生檢查我時及治療我時的程序是很專業	1	2	3	4	5
19. 醫生對我是很有善的	1	2	3	4	5
20. 有些醫生似乎對我的病情經驗不足	1	2	3	4	5
21. 醫生有時候不理會我會對他們透露過我所擔心的事	1	2	3	4	5
22. 當我有醫療上的問題，我隨時可以問醫生	1	2	3	4	5
23. 醫生注意到煩擾我的事情	1	2	3	4	5
24. 醫生願意傾聽所有我所擔心的事	1	2	3	4	5
25. 醫生是有同情心的	1	2	3	4	5
26. 醫生在巡房時有足夠時間見我	1	2	3	4	5
護士：	非常 不同意	不同意	中立	同意	非常同意
27. 護士很留意我身體的問題(如：痛楚)	1	2	3	4	5
28. 護士對於我身體舒適是很靈敏的	1	2	3	4	5
29. 護士對我是很有善的	1	2	3	4	5
30. 當我有需要時，護士很樂意幫助我	1	2	3	4	5
31. 護士是有同情心的	1	2	3	4	5
32. 當我按鐘後，護士很快回應我	1	2	3	4	5

# Phase IIA- Reliability

- Test retest reliability
  - To demonstrate the instrument is stable over time
- Study period: 2008 February – March
- Sample size: 42 surgical inpatients
- Target population: surgical patients within PWH
  - General surgery, Cardio-thoracic, Urology, Neurosurgery, ENT, Eye and Dental
- Self-administered HK2Happ twice on discharge day with 2-hr apart

# Test-retest reliability

<b>N=42</b>	<b>ICC</b>
Total score	0.925
Admission process & hospital environment	0.929
Information provision	0.868
Nursing Care	0.933
Nurses	0.935
Doctors	0.893
Other	0.875

Higher ICC coefficients => The better the internal reliability of the instrument.

An acceptable level of coefficient for a measure defined as  $> 0.7$

# Phase IIB- ongoing validity test

- Ongoing; started since 2008 March –
- Sample size: 600
- Target population: all types of surgical patients within NTE hospitals (PWH, NDH, AHNH hospitals)
  - General surgery, Breast surgery, Cardio-thoracic, Urology, Neurosurgery
  - ENT, Eye, Dental
  - Gynaecology
  - Orthopaedics
- Validity test
  - Self-administered HK2Happ and EORTC IN-PATSAT32 questionnaire on discharge day



# Preliminary results on concurrent validity

(N=81)	INPATSAT32			
HK2Happ	Doctors			
	Interpersonal skills	Technical skills	Information provision	Availability
Total score	0.741	0.675	0.669	0.589
Admission processes & hospital environment	0.452	0.477	0.401	0.430
Information provision	0.531	0.477	0.499	0.488
Nursing care	0.594	0.602	0.524	0.492
Nurses	0.637	0.553	0.582	0.443
Doctors	0.699	0.662	0.680	0.520
Other	0.625	0.474	0.522	0.455

# Preliminary results on concurrent validity

(N=81)	INPATSAT32			
HK2Happ	Nurses			
	Interpersonal skills	Technical skills	Information provision	Availability
<b>Total score</b>	<b>0.741</b>	<b>0.790</b>	<b>0.638</b>	<b>0.702</b>
<b>Admission processes &amp; hospital environment</b>	<b>0.406</b>	<b>0.446</b>	<b>0.427</b>	<b>0.476</b>
<b>Information provision</b>	<b>0.458</b>	<b>0.486</b>	<b>0.445</b>	<b>0.465</b>
<b>Nursing care</b>	<b>0.651</b>	<b>0.749</b>	<b>0.531</b>	<b>0.645</b>
<b>Nurses</b>	<b>0.708</b>	<b>0.739</b>	<b>0.595</b>	<b>0.614</b>
<b>Doctors</b>	<b>0.661</b>	<b>0.648</b>	<b>0.512</b>	<b>0.552</b>
<b>Other</b>	<b>0.636</b>	<b>0.675</b>	<b>0.530</b>	<b>0.597</b>

# Conclusion

- **Advantages of HK2Happ instrument**
  - ✓ Cultural relevant based on views from patients' perspectives
  - ✓ Fit for local surgical patients
  - ✓ Applicable public hospital setting in Hong Kong
  - ✓ Reliable
  - ✓ Easy to administer (<10mins)
- Preliminary results on validity test to be further confirmed
- This instrument can be used to measure and compare satisfaction level of surgical inpatients within and across hospitals

**Thank You!**