New idea for Old problem
CADENZA Community Project
Health-social Partnership Transitional Care Model (HSP-TCM) for Post-discharged Elderly

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香港賽馬會
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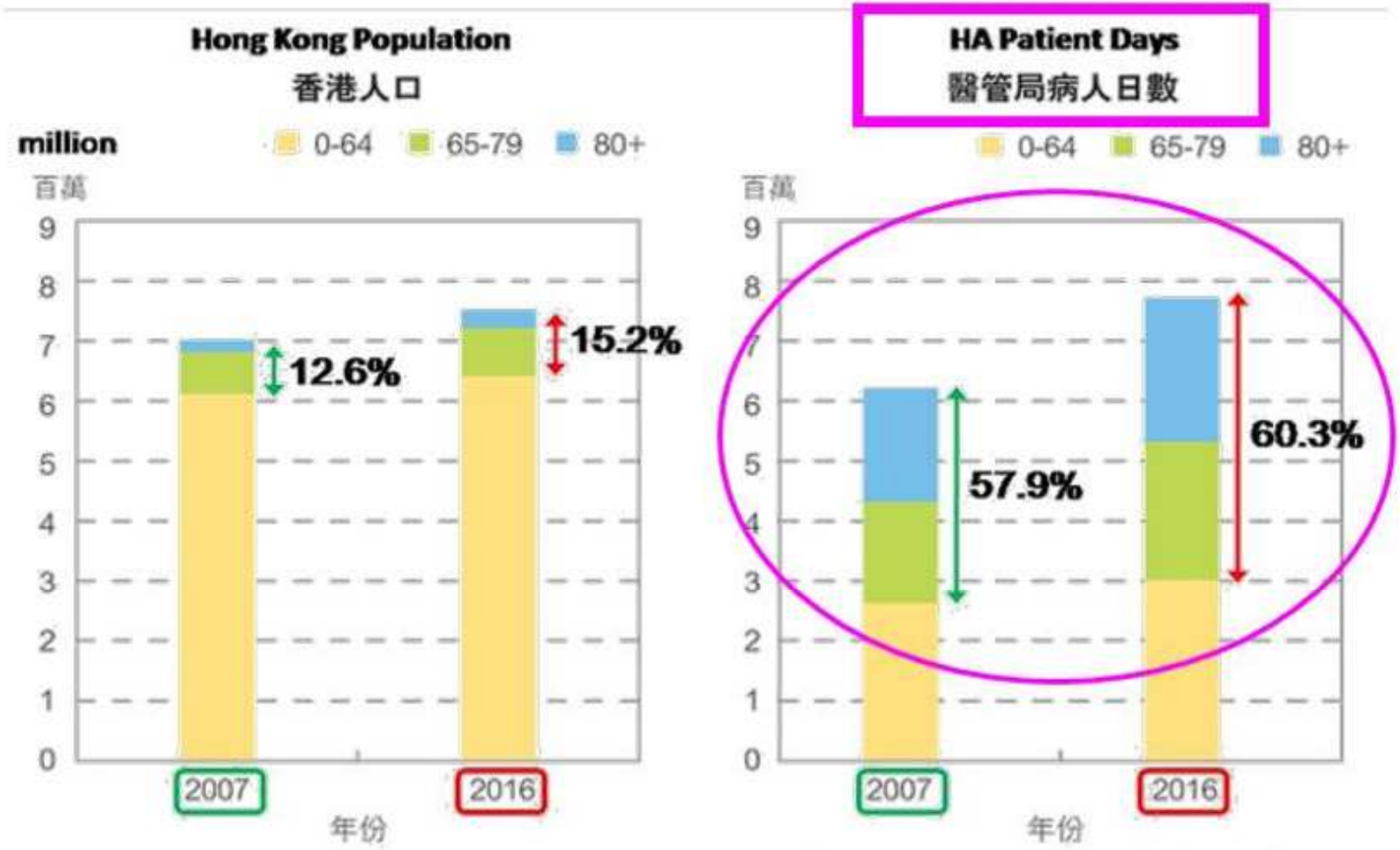
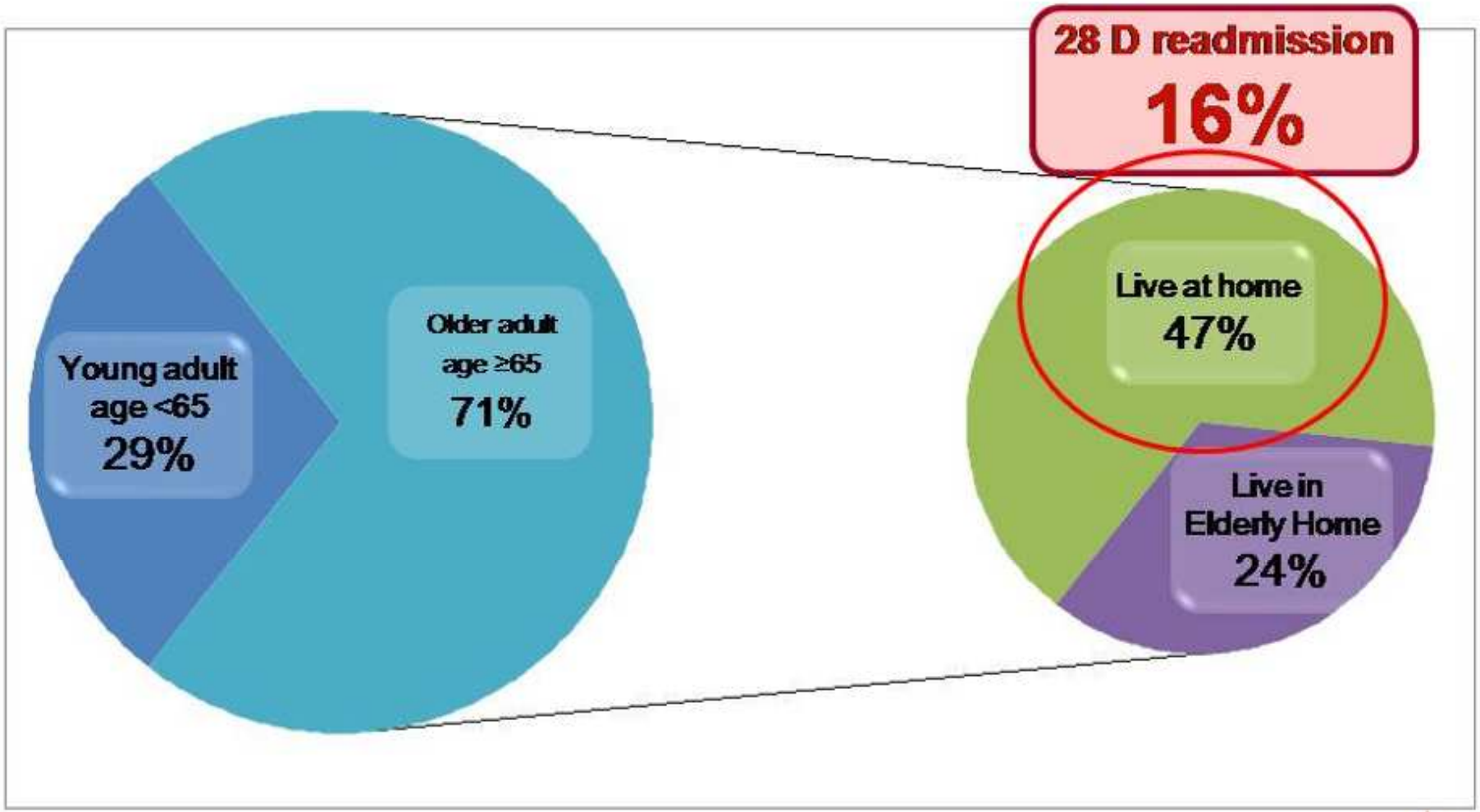
Population ageing increases healthcare services consumption

