Palliative Care for People at Home initiative
Pharmacist in community palliative care multidisciplinary team pilot project
Final Project Report, Victoria
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APPENDICES
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APPENDIX 1: PROJECT SUMMARY

Pharmacist in Community Palliative Care Multidisciplinary Teams Project
Calvary Health Care Bethlehem (CHCB)

This project builds on work previously undertaken by CHCB and the Central Bayside General Practice Association exploring the role of a specialist palliative care pharmacist in the community (1). This work identified a number of strategies to optimize pharmaceutical care and quality of life for community based palliative care patients. These included:

- obtaining thorough drug histories identifying potential effects of drug interactions,
- developing a continuing and mobile record of patients’ medications as they transition through care,
- counseling patients/carers on medication regimes, and
- providing resources and expert advice to patients’ community pharmacists.

Building on this work, the proposed project aims to promote the pharmacists’ role in the community palliative care multidisciplinary team. This will be achieved by further strengthening partnerships with key stakeholders and developing a model of care that is transferable to other regions and sustainable into the future.

This project targets patients (and their carers) admitted to CHCB’s Community Service which provides multidisciplinary care to palliative care patients residing in Glen Eira, Stonnington, Bayside, Port Phillip and part of Kingston (covering a population base of over 500,000). Patients may be referred by their carers, general practitioners (GPs), other health care professionals, external agencies, or by self-referral. The service admits over 500 new patients each year, with an average of 180 patients on the program at any one time. Patients’ ages range from 1-90+ years (median age 65+) and average length of stay is 120 days. Approximately 85% of patients have a malignant diagnosis and 15% non-malignant, including end stage Motor Neurone Disease. More specifically, this project will target patients at risk of medication misadventure (2) as identified by a screening tool.

This project will address a number of previously identified unmet needs (1, 3). These include a lack of:

- specialist community based palliative care pharmacy services and knowledge,
- accurate patient held medication records as they transition through various health care settings,
- access to expert advice and evidence based training material regarding medication management of palliative care patients for health care professionals,
- counseling and access to evidence based information for patients and carers on medication regimes, and
- timely access to specialized medications for off-label use
- access to medications after hours

The aim is to develop a cost effective model of care that supports the role of the pharmacist as a member of the community palliative care multidisciplinary team. This will be achieved by:

- developing and evaluating a pharmacist position in the community palliative care multidisciplinary team,
- periodically reviewing and monitoring patients’ medication regimes to improve symptom management and patient outcome, prevent hospital readmission and contain pharmaceutical costs,
- developing best practice protocols, guidelines and pathways in accordance with Australia’s National Strategy for the Quality Use of Medicines (4),
- developing protocols to support and integrate HMR accredited pharmacists into model of care,
o providing consultative resources to other community palliative care providers regarding specialist palliative care medicines,
o developing evidence based patient information sheets for patients and carers,
o developing and/or sourcing evidence based training material for health care professionals,
o up-skilling community and HMR accredited pharmacists, and general practitioners on medication management in palliative care,
o developing patient held medication records to improve communication of patients’ medication requirements as they transition through different care settings,
o developing strategies to address complex issues as they arise during the project’s implementation, and
o identifying management strategies that will ensure proposed model of care is sustainable and transferable to other community palliative care providers.
APPENDIX 2: LITERATURE REVIEW

The literature searches commenced in Phase 1 and continued throughout the project to ensure the latest version of some reports were captured in the review.

The literature review has been divided into five main groups:

- Medication Reviews
- Prescribing in Palliative Care
- Interventions
- Patient/Consumer Information
- Patients at Risk of Non-concordance

Summary of Evidence

The literature search supports the premise that:

- there is often a poor understanding within patient groups of their medicines, what they are for, when and how to take them
- there is sometimes duplication of medicines due to patients attending more than one health care provider
- there are medicines are kept that are expired
- medication management reviews reduce the incidence of medication misadventure
- there are groups of ‘at risk of non-concordance’ patients that may require different approaches to medication management and risk management
- the capacity for duplication and sustainability of this project can be limited by a number of factors outside of the domain of the current project brief

When prescribing, MMRs inform the prescriber about the number and complexity of medicines being taken thus avoiding some of the medication misadventures. MMRs alert the prescriber (and pharmacist) to potential drug interactions, when to discontinue medicines, when further information and education of the patient and family is required. A current study (VALMER) is being undertaken to ascertain whether such reviews will reduce healthcare costs.

The literature indicated that appropriate interventions by pharmacists have been determined likely to improve patient compliance and outcomes; however, it was not specific to palliative care patients.

With respect to patient information, Consumer Medicines Information is mandatory. However, although the information specifications are provided for under legislation, it has been found that there are still groups of people who find it difficult to understand CMI because of levels of literacy, including health literacy, in both English and for those from culturally and linguistically diverse populations in their own languages. This poses a distinct issue for the production of consumer information when the amount and complexity of medicines is significant as is often the case for palliative care patients. Information in the context of the condition makes it more relevant to the patient.

The literature also highlighted that patients have ‘changing and different information needs’. This will impact on their capacity to read, comprehend and comply with the directions and information provided.
Literature Search – Process

A literature search was undertaken to gather evidence regarding the role of the pharmacist in community palliative care services, in turn, enhancing the quality use of medicines. The search sought information on medication reviews; tools currently being used for home medication reviews for palliative care patients; types of interventions should be/are being conducted; facets of prescribing in palliative care currently being practiced and the type, extent and format of consumer medicines information that should be made available to patients and their family/carers. The evidence gathered was used to ensure that the project developed appropriate tools, pathways and information to improve patient care by a more appropriate documenting and use of medications and a reduction in the incidence of poor use of medications or “medication misadventures”. The search of the literature included consideration of ‘at risk’ groups and although there is not a large body of work specifically related to palliative care, the lessons learned in other spheres of medication management, pain management, risk management and medication misadventure can be equally applicable to patients within this sector.

The keywords used in the literature search:

- Consumer medicines information
- General Practitioners and medication management
- Guidelines for managing medication in the home
- Guidelines for medication management
- Home Medication Reviews
- Interventions in medication management
- Management of medications by Community pharmacists
- Medication adherence
- Medication management
- Medication management in the home
- Medication management interventions
- Medication Management Reviews
- Medication misadventure
- Medication mismanagement
- Patient information on medicines
- Policies for managing medication in the home
- Prescribing in palliative care
- Prescribing in the elderly
- Medication and Groups at risk
- Medication management and people from Non-English Speaking Backgrounds
- Risks for migrants and refugees
- Medications and non-compliance
- Medication errors
- Medical records
- Communication barriers
There was a general search of the internet and a number of databases and websites were searched, including:

- BMC palliative care
- Journal of pain and symptom management
- Journal of palliative care
- Palliative and supportive care
- Palliative Care: Research and Treatment
- Palliative Medicine
- Progress in Palliative Care Journal
- Supportive Care in Cancer
- The Internet journal of pain, symptom control and palliative care

Other Journals consulted:

- Australian Pharmacist
- British Medical Journal
- Journal of Clinical Oncology
- Medical Journal of Australia
- The Pharmaceutical Journal

Websites used during the course of the project:

**Australian**

- National Prescribing Service [www.nps.org.au](http://www.nps.org.au)
- The Society of Hospital Pharmacists of Australia [www.shps.org.au](http://www.shps.org.au)

**Overseas**

- Canadian Hospice Palliative Care Association [www.chpca.net](http://www.chpca.net)
- Gold Standards Framework [www.goldstandardsframework.nhs.uk](http://www.goldstandardsframework.nhs.uk)
M D Cancer Centre www.mdanderson.org
Medicines and Healthcare products Regulatory Agency www.mhra.gov.uk
Medscape www.medscape.com
MedsCheck www.health.gov.on.ca/cs/medscheck/professionals
National Guideline Clearance www.guideline.gov
National Institute for Health and Clinical Excellence www.nice.org.uk
National Prescribing Centre www.npc.co.uk
Palliative drugs www.palliativedrugs.org
Plain English Campaign www.plainenglish.co.uk
RAND Health www.rand.org/health/projects/acove
The Cochrane Library www.thecochranelibrary.com
U.S. Food and Drug Administration www.fda.gov
Medication Reviews

The sections on medications reviews and prescribing in palliative care were used to draft and modify the Medication Review Screening Tool (MRST).

The Home Medication Review (HMR) referral form lists the following as risk factors for medication-related adverse effects.

- Currently taking 5 or more regular medications
- Taking more than 12 doses of medication/day
- Significant changes made to medication regimen in the last 3 months
- Medication with a narrow therapeutic index or medications requiring therapeutic monitoring
- Symptoms suggestive of an adverse drug reaction
- Sub-therapeutic response to treatment with medicines
- Suspected non-compliance or inability to manage medication related therapeutic devices
- Patients having difficulty managing their own medicines because of literacy
- or language difficulties, dexterity problems or impaired sight, confusion/dementia
- or other cognitive difficulties
- Attending a number of different doctors, both general practitioners and specialists
- Recent discharge from a facility / hospital (in the last 4 weeks)
- Other medication issues/problems

The palliative care population has complex and changing medication regimes, and other risk factors for medication-related adverse effects other than those listed above have been identified to alert the health professional to possible problems.

*Medication review: patient selection and general practitioner’s report of drug-related problems and actions taken in elderly Australians.*

A Medication Risk Assessment Form was developed for patients to complete as a screening to select patients for medication review by their general practitioner. Monitoring of patients medication was a frequent action, with a focus on medications likely to cause adverse drugs reactions. Adherence was aided by the generation of a list of medications for the patient to carry.

*NICE clinical guideline 76 Medicines adherence: National Institute for Health and Clinical Excellence*  
www.nice.org.uk  http://www.nice.org.uk/guidance/CG76

Assists patients to make informed choices by involving them in decision-making about prescribed medicines and supporting adherence by:

- Involving patients in decisions about medicines
- Improving communication
- Increasing patient involvement
- Understanding the patient perspective
- Providing information
- Supporting adherence
- Addressing adherence
- Interventions to increase adherence
- Reviewing medicines
- Improving communication between healthcare professional
Types of medication review

- Type 1 – prescription review
  Address technical issues
- Type 2 – concordance and compliance review
  Address issues relating to patient’s medicine-taking behaviour
- Type 3 – clinical medication review
  Address issues relating to the patient’s use of medicines in the context of their clinical condition

The Type 3 clinical medication review requires the patient to be present, access to the patient’s notes and includes all prescription, complementary and over-the-counter medications. Review of medicines and condition occurs, which is important in the context of the palliative care patient.

Medication management at home: medication-related risk factors associated with poor health outcomes.

The study supported the theory that polypharmacy and medication-related risk factors as a result of polypharmacy are correlated with poor health outcomes.

Medication risk factors included:
- Confusion with generic and trade names
- Poor adherence
- No medication administration routine
- Horded medications
- Discontinued medication repeat prescriptions
- Expired medications
- Multiple locations of medication storage

Pharmaceutical Society of Australia

The PSA provides the following to assist pharmacists who are undertaking HMRs:
- Framework Document endorsed by all stakeholders in February 2001
- PSA Guidelines for Pharmacists
- December 2000 Domiciliary Medication Management Review
- PSA Standard for Home Medicines Review (Domiciliary Medication Management Review)

Medicines use reviews February 2008: Introduction to medication review December 2007
The Pharmacy Guild of Australia
www.guild.org.au/mmr

“The Home Medicines Review (HMR) was introduced into the Medical Benefits Scheme in October 2001 to increase the appropriate use of medications and reduce the incidence of 'Medication Misadventures', thereby assisting in improving patient health outcomes.

The HMR is a consumer-focused, structured and collaborative health care service provided in the community setting to optimise consumer understanding and quality of use of medicines. It involves the consumer, their general practitioner, their pharmacy, and other relevant members of the health care team.

HMRs can prevent:
- Incorrect use of medicines are not used properly
- Incorrect or inappropriate mixing of medications (including vitamins and complementary medicines)
Confusion in consumers who take more than five medicines a day, are confused or worried about their medicines

Confusion in consumers who see more than one GP or specialist and/or who have recently been in hospital

HMRs provides the GP with information to draw up an appropriate medication treatment plan that can benefit patients by:

- Drawing up of a relevant medication treatment plan
- A listing of medications that need to be taken and thus preventing patients from forgetting important medications

The GP generates a referral to the local pharmacy. A pharmacist conducts an interview, preferably in the consumer’s own home, and then writes a report back to the GP, who then discusses any recommendations with the consumer and may make appropriate changes to their medication regime.

Often the pharmacist may pick up on things in the home that the GP is not aware of, but should know about. For example, the patient may not be taking their medications properly, they may not be stored appropriately, or there may be over-the-counter medicines that should not be taken with the prescribed medicines. The pharmacist may also find that the patient is confused about their medications or forgets to take them. The GP and pharmacist work together to help the patient to get the most positive health outcomes possible.

*Improving medication management of palliative care patients: enhancing the role of community pharmacists*

http://www.guild.org.au/research/project_display.asp?id=262

Project Summary:

“Over 70% of patients with cancer requiring palliative care are managed in the community. Pharmacists are an accessible member of the healthcare team, but due to a lack of knowledge they are a very under-utilised resource for the delivery of medication management and other palliative care services to patients in the community. The key element of this project are the development, implementation and evaluation of a flexible, problem-based educational program in palliative care, including medication management, directed at community pharmacists in both urban and rural Australia, to empower them to contribute more effectively in this important area.”

Findings of the project:

The current (2006) model of care for the community palliative care patient required the patient/carer to attend the community pharmacy, and the pharmacist to be able to dedicate time for an unremunerated service. A new model for the delivery of pharmacy palliative care services was required to

- Provide cognitive services in the same location as other health professionals
- On more than one occasion
- Accredited program for pharmacists that facilitates provision of clinical pharmacy services
- Possibility of case conferencing

In the conclusion, in the interim, pharmacists where encouraged to:

- Become accredited to conduct medication management reviews
- Undertake educational project developed in the project
- Liaise with palliative care services or centres

This project is the topic of the following thesis:

*Community Pharmacists and Palliative Cancer Care: Addressing Educational Needs*, Safeera Yasmeen Hussainy

B.Pharm (Hons) A thesis submitted for the degree of Doctor of Philosophy August 2006
"Medications reviews have been shown to improve the resident’s quality of life and reduce health costs. A medication review can be described as “the systematic evaluation of medication therapy viewed within the context of resident specific data”. The aim of a medication review is to identify, solve or prevent actual or potential drug-related problems or concerns”.


The study examined the extent of potentially inappropriate medicine defined by explicit criteria (based on Beers or McLeod criteria) prescribed to Repatriation patients in the first 6 months of 2005.

**Updating the Beers’ criteria for potentially inappropriate medication use in older adults: Results of a U.S. consensus panel of experts**
Fink D, Cooper J, Wade W et al.. Arch Intern Med 2003;163:2716-2724.

The Beers criteria is a criteria listing potentially inappropriate medication use in adults 65 years and over in the United States. This paper documents the revised and updated criteria. N.B. Some of these drugs are not used in Australia.


Discusses a consensus based list of inappropriate practices in prescribing for elderly people. The authors embarked on this project as they disagree with some of the drugs deemed inappropriate in the Beers criteria.

**Accessing Care of Vulnerable Elders**

Evaluation of the literature to update indicators that can be used to measure appropriate care in vulnerable elders

**Quality Indicators for medication use in vulnerable elders.**

This paper provided a process for checking what medicines are being used and when they have last been reviewed. This list can be used when assessing medication use in vulnerable elders:

- Medication list
  - Periodic drug regimen review
  - Drug indication
  - Patient education
  - Response to therapy
  - Avoid propoxyphene in older patients
  - Avoid chronic or high-dose benzodiazepine use
  - Avoid drugs with strong anti-cholinergic properties wherever possible
  - Avoid pethidine
  - Paracetamol dosing
Quality indicators for palliative and end-of-life care in vulnerable elders.

Highlighted two important aspects of medication care:
- Management of emergent pain and obstruction
- Treatment of dyspnoea

Quality indicators for pain in vulnerable elders

Highlighted aspects of pain to be assessed when dealing with vulnerable elders:
- Screening for persistent pain
- Cancer pain
- Education for persistent pain
- Preventing constipation with opioids
- Reassessing pain control with opioids

Unit for Medication Outcomes Research and Education (UMORE), University of Tasmania research projects

The Value of Home Medicines Reviews (VALMER) is a current project being undertaken to determine the value of a sample of Home Medicine Reviews (HMRs) in terms of healthcare costs such as GP and specialist visits avoided, worsening of underlying disease and hospital days avoided.

The PROMiSe project is researching the Pharmacy Recording Of Medication Incidents and Services electronic documentation system, and examined community pharmacists involvement in the detection and prevention of medication related problems.

“The D.O.C.U.M.E.N.T. system (1) has been designed to classify the drug-related problems (DRPs) identified by pharmacists in medication reviews performed in the community setting. The primary focus of this system is to allow the reconstruction of the identification and resolution of a DRP without a long-hand description of the process. It is designed to be used in conjunction with drug and disease classification systems (such as the World Health Organisation ATC and ICPC-2 PLUS systems)”.

The final report will not be updated until mid 2010

The D.O.C.U.M.E.N.T.for medication review, a classification system for problems identified in medication reviews and their resolution, was used in the community palliative care project (with permission from the authors) to classify the medication reviews undertaken by the Project Pharmacist.

Medication Management Review Facilitator Program: Consortium Report, June 2005 Health Workforce, Queensland

This report has been considered in the context of the barriers and challenges that would face the current CHCB Pharmacy Project and how it could be duplicated and sustained into a rural/regional area. Some of the most important aspects of the report with respect to potential barriers or challenges that would be faced are:
- “lack of time to conduct HMRs
- Lack of time to become accredited;
- Financial burden to become accredited;
- Lack of remuneration (primarily to support employing another pharmacist or locum);
- No financial recognition/reward for distances pharmacists need to travel to do HMRs in the bush;
- Sole-practising pharmacist inability to leave the pharmacy during working hours;
Sole-practising pharmacist has no support from other pharmacists;
Very few pharmacists in the rural consortium Divisions are currently accredited and available to provide the service.”

Although these are issues that have been highlighted in the context of rural/regional Queensland, the challenges of each of the above points are equally applicable to duplication and sustainability of the project into Victoria and in other areas across Australia and not only in these more remote geographic locations. They could equally apply in some of the metropolitan areas, particularly those more removed from the centre of Melbourne.

The report did, however, provide some practical considerations and these, including the Report Recommendations should be studied in more detail when consideration to implementing the Pharmacist role within Community Palliative Care services is to proceed. With the implementation, in approximately June 2010, of the Fourth Pharmacy Agreement online education unit for accredited pharmacists, there could be a significant reduction in some of the above points around accreditation.

Guiding principles for medication management in the community

This link provided the following risks for adverse drug reactions which are pertinent to the palliative care patient:

- Health conditions or lifestyle practices that significantly affect pharmacodynamics and pharmacokinetics (e.g. alcohol, tobacco, illicit drugs or restricted diets)
- The use of non-prescription medicines and/or complementary health care products with other medicines or treatment

The Home Medicines Review Program Qualitative Research Project 2008 report was released in June 2009.

The report identified the following patient groups that were at the highest risk of medication management
- patients post hospital discharge
- Indigenous consumers
- consumers in remote locations
- CALD consumers
- palliative care patients
- non-compliant consumers
- consumers who are transient or homeless

It was reported that the largest gap in the home medicine review (HMR) process was for patients on multiple medications in the period post hospital discharge

The report indicated the HMR process is considered a valuable tool for the following reasons:

- reassurance
- information provision
- encouragement of continued compliance
- positive feedback
- de-mystification of the reason for medication

In the palliative care patient, the current HMR GP referral model can be inadequate due to the unpredictable and short time period which may occur between the terminal and dying phase.

As a consequence, the Project Pharmacist has highlighted the need for referrals for community palliative care patients who have been recently discharged from hospital.
Interventions

**Standards of practice for clinical pharmacy.**

The standard describes an intervention "as any action by a pharmacist that directly results in a change in patient management or therapy." Classification of interventions involves risk assessment.

**Evaluation of the effectiveness of UK community pharmacists’ interventions in community palliative care.**

Community pharmacists received training in palliative pharmaceutical care and documenting interventions prior to reviewing a patients’ medication. Interventions were reviewed by a panel consisting of a Macmillan nurse, a consultant in palliative care and a hospital pharmacist with a special interest in palliative care. A classification relevant to palliative care was developed as previous studies indicated that palliative care issues had not been taken into account when categorizing pharmaceutical interventions.

Categories of interventions:

- Intervention was likely to improve symptom control
- Intervention was likely to prevent deterioration of the patient
- Intervention was likely to improve patient compliance
- Intervention was worthwhile but effected no change
- Intervention was unnecessary or inappropriate
- Intervention was likely to be detrimental to the patient’s wellbeing
- Insufficient information available to allow categorisation

Prescribing in palliative care

**Managing comorbidities in patients at the end of life.**

The knowledge base necessary to generate a framework to improve clinical decision making at the end of life “includes an understanding of:

- Metabolism of drugs in normal and disease states
- The final common pathway of involution that characterizes most deaths from life limiting illness
- Prognosis and natural course of the life limiting illness and comorbidities
- Measure of benefit for clinical interventions – for example, number needed to treat (NNT)
- Aims of intervention for co-morbidity (primary, secondary or tertiary prevention?)
- Psychological effects of stopping drugs.”
Reconsidering medication appropriateness for patients late in life.

The study considered the appropriateness prescribing/discontinuation of medications for patients nearing the end of their life. It showed that there are four components to be taken into account when discontinuing medications:

- Remaining life expectancy
- Time until benefit
- Goals of care,
- Target treatments

Increasing prescriber awareness of drug interactions in palliative care

The study was aimed at increasing prescriber awareness of interactions by documenting on the prescribing sheet. Most of the non-documented interactions had the potential to cause hypokalaemia, gastrointestinal bleeding and reduced drug absorption.

The study found that an increased awareness by prescribers of interactions resulted in a decrease in the number of systemic drugs prescribed. The report provided two key recommendations:

- “Prescribers should document potential interactions ideally on the drug prescription sheets
- One individual (ideally a pharmacist) should have responsibility for monitoring prescribing practice.”

Drug interactions in palliative care

A literature review of medications used in palliative care was undertaken, with a conclusion that interactions are similar to other areas of medicine but “have significant consequences in pain management.”

Frameworks for approaching prescribing at the end-of-life.
Currow DC, Abernathy AP. Arch Intern Med 2006;167:2404

Correspondence in response to Holmes et al stating that there is significant work “to be done in prospectively evaluating and refining the framework(s) that will best optimize function and comfort while actively managing comorbid illness at the end of life.”

Futile medication use in terminally ill cancer patients.

A study of patients in a palliative care unit determined that 26 of 106 consecutive patients where taking futile or inappropriate drugs. This study retrospectively reviewed charts of ambulatory patients with advanced cancer and determined about 20% of the patients were taking futile medications, most commonly statins.
Prescribing in palliative care as death approaches.

Little guidance exists in reducing or stopping medicines in the setting of life-limiting illness. The article suggests that medicines should be assessed with respect to the primary intent, that is, primary, secondary or tertiary prevention, when managing co-morbid conditions in palliative care. Symptom-control medicines also need monitoring, as there is potential for adverse reactions and interactions in the palliative care population.

Changes in anti-cholinergic load from regular prescribed medications in palliative care as death approaches

A study which documents the anti-cholinergic load of medicines used between referral to death in palliative care. The biggest contributor to anti-cholinergic load was symptom-specific medicines.

Patient medicine information

From research to practice-effective delivery of consumer medicine information
Asani P. Australian Pharmacist 2006;25:204-208

Pharmacists require appropriate skills to effectively use consumer medicine information (CMI), but also need to be aware factors which can influence consumer use of CMI such as:

- Readability and presentation of CMI
- Perception of disease condition
- Health Locus of Control
- “Problematic” experience
- Timing and nature of provision of CMI
- Care-giver role
- Health literacy
- Coping style
- Health beliefs
- Experience with receiving written information
- Demographic factors (eg, age, gender)

The use of written medicine information by consumers.: Koo M. Australian Pharmacist; 25:412-414

Consumer medicine information (CMI) has been a mandatory requirement for new prescription medicines and existing prescription medicines with changes in their Product Information (PI) since January 1993. The required content of CMI is specified by the Therapeutic Goods Administration, and is required to be consistent with the medicine’s PI but be written in English and in language that is easily understood by consumers.

The research showed:

- Those patients with a symptomatic condition and those with adequate health literacy levels were more likely to seek written medicine information
- Patients who spoke mainly English at home, those with at least secondary educations and those with adequate literacy levels had a better CMI
Older patients and those on a greater number of medications found CMI useful

Issues for future consideration:

- Increasing the benefits of medication to the patient would enable a more realistic assessment of risk and benefit
- Research on patient’s understanding of perceived risk of experiencing a side effect listed to develop the best approach to describing side effects.


Twelve Written Medicines Information (WMI) leaflets were developed for this study.

Major considerations put forward by respondents:

- Simple language
- Avoidance of jargon
- Enlarged print comprehensible layout
- Conversational style of language
- Improved legibility
- Words written in capital letters too distracting
- Greater emphasis on medicines adherence rather than warnings against non-compliance
- Integration of benefit information to facilitate a better balanced benefit-risk perception of medicines

Expert panel

- Information as gentle advice rather than orders
- Language such as ‘you may experience’ instead of ‘you will experience’

Legibility

- Clearly defined headings
- A minimum of 12 point font
- Times New Roman test font
- Dark type on pale background
- Short paragraphs conveying one idea or theme at a time
- Lines spaced adequately
- Bulleted points and short words and sentences
- Boldface type and highlighting important points in text boxes to emphasize key messages

A systematic review of quantitative and qualitative research on the role and effectiveness of written information available to patients about individual medicines.

The review concluded that “there is a gap between currently provided leaflets and information that patients would value and find more useful.”

From the executive summary the following points have been succinctly made:

- No robust information was found that information affected patient satisfaction or affected compliance
- The readability of medicines information is important to patients, with concerns about complex language and poor visual presentation
- Most patients wanted to know about side-effects that could arise
- Some patients question the credibility of pharmaceutical company information
Patients would like written information to help decision-making
- First for initial decisions about whether to take the medicine or not
- Second, for ongoing decisions about the management of medicines and interpreting symptoms
- Patients did not want written information as a substitute for spoken information from their prescriber

Includes information on leaflet design with respect to:
- Words – use easy to understand, everyday language and short familiar words
- Type – use conventional, familiar typefaces; bold fonts are most legible
- Lines – long lines make reading harder, but too short a line also slows reading. Aim for 40-70 characters (8-12 words)
- Layout – document structure is important in helping readers find information. Following the sentence ‘before, during and after’ can be helpful.

The role and value of written information for patients about individual medicines: a systematic review
Grime J, Blenkinsopp A, Raynor DK et al.. Health Expect, 2007 Sep;10(3):286-98

The literature review concluded that patients have changing and different information needs.
- Written information is widely read on the first occasion medicine is prescribed
- Written information within the context of the illness being prescribed valued
- Sufficient detail required for those who want it
- Adverse effects of medications important
- Independence of pharmaceutical companies a concern
- Should not be a substitute for spoken information from the doctor
- Limited research on health professionals’ views suggested ambivalence to written information.

Quantitative studies
Patients’ motives for reading medicines information
- Deciding whether to take a medicine
- To know more about it
- For reassurance
- To be able to comply with therapy
- What to do if dose missed [oral contraceptive study]
- Determining the need to seek professional advise following chemotherapy, as well as informing friends and family about treatment
- Useful for those with hearing or memory problems

Qualitative studies
Information leaflets were read if
- They took responsibility for their own care
- The medicine prescribed was for a serious problem
- They have had a previous problem with a medicine
- They were a caregiver

What patients want to know about their medicines
- Diagnosis. Is this the right treatment for me?
- Other forms of treatment for the condition – both drug and non-drug
- Name of medicine
- When and how to take the medicine. Dosage
- Consequences of not taking the medicine
- What it feels like to take the drug
- How long the drug was likely to be prescribed
Interactions with other medicines
All side-effects with a likelihood of their occurrence
What to do about side-effects
Long-term effects and risk of damage

**PIL for every ill? Patient Information Leaflets (PILs): a review of past, present and future use**

Discusses advantages and disadvantages of computer-generated patient leaflets

**Knowledge and information needs of informal caregivers in palliative care: a qualitative systematic review.**

The review concluded that the evidence base for understanding caregivers’ knowledge and information needs is limited, specifically, in relation to the management of pain, barriers to pain management among caregivers and patients where inadequate knowledge, poor communication and lack of patient-caregiver consensus.

**Always read the leaflet – Getting the best information with every medicine**
www.mhra.gov.uk/home/groups/pl-a/documents/publication/con2018041.pdf

Contains “A guideline on the usability of the patient information leaflet for medicinal products for human use.” in the United Kingdom

**Consumer medicine information and the pharmacists**
Updated 2009

“No-one can say that the pharmacists have not been told. The inappropriate use of medicines is too high, adverse drug events are on the increase; and importantly, consumers have a right to receive accurate, up-to-date information about their medicines, of the kind that can only be provided on a performance-based, evidence-tested CMI. Pharmacists have a professional obligation to routinely deliver CMIs with prescription and pharmacy-only medicines, and to use them to counsel consumers on the appropriate use of their medicines. There really is no option here.”

**Components of Useful Written Consumer Medication Information (CMI)**
http://www.fda.gov/CDER/GUIDANCE/7139fnl.htmDK.

**From the FDA website:**
Comments on the introduction of CMI in Australia – delay in distribution to patients due to a lack of remuneration to pharmacists for printers and consumables, and the length of the leaflets.

**Consumer Medicine Information (CMI) search site**
National Prescribing Service
www.nps.org.au

“What is it?
Consumer Medicine Information (CMI) is designed to inform consumers about prescription and pharmacist-only medicines. It provides information about a medicine and is written by the pharmaceutical manufacturer.

A CMI gives you important facts to know before, during and after taking your medicine.
The content of a CMI is defined by legislation and includes headings such as how to take your medicines, side effects and a description of the product. The legislation ensures the leaflet is accurate, unbiased and easy to use.

The website provides guidelines on the reason for taking the medication, how to take it, where to make enquiries if uncertain on what the medicine is for and/or how to take it, when not to take the medication. It provides a range of options for searching for more information and making enquiries.

**MPES Pictogram Project: International Pharmaceutical Federation, June 2009**

The project has been undertaken “to give health professionals a means of communicating medication instructions to people that they have no language in common with and/or who may be illiterate”.

The pictograms are simple and can be adapted to meet the need of the individual and the aim of using them is to construct a ‘storybook concept’ with a series of pictograms being used to indicate e.g. how much medication, frequency, route and restrictions.

The software for this is freely available and could be useful for ‘at risk’ individuals with limited English language or literacy.

**Groups at Risk of Non-Concordance and Medication Misadventure**

There is significant literature available on the groups of ‘at risk of non-compliance’ patients. This group are often patients:

- from a language or cultural group other than that of the country of residence
- who are elderly and have some confusion or dementia
- Whose capacity to comprehend or manage as their illness progresses (whether from a language/cultural group other than the country of residence or a native of that country)
- whose literacy is limited (in either English or their own language)
- this includes their health literacy

Below is a small selection of articles pertinent to the area of non-concordance or non-adherence that illustrate some aspects requiring consideration and caution when prescribing. Translated materials are not the only answer and, sometimes can create more confusion.

**Medication Management Issues: The Older Person, with a focus on Non-English Speaking Backgrounds**


Pharmacy-related health disparities experienced by non-english-speaking patients: impact of pharmaceutical care. Westberg, Sarah M (SM); Sorensen, Todd D (TD); Journal of the American Pharmacists Association, USA Jan-Feb 2005; vol 45 (issue 1) : pp 48-54

Inclusion of practice-based interpreters and information in foreign languages go part of the way towards minimizing medication misadventure, however, the study undertook comprehensive assessments for 91 or 230 patients encounters and identified 186 drug therapy problems. Within this group these were greater among non-English speaking patients (31% compared with 12%).

The study concluded that “despite the availability of clinic-based interpreters and foreign language services in pharmacies, adherence-related problems are significantly more common in non-English-speaking patients. Pharmacists committed to providing pharmaceutical care must consider the impact of language barriers when working to optimize drug therapy outcomes.
The most significant outcome relevant to the current Pharmacy in Community Palliative Care Project was that drug therapy outcomes improved by 24% once a pharmacist joined the team of clinic providers.

**Pharmacist elicited medication histories in the Emergency department: Identifying patient groups at risk of medication misadventure:** Ajdukovic, M; Crook, M; Angley, CI; Stupans, Ieva; Soulsby, N; Doecke, C; Anderson, B; Angley, M., Pharmacy Practice 2007;5(4):162-168

The basis of this research was to ascertain the discrepancies between pharmacist-written up medication histories and Emergency Department (ED) histories, particularly for ‘at risk’ groups.

The study highlighted the positive contribution from an ED pharmacist and confirmed the vulnerability of patients with a language barrier to medication misadventure and to the ‘lowest frequency of correctly recorded medications’ leading to a higher number of medication related hospital admissions. The study also pointed to the benefit of using interpreter services – particularly at point of admission to ED.

While this study was in respect of patients being admitted through an ED, the learnings from this can be applied to ‘at risk’ patients being admitted to the palliative care services. As such, in an effort to minimise the risk for this group of patients the use of medication management reviews, patient-held medication lists and home medication reviews including upon discharge from hospital could reduce the potential for further admissions from medication misadventure.

**Medication Non-Adherence Issues with Refugee and Immigrant Patients**
http://ethnomed.org/
Avery, K. August 2007 Reviewed by Brian Chakofsky-Lewy and Tiffany Erickson, August 2008

The article discussed the issues of medication non-adherence with both refugee and immigrant patients, recognising that the issues “may not apply universally to all groups, and may also apply to non-immigrant populations”.

The author indicated some aspects of non-adherence the patient may:

- “Discontinue using prescribed medication
- Change dosage, amount, frequency or time of day medicine is taken
- Modify restrictions and special instructions
- Initiate taking someone else’s medications for a perceived common symptom
- Combine treatments such as:
  - Old prescriptions
  - Medications prescribed by different providers
  - Medications shared among family and community members
  - Over the counter medications
  - Medications brough on from abroad/home countries
  - Herbal and other traditional medicines
  - Black market prescriptions”

The reason for non-adherence varies and it can be related to confusion about medications and what they are meant to do, lack of understanding of the scheduling of medications while some patients “actively resist complying” with treatment regimens.

