



Medication Safety and Quality Improvement [MSQI] Pharmacist Position

Pharmacy Department Logan Hospital

**Presenter: Paul Firman, Pharmacist – Advanced (Medication Safety and Quality
Improvement)**

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Key Problem and Current Situation

- LBH Pharmacy was working at capacity to ensure the delivery of safe and cost effective medication services across LBH and related community services
- There were organisational wide opportunities to improve medication utilisation across LBH if resource allocation allowed
- The rapid and continued growth of the region and the expanding health service would put continued pressure on the organisation meeting the medication safety standards as outlined in the NSHQS accreditation framework

Aim of this Innovation

- **Accreditation Standard 4: Medication Lead** (NSQHS Standard 4)
 - Chair the organisations preparedness for ASCQHC Standard 4: Medication Safety
 - Responsible for the compliance handbook
- **Drug Use Evaluation Audits and Drug Cost Mitigation Strategies** (NSQHS Standard 4.2.1, 4.2.2, 4.3.2, 4.3.3)
 - Conduct initial and follow up QUM DUE
 - Systemic DUE and audits in line with state-wide formulary changes and DTC approvals
 - Organisational drug cost reports to determine areas of cost savings
- **Committee Membership** (NSQHS Standard 1, 4.1)
 - Medication Safety Committee
 - Drugs and Therapeutic Committee

Key Changes Implemented

- Quality Impact – State-wide
 - Development of state-wide iPharmacy custom report
 - Development of MQSI network
 - Interdisciplinary networking/team building
 - QH Safe and Quality Use of Medicines Advisory Group
 - QHMAC
 - MSH MAC
 - MSQI Network
 - Central Pharmacy
 - Central Supply
 - CISSU
 - CSC
 - Metro South Allied Health Showcase 2016

Key Changes Implemented (continued)

- **Quality Impact – MSH, LBH, LG**
 - **Financial Savings**
 - LBH Nurse Initiated KVO Intervention
 - LBH Cost Analysis – Fluids, LMWH, Noradrenaline, Morphine, Parenteral Nutrition, Fentanyl, LBH reduction in freight charges
 - **Procedure Development**
 - LBH Managing Medicines Access Programmes [Complete]
 - LBH Medication Standard Order Procedure [Complete]
 - LG Inhaled Medication Supply [Complete]
 - LG Fluid Warming [Complete]
 - LG Nurse Initiated Fluids for Intermittent IV Medication Administration [Complete]
 - **Form Development**
 - LG Inhaler approval [Complete]
 - MSH Iron Infusion Procedure and Pathway [in progress]
 - **Committee Involvement**
 - LG DTC
 - LG MST
 - LG DOMES
 - LG TOR review and committee restructure

Outcomes so far

Drug Utilisation Evaluation Summary Report February 2017 - Active Projects

Commencement	Drug/Clinical Problem	Intervention	Net expenditure/saving	Actual 15/16	Actual 16/17	Total
20/5/2016	IV Sodium Chloride Product Use for intermittent medication infusion	Standardisation of sodium chloride product selection and PlumA line use in 3A and 3B. Trial commencement 18/7/2016 1/3/2017 KVO started MAPU/2H/2I	Direct drug and consumables costs	-	\$ 90,694.09	\$90,694.09
			Estimation of nursing time saved based on 106 audited cases where. The true denominator is unknown therefore this is a conservative estimate. Equates to 10 hours nursing time for an RN grade 5 yr 3. (3A3B intervention worksheet)	-	\$ 390.41	\$390.41
20/5/2016	Large volume fluid bags.	Switch from Baxter to FK	August data adjusted	-	\$ 6,617.63	\$ 6,617.63
1/3/2016	IV iron formulations	Remove Ferinject® from DSTU imprest	Institute requirement for PBS prescription for all DTU admission for IV Ferinject® No IPA for in-patient use	\$42,326.30	\$ 141,886.00	\$184,212.30
30/05/2016	Low molecular weight heparin tender	Switch enoxaparin to dalteparin for VTE	Based on converting to all enoxaparin doses based on current AWP (July) (converting 2,500 to 20mg and 5,000 & 7,500 to 40mg enoxaparin at \$4.15 and \$4.22 per unit respectively).	\$16,539.44	\$ 12,051.69	\$28,591.13
10/6/2016	Noradrenaline ampoules procurement	Switch from Levophed to MYX BRAND	Product transition occurred 1/7/2016 Addition of 2mg ampoule to prevent wastage of vials for preparation of standard concentration 6mg/100ml bags not included.	-	\$7,300.14	\$7,300.14
10/6/2016	Morphine	Switch to 10mg ampoule ONLY	5mg vials rolled back over July into August 2016. Data for this intervention will be available from end of August 2016	-	\$ 14,040.51	\$14,040.51
5/7/2016	Parenteral Nutrition	Switch PN CO35 (\$135) to PN – CO14 AEF (\$120)		\$7,280.00	\$ 7,440.00	\$14,720.00
1/9/2016	Urine pregnancy tests across LBH	Switch to state-wide SOA supplier via the supply department	Implemented September 2016. BDH included Oct	-	\$ 11,892.84	\$11,892.84
1/9/2016	Heparin 5,000 units/0.2ml	Switch heparin 5,000 unit box size from 50 units to 5 due to cheaper unit price.	Supply chain issues occurred with procurement of 5 amp boxes in late September	-	\$ 9,046.92	\$9,046.92
1/6/2016	Pharmacy freight charges	Sourcing of internal courier service from CP to LBH sites	Data to end of December 2016	\$1,127.00	\$ 13,401.00	\$14,528.00
1/10/2016	Fentanyl 1000mcg/100ml	Supplier change		-	\$ 1,733.77	\$1,733.77
1/10/2016	Metaraminol 3mg/6ml	Supplier change		-	\$ 991.26	\$991.26
1/10/2016	Sucrose 24%/2ml	Supplier change		-	\$ 649.00	\$649.00
Total reduction in expenditure				\$ 67,272.74	\$318,135.32	\$385,408.00

Contact for this Innovation

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Lessons Learnt

- There are opportunities for quality improvement and financial gains on a local and district level from the implementation of pharmacist positions in this area
- There is opportunity for further work in this area with recent approval of another pharmacist project officer to continue advancing this work

Medication Safety and Quality Improvement (MSQI) Pharmacist Logan and Beaudesert Hospital - Metro South Hospital and Health Service



Problem

Logan and Beaudesert Hospital were working at capacity to ensure safe and cost effective medication services across a rapidly growing and developing district. With appropriately allocated resources, there was the opportunity to provide even more cost effective and safety measures to medication utilisation

Solution

- Creation of the MSQI Pharmacist at Logan and Beaudesert Hospital in a proof of concept position for 12 months

Results

- To date the MSQI Pharmacist has provided the hospital with savings totalling \$385,408.00 (until the end of March 2017)
- The MSQI Pharmacist provided savings to show worth in the concept after the fifth month
- The MSQI Pharmacist has completed multiple quality improvement activities
- The MSQI Pharmacist was approved as a permanent position at LBH