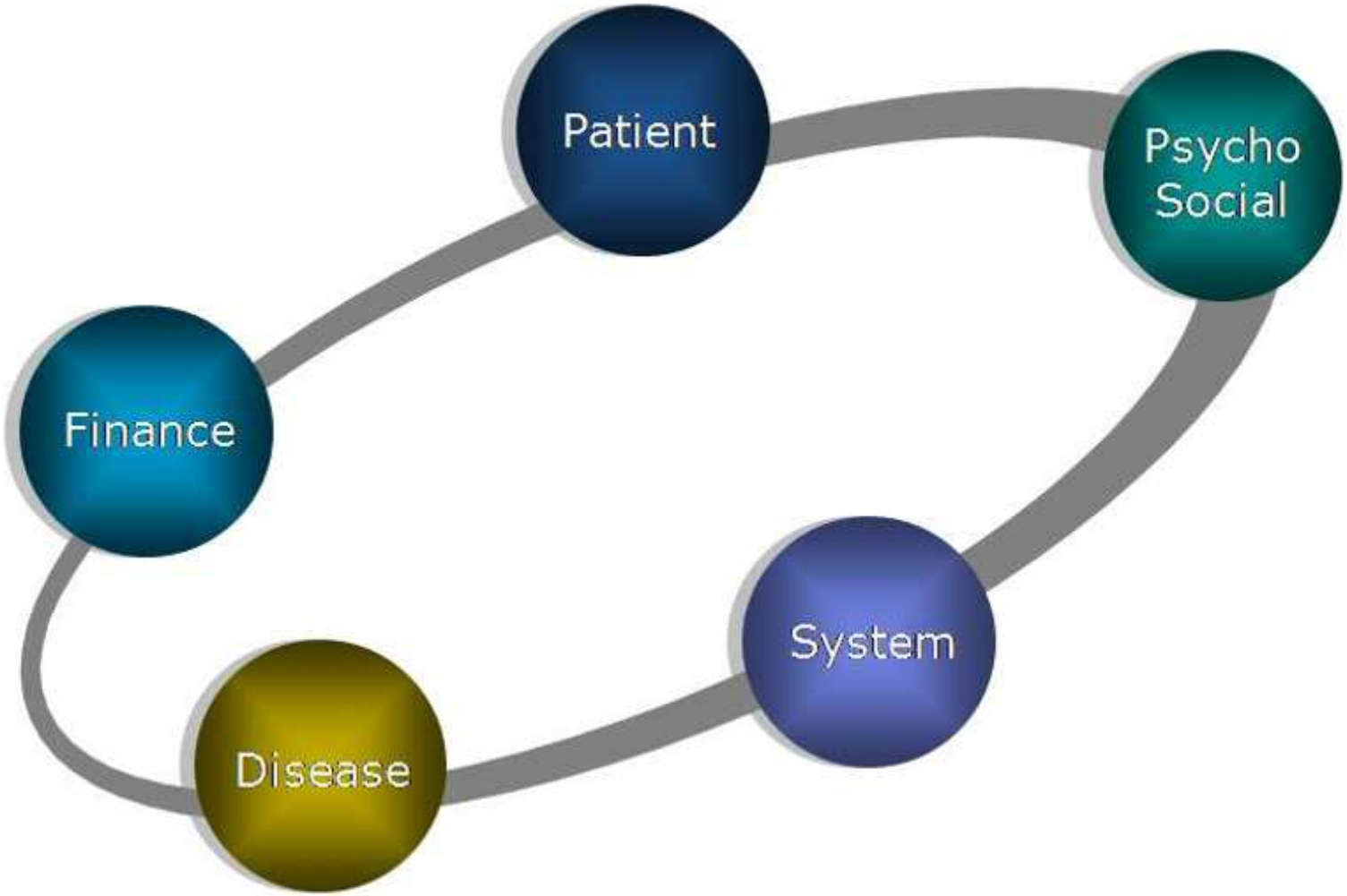


資料來源：醫院管理局2009至2012年策略服務計劃
Source: Hospital Authority Strategic Service Plan 2009-2012

QEH MED Unplanned re-admission (28 days) Community dwelling elderly Apr/07 – Mar/08



Reasons of Readmissions



CADENZA Community Project – Health-social Partnership Transitional Care Model (HSP-TCM) for Post-discharged Elderly

Aim

- Develop a **health & social partnership transitional care (HSP-TCM)** delivery model that enhances the quality of care provided to the discharged elderly

- Reduce the **re-admission rate** of elderly

Study design

1. Randomized controlled trial
2. Inclusive criteria
   - Aged 60 or above
   - Discharged home
   - Lives alone, with spouse or daytime alone
   - Lives within the service area

Health-social Partnership Transitional Care Model (HSP-TCM)

1. Synergize the collaborative relationship between health care & social care teams - Nurse case manager with support of volunteers, social service and medical consultations
2. Protocol-driven intervention
   - Training of team members, including case managers and volunteers
   - Post-discharged intervention tools
3. Regular case reviews – clinical and health-social conferences

28-days intervention schedule

- Nurse Case Manager (NCM) and Trained Volunteers (TV) offered:
- First home visit (2-4 days after discharge by NCM + TV)
- First telephone follow-up (7-10 days after discharge by NCM)
- Second home visit (16-22 days after discharge by TV)
- Second telephone follow-up (24-28 days after discharge by NCM)