Some of the aspects discussed were:

- “strong” medicines: e.g. “hot” given for a fever, and a belief by some that traditional medicines are better than western medicines
- Combinations of medications: some people believe this is a good thing while others
consider it is dangerous
o “more is better”: some have a belief that taking larger amounts/dosages is better and will aid recovery
o appearance of the medication: the colour (and size) of a medication can influence adherence; in some cultures “red is a ‘strong’ colour and thus red medication are considered to be more effective, while large pills contribute to non-adherence, as does the provision of brand name medications vs generic or cheap brands
o method of taking medications: some people prefer liquids, some tablets — others injections (and this can depend on what was seen in their ‘home country’ as more positive.
  o Stigma: patients with some diseases are non-adherent because of the stigma attached to the disease, they may become isolated.
  o Side effects: if medications produce significant side effects they are often discontinued or taken intermittently thus creating greater problems

The author also indicated that cultural knowledge and traditional treatments, gender, literacy and health literacy, time and interpretation were factors, as was communication and trust.

The article provides a comprehensive list of recommendations for providers that, although this article is not specifically about palliative care patients, could be beneficial for palliative care providers to consider in framing the questions and approach to medication management with their patients of non-English speaking background. It could also be useful for other groups of patients regardless of their language or cultural background.

**Essentials for Medical Interpreters and Translators**
Orlando González, MS, EMT-P, ATA 48th Annual Conference Proceesings

This article discusses the complexities involved for medical interpreters and translators with respect to their background, socio-cultural context and country or culture of origin. It specifically refers to Spanish-speaking people who come from 22 different countries in three continents and even more island populations and (in the USA) make up 340 million of the population. It indicates that while the interpreter or translator is not expected to have the same level of knowledge as the medical practitioners and nursing staff, their level of intelligence must be on a similar level so they “twig, transform and transmit the intended message. A degree of subject matter expertise beyond that of an average person is a prerequisite for effective interpretation and translation”.

The article indicates that the greater the knowledge of the subject – in this instance, the medications and the illness – the more fully understood will be the message to the patient and family.

It leads to the conclusion that a knowledge and fluency of a particular language is insufficient in itself to ensuring the ‘message’ and intent of the message is passed to the patient and their family. This will be particularly important when talking about medications and ensuring a comprehension of what a medication is supposed to do, what problems may arise and when to ask for advice or help. While the article specifically refers to the Spanish language (where knowledge in the USA is quite common) the inherent problems with interpreting and translating are multiplied when there are more languages, less population and thus less knowledge of the background and cultural issues involved in passing the message to patients and their families.
Reducing Medication Errors and Increasing Patient Safety: Case Studies in Clinical Pharmacology, Benjamin, David M. PhD, FCT, Department of Pharmacology & Experimental Therapeutics, Tufts University School of Medicine, Boston, Massachusetts, USA

http://jcp.sagepub.com/cgi/content/abstract/43/7/768?maxtoshow=&HITS=10&hits=10&R ESULTFORMAT=&author1=Benjamin&fulltext=Reducing+Medication+Errors+and+Increasing+Patient+Safety%3A+Case+Studies+in+Clinic&searchid=1&FIRSTINDEX=0&sortspec=rel evance&resourcetype=HWCIT

The article explores the issue of ‘medication’ error, indicating that clinical pharmacologists are well aware of the issues of improving patient safety and reducing medication misadventure, however, with the focus on ‘error’ there is a thrust to look at prevention.

As part of quality improvement, there is now a requirement to report (in the USA and increasingly in Australia) “severe and unexpected adverse drug experiences”. There are, however, many more minor adverse experiences and issues of non-adherence. The lessons learned from the more severe occurrences should be used to consider how to improve day-to-day medication management for patients by improving communication, and ensuring (as far as possible) that patients. This applies to all patients but the groups already known to have greater non-adherence, the elderly, those from a non-English speaking background, should be provided with sufficient information and support so that medication ‘error’ or misadventure is minimised or prevented.

The article provided some statistics (gleaned from other reports) that “between 44,000 and 98,000 (in the USA) die as a result of medication error. The author also quotes from other studies that ‘indicate that up to half of all medication errors arise from physician orders, followed by nursing administration, transcription errors and pharmacy dispensing errors.

The project focussed on preventing medication errors through the screening of all patients admitted to the CPCS program and concentrated on ensuring that:

- the right drug
- right dose
- right route
- right time
- right patient

(the “five rights”) were followed for all patients.

Literature Review – Conclusion

In summary, patients who are at risk of non-compliance/adherence may require careful consideration of:

- the medications being prescribed, including the number, colour, size and route and when to take them/it
- the use of pictograms may assist
- the type of information provided to them and in what format this is provided, including whether it is to be written, translated or verbally conveyed
- a professional interpreter/translator (where either appropriate and/or requested) to ensure the ‘message’ is understood

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1 International Pharmaceutical Federation (FIP): www.worldhealthpictograms.com/beta/WHP_files/page0001.htm
www.fip.nl/www/?page=pp_sect_maeps01m_pictogram
regular checking of the number and type of medications prescribed and by whom they have been prescribed, and
whether the patient/family understand:
what they must do to comply
the diagnosis (and this can be difficult depending upon the cultural and familial relationships) and implications for medications and medication management
what if any potential side-effects may occur with the medication regimen as it changes
when to call for assistance from their GP or palliative care service provider
provision of a rationale for each of the medications prescribed and provided
education of family members to support the patient
support from the patient’s community pharmacist or GP, where this is practicable
regular checking back with the patient and their family of their understanding as the illness progresses and medications change.

The majority of the literature related to pharmacy, medication misadventure/error, concordance, interventions and patients at risk was not palliative care specific. Given this limitation, it was possible to draw correlations to the situations for other patients and relate them to patients within palliative care settings.

The project has thus attempted to fill in some of the gaps in the literature and it will, therefore, be important to reflect on this and CHCB should be trying to submit to journals and other publications to ensure the lessons learned and outcomes of the project become part of the literature and thus sustainability of the outcomes into the future.
APPENDIX 3: EVALUATION

Terms of Reference & Requirements of External Evaluation
Pharmacy in Community Palliative Care Project – 2010

Overview:

The Pharmacy in Community Palliative Care Project is a Commonwealth-funded (CofA) project, administered through the Victorian Department of Health (DH). As with all such projects, it is a requirement of funding that a percentage of the project funds be expended on evaluation, including some components of external evaluation. An evaluator was appointed to this task early on in the project lifespan.

During the course of the project, the Project Manager and Project Pharmacist have undertaken regular review and revision of the project goals and timeframes as necessary. All elements of the project have been reported regularly to the Project Team and to the Project Steering Committee. Consultation with Department of Health officials on variations to goals and/or evaluation markers have been undertaken as necessary.

The Project Manager has undertaken components of evaluation required in the original project brief and has met with the evaluator at points in the project lifespan to report and check on progress and to discuss any aspects that may require review and revision.

Appointment of Evaluator: Dr. Safeera Hussainy

Department of Pharmacy Practice
Centre for Medicine Use and Safety
Faculty of Pharmacy and Pharmaceutical Sciences, Monash University

Purpose of Evaluation:

As a requirement of the funding, an independent external evaluation of the project is to be undertaken covering the effectiveness of the project in terms of its objectives and in meeting the required timeframes.

Generally the aims of a project are to bring about improvements in a particular area of program delivery, including lessening risk, improving service delivery and, with projects funded by government, provide accountability for taxpayer funds by delivery of (at least) some element of sustainability without ongoing funding into the future.
Scope of evaluation:

**Method:**

The evaluator will:

- review and analyse project documents provided by the Project Manager
- review and analyse project documents provided by the Project Pharmacist
- conduct interviews/focus groups as deemed appropriate within the evaluation framework
- review the project management processes, including communication strategy/process
- be required to attend the final Steering Committee meeting and, if requested, the final Project Team Meeting
- review processes and documentation as indicated in points above, including:
  - Statistical data collation and analysis
  - Tools developed and/or adapted
  - Literature review
  - Management processes and documentation

**Deliverables:**

Prior to commencement of this phase of the project, the external evaluator will provide to the Project Manager:

- A plan and timetable for evaluation
- full costing of the external evaluation
- The external evaluator will:
  - prepare and present to the final Steering Committee Meeting, a written evaluation report that describes and presents the findings and any recommendations
  - provide a verbal presentation to the Steering Committee on the overall process, impact and outcomes of the project.

The evaluator will consider and review the:

- Process
- Impact
- Outcomes
<table>
<thead>
<tr>
<th>Process &amp; Tasks</th>
<th>Impact</th>
<th>Outcomes</th>
<th>APPROX.TIME TO REVIEW</th>
<th>approx. time to write up findings &amp; recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall management</td>
<td>1 hr</td>
<td></td>
<td></td>
<td>30mins-1 hr</td>
</tr>
<tr>
<td>Project Plan (incl. timeframes)</td>
<td>1 hr</td>
<td></td>
<td></td>
<td>30 mins</td>
</tr>
<tr>
<td>Literature Review</td>
<td>3-4 hrs</td>
<td></td>
<td>2 hrs</td>
<td></td>
</tr>
<tr>
<td>Data Collection</td>
<td>3-4 hrs</td>
<td></td>
<td>3 hrs</td>
<td></td>
</tr>
<tr>
<td>Communication Strategy</td>
<td>2 hrs (1 x meeting with Sandy &amp; Margaret)</td>
<td>2 hrs</td>
<td>10th March 9-11am</td>
<td></td>
</tr>
<tr>
<td>Education Strategy</td>
<td>2 hrs (1 x meeting with Sandy &amp; Margaret - discuss in same meeting above)</td>
<td>2 hrs</td>
<td>10th March 9-11am</td>
<td></td>
</tr>
<tr>
<td>Role of Pharmacist in the CPCS Team</td>
<td>4 hrs (1 x meeting with Sandy + 1 x meeting with CPCS team)</td>
<td>Up to 3-4 hrs Date to be decided</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medication Reviews</td>
<td>2 hrs (1 x meeting with Sandy – discuss in same individual meeting above)</td>
<td>Up to 3-4 hrs To be incorporated into meeting above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tools developed/adapted</td>
<td>4 hrs</td>
<td></td>
<td>Up to 3-4 hrs</td>
<td>To be incorporated into meeting above</td>
</tr>
<tr>
<td>Care pathway</td>
<td>1 hr</td>
<td></td>
<td>30 mins</td>
<td></td>
</tr>
<tr>
<td>Patient medicine information</td>
<td>30 mins/information leaflet</td>
<td>Up to 3-4 hrs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

of the project in line with the:

- funding requirements
- the overall project brief
- potential for:
- lessening risk of medication misadventure
- improving service delivery
- general improvements in patient care
- the evaluation framework within the project brief/plan
- sustainability
- capacity for duplication of (elements of) the project

Any other items subsequently identified by the external evaluator as requiring evaluation should be discussed with the Project Manager and Project Pharmacist. Specifically, the external evaluator will review and report on the:

- Literature review for relevancy to the project
- Tools developed/adapted and used during the course of the project and their efficacy
- Methods and results of statistical and data collation and analysis to ascertain if the findings of the project are supported by the data collection/analysis

In addition, the external evaluation will review the management of the project with respect to the:
communication strategy
reporting requirements
including meeting of reporting tasks and timeframes
progress report content

Proposed Timeframe and Process for Evaluation Plan – External Evaluator

The external evaluation is to be completed and prior to the final Steering Committee meeting to be held on 22\textsuperscript{nd} April 2010. At this meeting the external evaluator will present findings of the evaluation to the Steering Committee along with a draft report that includes any recommendations for actions to be taken prior to conclusion of the project period (30\textsuperscript{th} June 2010).

A final written report is to be completed and provided to the Project Manager by 14\textsuperscript{th} May 2010. Further details of the proposed timeframe and process for the evaluation are to be supplied by External Evaluator to Project Manager by 1\textsuperscript{st} March 2010.

See above timetable. Proposed timeframe is to conduct the review during March 2010 and write up the findings & recommendations alongside & over the month of April 2010.

First, all the processes/tasks that can be reviewed by reading the Final Report (in progress) will be evaluated, then the face-to-face meetings for the remaining processes/tasks will be conducted.
APPENDIX 4: EVALUATION FINDINGS - DR. SAFEERA HUSSAINY

Overall management

Impact and Outcomes
Overall management of the project was impeccable, as timelines were met (refer to Project Plan for further discussion) and project expenditure was within budget. The Project Manager demonstrated a good understanding of the scale of the project and of her own responsibilities. She remained in contact with myself on an ongoing basis, and provided ample time to plan attendance at meetings and review and provide feedback on documents (e.g. project reports, tools developed). She was consultative and was open to, and sought advice on, several elements of the project, especially the evaluation framework. Her excellent management of the project, and of the Project Pharmacist, with the view of meeting the overall project brief, was overall successful as many of the major outcomes for each process/task were achieved (refer to each section below).

Project Plan

Impact
The project was well planned and executed. All of the processes/tasks were implemented within the proposed timelines, with some appropriately carrying over to another phase or being undertaken for the entire duration of the project e.g. literature review. Others were reviewed and revised in line with suitability for the overall project brief e.g. evaluation framework. As a result, the impact of all of the processes/tasks on palliative care patients (and their carers) managed by the Project Pharmacist, as a member of the CPCS team, has been considerable. A positive impact on CPCS team members was also reported, who are now more aware of the Pharmacist’s role in medication management. Increased awareness has also occurred within other palliative care services and the wider community.

Certainly, if the project had not been well planned, managed and timelines not met, these positive effects would have gone amiss.

Outcomes
As all project deliverables were achieved, the major outcomes are that:

- By adopting a PDSA (Plan, Do, Study and Act) type of approach, the funding requirements and project brief set by the Department of Health (DH) have been met, in particular the evaluation framework.
- Particular elements of the project have been recognised as being able to be duplicated across community palliative care services in Victoria and the rest of Australia e.g. model of care, and Medication Review Screening Tool (MRST) and patient medicine information leaflets developed.
- The long-term benefits of pharmacist involvement in medication management in the community palliative care setting have been

*Pharmacist in Community Palliative Care Multidisciplinary Team Pilot Project: Report on the findings of the Evaluation. Conducted and Written by Dr Safeera Hussainy, Centre for Medicine Use and Safety, Monash University, Victoria, Australia.*
demonstrated, such that there is potential for decreased medication misadventure, improved service delivery (in particular increased workforce efficiency) and other improvements in patient care. Funding to duplicate and sustain the Pharmacist’s position is therefore justified.

Literature Review

Impact
The impact of the Literature Review can only be gauged by determining if it considered aspects integral to implementing the processes/tasks in the project. It is immediately apparent that the information uncovered, using the search strategy detailed, assisted the Project Team in:

- Highlighting issues for the Project Pharmacist that she would need to be aware of when undertaking medication review
- Developing the screening tool, by including groups of patients who the Project Pharmacist would need to identify as being at risk of medication misadventure; and
- Developing the evidence-based patient medicine information leaflets, by recognising and incorporating factors that can facilitate the uptake and understanding of these.

However, it is not clear if evidence-based databases were searched, such as the Cochrane Library, to elicit studies with stronger evidence, which would have further supported the development of all processes/tasks. Also, the Project Team were given a copy of my thesis, one facet of which examined the types of interventions undertaken by community pharmacists, and their significance on patient care, using a risk assessment scale similar to that used in the Needham et al (2002) study. The thesis needs to be included in the Literature Review as it was referred to, to a great extent, when the project was scoped.

In addition, while the Project Team have noted that the current content and format of the Literature Review is not complete, syntheses/critical analyses of the findings of each section are required. This would include, most importantly, the gaps identified, and how the information influenced the directions the Project Team took for the above, and all other, processes/tasks.

Recommended action: Include the above information in the Final Project Report

Outcomes
The major outcome of the Literature Review would be whether the project closed the evidence-practice gaps that exist in, for example:

- Developing and implementing the pharmacist’s role as a community palliative care team member
- Providing satisfactory care to patients being palliated, from the patient and carer perspective.

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Education Strategy

Impact
The Education Strategy was closely linked to the Communication Strategy as education was by and large defined by the Project Team as creating awareness of the project and its aims. The Project Pharmacist has provided education in various forms, mainly to internal stakeholders, however, the nature and impact (e.g. on self-reported knowledge/practice) of this education has not been detailed, except for the topic areas presented to health professionals in the Gippsland region. These details are required. Clarification of how the increasing number of medication management reviews assisted education for CPCS team members is needed, as are details of the presentations given at conferences. It is not apparent whether patients/carers were surveyed about their educational experiences (e.g. improved medication-related knowledge and understanding) as a result of increased pharmacist contact. In addition, the Project Pharmacist was clinically supervised to an extent and it would be interesting to hear about her perspectives on her own professional development, aside from those more objectively discussed in the Report.

Since review of the Education Strategy, the above information has been sought by myself from the Project Manager and Project Pharmacist (10/3/10). As a result, the following items will be actioned for the Final Report:

- If possible, a survey will be conducted with the Gippsland region health professionals to ascertain their views of the education session, including whether they believed that their knowledge of the topic areas increased.
- Reference will be made to the survey conducted with CPCS team members on the Role of the Pharmacist, and examples of how their practice was impacted will be included. The findings of the focus group (30/3/10, Appendix A) that I conducted with CPCS team members can also be used to further support the survey results.
- The increasing number of medication management reviews did not assist education for CPCS team members, therefore this statement will be removed.
- Patients/carers were not formally surveyed about their educational experiences, however, they did provide feedback, and this will be reported on.
- A list of conference presentations (abstracts attached) will be included.
- Interprofessional learning (IPL)/education (IPE) undertaken by the Project Pharmacist during clinical supervision will be detailed.

Outcomes
A major outcome of education provision by the Project Pharmacist was the self-reported improvements in knowledge of medications used in palliative care by
CPCS team members. Many team members (60%) also felt that their practice had changed. Similar outcomes for significant others involved in the education process (health professionals in Gippsland, patients/carers) is desirable and would strengthen support and advocacy for continuation and sustainability of the Pharmacist’s position, or a role in the future at CHCB or other community palliative care services.

Role of Pharmacist in the CPCS Team

Impact
On review of the Pharmacist Activity Database with the Project Pharmacist (17/03/10), it was demonstrated that the Pharmacist undertook the following roles:

- Medication review
- Education for patients/carers e.g. carer training on how to use dose administration aids and other delivery devices, such as nebulisers and oxygen concentrators.
- Ensuring ongoing access to medications e.g. home delivery of medications in palliative care emergencies
- Information provision/education for CPCS team members e.g. on how to use a dose administration aid, unusual medications used by patients (this information was inserted into the patient’s medical history and “working file” for all CPCS team members to access)
- Consultation and collaboration with CPCS team members e.g. updating medication chart
- Liaison with other health professionals (e.g. hospital, community and outreach pharmacists, GPs, palliative care nurses) to ensure continuity of patient care.
- Symptom management protocol (e.g. on nausea and vomiting, constipation) implementation through inservices education.

These roles concur with those recommended for pharmacists in my thesis. In addition, the Project Pharmacist conducted a combined bereavement visit (with a social worker) for a patient’s carer. While bereavement counselling was suggested to be an unorthodox role for pharmacists in my thesis, this role cannot be discounted. The Project Pharmacist found the experience to be valuable as it provided the opportunity for interprofessional learning and development of this counselling skill.

The impact of the role of the Project Pharmacist in the CPCS team was primarily measured by the survey conducted with team members, who reported that the frequency of their interactions with the Pharmacist had increased, for advice most commonly on medication use and changing medications. An outstanding finding was that all team members who responded to the survey felt their knowledge of...
palliative care medications had increased as a result of interacting with the Pharmacist. This was corroborated by the following comments made by CPCS team members in the focus group I held with them (30/3/10, Appendix A):

"Great resource in pharmacology for post graduate study by providing useful website links." (P6)

"Great resource and help especially when there’s a problem in the home. Can pick up the phone and ask her [about] e.g. unfamiliar drug; doses, calculations." (P5)

"[Feel confident] to ask questions because others are asking them too.” (P5)

"Looks deeper and has knowledge" (P4)

"Referrals from hospital/GPs were passed by the Pharmacist to identify things to address immediately e.g. a dr and nurse were in the home, the patient had taken three times the opioid dose, they weren’t sure when it would be a huge problem. The Pharmacist informed them of the timeframe, danger and options to deal with the situation. [This built] confidence and reassurance in carrying out roles and improving patient outcomes". (P4)

"Arranged a Webster pack for a patient, arranged liaison with the community pharmacy.” (P3)

"Accessible.” (P3)

"[Was a] huge-learning curve, opened up discussion for cross-pollination of knowledge, broadened your horizons.” (P3)

"[Would] field questions that are not related to your expertise and can be followed up, adds to integrity of the team, realise what huge gap there was without a pharmacist.” (P2)

"[The] validity of trying to get across recommendations and rationale for certain medicines, in the absence of not having a pharmacist, is more difficult. It helps clarify in doctors’ minds about medicines and doses”. (P2)

"Walking, talking MIMS…can bounce ideas off her and what [the information] means in practice.” (P1)

"On a home visit the patient’s medicines were locked up, noone knew, if I went out by myself I wouldn’t have picked that up.” (P1)

Outcomes

By creating a role for the Project Pharmacist in the CPCS team, the major outcomes were that:

- 60% of CPCS team members who responded to the survey reported that they had changed their practice, and examples of these changes were later sought and included.
- All of the CPCS team members who participated in the focus group felt that their medication-related knowledge increased, as well as their confidence in being able to ask questions about medicines because the Pharmacist was highly knowledgeable, approachable, and readily accessible.
Most team members' perceptions about the roles of pharmacists in palliative care changed (positively oriented) as a result of their interactions with the Project Pharmacist, who was deemed to be “indispensable.” It was suggested that every community palliative care service should have a pharmacist.

The number of enquiries directed to the Hospital Pharmacist about medications had decreased, which in turn produced time and cost savings in hospital operations.

The anxiety felt by the Hospital Pharmacist when providing information and advice on medications for patients who they had not assessed had reduced.

However, it was highlighted by the Project Pharmacist and Project Manager that pharmacist role definition and inclusion in multidisciplinary teams depends on palliative care specialist availability and accessibility, as they both interprofessionally ‘engage’ (learn from/with) with each other to achieve satisfactory health-related outcomes for patients. Also, the focus group participants felt that any pharmacist working in a community palliative care team should have the same level of expertise and experience that the Project Pharmacist did, as well as a “proactive and palliative approach to the way they think and interact with carers and families, understanding of palliative care processes and goals, [and preferably knowledge of] oncology treatments.” These are issues that therefore require consideration from a sustainability point of view for the delivery of future community palliative care services.

**Medication Reviews**

**Impact**

On review of the Pharmacist Activity Database with the Project Pharmacist (17/03/10), it was apparent that:

- Screening for patients at risk of medication misadventure was conducted for the majority of patients (88.4%, 373/422) referred to the CHCB Community Service, using the Medication Review Screening Tool (MRST).
- 380 MRSTs were conducted from April 2008-March 2010, during which the following problems were frequently detected by the Pharmacist:
  - 83% (316) took 5 or more medications, or more than 12 doses of medications per day.
  - 77% (294) took medication requiring monitoring, had a narrow therapeutic index or are high risk.
  - 62% (238) had other co-morbidities
  - 55% (208) were recently discharged from hospital
  - 59% (224) were attending different healthcare providers
- Allergies/adverse drug reactions were recorded routinely since October 2009 in 185 MRSTs: 24% (44) reported no known allergies/adverse drug reactions; 31% (58) had none recorded; and 45% (83) had data recorded.
- Similarly, renal function was routinely recorded since December 2009 in 116 MRSTs. There was data available for 49% (57) of patients.
- 52 home visits were undertaken by the Pharmacist from June 2009-March 2010, and these were done on a "needs basis" after consultation with other CPCS team members.
- Approximately 6 home visits per month were conducted by the Pharmacist.
- On average, a home visit took the Pharmacist 54.5 minutes to conduct.
- Where there was no need for a home visit, sometimes care was coordinated by the Pharmacist over the telephone, or by other means, which took substantial time; this was not counted as a home visit. The action taken was recorded by the Pharmacist.
- Medication reviews were conducted at the majority of home visits (88%, 46/52), and a report of the findings was generated for all patients seen by the Pharmacist, a copy of which was compiled into the patient’s medical history and sent to their GP, community pharmacist and other health professionals involved in the patient’s care if appropriate.

The Project Pharmacist perceived the medication reviews undertaken at home visits to have had a significant impact on patients’ care, through reassurance and education around medication management for patients/carers. The Pharmacist felt that the impact of medication reviews on CPCS team members was that they were provided with an updated medication list for all patients, and therefore knew exactly what medications the patient was currently taking.

In the focus group (see Appendix A) I conducted with the CPCS team members (30/03/10), they felt that the Project Pharmacists’ contribution to medication review resulted in reduced medication misadventure, because she was able to identify a range of related issues, including but not limited to:
- non-adherence to treatment;
- whether there was a therapeutic need for emergency medicines;
- the patient’s cognitive ability to take medicines and whether the carer was responsible for managing the patient’s medicines;
- the use of, and need for, dose administration aids to manage medicines e.g. Webster packs;
- incorrect dosages of medicines, especially those with a narrow therapeutic index e.g. phenytoin;
- what to do in the event of a palliative care emergency e.g. accidental opioid overdosage; and
- compatibility of medicines in syringe drivers.
The CPCS team also felt that most of these issues were best detected at initial home visits when the Project Pharmacist accompanied them, as they were likely to not pick up on these problems themselves or follow up on them up as quickly and competently as the Pharmacist did.

Outcomes
The major outcome is that the Project Pharmacist’s involvement in medication management/review decreased medication misadventure and its potential consequences (e.g. hospitalisation, adverse drug reactions/events, death) for many patients. And home visits best provided this opportunity. One of the focus group participants (P3) expressed this by saying:

“…reduces the risk of things going wrong, for example she’s picked up on things that could’ve gone catastrophic. Therefore it’s about providing a safe service and acting quickly, for example on what GPs are prescribing, not necessarily what’s wrong with our service”. (P3)

Tools Developed/adapted

Impact
The tools developed/adapted for the project were mainly for use by the Project Pharmacist, to carry out activities such as screening “at risk” patients, medication review, documenting interventions and recommendations, and communicating findings to GPs and community pharmacists involved in the care of patients. Most tools were adapted from previous projects, and therefore there was no need to validate them prior to implementation. Nevertheless, two GPs evaluated the tools and their feedback was found to be valuable and was incorporated.

However, the impact of these tools is not evident, and I therefore sought the following information from the Project Pharmacist (17/3/10), who reported that:

- The tools were easy to use and she regularly used them, with the exception of the Intervention tool.
- Unlike in the community pharmacy setting, she only used the Intervention tool when there was an isolated intervention, as it was not suitable for recording multiple discussions over a period of time that were integral to solving ongoing issues encountered in the patient’s care. Instead, the Pharmacist recorded the contacts she made that were necessary for resolving the problems.
- Amendments were made to the MRST until December 2009. The tool could be modified slightly for future use at CHCB e.g. by removing the “symptoms suggestive of an adverse drug reaction” check box), however, should be used as it is by other community palliative care services. The MRST would be suitable for the “accredited pharmacists’ model” (i.e. for pharmacists undertaking accreditation in conducting medication screening and review in palliative care, via the online course recently rolled out by

Pharmacist in Community Palliative Care Multidisciplinary Team Pilot Project: Report on the findings of the Evaluation. Conducted and Written by Dr Safera Hussainy, Centre for Medicine Use and Safety, Monash University, Victoria, Australia.
the Pharmacy Guild of Australia funded project), and could be filed in to the patient’s medical history at CHCB.

- **Community Service CHCB patients/carers** did not complete the NPS Medication List themselves and the Pharmacist infrequently undertook this task on their behalf. The Pharmacist suggested that the blank NPS Medication List could be given to nurses and they could pass it on to competent and health literate carers to complete, who often developed their own medication chart using computer programs such as Microsoft Excel.

- There is still a need for a hand-held patient medication record, and as suggested in my thesis, this would include a medication list and treatment plan for the patient and can be accessed by all health professionals involved in the patient’s care, especially when the patient has transitioned from one care setting to another. This could be modeled on the hand-held patient medication record used by Queensland Health (e-LMS).

- The PMP Program could be used for Community Service CHCB patients because it would extend community pharmacists’ and GPs’ involvement in the patient’s care. Community pharmacists would also be able to update the patient’s medication list when the patient/carer visits the pharmacy. However, so far the PMP Program has had little uptake in community pharmacy and this would be a barrier that would need to be overcome before its implementation in the palliative care setting.

**Recommended action:** Include the above information in the Final Project Report

**Outcomes**

To determine whether the tools assisted the Project Pharmacist in tasks such as medication review and intervention documentation, data entered into the Pharmacist Activity Database needed to be evaluated. Descriptive/summary statistics that I sought from the Pharmacist, on review of the Pharmacist Activity Database (17/3/10), indicated that:

- Medication screening was frequently conducted (88.4%) by the Project Pharmacist in context of patients referred to CHCB

- It could not be estimated as to how many recommendations arising from medication reviews were accepted by prescribers, as the Intervention tool was used infrequently, and there was little correspondence from GPs in response to the medication review reports generated by the Pharmacist.

However, a lot of the time symptom management issues were managed the doctors at CHCB and the scope for GP involvement was small; the purpose of the medication review report was mainly to keep the GP up to date with the patient’s progress. Also, in many cases the medication review report only recorded the patient education activities undertaken by the Pharmacist, where no GP intervention was required.

- 113 interventions were made by the Project Pharmacist based on 113 drug related problems (DRPs) that were detected, and the most common
DRPs were “patient requests drug information” (25%, 28/113) and “condition not adequately treated” (22%, 25/113).

- 120 recommendations were made by the Project Pharmacist in relation to interventions they made and most common types were “referral to the prescriber” (35%, 42/120) and “education/counselling session” (30%, 36/120).

The above shows that the major outcomes were that:

- Medication screening is an important and valuable role undertaken by the Project Pharmacist, and the MRST tool used to carry out this activity can be used by other community palliative care services.
- The Intervention tool appears to only be appropriate for community pharmacist use and not for the setting in which the Project Pharmacist practiced in.
- The medication review reports provided a useful summary of the Pharmacists’ recommendations, which potentially decreased medication misadventure and led to other improvements in patient care (e.g. improved communication between team members and satisfactory clinical outcomes for patients). However, there needs to be a mechanism in the future to detect and record whether GPs “accept” pharmacists’ recommendations outlined in medication review reports, as presently this is a gap in care.

**Recommended action:** Include the above information in the Final Project Report

**Care pathway and model of care**

**Impact**

The Care pathway was initially developed by the Chief Pharmacist, who drew on her own intimate knowledge of the gaps in service provision at CHCB at that time (prior to submission of an expression of interest to DH). The final pathway (Appendix 7) therefore puts in place a rigorous system to screen, assess, refer and monitor palliative care patients being seen by the CHCB Community Service. This system considers all sectors of care (and health professionals) that are involved, or have the potential to be, in the care of its patients. The impact of the well designed pathway manifested as positive survey responses from members of the CPCS team members, with regards to the impact and role of the Project Pharmacist (pg. 10-12).

Discussions between myself and the team during the focus group session (30/3/10, Appendix A) have revealed, however, that they did not use the care pathway because they were already following the processes involved, which seemed the most logical way to do things. Most of the focus group participants stated that there was a lack of referrals from the wards at CHCB to the Project Pharmacist prior to patient discharge, and hence this process was not...
undertaken properly as part of the care pathway. They felt that this is important because there are many medication management issues that can be prevented prior to patient discharge, such as emergency medicines not being prescribed. It was suggested that perhaps the wards were not familiar with the Project Pharmacist’s role, in which case clarity around the processes involved in referral, for ward staff, would be required. Notification of patient related issues to community pharmacists did not always occur either and was a perceived gap in implementation of the care pathway that one of the focus group participants (P3) noted. The same participant felt that the care pathway could be used by other community palliative care services.

Moreover, the CPCS team members who participated in the focus group also felt that the model of care instituted in the project is sustainable, because it:

“Is an essential component of Interdisciplinary management for patients being palliated at home.”

“recognises that each component is important.”

“provides quality care for patients and families.”

“results in no gaps in care.”

However, the Project Report does not detail whether a referral form was used by CPCS team members, and if such a form was, it appears to have not been provided for review. It is not clear if it is the Referral template cited in Appendix 7. It is also not known whether referrals were mainly made to the Project Pharmacist via such a form or verbally during team meetings. Therefore, during the focus group I explored this and found that the CPCS team members:

- Were not aware of such a referral form
- Made verbal referrals to the Project Pharmacist, which were more appropriate for queries regarding medicines where timely responses were required.
- Most likely would not have used a referral form if it was available online (via a link on the CHCB website), because this relies on having accessibility to a computer, and most queries arose when they were conducting home visits so computer access would have been a problem.
- May use a referral form in the future if they have palm pilots

**Recommended action:** Include the above information in the Final Project Report, with particular attention to clarifying whether a referral form was created for CPCS team members, and if and how it was made available to them.

**Outcomes**
The duly considered Care pathway and model of care has produced the following major outcomes:

- Increased patient referrals to the Project Pharmacist due to an awareness of the project, which in turn has brought the value of the Pharmacist’s role
in medication management to the forefront and has improved the medication knowledge of CPCS team members.

- Evidence that it should be continued to be used by CHCB Staff, however, raised awareness for ward staff about the processes involved needs to occur.
- Potential to be adapted by other community palliative care services who would need to consider the gaps in their service provision, processes requiring modification, and resources needed.

**Patient medicine information**

**Impact**

Patient medicine information was developed for 10 medicines commonly prescribed in palliative care. The information on morphine was pilot-tested in a sample of patients/carers, and they were surveyed to determine its face and content validity i.e., whether they understood the information overall and specific aspects of it, and if it was easy to read. Based on the information, most patients/carers felt they fully/mostly understood most aspects of morphine, but not as many thought they fully/mostly understood how to take the medicine and what to do if side effects occur. Some patients felt they only had a basic understanding, and were not confident, of what to do for side effect management.

