CLOSE THE GAP – SPECIAL FOCUS

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Case Study

Culturally safe and sustainable solution for Closing the Gap-registered patients discharging from a tertiary public hospital

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Abstract. This case study describes the development, implementation and review of a sustainable and culturally sensitive procedure for a hospital-funded discharge medicine subsidy for Aboriginal and Torres Strait Islander patients registered with the Closing the Gap (CTG) program discharging from a public hospital. A 7-day fully subsidised medication supply was approved to be offered to Aboriginal and Torres Strait Islander patients admitted under cardiac care teams, including cardiology and cardiothoracic surgery patients. Patients were offered the option of a 7-day supply free of cost to them or a full Pharmaceutical Benefits Scheme (PBS) supply if preferred. A general practitioner (GP) appointment was organised within 7 days of discharge to ensure patients received ongoing supply of their medications as well as timely clinical review after discharge. Over a 34-month period from September 2015 to June 2018, 535 Aboriginal and Torres Strait Islander patients were admitted to the hospital under cardiac care teams. Of these patients, 296 received a subsidised discharge medication supply with a total cost of A$6314.56 to the hospital over the trial period, with a mean cost of A$21.26 per discharge. The provision of subsidised medications through the CTG program has improved the continuity of care for Aboriginal and Torres Strait Islander patients. The culturally sensitive approach is well received and has allowed smooth transition back to the community. This site-specific and state-based funding model was found to be financially sustainable at a public hospital.

What is known about the topic? The CTG PBS program is not applicable to discharge prescriptions from public hospitals. As such, patients are required to either leave the hospital with no medicines or leave the hospital with medicines for which they have to pay full PBS price. This creates a huge financial barrier to the care for CTG-registered patients in the acute care setting.

What does this paper add? A sustainable solution to the problem was found via a state-funded model while providing a supportive team to ensure GP follow-up and continuity of care after discharge.

What are the implications for practitioners? If similar approvals are granted and supported at other public hospital sites, practitioners will be afforded one less barrier to provide patient-centred care for Aboriginal and Torres Strait Islander patients.

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Introduction

Despite government efforts, Aboriginal and Torres Strait Islander peoples continue to have a lower life expectancy than non-Indigenous Australians. As of 2012, the gap in life expectancy was 9.5 years for women and 10.6 years for men.[1] Cardiovascular disease is the largest contributor to this life expectancy gap and a major contributor to morbidity in this patient group.[2] Aboriginal and Torres Strait Islander peoples experience significant disadvantage across three major social determinants of health in terms of income, education and employment.[3,4]

The Council of Australian Governments (COAG) has made a formal commitment to achieve Aboriginal and Torres Strait Islander health equality by 2031.[5] A major part of the Closing the Gap (CTG) strategy has been to reduce the financial barrier to medication access through subsidised prescription medicines. Under the federally funded Pharmaceutical Benefits Scheme (PBS), Aboriginal and Torres Strait Islander patients who are registered with the CTG medications subsidy scheme are eligible to receive their medications at a heavily subsidised cost or no cost when CTG-endorsed prescriptions are written by their community-based doctors.[6] However, the CTG PBS program is not applicable to discharge prescriptions from public hospitals. As such, patients are required to either leave the hospital with no medicines or leave the hospital with medicines for which they have to pay the full PBS price. This creates a huge financial barrier to the care of CTG-registered patients in the acute care setting.

The inaccessibility to subsidised discharge medicines from public health facilities creates numerous logistical and operational issues that compromise optimal continuity of patient care. The authors recognise that public hospitals in various Australian states and territories use different strategies for medication supplies on discharge regardless of cultural identification. At the Princess Alexandra Hospital in Brisbane (Qld, Australia) discharge medication supplies should adhere to Queensland Health policy and PBS-claiming regulations, and represent copayment contributions by patients. In our hospital it was reported that in many instances patients were being directed to their general practitioner (GP) for the provision of CTG prescriptions when they were discharged from hospital. This would be logistically difficult because it would involve patients visiting both the general practice and the community pharmacy on the day of discharge if they were to continue on the newly prescribed therapies without interruption. If the patient was discharged late in the day or the general practice has no available appointments, this may not be possible. In such an instance, critical medicines may be missed. Furthermore, the concept of shame within a health care context is known to deter Indigenous patients from accessing and feeling safe in health service environments.[7]

