



## Stroke interfacing program to enhance confidence in home care

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### Introduction

Despite the advancement in medical technology, stroke continues to represent the leading cause of long-term disability. Stroke rehabilitation process is an ongoing process, which commences once being admitted and continues even after discharge back to the community. Stroke patients and their carers may not have enough confidence of discharging patients to home because of fear and anxiety of post-discharge home care. In the stroke interfacing program, volunteers of stroke victims and their carers come to hospital to share the community rehabilitation and caring experience. The sharing provides the most realistic illustration and visualization of future rehabilitation process and post-discharge care in the community to the stroke patients and their carers. The staff of community rehabilitation network (CRN) also briefly introduce the community services available after discharge and this further enhances stroke patients' and their carers' confidence of discharge to home.

### Objectives

To enhance stroke patients' and carers' confidence of discharging patients to home

### Methodology

This was a retrospective case control study. The patients were recruited as convenient intervention subjects if either the patient or his/her relatives attended the stroke interfacing program. At the same time, the patients had to be discharged from January to August 2010. For those discharged stroke patients had not attended the program in the same period were regarded as control group. The clinical records of all these patients were reviewed. The following parameters were evaluated:

- Destination of discharge
- Number of unplanned admission within 3 to 6 months after discharge

### Results

There were total 187 patients were recruited as intervention group. At the same period, there were 436 stroke patients not attended the stroke interfacing program. The proportion of male and female patients were similar in both 2 groups (male: 52.3%, n=326; female: 47.7%, n=296). The mean age of all the subjects was 72.5 year (range: 20 to 101). Chi-square and independent samples t-test were performed to compare the intervention and control groups. The mean age of the intervention group was significantly younger (↓ 4.3 age,  $t=3.774$ ,  $p<0.0001$ ) and with higher Barthel Index (BI) score (↑ 8.3,  $t=-2.147$ ,  $p<0.05$ ). Significantly more patients in the intervention group discharged to home (intervention: 82.4%, control: 50.1%,  $\chi^2=56.402$ ,  $p<0.0001$ ). On the other hand, there was no significant difference in the number of unplanned admissions within 3 months and 6 months after discharge between the two groups (3 months:  $t=0.606$ ,  $p=0.545$ ; 6 months:  $t=0.111$ ,  $p=0.912$ ).



Figure 1: Individual sharing



Figure 2: Group sharing

### Discussion

The retrospective study proved that the stroke interfacing program might instill some information and a brief picture of the future rehabilitation process and post-discharge care in the community to the stroke patients and their carers. In spite of there was no significant difference in the unplanned admission rate within 3 to 6 months after discharge, markedly much more patients were willing to be discharge home after the intervention. Resuming one's role in the family is the first milestone that stroke patients have to encounter just before reintegrating into the community. Discharging to home offers them this opportunity to take up their family role. The stroke interfacing program facilitates stroke patients and carers to have better understanding of the community rehabilitation process, home care and community resources.

### Conclusion

The stroke interfacing program establishes the framework of transitional health care service from the hospital to the community. The program unfolds the community resources and realistic stroke rehabilitation experience before patients' and carers' eyes. Hence, the program enhances stroke patients and carers confidence in home care and much more willing to be discharged to home.

| Characteristics              | Intervention Group (n=187) |        | Control Group (n=436) |        | P-value |
|------------------------------|----------------------------|--------|-----------------------|--------|---------|
|                              | No.                        | (%)    | No.                   | (%)    |         |
| Sex                          |                            |        |                       |        |         |
| Female                       | 86                         | (46)   | 211                   | (48.4) | .600    |
| Male                         | 101                        | (54)   | 225                   | (51.6) |         |
| Mean Age (Year)              | 69.5                       |        | 73.8                  |        | <.0001  |
| Age Group (Year)             |                            |        |                       |        |         |
| <21-30                       | 1                          | (0.5)  | 1                     | (0.2)  |         |
| 31-50                        | 10                         | (5.3)  | 23                    | (5.3)  |         |
| 51-70                        | 81                         | (43.3) | 125                   | (28.6) |         |
| 71-90                        | 89                         | (47.6) | 262                   | (60)   |         |
| >90                          | 6                          | (3.2)  | 25                    | (5.7)  |         |
| Mean Pre Barthel Index (100) | 46.3                       |        | 38.0                  |        | <.05    |

| Parameters   | Intervention Group (n=187) |        | Control Group (n=436) |        | P-value |
|--|----------------------------|--------|-----------------------|--------|---------|
|  | No.                        | (%)    | No.                   | (%)    |         |
| Mean Post Barthel Index (100)                      | 61.94                      |        | 47.39                 |        | <.0001  |
| Destination of Discharge                           |                            |        |                       |        | <.0001  |
| Home   | 154                        | (82.4) | 215                   | (50.1) |         |
| Old Aged Home (OAH)                                | 30                         | (16.0) | 198                   | (46.2) |         |
| Death  | 3                          | (1.6)  | 16                    | (3.7)  |         |
| Mean Number of Unplanned Admission after discharge |                            |        |                       |        |         |
| Within 3 months                                    | 0.21                       |        | 0.25                  |        | 0.568   |
| Within 6 months                                    | 0.38                       |        | 0.39                  |        | 0.545   |

Percentage of Patients Discharge to Home