At the previous Steering Group Committee meeting (9/12/09), it was also decided that the Palliative Care Victoria (PCV) format was not a suitable host for the developed information due to colour and appearance incompatibilities, and to ensure sustainability, the information should be instead made available from the CHCB website and other avenues (e.g., Southern Metropolitan Region Palliative Care Consortium website).

From my perspective, the current format of the information is easy to read and understand, and could be used by other community palliative care services. However, the following details have not been provided, without which an estimate of the impact the information had cannot be judged:

- The feedback obtained from patients/carers on whether the morphine information was easy to read and understand (yes/no responses in the survey and comments provided), and how this impacted on the information (e.g., Were significant changes made? Was the length of the morphine leaflet problematic?)
- The evidence-based resources the Project Pharmacist used to develop the medicine information
- Whether the Project Pharmacist regularly used the patient medicine information during counselling/home visits, and if she did not, what were

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1 I found the information morphine, fentanyl, hydromorphone and oxycodone to be lengthy, and perhaps some of the detail can be reduced to facilitate easier reading and retention of information.

*Pharmacist in Community Palliative Care Multidisciplinary Team Pilot Project: Report on the findings of the Evaluation. Conducted and Written by Dr Safeera Hussainy, Centre for Medicine Use and Safety, Monash University, Victoria, Australia.*
the barriers encountered. And also if information on how to take the medicine and side effect management was emphasised during home visits, given that these were areas of weakness identified in the survey on the morphine information.

- Whether incorporating pictograms/pictures (e.g. from the FIP website) was considered.

Since review of the Patient Medicine Information, the above information has been sought by myself from the Project Manager and Project Pharmacist (10/3/10). As a result, the following items will be actioned for the Final Report:

- Survey responses and details of the feedback on the morphine leaflet will be included e.g. patients/carers did not find the length of the leaflet an issue.
- The evidence-based resources used to develop the information will be detailed.
- As the information was being developed in Phase 2 and was produced in Phase 3, the Project Pharmacist only recently started using the leaflets during counselling/home visits. This will be acknowledged.

Outcomes
The major outcome is that a suite of patient medicine information has been developed, which can be used as is or adapted by other community palliative care services. Another significant outcome is that the information could potentially be available in up to 7 different languages, which would help overcome issues related to patient understanding and health literacy in the palliative care population.

CONCLUSION

Overall, the project brief was met. Importantly, the project has provided further evidence regarding:

1. Various roles of pharmacists (7) in community palliative care multidisciplinary teams.
2. Impact of pharmacists’ contributions on patient care and other health professionals in the team. Such that the major outcome is improved service delivery.
3. A sustainable model of care that can be adapted to other palliative care services in Victoria & Australia, via e.g. a resource/tool kit.
Appendix A

FOCUS GROUP WITH CPCS TEAM MEMBERS (30/3/10): QUESTIONS

MEDICATION SCREENING AND REVIEW

1. The Project Pharmacist conducted medication screening and review for a significant number of patients. What do you perceive are/were:
   - The benefits of the Pharmacist’s contributions?
   - The limitations, if any?
   - Areas which require improvement?

CARE PATHWAY

2. Did you find the care pathway useful?
   - If yes, what are/were the benefits?
   - If no, what are/were the limitations and which areas require improvement?

REFERRAL FORM

3. How often did you use the referral form?
4. Did you find the referral form useful?
   - If yes, what are/were the benefits?
   - If no, what are/were the limitations and which areas require improvement?

OVERALL

5. What are your perceptions about including a pharmacist in a community multidisciplinary team?
6. What were your perceptions of what pharmacists do before the Project Pharmacist became a team member?
7. Is the model of care piloted in this project sustainable?
   - If yes, why do you believe it is?
   - If no, why do you believe it isn’t and what needs to be done to ensure sustainability?

FINAL COMMENTS

8. Is there anything else about this project – the processes, their impact and outcomes – that you would like to add?
Pharmacy in Community Palliative Care Project - Consultation Process: Phase 3

Steering Committee

Project Manager/Project Pharmacist & Project Team

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**Pharmacy Guild of Australia**
- Alan Freedman
  - Manager Medication Reviews

**4th Community Pharmacy Agreement Project**
- Michael Dooley/Lauren French/Helen Jackson

**SMR Consortium**
- Tanja Bahro
  - Consortium Manager

**Palliative Care Victoria**
- Sue Salau
  - Communications Officer

**Pharmacy Society of Australia (PSA)**
- Bill Suen

**Department of Health**
- Ellen Sheridan

**Pharmacy Guild of Australia**
- Sandra Lonergan
  - Facilitator

**Guild MMR**
- Safeera Huseini
  - Evaluation – Framework & Timeframe

**RDNS Royal District Nursing Service**
- Vic Pallcare Program Mgr

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**Central Bayside Division of GPs**
- South City GP Services

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**PCV Conference**
- July 2010

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**Facilitator for Pain Management & Palliative Care Session - Frankston**

**PEPA Pharmacists**
- PEPA – ongoing as necessary

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**Victorian Outreach Medication Management SIG**

**Victorian Oncology SIG**

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**Australian Palliative Care Pharmacists**

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**SHPA Conference – November 2010**

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**Key**
- HMR Home Medication Review
- MMR Medication Management Review
- GPs General Practitioners
- SMR Southern Metropolitan Region (Palliative Care Consortium)
- GPDV General Practice Divisions Victoria
- Vic Pallcare Program Mgr Victorian Palliative Care Program Manager
- RDNS Royal District Nursing Service
## APPENDIX 6: PROJECT TEAM COMMUNICATION PLAN

<table>
<thead>
<tr>
<th>What</th>
<th>To Whom</th>
<th>When</th>
<th>Who</th>
<th>How</th>
<th>Where</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Steering Committee Meetings</strong></td>
<td>Project Manager/Project Pharmacist</td>
<td>Periodic as set down in project brief</td>
<td>Project Manager</td>
<td>Written Report &amp; Meeting</td>
<td>CHCB Board room</td>
<td></td>
</tr>
<tr>
<td><strong>Steering Committee Meetings – Agenda &amp; any relevant documents</strong></td>
<td>Steering Committee Members</td>
<td>Within one week of meeting</td>
<td>Project Manager/Project Pharmacist &amp; DHS</td>
<td>Written</td>
<td>Via Email communication</td>
<td>Hard copy if requested</td>
</tr>
<tr>
<td><strong>Steering Committee Meeting Minutes</strong></td>
<td>Steering Committee Members</td>
<td>Within one week of meeting</td>
<td>Project Manager/Project Pharmacist</td>
<td>Written</td>
<td>Via Email communication</td>
<td></td>
</tr>
<tr>
<td><strong>Project Team Meetings</strong></td>
<td>Project Team, Invitees: Millissa Frommer, Ka-Yee Chen, Shannon Thompson, Caroline Edwards, Margaret Box, Sandy Scholes</td>
<td>Monthly 4th Thursday 11-12.00noon</td>
<td>Project Manager/Project Pharmacist</td>
<td>Notices, agendas sent out 1 week ahead via email</td>
<td>Board room</td>
<td></td>
</tr>
<tr>
<td><strong>Agenda &amp; documentation</strong></td>
<td>Project Team Members</td>
<td>Approx. 1 week prior</td>
<td>Project Manager/Project Pharmacist</td>
<td>Written</td>
<td>Via Email &amp; hard copy if required</td>
<td></td>
</tr>
<tr>
<td><strong>Project Team Meeting Minutes</strong></td>
<td>Project Team Members</td>
<td>Within one week</td>
<td>Project Manager/Project Pharmacist</td>
<td>Via email</td>
<td>Via Email</td>
<td></td>
</tr>
<tr>
<td><strong>Team Work/Action Items</strong></td>
<td>Project Team, Project Champion &amp; others as necessary</td>
<td>As they arise</td>
<td>Project Manager/Project Pharmacist</td>
<td>Via email</td>
<td>Nature of file – via email/hard copy</td>
<td></td>
</tr>
<tr>
<td><strong>Project Budget – Progress Reports</strong></td>
<td>Project Champion, Financial Director, Steering Committee, Project Manager</td>
<td>As detailed in Project Plan</td>
<td>Project Manager/Project Champion Financial Director</td>
<td>Via email</td>
<td>MS Excel</td>
<td></td>
</tr>
<tr>
<td><strong>Project Progress Reviews</strong></td>
<td>Project Team, Project Champion, Project Manager</td>
<td>As detailed in Project Plan</td>
<td>Project Team</td>
<td>Written</td>
<td>Via email</td>
<td></td>
</tr>
<tr>
<td><strong>Project Reports – Progress Reports, including timelines</strong></td>
<td>Project Champion, Project Manager, Project Pharmacist</td>
<td>As detailed in Project Plan</td>
<td>Project Team Members</td>
<td>Via email</td>
<td>Via email &amp;/or hard copy as required</td>
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<tr>
<td><strong>Evaluation</strong></td>
<td>Safeera Hussainy, Project Team, Steering Committee</td>
<td>As required in framework</td>
<td>Project Manager/Project Pharmacist/Project Champion</td>
<td>As relevant</td>
<td>As determined from time to time</td>
<td></td>
</tr>
</tbody>
</table>
Communication Plan Considerations

What - The type of communication/event, e.g. team meetings, meeting minutes, team work/action items, project status reports, project timeline, project reviews/tollgates, project success stories/storyboards, etc. The ‘what items/meetings, etc. are distributed to the ‘To Whom’ column.

To Whom - The audience or recipients of the communication, e.g. senior management, the quality department, project champion, MBB, team members, etc.

When - The time and/or frequency at which the communication is delivered, e.g. every Friday at close of business, weekly, within 24 hours or next day close of business, etc.

Who – Person/s responsible for delivering the communication and/or developing communication/report/plan, e.g. Project Champion, Project Manager, Project Pharmacist

How - The delivery mechanism that will facilitate the communication, e.g. electronic mail, voice mail, conference call, video presentation, etc.

Where - The location where the recipient will find the communication/meeting, if specified.
Appendix 7: Communication & Education Strategy – Summary of Project

Steering Committee

Project Manager/Project Pharmacist & Project Team – CHCB Communication & Education Strategy

CHCB Community Palliative Care Service
Interdisciplinary/Multidisciplinary Team
Project Pharmacist

Communication & Consultation

Education

Inservices:
- Neuropathic pain
- Enteral administration of medications
- Prescribing in the Elderly and in Renal & Liver Impairment
- Nausea and Vomiting
- Constipation/apartients

Individual Team Members:
- Daily on-going interactions
- Information about medications/medication management

Resource for CPCS:
- Chemotherapy, ‘unfamiliar drug’ sheets for nurses/working folder
- Alert sheet (allergies, chemotherapy)
- Liaison with community pharmacists (e.g. Dosage Administration Aids)

Patients/Carers:
- Dose Administration Aid (DAA) teaching for patients/carers

CHCB Pharmacy Department

Team Meetings:

CPCS including Allied Health & Individual Team Members

CHCB Staff:

Journal Club:
- Presentation on project

Project Team:
- Monthly Meetings initially
- Meetings as required throughout project
- Progress Reports

Steering Committee:
- Progress Reports
- Feedback as required

Conferences:
- Palliative Care Australia – ‘09
- Carex ’09
- National Medicines Symposium 2010
- Conpharm ’09
- Centre for Ethnicity & Health Conference 2010
- Palliative Care Victoria Conference 2010
- SHPA National Conference Medicines Management 2010

Patients/Carers:
- Dose Administration Aid (DAA) teaching for patients/carers
APPENDIX 8: PATIENT MEDICINE INFORMATION

Patient medicine information was developed and the morphine leaflet was reviewed for layout, readability and comprehension by medical practitioners, the Community Palliative Care Services team and CHCB volunteers, including ex-pharmacist and those from a non-English speaking background.

The format and content layout was kept consistent for the remainder of the patient medicine information developed. of the leaflets was translated and then independently assessed for accuracy by All Graduates Translating and Interpreting.

The leaflets developed were:
- Clonazepam
- Cyclizine
- Fentanyl
- Gabapentin
- Hydromorphone
- Metoclopramide
- Morphine
- Oxycodone
- Pregabalin

Then four of the leaflets:
- Morphine
- Fentanyl
- Hydromorphone
- Oxycodone

have been translated into seven languages frequently encountered in the Southern Metropolitan Region:

- Arabic
- Greek
- Italian
- Sinhalese
- Traditional Chinese
- Vietnamese
- Hindi

The material was translated by All Graduates Interpreting & Translating where they use level 3 NAATI accredited translators who are specialized and experienced linguists. The translated material was then independently checked.

MP3 files of the Oral Morphine leaflet were produced in English by Vision Australia and in other languages by All Graduates Translating and Interpreting. These files have been attached to websites for those to assist access to patients and families who have little comprehension in English and/or limited literacy in either English or their respective languages.

Two examples of translated information are also attached in this appendix.
A guide to clonazepam oral liquid

Clonazepam is used to treat pain that occurs as a result of damage to or from a disturbance in the function of nerves (called neuropathic pain). It is also used to control or prevent seizures and to relieve panic attacks.

Brand name:

Rivotril®

How to use clonazepam oral liquid

The drops are used instead of tablets, that is, the drops are to be taken by the mouth. Your doctor will order this medicine as a number of drops. Use only the dropper supplied in the bottle. Count drops onto a spoon to give the liquid rather than putting the drops directly into the mouth. Do not give the drops directly into the mouth from the bottle. After each administration, make sure that the dropper is secure in the neck of the bottle.

Clonazepam can be given with water, tea or fruit juice.

Common side effects of clonazepam

Side effects from clonazepam are usually temporary

- Drowsiness, tiredness
- Lack of coordination, unsteadiness
- Confusion, lack of concentration
- Headache, hangover feeling in morning

Some medicines, such as sedatives and anti-depressants, or alcohol may increase the side-effects of clonazepam. Ask your health professional (eg doctor, nurse, pharmacist) for advice.

Do not stop taking this medicine suddenly unless your doctor tells you to, otherwise you may get withdrawal symptoms such as anxiety, sweating, being unable to sleep, or headache.

Clonazepam and driving

This medicine may cause drowsiness and affect your ability to drive or operate machinery; avoid these activities until you know how you are affected.

If you are unsure how much to give or how to use the drops, ask your health professional.

The information provided in this leaflet is a guide only and it is important to ask your health professional if you have questions or concerns about the use of clonazepam.
A guide to fentanyl patches

Fentanyl patches are used to control ongoing moderate to severe pain. They are not used for pain that lasts for a short time.

Brand name: Durogesic®

How to use fentanyl patches

The fentanyl is inside a patch that is stuck on to the skin.

The medicine passes from the patch through the skin into the body. The patch is left on the body for 3 days in most patients.

When you first start using fentanyl it takes time to work. Your doctor will give you short acting medicine to take for pain if you need until your patch is working. You can also take the short acting medicine when you have pain while you are using the patch.

Always apply the patch regularly, and take short acting pain medicine as well if you need to.

If you need to take more than 2 to 3 doses of extra pain medicine a day, tell your health professional (eg doctor, nurse, pharmacist) as the dose of your fentanyl patch may need reviewing.

Some people find that doing certain things like walking or showering brings on pain. Tell your health professional who can advise you on the best way to manage this.

Applying the patch

- Clean the skin area with water only. Do not use soap, lotion oils or alcohol to the area where the patch will be applied.
- Write the date and time of application on the patch with permanent marker, then apply it to dry, hairless, non-irritated skin on the upper part of your body or upper arm.
- Any excess hair should be trimmed with scissors. Shaving may irritate the skin.
- Press the area with the palm of your hand for 30 seconds.
- Do not use if the patch is damaged or cut.
- Do not apply after a hot bath or shower.

Wearing the patch

- Check that the patch is still in place each day.
• Remove after 3 days (72 hours) and put a new patch on in a different place. Fold the old patch in half and dispose of in the garbage.
• After removing a patch, avoid exposing that area of skin to the sun for 2 days as it may be more sensitive.
• The patches are waterproof so you can have a shower or go swimming.
• When wearing the patch, do not allow it to come into contact with direct sources of heat such as electric blankets, heat pads, heat lamps, saunas.
• If the patch falls off or you forget to change it, stick a new one on as soon as you can. If you are very late changing your patch, you may need to take other pain relieving medicine until the fentanyl starts working again.
• If you develop a fever, try to keep your temperature down and contact your doctor or nurse if your temperature is 39 degrees or higher.

**Fentanyl and addiction**

You will not become addicted to fentanyl if you are taking it at the appropriate dose for your pain. If you are having other treatments for pain, such as radiotherapy, it may be possible to reduce the dose of fentanyl. Do not stop taking fentanyl suddenly, or you may get withdrawal symptoms such as chills, stomach pains or diarrhoea.

The amount of fentanyl needed for pain varies from patient to patient. People often stay on the same dose of fentanyl for a long time. Others find that their fentanyl dose needs to be adjusted. If your fentanyl dose needs to be increased it does not necessarily mean that your disease is worse.

**Common side effects of fentanyl**

• Drowsiness/Sleepiness - This is most common when you first use fentanyl or when the dose is increased. It should improve after a few days.

• Constipation - This is a common side effect but is preventable if you always take a laxative regularly as prescribed by your doctor. It is important to drink plenty of fluids.

• Nausea - You feel nauseated when you first start to use fentanyl. Your doctor may need to give you some medicine for a few days until nausea goes away.

Nausea, vomiting, and constipation are generally less than for other medications such as morphine.

Fentanyl patches can also cause rash; redness and itch at the patch site is usually mild and resolves when the patch is removed.

Some medicines, such as sedatives and ant-depressants, or alcohol may increase the side-effects of morphine. Ask your health professional for advice.
Fentanyl and driving

Fentanyl may impair your ability to drive. Generally, avoid driving when starting fentanyl, or when increasing the dose. Check with your health professional if you are unsure.

Although fentanyl is a very good pain killer, it is not helpful for all types of pain. Other treatments may be needed, and can be prescribed by your doctor if fentanyl is not controlling your pain, or is causing unpleasant side effects.

The information provided in this leaflet is a guide only and it is important to ask your health professional if you have questions or concerns about the use of fentanyl.
A guide to gabapentin

Gabapentin is used to treat pain that occurs as a result of damage to or from a disturbance in the function of nerves (called neuropathic pain).

Brand names:

- Gabaran®
- Neurontin®
- Gabalexal®
- Gabapentin (CR, GM, GX, HS),
- Pendine®
- Gantin®
- Nupentin®
- Gabatine®

How to take gabapentin

- Most people start taking 100mg to 300mg of gabapentin at night. The dose will then increase gradually over 3 to 7 days, depending on your response. Gabapentin is usually taken 3 times a day, once your doctor has decided on the correct dose for you.

- If you miss a dose or forget to take your medicine, take it as soon as you can. If it is almost time for your next dose, wait until then to take the medicine and skip the missed dose. Do not take a double dose.

- Do not stop taking gabapentin suddenly as it may cause anxiety, insomnia, nausea, pain and sweating. Your doctor will gradually reduce the dose over at least a week.

Common side effects

- Drowsiness
- Fatigue
- Dizziness
- Shaky movements and unsteady walk

Indigestion remedies (antacids) containing aluminum or magnesium may reduce the absorption of gabapentin from the gut. Indigestion remedies should therefore not be taken at the same time as a dose of gabapentin, or in the two hours before a dose.

With other medicines

Gabapentin is safe to take with other medicines, but may increase the effects of alcohol.
Gabapentin is often used with other medicines for pain, such as morphine.

**Gabapentin and driving**

Gabapentin may impair your ability to drive. Generally, avoid driving when starting gabapentin, and when increasing the dose. Check with your health professional if you are unsure.

The information provided in this leaflet is a guide only and it is important to ask your health professional if you have questions or concerns about the use of gabapentin.
A guide to oral hydromorphone

Hydromorphone is used for moderate to severe pain and cough

Brand names:

**Short acting**
- Dilaudid® tablets
- Dilaudid® oral liquid

**Long acting**
- Jumista®

How to take oral hydromorphone (hydromorphone taken by mouth)

- **Short acting** hydromorphone (Dilaudid®) is taken as needed, starts to work after about 30 minutes and works for up to 4 hours.

- **Long acting** hydromorphone (Jumista®) is taken once every day, at around the same time each day.

- Long acting hydromorphone (Jumista®) should be swallowed whole – **do not crush or chew**

- Most patients will be ordered long acting hydromorphone and short acting hydromorphone. The long acting hydromorphone is taken to control ongoing pain, and the short acting hydromorphone is taken for breakthrough pain, that is, pain which occurs between the regular doses of long acting hydromorphone. **Always take the long acting hydromorphone regularly and take short acting hydromorphone as well if you need to.**
  - Wait about 30 to 60 minutes after taking the extra dose of quick acting hydromorphone. If you still have pain, take a second dose.

- If you need more than 2 to 3 extra doses of short acting hydromorphone in a day, tell your health professional (e.g., doctor, nurse, pharmacist), as the dose of long acting hydromorphone may need reviewing.

- Some people find that things like going for a walk or showering brings on pain. Tell your health professional who can advise you on the best way to manage this.

- If you forget to take your long acting hydromorphone, take the missed dose as soon as you remember it. If it is almost time for the next dose, skip the missed dose and continue your regular schedule. Do not take a double dose. Remember that you can take a dose of the quick acting hydromorphone if you have pain.

- If you vomit and bring up your long acting hydromorphone, repeat the dose as soon as you feel better. If you are unsure, contact your health professional.
Hydromorphone and addiction

- You will not become addicted to hydromorphone if you are taking it at the appropriate dose for your pain. If you are having other treatments for pain, such as radiotherapy, it may be possible to reduce the dose of hydromorphone. Do not stop taking hydromorphone suddenly, or you may get withdrawal symptoms such as chills, stomach pains or diarrhoea.

- The amount of hydromorphone needed for pain varies from patient to patient. People often remain on the same dose of hydromorphone for a long time. Others find that their hydromorphone dose needs to be adjusted. If your hydromorphone dose needs to be increased it does not necessarily mean that your disease is worse.

Common side effects of hydromorphone

- Drowsiness/Sleepiness - This is most common when you first take hydromorphone or when the dose is increased. It should improve after a few days.

- Constipation - This is a very common side effect but is preventable if you always take a laxative regularly as prescribed by your doctor. It is important to drink plenty of fluids.

- Nausea - If you feel nauseated when you first start to take hydromorphone, try taking it with food. Your doctor may need to give you some medicine for a few days until nausea goes away.

Some medicines, such as sedatives and ant-depressants, or alcohol may increase the side-effects of hydromorphone. Ask your health professional for advice.

Hydromorphone and driving

Hydromorphone may impair your ability to drive. Generally, avoid driving when starting hydromorphone, and when increasing the dose. Check with your health professional if you are unsure.

Although hydromorphone is a very good pain killer, it is not helpful for all types of pain. Other treatments may be needed, and can be prescribed by your doctor if hydromorphone is not controlling your pain, or is causing unpleasant side effects.

The information provided in this leaflet is a guide only and it is important to ask your health professional if you have questions or concerns about the use of hydromorphone.
A guide to metoclopramide

Metoclopramide is used to prevent and treat nausea and vomiting, and can also help to speed up the emptying of the stomach.

Other Names:
- Pramin®
- Maxolon®

How to take metoclopramide

Metoclopramide is usually taken three to four times daily.

It can be taken about half an hour before food to help to prevent nausea and vomiting.

If you forget to take your dose take the missed dose as soon as you remember it. However, if it is almost time for the next dose, skip the missed dose and continue your regular schedule. Do not take a double dose.

Common side effects

- Restlessness
- Drowsiness
- Dizziness
- Headache

If you experience any of the following symptoms, call your doctor immediately:

- Involuntary movements of the limbs or eyes
- Spasm of the neck, face, and jaw muscles

With other medicines

Due to its action on the stomach, metoclopramide may affect the absorption of various other medicines that are taken by mouth.
Some medicines, such as sedatives and anti-depressants, or alcohol may cause more sedation when given with metoclopramide. Ask your health professional for advice.

**Metoclopramide and driving**

Metoclopramide may impair your ability to drive. Generally, avoid driving when starting metoclopramide and when increasing the dose. Check with your health professional if you are unsure.

The information provided in this leaflet is a guide only and it is important to ask your health professional if you have questions or concerns about the use of metoclopramide.

"Developing the role of a pharmacist in community palliative care multidisciplinary teams project. This project is an initiative of the Victorian Department of Health and is funded by the Australian Government, Department of Health and Ageing, under the National Palliative Care Program."

Disclaimer: The pdf file provided on this website is the official version of this information developed by Calvary Health Care Bethlehem. The text file is provided in the interests of accessibility.
A guide to oral morphine

Morphine is used for moderate to severe pain. It is sometimes used for cough and to help breathlessness.

Brand names for morphine:

Short acting
- Ordine® liquid
- Sevredol® tablets
- Anamorph® tablets

Long acting
- MS Contin® tablets
- MS Contin Suspension®
- Kapanol® capsules
- MS Mono® capsules

How to take oral morphine (morphine taken by mouth)

- **Short acting morphine** (Ordine®, Sevredol®, Anamorph®) is taken as needed, starts to work after about 30 minutes and usually works for up to 4 hours.

- **Long acting morphine** is taken regularly to control ongoing pain. Most long acting morphine is taken every 12 hours (MS Contin®). Take your morning dose when you wake up and then the evening dose 12 hours later. There is one type of long acting morphine that is taken once every 24 hours (MS Mono®). Kapanol® may be taken every 12 or 24 hours. MS Contin® must be swallowed whole – **do not crush or chew**. Long acting morphine capsules (Kapanol®, MS Mono) may be opened and the contents sprinkled on soft food or mixed with liquid. MS Contin Suspension® should be mixed thoroughly in water and taken immediately.

- Most patients will be ordered a long acting morphine and a short acting morphine. The long acting morphine is taken to control pain, and the short acting morphine is taken for breakthrough pain, that is, pain which occurs between the regular doses of long acting morphine.
Always take the long acting morphine regularly, and take short acting morphine as well if you need to.
Wait about 30 to 60 minutes after taking the dose of short acting morphine. If you still have pain, take a second dose.

- Some patients may not require long acting morphine, and take short acting morphine (Ordine®, Anamorph®, Sevredol®) only, for instance, to help with breathlessness.

- If you need more than 2 to 3 extra doses of short acting morphine in a day, tell your health professional (e.g., doctor, nurse, pharmacist), as the dose of long acting morphine may need reviewing.

- Some people find that things like walking or showering brings on pain. Tell your health professional who can advise you on the best way to manage this.

- If you forget to take your long acting morphine, take the missed dose as soon as you remember. If it is almost time for the next dose, skip the missed dose and continue your regular schedule. Do not take a double dose. Remember that you can take a dose of the short acting morphine if you have pain.

- If you vomit and bring up your long acting morphine, repeat the dose as soon as you feel better. If you are unsure, contact your health professional.

Morphine and addiction

- You will not become addicted to morphine if you are taking it at the appropriate dose for your pain. If you are having other treatments for pain, such as radiotherapy, it may be possible to reduce the dose of morphine. Do not stop taking morphine suddenly, or you may get withdrawal symptoms such as chills, stomach pains or diarrhoea.

- The amount of morphine needed for pain varies from patient to patient. People often stay on the same dose of morphine for a long time. Others find that their morphine dose needs to be adjusted. If your morphine dose needs to be increased it does not necessarily mean that your disease is worse.

Common side effects of morphine

- Drowsiness/Sleepiness - This is most common when you first take morphine or when the dose is increased. It should improve after a few days.

- Constipation - This is a very common side effect but is preventable if you always take a laxative regularly as prescribed by your doctor. It is important to drink plenty of fluids.

- Nausea - If you feel nauseated when you first start to take morphine, try taking it with food. Your doctor may need to give you some medicine for a few days until nausea goes away.
Some medicines, such as sedatives and anti-depressants, or alcohol may increase the side-effects of morphine. Ask your health professional for advice.

**Morphine and driving**

Morphine may impair your ability to drive. Generally, avoid driving when starting morphine, and when increasing the dose. Check with your health professional if you are unsure.

**Although morphine is a very good pain killer, it is not helpful for all types of pain. Other treatments may be needed, and can be prescribed by your doctor if morphine is not controlling your pain, or is causing unpleasant side effects.**

The information in this leaflet is a guide only and it is important to ask your health professional if you have questions or concerns about the use of morphine.

*Developing the role of a pharmacist in community palliative care multidisciplinary teams project. This project is an initiative of the Victorian Department of Health and is funded by the Australian Government, Department of Health and Ageing, under the National Palliative Care Program.*
A guide to oxycodone

Oxycodone is used for moderate to severe pain

Brand names for oxycodone:

**Short acting**
- Oxynorm® liquid
- Oxynorm® capsules
- Endone® tablets

**Long acting**
- Oxycontin® tablets

How to take oral oxycodone (oxycodone taken by mouth)

- **Short acting oxycodone** (Oxynorm®, Endone®) is taken as needed, starts to work after about 30 minutes and works for up to 4 hours.

- **Long acting oxycodone** (Oxycontin®) is taken regularly to control on-going pain (constant and continual pain.)
  Long acting oxycodone is taken every 12 hours to control pain. Take your morning dose when you wake up and then the evening dose about 12 hours later.

- Long acting oxycodone (Oxycontin®) must be swallowed whole — **do not crush or chew**.

- Most patients will be ordered a long acting oxycodone and a short acting oxycodone. The long acting oxycodone is taken to control ongoing pain, and the short acting oxycodone is taken for breakthrough pain, that is, pain which occurs between the regular doses of long acting oxycodone. 
  **Always take the long acting oxycodone regularly, and take short acting oxycodone as well if you need to.**
  Wait about 30 to 60 minutes after taking the dose of short acting oxycodone. If you still have pain, take a second dose.

- If you need more than 2 to 3 extra doses of short acting oxycodone in a day, tell your health professional (eg, doctor, nurse, pharmacist), as the dose of long acting oxycodone may need reviewing.

- Some people find that things like walking or showering brings on pain. Tell your health professional, who can advise you on the best way to manage this.
• If you forget to take your long acting oxycodone, take the missed dose as soon as you remember it. If it is almost time for the next dose, skip the missed dose and continue your regular schedule. Do not take a double dose. Remember that you can take a dose of the quick acting oxycodone if you have pain.

• If you vomit and bring up your long acting oxycodone, repeat the dose as soon as you feel better. If you are unsure, contact your health professional.

**Oxycodone and addiction**

• You will not become addicted to oxycodone if you are taking it at the appropriate dose for your pain. If you are having had other treatments for pain, such as radiotherapy, it may be possible to reduce the dose of oxycodone. Do not stop taking oxycodone suddenly, or you may get withdrawal symptoms such as chills, stomach pains or diarrhoea.

• The amount of oxycodone needed for pain varies from patient to patient. People often stay on the same dose of oxycodone for a long time. Others find that their oxycodone dose needs to be adjusted. If your oxycodone dose needs to be increased it does not necessarily mean that your disease is worse.

**Common side effects of oxycodone**

• Drowsiness/sleepiness – This is most common when you first take oxycodone or when the dose is increased. It should improve after a few days.

• Constipation – This is a common side effect but is preventable if you always take a laxative regularly as prescribed by your doctor. It is important to drink plenty of fluids.

• Nausea – If you feel nauseated when you first start to take oxycodone, try taking it with food. Your doctor may need to give you some medicine for a few days until nausea goes away.

Some medicines, such as sedatives and anti-depressants, or alcohol may increase the side-effects of oxycodone. Ask your health professional for advice.

**Oxycodone and driving**

Oxycodone may impair your ability to drive. Generally, avoid driving when starting oxycodone, and when increasing the dose. Check with your health professional if you are unsure.

**Although oxycodone is a very good pain killer, it is not helpful for all types of pain. Other treatments may be needed, and can be prescribed by your doctor if oxycodone is not controlling your pain, or is causing unpleasant side effects.**

**The information provided in this leaflet is a guide only and it is important to ask your health professional if you have questions or concerns about the use of oxycodone.**

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A guide to pregabalin

Pregabalin is used to treat pain that occurs as a result of damage to or from a disturbance in the function of nerves (called neuropathic pain).

Brand name:
Lyrica®

How to take pregabalin

- Most people start taking 75mg of pregabalin twice daily. The dose will then increase gradually over 7 days, depending on your response.
- If you miss a dose or forget to take your medicine, take it as soon as you can. If it is almost time for your next dose, wait until then to take the medicine and skip the missed dose. Do not take a double dose.
- Do not stop taking pregabalin suddenly as it may cause insomnia, headache, nausea and diarrhoea. Your doctor will gradually reduce the dose over at least a week.

Common side effects

- Dizziness
- Drowsiness
- Blurred vision
- Fatigue
- Increased weight
- Dry mouth

With other medicines

Pregabalin is safe to take with other medicines, but may increase the effects of alcohol.

Pregabalin is often used with other medicines for pain, such as morphine.

Pregabalin and driving

Pregabalin may impair your ability to drive. Generally, avoid driving when starting pregabalin, and when increasing the dose. Check with your health professional if you are unsure.

The information provided in this leaflet is a guide only and it is important to ask your health professional if you have any questions or concerns about the use of pregabalin.
oxycodone

Arabic - Oxycodone

دليل لأخذ الأوكسيكودون

يُستخدم الأوكسيكودون لتخفيض الآلام المعتدلة والشديدة.

أسماء ماركات الأوكسيكودون

الأوكسيكودون قصير المفعول
- شراب Oxynorm®
- كبسولات Oxynorm®
- حيوي Endone®

الأوكسيكودون طويل المفعول
- حيوي Oxycontin®

كيفية أخذ الأوكسيكودون عن طريق الفم

- الأوكسيكودون قصير المفعول (Oxynorm®, Endone®) بعد حوالي 30 دقيقة ويستمر لغاية 4 ساعات.

- الأوكسيكودون طويل المفعول (Oxycontin®). يأخذ بصورة منتظمة للتحكم بالألم المباشر (المستسيم ومستمر).

- الأوكسيكودون طويل المفعول كل 12 ساعة للتحكم بالألم. خذ جرعة الصباح عند استيقاظك من النوم وبعد 12 ساعة خذ جرعة المساء.

- الأوكسيكودون طويل المفعول (Oxycontin®): يجب بلع الحبة كاملاً - لا تهسر الحبة أو تمضغها.