28-days intervention schedule
2 home visits + 2 phone calls

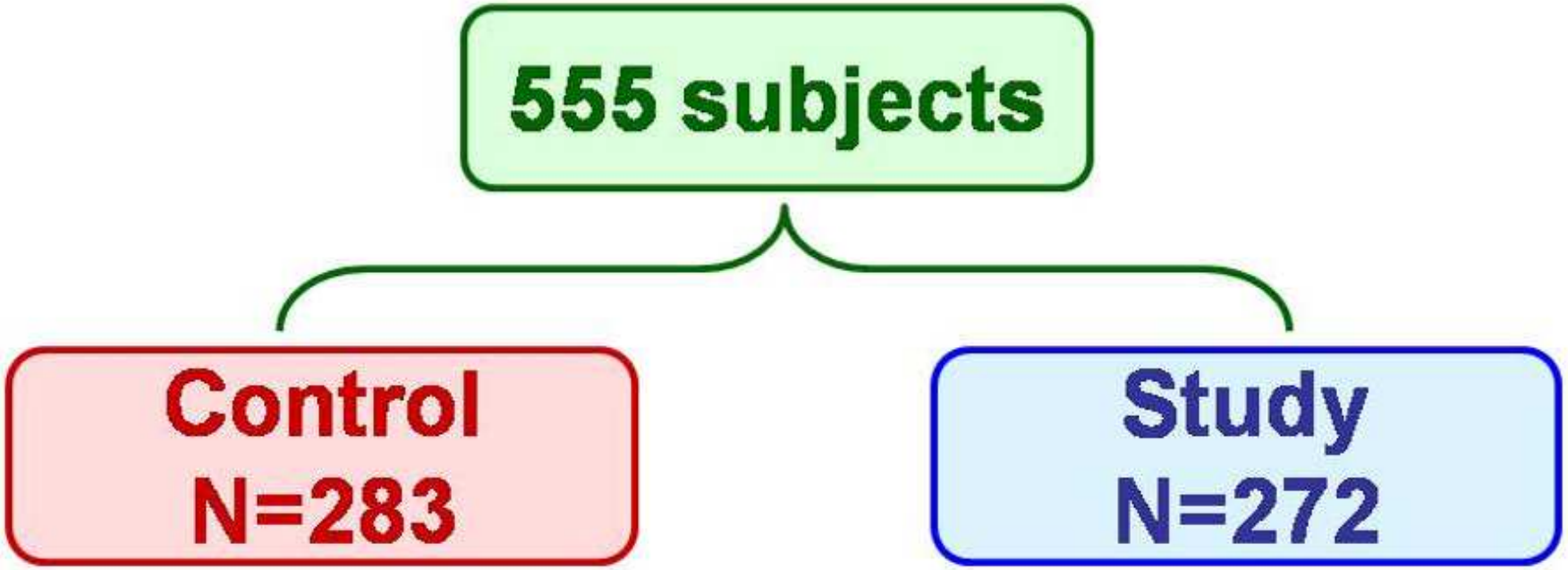
Services provided:

- Health assessment
- Health education
- Medication adherence and management
- Diet adherence
- Home safety assessment
- Patient empowerment
- Health-social system support

