Medical Outreach Education and Training Program (MOET)

Initiative Type

Framework

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Deliver

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Summary

The Medical Outreach Education and Training Program (MOET) program is a new model of rural healthcare delivery, based primarily on training rather than service principles and combines multi-systems elements not previously integrated. It is believed that this model can be scalable, efficient, sustainable and an improvement to previous models of care. The model of both remote and face-to-

face supervision has been particularly relevant considering the challenges of providing training in a COVID normal world. With this in mind, Stanthorpe Hospital developed a model that integrates all aspects of medical education to the rural and remote context, focusing on training as the primary tenant rather than service, has demonstrated that the current infrastructure, industrial and training framework doesn't easily satisfy the expectations of trainees. We have loosely divided our interventions into:

- care co-ordination - assist with home oxygen facilitate, telehealth appointments, GP visits, meals on wheels
- clinical support - dressings; blood collection; observations
- medication support - Webster packs, identify non adherence; drug interactions with the herb or OTC sitting in the fruit bowl

Key dates

Mar 2022

Mar 2022

Implementation sites

Stanthorpe Hospital; Inglewood Multipurpose Health Service; Texas Multipurpose health Service; Millmerran Multipurpose Health Service; Texas and Inglewood Medical Centres

Partnerships

Primary Health, GP practices, Community Pharmacies; Consumer groups

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Aim

To develop and implement a replicable rural registrar training model that provides medical support for smaller communities while providing a unique training opportunity for General Practice (GP) registrars.

Benefits

Ensure equity of access for all Australians, identification and in turn support of communities with restricted or oversubscribed primary health care services is essential.
In an attempt to address rural medical workforce shortages, multiple strategies have been trialled including increased enrollment quotas for rural background students and implementation of the Rural Clinical Schools program. Despite these interventions, long term rural work intent and retention of graduates in the rural setting is challenging. Barriers to rural workforce retention include limited professional support from supervisors with rural expertise; reduced educational opportunities; and professional and training isolation. Initial feedback received suggests that some of the barriers to rural workforce retention have been addressed by the MOET model. Registrars have identified the benefit of having supervisors with a significant understanding of the rural setting and the relevance of training provided by these supervisors. Benefits identified by other stakeholders during the preliminary evaluation include increased availability of primary medical care. Further to this, the training model has provided training opportunities, by leveraging off pre-existing training supports and health services and establishing integration of those resources, where none previously existed. This model has also seen the realisation of opportunity to develop models of training during a time when access to training had been reduced, tested or had been redirected to cover the ever-advancing impact of COVID-19.

Background

Evidence suggests that pharmacist led post discharge programs delivered within three to five days of discharge can reduce these readmissions by up to 36% Australians living in rural and remote areas have poorer access to doctors and therefore higher levels of disease compared to those living in major cities. Australian Bureau of statistics figures confirm there are 274 doctors per 100,000 in remote/very remote areas compared with 433 doctors per 100,000 in major cities. Increased access to comprehensive health care for rural and remote Australians is considered a national priority. In 2017, the Medical Superintendent of Stanthorpe Hospital, Dr Dan Halliday, conducted a snap audit of admissions and found that 69% of patients admitted to Stanthorpe Hospital had their medication changed.
The audit also identified issues with inaccurate discharge summaries and communication to primary care providers.
With this in mind a business case was developed but with a twist…a clinical pharmacist based at the hospital but working as part of an extended community health team.

Solutions Implemented

To identify the most appropriate patients we adopted a medication risk tool to identify a patients risk of discharge medication misadventure.
It takes into account a patient's cognition; if they are taking high risk medications; age and who and how they are managing their medications. Moving forward we hope to adapt this more specifically to a rural setting.
We find given the nature of our admissions and their level of acuity that a tool developed in a large Metro hospital may not as accurately identify the risk of readmission of Stanthorpe Hospital's patients.
In particular we find that distance from town and accessibility to a General Practitioner (GP) are particular risks to rural patients. Also, as with most rural communities, wait time to see their GP is another risk factor. In our town the current time to see a GP for a non urgent existing patient can stretch beyond a week. Once we establish a patient's particular risk factors we design a service plan for low risk, moderate risk and high risk patients.

Evaluation and Results

An initial baseline evaluation was conducted at three months. The evaluation was conducted using an online survey with rating and ranking scale questions; open ended and free text comment sections. Descriptive statistical analysis has been conducted, and free text comments coded for common expressions and themes.
Following the conclusion of the initial 12-month period, an additional, separate mixed methods research project and publication is planned.
Stakeholders included in the evaluation were GP Registrars, General Practitioners, Supervising Senior Medical Officers, GP Practice Staff, hospital nursing staff and GP Facilitators. Data collected during the preliminary study included:

- comparison of the service and training models across all four facilities (Texas, Inglewood,

Millmerran and Stanthorpe)
- review of supervision model including preferences, opinion and limitations
- review of training content and delivery
- perceptions on the value, barriers and benefits of the model including impact on work life balance
- perceptions on the sustainability of the model including opinion on scope for expansion and community impact

We have devised a substantial data collection tool using RedCap where we benchmark our readmission rates against a validated readmission risk tool , the LACE score.
The LACE score of our patients show that 41 and 34% of our patients have a high or very high risk of readmission.
The LACE score, developed by van Walraven uses a simple formula of hospital length of stay, admission type , Charlson Comordity Index and number of visits within the last six months to predict a patients risk of readmission or death within 30 days of admission. So, using the LACE score we compared our patients against their predicted readmission risk.
The evidence suggest our program is working particularly with patients at high risk of readmission. VanWalraven predicts up to a 30-43% risk of readmission for a patient with a very high LACE score; however only 12 % of our patients in this range were readmitted within 30days.
While it is predicted that 20% of patients with a high LACE score of 10-14 we are seeing only 10% readmission rates. Our service evaluation and data collection continues.

Lessons Learnt

Infrastructure challenges faced were mostly around historical infrastructure in some rural and remote communities which was found to be not fit for purpose to address quality standards for specialist general practice training. Further to this, conflicting funding arrangements for primary care in smaller rural and remote communities was identified and there can be a tension between hospital and primary care services and without suitable arrangements. Industrially the model was challenging due to the historical staffing levels of smaller rural communities and reduced capacity to cover on call and after hours duties. Implementing a registrar (Principal House Officer) based component should only be considered where suitable supervision and fatigue management opportunities exist. In spite of the above potential exists for collaboration as demonstrated amongst rural hospitals, small community hospitals, general practices and community-based health services such as pharmacies working together. Positive engagement from GP training colleges and regional training organisations underpins these communities of practice on the ground. Although the current principal focus, particularly during the COVID-19 pandemic has been on telehealth and videoconference, this model is proof that face-to-face contact is still the gold standard for education and training.