- يتم وصف أوكسيكودون طويل المفعول مع أوكسيكودون قصير المفعول لأغلب المرضى.

- يأخذ الأوكسيكودون طويل المفعول للتحكم بالألم المستمر، بينما يأخذ الأوكسيكودون قصير المفعول لتخفيض الألم الذي يحدث بين الجرعات المنتظمة للأوكسيكودون طويل المفعول.

- دائماً خذ الأوكسيكودون طويل المفعول بصورة منتظمة، وخذ الأوكسيكодون قصير المفعول أيضاً إذا كنت بحاجة إلى ذلك.

- تنتظر لمدة 30 إلى 60 دقيقة بعد أخذ جرعة الأوكسيكودون قصير المفعول، وإذا كنت لا تزال تعاني من الألم، خذ جرعة ثانية.

- إذا كنت بحاجة إلى أكثر من 2 إلى 3 جرعة إضافية من الأوكسيكودون قصير المفعول في اليوم، أغلب المهني الصحي الذي يتعامل معه (الطبيب، أو الممرضة، أو الصيدلي) حيث قد تكون هناك حاجة إلى مراجعة جرعة الأوكسيكودون طويل المفعول.

- يجد بعض الأشخاص بأن أشياء مثل المشي أو أخذ الدوام تسبب الألم. أغلب المهني الصحي الذي يتعامل معك يمكنه تقديم المشورة لك حول أفضل طريقة للتعامل مع هذه الحالات.
Appendix 8: Patient Medicine Information

إن تصبح مدينا على الأوكسيكودون إذا أخذته وفق الجرعة الصحيحة لألم الذي تعاني منه. إذا كنت تأخذ علاجات أخرى لعلاج مثل المعالجة بالأشعة السينية تحت أن يتم تحفيز جرعة الأوكسيكودون. لا توقف عن أخذ الأوكسيكودون فجأة وإنما ستعاني من أعراض الانسحاب مثل القشعريرة، أو آلام المعدة أو الإسهال.

تتناول كمية الأوكسيكودون المطلوبة للتعامل مع الألم من مريض إلى آخر. وتيفي الناس عادة على نفس جرعة الأوكسيكودون لفترة طويلة. وقد يجد بعض الأشخاص بأن جرعة الأوكسيكودون التي يأخذونها بحاجة إلى التعديل. إذا كان يتعين زيادة كمية جرعة الأوكسيكودون التي تأخذها فلذلك لا يعنى بالضرورة أن يكون قد أدى سوءاً.

التأثيرات الجانبية الشائعة للأوكسيكودون

• الخمول/النوم - هو أكثر التأثيرات الجانبية شيوعا عند بدء تناول الأوكسيكودون أو عند زيادة مقدار الجرعة. يمكن أن تتحسن الحالة بعد بضعة أيام.
• الإمساك - تأثير جانبى شائع ولكن يمكن الوقاية منه إذا كنت دائما تأخذ مسحولات بشكل منتظم وفق ما يصفه الطبيب، ومن المهم شرب كميات كبيرة من السوائل.
• الغثيان - إذا شعرت بالغثيان عند بدء تناول الأوكسيكودون حاول أخذه مع الطعام. وقد يتطلب من طبيبك إعطاءك بعض الأدوية لضعف أعراض الغثيان.
• بعض الآدوية مثل المسكات ومضادات الاكتئاب أو الكحول يمكن أن يتسبب في زيادة التأثيرات الجانبية للأوكسيكودون. أطلب المشورة من المهني الصحي الذي تعامل معه.

الأوكسيكودون والقيادة

يمكن أن يضخمير الأوكسيكودون من قدرتك على القيادة، وعصف تأثير القيادة عند بدء تناول الأوكسيكودون عند زيادة مقدار الجرعة. تحقق من المهني الصحي الذي تعامل معه إذا كنت غير متأكد.

على الرغم من أن الأوكسيكودون مخافض جيد للألم ولكن ليس مفيدا لكل أنواع الألم. وقد يتطلب إعطاء علاجات أخرى بوسع طبيب وصفها لك إذا لم يقم الأوكسيكودون بالتحكم بالألم الذي تعاني منه، أو كان يسبب لك تأثيرات جانبية غير مرغوبة.

المعلومات الواردة في هذه النشرة هي دليل فقط، ومن الضروري سؤال المهني الصحي الذي تعامل معه إذا كنت لديك أي أسئلة أو اهتمامات أو قلق حول استعمال الأوكسيكودون.
Hướng dẫn sử dụng thuốc hydromorphone đang uống

Hydromorphone dùng trị ho và con đau mức độ trung bình tới nặng

Tên thương mại:

Đang có tác dụng ngắn
Dilaudid® viên
Dilaudid® dung dịch

Đang có tác dụng kéo dài
Jurnista®

Đúng hydromorphone đang uống ra sao (hydromorphone uống qua đường miệng)

- Hydromorphone đang tác dụng ngắn (Dilaudid®) được uống khi cần, thuốc bắt đầu có tác dụng sau khi uống khoảng 30 phút và kéo dài khoảng 4 giờ.

- Hydromorphone đang tác dụng kéo dài (Jurnista®) uống một lần một ngày, uống cùng một giờ trong ngày.

- Hydromorphone đang có tác dụng kéo dài (Jurnista®) khi uống nên nuốt cả viên—đừng nghiền thuốc ra hay nhai thuốc trong miệng.

- Hậu hết bệnh nhân sẽ được cho uống hydromorphone đang có tác dụng ngắn và đang có tác dụng kéo dài.

Hydromorphone đang có tác dụng kéo dài được dùng kiểm chế các cơn đau tiếp diễn, và loai có tác dụng ngắn hạn được dùng để cất cơn đau bắtROT cảm xảy ra trong khi đang dùng loại tác dụng kéo dài với liệu thuốc sử dụng hàng ngày.

Luôn sử dụng loai có tác dụng kéo dài một cách thường xuyên và khi cần dùng thêm loại tác dụng ngắn hạn.

Sau khi uống phụ thêm một liệu hydromorphone loai tác dụng nhanh rõi, quý vị nên chờ khoảng 30-60 phút để thuốc tác dụng. Nếu vẫn còn đau thì ốm thêm một liệu phụ thuộc vào

- Nếu trong một ngày quá quý vị phải uống thêm 2-3 liệu phụ hydromorphone loai tác dụng ngắn, thì nên báo cho chuyên viên y tế biết (v.d bác sĩ, y tá, điều dưỡng) vi có thể là liệu hydromorphone loai tác dụng kéo dài của quý vị cần phải được coi lại.

- Một số người thấy đau khi làm những việc như đi bộ hay tắm rửa. Nên hỏi nhân viên y tế để được khuyên về cách kiểm soát con đau tốt nhất.
• Nếu quên uống hydromorphone đang tác dụng kéo dài, thì khi nhớ ra quý vị nên uống liệu quên đó càng sớm càng tốt. Nếu lúc đó gần đến giờ uống liệu kế tiếp rồi, thì quý vị bỏ liệu quên đi chỉ uống liệu kế tiếp thôi như thời gian liệu. Đừng uống liệu gấp đôi. Hãy nhớ là quý vị có thể uống một liệu phụ đang tác dụng ngăn nếu bị đau.

• Nếu bị nôn thuốc ra khi uống hydromorphone đang tác dụng kéo dài thì quý vị nên uống lập lại liệu thuốc này ngày khi cảm thấy khá hơn. Nếu thấy không chắc chắn, hô lắc nhân viên y tế.

**Hydromorphone và sự ghiền thuốc**

• Nếu quý vị đang được điều trị khác nữa cho cơ quan như xa trị liệu pháp, thì có thể là quý vị nên được giảm liệu hydromorphone. Đừng bất thình lình ngừng ngang việc dùng hydromorphone, nếu không quý vị có thể bị triệu chứng và thuốc như nóng lạnh, đau bụng hay tiêu chảy.

• Liều lượng hydromorphone sử dụng trong điều trị đau ở mọi bệnh nhân đều khác nhau. Có người được cho một liều lượng hydromorphone vòng vào trong một thời gian dài, lại có người thấy hiệu quả của hydromorphone của họ cần phải được điều chỉnh. Nếu quý vị thấy liều hydromorphone đang tăng lên, điều này không có nghĩa là quý vị tốt hơn.

**Những phân ứng phụ thường gặp của hydromorphone**

• Ngủ gà ngủ gật/Buồn ngủ- Đây là phân ứng phụ thường gặp nhất khi dùng hydromorphone hay khi tăng liệu thuốc. Phân ứng này sẽ được cải thiện sau vài ngày.

• Táo bón- Đây là phân ứng phụ thường gặp nhưng có thể ngừa được nếu thường dùng thuốc xô theo đúng toa thuốc của bác sĩ. Điều quan trọng là phải uống đủ nước.

• Buồn nôn- Nếu thấy bị buồn nôn khi mới bắt đầu dùng hydromorphone, uống thuốc với đồ ăn. Bác sĩ có thể can cho quý vị dùng thêm một số thuốc trong vài ngày cho tới khi hết buồn nôn.

Một số thuốc như thuốc ngủ, thuốc chống trầm cảm và rượu có thể làm gia tăng những phản ứng phụ của thuốc hydromorphone. Hỏi bác sĩ để được khuyên thêm.

**Hydromorphone và việc lái xe**

Hydromorphone có thể làm giảm khả năng lái xe. Nơi chúng quý vị nên tránh lái xe khi bắt đầu xài hydromorphone hay khi tăng liệu thuốc Nếu thấy không chắc chắn, nên kiểm tra lại với bác sĩ.

Mặc dù hydromorphone là một loại thuốc giảm đau rất tốt, nhưng không phải là thuốc giúp trị tất cả mọi thứ đau. Bác sĩ có thể can phải ra toa cho thêm những điều trị khác để giúp quý vị kiểm soát được con đau hay nếu thuốc gây ra những phản ứng phụ khó chịu được.
Những thông tin được đưa ra trong tờ này chỉ có tính cách hướng dẫn mà thôi và việc hỏi bác sĩ rắt quan trọng nếu quý vị có câu hỏi hay lo ngại gì về việc dùng hydromorphone.

Dự án về Phát triển vai trò của thuốc sốto chuyển viện da khoa trong việc Chăm sóc An hệ Bệnh ở Giai đoạn cuối.

Dự án này là sáng kiến của Bộ Y tế Tiểu bang Victoria được Chương trình Quốc gia Chăm sóc An hệ Bệnh ở Giai đoạn Cuối của Bộ Y tế và Cao miên Chính phủ Liên bang. Ưc tài trợ:
Appendix 8.1: Pictograms

What are pictograms?
Pictograms are visual aids that are used to supplement pharmacist or physician counseling sessions. They are pictures that outline when and how to take medications.

Why are pictograms used?
These pictograms aid in the delivery of very important information. They give health professionals an effective way of communicating medication instructions to people who they have no language in common with or who may be illiterate. Pictograms help patients with language or comprehension barriers.

Why are pictograms valuable?
Pictograms enhance comprehension and information recall. In a pharmacy setting, photographic medication instructions have been shown to improve patient understanding of drug therapy when used together with both oral and written instructions. This is considerably important because problems associated with patient comprehension of medical instructions are often encountered when healthcare providers are faced with illiteracy or differences in language. Pictograms can be used to help bridge barriers in literacy and language.

Watch the video to learn more!
An introductory video (available in both English and French) can be found online at http://www.flp.nl/www/?page=sp_sect_maepsm_pictogram

This video touches on pictograms; it discusses their relevance to health literacy and demonstrates how they can be used to communicate with patients with language barriers.

The video is a useful resource to inform Health Care Providers on the benefits of using graphical images when counseling patients on their medications. With examples of potential real-life scenarios, this video proves to be a great educational resource for all Pharmacy Students. In addition, information on how to access and use the Pictograms software is provided.

The pictograms software is available online for free!
Go to www.worldhealthpictograms.com/beta/WHP_files/pags0001.htm and try the pictograms software for free! Once on the website, you have a choice between using the web-based version of the pictograms software (French and English are available), or you can download the pictograms program and use it on a standalone computer.

Or simply go to www.flp.nl/www/?page=sp_sect_maepsm_pictogram and scroll down to “Key Downloads” and choose the version you wish to download.
Medication Pictograms

Click on image to show target circle.
Position it with the mouse.

Indication

Dose
- Take 2 tablets
- with a glass of water
- with food

Frequency
- Morning
- Evening
- Bedtime

Precisions
- Not for children
- Not for infants
- May cause drowsiness

The Pictogram project is an undertaking of the Military and Emergency Pharmacy Section (MEPS) of FP.

This page was developed in partnership with Vigilance Santé Inc. from Canada.
### Appendix 9: Medication Review Screening Tool (MRST)

<table>
<thead>
<tr>
<th>Calvary Health Care Bethlehem</th>
<th>Patient Details:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacist in Community Palliative Care Multidisciplinary Teams Project</td>
<td>Name:</td>
</tr>
<tr>
<td>Medication Review Screening Tool</td>
<td>Address:</td>
</tr>
<tr>
<td></td>
<td>UR Number</td>
</tr>
</tbody>
</table>

**Medication use**

- [ ] Taking 5 or more medications, or more than 12 doses of medication per day
- [ ] Significant changes to medication treatment regimen in the last 3 months
- [ ] Started new medication in the last 4 weeks
- [ ] Taking medication not commonly used in primary care
- [ ] High alert medication
- [ ] Use of alternative health care products
- [ ] Enteral feeding tube in-situ
- [ ] Symptoms suggestive of an adverse drug reaction
- [ ] Medication plan is not current
- [ ] Suspected non-adherence or inability to manage medication

**Other**

- [ ] Literacy or language difficulties, confusion/dementia or other cognitive difficulties
- [ ] Other co-morbidities or lifestyle practices [eg alcohol, tobacco, illicit drugs] which affect pharmacodynamics and pharmacokinetics
- [ ] Living alone or in Supported Residential Services, poor carer support or carer concerns
- [ ] Recent discharge from a hospital (in the last 4 weeks)
- [ ] Attending different healthcare providers eg, general practitioner, specialist

**Diagnosis:**

**Allergy/adverse drug reactions:**

**Renal function:**

**Hepatic function:**

**Comments:**

_________________________  __________________________
Signature: Date:
APPENDIX 9.1: Changes to MRST Over Project

The screening tool was, over the course of several months, modified to take into account the more common subcategories that emerged while piloting the tool.

Draft 1

<table>
<thead>
<tr>
<th>Medication use</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Taking 5 or more medications</td>
</tr>
<tr>
<td>o Significant changes in medication treatment</td>
</tr>
<tr>
<td>o Started new medication in the last 4 weeks</td>
</tr>
<tr>
<td>o Taking medication required for sleep</td>
</tr>
<tr>
<td>o Taking medication required for nerves, stress,</td>
</tr>
<tr>
<td>o Taking medication unknown to general practitioner,</td>
</tr>
<tr>
<td>o Greater than seven medications taken regularly</td>
</tr>
<tr>
<td>o Perceived side effects</td>
</tr>
<tr>
<td>o Remembering to take medication</td>
</tr>
<tr>
<td>o Knowing what the medication is for</td>
</tr>
<tr>
<td>o Reading and understanding the label</td>
</tr>
<tr>
<td>o Affording the medication</td>
</tr>
<tr>
<td>o Dexterity problems with opening bottles of packets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential adverse drug reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Had trouble sleeping</td>
</tr>
<tr>
<td>o Felt drowsy or dizzy</td>
</tr>
<tr>
<td>o Felt nauseous</td>
</tr>
<tr>
<td>o Had a skin rash or itch</td>
</tr>
<tr>
<td>o Leaked urine</td>
</tr>
<tr>
<td>o Been constipated</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suspected non-compliance or inability to manage medication</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Perceived side effects</td>
</tr>
<tr>
<td>o Remembering to take medication</td>
</tr>
<tr>
<td>o Knowing what the medication is for</td>
</tr>
<tr>
<td>o Reading and understanding the label</td>
</tr>
<tr>
<td>o Affording the medication</td>
</tr>
<tr>
<td>o Dexterity problems with opening bottles of packets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Literacy or language difficulties, confusion/dementia</td>
</tr>
<tr>
<td>o Recognizing a high number of visits to community or</td>
</tr>
<tr>
<td>o Attending a number of different pharmacies, including</td>
</tr>
<tr>
<td>o Attending a number of different general practitioners and</td>
</tr>
<tr>
<td>o Attending a number of different pharmacies, including</td>
</tr>
<tr>
<td>o Recent discharge from a facility/hospital (in the last</td>
</tr>
<tr>
<td>o Carer concerns</td>
</tr>
<tr>
<td>o Living alone</td>
</tr>
<tr>
<td>o Other co-morbidities</td>
</tr>
</tbody>
</table>

Draft 1 to 2

- Too much emphasis on adverse drug reactions
- Emphasis on sleep, stress, anxiety, depression, nerves not appropriate for palliative care patients
- Side effects routinely screened for by community service nursing staff
- Addition of “medication not commonly used in primary care” to take into account off label/ nonPBS/SAS palliative care medication
- Need to take into account medication plan of patient in the home
- Need to check if patient has had a Home Medicine Review

Draft 2

<table>
<thead>
<tr>
<th>Medication use</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Taking 5 or more medications</td>
</tr>
<tr>
<td>o Significant changes in medication treatment</td>
</tr>
<tr>
<td>o Started new medication in the last 4 weeks</td>
</tr>
<tr>
<td>o Taking medication unknown to general practitioner,</td>
</tr>
<tr>
<td>o Taking medication not commonly used in primary</td>
</tr>
</tbody>
</table>

[77] Appendix 9.1: Changes to MRST Over Project | FINAL PROGRESS REPORT – PHARMACY PROJECT: JUNE 2010
Taking medication requiring monitoring, with narrow therapeutic index or high risk [eg opioid, insulin, chemotherapy]
Symptoms suggestive of an adverse drug reaction
Unexpected or exaggerated reaction to medication
Medication plan is not up to date
Suspected non-compliance or inability to manage medication
Remembering to take medication
Knowing what the medication is for
Affording the medication
Dexterity problems with opening bottles of packets (patient or carer)

Other
Literacy or language difficulties, confusion/dementia or cognitive difficulties
Attending a number of different healthcare providers eg, general practitioner, specialist, naturopath
Attending a number of different pharmacies, eg community and hospital pharmacies
Recent discharge from a facility/hospital (in the last 4 weeks)
Carer concerns
Living alone or poor carer support
Other co-morbidities
Recent Home Medication Review

Medication use
Taking 5 or more medications
Significant changes in medication treatment during the last 3 months
Started new medication in the last 4 weeks
Taking medication not commonly used in primary care
Taking medication requiring monitoring, with narrow TI or high risk [eg opioid, insulin, chemotherapy]
Symptoms suggestive of an adverse drug reaction
Medication plan is not up to date
Suspected non-compliance or inability to manage medication
Remembering to take medication
Knowing what the medication is for
Dexterity problems with opening bottles of packets (patient or carer)
Affording the medication

Other
Literacy or language difficulties, confusion/dementia or cognitive difficulties
Other co-morbidities
Carer concerns
Living alone or poor carer support
Recent discharge from a facility/hospital (in the last 4 weeks)
Attending a number of different healthcare providers eg, general practitioner, specialist
Community pharmacy …………………………………. HMR ………………………..

Medication use
Taking 5 or more medications
Significant changes in medication treatment during the last 3 months
Started new medication in the last 4 weeks
Taking medication not commonly used in primary care

Draft 3 to 4 [April]
Added comments
Enteral feeding may be a trigger in this patient group due to drug administration problems
Taking medication requiring monitoring, with narrow TI or high risk [eg opioid, insulin, chemotherapy]
- Symptoms suggestive of an adverse drug reaction
- Medication plan is not up to date

Suspected non-compliance or inability to manage medication
- Remembering to take medication
- Knowing what the medication is for
- Dexterity problems with opening bottles of packets (patient or carer)
- Affording the medication

Other
- Enteral feeding
- Literacy or language difficulties, confusion/dementia or cognitive difficulties
- Other co-morbidities
- Carer concerns
- Living alone or poor carer support
- Recent discharge from a facility/hospital (in the last 4 weeks)
- Attending a number of different healthcare providers eg, general practitioner, specialist
- Community pharmacy ……………………………….. HMR ………………………..

Draft 4 [April] to 5 [May]
- Taken into account suggestions from Dr Safeera Husseiny
- Deleted sub categories under non-adherence and medication management

Medication use
- Taking 5 or more medications, or more than 12 doses of medication per day
- Significant changes to medication treatment regimen in the last 3 months
- Started new medication in the last 4 weeks
- Taking medication not commonly used in primary care
- Taking medication requiring monitoring, has a narrow therapeutic index or is high risk [eg opioid, insulin, chemotherapy]
- Enteral feeding tube in-situ
- Symptoms suggestive of an adverse drug reaction
- Medication plan is not current
- Suspected non-adherence or inability to manage medication

Other
- Literacy or language difficulties, confusion/dementia or other cognitive difficulties
- Other co-morbidities
- Carer concerns
- Living alone or poor carer support
- Recent discharge from a hospital (in the last 4 weeks)
- Attending different healthcare providers eg, general practitioner, specialist, naturopath
- Community pharmacy details
- HMR ?

Draft 5 [May] to 6 [June]
- Added general practitioner details

Medication use
- Taking 5 or more medications, or more than 12 doses of medication per day
- Significant changes to medication treatment regimen in the last 3 months
- Started new medication in the last 4 weeks
- Taking medication not commonly used in primary care
- Taking medication requiring monitoring, has a narrow therapeutic index or is high risk [eg opioid, insulin, chemotherapy]
- Enteral feeding tube in-situ
- Symptoms suggestive of an adverse drug reaction
- Medication plan is not current
- Suspected non-adherence or inability to manage medication

Other
- Literacy or language difficulties, confusion/dementia or other cognitive difficulties
Appendix 9.1: Changes to MRST Over Project

FINAL PROGRESS REPORT – PHARMACY PROJECT: JUNE 2010

- Other co-morbidities
- Carer concerns
- Living alone or poor carer support
- Recent discharge from a hospital (in the last 4 weeks)
- Attending different healthcare providers eg, general practitioner, specialist
- General practitioner details
- Community pharmacy details
- HMR?

Draft 6 [June] to 7 [October]
- Deleted HMR as not requesting this information routinely (Home Medicines Review Program Qualitative Research Project Final Report)
- Added allergy/adverse drugs reactions
- Added diagnosis

Medication use
- Taking 5 or more medications, or more than 12 doses of medication per day
- Significant changes to medication treatment regimen in the last 3 months
- Started new medication in the last 4 weeks
- Taking medication not commonly used in primary care
- Taking medication requiring monitoring, has a narrow therapeutic index or is high risk [eg opioid, insulin, chemotherapy]
- Enteral feeding tube in-situ
- Symptoms suggestive of an adverse drug reaction
- Medication plan is not current
- Suspected non-adherence or inability to manage medication

Other
- Literacy or language difficulties, confusion/dementia or other cognitive difficulties
- Other co-morbidities
- Carer concerns
- Living alone or poor carer support
- Recent discharge from a hospital (in the last 4 weeks)
- Attending different healthcare providers eg, general practitioner, specialist
- General practitioner details
- Community pharmacy details
- Diagnosis
- Allergy/adverse drug reactions

Draft 7 [October] to 8 [December]
- Added renal function

Medication use
- Taking 5 or more medications, or more than 12 doses of medication per day
- Significant changes to medication treatment regimen in the last 3 months
- Started new medication in the last 4 weeks
- Taking medication not commonly used in primary care
- Taking medication requiring monitoring, has a narrow therapeutic index or is high risk [eg opioid, insulin, chemotherapy]
- Enteral feeding tube in-situ
- Symptoms suggestive of an adverse drug reaction
- Medication plan is not current
- Suspected non-adherence or inability to manage medication

Other
- Literacy or language difficulties, confusion/dementia or other cognitive difficulties
- Other co-morbidities
- Carer concerns
- Living alone, SRS or poor carer support
Recent discharge from a hospital (in the last 4 weeks)
- Attending different healthcare providers eg, general practitioner, specialist
- Diagnosis
- Allergy/adverse drug reactions
- Renal function

Final changes to the MRST were made in May 2010, to take into account the learning and experience of using the MRST. It was also important to consider the sustainability of the tool, so that it can be used by a pharmacist or community nurse.

The following changes were made:

- Combine living alone, SRS or poor carer support/carer concerns
- Medication plan not current. This aspect can be difficult to determine without a home visit. The medication plan is recorded by the CPCS nurse on admission. The accuracy of this information can depend on
  - The source, eg hospital discharge, doctor’s letter, patient/carer knowledge
  - The time/complexity of the admission process
  - The medication knowledge of the health professional
- Drug interactions. Opioid analgesics are common in patients receiving palliative care¹, therefore it is a given that this be taken into account when screening their medication.
  - Patients at greatest risk are
  - Patients on antineoplastic agents; the Richelman article excluded patients receiving antineoplastic therapy²
  - Patients on phenytoin, warfarin and corticosteroids
  - Older patients
  - Patients with comorbid conditions
  - Patients taking many medications
  - Patients with brain tumour
- Health conditions or lifestyle practices that significantly affect pharmacodynamics and pharmacokinetics (e.g. alcohol, tobacco, illicit drugs or restricted diets)³
- The use of non-prescription medicines and/or complementary health care products with other medicines or treatment³

3. Guiding principles for medication management in the community
APPENDIX 10: MEDICATION REVIEW REPORT

Calvary Health Care Bethlehem
Pharmacist in Community Palliative Care
Multidisciplinary Teams Project
Medication Review Report

Name: Address: UR Number:

Was visited at home by the Community Service Pharmacist following recent discharge from Hospital

MEDICATION REGIME:

Allergies/adverse drug reactions:

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSE &amp; FREQUENCY</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OTHER MEDICATIONS AVAILABLE AT HOME:

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>COMMENT</th>
</tr>
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Community Service Pharmacist:
Sandy Scholes Phone no: 0429018721 or 0395953192 email: sandys@bethlehem.org.au

General Practitioner: Phone no: Fax no:

Community Pharmacy: Phone no: Fax no:

The information contained within this report and the recommendations made are provided to the best of our knowledge. We understand there may be sound clinical reasons why they may not be appropriate for this patient.
### APPENDIX 11: INTERVENTION TOOL

Calvary Health Care Bethlehem Hospital  
Pharmacist in Community Palliative Care Multidisciplinary Teams Project  
Intervention tool

<table>
<thead>
<tr>
<th>Description of Drug Related Problem</th>
<th>Classification of Drug Related Problem</th>
<th>Description of Recommendation</th>
<th>Classification of Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>
# Classification of Drug Related Problems

<table>
<thead>
<tr>
<th>Classification of Drug Related Problems</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>D Drug selection</strong></td>
<td>D1 Duplication&lt;br&gt;D2 Drug interaction&lt;br&gt;D3 Wrong drug&lt;br&gt;D4 Incorrect strength&lt;br&gt;D5 Inappropriate dosage form&lt;br&gt;D6 Contraindications apparent&lt;br&gt;D7 No indication apparent&lt;br&gt;D8 Other drug selection problem</td>
</tr>
<tr>
<td><strong>O Over or under-dose</strong></td>
<td>O1 Prescribed dose too high&lt;br&gt;O2 Prescribed dose too low&lt;br&gt;O3 Incorrect or unclear dosing instructions&lt;br&gt;O0 Other dose problem</td>
</tr>
<tr>
<td><strong>C Compliance</strong></td>
<td>C1 Taking too little&lt;br&gt;C2 Taking too much&lt;br&gt;C3 Erratic use of medication&lt;br&gt;C4 Intentional drug misuse (Including OTCs)&lt;br&gt;C5 Difficulty with dosage form&lt;br&gt;C0 Other compliance problem</td>
</tr>
<tr>
<td><strong>U Under-treated or Untreated indication</strong></td>
<td>U1 Condition not adequately treated&lt;br&gt;U2 Condition untreated&lt;br&gt;U3 Preventive therapy required&lt;br&gt;U0 Other untreated indication problem</td>
</tr>
<tr>
<td><strong>M Monitoring required</strong></td>
<td>M1 Laboratory monitoring&lt;br&gt;M2 Non-laboratory monitoring&lt;br&gt;M0 Other monitoring problem</td>
</tr>
<tr>
<td><strong>E Education or Information</strong></td>
<td>E1 Patient requests drug information&lt;br&gt;E2 Patient requests disease management advice&lt;br&gt;E0 Other education or information problem</td>
</tr>
<tr>
<td><strong>N Not classifiable</strong></td>
<td>N0 Clinical interventions that cannot be classified under another category</td>
</tr>
<tr>
<td><strong>T Toxicity or adverse reaction</strong></td>
<td>T1 Toxicity, allergic reaction or adverse effect present</td>
</tr>
</tbody>
</table>

# Classification of Recommendations

<table>
<thead>
<tr>
<th>A Change in therapy</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>Dose change</td>
</tr>
<tr>
<td>R2</td>
<td>Drug change</td>
</tr>
<tr>
<td>R3</td>
<td>Drug formulation change</td>
</tr>
<tr>
<td>R4</td>
<td>Drug brand change</td>
</tr>
<tr>
<td>R5</td>
<td>Dose frequency/schedule change</td>
</tr>
<tr>
<td>R6</td>
<td>Prescription not dispensed</td>
</tr>
<tr>
<td>R7</td>
<td>Other changes to therapy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A Referral required</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>R8</td>
<td>Refer to prescriber</td>
</tr>
<tr>
<td>R9</td>
<td>Refer to hospital</td>
</tr>
<tr>
<td>R10</td>
<td>Refer for medication review</td>
</tr>
<tr>
<td>R11</td>
<td>Other referral required</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Provision of information</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>R12</td>
<td>Education or counselling session</td>
</tr>
<tr>
<td>R13</td>
<td>Written summary of medications</td>
</tr>
<tr>
<td>R14</td>
<td>Commence dose administration aid</td>
</tr>
<tr>
<td>R15</td>
<td>Other written information</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monitoring</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>R16</td>
<td>Monitoring, Non-laboratory</td>
</tr>
<tr>
<td>R17</td>
<td>Monitoring, Laboratory test</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>R18</td>
<td>No recommendation necessary</td>
</tr>
</tbody>
</table>
Dr

.....2010

Dear Dr

Re: –

I am writing to you regarding your patient who is a patient of the Community Service (Palliative) of Calvary Health Care Bethlehem.

I am currently the Project Pharmacist on a Department of Health funded project that is developing the role of the pharmacist as part of the community palliative care multidisciplinary team.

Please find attached my report for your information.
Please do not hesitate to contact me on telephone 9595 3192 or 0429018721, or email below.

Yours sincerely

Sandy Scholes
Project Pharmacist
Calvary Health Care Bethlehem
476 Kooyong Road
Caulfield Vic 3162
Email: sandys@bethlehem.org.au
Fax: 03 9596 0412
Pharmacist
2010

Dear Pharmacist

Re: –

I am writing to you regarding your patient who is a patient of the Community Service (Palliative) of Calvary Health Care Bethlehem.

I am currently the Project Pharmacist on a Department of Health funded project that is developing the role of the pharmacist as part of the community palliative care multidisciplinary team.

Please find attached my report for your information.

Please do not hesitate to contact me on telephone 9595 3192 or 0429018721, or email below.

Yours sincerely

Sandy Scholes
Project Pharmacist
Calvary Health Care Bethlehem
476 Kooyong Road
Caulfield Vic 3162
Email: sandys@bethlehem.org.au
Fax: 03 9596 0412
Patient referred to Community Service (CS)

Nursing Admission Assessment undertaken

PATIENT PRESENTED TO WEEKLY TEAM MEETING:
Project Pharmacist (PP) conducts initial medication screening using -
- Knowledge gained from team meeting
- Patients history
- Referral documentation provided on admission to CHCB

MEDICATION REVIEW:
- PP available to accompany Community Nurse at admission (at discretion of CS Team Leader)
- PP available if medication review required on admission
- PP available for home visit if team member deems appropriate

Feedback to:
- Community Service
- General Practitioner
- community pharmacy

CS patient admitted to CHCB:
- PP notified prior to discharge from hospital
- PP to visit patient prior to discharge & inform patient they can visit after discharge
- Patient visited at home within 7-10 days after discharge from hospital

CS patient admitted to another hospital:
- PP notified prior by CS Primary Nurse when patient returns home
- PP to contact patient/carer to offer a visit
- Patient visited at home within 7-10 days after discharge from hospital

Pharmacy Referral Form
Pharmacy in Community Palliative Care – Referral Pathway

Patient referred to CHCB Community Service

Nursing admission assessment undertaken
Patient presented to weekly team meeting following admission
Project Pharmacist undertakes medication screening using
knowledge gained from team meeting
patients history and
referral documentation provided on admission to CHCB

Admission medication review:

Project Pharmacist available to accompany Community Nurse at admission at the discretion of Community Service
Team Leader [Referral template]
Project Pharmacist available if the patient requires a medication review on admission eg determine patient’s
medication regime, counseling, update medication list [Referral template]

Post-discharge medication management

If a Community Service patient is admitted to CHCB:

The Project Pharmacist will be notified prior to discharge from hospital [Referral template]
The project pharmacy will visit the patient prior to discharge to inform patient that they can visit after discharge [7-
10days]
Patient visited at home
Feedback to community service, GP and community pharmacy as necessary

If a Community Service patient is admitted to another hospital:

The Project Pharmacist will be notified by the Community Service Primary Nurse when patient returns home [Referral
template]
The Project Pharmacist will contact the patient/carer to offer a visit
Patient visited at home within 7-10 days of discharge
Feedback to community service, GP and community pharmacy as necessary
Other
Project Pharmacist available for home visit at other times if Community Service team member deems appropriate, eg
change in medication regime, counseling
APPENDIX 15: CLINICAL SUPERVISION REPORT

Pharmacist in Community Palliative Care Multidisciplinary Teams Project
March 2010
As this project involved a pharmacist with specialised palliative care knowledge and experience, clinical supervision was not required for all aspects of the project methodology (tasks/activities).

1. Model of care:

A major part of the project was the development of a pathway for review of medication of all patients admitted to the service.