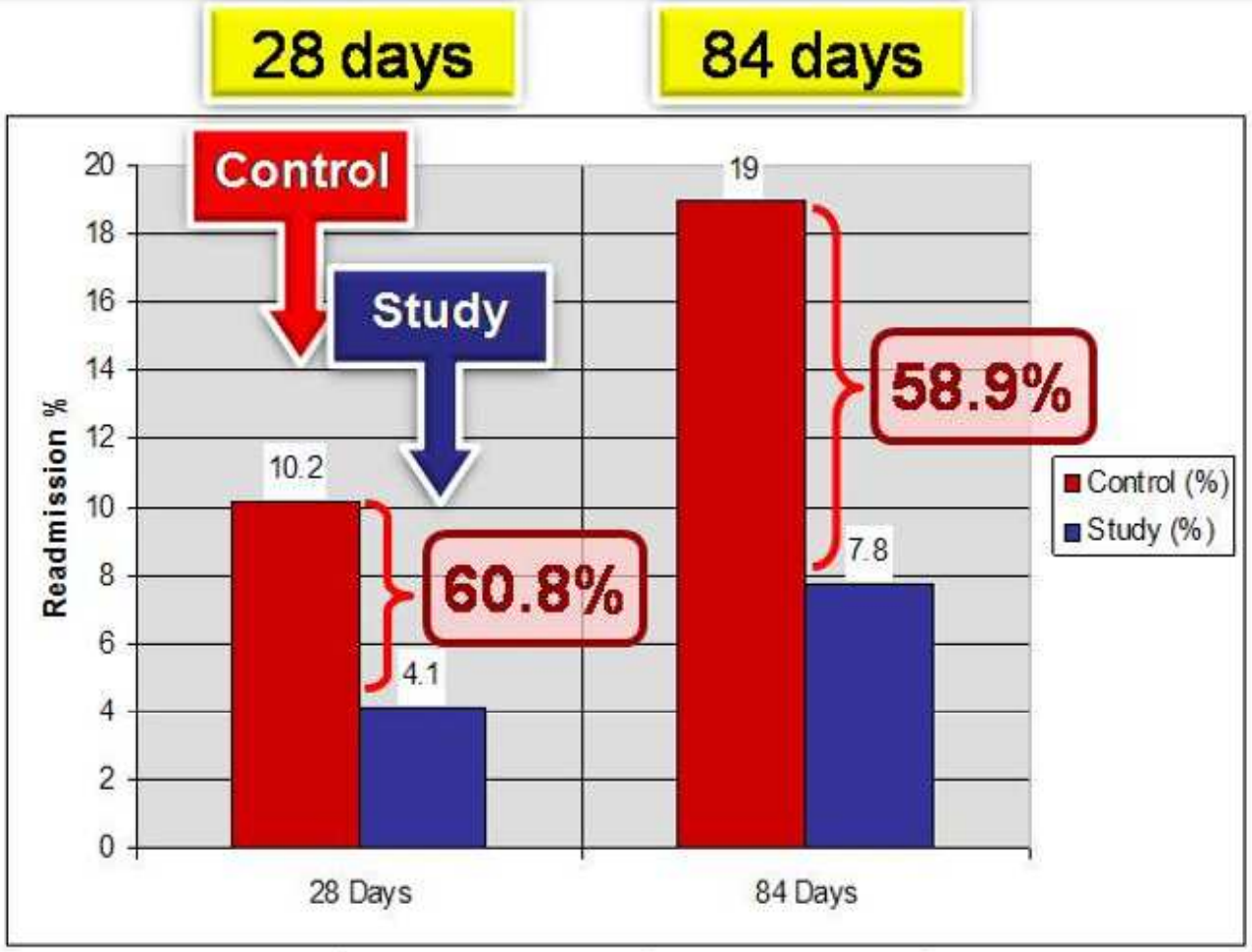
Statistical Analysis

- Chi-square test and independent *t*-test to compare the background characteristics of study and control two groups.
- Independent *t*-test to compare the mean scores of each outcome measure between groups at each time period.
- One-way Analysis of Variance (ANOVA) repeated measures to examine differences of the outcome measures while controlling for some of the variables

Results (Oct 2008 - June 2010)



Readmission Rate Within 28 and 84 Days



Readmission Rate	Control (%)	Study (%)	Chi-square
28 Days	10.2	4.1	$\chi^2 = 7.75$, $p = 0.005$
84 Days	19.0	7.8	$\chi^2 = 14.9$, $p < 0.001$

Health Cost Savings

Based on the **28 days** readmission:

Control group : LOS 144 x $3650 / hospital day = $526,000

Study group : LOS 30 x $3650 / hospital day = $109,500

We saved **$416,100**

Staff Cost (Nurse case manager APN) for 28 days

$467.5 per pt = 272 pt in study group $127,160

In 28 days, we saved $288,940

Health Cost Savings

Based on the **84 days** readmission:

Control group : LOS 329 x $3650 / hospital day = $1,200,850

Study group : LOS 100 x $3650 / hospital day = $365,000

We saved **$835,850**

Staff Cost (Nurse case manager APN) for 28 days

$467.5 per pt = 272 pt in study group **$127,160**

In 84 days, we saved $708,690

Quality of Life

The research data showed that the quality of life of our clients have improved significantly in all aspects of the SF36 measures

- Physical Functioning
- Role-Physical
- Body Pain
- General Health
- Vitality
- Social Functioning
- Role-Emotional
- Mental Health
- Self Efficacy

Volunteer Achievements

- 251 volunteers recruited
- 881 episodes of home visits provided
- Volunteer training provided by PolyU, QEH and Salvation Army
- Volunteers improved the quality of life of clients.
- The experience during the service was extremely rewarding and meaningful to our volunteers

Conclusions

- Health-social Partnership Transitional Care Model (HSP-TCM) is cost effective in reducing hospital readmission, improving quality of life.
- Developed structured protocols for the delivery of HSP-TCM model
  - patient assessment and intervention
  - training of volunteers
  - can apply to other hospitals / clusters

Limitations of the study

- The effectiveness of the HSP-TCM model may be confined to those who are less sick and more stable in the illness trajectory

- The study was conducted in one regional hospital only

Deep appreciation to

THE SALVATION ARMY 救世軍

香港賽馬會
The Hong Kong Jockey Club

Cadenza 流金頌