

# Collaborative Prescribing Service in an Inpatient Hospice in Singapore – Our Experience



Beng Le Tan<sup>1</sup>, Tze Ling Gwendoline Beatrice Soh<sup>1,2</sup>, Cheng Fong Chiew<sup>1</sup>, Claricia Mei Xuan Chan<sup>1</sup>, Seow Ying Fong<sup>1</sup>, Alethea Chung Pheng Yee<sup>1,2</sup>, Tan-Ying Peh<sup>1,2</sup>.

<sup>1</sup>Assisi Hospice, Singapore, <sup>2</sup>Division of Supportive and Palliative Care, National Cancer Centre Singapore

## Background

The National Collaborative Prescribing Programme (NCP), supported by Ministry of Health (MOH), was started in March 2018 to upskill senior pharmacists and Advanced Practice Nurses (APNs) to legally prescribe medicines and order investigations in collaboration with medical professionals<sup>1</sup>. Collaborative Prescribing (CP) service aims to facilitate care delivery by providing a team-based holistic service and enhancing continuity of care between hospitals and the community. In a palliative care setting, patients often have complex care needs. A CP service can enable safe and timely care delivery with the aim to improve patient care outcomes, in particular symptom management, quality of life and patient satisfaction.

## Aim

To review a new Collaborative Prescribing service in an inpatient hospice for adult palliative care patients.

## Method

A new CP service was initiated in the Assisi Hospice (AH) inpatient service in February 2022. This was the first CP service in a community palliative care setting in Singapore. The Collaborative Prescribing Licence granted by MOH was successfully obtained in January 2023. The service was started by an APN who had completed the NCP. Relevant policies and work processes were established by the institution for the development of the CP service. The AH Clinical Director was appointed as the Clinical Governance Officer of the service. A Credentialing Committee (CC) and Service Review Committee (SRC) were formed. The committee members comprised medical professionals, pharmacists and clinical quality assurance professionals. The SRC performed 6-monthly reviews to monitor the progress of the service. Periodic reviews with the CP practitioner included weekly consultant rounds, case discussions of new and existing patients, and 3-monthly case logs. Case load and patient safety were monitored as service outcome measures.

## Results

From February to December 2022, the CP practitioner provided service to patients with a total of 131 prescribing encounters (refer to Figure 1). There were a total of 407 prescriptions made, with no medication errors or adverse events over the 11-month period (refer to Table 1). The near-miss involved the CP practitioner transcribing a topical antibiotic cream that was not listed in the CP's Approved Drug Formulary into the patient's Inpatient Medication Record (IMR). The error was discovered by CP practitioner before the medication was administered to patient. The medications commonly prescribed were included in Table 2.

Table 1 Outcome indicators (Number of prescriptions and patient safety measure)

Indicator	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total Number of prescriptions under CP service	Inpatient prescription (Did not monitor)			79	43	48	37	49	70	47	34
	Prescription for external pharmacy		0	0	0	0	0	0	0	0	0
Number of errors/ near misses, and number of adverse drug reactions detected	0	0	0	0	1 (Near Miss)	0	0	0	0	0	0

Fig. 1 Number of prescribing encounters with patients under CP service (Feb – Dec 2022)