In practice, the Project Pharmacist would triage the patients to identify those at high risk of adverse medication outcomes. I would then review the patient’s notes with the pharmacist (where a clinical issue existed) and the appropriate intervention would be implemented. From this approach, adverse outcomes should be reduced. This has implications both in a direct clinical context for the patient and also in health economic terms as medication misadventure is a frequent precipitant for hospital admission.

Issues identified included:

- Prescribing of interacting medications likely to cause adverse reactions, eg
- recognition of a potential interaction between warfarin and bevacizumab of haemorrhage, with liaison with the medical oncologist and change in therapy of warfarin to aspirin.
- Inappropriate dosages of drugs, eg
  - the use of high dose fentanyl patches in opioid naïve patients,
  - rapid escalation of drug doses causing side effects,
  - correct dose but incorrect frequency of administration
- Incorrect formulations (eg for PEG tube) or administration (eg crushing SR medications)
- Inappropriate medications for a clinical condition, eg
  - morphine in end stage renal failure
- Use of several drugs with similar side effect profiles, increasing the risk of side effects occurring
- Failure to cease futile medications in patients at end of life
- History of poor adherence to medication, eg
  - many of the population of palliative care patients are elderly with cognitive impairment issues and often live alone and so medication adherence is a common problem.
  - poor adherence issues were also found to be due to cost (eg for non PBS items)
- History of substance abuse with implications for opioids, benzodiazepines etc with prescribing and possible issues for staff safety.

As all new patients are discussed in a multidisciplinary team meeting, this also provided the opportunity for ad hoc education if the patient was on a novel, unusual or trial drug. The presence of the pharmacist encouraged open fluid discussion of the patient’s medication list and offered the opportunity for combined pharmaceutical and medical input. Non clinical team members reported a clearer understanding of medication issues.
2. Home medication reviews (HMR):

Identified complex patients were visited jointly by both the pharmacist and myself.

Multiple co morbidities, complex symptom issues and polypharmacy were common underlying themes. The joint management of such patients resulted in rationalised medication regimes.

Additionally, joint review also precipitated alerting other treating clinical teams to possible significant drug interactions/contraindications. With newer chemotherapeutic agents and trial drugs this was an important aspect of clinician/pharmacist interaction.

Strengthening of relationships with other key stakeholders was a by product of HMR, with enhanced communication at the hospital discharge point with the relevant hospital pharmacy. HMRs also resulted in the facilitation of patient access to non PBS drugs. (eg gabapentin)

The pharmacist had a broad role in interacting with patients’ GPs and dispensing community pharmacists following HMRs.

The pharmacist was invaluable in providing reinforcement, education and advice to patients and their carers/families. This was a powerful adjunct to the clinical advice.

The need to take an accurate drug history was highlighted by joint visits and encompassed complementary and OTC medicines.

Timely access to drugs was a project focus. If visits resulted in the prescribing of a drug not easily available in the community, the pharmacist liaised with either the CHCB pharmacy or the community pharmacist to facilitate access.

3. Provision of advice to other members of the MDT:

As the November 2009 survey result showed, there was widespread acceptance in the team for the Project Pharmacists role. As a clinician, I found it useful to talk through difficult cases and enhance my knowledge of medications less commonly used in palliative care.

The availability and ease of access to the pharmacist facilitated team member's utilisation of the pharmacist for advice. If the pharmacist felt there was a clinical issue which needed reviewing, the case would be forwarded to me (and/or other doctors) for review/discussion after preliminary discussion with the enquiring team member... Monitoring of advice given to nurses, for example, was not routine due to the expertise and experience of the pharmacist. It is relevant that the pharmacist had a good understanding of the functioning of a MDT and so there were no issues re role blur or overlap. Good communication underpinned the pharmacist/MDT member’s interaction.

Community palliative care nurses have a high degree of autonomy in their role and it appeared that direct access to the pharmacist enhanced that.

4. Resource provision:

As discussed previously, community pharmacists were contacted concerning patients for many different issues. (eg trying to ascertain an accurate medication history, to assess adherence etc). Offers of resource material were routinely made.

Within CHCB, a benzodiazepine chart was compiled which reflects equivalent doses, half lives and PBS availability.

Patient information leaflets (eg about morphine) compiled by the pharmacist was read/edited by me.

Identification of needed information (eg a drug monograph on sufentanil) was accessed promptly by the pharmacist. Again, this resulted in a positive safety and education outcome.

Prior to a Gippsland education trip, resources were compiled which were distributed to GPs, hospital and community pharmacists during three separate education sessions in 2 distinct geographical locations.
5. Identification of system improvements/QA issues:

Emergency medications/orders are an important issue for community patients. The availability of the CORRECT medications, in the CORRECT formulation is essential for a rapid response for good symptom management. (“Just in Case”) The pharmacist and I identified areas where the current system appeared to fail.

- Patients discharged without emergency meds or were discharged on Special Access Scheme (SAS) medications and no alert made to the community team.
- Emergency orders were returned by GPs with incorrect drugs, dosages and route of administration. (eg clonazepam oral drops ordered as 2 to 4mL instead of 2 to 4 drops.)
- Emergency orders requested were rejected occasionally by GPs and /or families, leading to the inability of the service to respond to a clinical crisis.
- Inconsistencies in the policy for Emergency orders in referring services to CHCB Community Service
- Emergency orders needed to be tailored to the individual case. (eg is there a risk of seizures, renal failure, and end of life delirium)

In order to facilitate the revision of policy, an audit is to be carried out on current patients in the service and also of patients discharged from the inpatient facility to the Community Service. Work has already been started with the pharmacist with pilot request forms for Emergency orders for different conditions and revision of the medication list to show which drugs are in the home and where they are stored.

Chemotherapy alerts: patients on chemotherapy now have an orange alert sheet in their notes with the name of the agent AND date given. A resource folder has been compiled of chemotherapeutic agents and a copy of the P.I. should be inserted behind the alert sheet to enhance the identification of side effects and the likely time of nadir.

6. Education:

The pharmacist and I provided joint education to GPs and pharmacists in the Gippsland Region. This was in the form of case reviews and didactic teaching,

depending on the request. The pharmacist provided responsive education during Q and A sessions and also provided resources for participants to access further information.

We are to provide a joint session to South City Division to GPs and pharmacists in May 2010.

Much of the education has also been at an informal clinical level, when patients are discussed and solutions found for complex clinical problems.

An in house education session for the Community Team is planned for April 2010. This is to reflect on issues that have arisen during the course of this project and to change practice where possible negative outcomes could arise. (eg confusion between hyoscine hydrobromide and hyoscine butylbromide).

7. Sustainability and transfer of the model:

Management strategies for medication lists and emergency medicines developed during the project can be implemented and subject to ongoing review.

We have also had discussion re compilation of “How To” document for effective and accurate medication history taking. However, the direct interface between an individual team member and the pharmacist was a crucial part of the impact of this project. It would appear that the project has had successful outcomes and that our entire MD team would wish for the pharmacist role to continue.

My suggestion would be that the role could be expanded to “package” an education component which could be formally implemented in other settings. This could encompass the model of care, a resource kit and tools developed during the project.
As systems become embedded at CHCB, then this would make the pharmacist more available for education/ further dissemination of the program. (I would envisage this as being like the rollout of the “Caring for the Carers” program from WA).

Dr Liz Whyte
Community Senior Medical Officer
CHCB Community Palliative Care Service
APPENDIX 16: MEDICATION REVIEW REPORTS

Calvary Health Care Bethlehem
Pharmacist in Community Palliative Care Multidisciplinary Teams Project
Medication Review Report

A follow-up phone call to the W household was made on the 3rd March 2010 after recent medication changes and liaison by the community pharmacist with H’s community pharmacy to organize a dose administration aid [DAA].

RECENT MEDICATION CHANGES:
H was visited by the Community Service Doctor, on the 23rd February 2010, with the following medication additions recommended:
- Oxycontin® 5mg tablets twice daily
- Coloxyl® 50mg tablets two tablets twice daily
- Motrin® 100mg tablets twice daily if necessary.

MEDICATION MANAGEMENT
Medications are packed in a DAA by H’s community pharmacy.

H’s wife reported that H is currently pain free with the current regime of Oxycontin® tablets, and is not requiring the Endone® tablets regularly.

H’s wife stated that H’s blood sugar levels are usually around 4.4mmol/L. As glibenclamide has an increased risk of hypoglycaemia with increased age and renal impairment, it may be able to be discontinued as H’s health declines, and BSLs monitored occasionally.

MEDICATION REGIME:
Allergies/adverse drug reactions: Tramadol -> confusion

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<tr>
<th>MEDICATION</th>
<th>DOSE &amp; FREQUENCY</th>
<th>COMMENT</th>
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<tbody>
<tr>
<td>Glibenclamide 5mg</td>
<td>One tablet in the morning</td>
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</tr>
<tr>
<td>Metoprolol 50mg</td>
<td>Quarter of a tablet twice daily</td>
<td></td>
</tr>
<tr>
<td>Esomeprazole 40mg tablets</td>
<td>One tablet in the morning</td>
<td></td>
</tr>
<tr>
<td>Digoxin 62 5mcg tablets</td>
<td>Two tablets in the morning</td>
<td></td>
</tr>
<tr>
<td>Oxycodone controlled release 5mg</td>
<td>One tablet twice daily</td>
<td></td>
</tr>
<tr>
<td>tablets [Oxycontin®]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coloxyl 50mg tablets</td>
<td>Two tablets twice daily</td>
<td></td>
</tr>
<tr>
<td>Oxycodone immediate release 5mg</td>
<td>One tablet when necessary for</td>
<td></td>
</tr>
<tr>
<td>tablets [Endone®]</td>
<td>breakthrough pain</td>
<td>Not in dose administration aid</td>
</tr>
<tr>
<td>Motrin® sachets</td>
<td>One sachet twice daily when</td>
<td></td>
</tr>
<tr>
<td>Hydrozole® cream</td>
<td>Apply twice daily</td>
<td></td>
</tr>
<tr>
<td>Diproside® cream</td>
<td>Apply twice daily</td>
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</table>

OTHER MEDICATIONS AVAILABLE AT HOME:

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine 10mg/1mL injection</td>
<td></td>
</tr>
<tr>
<td>Metoclopramide 10mg/2mL injection</td>
<td></td>
</tr>
<tr>
<td>Clonazepam 2.5mg/mL oral solution</td>
<td></td>
</tr>
</tbody>
</table>

Community Service Pharmacist
Sandy Schloes T: 0429018721  or 0335033132  E: sandy.s@bethlehem.org.au

General Practitioner
Community Pharmacy

The information contained within this report and the recommendations made are provided to the best of our knowledge. We understand there may be sound clinical reasons why they may not be appropriate for this patient.
I and her daughter, C, were visited at home on the 8th September 2009 by the Community Service Pharmacist and Social Worker following recent discharge from Hospital.

**MEDICATION MANAGEMENT:**
Medications are administered with the help of I’s daughter, C. Most medicines are in a weekly dose administration box.

**MEDICATION ISSUES FOR CONSIDERATION:**
I is taking Coloxyl with senna® at night and lactulose for constipation. Bowel function has been irregular.

Suggested trialling Coloxyl with senna® routinely morning and night.

I requires one to two breakthrough doses of Oxynorm® daily, usually in the early morning. She does take it prior to her pain escalating, but often requires a second dose 2 hours later. Reinforced to I and C that the Oxynorm® could be taken up to hourly if needed. Also explained that an increase in breakthrough Oxynorm® dose is an option. As a trial, suggested that Irene change the administration time of her Oxycontin® to 8am/9am and 8pm/9pm which may alleviate waking with pain in the early hours. [Currently taking at 7am and 7pm]

Nausea, dry retching and vomiting are still a problem for Irene, although there has been a recent increase in haloperidol dose. As both metoclopramide and haloperidol are dopamine antagonists, a change to a different anti-emetic e.g. cyclizine or promethazine may be considered.

I reported that her leg oedema had improved.

I is on monthly zoledronic acid 4mg infusion by Peter Mac at Home. Due 8/9/09, but C received a phone call while we were visiting from Peter Mac saying that calcium level was low therefore zoledronic acid would not be administered.

For follow-up appointment with oncologist, Dr M at Peter Mac on 6/10/09.

Corrected calcium level 19/8/09 was 2.21 mmol/L [range 2.33-2.50]. Irene’s calcium level is low 8/9/09. Consider supplementation with oral calcium supplement of 500 mg and a multiple vitamin containing vitamin D 400 IU daily. Have made the assumption that the zoledronic acid indication is for Prevention of SREs (pathological fracture, spinal cord compression, radiation to bone or surgery to bone) in patients with advanced malignancies involving bone.^[https://www.mirrsonline.com-au.proxy1.anu.edu.au/ accessed 9/9/09]

**MEDICATION REGIME:**

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSE &amp; FREQUENCY</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxycodone (Oxycotin®)</td>
<td>110mg twice daily</td>
<td></td>
</tr>
<tr>
<td>Paracetamol 500mg tab</td>
<td>Two tablets three times daily</td>
<td></td>
</tr>
<tr>
<td>Metoclopramide 10mg tab</td>
<td>Two tablets four times daily</td>
<td></td>
</tr>
<tr>
<td>Esomeprazole 40mg tab</td>
<td>One tablet each morning</td>
<td></td>
</tr>
<tr>
<td>Frusemide 40mg tab</td>
<td>One tablet each morning</td>
<td></td>
</tr>
<tr>
<td>Potassium chloride SR 600mg tab</td>
<td>Two tablets each morning</td>
<td></td>
</tr>
<tr>
<td>Coloxyl with senna®</td>
<td>Take two tablets at night</td>
<td>Will trial twice daily</td>
</tr>
<tr>
<td>Haloperidol 0.5mg tab</td>
<td>One tablet twice daily and when necessary</td>
<td>Taking two tablets twice daily</td>
</tr>
<tr>
<td>Ibuprofen 400mg tab</td>
<td>One tablet three times daily</td>
<td></td>
</tr>
<tr>
<td>Lorazepam 1mg tab</td>
<td>Half to one tablet every 6 hours when necessary</td>
<td>Taking a quarter of a tablet</td>
</tr>
<tr>
<td>Lactulose mixture</td>
<td>20mL three times daily when necessary</td>
<td></td>
</tr>
<tr>
<td>Oxycodone 20mg cap (Oxynorm®)</td>
<td>One capsule every two hours when necessary</td>
<td>Can be taken up to hourly if needed</td>
</tr>
</tbody>
</table>

**OTHER MEDICATIONS AVAILABLE AT HOME:**
<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine 10mg amp x 5</td>
<td></td>
</tr>
<tr>
<td>Metoclopramide 10mg amp x 19</td>
<td></td>
</tr>
<tr>
<td>Clonazepam 2.5mg/mL oral drops x 2 bottles</td>
<td></td>
</tr>
</tbody>
</table>

Community Service Pharmacist:  
Sandy Scholars, T 0429018721 or 0395953192  E: sandys@bethlehem.org.au

General Practitioner:

Community Pharmacy:

The information contained within this report and the recommendations made are provided to the best of our knowledge. We understand there may be sound clinical reasons why they may not be appropriate for this patient.
Calvary Health Care Bethlehem
Pharmacist in Community Palliative Care Multidisciplinary Teams Project
Medication Review Report

Jas visited at home on the 17th February 2010 by the Community Service Pharmacist and Social Worker following her recent discharge from The Alfred and Calvary Health Care Bethlehem.

J was teary on arrival, but was unable to explain why. She appeared to be confused about her medications, stating that she hadn’t taken her doxepin that morning, and proceeded to take one. She was uncertain whether she had taken doxepin the previous night, stating that she takes them twice daily. On examination the doxepin 10mg capsules were expired.

J was awaiting a phone call from the Alfred Hospital Pharmacy to pick up a further supply of everolimus, which had been prescribed by her oncologist, Dr H, on the 16/2/10. Her next appointment with Dr H is on the 18/3/10. She also has an appointment with Dr G on the 18/3/10; however, she will require pregabalin prior to this [35 capsules left].

I have encouraged J to take paracetamol on a regular basis, as she does believe it helps her arm/shoulder pain. The current dose of Oxycontin® is effective, with very few breakthroughs of Endone® required.

J has decreased her Coloxyl with senna® tablets to one tablet at night with effect, rather than two tablets twice daily which was listed on her discharge medication list.

J will visit her general practitioner, on the 18/2/10 for further prescriptions. I gave her a copy of her discharge medication list to facilitate this. I also asked her to mention her lack of appetite to her doctor, as a trial of metoclopramide prior to meals may be beneficial. J will also discuss her low mood with her doctor.

I phoned her community pharmacist, as I understood from the Community Nurse that J was to get her medications packed. J had been in to discuss this with the pharmacist, but had not returned with the medications to enable this to proceed.

I have asked J to take her medications and prescriptions to her pharmacy after visiting her general practitioner, including the expired doxepin and unused Oxycontin® 10mg. J will keep her Endone® tablets and metoclopramide tablets at home.

MEDICATION REGIME:

Allergies/adverse drug reactions: Penicillin -> rash

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSE &amp; FREQUENCY</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esomeprazole 40mg tablets</td>
<td>One tablet in the morning</td>
<td></td>
</tr>
<tr>
<td>Everolimus 10mg tablets [Afinitor®]</td>
<td>One tablet in the morning</td>
<td>Supplied by the AH - compassionate use</td>
</tr>
<tr>
<td>Metoprolol 50mg tablets</td>
<td>Quarter tablet twice daily</td>
<td></td>
</tr>
<tr>
<td>Oxycodeone controlled release tablets [Oxycontin®]</td>
<td>One tablet twice daily</td>
<td></td>
</tr>
<tr>
<td>Oxycodeone immediate release tablets [Endone®]</td>
<td>One tablet when necessary for breakthrough pain</td>
<td></td>
</tr>
<tr>
<td>Pregabalin 150mg capsules</td>
<td>One capsule twice daily</td>
<td>Supplied by the AH</td>
</tr>
<tr>
<td>Diazepam 5mg tablets</td>
<td>One tablet twice daily</td>
<td></td>
</tr>
<tr>
<td>Paracetamol 500mg tablets</td>
<td>Two tablets four times daily</td>
<td></td>
</tr>
<tr>
<td>Doxepin 25mg capsules</td>
<td>One capsule at night</td>
<td></td>
</tr>
<tr>
<td>Medication</td>
<td>Dosage</td>
<td>Comment</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------------------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>Temazepam 10mg capsules</td>
<td>One tablet at night when necessary</td>
<td>Takes routinely</td>
</tr>
<tr>
<td>Coloxyl with senna® tablets</td>
<td>One tablet at night</td>
<td>Decreased by patient from two tablets twice daily</td>
</tr>
<tr>
<td>Metoclopramide 10mg tablets</td>
<td>One tablet three times daily when necessary</td>
<td>Currently not taking</td>
</tr>
<tr>
<td>Movicol® sachets</td>
<td>One sachet daily when necessary</td>
<td></td>
</tr>
</tbody>
</table>

**OTHER MEDICATIONS AVAILABLE AT HOME:**

<table>
<thead>
<tr>
<th>Medication</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine 10mg/mL injection</td>
<td></td>
</tr>
<tr>
<td>Metoclopramide 10mg/2mL injection</td>
<td></td>
</tr>
</tbody>
</table>

**Community Service Pharmacist**  
Sandy Scholes  T: 0429018721 or 039595323  E: sandys@bethlehem.org.au

**General Practitioner:**

**Community Pharmacy:**

**Report also sent to Alfred Hospital Outreach Pharmacy Service and Palliative Care Unit**

The information contained within this report and the recommendations made are provided to the best of our knowledge. We understand there may be sound clinical reasons why they may not be appropriate for this patient.
J was visited at home by the Community Service Pharmacist on the 28th October 2009 following his recent admission to the Community Palliative Care Service.

MEDICATION MANAGEMENT:
J self-administers his medications from original containers, as well as his insulin.

J presents with epigastric pain, which he describes as going across his midriff and up his right side. He scores his pain at 5 most of the time. He is unsure of the effectiveness of the current pain regime, but finds his pain is decreased if he can distract himself.

Fentanyl patch was increased to 37mcg/hour on the 26th October. His breakthrough dose of oxycodone [Endone®] was increased to 20mg.

I have asked J to contact his doctor to organize further supplies of oxycodone.

J’s intake is minimal due to a constant feeling of fullness and bloating. He also has a metallic taste and does not find sweet food palatable. Blood glucose levels since last evening have been 13.9mmol/L, 4.7mmol/L, 5.6mmol/L and 5.1mmol/L.

J has been prescribed metoclopramide 10mg tablets. He does not think they have been of benefit to him, even though he has tried them before meal times.

Sucralfate tablets were prescribed at a recent consult with Mr J Spillane. J has not commenced the sucralfate yet. He has recently had an increase in esomeprazole dosage to 40mg twice daily while in hospital. He is unsure of the effectiveness of esomeprazole and believes that pantoprazole is more effective for him.

J has tried Mylanta® previously for his epigastric pain, and will purchase some.

J has lactulose [Actilax®] at home also, which he will add to his sperient regime. I have mentioned to him that it may cause bloating and discomfort. I have suggested Movicol® sachets as an alternative.

J has completed a course of cephalaxin two days ago for a wound on his right hand.

MEDICATION REGIME:

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSE &amp; FREQUENCY</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulin glargine 100units/mL</td>
<td>25 units at night</td>
<td></td>
</tr>
<tr>
<td>[Lantus®]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulin aspartate 100units/mL</td>
<td>25 units in the morning, at midday and at right</td>
<td></td>
</tr>
<tr>
<td>[Novorapid®]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isosartan 25mg tabs [Avapro®]</td>
<td>One tablet in the morning</td>
<td></td>
</tr>
<tr>
<td>Metoprolol 50mg tabs</td>
<td>Half a tablet twice daily</td>
<td></td>
</tr>
<tr>
<td>Esomeprazole 40mg tabs</td>
<td>One tablet twice daily</td>
<td></td>
</tr>
<tr>
<td>Cisapride with semis® 50mg/8mg tab</td>
<td>Two tablets twice daily</td>
<td></td>
</tr>
<tr>
<td>Lactulose oral liquid [Actilax®]</td>
<td>20mL daily</td>
<td>To add to regime</td>
</tr>
<tr>
<td>Sartraline 100mg tab</td>
<td>One tablet twice daily</td>
<td></td>
</tr>
<tr>
<td>Amitriptyline 25mg tab</td>
<td>One tablet at night</td>
<td>Commenced for peripheral neuropathy 15 years ago</td>
</tr>
<tr>
<td>[Carafate®]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fentanyl patches 12mcg/hour and 25mcg/hour [Durogesic®]</td>
<td>37mcg/hour every three days</td>
<td></td>
</tr>
<tr>
<td>Oxycodone immediate release tablet/capsule</td>
<td>20mg when necessary for breakthrough pain</td>
<td></td>
</tr>
</tbody>
</table>

OTHER MEDICATIONS AVAILABLE AT HOME

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine 10mg/mL ampoules</td>
<td>Expiry 12/2011</td>
</tr>
<tr>
<td>Metoclopramide 20mg/2mLamp</td>
<td>Awaiting supply</td>
</tr>
<tr>
<td>Clonazepam 2.5mg/mL 10mL oral drops</td>
<td>Expiry 02/2011</td>
</tr>
<tr>
<td>Microlax® enema</td>
<td>Not taking</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Morphine controlled release 10mg tabs [Ms Contin®]</td>
<td>Not taking</td>
</tr>
<tr>
<td>Metoclopramide 10mg tabs [Pramine®]</td>
<td>Not taking</td>
</tr>
<tr>
<td>Paracetamol [Panamax®] 500mg tabs</td>
<td>Not taking</td>
</tr>
<tr>
<td>Paracetamol &amp; Codeine phosphate 30mg/8mg [Codapane Forte®] tabs</td>
<td>Not taking</td>
</tr>
</tbody>
</table>

**Community Service Pharmacist:**
Sandy Scholes T: 0429018721 or 0395953192   E: sandys@bethlehem.org.au

**General Practitioner:**

**Community Pharmacy:**

The information contained within this report and the recommendations made are provided to the best of our knowledge. We understand there may be sound clinical reasons why they may not be appropriate for this patient.
Medication Review Report

Calvary Health Care Bethlehem
Pharmacist in Community Palliative Care Multidisciplinary Teams Project

J was visited at home on the 16th September 2009 by the Community Service Pharmacist following recent discharge from The Alfred and CHCB.

MEDICATION MANAGEMENT:
Medication administered to J by his wife J from original containers.
Education on the use of clonazepam drops was provided at visit.

MEDICATION ISSUES FOR CONSIDERATION:
J is not experiencing any pain, and is not taking the paracetamol tablets.
J is not experiencing nausea. I have suggested to J and J that they try ceasing the haloperidol, to minimise side effects, particularly J gets up to the toilet up to 3 times a night. From the history, haloperidol was commenced at The Alfred for delirium.

J is taking the dexamethasone 2mg in the morning. Blood glucose levels are tested on a daily basis [in the morning] and are between 6.0 - 6.4 mmol/L. The discharge summary suggests that J should monitor BSLs twice daily and that the dexamethasone dose is to be reviewed by radiotherapy. I have asked J and J to follow this up at the next doctor’s appointment.

J is coughing in the morning and on retiring. The night time cough often requires him to sit out of bed in the lounge chair until it resolves. I have asked J and J to mention the cough to the doctor on their next visit.

MEDICATION REGIME: From discharge 20/9/09

Adverse effects of nausea and vomiting from morphine

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSE &amp; FREQUENCY</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metformin 850mg tab</td>
<td>One tablet twice daily</td>
<td></td>
</tr>
<tr>
<td>Gliclazide 30mg SR tab</td>
<td>One tablet each morning</td>
<td></td>
</tr>
<tr>
<td>Esomeprazole 20mg tab</td>
<td>One tablet each morning</td>
<td></td>
</tr>
<tr>
<td>Atenolol 50mg tab</td>
<td>One tablet each morning</td>
<td></td>
</tr>
<tr>
<td>Paracetamol 500mg tab</td>
<td>Two tablets four times daily</td>
<td>Not currently taking</td>
</tr>
<tr>
<td>Dexamethasone 4mg tab</td>
<td>Half a tablet each morning</td>
<td></td>
</tr>
<tr>
<td>Haloperidol 0.5mg tab</td>
<td>Half a tablet at night. An additional one to two tablets twice daily if required</td>
<td>Trial ceasing</td>
</tr>
</tbody>
</table>

OTHER MEDICATIONS AVAILABLE AT HOME:

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coloxyl with Senna® tab</td>
<td></td>
</tr>
<tr>
<td>Metoclopramide 10mg tab</td>
<td></td>
</tr>
<tr>
<td>Paracetamol/Codeine 30mg/500mg [Codalgin Forte] tab</td>
<td></td>
</tr>
<tr>
<td>Clonazepam 2.5mg/mL 10mL drops</td>
<td></td>
</tr>
</tbody>
</table>

Community Service Pharmacist:
Sandy Scholes, T: 0429018721 or 0395953192 email: sandys@bethlehem.org.au

General Practitioner:

Community Pharmacy:

The information contained within this report and the recommendations made are provided to the best of our knowledge. We understand there may be sound clinical reasons why they may not be appropriate for this patient.
J was visited at home on 8th October 2009 by the Community Service Pharmacist and Nurse.

J has been prescribed morphine oral solution for his cough since my last visit. He is reluctant to take this for his cough, and will use his salbutamol inhaler instead. "Provided encouragement to use the morphine for his cough."

J has discontinued the haloperidol tablets. The use of the dexamethasone has been discussed with his oncologist, and is to continue at 2mg daily. Blood sugar levels are monitored and less than 7mmol/L.

Will provide midazolam amps from hospital pharmacy as J has not been able to obtain the prescription in the community. Midazolam amps delivered to patient’s home.

MEDICATION REGIME:

Adverse effect of nausea and vomiting from morphine

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSE &amp; FREQUENCY</th>
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<tbody>
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<td>Metformin 850mg tab</td>
<td>One tablet twice daily</td>
<td></td>
</tr>
<tr>
<td>Gliclazide 30mg SR tab</td>
<td>One tablet each morning</td>
<td></td>
</tr>
<tr>
<td>Esomeprazole 20mg tab</td>
<td>One tablet each morning</td>
<td></td>
</tr>
<tr>
<td>Atenolol 50mg tab</td>
<td>One tablet each morning</td>
<td></td>
</tr>
<tr>
<td>Dexamethasone 4mg tab</td>
<td>Half a tablet each morning</td>
<td></td>
</tr>
<tr>
<td>Salbutamol 100mcg inhaler</td>
<td>One to two puffs when necessary</td>
<td>Using for cough</td>
</tr>
<tr>
<td>Morphine 2mg/mL</td>
<td>1mL three times daily for cough</td>
<td>Not taking routinely</td>
</tr>
</tbody>
</table>

OTHER MEDICATIONS AVAILABLE AT HOME:

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine 10mg/mL amp Exp: 9/2011</td>
<td>Midazolam 5mg/mL amp Exp: 3/2014</td>
</tr>
<tr>
<td>Metoclopramide 10mg/2mL amp Exp: 11/10</td>
<td>Clonazepam 2.5mg/mL 10mL drops</td>
</tr>
<tr>
<td>Coloxyl with Senna® tab</td>
<td>Haloperidol 0.5mg tab</td>
</tr>
<tr>
<td>Metoclopramide 10mg tab</td>
<td>Paracetamol 500mg tab</td>
</tr>
<tr>
<td>Paracetamol/Codeine 30mg/500mg [Codalgin Forte] tab</td>
<td></td>
</tr>
</tbody>
</table>

Community Service Pharmacist:
Sandy Scholes T: 0429018721 or 0395953192 email: sandys@bethlehem.org.au

General Practitioner:

Community Pharmacy:

The information contained within this report and the recommendations made are provided to the best of our knowledge. We understand there may be sound clinical reasons why they may not be appropriate for this patient.
Calvary Health Care Bethlehem
Pharmacist in Community Palliative Care Multidisciplinary Teams Project
Medication Review Report

N was visited at home on the 22nd October 2010 by the Community Service Doctor and Pharmacist on admission to the CHCB Community Palliative Care Service.

MEDICATION MANAGEMENT:
N self-administers her medications. She is consulting a naturopathic practitioner, and takes many supplements. The Metagenics supplements are listed [L] medicines with the Therapeutic Goods Administration [TGA]. The supplements which are supplied by Trad-Comed are not registered or listed with the TGA.

N is considering a Phase 1 trial at Peter MacCallum Cancer Centre. PF-03758309, an oral PAK4 inhibitor. PAK [p21 activated kinase] is a family of cytoplasmic kinases for various oncogenic pathways. Inhibition of PAK4 may inhibit cell growth and make cancer cells hypersensitive to apoptosis [cell death]. As it is a Phase 1 trial, the pharmacokinetics will be studied, requiring frequent visits for physical examinations and blood tests. If Nikki enrols in the study, she will need to discontinue the supplements she is currently taking. PF-03758309 is an oral drug taken once daily in a fasting state.

MEDICATION REGIME:

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSE &amp; FREQUENCY</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxycodeine 20mg controlled release tablets [Doxoral®]</td>
<td>One tablet twice daily</td>
<td>Every twelve hours reinforced</td>
</tr>
<tr>
<td>Oxycodeine 10mg immediate release capsules [Oxynorm®]</td>
<td>One capsule when necessary</td>
<td>Can be taken hourly if needed</td>
</tr>
<tr>
<td>Gabapentin 300mg capsules</td>
<td>One capsule three times daily</td>
<td>For titration, commenced on the 12/10/09</td>
</tr>
<tr>
<td>Paracetamol 660mg controlled release tablets [Paradol Octo®]</td>
<td>Two tablets twice daily</td>
<td>Can increase to two tablets three times daily</td>
</tr>
<tr>
<td>Esiclofluram 10mg tablets [Lexapro®]</td>
<td>One tablet at night</td>
<td></td>
</tr>
<tr>
<td>Esomeprazole 40mg tablets</td>
<td>One tablet daily</td>
<td></td>
</tr>
<tr>
<td>Coloxyl with Senna® tablets</td>
<td>When necessary</td>
<td>Taking up to six tablets daily</td>
</tr>
<tr>
<td>Movicol® sachets</td>
<td>When necessary</td>
<td></td>
</tr>
<tr>
<td>Protosdy® ointment</td>
<td>When necessary</td>
<td></td>
</tr>
<tr>
<td>Zopiclom 10mg tablets [Stilnox®]</td>
<td>At night when necessary</td>
<td></td>
</tr>
<tr>
<td>Diclofenac tablets [Voltaren®]</td>
<td>Used in hospital for muscular neck pain</td>
<td></td>
</tr>
<tr>
<td>Glyceryl trinitrate 0.2% ointment</td>
<td>Applied to anal area in hospital</td>
<td></td>
</tr>
<tr>
<td>[Recitrogel®]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SUPPLEMENTS:

- Colacalciferol 25mcg tablets [Osteovit D8]
- Meta 1.3C [indole-3-carbinol & rosemary leaf] from Metagenics
- Parox [antimicrobial herbs] from Metagenics
- Cell Protect [green tea, turmeric & lycophene] from Metagenics
- Thermo Phase Detox [milk thistle, turmeric, glutamine & other amino acids] from Metagenics
- Fibroplex Plus [magnesium, chromium & selenium] from Metagenics
- Selenium Drink [selenium & zinc] from Metagenics
- Digestaid http://www.vagipharmaceuticals.com.au
- Liquid zeolite http://www.liquidzeolite.org/intro/overview
- The Alkaline Powder
- WHW1 TH #1 modulation
- WHW1 Innate immune modulator
- WHW1 TH modulation drops
- Cellular communication mineral drops
- Trad Comed
Community Service Pharmacist
Sandy Scholes T: 0429018721 or 0395953192 E: sandys@bethlehem.org.au

General Practitioner:

Community Pharmacy:

The information contained within this report and the recommendations made are provided to the best of our knowledge. We understand there may be sound clinical reasons why they may not be appropriate for this patient.
Calvary Health Care Bethlehem
Pharmacist in Community Palliative Care Multidisciplinary Teams Project
Medication Review Report

N was visited at home on the 25th March 2010 by the Community Service Doctor and Pharmacist after phone calls on the 22nd and 23rd March about her pain medication regime.