The importance of Aboriginal and Torres Strait Islander patients having full access to evidence-based medicines after a cardiology admission is well recognised.[8] However, limitations on CTG prescribing in public healthcare settings make achieving this target difficult. The problem is widely acknowledged. The Society of Hospital Pharmacists of Australia (SHPA), the Pharmacy Guild and the National Aboriginal Community Controlled Health Organisation (NACCHO) have lobbied the government for hospital CTG prescriptions to be eligible.[9,10]

A multidisciplinary team project entitled Better Cardiac Care commenced at the Princess Alexandra Hospital in September 2015, aiming to improve the cardiac care for Indigenous Australians through better access, support, education, advocacy and cultural sensitivity across the entire patient journey. Ongoing team member assessments of cultural capability were conducted by the hospital liaison officers responsible. This ensured patient-centred and culturally appropriate recommendations during admission and transition planning to community support services after discharge.

The Better Cardiac Care team includes clinical nurse consultants, an Aboriginal and Torres Strait Islander hospital liaison officer, an administration officer, a cardiologist and a pharmacist. The team identified that discharge medication supply was problematic for CTG-registered patients because they were unable to receive subsidised medicines at the point of discharge.

This article describes the development, implementation and review of a newly developed local strategy of a hospital-funded discharge medicine supply for CTG-registered Aboriginal and Torres Strait Islander patients discharging from cardiac care teams.

Methods

Setting

This project was conducted at Princess Alexandra Hospital, Brisbane, a large tertiary public hospital that provides cardiothoracic surgery and cardiac catheterisation laboratory services. All Better Cardiac Care team members were required to complete Metro South's Cultural Capability course, including an extension course through the Lighthouse Hospital Project. A model was proposed whereby a 7-day fully subsidised medication supply could be offered to Aboriginal and Torres Strait Islander patients who were registered with the CTG program in community and were admitted under cardiac care teams. Although not creating a new form of medication supply, the aim was to bridge the gap between point of discharge and GP follow-up. To gain approval for this model, the hospital executive was consulted and provided with information regarding projected costs. The proposed model of medication supply was approved by the Executive Director of the hospital and health service initially on a trial basis and has since been renewed.

Ethics exemption was granted for data collection by Metro South Human Research Ethic Committee (HREC/16/QPAH/157).

Model

Aboriginal and Torres Strait Islander patients admitted to the hospital under cardiac care teams were identified on a daily basis via the hospital's patient management system. The project team conducted ward rounds to introduce the service to patients and confirm CTG registration status. The pharmacist would offer CTG-registered patients the option of a 7-day subsidised supply with no cost to the patient or a full PBS supply that the patient would be required to pay for as routine hospital care. Patients not registered for CTG would only be offered the full PBS supply because they were ineligible for this trial.

For patients receiving the subsidised supply, their prescriptions were dispensed non-PBS, and costs were absorbed by the hospital and health service. Data were extracted from medical

