Project Title

The Effectiveness of Community Health Team (CHT)-Inpatient Ward-Agency of Integrated Care (AIC) / Tripartite Case Discussion in Developing Care Plans to Aid Transition from Hospital to Home

Project Lead and Members

Project lead: Lau Ling Li Eileen

Project members: Tan Zong Rui, Joey Yeo Jia Yang, Chee Jee Mei, Bangar Benita, Chen Wei Ting

Organisation(s) Involved

Tan Tock Seng Hospital, Agency for Integrated Care

Healthcare Family Group(s) Involved in this Project

Nursing, Healthcare Administration

Applicable Specialty or Discipline

General Medicine, Operations

Project Period

Start date: July 2020

Completed date: March 2021

Aims

This study aims to evaluate the effectiveness of a tripartite case discussion in formulating the “one collaborative care plan” for facilitation of right siting appropriate community service, allowing for patient to receive optimum transitional care post discharge from hospital.

Background

See poster appended / below

Methods

See poster appended / below

Results

See poster appended / below

Lessons Learnt

See poster appended / below

Conclusion

See poster appended / below

Additional Information

Singapore Health & Biomedical Congress (SHBC) 2021: Best Poster Award (Nursing) - Bronze Award

Project Category

Care Continuum, Preventive Care, Community Health

Keywords

Tripartite Case Discussion, Hospital Discharge, Reduced Resource Utilization

Name and Email of Project Contact Person(s)

Name: Lau Ling Li, Eileen

Email: EILEEN_LL_LAU@TTSH.COM.SG

BP-NR-03

The effectiveness of Community Health Team (CHT)-Inpatient ward-Agency of Integrated Care (AIC) tripartite case discussion in developing care plans to aid transition from hospital to home.

L.L.Lau., Z.R. Tan., J.Y. Yeo., J.M.P. Chee., B. Bangar., W.T. Chen.
Community Health, Tan Tock Seng Hospital

Tan Tock Seng HOSPITAL

National Healthcare Group
Adding years of healthy life

BACKGROUND/AIM

Fragmented discharge care planning and communication silo were deemed to be detrimental to patient's care transition. A biopsychosocial model was initiated to delve into patient's care needs and co-develop a holistic "one collaborative care plan" to aid in transition from hospital to home.

This study aims to evaluate the effectiveness of a tripartite case discussion in formulating the "one collaborative care plan" for facilitation of right siting appropriate community service, allowing for patient to receive optimum transitional care post discharge from hospital.

METHOD

Research design:
Retrospective Descriptive Study

Population and Sampling:
Purposive sampling of inpatients with complex discharge issues in four acute care wards. Healthcare professionals from three departments, namely Ward Resource Nurse (WRN), Community Health Team (CHT), and Agency of Integrated Care (AIC) multidisciplinary staff were involved in the tripartite case discussion in four general wards of a restructured hospital.

Inclusion:
- Inpatient with length of stay seven days or more
- Recurrent admissions to the hospital three or more times in a calendar year
- Patients require assistance in activities of daily living without an identified competent caregiver or deemed to have complex social set up were identified to have potential discharge issues by a Ward Resource Nurse (WRN)

Exclusion:
- Patients who were identified under Dangerously Ill List (DIL)
- Existing active follow up by CHT or other hospitals' Hospital to Home (H2H) programs
- Residents in institutionalized care
- Patients planned for discharge to any institutional placement
- Patient receiving palliative home care services
- Foreigners

Data collection:
Data was collected from July 2020 to March 2021 on the case discussions conducted by WRN, CHT Nurse and AIC staff for the inpatients who met the inclusion criteria. The care team collated the information into a password protected shared electronic file before and after the discussion.

Nine months of retrospective data, including pre and post intervention healthcare utilization rates (at 30 and 90 days), were analyzed. Data was also collected and analyzed on various community services referrals and referrals outcomes upon patient's discharge from the hospital. A staff survey questionnaire was distributed at the end of the study completion via email to all staff involved in the tripartite case discussion. This questionnaire consisted of five structured questions, was developed using form.sg.

Ethical consideration:
Data was collected and analysed with no patient identifier. Data was kept in an electronic file with password only known to the care team involved. Participation of the survey was voluntary and anonymous.

Table 1: Total Sampling Count listed (n=275)

Category	Frequency	Percentage %
Total patients who meet inclusion criteria	261	94.9%
Total patients who were excluded	14	5.1%

Reference:
Alcantara, Alma, "MDR Matters! Improving Primary Nurse Participation in Multidisciplinary Rounds" (2018). Master's Projects and Capstones. 852.

Zurlo, A., Zuliani, G. Management of care transition and hospital discharge. *Aging Clin Exp Res* **30,** 263–270 (2018). https://doi.org/10.1007/s40520-017-0885-6

Acknowledgement:
Special thanks to level 5 WRNs, and CHT Telephonic and Triage team for their participation this project.

