

Advanced Practice Summary Report

Project title	Advanced Practice in Pharmacy - improving timely medication assessment and charting accuracy on admission.
Health service	Peninsula Health (PH).
Project aims	<ul style="list-style-type: none"> • To improve the accuracy, safety, and efficiency of medication history and reconciliation and to facilitate patient flow for admitted patients • To develop a credentialing process and establish the role of a pharmacist as a collaborative prescriber in the admission process. • To release medical staff time for other clinical duties
Key outcomes	<ul style="list-style-type: none"> • Credentialing model for a collaborative prescribing role developed and implemented • Project pharmacist successfully completed credentialing for the Advanced Practice Pharmacist (APP) role • Successful completion of a prospective parallel study (N=110 patients) • Significant reduction in medication errors The study demonstrated that the role of the APP achieved ≥80% statistically significant reduction in medication errors and a reduction of high or extreme risk errors. <ul style="list-style-type: none"> • Average error reduction (per patient): 0.52 vs 4.41 (p<0.0001) • Average error reduction (per medication order): 0.05 vs 0.43 (p<0.005) • The severities of medication errors were also decreased. Errors independently rated extreme and high were eliminated. Errors rated moderate were reduced by 91% and minor errors were also reduced by 71%. • Implementation of medication safety strategies that include minimising risk to patients due to preventable sources of harm <ul style="list-style-type: none"> • 33% increase in documented Venous Thromboembolism (VTE) risk assessment and prescribing of appropriate VTE prophylaxis. • 56% increase in correctly documented allergy/ADR history. • A positive impact of APP on efficiency was demonstrated by: <ul style="list-style-type: none"> • 80-100% of day time admissions to the AAA Unit reviewed by the APP, • Reducing the average medical staff time spent on medication history reconciliation per admitted patient by 36 minutes, enabling them to be freed up for other clinical duties. • A staff satisfaction survey was conducted with positive outcomes demonstrated by: <ul style="list-style-type: none"> • A high level of satisfaction (≥80 per cent) achieved from participating medical officers; 87% had no reservations about the concept of the APP project, 91% were supportive of a Pharmacist running the service, 100% agreed that the service lived up to expectations, 96% were very satisfied with service, 100% agreed that the service permitted faster and more accurate charting of admission medications, 100% would recommend the service to a colleague. • Disseminated concept and outcomes to stakeholders <ul style="list-style-type: none"> • Presentations at a local level and the Annual National Society of Hospital Pharmacist of Australia (SHPA) Medication Management Conference¹ 2015

	<p>and SHPA symposium in General Medicine, Melbourne, September, 2016.²</p> <ul style="list-style-type: none"> • Publication of the project in the Journal of Clinical Pharmacy and Therapeutics³. • Issued expression of interest to participate in Workforce Innovation Grants Program (WIGP) replication phase 2. The partnered Pharmacist Medication Charting Expansion Project to expand the concept further. <p>• Expansion and Development of the project</p> <ul style="list-style-type: none"> • Permanent appointment of a pharmacist to the collaborative prescribing role of an admission pharmacist, funded in the PH operational budget. • In-house credentialing of a further 6 pharmacists enabling expansion of the roles as collaborative prescribers in General Medicine Units, together with a clinical pharmacy restructure involved unit based clinical pharmacy service.
<p>Total investment</p>	<p>Funding provided plus in-kind support: \$107, 339</p> <ul style="list-style-type: none"> • Funding costs included: Staffing costs <p>In-kind support costs included:</p> <ul style="list-style-type: none"> • salary adjustment for Grade 3 Yr 1 • Senior Pharmacist: report preparation x 24hrs, general project supervision x 12 hours • Consultant Medical Officer: Direct supervision of project x 15 hours, general project supervision x 12 hours • Project steering group; consultant medical officer, Director of Pharmacy, nurse unit manager, senior pharmacist, Executive Director of Medical Services (4 x 1hr meetings) <p>Total FTE to provide service:</p> <ul style="list-style-type: none"> 1 x 1 FTE Grade 3 Year 1 Senior Pharmacist 1 x 0.01 FTE Senior Pharmacist: 36 hours total 1 x 0.01 FTE Consultant medical Officer: 27 hours total
<p>Resources available</p>	<ul style="list-style-type: none"> • Study Protocol – Pharmacist undertook best possible medication history taking, medication regimen evaluation and electronic prescribing of medications on admission in collaboration with senior medical staff to improve patient safety <p>References of Publication and Presentation of this Project.</p> <ol style="list-style-type: none"> 1. deClifford, J, Lam S, Khalil V. AAA Rating for Our AAA Advanced Practice Pharmacist Role. Presented at Medicines Management 2015. The 41st SHPA National Conference. 2015 Dec 3-6; Melbourne, Australia 2. Khalil V. Pharmacist Partnered Charting. Presentation to the Society of Hospital Pharmacists of Australia (SHPA) symposium General Medicine, Melbourne, September, 2016. 3. Khalil V Khalil V, deClifford J-M, Lam SH, Subramanian A. Implementation and evaluation of a collaborative clinical pharmacist's medication reconciliation and charting service for admitted medical inpatients in a metropolitan hospital. J Clin Pharmacy and Therapeutics. 2017, doi:101111/jctp.12442