Project Title

Palliative Response Team: Increasing Compassionate Discharges (ComD) Success

Project Lead and Members

Project members: Tan Li Ping, Nur Sa'idah Binti Jalani, Radin Nur Faridah Binte Ali Tan Poh Hoon, Myint Myint Than, Theresa Heng, Kelly Lai, Siti Raihana Binte Mohamed Shariff, Janet Lam, Yong Woon Chai, Thi Phuong Tu Pham, Golda Wang, Irene Chen

Organisation(s) Involved

Alexandra Hospital

Healthcare Family Group(s) Involved in this Project

Ancillary Care, Pharmacy, Nursing

Applicable Specialty or Discipline

Palliative Medicine

Project Period

Start date: Jul 2020

Completed date: Jun 2023

Aims

- To set up a transitional care ComD program to support patients who express a wish to die at home.
- To form a multidisciplinary team to provide seamless care transition for ComD.
- Our program aims to support ComD outside of office hours to address gap in current hospice services in Singapore.

Background

Singapore has a rapidly aging population, with a significant gap between the desire to die at home (77%) and actual home deaths (27%). The Ministry of Health aims to reduce in-hospital deaths from 61% to 51% by 2027. Many hospital deaths occur due to discharge delays and limited after-hours hospice support. Alexandra Hospital's Palliative Response Team was initiated to provide palliative transitional care and ComD services, including after-hours support.

Methods

1. Establishment of the Palliative Response Team at Alexandra Hospital.

2. Provision of palliative transitional care and ComD services during and outside office hours.

3. Enhanced ComD process with Pharmacy's standardized ComD prescription order for simple and complex ComD with infusors.

4. Nursing interventions including accompanying patients home, home visits, telephonic support, and coordination of care with community partners.

5. Physicians provided telephonic support for symptom escalation and home visits.

6. Operation team managed patient scheduling, developed administrative protocols, coordinated communication, and ensured smooth patient transitions.

Results

1. From July 2020 to July 2023, there were 64 successful ComDs, averaging 21 per year.

2. Patient wishes to die at home were honored 100% of the time.

3. Positive qualitative feedback from families regarding the service.

4. The program successfully supported AH ComDs and scaled up to NUH ICU, Emergency Department, and NUHS@Home.

5. ComD increased from 1.0% to 7.4%.

6. Reduced average length of stay (ALOS) by 3.5 days.

7. Average lifespan post-discharge was 8 days.

8. Total gross inpatient bill avoided: $98,046.29.

9. Total CAPEX in bed building avoided: $7,395,556.

Lesson Learnt

The successful end-of-life care program at Alexandra Hospital offers valuable lessons. First, collaboration between different healthcare professionals (doctors, nurses, pharmacists, operation) is crucial for smooth patient discharge and addressing the needs. The program has effectively addressed the lack of after-hours support to fulfil patient wishes to pass away at home. While standardization of protocols ensures consistent care, flexibility is needed to adapt to specific patients' needs. By considering these lessons and potential challenges, future compassionate discharge programs can be expanded and scaled up to equip other healthcare partners to implement ComD more effectively to support the patients' wish to die at home.

As healthcare policies and partners change rapidly, there is a need for the team to remain agile and adaptable.

1. A multidisciplinary team approach with standard ComD guides is crucial to prevent delays in the inpatient ComD process.

2. The Palliative Response Team Program can support patients' wishes to die at home outside of office hours when home hospice resources are limited.

3. More studies can track hospital deaths to determine if ComD can be offered as an option if home care arrangements are feasible.

Additional Information

National Healthcare Innovation & Productivity (NHIP) 2024 – Excellence Champion (Care Redesign category)

Conclusion

The Palliative Response Team Program at Alexandra Hospital successfully increased the number of compassionate discharges, honored patient wishes to die at home, and provided significant cost savings. The multidisciplinary approach and standardized ComD processes were key to the program's success, demonstrating the importance of seamless care transitions and effective resource management.