RESULTS

A total of 356 tripartite case discussions were listed for 275 patients. 14 listed patients (5.1%) did not proceed to case discussions as these patients required institutionalized care or change in condition and/or were deceased (table 1).
43 (15.6%) listed patients were successfully discharged to community service provider(s) such as Home Help Service, Day Care Centre, etc. 99 (36%) of them were enrolled into CHT for continued case management and 119 (43.3%) patients were followed up by WRN for continued collaboration with inpatient multi-disciplinary team (Figure 1). A positive reduction in hospital resources utilization was seen from 365 admissions pre-90 days to 146 admissions post-90 days (Figure 2).

Figure 1: Outcome of tripartite case discussion

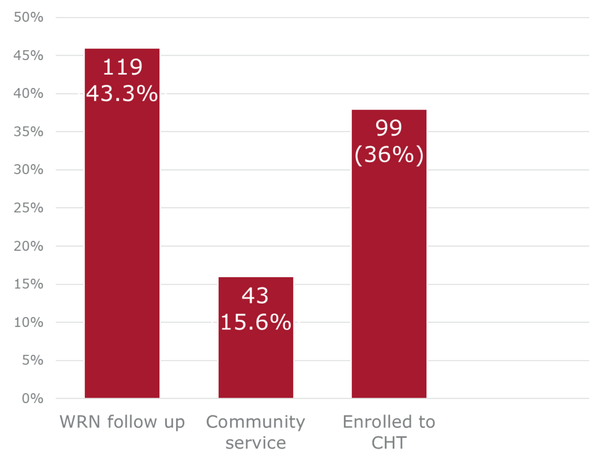
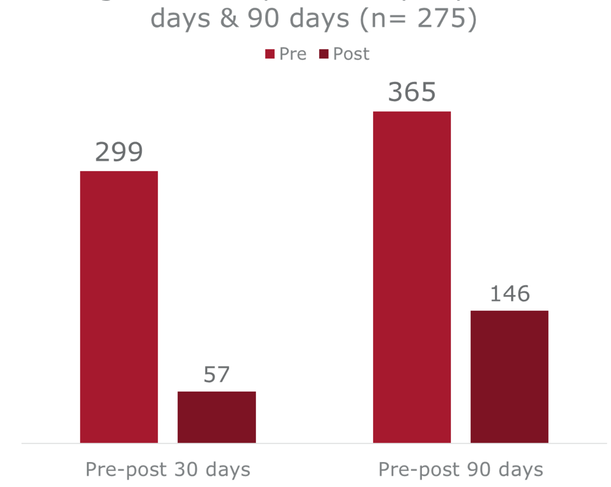


Figure 2: Comparison of pre-post 30 days & 90 days (n= 275)



A staff survey questionnaire reported a high percentage of staff having more awareness of the patient and care team's needs (figure 3) and that staff reports having closer communication between the inpatient and the community resources (figure 4).

Figure 3: What have you learnt from the WRM-CHT-CRT MDR?

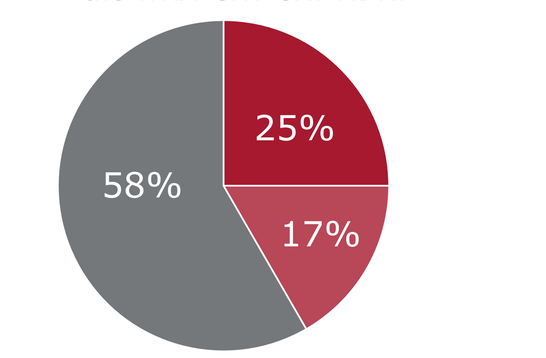
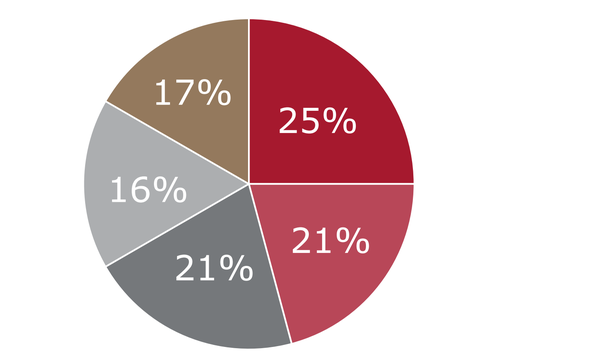


Figure 4: What are the benefits you have seen after the implementation of the MDR sessions? (n= 7)



DISCUSSION

Tripartite case discussion aided formulation of better discharge care plan for patients resulting in a smoother transition of care from hospital to home, as shown in the reduction of hospital resources utilization. This was achieved through establishing a collaborative healthcare team and optimizing one collaborative care plan to promote safe , seamless and robust quality of continued care post hospital discharge (Alcantara, 2018).
It also equipped nurses and AIC staff with knowledge of the current available community support services, thus effecting right site, recommending and initiating appropriate referrals targeting the individual patients in avoiding risk of post discharge readmissions (Zurlo & Zuliani, 2017).

LIMITATIONS/IMPLICATIONS

This study is limited by the lack of a control group to allow for comparison of re-admission rates between patients with or without case discussion. Future research could also consider replicating this study with a larger sample and include patients from other disciplines to provide more substantial results for comparisons.

More educational interventions such as in-service talks to WRN and CHT were also recommended to improve knowledge, especially in community nursing and the diverse community services.

The appointment of a CHT point of contact for ad-hoc consultations has also found to be important and should be further studied.