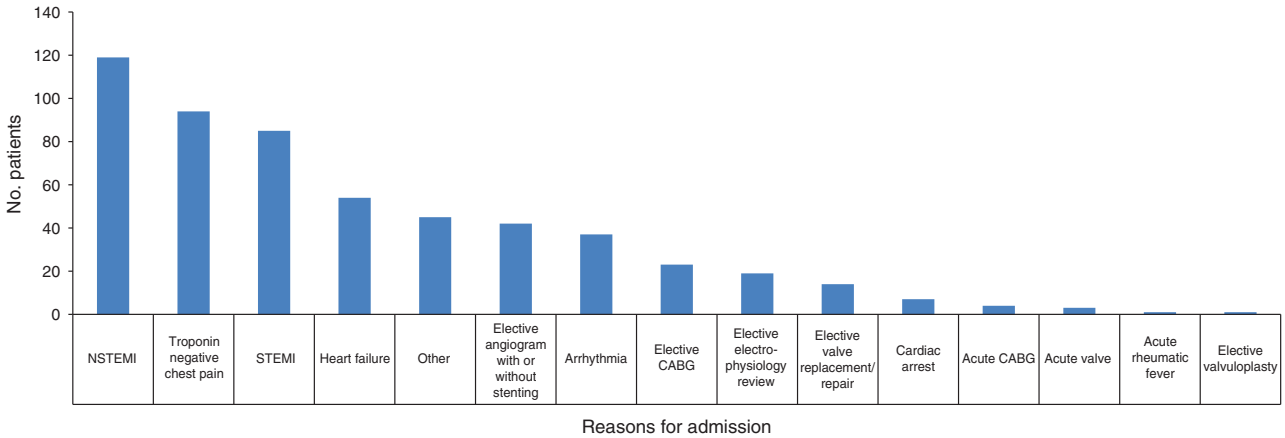

Fig. 1. Reason for admission for the 535 patients admitted between September 2015 and June 2018. 'Other' reasons include patent foramen ovale closure, pneumonia, syncope, myopericarditis and pericarditis. CABG, coronary artery bypass grafting; NSTEMI, non-ST segment elevation myocardial infarction; STEMI, ST segment elevation myocardial infarction.

records dispensing software and was recorded deidentified by the pharmacist on a Microsoft (Bellevue, WA, USA) Excel spreadsheet. In order to maintain approval for the project, these costs were reported back to the hospital executive for review and consideration for approval extension.

Unregistered patients

Patients who were not yet registered with CTG were informed about the program. If the patient desired, the project team liaised with community supports and general practice to facilitate the registration process.

GP follow-up

Essential activities of the project team were to arrange a follow-up GP appointment within 7 days of hospital discharge and to ensure that all discharge information had been sent to the general practice, including the discharge medication record. At this appointment, patients would receive a CTG-endorsed prescription for ongoing supply of their discharge medicine at a community pharmacy.

Results

Over a 34-month period from September 2015 until June 2018, 535 Aboriginal and Torres Strait Islander patients were admitted to the hospital under cardiac care teams. Data were recorded by the pharmacist in real time in an Excel spreadsheet as patients were admitted (i.e. eligibility and supply preferences). However, analysis of the data occurred retrospectively after discharge. The mean age of this patient cohort was 54 years, and males predominated, accounting for 58% of patient encounters. Primary diagnoses for hospital admission are shown in Fig. 1.

Of the 535 patients in total, 296 (55%) received a subsidised supply of medications on discharge. The reasons the remaining 239 patients did not receive a subsidised supply are given in Table 1.

The total cost of the subsidised 7-day discharge supply for all 296 patients was A$6314.56, with a mean (± s.d.) cost of A$21.26 ± 27.51 per discharge (mode A$11.48, median A$13.60). The mean cost is based on the average weighted cost of the product and does not include operational costs (i.e. pharmacist time and purchase officer duties). If patients were charged for this medication supply, the mean cost per patient would have been A$43.78. The highest cost if patients were charged for this medication supply would have been A$212.66. It should be noted that 35% of patients indicated that they had certain supplies at home and required only certain medications to be supplied, termed a 'partial supply' in Table 1. This resulted in overall costs being kept low.

For patients who discharged against medical advice, attempts were made to follow them up in the community to ensure they had access to the required medications.

Patients who used dose administration aids (DAA) were considered unlikely to benefit from a full supply of unpacked medications on discharge. In some cases only newly prescribed

Table 1. Type of medication supply received (September 2015–June 2018)

CTG, Closing the Gap; DAMA, discharged against medical advice; PBS, Pharmaceutical Benefits Scheme

Received CTG supply (*n*)	
Full CTG supply of all medications	109
Partial CTG supply of medications not available at residence	187
Total no. receiving CTG supply (%)	296 (55)
Not receiving supply (*n*)	
Preferred PBS safety net supply	6
Preferred full PBS supply	18
Not CTG registered	27
DAMA	14
Nil required	74
Script taken outside	9
Interhospital transfer	14
Webster pack	50
Deceased	5
Prisoner	17
Reason unclear	5
Total no. not receiving CTG supply (%)	239 (45)

medications were supplied and taken in addition to the DAA, where appropriate. Otherwise, patients using a DAA were managed through liaison between the hospital, GP and community pharmacy to minimise any interruption to therapy.