MEDICATION MANAGEMENT:
N self administers her medications, but her adherence to a regular pain medication regime has been an issue. Dr Whyte visited N in February, and recommended the following regime:
1. Oxycontin® 70mg twice daily
2. Titrating the gabapentin up from 300mg in the morning and at lunchtime and 600mg at night
3. Add naprosyn SR 750mg daily
4. Increase escitalopram to 20mg daily

N has not been taking the gabapentin
Since the 22nd March, N has been taking Oxycontin® 50mg twice daily, as her GP had been unable to obtain an Oxycontin® authority.
On the day prior to our visit N had not taken a morning Oxycontin® dose, and had experienced withdrawal symptoms. We have reinforced taking the Oxycontin® regularly, and to obtain further prescription
We have asked N not to take the diclofenac tablets and the Nurofen Plus tablets.
N is considering a phenol ablation on Monday 29th March. The specialist at Monash has also commenced amitriptyline 50mg at night.
We discussed the need for stepdown withdrawal of Oxycontin® if N is to proceed with the ablation.

Phone call 29th March:
N is to have phenol ablation on the 29th March. N has Oxycontin® 30mg and 5mg tablets from her medical clinic, anticipating the need for stepdown withdrawal of Oxycontin®.
Currently taking Oxycontin® 40mg twice daily.

MEDICATION REGIME:
Allergies/adverse drug reactions: penicillins, erythromycin, sulphonamides, roxithromycin

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSE &amp; FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxycodeine controlled release tablets [Oxycontin®]</td>
<td>One tablet twice daily. Take every 12 hours. Swallow whole</td>
</tr>
<tr>
<td>Oxycodeine 5mg immediate release tablets [Endone®]</td>
<td>Two tablets when necessary for breakthrough pain. Can be taken up to hourly if needed</td>
</tr>
<tr>
<td>Diclofenac/codeine 200mg/12.8mg tablets [Nurofen Plus®]</td>
<td>When necessary</td>
</tr>
<tr>
<td>Escitalopram 10mg tablets [Lexapro®]</td>
<td>One tablet in the morning</td>
</tr>
<tr>
<td>Amitriptyline 50mg tablets [Endep®]</td>
<td>One tablet at night</td>
</tr>
<tr>
<td>Oestrogens/ medroxyprogesterone 0.025mg/5mg tablets [Premia® 5mg]</td>
<td>One tablet in the morning</td>
</tr>
<tr>
<td>Movicol® sachets</td>
<td>One sachet twice daily. Dissolve the contents in approximately 125mL of water.</td>
</tr>
<tr>
<td>Alprazolam 1mg tablet [Xanax®]</td>
<td>One tablet when necessary for anxiety</td>
</tr>
<tr>
<td>Zolmitriptan 2.5mg tablets [Zomig®]</td>
<td>One tablet when necessary for migraine as soon as possible after onset. Dose may be repeated after at least 2 hours if migraine recurs</td>
</tr>
</tbody>
</table>

Community Service Pharmacist
Sandy Scholcs T: 0423016721 or 039593192 email: sandys@bethlehem.org.au

General Practitioner:
Community Pharmacy:

The information contained within this report and the recommendations made are provided to the best of our knowledge. We understand there may be sound clinical reasons why they may not be appropriate for this patient.
N was visited at home on the 23rd February 2010 by the Community Service Pharmacist and Nurse following his recent discharge from the Alfred Hospital.
N had been referred to the Outreach Pharmacy Service at the Alfred Hospital, however, as he has been admitted to the Community Service, it was agreed that I should visit.

RECENT MEDICATION CHANGES:
The following changes occurred during N’s recent hospital admission:
- Metformin reduced to 500mg twice daily from 1g twice daily
- Amlodipine 5mg daily commenced
- Paracetamol commenced at 1g qid pm

MEDICATION MANAGEMENT:
Medications are self-administered from the original containers.
I have asked N to make an appointment with his general practitioner, to obtain a further supply of amlodipine.
We also informed N that Dr M may have written prescriptions for emergency medications which should be filled and kept at home. The use of emergency medications was discussed.
N will call the clinic to see if Dr M is able to do home visits.

N does not monitor his blood sugar levels [ESLs] at home and reported that his BSLs had been elevated in hospital.
N’s main problem at this time is an itch, which commenced prior to his hospital admission. The itch is over the whole body, and is worse at night. The itch settled in hospital, but has since returned. The RN and I have discussed possible causes with N, and have ruled out medication changes, changes in soaps etc. and scabies.
Liver functions tests recorded as an inpatient were: albumin 22, bilirubin 7, ALT 13, GGT 71, ALP 93.
Antihistamines have been used with no effect. As N did have Gastrogel® on hand, I suggested using this in the interim.
On viewing the discharge summary from The Alfred, N did have a course of corticosteroids [prednisolone] while in hospital. I have discussed N's itch with our Community Senior Medical Officer, who has suggested a trial of low dose dexamethasone.
Unfortunately, we will be unable to monitor his BSLs routinely.

N reported vomiting a couple of times, related to coughing rather than nausea.
He also reported intermittent offensive urine.
N does not report any pain; he has only required one dose of paracetamol which he took prior to a walk. However, he may benefit from having Ornidil® at home for his cough.

As N deteriorates, the burden of taking simvastatin and ezetimibe could be considered.

MEDICATION REGIME:
Allergies/adverse drug reactions: Warfarin -> bleeding [Alfred Hospital discharge summary]

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSE &amp; FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diltiazem controlled release 180mg capsules</td>
<td>One capsule in the morning</td>
</tr>
<tr>
<td>Aspirin 100mg tablets</td>
<td>One tablet in the morning</td>
</tr>
<tr>
<td>Clopidogrel 75mg tablets</td>
<td>One tablet in the morning</td>
</tr>
<tr>
<td>Ezetimibe 10mg tablets</td>
<td>One tablet in the morning</td>
</tr>
<tr>
<td>Metformin 500mg tablets</td>
<td>One tablet twice daily</td>
</tr>
<tr>
<td>Amlodipine 5mg tablets</td>
<td>One tablet at night</td>
</tr>
<tr>
<td>Simvastatin 40mg tablets</td>
<td>One tablet at night</td>
</tr>
<tr>
<td>Paracetamol 500mg tablets</td>
<td>Two tablets four times daily when necessary</td>
</tr>
<tr>
<td>Gastrogel oral liquid</td>
<td>When necessary</td>
</tr>
</tbody>
</table>
Community Service Pharmacist:
Sandy Scholes T: 0429018721 or 0395953192 E: sandys@bethlehem.org.au

General Practitioner:

Community Pharmacy:

Report also sent to Alfred Hospital Outreach Pharmacy Service

The information contained within this report and the recommendations made are provided to the best of our knowledge. We understand there may be sound clinical reasons why they may not be appropriate for this patient.
**Calvary Health Care Bethlehem**  
Pharmacist in Community Palliative Care Multidisciplinary Teams Project  
**Medication Review Report**

Request from Community Service Nurse to review the supplements P is currently taking. Cautions listed below; of relevance to P:

- **Calcium**
  - Shark cartilage can increase calcium levels  
  - Viagra (Sildenafil) contains calcium  
  - Sorel can decrease calcium absorption  
  - Alkaline salts may contain calcium

- **SAMe** and fluoxetine may cause additive serotonergic effects and serotonin syndrome  
- **Decrease effectiveness of rabeprazole with the use of selenium**

**Allergies/adverse drug reactions:** NKA

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSE &amp; FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cypromone 50mg tablets</td>
<td>One tablet twice daily</td>
</tr>
<tr>
<td>Fluoxetine 20mg tablets</td>
<td>One tablet in the morning</td>
</tr>
<tr>
<td>Rabeprazole 20mg tablets</td>
<td>Three tablets in the morning</td>
</tr>
<tr>
<td>Diazepam 5mg tablets</td>
<td>One tablet twice daily when necessary</td>
</tr>
<tr>
<td>Paracetamol 500mg tablets</td>
<td>Two tablets four times daily when necessary</td>
</tr>
<tr>
<td>Paracetamol/codeine 500mg/30mg tablets</td>
<td>One tablet four times daily when necessary</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUPPLEMENTS:</th>
<th>Active ingredients</th>
<th>Cautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green tea extract</td>
<td>Constituents</td>
<td>Combination with hepatotoxic drugs</td>
</tr>
<tr>
<td></td>
<td>Caffeine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flavonoids, theaflavin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Methylxanthines: Theophylline, theobromine, and theanine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Polyphenols: Gallic acid and catechins: galloocatechin (GC), epigallocatechin (EGC), epicatechin (EC), and epigallocatechin gallate (EGCG)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Polysaccharides</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proanthocyanidins (tannins)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vitamins: Ascorbic acid, tocopherol</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other: Fluoride, chlorophyll, organic acids</td>
<td></td>
</tr>
</tbody>
</table>

Shark cartilage
- Several types of extracts e.g. squalamine lactate, AE-341, U-395
- **Constituents:** Glycoproteins: Sphymnastatin 1 and 2  
  - Glycosaminoglycans: Chondroitin sulphate, keratan sulphate  
  - Calcium salts  
  - Proteins: Collagen

- **Cautions:** Increase calcium levels  
- Addition to acidic fruit juice

Resveratrol
- **Resveratrol:** found in red wine, red grape, shine purple grape juice, mulberries, peanuts

- **CYP3A4 substrates:** Anticoagulant/Antiplatelet drugs

SAMe 400mg
- **SAMe** - found naturally in the body
- **Constituents:** S-adenosylmethionine  
  - Sulfur-containing compound to stabilize molecule: Tosylate, disulfate tosylate, disulfate ditosylate, or 1,4-butanedithiolate

- **Cautions:** Antidepressant drugs, Tramadol

Sodium selenite drops
- **Selenium** - a mineral ingested in water & foods e.g.

- **Cautions:** Anticoagulant/Antiplatelet drugs, Decrease effectiveness of
<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharma Mag Forte</td>
<td>Magnesium, potassium &amp; calcium</td>
<td>Anticoagulant/Antiplatelet drugs</td>
</tr>
<tr>
<td>Prosta Balance</td>
<td>Saw palmetto plant</td>
<td>Anticoagulant/Antiplatelet drugs</td>
</tr>
<tr>
<td></td>
<td>Constituents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Fatty Acids: Capric, caprylic, lauric, cis-linoleic, myristic, palmitic and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>stearic acid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Steroids: beta-sitosterol, campesterol, cycloartenol, lupeol, lupenone and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>stigmasterol</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Aliphatic alcohols</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Polyprenic compounds: Arabinose, flavonoids, galactose, glucose and uronic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>acid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Anthranilic acid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Carotenes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Lipase</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Tannins</td>
<td></td>
</tr>
<tr>
<td>Multi Essential</td>
<td>Vitamin &amp; mineral supplement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- B vitamins, antioxidants and a broad mineral base including Chromium, Calcium, Magnesium, Selenium and Boron.</td>
<td></td>
</tr>
<tr>
<td>D3 capsules</td>
<td>Colecalciferol</td>
<td></td>
</tr>
<tr>
<td>Sheep Sorrel</td>
<td>Plant – contains tannins</td>
<td>Decrease absorption of calcium, iron &amp; zinc</td>
</tr>
<tr>
<td>Mlo lift?</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>DEF enzyme</td>
<td>Digestive enzymes [eg protease, amylase, lipase]</td>
<td></td>
</tr>
<tr>
<td>Alkaline salts</td>
<td>Alkaline salts include calcium citrate, potassium citrate, magnesium citrate</td>
<td></td>
</tr>
</tbody>
</table>

References:
http://www.naturaldatabase.com/(S(fwvuz2bf0s3v3yzxti0zuj))/home.aspx?cs=&s=ND accessed 12/4/10

Community Service Pharmacist:
Sandy Scholes T: 0429018721 or 0395953192 email: sandys@bethlehem.org.au

The information contained within this report and the recommendations made are provided to the best of our knowledge. We understand there may be sound clinical reasons why they may not be appropriate for this patient.
## Appendix 17: Classification of Interventions from Medication Reviews

<table>
<thead>
<tr>
<th>Visit</th>
<th>Description of drug related problem</th>
<th>Classification</th>
<th>Description of recommendation</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Morphine oral solution and injection prescribed for SOB</td>
<td>D6</td>
<td>Change to hydromorphone</td>
<td>R2</td>
</tr>
<tr>
<td></td>
<td>Oxazepam and domperidone discontinued but still in DAA</td>
<td>D8</td>
<td>Reduce oxazepam dose before discontinuing</td>
<td>R8</td>
</tr>
<tr>
<td></td>
<td>Paracetamol charted as prn, but not being requested</td>
<td>U1</td>
<td>Chart regularly as SR bd</td>
<td>R8</td>
</tr>
<tr>
<td></td>
<td>On KCl, spironolactone &amp; candesartan</td>
<td>M1</td>
<td>Consider ceasing potassium</td>
<td>R8</td>
</tr>
<tr>
<td></td>
<td>On warfarin, history of falls, age 95</td>
<td>D6</td>
<td>Maintain INR &lt;2, or discontinue</td>
<td>R8</td>
</tr>
<tr>
<td>With D</td>
<td>Has temazepam, oxazepam and zolpiderm for sleep</td>
<td>D1</td>
<td>To trial temazepam only</td>
<td>R12</td>
</tr>
<tr>
<td>With N</td>
<td>Advice/reassurance on oxycodone, aperients, antiemetics</td>
<td>E1</td>
<td></td>
<td>R12</td>
</tr>
<tr>
<td></td>
<td>Advice on the use of opioids and side-effects &amp; antiemetics</td>
<td>E1</td>
<td></td>
<td>R12</td>
</tr>
<tr>
<td></td>
<td>No aperients</td>
<td>U2</td>
<td>Carer to obtain Coloxyl with Senna and/or Movicol</td>
<td>R7</td>
</tr>
<tr>
<td>With N</td>
<td>Advice on use of Oxynorm for breakthrough pain</td>
<td>E1</td>
<td></td>
<td>R12</td>
</tr>
<tr>
<td></td>
<td>Advice on metoclopramide</td>
<td>E1</td>
<td>Take metoclopramide routinely before meals</td>
<td>R12</td>
</tr>
<tr>
<td></td>
<td>Advice on use of alprazolam for anxiety</td>
<td>E1</td>
<td></td>
<td>R12</td>
</tr>
<tr>
<td>With D</td>
<td>In terminal phase therefore rationalise medications (previously ED for high INR)</td>
<td>N0</td>
<td>Cease aspirin, potassium supplement, metoprolol, warfarin, lactulose</td>
<td>R8</td>
</tr>
<tr>
<td></td>
<td>Advice on emergency medications due to renal impairment</td>
<td>E1</td>
<td>Haloperidol and hydromorphone</td>
<td>R8</td>
</tr>
<tr>
<td>With N</td>
<td>Using Oxycontin and Durogesic. On MEDD of approx 600mg morphine per day and taking Oxynorm 20mg x one.</td>
<td>D1</td>
<td>Review pain regime. Increase breakthrough. Rotate opioids. Increase amitriptyline.</td>
<td>R8</td>
</tr>
<tr>
<td></td>
<td>Describes a burning pain</td>
<td>U1</td>
<td>As above</td>
<td>R8</td>
</tr>
<tr>
<td></td>
<td>Taking metoclopramide routinely but no nausea</td>
<td>D7</td>
<td>Take it prn but monitor</td>
<td>R5</td>
</tr>
<tr>
<td></td>
<td>Taking temazepam during the day</td>
<td>C4</td>
<td>Trial Oxynorm instead for &quot;discomfort&quot;</td>
<td>R12</td>
</tr>
<tr>
<td>With D</td>
<td>To commence sorafinib?</td>
<td>E1</td>
<td>Patient information supplied</td>
<td>R15</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------</td>
<td>----</td>
<td>-----------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>With D</td>
<td>Using Norspan 30mcg/hour</td>
<td>U1</td>
<td>Rotate to Durogesic 25mcg patch</td>
<td>R2</td>
</tr>
<tr>
<td></td>
<td>Likelihood of dysphagia</td>
<td>C5</td>
<td>Changes in dosage forms</td>
<td>R3</td>
</tr>
<tr>
<td>With D</td>
<td>Commenced on methadone prior to discharge</td>
<td>E1</td>
<td>Obtain methadone from GP, legislative requirements sent to GP</td>
<td>R8</td>
</tr>
<tr>
<td></td>
<td>Sorted through medications</td>
<td>C0</td>
<td>Expired medications to be taken to community pharmacy</td>
<td>R12</td>
</tr>
<tr>
<td></td>
<td>Bowel function irregular</td>
<td>C1</td>
<td>Take Coloxyl with Senna regularly</td>
<td>R5</td>
</tr>
<tr>
<td></td>
<td>Advice on breakthrough Oxynorm</td>
<td>E1</td>
<td>Increase breakthrough dose</td>
<td>R12</td>
</tr>
<tr>
<td></td>
<td>Metoclopramide &amp; haloperidol ineffective</td>
<td>D1</td>
<td>Consider cyclizine</td>
<td>R8</td>
</tr>
<tr>
<td></td>
<td>On monthly Zometa but not given as hypocalcaemic</td>
<td>U1</td>
<td>Consider routine calcium &amp; colecalciferol</td>
<td>R8</td>
</tr>
<tr>
<td></td>
<td>Inadequate pain control</td>
<td>U1</td>
<td>Discuss with CPCS doctor, admission for pain control following week</td>
<td>R8</td>
</tr>
<tr>
<td>With N</td>
<td>Escalating pain</td>
<td>U1</td>
<td>Discuss with CPCS doctor, contact made with MMC, patient admitted</td>
<td>R8</td>
</tr>
<tr>
<td>With N</td>
<td>Advice on use of clonazepam oral drops</td>
<td>E1</td>
<td></td>
<td>R12</td>
</tr>
<tr>
<td></td>
<td>On dexamethasone 2mg morning, has NIDDM</td>
<td>O0</td>
<td>Review at oncology appointment</td>
<td>R8</td>
</tr>
<tr>
<td></td>
<td>Patient has cough</td>
<td>U2</td>
<td>Review with GP</td>
<td>R8</td>
</tr>
<tr>
<td>With D</td>
<td>Ongoing nausea</td>
<td>U1</td>
<td>Syringe driver commenced</td>
<td>R13</td>
</tr>
<tr>
<td>With D</td>
<td>Ongoing pain</td>
<td>U1</td>
<td>Norspan commenced</td>
<td>R13</td>
</tr>
<tr>
<td>--------</td>
<td>--------------</td>
<td>----</td>
<td>------------------</td>
<td>-----</td>
</tr>
<tr>
<td>With D</td>
<td>Ongoing pain</td>
<td>U1</td>
<td>Methadone &amp; breakthrough education</td>
<td>R13</td>
</tr>
<tr>
<td>With D</td>
<td>Ongoing pain</td>
<td>U1</td>
<td>Oxycontin commenced &amp; delivered by project pharmacist</td>
<td>R13</td>
</tr>
<tr>
<td></td>
<td>Patient has cough</td>
<td>E1</td>
<td>Reviewed by GP - morphine oral solution prescribed</td>
<td>R12</td>
</tr>
<tr>
<td></td>
<td>Midazolam inj prescribed but unable to obtain</td>
<td>N0</td>
<td>Delivered by project pharmacist</td>
<td>R18</td>
</tr>
<tr>
<td>With N</td>
<td>Discharge from Pmac the day before</td>
<td></td>
<td>Packed DAA</td>
<td>R18</td>
</tr>
<tr>
<td></td>
<td>Constipation - day 5</td>
<td>U1</td>
<td>Discuss with CPCS doctor, methylnaltrexone prescribed</td>
<td>R8</td>
</tr>
<tr>
<td>With D</td>
<td>Cost of medications an issue</td>
<td>C3</td>
<td>Advice on safety net as using multiple pharmacies</td>
<td>R12</td>
</tr>
<tr>
<td></td>
<td>Uses oxazepam 30mg tds but not taking</td>
<td>C3</td>
<td>Encouraged to obtain supply</td>
<td>R12</td>
</tr>
<tr>
<td></td>
<td>Advice on mouthcare; loss of taste</td>
<td>U2</td>
<td>Trial vitamin B and zinc tablets</td>
<td>R12</td>
</tr>
<tr>
<td>With N</td>
<td>Packs own DAA but doesn't correlate with regime</td>
<td>C3</td>
<td>Increase Caltrate to qid in DAA</td>
<td>R12</td>
</tr>
<tr>
<td></td>
<td>Non adherent with paracetamol - encouraged to take</td>
<td>C1</td>
<td>Consider Norspan patch</td>
<td>R8</td>
</tr>
<tr>
<td></td>
<td>Diabetes control - on gliclazide 40mg bd &amp; insulin. Recent Hba1C 6.4. BGLs recorded daily &amp; are 6.0 to 6.4mmol/L. Symptomatic at 4mmol/L</td>
<td>N0</td>
<td>Consider gliclazide MR 30mg morning &amp; ceasing insulin</td>
<td>R8</td>
</tr>
<tr>
<td>With N</td>
<td>Commenced Caltrate at Sandingham Hospital but not on list from Com Hospital</td>
<td>D8</td>
<td>GP to review</td>
<td>R8</td>
</tr>
<tr>
<td></td>
<td>Frusemide dose reduced in hospital</td>
<td>U1</td>
<td>GP to review</td>
<td>R8</td>
</tr>
<tr>
<td></td>
<td>Oxycontin dose reduced in hospital</td>
<td>U1</td>
<td>GP to review</td>
<td>R8</td>
</tr>
<tr>
<td>With D</td>
<td>Pain regime ineffective</td>
<td>U1</td>
<td>Increase gabapentin dose</td>
<td>R12</td>
</tr>
<tr>
<td></td>
<td>Advice on opioids and breakthrough</td>
<td>E1</td>
<td>Take breakthroughs pm</td>
<td></td>
</tr>
<tr>
<td>Issue</td>
<td>Code</td>
<td>Intervention</td>
<td>Result</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Pain regime ineffective</td>
<td>U1</td>
<td>Discuss with CPCS doctor, for admission for symptom management</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>Advice on use of clonazepam oral drops</td>
<td>E1</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>Advice on use of midazolam inj</td>
<td>E1</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>Possibility of dysphagia</td>
<td>C5</td>
<td>Changes in dosage forms</td>
<td>R3</td>
<td></td>
</tr>
<tr>
<td>Advice on use of opioids as opioid phobic</td>
<td>E1</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>With D: Patient given Oxycontin 10mg x 1/2, Stilnox 10mg x 1/2 and clonazepam 2mg x 1/2. Patient 92 years</td>
<td>C4</td>
<td>Oxycontin 5mg bd, withdraw Stilnox &amp; clonazepam. Use nitrazepam for sleep.</td>
<td>R1</td>
<td></td>
</tr>
<tr>
<td>Nitrolingual spray expired</td>
<td>C5</td>
<td>Prescription for spray</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>With D: Assess temozolamide adherence</td>
<td>C1</td>
<td>Packed doses for following two days. To monitor on next course</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>Commenced dexamethasone at 5pm</td>
<td>D8</td>
<td>Discussed with community pharmacy to facilitate packing in DAA</td>
<td>R8, R11</td>
<td></td>
</tr>
<tr>
<td>On warfarin, atorvastatin, calcium &amp; colecalciferol</td>
<td>N0</td>
<td>Monitor and discontinue if appropriate</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>With D: Non adherence</td>
<td>C3</td>
<td>Reinforced previous information</td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>Dysphagia</td>
<td>C5</td>
<td>Changes in dosage forms</td>
<td>R3</td>
<td></td>
</tr>
<tr>
<td>Advice on MS Contin and Ordine</td>
<td>E1</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>With N: Metoclopramide ineffective</td>
<td>U1</td>
<td>To trial pm haloperidol but may require cyclizine</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>On paracetamol SR two tablets tds, but LFTs very high</td>
<td>D6</td>
<td>Reduce to bd</td>
<td>R1</td>
<td></td>
</tr>
<tr>
<td>With N: Advice on hydromorphone</td>
<td>E1</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>Advice on aperients</td>
<td>E1</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>Thick secretions</td>
<td>U2</td>
<td>Consider bromhexine</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>Intervention</td>
<td>G1</td>
<td>Intervention</td>
<td>G2</td>
<td>Intervention</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>----</td>
<td>--------------</td>
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<td>--------------</td>
</tr>
<tr>
<td>Gliclazide 80mg mane and 40mg at night. BGLs routinely 5 to 6mmol/L before</td>
<td></td>
<td>Consider gliclazide MR 30mg mane. Random BGLs</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>breakfast.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On multiple antihypertensives and simvastatin</td>
<td>N0</td>
<td>Monitor and discontinue if appropriate</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>With D Ongoing nausea</td>
<td>U1</td>
<td>Increase metoclopramide dose &amp; monitor</td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>With D Ongoing pain</td>
<td>U1</td>
<td>Use GTN for chest pain, use hydromorphone for other pain</td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>With D On propantheline, domperidone and amitriptyline</td>
<td>D2</td>
<td>Discontinue propantheline</td>
<td>R7</td>
<td></td>
</tr>
<tr>
<td>With N On Jurnista 64mg daily, but received samarium therapy four weeks previously. Feeling ' woozy'</td>
<td>O1</td>
<td>Review Jurnista dose</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>Reporting nausea</td>
<td>U1</td>
<td>Take metoclopramide routinely</td>
<td>R5</td>
<td></td>
</tr>
<tr>
<td>With N Non-adherent with DAA</td>
<td>C3</td>
<td>Packed DAA</td>
<td>R18</td>
<td></td>
</tr>
<tr>
<td>Symptoms suggestive of SCC</td>
<td>U2</td>
<td>Referral to MMC</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>Advice on use of clonazepam oral drops</td>
<td>E1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exacerbation of Restless Legs Syndrome. Patient on metoclopramide post chemotherapy - in combination with ondansetron</td>
<td>T1</td>
<td>Patient to avoid metoclopramide if possible this cycle. Use ondansetron and cyclizine. Avoid dopaminergic agents</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>Ongoing nausea</td>
<td>U1</td>
<td>Take metoclopramide regularly before meals &amp; increase to 20mg qid</td>
<td>R5</td>
<td></td>
</tr>
<tr>
<td>Taking naproxen SR 750mg daily, difficult to swallow</td>
<td>C5</td>
<td>Trial ceasing to see if nausea resolves. Change to immediate release form</td>
<td>R1, R3</td>
<td></td>
</tr>
<tr>
<td>Education on lorazepam for anxiety. Insomnia an issue.</td>
<td>E1</td>
<td>Taking amitriptyline 10mg nocte. Increase dose to aid sleep or change to escitalopram.</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>Compliance issue</td>
<td>C0</td>
<td>Packed DAA with son, medication list provided</td>
<td>R12,R13,R14</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>-----------------------------------------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>With N Advice on regular use of aperients</td>
<td>U1</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>Discussion of use of morphine oral solution</td>
<td>E1</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>Advice on protective cream</td>
<td>U1</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>Advice on aperients</td>
<td>E1</td>
<td>To take Senokot regularly</td>
<td>R5</td>
<td></td>
</tr>
<tr>
<td>Metformin dose 1g tds - LOW 8kg since Oct 09, nausea and ?renal function</td>
<td>D6</td>
<td>Decrease dose</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>With D Metformin dose 1g tds - LOW 8kg since Oct 09, nausea and ?renal function</td>
<td>D6</td>
<td>Dose of metformin decreased</td>
<td>R2</td>
<td></td>
</tr>
<tr>
<td>Discussion on supply of emergency medications</td>
<td>E0</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>Ongoing nausea</td>
<td>U1</td>
<td>Take metoclopramide regularly before meals</td>
<td>R5</td>
<td></td>
</tr>
<tr>
<td>Advice on use of opioids</td>
<td>E1</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>Education on sublingual use of lorazepam</td>
<td>E1</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>Insulin expiring 2/2010</td>
<td>C5</td>
<td>New prescription required</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>Taking meloxicam and intermittent dexamethasone, experiences epigastric pain</td>
<td>T1</td>
<td>Had discontinued esomeprazole tablets herself, suggest patient recommences</td>
<td>R7</td>
<td></td>
</tr>
<tr>
<td>With D Ongoing nausea</td>
<td>U1</td>
<td>Take metoclopramide regularly before meals &amp; increase to 20mg qid</td>
<td>R5</td>
<td></td>
</tr>
<tr>
<td>Non-adherence.</td>
<td>C3</td>
<td>Organised DAA with community pharmacy</td>
<td>R14</td>
<td></td>
</tr>
<tr>
<td>On everolimus and pregabalin from Alfred Hospital</td>
<td>C0</td>
<td>Liaised with AH</td>
<td>R18</td>
<td></td>
</tr>
<tr>
<td>Taking paracetamol prn</td>
<td>C1</td>
<td>Encouraged to take regularly as is effective</td>
<td>R5</td>
<td></td>
</tr>
<tr>
<td>Two visits with CPCS nurse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervention</td>
<td>Code</td>
<td>Recommended Intervention</td>
<td>Code</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>------</td>
<td>-----------------------------------------------------------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Oxazepam dose increased, temazepam added, zolpidem ceased</td>
<td>D6</td>
<td>Recommended withdrawal of zolpidem</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>Contact lens solution with preservative being used in nebuliser</td>
<td>D5</td>
<td>Recommended use sodium chloride</td>
<td>R2</td>
<td></td>
</tr>
<tr>
<td>Carer training on use of DAA, nebuliser, oxygen concentrator</td>
<td>E1</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>Discussed use of emergency medications</td>
<td>E1</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>Ongoing itch</td>
<td>U2</td>
<td>Discussed with CPCS doctor, trial of dexamethasone</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>Ongoing cough</td>
<td>U2</td>
<td>Recommended Ordine</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>Rationalisation of medications - simvastatin &amp; ezetimibe</td>
<td>N0</td>
<td>Monitor and discontinue if appropriate</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>Advice on use of clonazepam oral drops</td>
<td>E1</td>
<td></td>
<td>R12</td>
<td></td>
</tr>
<tr>
<td>Occasional pain, but only paracetamol available as Endone kept by hospital at recent admission</td>
<td>U1</td>
<td>Requested Endone</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>Dexamethasone given qid</td>
<td>O3</td>
<td>Sleep disturbance not an issue but monitor</td>
<td>R8</td>
<td></td>
</tr>
<tr>
<td>On dexamethasone &amp; phenytoin</td>
<td>D2</td>
<td>Monitor</td>
<td>R17</td>
<td></td>
</tr>
<tr>
<td>Taking Coloxyl with Senna 4 tablets at night - tablet burden at night an issue</td>
<td>5</td>
<td>Suggest two tablets twice daily</td>
<td>R5</td>
<td></td>
</tr>
<tr>
<td>Advice on aperients</td>
<td>E1</td>
<td>Suggested use of Movicol. Discontinue Fleet Phosphosoda as can cause electrolyte disturbance</td>
<td>R1</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix 18: Patient Medicines List

**Important things to know about your medicines**

It's important to get to know your medicines so you can get the best results from them. Some of the most important things you need to know — such as what your medicines are for, how much to use and when to use it — are on the Medicines List.

**Other things to know about your medicines include:**

- **When the medicines will begin working**
- **What to do and not to do while using your medicines**
- **Side effects of the medicines.**

Your medicines may also be affected by your:

- **Health problem(s)**
- **Other medicines**
- **Family history**
- **Previous problems with medicines**
- **Lifestyle**

For more information, pick up a copy of Medmate from your doctor or pharmacist.

**Using your Medicines List**

To get the most from your Medicines List:

- **Keep it up to date by crossing out any medicines you are no longer using**
- **Add new medicines as you start using them**
- **Take it with you each time you visit your doctor, pharmacist or health professional, or if you go into hospital**
- **Keep it with you at all times in case of emergency.**

**Allergies or previous problems with medicines:**

<table>
<thead>
<tr>
<th>Allergies</th>
<th>Family history</th>
<th>Previous problems with medicines</th>
<th>Lifestyle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

**Medicines Line is not an emergency service. It does not replace advice from your doctor or pharmacist.**

Medicines Line is available Monday to Friday, 9am to 6pm (EST)

*For the cost of a local call. Calls from mobiles may cost more.*

---

**www.nps.org.au**

Get to know your medicines.

**National Prescription Service Limited**

**Medicines Line**

1300 888 763

Medicines Line is available Monday to Friday, 9am to 6pm (EST)

*For the cost of a local call. Calls from mobiles may cost more.*
# Keep your Medicines List up to date

List ALL medicines currently used, including: prescription medicines, over-the-counter medicines, herbal and natural medicines. Medicines come in many forms, including: tablets, liquids, inhalers, drops, patches, creams, suppositories, injections.