Project Category

Care Continuum

End-of-Life Care, Palliative Care

Keywords

Compassionate Discharge, Palliative Care, End-of-Life Care, Home Hospice, Multidisciplinary Team, Cost Saving

Name and Email of Project Contact Person(s)

Name: Tan Poh Hoon

Email: Poh_hoon_tan@nuhs.edu.sg

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Tan Li Ping[1], Nur Sa'idah Binti Jalani[1],Radin Nur Faridah Binte Ali[1], Tan Poh Hoon[1],
Myint Myint Than[1], Theresa Heng [1], Kelly Lai[1], Siti Raihana Binte Mohamed Shariff[1], Janet Lam[1]
Yong Woon Chai[2], Thi Phuong Tu Pham[2]
Golda Wang[3] , Irene Chen[4]

[1] AlexNIC (Nurse in Community) Palliative , Alexandra Hospital, Singapore
[2] Supportive and Palliative Care Programme, Alexandra Hospital, Singapore
[3] Department of Pharmacy, Alexandra Hospital, Singapore
[4] Assistant Director, Ambulatory Operations,, Alexandra Hospital, Singapore

Background

Singapore has a rapidly aging population. A 2013 Lien Foundation survey revealed a significant gap between patient wishes to pass on at home and reality: 77% of Singaporeans desire to die at home, but only 27% of deaths occur at home. Aiming to address this disparity, the Ministry of Health (MOH) has announced a goal to reduce in-hospital deaths from 61% to 51% by 2027. Expanding access to compassionate discharge

ComD allows critically ill patients with a short life expectancy to be discharged home for end-of-life care. Unfortunately, many hospital deaths occur due to delays in discharge and limited after-hours hospice support.

When Alexandra Hospital (AH) initiated their program, hospice services were constrained and were unable to accommodate ComD outside regular hours. Consequently, patients faced significantly restricted options for home-based care during their final days.

Inpatient hospital primary team lacked the time and confidence to prepare for ComD as the process is time consuming and requires lengthy coordination.

Aims

- To set up a transitional care ComD program to support patients who express a wish to die at home.
- To form a multidisciplinary team to provide seamless care transition for ComD.
- Our program aims to support ComD outside of office hours to address gap in current hospice services in Singapore.

Methods

This is a program conducted in Alexandra Hospital. We used descriptive data to analyse the data.

Method Workflow

Alexandra Hospital's Palliative Response Team was set up.
This program provides palliative transitional care and ComD services, during and outside of office hours.

The ComD process was enhanced with Pharmacy's standardized ComD prescription order for simple and complex ComD with infusors.

Nursing interventions include palliative care nurse accompanying patients in the ambulance to home, home visits, telephonic support and coordination of care with community partners.

Home visits include symptom assessment and management; care giver training on end of life care; preparation of subcutaneous medication; initiation of infusion via disposable infuser; psychosocial and spiritual support to patient and family with bereavement support.

Physicians provide telephonic support for escalation of symptom and also home visits. Patients would be transited to hospice team after 3-5 days if they survive.

Operation team provides access to patient scheduling systems, develops administrative protocols, coordinates communication among the team, manages logistics, and ensures smooth patient transitions.

Results

Data was collected from July 2020 to July 2023. There were 64 successful ComDs, average 21 per year. The wishes for these patients to die at home were honored 100% of the time. Family gave positive qualitative feedback regarding the service. The Program successfully supported AH ComDs and also scaled up to NUH ICU, Emergency Department, NUHS@Home.