During the trial period, GP follow-up within 7 days of discharge increased from 50% to 80% of patients.

Discussion

There are many barriers to medication management in Aboriginal and Torres Strait Islander populations, including financial, cultural, socioeconomic and geographic factors, with the addition of complex treatment regimens and the patients' beliefs towards taking medications.[7,11] Subsidised medications can assist with removing at least the financial barrier. Engaging patients on ward rounds as a team that included members of the Better Cardiac Care team and Aboriginal Liaison Officer(s) ensured that the admission to discharge process was culturally appropriate and helped overcome other barriers. Conversely, when discharge medication invoices are presented on discharge, concerns are raised by patients regarding affordability. In our experience, this has led to avoidance of future warranted hospital admissions due to the fear of punishment or shame, ultimately having a negative effect on health outcomes and increasing the financial burden of the health system. Upon ratification of the Indigenous Chronic Disease Package, it was identified that increased access to PBS medications via a subsidy scheme would result in higher medication compliance and improvement in management of chronic diseases (*National Health (Indigenous Chronic Disease — PBS Co-Payment Measure) Special Arrangements 2016*; https://www.legislation.gov.au/Details/F2016L00079, accessed 16 January 2020).

Several options were considered as alternatives to the above process. One included the provision of full PBS supplies at no cost. However, it was hypothesised that hospital expenditure may not prove sustainable. In addition, the 7-day supply encourages patients to see their GP within 1 week of discharge, advocating for appropriate clinical follow-up after a cardiac event within recommended time frames. Offering the subsidised supply to all Aboriginal and Torres Strait Islander patients regardless of CTG registration was another option considered. However, it was decided to include only CTG-registered patients because it would be a reflection of the usual standard of care in the community setting. The project team helped facilitate CTG registration of patients in the community, which will also ensure patients with chronic disease are seen periodically by a community provider for annual Indigenous health checks (Medicare Benefits Schedule Item 715).

This project was restricted to cardiology patients to allow preliminary cost analysis for the hospital and health service. The speciality of cardiology was chosen because cardiovascular disease contributes the greatest burden of morbidity and mortality for Aboriginal and Torres Strait Islander peoples, and cardiac patients were identified as at high risk for missed doses of medications after discharge, with medication compliance in this setting being imperative to clinical outcomes. Strategies used to improve medication adherence after discharge included simplifying the medication regimen, provision of a medication list, ensuring CTG registration to allow ongoing subsidised supplies and the use of DAAs.

The mean medication cost of the program A$21.26 is minor compared with the cost of cardiac events, and cost of hospital readmissions. If adequate medication supply on discharge prevents even one patient readmitting to hospital, this can save a significant amount of money, considering that the cost of a hospital bed for one night is approximately A$1901 according to the Independent Hospital Pricing Authority for the financial year 2014–15.[12]

Hospital prescriptions being ineligible for CTG is a barrier faced by clinicians in all public hospital facilities across Australia, with various approaches being trialled to overcome the barrier. In lieu of hospital prescriptions being CTG eligible, this model was found to ensure patients can continue essential medications at a limited cost to the hospital and health service. Inclusion of hospital prescriptions under the CTG program would diminish this barrier faced by many patients at the critical transition from hospital to community care.

Conclusions

Cultural sensitivity is a key element to Aboriginal and Torres Strait Islander patient engagement with the healthcare system. A positive healthcare experience and patient–clinician partnership can encourage patients to appropriately present to hospital in the future and potentially remove some of the negative stigma associated with hospitals and institutions.

Provision of a fully subsidised 7-day discharge supply of medications to CTG-registered cardiac patients had high uptake and aligned more closely with community practices. A culturally sensitive discharge process has improved the continuity of care for patients transitioning back to community safely. Given that federal funding is not currently available, a site-specific and state-based funding model proved to be of minimal financial burden to a public hospital.

Competing interests

The authors declare that there are no competing interests.

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