<table>
<thead>
<tr>
<th>Name of medicine</th>
<th>Strength</th>
<th>What is the medicine for?</th>
<th>How much do I use and when?</th>
<th>Special instructions or comments</th>
<th>Date started</th>
<th>When to stop or review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: Paracetamol</td>
<td>500 mg tablets</td>
<td>Pain from arthritis in knee</td>
<td>2 tablets, every 6 hours</td>
<td>Doctor recommends taking regularly, rather than as needed for pain</td>
<td>11.03.03</td>
<td>11.11.03</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

If you need more space to write your medicines, visit our website at [www.nps.org.au](http://www.nps.org.au) to print more Medicines List pages or to order extra copies. Keep all your pages together.
## Appendix 19: The Pharmacy Guild - Patient Medication Profile

**Profile ID:** 040409-03

**Mr. Test Patient**  
Address: 42 Green street, Somewhere Nice, NSW 2009  
Phone: (09) 1105 5412

**DOB:** 06/13/1948  
**Gender:** Male  
**Usual Doctor:** Dr. Smith / Ph: 02 8234 5678

<table>
<thead>
<tr>
<th>Medical Conditions</th>
<th>Allergies / Adverse Drug Reactions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes type 2</td>
<td>Fennel / In sensitivity</td>
<td>Has annual flu vaccination</td>
</tr>
<tr>
<td>Asthma</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**This profile provides you with information about your medicines - advise your pharmacist of any changes. Present it when seeing your doctor or if you need to go to hospital or other health care facility.**

<table>
<thead>
<tr>
<th>Medication and Strength</th>
<th>Medication Image</th>
<th>Medication Description</th>
<th>Dose / Directions</th>
<th>Breakfast</th>
<th>Lunch</th>
<th>Dinner</th>
<th>Extra Counselling (purpose / cautions)</th>
</tr>
</thead>
</table>
| Lipitor 20mg tablets    | ![ACTUAL SIZE](image1) | Tablet White Unscooped | Take ONE tablet in the evening before bed  
Prescriber: Dr. J. Smith | 1 | Used for high cholesterol  
Try to keep to a healthy diet |
| Atorvastatin            |                  | Front: P0158 Back: 20 |                   |           |       |       |                                       |

| Cardizem cd 180mg capsules | ![ACTUAL SIZE](image2) | Capsule Blue and light Turquoise Marking 1: Marking 2: | Take ONE capsule every morning with the first meal of the day  
Prescriber: Dr. J. Smith | 1 | Used for high blood pressure  
Try to avoid too much salt in your diet |
| Diltiazem                |                  | Front: MF 3 Back: 20 |                   |           |       |       |                                       |

| Diaformin 1000mg tablets | ![ACTUAL SIZE](image3) | Tablet White Scored | Take ONE tablet TWICE a day, in the morning and at night, with breakfast and dinner  
Dr. ABC (Specialist) | 1 | Used for high blood sugar  
Take after a meal to avoid nausea  
Try to keep to a healthy diet |
| Metformin                |                  | Front: 20mg Back: logo |                   |           |       |       |                                       |

| Losec 20mg tablets       | ![ACTUAL SIZE](image4) | Tablet Pink Unscooped | Take ONE tablet in the evening after the evening meal  
Prescriber: Dr. J. Smith | 1 | Used for acid reflux  
Swallow whole, do not chew or crush |
| Omeprazol                |                  | Front: 20mg Back: logo |                   |           |       |       |                                       |

| Zactin 20mg capsules     | ![ACTUAL SIZE](image5) | Capsule Green and Purple Marking 1: LOGO Marking 2: FL 20 | Take ONE capsule every morning  
Prescriber: Dr. J. Smith | 1 | Used for depression |
| Fluoxetine               |                  | Front: 20mg Back: logo |                   |           |       |       |                                       |

| Ferrograd C tablets      | ![ACTUAL SIZE](image6) | Tablet Maroon Unscooped | Take ONE tablet in the morning with the first meal of the day  
Prescriber: Dr. J. Smith | 1 | Iron supplement  
Take with some food to reduce nausea or stomach upset |
| Ferrous Sulphate (Iron)  |                  | Front: Back |                   |           |       |       |                                       |
| plus Vitamin C           |                  | Back |                   |           |       |       |                                       |

| Cartia 100mg tablets     | ![ACTUAL SIZE](image7) | Tablet Orange Unscooped | Take ONE tablet every with the first meal of the day  
Prescriber: Dr. J. Smith | 1 | Used to keep the blood thin |
| Aspirin                  |                  | Front: Back |                   |           |       |       |                                       |

| Other brands:            |                  | Front: Back |                   |           |       |       |                                       |
| Astra                    |                  | Back |                   |           |       |       |                                       |
| Cardarin                |                  | Front: Back |                   |           |       |       |                                       |

---

Appendix 18: Patient Medicines List | FINAL PROGRESS REPORT – PHARMACY PROJECT: JUNE 2010
APPENDIX 20: SURVEYS

Patient Medicine Information Survey

1. Evaluation of evidence-based consumer information

The Pharmacy in Community Palliative Care Project is designed to improve care of patients by the provision of evidence-based information relating to their medications. The information provided is to support them in knowing what their medication is for, how to take it, what to do if there are any problems, who to contact if they have any queries.

This short survey is to enable feedback on the information you have reviewed for the project.

Thank you for your time and feedback. This survey can be undertaken online:

For further details please contact:

Sandy Scholes
Project Pharmacist
sandy@bethlehem.org.au
Tel.: 959933192

or

Margaret Box
Project Manager
margaretb@bethlehem.org.au
Tel.: 9595 3257

1. From the patient information provided, do you think you would know:

<table>
<thead>
<tr>
<th>Fully understand</th>
<th>Mostly understand</th>
<th>Have a basic understanding but not confident of its use</th>
<th>Understanding uncertain</th>
<th>No understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you can take the medication and drive?
What can be done about the side-effects of the medication?
What the medication is used for?
How to take the medication?
What to do if the pain doesn’t go away?
What to do if you miss a dose of medication?
What the common side effects of the medication are?

Please add any comments and specify what question you are referring to!
2. Is the information EASY TO READ?
   - Yes
   - No
   Please indicate what would make the information easier to read:

3. Is the information EASY TO UNDERSTAND?
   - Yes
   - No
   - Not applicable
   Please indicate what would make the information easier to understand?

4. Is there any other information that would be helpful about this medication?

2. Please provide further feedback

Thank you for your assistance.

If there are other points about the ease, understanding or content of the information provided that you think would assist other consumers to better understand what their medication is for and how it should be used - please provide feedback to:

Sandy Scholes sandys@bethlehem.org.au OR
Margaret Box margaretb@bethlehem.org.au
Results from the Patient Medicine Information survey

This survey indicated a good level of understanding of the material provided:

From the patient information provided, do you think you would know:

- What the medication is used for?
- How to take the medication?
- What to do if you miss a dose of medication?
- What are the common side effects of the medication?
- What can be done about the side-effects of the medication?
- If you can take the medication and drive?
- What to do if the pain doesn’t go away?
Impact of the Role of the Pharmacist in the CPCS Team

1. Evaluation of the impact and role of Pharmacist

Calvary Health Care Bethlehem (CHCB) is undertaking an 18 month project: 'Pharmacy in Community Palliative Care'. This project is an initiative of the Department of Human Services and funded by the Australian Government, Department of Health and Ageing, under the National Palliative Care Program.

As part of the project there is a Project Pharmacist within the Calvary Health Care Bethlehem (CHCB) Community Palliative Care Service (CPCS).

Throughout the project there are evaluation checkpoints that must be considered. To fulfil these requirements we are seeking your support and ask if you will spend a few minutes and respond to the following survey.

As part of the ongoing evaluation of the project, this survey will be repeated again later in the project.

We would really appreciate your responses on the role of the Project Pharmacist within CPCS to date.

Any queries about the survey/project, please contact:

Margaret Box
Project Manager
Calvary Health Care Bethlehem
476 Kooyong Road,
Caulfield South, Vic. 3162

Email: margaretb@bethlehem.org.au
Tel: 9595 3257
Internal to CHCB: Ext. 257

THIS SURVEY CLOSES AT 5PM 30th November 2009

PLEASE NOTE THAT WE REQUIRE A RESPONSE TO ALL QUESTIONS WITH AN ASTERISK*

WE APPRECIATE YOUR TIME IN PROVIDING US WITH AS MUCH INFORMATION AS POSSIBLE TO EVALUATE THE IMPACT OF THE ROLE OF THE PROJECT PHARMACIST WITHIN THE CPCS.

*1. Please provide your name, position and contact details so we can follow up with you if necessary (if external to CHCB staff, please provide company/organisation/practice name):

Name:
Company/Organisation/Practice:
Position:
Address:
Suburb:
Postcode:
Email Address:
Phone Number:

*2. Are you aware of the role of the Project Pharmacist within the CHCB CPCS?

☐ Yes
☐ No
*3. Do you think that having the Project Pharmacist within the CPCS has been helpful? Please indicate how helpful.

- Very helpful
- Not helpful
- Helpful
- Somewhat helpful
- Any comments?

*4. How many times during the past three months have you interacted with the Project Pharmacist for advice/assistance?

- Never
- 1-3
- 4-6
- 7-10
- 10+

5. If you did access the Project Pharmacist, what type of interaction you had: (please tick all applicable boxes)

- advice on what medications could be used
- advice on alternative medication/s
- information/clarification about medications
- assistance in decision-making when changing a medication

Please provide information on any other aspects of medication management where you accessed the Project Pharmacist:

*6. If you find the Project Pharmacist role is helpful within CPCS, could you now consider whether it has: (Please tick all applicable boxes)

- improved your knowledge of the different medications used in palliative care
- improved your knowledge of medication issues for palliative care patients
- changed your practice with sourcing and providing information to patients/families
- Any other comments:
7. Since commencement of the Project Pharmacist in the CPCS, do you consider you are:
- more likely to discuss patients with potential medication issues with the Project Pharmacist
- unlikely to discuss patients with potential medication issues with the Project Pharmacist
- unlikely to discuss, please comment:

8. Prior to commencement of the Project Pharmacist, how did you obtain information about medication: (Please tick all applicable boxes)
- CHCB pharmacist
- Community pharmacist
- found it myself
- Other (please specify)

9. Do you need clarification of the role of the Project Pharmacist in the CPCS and how it may assist you with your patients?
- Yes
- No

10. If you would like clarification of the role, would you like:
- the Project Manager to contact you
- the Project Pharmacist to contact you

If yes, please provide the most convenient time/days for you to be contacted:

11. Do you think it will be helpful to continue the Project Pharmacist role within the CPCS?
- Yes
- No
- Don't know

12. Do you have any comments on how the role of the Project Pharmacist might be more beneficial to patients/carers or to your role in their care?
Results of the Impact of the Role of the Pharmacist

How many times during the past three months have you interacted with the Project Pharmacist for advice/assistance?

- Never: 10
- 1-3: 2
- 4-6: 3
- 7-10: 2
- 10+: 1

If you did access the Project Pharmacist, what type of interaction you had: (please tick all applicable boxes)

- Advice on what medications could be used: 72.7%
- Advice on alternative medication(s): 62.2%
- Information/clarification about medications: 94.7%
- Assistance in decision making when changing a medication: 47.4%
If you find the Project Pharmacist role is helpful within CPCS, could you now consider whether it has: (Please tick all applicable boxes)

- improved your knowledge of the different medications used in palliative care (95.0%)
- improved your knowledge of medication issues for palliative care patients (50.0%)
- changed your practice with sourcing and providing information to patients (20.0%)
- Any other comments: (5.0%)

Since commencement of the Project Pharmacist in the CPCS, do you consider you are:

- more likely to discuss patients with potential medication issues with the Project Pharmacist (95.0%)
- unlikely to discuss patients with potential medication issues with the Project Pharmacist (5.0%)
- If unlikely to discuss, please comment.
Emergency Medications Survey

1. Ordering and Problems related to Emergency Medications

As part of the Pharmacy Project in CPCS, we are trying to ascertain the pattern for ordering of emergency medications and any problems that may be encountered in doing so.

[You will see an asterix next to most of the questions. This means that you must provide a response if completing online - otherwise the survey will keep coming back to the question.]

If you are not completing this survey online, please assist us by providing a response to these questions anyway.]

Please assist us with a speedy response to this survey - we appreciate your time.

Any questions can be directed to:
Sandy Scholes
Project Pharmacist
sandy@bethlehem.org.au
Ext. 192

1. Please provide your name, extension number and email.

<table>
<thead>
<tr>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email Address:</td>
</tr>
<tr>
<td>Phone Number:</td>
</tr>
</tbody>
</table>

* 2. At what time do you request emergency medications from the general practitioner?

- [ ] As soon as possible after admission to the community service
- [ ] After the team meeting
- [ ] Other (please specify)

* 3. What emergency medications do you usually request?

- [ ] Morphine
- [ ] Metoclopramide
- [ ] Midazolam
- [ ] Clonazepam oral drops
- [ ] None

Other (please specify)

* 4. What aspects of the patients medical history influences your choice for emergency medications? Please list.


5. Do you consult anyone prior to requesting emergency medications?
   - Yes
   - No
   If yes, who?

6. How do you usually request emergency medications?
   - Telephone GP
   - Fax GP
   - Other (please specify)
   Other comments

7. How long do you estimate that it takes to organize emergency medications (discussion, telephone call, fax, etc.)?
   - Less than 30 minutes
   - Between 30 to 60 minutes
   - Greater than 60 minutes
   Other comments

8. What problems do you encounter with organizing emergency medications?
   - No GP
   - GP not receptive to writing prescriptions/orders
   - Patient/carer not receptive to having emergency medications
   - Cost an issue
   - Access as issue eg SAS medications, less common medications
   - Incorrect formulations eg midazolam 5mg/5mL
   - No problems encountered
   Other (please specify)

9. Do you have any other comments regarding ordering or problems with emergency medications?
Results of survey – audit of emergency medications:

What emergency medications do you usually request?

- Morphine: 42.9%
- Metoclopramide: 78.6%
- Midazolam: 100.0%
- Clonazepam oral drops: 100.0%

What problems do you encounter with organizing emergency medications?

- No GP
- GP not receptive to writing prescriptions/orders
- Patient/carer not receptive to having emergency medications
- Cost an issue
- Access an issue e.g. SAS medications, less common medications
- Incorrect formulations e.g. midazolam 5mg/5mL
- No problems encountered
APPENDIX 21: MASTERS STUDENT PLACEMENT

PHRM8010 Placement Activities

Students undertaking clinical placements are expected to participate in a range of the day-to-day clinical activities of the preceptor. These may include (but are not limited to):

- Observe the pharmacist’s ward round
- Participate in patient interviews and counselling
- Attend medical ward rounds and team meetings
- Observe medical (diagnostic and/or interventional) procedures
- Answer drug information questions
- Assist provision of in-service teaching to allied health care professionals
- Attend continuing education and research forums (e.g. seminars, Grand Rounds, Journal Clubs, departmental clinical meetings)
- Assist or observe the pharmacist’s research activities
- Participate in health promotion activities (e.g. weight loss, blood pressure readings, BSL monitoring)
- Participate in activities in community such as practising with other health care providers (e.g. naturopath, baby health nurse, asthma educator, diabetic educator, blue nurse, dietician).

At the start of the placement, the preceptor and student should identify any specific learning objectives for the placement and decide on how these will be addressed during the time allocated. The focus should be on the most common clinical presentations and problems seen in the clinical area. The structure of the placement, and how guidance, feedback and support are provided to the student during their placement will vary depending on the clinical area and the responsibilities of the preceptor. The following placement plan is provided as an example.

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orient student</td>
<td>Medical ward round</td>
<td>Pharmacist round</td>
<td>Attend pharmacy</td>
<td>Pharmacist round</td>
</tr>
<tr>
<td>and discuss specific</td>
<td>Pharmacist</td>
<td>Grand rounds/</td>
<td>inservice</td>
<td>Conduct mini-</td>
</tr>
<tr>
<td>objectives</td>
<td>follow-up</td>
<td>Seminar</td>
<td>Pharmacist</td>
<td>CEX</td>
</tr>
<tr>
<td>Make plan for week</td>
<td>Private study</td>
<td>Collect cases</td>
<td>round</td>
<td>Private study</td>
</tr>
<tr>
<td>Pharmacist rounds</td>
<td>Counselling/</td>
<td></td>
<td>Counselling</td>
<td>Question time</td>
</tr>
<tr>
<td>Private study /</td>
<td>Patient discussion</td>
<td></td>
<td>Collect cases</td>
<td></td>
</tr>
<tr>
<td>Review literature</td>
<td>Question / discussion</td>
<td></td>
<td>Question / time</td>
<td></td>
</tr>
</tbody>
</table>
PHRM8010 Assessment relating to clinical placements

Pharmaceutical Care Handbook

The objective of the Pharmaceutical Care Handbook is to produce a document that could be used as a guide for a new pharmacist working in that particular clinical area. It should present a short overview of the therapeutic area, which explores the key features of the disease area as well as the evidence (or lack thereof) for the various pharmacotherapies. A number of cases must be described and discussed to illustrate the key components of the therapeutic area, identifying pharmaceutical care issues for each case, the evidence and its limitations for the individual patient & the role of the pharmacist. It is essential that the student is able to link the case with the evidence and pharmaceutical care.

The Pharmaceutical Care Handbook must contain a minimum of 5 and a maximum of 10 clinical cases. The Pharmaceutical Care Handbook should not be longer than 20 pages, excluding references. The University will organise marking the Handbook.

Teaching Presentation

A case presentation of 30 minutes (with 10 minute question time) must be presented during the semester for one of the student's placements. If the presentation goes over time, marks will be deducted for organisation and the ability to answer questions may also be compromised. This presentation should include evidence based management of a chosen therapeutic area, illustrated by one or more cases, and should explore pharmaceutical care issues.

The teaching presentation is usually conducted at the site of the clinical placement on an agreed date after the placement. Typically the presentation will be delivered to pharmacists. Two senior pharmacists usually assess this presentation; typically, one of the assessors will be linked with the University.
APPENDIX 22: INTERPROFESSIONAL LEARNING

The Pharmacist as part of the Community Palliative Care Service Team
Calvary Health Care Bethlehem (CHCB) Community Palliative Care Service (CPCS) includes the following disciplines:

- Nursing
- Medical
- Physiotherapy
- Occupational Therapy
- Musical Therapy
- Social Work
- Pastoral Care
- Bereavement

The Nursing staff generally make initial contact with the patient/carer, admitting them to the service, assessing their needs, making appropriate referrals to other members within the team, and providing ongoing contact, usually on a weekly or two weekly basis. The relationship developed between the nurse and the patient and carer is imperative to acceptance of the CPCS team and subsequent patient care.

The CHCB CPCS has day to day access to Medical staff, including a Palliative Care Consultant, Senior Medical Officer and Registrar. The medical staff is able to provide advice to the other members of the team and can also undertake home visits for complex patients. The medical staff liaises with the patient’s General Practitioner and is also available to community health professionals for advice.

The Physiotherapist provides assistance to patients to maintain mobility and physical function to optimize quality of life and minimize carer burden. There are six main areas that are addressed by physiotherapy. Overall the input is less intense than that for other areas of physiotherapy work but this does depend very much on the patient’s wishes. There is a greater concentration on quality of life and what impact any intervention may have on that.

- Mobility covers a wide area and includes mobility every situation. In bed, transfers, indoor and outdoor. Concentration is on the provision of equipment, maintenance of ability, safety of patient and carer and training of the carer in the best ways to assist.
- Exercise does not play such a major role as in other areas of physiotherapy, but exercise is useful post injury, radiotherapy and chemotherapy, in fatiguing management and to assist in the maintenance of mobility.
- With breathlessness, the emphasis is on the teaching of strategies and provision of aids to assist with its control and to assist in the prevention of a feeling of helplessness and panic in the patient and carer.
- Education of the patient and carer and the provision of aids to reduce the likelihood of pressure areas are done in conjunction with the occupational therapist and nursing staff.
- Lymphoedema Management Treatment usually focuses on comfort and simple management but daily visits for complex therapy can be arranged. This involves massage, bandaging and exercise plus prescription of pressure garments.
- Fatigue Management is a very gentle exercise program that can assist with the management of fatigue.

The Occupational Therapist provides assistance to patients to function and live as independently as possible, through the provision of home modifications and equipment. This is especially important as the patient approaches the terminal care phase, and may require equipment such as a hospital bed so that the patient can be safely cared for at home.

The Social Worker provides assistance with resourcing care packages and financial entitlements, information and referral to community services, advocacy, arranging respite care, and, counselling and support for the patient and their family.

Pastoral Care provides spiritual and emotional support and understanding to those for whom we care, for their families and friends, always respecting their beliefs and wishes.
**Bereavement** counselling is offered as a continuum of care to bereaved families of patients that have been part of the palliative program. Debriefing as a team is provided to the palliative care team on a monthly basis. Individual staff support is available on request.

**Music Therapists** use music to address the perceived needs of the patients in order to:

- Encouraging emotional expression
- Stimulate creativity
- Encouraging spiritual expression
- Reducing patients’ perceptions of pain and other distressing symptoms, such as nausea, insomnia, anxiety etc.
- Reducing agitated and restless behaviours including wandering
- Improving cooperation and attentiveness
- Improving self-esteem
- Reducing isolation and withdrawal
- Address cognitive, sensory, communicative and physical deficits

**Techniques used in music therapy can include:**

- Live performance of music
- Musically assisted counselling
- Musically facilitated life review
- Song writing and/or word substitution
- Music and imagery
- Facilitating patients playing instruments
- improvisation
- Listening to music
- Music sensory activities
- Pharmacist interaction with CPCS

Interprofessional team meetings have been routinely attended twice weekly throughout the project. Patients admitted to the service in the previous week are presented to the team, as well as discussion of any other patients who may require team input. Referrals are made to team members as required.

Home visits with other health professionals were often undertaken by the Project Pharmacist. The reasons for a joint visit have included:

- Support for the nurse at the patient’s admission to the service if the patient had multiple medications, no current medication plan, or complex symptoms
- If a visit by another health professional had already been organized to minimize the impact of multiple visits on the patient/carer
- With a new staff member to help with familiarization to a different work environment, eg registrar who had not worked in the community before.
- With the community doctors to review the medication regime of in a complex case.

The joint home visits also allowed the pharmacist to observe the skills and abilities of other health professionals, eg, a bereavement visit with the Social Worker.

Visits with the Senior Medical Officer were important from a learning perspective in the area of managing symptoms in the community. Of great value was observing the communication style when discussing issues such as end of life care. “Remembering lives” is a regular activity facilitated by the bereavement counsellor which team members are encouraged to attend. We are able to reflect on patients who have died in the previous month, in particular remembering those who made an impact on us in some way. Personally, I have found this to be a component of self-care that I, as a pharmacist, have not been exposed to in the past in a formal sense.

Debriefing also occurs on a daily basis, as ongoing support is provided by fellow health professionals. Being co-located with the team allows this to happen. This needs to be considered when considering sustainability options for inclusion of a pharmacist working in palliative care, as the emotional support and debriefing is imperative.
In summary, working as part of the CPCS team has increased my clinical knowledge in the context of community care, but more importantly, consolidated my counselling skills to deal with the difficult questions asked by patients/carers in the palliative care setting.

**Definition of Interprofessional Learning (IPL)**

Interprofessional Learning (IPL).

*IPL occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of health care for patients and clients. IPL philosophy supports health professionals working collaboratively in a health care setting, through a purposeful interaction with service users and carers, to produce quality patient centred care.*

**Interprofessional Education (IPE)**

IPE is used when referring to formal postgraduate and undergraduate IPL. The Centre for the Advancement of Interprofessional Education (CAIPE, UK) uses the term IPE to include all such learning in academic and work based settings before and after qualification. IPE in this context is used to refer to professional development and tertiary based systems and processes of education.

**Interprofessional Practice (IPP) or Interprofessional Working (IPW)**

There is an emphasis of IPP and IPW within the health service workplace as the terms directly relate to the clinical delivery of health care. IPP and IPW occurs when all members of the health service delivery team participate in the team activities and rely on one another to accomplish common goals and improve health care delivery, thus improving the patients experience and quality of care. Principles of IPP and IPW are intended to deliver positive interdependence between health professionals and support staff who also contribute to patient care.

**Collaboration.**

Collaboration is the joint intellectual and practical effort of health professionals working together. Collaboration is the process of communication and decision making to enable the separate and shared knowledge and skills of health care providers to positively influence the organisation and outcomes for patient care.
## Appendix 23: Conferences & Seminars

Papers & Posters presented by Project Pharmacist &/or Project Manager

<table>
<thead>
<tr>
<th>Name of Conference/Seminar</th>
<th>Conference Name/Location</th>
<th>Paper/Poster Presentation - Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carex ’09</td>
<td>Palliative care workshop</td>
<td>Presentation: Providing quality end of life symptom management</td>
</tr>
<tr>
<td>Conpharm ’09</td>
<td></td>
<td>Presentation: Pharmacist in Community Palliative Care Multidisciplinary Teams Project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Facilitator: Palliative Care Workshop</td>
</tr>
<tr>
<td>Palliative CareAustralia – September 2009</td>
<td>Together! Cultural connections for quality end of life care</td>
<td>Poster: Pharmacist in Community Palliative Care Multidisciplinary Teams Project</td>
</tr>
<tr>
<td>Centre for Culture, Ethnicity &amp; Health – June 2010</td>
<td>Diversity in Health - Melbourne 2010:</td>
<td>Presentation: Different people, different needs – same context!</td>
</tr>
<tr>
<td>Palliative Care Victoria – July 2010</td>
<td>Palliative Care - Extending The Reach</td>
<td>Presentation: Pharmacist in Community Palliative Care Multidisciplinary Teams Project (waiting on advice as to success of abstract submission)</td>
</tr>
<tr>
<td>Pharmaceutical Society of Australia (PSA)</td>
<td>Frankston –12 April 2010</td>
<td>Pain Management – Common Symptoms</td>
</tr>
</tbody>
</table>
### Education Sessions provided by Project Pharmacist

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Location</th>
<th>Name of Presentation/Education Session</th>
</tr>
</thead>
</table>
| Gippsland PC Consortia    | Lakes Entrance            | - Case presentations  
- Motor Neurone Disease case study  
- Symptom management in a patient cancer of the tongue and mouth  
- Symptom management in a patient with non small cell lung cancer and a history of substance abuse |
|                           | Sale                      | Case presentations – symptom management in a patient with gastric cancer                                                                                        |
| CHCB                      | Bethlehem                 | Medications used in the treatment of nausea and vomiting  
Medications used in the treatment of constipation  
Enteral feeding tubes and medication administration  
Treatment of neuropathic pain  
Cautions with renal impairment, liver impairment and the elderly with palliative care drugs |
| South City GP Services    | Melbourne – 20th May 2010 | The Essential Medications in Palliative Care                                                                                                                                                                                              |
| Loddon Mallee PC Consortia | Bendigo – 8th June 2010   | Medications used in the treatment of nausea and vomiting  
Pharmacological management of cancer pain and opioid switching                                                                                                                                                                          |
| N.B. This session was cancelled due to unforeseen changes in Bendigo. |                           |                                                                                                                                                                                                                                          |
| South East Palliative Care | 2nd June 2010             | Medications used in the treatment of nausea and vomiting  
Medications used in the treatment of constipation                                                                                                                                                                                        |
| Peninsula Health Service  | 9th June 2010             | Pharmacological management of cancer pain and opioid switching                                                                                                                                                                           |
Appendix 23.1: Posters - NMS Conference: May 2010

Pharmacist in Community Palliative Care Multidisciplinary Teams Project
Schools of Pharmacy & Medicine, University of Melbourne, Parkville, Victoria.

The "Developing the role of a pharmacist in community palliative care multidisciplinary teams to improve outcomes at home initiative" was funded under the Commonwealth's Palliative Care for people at home initiative.

Objective
To develop the role of the pharmacist as a member of the multidisciplinary Community Palliative Care Service (CPCS).

Method
One role of the pharmacist is to screen and review patients' medication regimens after their admission to the CPCS, taking into account information from the referral and discussion at the team meetings. Review of the medication regime can result in the following:

- Change of dosage form e.g. for a patient with dysphagia
- Recognition of potential drug interactions e.g. patient on warfarin and bevacizumab
- Recommendations for emergency or 'just in case' medications e.g. avoid morphine in a patient with renal impairment

Home visits can also be undertaken when required, in the patient's care setting, to address issues such as:

- Education on and provision of information to patient/carer, including patient medication information
- Ongoing access to palliative care medications e.g. medications not available on the Pharmaceutical Benefits Scheme
- Provision of an up-to-date medication list to the patient/carer, and for use by the CPCS team
- Teaching patient/carer how to use a dose administration aid
- Provision of drug information e.g. syringe driver compatibilities, patient’s chemotherapy
- Provision of education sessions

Results
Palliative care patients are one of five groups identified in a recent report on the Commonwealth Government funded Home Medicines Review (HMR) Program, as at greatest risk of medication misadventure. The current HMR referral model could be inadequate due to the unpredictable and short time period which may occur between the terminal and dying phase.

The pharmacist as a member of the team is able to respond to a request for a medication review in a timely manner, as well as being able to follow-up with home visits or contact by phone.

The HMR model is currently being reviewed, and changes to the referral process from July 1st 2010 may be beneficial to the these patients at greatest risk of medication misadventure. Consequently, the care pathways may incorporate a pharmacist as part of the community palliative care team, as well as the outreach pharmacist and the accredited pharmacist, in order to facilitate the review of a patient's medication in their home.

An audit on emergency medications is also being undertaken, and encompasses issues such as appropriateness, timeliness and legal issues. Our findings will influence an essential component of palliative care community service delivery.

Conclusions and Recommendations
Although the project is still in progress, there appears to be positive outcomes for the CPCS team members and the patients/carers regarding their knowledge and management of palliative care medicines, which in turn has decreased medication misadventure and improved service delivery.

A resource/tool kit will be developed which can be adapted for use in other community palliative care services.

The inclusion of a pharmacist in the palliative care team as the medicines expert is recommended.

References

For further information contact:
Sandy Scholes - Project Pharmacist
sandy@scholes.org.au
Tel: +61390630323

Margaret Box - Project Manager
margaret@bethlehem.org.au
Tel: +61 390632387

This project is an initiative of the Department of Human Services and funded by the Administrative Commission, Department of Health and Ageing, under the National Palliative Care Program.
Pharmacist in Community Palliative Care Multidisciplinary Teams Project

Schulze S, Box M, Lewich R, Poons M, Thompson S, Hogan B, Chen K, Fischer J, Hassaluy S
Calvary Health Care Bethlehem, Melbournes, Victoria, Monash University, Parkville, Victoria

INTRODUCTION
The project is funded under Palliative care for people at home initiative to develop the role of a pharmacist in community palliative care multidisciplinary teams to improve outcomes for people at home and their carers (community pharmacy project).

It builds on work previously undertaken at Calvary Health Care Bethlehem (CHCB) exploring the role of a specialist palliative care pharmacist in the community (1).

THE AIM
The aim is to develop a cost effective model of care that supports the role of the pharmacist as a member of the community palliative care multidisciplinary team by:

- reviewing and monitoring patients’ medication regimens to improve symptom management
- developing protocols to support and integrate the government-funded Medication Management Reviews into the model of care
- providing consultative resources and education to community palliative care providers, as well community and accredited pharmacists
- developing patient information sheets
- sourcing education and training material for pharmacists
- developing or identifying patient held medication records to improve communication of patients’ medication regimens

THE APPROACH
A communication strategy was implemented with key stakeholders including:

- CHCB community palliative care team and hospital staff
- peak pharmacy organizations
- local divisions of general practice
- palliative care organizations

A literature review was undertaken, focusing on the areas of medication management, pharmacist interventions in palliative care, prescribing in palliative care and medicine information for patients.

Tools were developed or adapted for screening community service patients, reporting the patient’s medication management issues and recording interventions relative to the palliative care setting.

Patient/carer information sheets about medications used in palliative care are being developed CHCB community palliative care staff and volunteers have assisted in this process.

A project is currently being undertaken at Curtin University, WA focusing on the role of the community pharmacist in palliative care. The project has the following objectives:

- to identify the palliative care needs of palliative care pharmacy clients and their carers and their families
- to develop an educational package for community pharmacists in order to provide enhanced care to palliative care patients
- to develop medication management reviews that incorporate palliative care
- the pharmacist is a reviewer of some of the education material.

Currently, the National Prescribing Service Medicines List is being utilised to record the patient’s medication, with the other avenues also being considered.

ACTIVITIES
- community team meetings
- provision of drug information to Community Staff
- screening of patients and review of their medication regime on admission to the service
- medication management services focusing on patients after discharge from hospital and other at risk patients

THE EVIDENCE
A recent report (2) on the Commonwealth Government funded Home Medicines Review (HMR) Program has identified that the following patients are at greatest risk of medication misadventure:

- certain patients in the period after hospital discharge
- indigenous consumers
- culturally and linguistically diverse consumers
- palliative care patients
- non-compliant or non-adherent consumers

It has also identified that the time line in the HMR process was unacceptable for the patient at risk of medication misadventure. This is an issue for the patient with palliative care needs, particularly after hospital discharge.

THE FUTURE
The proposed model of care will include communication strategies so that it can be sustainable and transferable to other community palliative care services. In particular, the involvement of community and accredited pharmacists in the area of palliative care is vital for patients and carers to have medication management services available to them in city, regional and remote locations.

Pharmacy in Community Palliative Care – Pathway for CHCB Staff

Patient admitted to CHCB

- HMP admitted prior to discharge from hospital
- HMP admitted prior to discharge and transfers patient from ward to hospital
- Patient visited at home within 7-10 days after discharge from hospital
- Patient visited at home within 7-10 days after discharge from hospital

Pharmacy in Community Palliative Care Project – Consultation Process

For further information contact:

Kandy Behrens, Project Pharmacist tel. 03 9327 7000
Margaret Bock, Project Manager tel. 03 9327 7000

This project is an initiative of the Department of Human Services and funded by the Australian Government, Department of Health and Ageing, under the National Palliative Care Program.
Appendix 23.1: Abstracts

PALLIATIVE CARE AUSTRALIA CONFERENCE: September 2009

Pharmacist in Community Palliative Care Multidisciplinary Teams Project

Scholes S, Box M. Calvary Health Care Bethlehem, Melbourne Victoria.

The project builds on work previously undertaken exploring the role of a specialist palliative care pharmacist in the community (1).

The aim is to develop a cost effective model of care that supports the role of the pharmacist as a member of the community palliative care multidisciplinary team by:

- reviewing and monitoring patients’ medication regimens to improve symptom management
- developing protocols to support and integrate the government funded Medication Management Reviews into the model of care,
- providing consultative resources and education to community palliative care providers, as well as community and accredited pharmacists
- developing patient information sheets,
- sourcing education and training material for pharmacists
- developing or identifying patient held medication records to improve communication of patients’ medication regimes

The proposed model of care will include communication strategies so that it is sustainable and transferable to other community palliative care services.

Preliminary results will be presented.


This project is an initiative of the Department of Human Services and funded by the Australian Government, Department of Health and Ageing, under the National Palliative Care Program.
CENTRE FOR CULTURE, ETHNICITY & HEALTH CONFERENCE: June 2010

Different people, different needs – same context!

Cultural diversity tends to claim the ‘moral high-ground’ when organising services. There is often much flurry of activity to ensure information is available in different languages; interpreters are available and staff trained in how to ‘deal’ with CALD patients/clients. Services can be tailored to meet the needs of individual groups, only to find that there are few of that particular group actually requiring a service. However, often it is not that a different service is required but a stronger recognition that different people have differing needs while requiring the same service within a setting and that simple adjustments are adequate for this to occur.

When a person is terminally ill and dying their cultural and language backgrounds can be a critical determinant in how they want, and need, to be treated; receive information and are heard. A limited capacity to comprehend or read English can lead to a diminished quality of service and an increased risk of e.g. medication misadventure. It is important in considering all the treatment/service issues that the impact of terminal illness and its social context are not ignored.