	Pre intervention Jul 2019 to June 2020	Post Intervention Jul 2020 - June 2023 Average Per Year
•Number of pall patients discharged during this period	199	288
•ComD with Palliative Response Team support	2	21
•Average lifespan since discharge till death for TD patients:	5.85	8
% of Pall Patient undergo Com D	1.0%	7.4%
Reduction of ALOS	3.5	
Reduction of ALOS (based on ave lifespan since discharge)	8	

Average FY22 C class gross bill size	$574.49
INPATIENT SERVICES	Based on ALOS of patient died in AH
%Com D **increase from 1.0% to average 8.5%** of AH Pall patients (3 years)	
Bed-days saved	171
Total Gross Inpt bill avoided (saving in healthcare system)	$ 98,046.29
Total beds avoids	6

- ComD increased from 1.0% to 7.4%.
- Reduced average length of stay (ALOS) of 3.5 days reduced.
- Reduced in ALOS based on the average lifespan since discharge of 8 days.
- Total Gross Inpt bill avoided (saving in healthcare system) - $98,046.29
- Total CAPEX in bed building avoided - $7,395,556

Discussion

Patients lived for about a mean duration of 8 days after ComD from hospital. Inpatient hospital resources can be further reviewed. Symptom burden was manageable at home.
Palliative care response team interventions have been productive in terms of increasing the number of patients discharged, facilitating complex ComD, and reducing length of stay. The interventions have led to significant cost savings in the healthcare system. By reducing the length of stay and avoiding the need for additional beds, the intervention have freed up resources that can be used to treat other patients.

Conclusion

A multidisciplinary team approach with standard ComD guides is crucial to prevent delays in the inpatient ComD process.

The Palliative Response Team Program was able to support patients' wish to die at home outside of office hours when home hospice resources are limited.

More studies can be done to track deaths in hospitals to determine if ComD can be offered as an option if care arrangement at home is feasible.

Palliative Terminal Discharge

Assessment	Preparation (Medication)	
	Simple	**Complex (low doses/fever symptom)**
Assessment guide: ❑ Symptom, Prognosis, Psychological ❑ Pain, SOB, Agitation/ nausea vomitting ▪ Mild: 0 to 3 (Nurse) ▪ Moderate: 4 to 6 (Doc) ▪ Severe: 7 to 10 (Doc)	**Medication: Non-infuser/ PRN** ▪ Fentanyl 100mcg (10 vials) ▪ Fentanyl Patch [(12 mcg/hr, Tegaderm) x 1 ▪ Haloperidol (5 vials) ▪ Midazolam (5 vials) ▪ Buscopan (10 vials) ▪ Rectal paracet (12 per box)	**Medication: Infuser** ▪ Fentanyl (250mcg/24hr) – 500mcg ▪ Haloperidol (5mg/24hr) – 10mg ▪ Midazolam (5mg/24hr) – 10mg ▪ Buscopan (100mg/24hr) – 200mg ▪ Normal saline (20ml x 5amp) – 100ml **Total volume: 120ml/48h (2.5ml/hr)**
Operating hours ❑ Monday – Friday, 8am – 4pm ❑ Saturday, 8am – 12pm ❑ Sunday/ PH: case by case Note: Known cases to home hospice, to be handed over back to home hospice. Otherwise, AH Palliative to support interim. If unknown cases, AH palliative to support, assess on 2nd/3rd day for potential transition to home hospice. KIV AH support up to 5 days	**Equipment/Supplies:** ▪ 1 ml Syringes (50 pcs) ▪ 3 ml Syringes (for Buscopan) (10 pcs) ▪ Yellow needle (10 pcs) ▪ Red stoppers (20 pcs) ▪ Alcohol swabs (50 pcs) ▪ 3 ml Posiflush (10 pcs) ▪ Non –sodium bicarbonate green sponge (10 pcs)	*Note: Dilution will be done by 2 pax (2 trained nurses or 1 trained nurse + 1 pharmacist). Use of excel template for calculation.* **Top up** ▪ Fentanyl 500mcg (5 vials) ▪ Haloperidol (2 vials) ▪ Midazolam (2 vials) ▪ Buscopan (10 vials) ▪ Rectal paracet (12 per box)

For Complex infuser case, on discharge, provide 1 prepared infuser set + 1 set of PRN + 1 Top up. For disposal of excess of infuser, cut and drain in toilet or come back to AH Pharmacy for disposal.

References

Lien Foundation (2014). Death Attitudes Survey. http://lienfoundation.org/sites/default/files/Death%20survey%20Presser%20Final%20-%20Combined_0.pdf

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