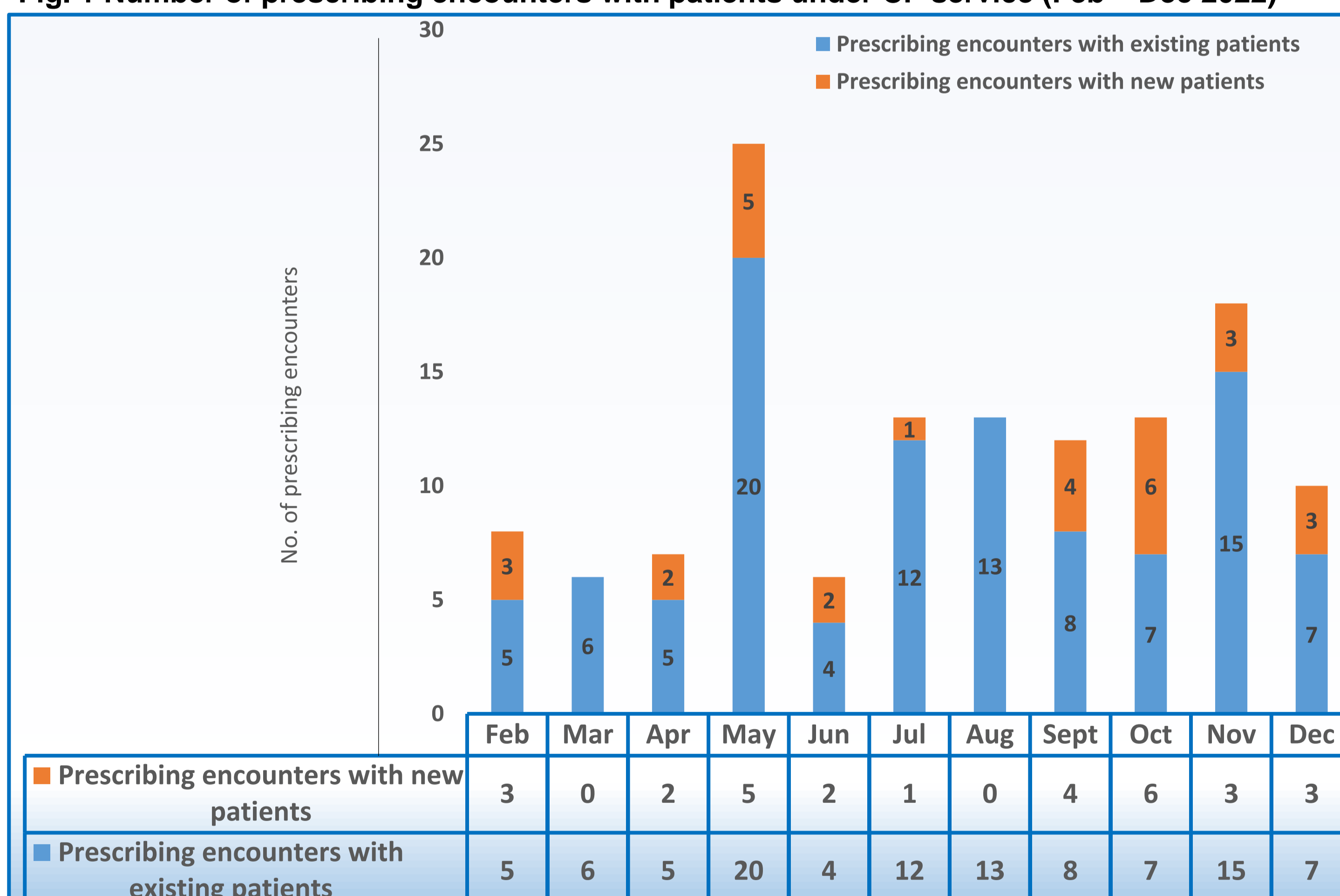


Table 2 Commonly Prescribed Medications

Route	Drug Name
Oral, Enteral and Sublingual	Acetylcysteine Clonazepam Dexamethasone Dextromethorphan linctus Frusemide Gabapentin Haloperidol Hydroxyzine Lactulose Levetiracetam Loperamide Loratadine Lorazepam Macrogol 4000 Metoclopramide Nystatin suspension Olanzapine Omeprazole Oral Morphine Syrup Paracetamol Pregabalin Promethazine 6.25 mg/ Codeine 10 mg per 5 mL Sennosides
Subcutaneous	Dexamethasone Haloperidol Hyoscine Butyl bromide Metoclopramide Midazolam
Inhalation	Salbutamol Inhaler
Rectal	Bisacodyl Suppository Centa Enema Olive Oil Enema Paracetamol suppository
Topical	Adrenaline 1:1000 Betamethasone cream 0.1% Ketoprofen patch Lidocaine gel 2% Miconazole cream 2%

## Conclusion

Collaborative Prescribing has empowered our APN CP practitioner to perform more advanced roles in the delivery of holistic care. It has also fostered leadership and interprofessional collaboration. From this experience, most of the prescribed medications were for symptom management and anticipatory medications for end-of-life care. Challenges encountered included: 1) missed opportunities for CP practitioner to prescribe as rotating doctors were unfamiliar or unaware of CP service, 2) CP practitioner taking a longer time to complete the prescriptions due to the need to manually refer to the CP's Approved Drug Formulary for safe practice, and 3) some patients and family members being less receptive towards non-medical professional medication prescribers. Future service focus will include the expansion of CP's Approved Drug Formulary and the extension of the CP service to Hospice Day Care and Home Care.

## References

1. National University of Singapore. (2018). Media Factsheet on National Collaborative Prescribing Programme. <https://medicine.nus.edu.sg/nursing/2018/07/media-factsheet-on-national-collaborative-prescribing-programme/>