Migrants and refugees can have different needs because of their past experiences – experiences that come to the fore when coming in contact with authority figures – but the service/treatment they require is the same service/treatment. Having a sympathetic approach to service delivery for people from a variety of backgrounds and developing strategies for ascertaining their differing needs will lead to improved quality of care.

This paper will explore approaches to culturally appropriate palliative care and address some aspects of medication management for people from a CALD background.

Corresponding and presenting author:
Margaret Box,
Project Manager
Calvary Health Care Bethlehem
margaretb@bethlehem.org.au
PALLIATIVE CARE VICTORIA CONFERENCE: JULY 2010

Objective

To develop, pilot and evaluate the role of the pharmacist in the multidisciplinary Community Palliative Care Service (CPCS), through building effective partnerships and a sustainable care pathway informed by evidence-based practice.

Approach

Three-phase project:

- Literature review; development/evaluation of processes and pathways; development, implementation of education/communication strategies and evaluation framework.
- Implementation of care pathway; development of evidence-based patient medicine information
- Evaluation of key performance indicators.

In phase 2, the pharmacist screened/reviewed patient medication regimens upon admission to CPCS. Home visits were undertaken when required and provided:

- Education of, and information provision to, patient/carers.
- Information on access to palliative care medications
- Provision of an up-to-date medication list
- Training of patients/carers on use of dose administration aids

The pharmacist as a resource for the CPCS team, provided:

- Inservices on medications used in palliative care
- Advice on patients’ medication regimes
- Liaison with community pharmacists

Presenting authors:

Margaret Box: Former CEO of CIDA; Executive Director of Palliative Care Victoria, Project Manager with long experience of palliative care service system.

Sandy Scholes: Sandy has gained practical experience in palliative care at Peter MacCallum Cancer Centre and Calvary Health Care Bethlehem in Melbourne. In 2009/2010 she has undertaken a Victorian Department of Health project to develop the role of the pharmacist as a member of the community palliative care multidisciplinary team.
APPENDIX 23.2: EDUCATION

Session provided to Southcity GP Services – Melbourne – example of other sessions provided to CPCS

The Essential Medications in Palliative Care
Dr Liz Whyte
Sandy Scholes

How did we decide what is ESSENTIAL?

Little consensus!
• AFP… (very small sample size)
• WHO Essential Medicines List
• IAHPC

What makes the list?
• Morphine
• Haloperidol
• Clonazepam
• Midazolam
• Dexamethasone
BUT.. Issues

- PBS availability
- Access (eg: SAS)
- Cost.. For patient AND pharmacy!
- Lack of evidence

Practicalities:

- What’s in the doctor’s bag (PBS)?
  - ONLY injectables/Emergency use
- Morphine
- Haloperidol
- Clonazepam (But NO midazolam)
- Dexamethasone
- (Metoclopramide/promethazine/hyoscine BB)

Practicalities

- What’s stocked in local pharmacy?(WA doc.)
- MOST important.. “Just in case”
  - What’s in the HÔME...
  - PRN
  - Syringe driver

Common Symptoms Pain

- MOST patients INCLUDING those with non malignant diagnoses
- Many have MULTIPLE pain sites
- The basics:
  - Morphine plus… (other, co analgesics)
  - Remember non pharmacological/IDT
Pain relief

- By the clock
- By the mouth
- For the individual
- Attention to detail
- REVIEW

Morphine

- Opiate of choice due to familiarity and flexibility of routes of administration
  - Oral
  - SC
  - IV
  - Topical
  - Epidural
  - Intrathecal

Morphine

- Use in palliative care
  - Pain
  - Cough
  - Dyspnoea
- No ceiling dose
Morphine

• Metabolism mainly in liver to
  - Morphine -3-glucuronide (M3G) – approx 55%, little or no mu activity, neuroexcitatory effects
  - Morphine-6-glucuronide (M6G) – approx 15%, active

Morphine

• Accumulation in renal impairment
  - M3G – agitation and ? antagonism of analgesia
  - M6G – increased analgesia, sedation or respiratory effects

Morphine

• Alternatives?
  - Fentanyl
  - Hydromorphone
  - (Methadone)

Dyspnoea

• Morphine
• Dexamethasone (lymphangitis)
• Benzodiazepines…
• Non pharmacological… O2/OT/Physio/MT
• Other interventions… (RTX, pleural tap, stent etc)
Clonazepam

- Use in palliative care
  - **Dyspnoea**
    - 2 drops SL
  - Terminal restlessness
    - 2 to 5 drops SL
  - **Seizure**
    - 10 drops SL, if needed give 2 more doses at 10min intervals

Clonazepam

- **Oral drops – 1 drop = 0.1mg**
- Caution in respiratory disease, mild-moderate hepatic impairment, renal impairment, elderly

Other benzos

- See chart
- Which one?
- SL v PO
- Half life
- PBS v not. Cost
- Used already??

Benzodiazepine comparison

' = rapid onset, < hour after administration
AMH accessed 18/5/10

<table>
<thead>
<tr>
<th>Length of action</th>
<th>Half life</th>
<th>Drug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very short</td>
<td>&lt; 6 hours</td>
<td>midazolam²</td>
</tr>
<tr>
<td>Short</td>
<td>6 – 12 hours</td>
<td>aprazolam¹, oxazepam, temazepam¹</td>
</tr>
<tr>
<td>Medium</td>
<td>12 – 24 hours</td>
<td>lorazepam</td>
</tr>
<tr>
<td>Long</td>
<td>&gt; 24 hours</td>
<td>clonazepam, diazepam¹, nitrazepam</td>
</tr>
</tbody>
</table>
Nausea and Vomiting

- One size does not fit all!
- Often multiple causes
- May need to use more than 1 anti emetic
- (Levomepromazine/cyclizine/olanzapine)
  COST Access etc

Metoclopramide

- Use in palliative care
  - Nausea & vomiting
    - 10mg to 20mg od/sc qid or 40 to 80mg CSCI over 24 hours
  - Prokinetic
    - 10mg qid (ac and n)

Metoclopramide

- Increase risk of EPS in renal impairment and the elderly
- Acute dystonic reactions can occur after one dose, particularly in the young (esp females) ... benztropine

Metoclopramide

- Avoid in Parkinson’s disease and Restless Legs Syndrome ... domperidone
- Concurrent prescription with antimuscarinics will block prokinetic effect
Haloperidol

- Use in palliative care
  - **Nausea & vomiting**
    - 0.5 to 2.5mg o/SC bd to 7.5mg daily
  - Delirium
    - 0.5 to 1mg o/SC titrating as needed to a max daily dose of 10mg

Haloperidol

- Extrapyramidal reactions generally less in palliative care due to low doses used … also reported to be less with parenteral use
- Caution in Parkinson’s disease (DA receptors)

Dexamethasone

- Nausea & vomiting
  - 4mg o/SC mane
- Anorexia
  - 2 to 4mg o mane
- Bowel obstruction
  - 4 to 8mg o/SC mane

Dexamethasone

- Pain associated with tumour-related oedema eg
  - Liver capsule distention
  - Raised intracranial pressure
  - 8 to 16mg o/SC daily
## Haloperidol

- Use in palliative care
  - Nausea & vomiting
    - 0.5 to 2.5mg o/SC bd to 7.5mg daily
  - Delirium
    - 0.5 to 1mg o/SC titrating as needed to a max daily dose of 10mg

## Terminal Restlessness

- End of Life delirium?
- How does it differ?
- Red flags.. Expect trouble!
- Midazolam v clonazepam
  (Phenobarbitone)

## Clonazepam

- Use in palliative care
  - Dympnoea
    - 2 drops SL
  - Terminal restlessness
    - 2 to 5 drops SL
  - Seizure
    - 10 drops SL, if needed give 2 more doses at 10min intervals

## Midazolam

- Anxiety (esp with dyspnoea)
  - 5mg CSCI over 24 hours
- Seizure
  - 5 to 10mg SC/buccal repeat after 10 mins; 30-60mg CSCI
- Terminal restlessness
  - 5 to 10mg SC every 1 to 3 hours prn, review after 2 doses if not relieved; 30-60mg CSCI
### Midazolam

- Caution in chronic respiratory disease, mild-moderate hepatic impairment, renal impairment, cardiac impairment, elderly
- Paradoxical agitation

### Resources

- Good P et al. What are the essential medications in palliative care?AFP;35:261-265  
  [http://download.journals.elsevierhealth.com/pdfs/journals/0885-3924/PII/S088539240700108X.pdf](http://download.journals.elsevierhealth.com/pdfs/journals/0885-3924/PII/S088539240700108X.pdf)
Evaluation of Education Session: Southcity GP Services

It is clear that GPs, community and accredited pharmacists and nurses were keen to learn about essential medications in palliative care from experts practising in this area of patient care. The activity was provided principally as part of the division’s Home Medicines Review program. The session prompted some lively discussion and excellent interaction between the GPs, the allied health professionals and the presenters.
### Questions:

<table>
<thead>
<tr>
<th>Doctor</th>
<th>Nurse</th>
<th>Pharmacist</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Introductory Session x 1</td>
<td>Case Review x 2</td>
<td>Form not completed.</td>
</tr>
<tr>
<td>Case Review Education Session x 1</td>
<td>Education Session x 2</td>
<td></td>
</tr>
</tbody>
</table>

Overall were expectations of the Specialist Visit met?  
Yes x 5  
Yes x 6  
Yes x 3

Would you recommend this to other GPs and/or Palliative Care Service?  
Yes x 6  
Yes x 6  
Yes x 3

What did you find most useful about this Specialist Visit?  
- Use of different medications in palliative patient  
- Awareness of causes for delirium  
- Discussion re drugs in palliative care  
- Visiting palliative care aspects (difficult patient case) and re-visitings treatments  
- Discussion re (1) delirium – hyperuricaemia, hyponatraemia etc. – do a blood test (2) Biphosphonates for bone pain, (3) think Rx for Neuropathic pain eg methadone.  
- Simplification of Rx regimes.  
- To be aware of neuropathic pain.  
- Recognising delirium and reversible causes.  
- Palliative care rare beasts here. Excellent wide ranging discussion about palliation.  
- Practical assistance and valuable resources.  
- Use of current opioids and drugs in palliative care  
- Advice on palliative meds is available. Opioids not the only option

Please comment on how this presentation and/or visit could be more relevant for you.  
Less talking more questions  
Excellent  
Very relevant. Excellent suggestions and ideas. Reassuring so many options now available.  
All information & relevant  
Covered most of the relevant issues. Sensory issues always difficult to deal with

What advice or strategies would you suggest to encourage GPs and/or services to participate in the future?  
Breakfast was good  
Similar presentation again within six months – every 5x months  
Thank you. Come again anytime.  
Promote the relevance, simplicity of implementing.

What do you think will be the result/impact of your participation in this program?  
- 3x said they would be utilising the phone consult service  
- 3x Did not say they would attend further education and professional development sessions  
- 2x would attending palliative care case reviews  
- 2x said it would improve communication and referral pathways with Palliative care services  
- 0x said they would participate with palliative care services to identify ways to improve service delivery  
- 1x would use the clinical attachment option  
- 1x said they would be utilising the phone consult service  
- 2x said they would attend further education and professional development sessions  
- 0x would attending palliative care case reviews  
- 2x said it would improve communication and referral pathways with Palliative care services  
- 1x said they would participate with palliative care service to identify ways to improve service delivery  
- 0x would use the clinical attachment option

### Additional Comments

- All good  
- Very supportive visit  
- Thank you
Appendix 24: Sustainability and Duplication

Throughout the project, sustainability and capacity for duplication were considered. Some of suggestions below could be included in both policy and finance discussion by both the Federal and State Government Departments of Health. Some aspects could only be sustained if there was funding for the role of a pharmacist within either community palliative care services or divisions/networks of GPs. Other aspects of sustainability can be achieved through improved or structured communication processes between palliative care, hospital, general practices and community/accredited pharmacists.

Sustainability

1. A specialist palliative care pharmacist available in each palliative care team
2. A specialist palliative care pharmacist available in each palliative care consortium
3. Medication review undertaken by outreach pharmacist
   Metropolitan health services with specialist palliative care inpatients beds to have access to outreach pharmacists with palliative care expertise
4. Medication review undertaken by accredited pharmacist
   Metropolitan palliative care providers to have access to accredited pharmacists with palliative care expertise
   Rural palliative care providers to have access to accredited pharmacists with palliative care expertise

1. A specialist palliative care pharmacist available in each palliative care team [eg current project]
   • Funding required from Department of Health
   • Attend team meetings
   • Conduct medication screening
   • Conduct home medication reviews
     o Reports sent to general practitioner and community pharmacist
     o Able to undertake multiple visits if required
     o Able to follow up by phone if required
   • Available for medication advice to community palliative care team
   • Available to community health professionals for advice eg general practitioner, community pharmacist, accredited pharmacist
   • Education sessions to community staff

Community Palliative Care Provider with Palliative Medicine Specialist

   • Frequent liaison with Palliative Medicine Specialist
     ▪ Post medication review discussions when pharmacist has undertaken review independently for advice which can be included in report to the patient’s general practitioner.
     ▪ Joint community visits of Palliative Medicine Specialist and pharmacist, particularly when complex issues have been identified.
     ▪ Follow up by pharmacist of patient/carers adherence to newly implemented medications/changes subsequent to a Palliative Medicine Specialist visit.

Community Palliative Care Provider without Palliative Medicine Specialist

   • Would require mechanism for liaison with Palliative Medicine Specialist to discuss complex issues
2. **A specialist palliative care pharmacist available in each palliative care consortium**

- Funding required from Department of Health
- Available to community palliative care teams for advice
- Available to community health professionals for advice eg general practitioner, community pharmacist, accredited pharmacist
- Able to attend community palliative care team meetings
- Able to provide education sessions to community palliative care staff

3. **Medication review undertaken by outreach pharmacist**

Metropolitan health services with specialist palliative care inpatients beds to have access to outreach pharmacists with palliative care expertise

- Funding required from Department of Health
- Requires referral from hospital staff to outreach pharmacist
- Timely – within 7 to 10 days of discharge
- Requires education of outreach pharmacists in palliative care
- Currently outreach services are available through Hospitals Admission At Risk Program – Chronic Disease Management (HARP-CDM) at
  - Austin Health
  - Bayside Health
  - Melbourne Health
  - Northern Health (C-COMS)
  - Peninsula Health
  - Southern Health
  - St Vincents Health
  - Western Health

- Would be able to liaise directly with the Palliative Medicine Specialists and palliative care services provide at these sites
  - Austin Health - specialist palliative beds
  - Bayside Health - consultative palliative service
  - Melbourne Health - consultative palliative service
  - Northern Health - specialist palliative beds
  - Peninsula Health - specialist palliative beds
  - Southern Health - specialist palliative beds
  - St Vincents Health - specialist palliative beds
  - Western Health - specialist palliative beds

- Outreach model currently only in metropolitan health care services
- Outreach model not available for aged care patients

4. **Medication review undertaken by accredited pharmacist**

Metropolitan palliative care providers to have access to accredited pharmacists with palliative care expertise

Rural palliative care providers to have access to accredited pharmacists with palliative care expertise
o Funding exists under Medicare funding

o Requires use Home Medicine Review (HMR) referral process; currently general practitioner → community pharmacist → accredited pharmacist; not timely (refer to Campbell report)

o Limited/no followup by accredited pharmacist as not funded

o Availability of second HMR by general practitioner request ie another referral

o Requires education of accredited pharmacists in palliative care

o Access to Palliative Medicine Specialist limited/not available

**Specialist Palliative Care Beds in Victoria**

252 beds (57 rural, 199 metro) across Victoria

5,180 inpatient separations in 2007/08

**Metropolitan Health Care Services/Hospitals with Specialist Palliative Care Beds**

<table>
<thead>
<tr>
<th>Region</th>
<th>Name</th>
<th>Suburb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern</td>
<td>St Vincent’s Hospital - Caritas Christi Hospice</td>
<td>KEW</td>
</tr>
<tr>
<td></td>
<td>St Vincent’s Hospital - Caritas Christi Hospice</td>
<td>FITZROY</td>
</tr>
<tr>
<td></td>
<td>Wantirna Health</td>
<td>WANTIRNA</td>
</tr>
<tr>
<td>Northern</td>
<td>Austin and Repatriation Medical Centre</td>
<td>HEIDELBERG</td>
</tr>
<tr>
<td></td>
<td>Broadmeadows Health Service</td>
<td>BROADMEADOWS</td>
</tr>
<tr>
<td>Southern</td>
<td>Monash Medical Centre - McCulloch House</td>
<td>CLAYTON</td>
</tr>
<tr>
<td></td>
<td>Peninsula Health – Tattersalls Palliative Care Unit</td>
<td>FRANKSTON</td>
</tr>
<tr>
<td></td>
<td>Calvary Health Care Bethlehem</td>
<td>CAULFIELD</td>
</tr>
<tr>
<td>Western</td>
<td>Mercy Werribee Hospital</td>
<td>WERRIBEE</td>
</tr>
<tr>
<td></td>
<td>Sunshine Hospital</td>
<td>ST ALBANS</td>
</tr>
</tbody>
</table>
## Rural Health Care Services/Hospitals with Specialist Palliative Care Beds

<table>
<thead>
<tr>
<th>Region</th>
<th>Name</th>
<th>Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barwon South Western</td>
<td>Colac Area Health</td>
<td>COLAC</td>
</tr>
<tr>
<td></td>
<td>McKellar Centre</td>
<td>GEELONG</td>
</tr>
<tr>
<td></td>
<td>Portland and District Hospital</td>
<td>PORTLAND</td>
</tr>
<tr>
<td></td>
<td>South West Health Care</td>
<td>WARRNAMBOOL</td>
</tr>
<tr>
<td></td>
<td>Western District Health Service</td>
<td>HAMILTON</td>
</tr>
<tr>
<td>Gippsland</td>
<td>Bairnsdale Regional Health Service</td>
<td>BAIRNSDALE</td>
</tr>
<tr>
<td></td>
<td>Central Gippsland Health Service</td>
<td>SALE</td>
</tr>
<tr>
<td></td>
<td>Gippsland Southern Health Service</td>
<td>LEONGATHA</td>
</tr>
<tr>
<td></td>
<td>Latrobe Regional Hospital</td>
<td>TRARALGON</td>
</tr>
<tr>
<td></td>
<td>West Gippsland Health Care Group</td>
<td>WARRAGUL</td>
</tr>
<tr>
<td></td>
<td>Wonthaggi and District Hospital</td>
<td>WORTHAGGI</td>
</tr>
<tr>
<td>Grampians</td>
<td>East Grampians Health Service</td>
<td>ARARAT</td>
</tr>
<tr>
<td></td>
<td>Ballarat Health Services</td>
<td>BALLARAT</td>
</tr>
<tr>
<td></td>
<td>Wimmera Health Care Group</td>
<td>HORSHAM</td>
</tr>
<tr>
<td></td>
<td>Djerriwarrh Health Services</td>
<td>BACCHUS MARSH</td>
</tr>
<tr>
<td>Hume</td>
<td>Seymour District Memorial Hospital</td>
<td>SEYMOUR</td>
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<tr>
<td></td>
<td>Wangaratta District Base Hospital</td>
<td>WANGARATTA</td>
</tr>
<tr>
<td></td>
<td>Wodonga Regional Health Service</td>
<td>WODONGA</td>
</tr>
<tr>
<td></td>
<td>Goulburn Valley Health</td>
<td>SHEPPARTON</td>
</tr>
<tr>
<td>Loddon Mallee</td>
<td>Bendigo Health</td>
<td>BENDIGO</td>
</tr>
<tr>
<td></td>
<td>Mildura Base Hospital</td>
<td>MILDURA</td>
</tr>
</tbody>
</table>
Appendix 24.1 Outreach Pharmacy

Outreach Medication Review Service

In 2003, the Victorian Department of Health funded a number of medication-related projects to address issues of medication-related projects to address issues of medication misadventure amongst patients at risk in the community. The Hospital Admission Risk Program (HARP) objective was to identify patients in the community who were at risk of admission to hospital and provide services in the community with the aim of preventing admission. Ongoing funding was provided for the HARP-CDM (Chronic Disease Management) Program, which incorporates a medication management component.

The following Victorian hospitals currently offer an Outreach Medication Review Service;
- Austin Health
- Frankston Hospital
- Northern Hospital
- Royal Melbourne Hospital
- Southern Health
- St Vincents Health
- The Alfred
- Western Health (based at PivotWest Division of General Practice)

There is variability in how each hospital provides their outreach medication review service, though the outcome measure of reducing hospital admission risk is consistent to all.

Referrals are obtained mainly from hospital clinical pharmacists and nursing staff.

The Outreach Pharmacist provides counseling on medication and disease state management in the patient’s home or specialist outpatient clinic. After a home visit, a report is sent to the patient’s general practitioner and community pharmacist.


The report identified the following patient groups that were at the highest risk of medication management

- patients post hospital discharge
- Indigenous consumers
- consumers in remote locations
- Culturally and Linguistically Diverse consumers
- palliative care patients
- non-compliant consumers
- consumers who are transient or homeless

During the project, there has been ongoing liaison between the Project Pharmacist and The Alfred Hospital Outreach Service as some CPCS patients have been visited by an Outreach Pharmacist post discharge.
Appendix 24.2: Audit of Emergency Medications

Emergency “Just in Case” Medications Audit Calvary Health Care Bethlehem (CHCB) Community Palliative Care Service (CPCS)

One of the issues often highlighted in community palliative care is access to emergency medications when required in the patient’s home. The Project Pharmacist undertook an audit of existing patients admitted to the CPCS to ascertain whether they had been prescribed emergency medications and if they were appropriate for the patient. Reasons for not having emergency medications were also looked at. The following is a report on the audit.

Documentation of community palliative care patients who were on the service on the 9th April 2010 was audited. The following information was obtained where possible
- Place of residence
- Diagnosis
- Adverse drug reaction/allergy
- Renal function
- Any comorbidities
- Documentation of emergency medications
- What emergency medications are supplied
- Whether the emergency medication orders were current
- Whether the emergency medications been administered
- Who prescribed the emergency orders
- If emergency medications/orders are not supplied is there a reason why not
- Are the emergency medications appropriate for the patient

Results

A total of 168 patients were admitted to the CPCS on the 9th April 2010, with 147 residing at home and 21 in Residential Aged Care Facilities (RACF)

The 21 RACF patients were subsequently not included in the audit as it was difficult to ascertain the accuracy of their documentation as emergency medications and orders could be available at the RACF but not documented accurately in the CPCS nursing folder/history.

The number of patients prescribed emergency medications was 104, with the following frequency:

<table>
<thead>
<tr>
<th>DRUG</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine injection</td>
<td>91</td>
</tr>
<tr>
<td>Metoclopramide 10mg/mL injection</td>
<td>92</td>
</tr>
<tr>
<td>Midazolam 5mg injection</td>
<td>31</td>
</tr>
<tr>
<td>Clonazepam oral solution 2.5mg/10mL</td>
<td>43</td>
</tr>
<tr>
<td>Fentanyl 100mcg/2mL injection</td>
<td>1</td>
</tr>
<tr>
<td>Cyclizine 50mg/2mL injection</td>
<td>4</td>
</tr>
<tr>
<td>Haloperidol 5mg/mL injection</td>
<td>2</td>
</tr>
<tr>
<td>Hydromorphone 2mg/mL injection</td>
<td>9</td>
</tr>
<tr>
<td>Methadone 10mg/mL injection</td>
<td>1</td>
</tr>
</tbody>
</table>

274

The number of patients not prescribed emergency medications was 43.
Twenty six (60%) of patients did not have emergency medications at home as, at the time of admission to CPCS, they were not required or not requested. It was difficult to ascertain why emergency medications were not requested in some instances, but it was documented in one case that the General Practitioner was unwilling to prescribe emergency medications, and in two cases that the patient was unwilling to have emergency medications.

Two (5%) of patients did not have emergency medications at home at the time, although prescriptions had been written due to cost issues. One patient had been ordered morphine injection 5mg/mL, which is not available on the Pharmaceutical Benefits Scheme. Contact was made with the GP to rectify this. Another patient did have prescriptions, but cost was an issue even though three out of the four medications were PBS listed.

Another two (5%) of patients did not have emergency medications, as they were only admitted to the CPCS on the 9th April 2010, the date of the audit.

However, thirteen (19%) of patients did have emergency medications requested as an outgoing fax was in the patient’s history, but no follow up had occurred following the initial request.

**Survey**

In conjunction with the audit, a survey of the CPCS nursing staff was also carried out in April 2010, to canvas the following issues:

- When emergency medications are requested from the general practitioner
- What emergency medications are usually requested
- What influences the choice of emergency medication
- Are other health professionals consulted prior to requesting emergency medications
- How long it takes to organize emergency medications
- What problems are encountered when organizing emergency medications

The survey showed the following:

- 71% of nursing staff requested emergency medications as soon as possible after the patient’s admission to CPCS
- Nursing staff routinely requested morphine and metoclopramide injections, but other factors such as the patient’s allergy status, renal function and other comorbidities were also taken into account.

<table>
<thead>
<tr>
<th>DRUG</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine injection</td>
<td>100</td>
</tr>
<tr>
<td>Metoclopramide 10mg/mL injection</td>
<td>100</td>
</tr>
<tr>
<td>Midazolam 5mg injection</td>
<td>43</td>
</tr>
<tr>
<td>Clonazepam oral solution 2.5mg/10mL</td>
<td>79</td>
</tr>
</tbody>
</table>

- 79% stated that they consulted other staff for advice prior to ordering emergency medications, including other nursing staff, CPCS doctors and the CPCS pharmacist.
- 43% of nursing staff estimated that organizing medications took up to 30 minutes per admission, with 57% estimating that it took between 30 to 60 minutes.
Problems encountered when ordering emergency medications documented were:

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>No GP</td>
<td>57</td>
</tr>
<tr>
<td>GP not receptive to writing prescriptions/orders</td>
<td>100</td>
</tr>
<tr>
<td>Patient/carer not receptive to having emergency medications</td>
<td>50</td>
</tr>
<tr>
<td>Cost an issue</td>
<td>36</td>
</tr>
<tr>
<td>Access an issue, eg special access scheme medications, less common medications</td>
<td>43</td>
</tr>
<tr>
<td>Incorrect formulations eg midazolam 5mg/5mL</td>
<td>21</td>
</tr>
</tbody>
</table>

**Outcomes and recommendations**

- Modify letter sent to GP by nursing staff requesting emergency medications
- Develop a document to be sent to GPs to include emergency medications form, strength, dose, PBS availability and cautions
- Develop a check list for nursing staff on the process of ordering medications, including follow-up
- Modify the Community Services Patient Medication Regime form (MR088) to include emergency medications.

This would be a prompt nursing staff to follow-up emergency medications on a routine basis. It would also provide CHCB staff access to this information, as currently it is only recorded in the Community Environmental Risk Assessment form (MR074), which remains in the CPCS if the patient is admitted to CHCB inpatient ward. Consequently review of the patient's emergency medications can occur prior to discharge.
APPENDIX 25: CONSIDERATION FOR FUTURE DIRECTIONS

Proposal for a Pharmacist in a Community Palliative Care Service

N. B. This is a draft document and could be used to develop a proposal for use by palliative care services/consortia. The role of pharmacist within the allied health team at Calvary Health Care Bethlehem CPCS has shown some very positive outcomes that could be duplicated in other community palliative care services.

Medication Review and Interventions
Three levels of medication review are described in the literature¹

- **Type 1** - Prescription review, that is, review of medicines but patient not present
- **Type 2** - Concordance and compliance review, that is, review of medicines use, usually with patient present
- **Type 3** - Clinical medication review, that is review of medicines and condition with patient present.

All three types of medication reviews have been undertaken during the course of the project.

A project, the Pharmacy Recording Of Medication Incidents and Services² (PROMISe) is assessing the performance, documentation and estimated value of clinical interventions in Community Pharmacies in Australia.

The average clinical resulted in approximately $220 in avoided healthcare utilization, with significant improvement in quality of life.

Another project, The VALMER project, is assessing the economic value of Home Medicine Reviews.³

**Role of a pharmacist in Community Palliative Care Services (cpcs)**

- Liaison with intake worker to clarify/discuss medication issues prior to admission
- Review patient’s medication regime after admission to CPCS (applying Medication Review Screening Tool)
  - Suggest recommendations for specific patient groups if necessary, eg patients with PEG, patients experiencing swallowing difficulties
  - Alert CPCS staff to medication issues eg drug interactions
- Conduct home medication reviews
  - Reports sent to general practitioner and community pharmacist
  - Able to undertake multiple visits if required
  - Able to follow up by phone if required
- Available for medication advice to community palliative care team
Appendix 25: Consideration for Future Directions

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- Provision of written drug information for CPCS folder which are then included in the working folder eg, immunomodulators, antineoplastics, drugs specific to palliative care such as Special Access Scheme medications
- Available to community health professionals for medication advice eg general practitioner, community pharmacist, accredited pharmacist
- Liaison with other hospitals, e.g. outreach pharmacists, clinical trial pharmacists, palliative care units
- Organization of dose administration aids (DAA) with patient’s community pharmacy
- Provision of education sessions to CPCS nursing staff
- Attend team meetings
- Dispensing of prescriptions for CPCS patients as per organisation policies e.g. CHCB Policy no: 1.8.35 Management of Medications in Community Palliative Patients

Future considerations for medication reviews

The HMR model is currently being reviewed, and changes to the referral process from July 1st 2010 may have an impact on the provision of medication reviews to CPCS patients.

Facilitation of referral to General Practitioner for Home Medicines Review in the community after medication screening is an option when there are more pharmacists trained in palliative care. A project is nearing completion which is focusing on palliative care training for accredited and community pharmacists.4

An increased interaction with the local hospital Outreach Pharmacy Service may also be an avenue for shared patients.

Quality

A pharmacist in the team is able to contribute to quality initiatives in the community. This is illustrated by the audit currently being undertaken into the process of emergency (“just in case”) medication for CHCB CPCS patients.

Some potential cost savings and efficiencies may be demonstrated as a result of this audit.

- Time taken for CPCS nursing staff in facilitating emergency medications may be reduced. In the survey, 6 (43%) nursing staff estimated that it takes up to 30 minutes per admission to organize emergency medications, while 8 (57%) stated that it takes between 30 to 60 minutes. With 500 admissions to CPCS per year, a streamlined process would allow more time for direct patient care.
- Cost savings to CPCS patients as the medications requested will be tailored to the patient’s anticipated needs with input from medical staff. For example, the survey has shown that 31 (29%) patients were prescribed midazolam injections.
- Some considerations in this context are:
Did these patients need to have midazolam ampoules at home?  
Midazolam is not available on the PBS, community pharmacies do not routinely stock midazolam, pack sizes are 10 amps and costs vary at community pharmacies  
(Refer to “Essential palliative care medications list for community pharmacists and general practitioners” from the WA Cancer and Palliative Care Network http://www.healthnetworks.health.wa.gov.au/cancer/docs/Med_List1.pdf)

- Opportunity for CPCS medical staff to liaise with the patient’s GP and contribute to a coordinated management of the patient
- The emergency medication documentation in your organisation may need to be improved.

For example, at CHCB:

- When a CPCS patient is admitted to CHCB, the inpatient staff is unaware of what emergency medications are in the patient’s home, as this information is contained on the Community Environmental Assessment Form MR074, which is not part of the patient’s history.
- Development of a “just in case” flow chart/check list for nursing staff as the audit has shown that 30% of patients where emergency medications were requested did not have orders/medications in place because there was no follow up after a fax was sent to the patient’s GP.

**Education**

Development of an education package with an integrated approach of doctor and pharmacist could be made available to regional and rural Victoria  
Education of other community palliative care service providers; examples which have been undertaken during the project include:

- Support by CPCS doctor, Dr Liz Whyte, at Sale/Lakes Entrance November 2009
- Southcity General Practice Division - Project Pharmacist and CPCS doctor
- South East Palliative Care June 2010
- Peninsula Health Care June 2010

The above examples show that interaction with other palliative care services and community health professionals can provide increase knowledge and understanding of medication and its management for the services patient group  
Encouragement of local pharmacists to participate in the Program Experience in the Palliative Approach (PEPA) program could be beneficial in different geographic locations.

**Example of the Benefits to CHCB Pharmacy Department as a result of the Pharmacy Project:**

Having a pharmacist in the CPCS has advantages for the CHCB pharmacy department
- Not having to interact with an invisible ward when limited information is available on patients (NB, there are approximately 180 patients on the CPCS), eg when drug information is requested
- Possible decrease in dispensing of prescriptions for CPCS patients. Also need to take into account that the CPCS pharmacist will have screened the patient’s history/medication regime prior to dispensing the prescription, and has often been involved in discussions concerning the prescription, eg,
  - what/why medication is required for the patient
  - access and cost to the medication in the community setting
  - implications to Unassigned Bed Fund, ie, ongoing or once off

**Proposed Costing**

**Example: [this is a very rough estimate of the costs]**

Costing could vary dependent upon the number of days worked, grade level of the pharmacist. It would be important to ensure that the person employed has considerable knowledge of the palliative care medications, their management. Additionally, important that this person be able to work across services and be able to provide education. They would require good communication skills and an ability to develop relationships with local GPs and community/accredited pharmacists.

**Pharmacist Grade 3 year 4 $63ph** (including oncots of superannuation, workcover, leave accruals, mobile phone and laptop computer)

<table>
<thead>
<tr>
<th>Pharmacist employed 3 days per week</th>
<th>= $1,512pw</th>
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<td>= $78,624pa</td>
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Cost shared between 3 x palliative care services within a consortium:

= $26,208 per pc service

The oncots in relation to the role would vary dependent upon some of the following:

- where the position is located
- whether the position is in a single service or a consortium of division/network of GPs
- how much travel is required
- whether infracture costs can be absorbed or need to be added on to existing service costs, e.g. computer, car or mileage where relevant
- how many hours per week/per year the pharmacist works
- will the pharmacist be expected to prepare and deliver papers at conferences and seminars
- if the above, then the cost of registration, etc. for conference attendance

There may be other costs not identified above and any proposal should consider and include some contingency costing e.g. sick leave (is an unfunded liability for organisations).
References:

1. A guide to medication review

2. Documenting Clinical Interventions (PROMISe)

3. The Economic Value of Home Medicines Review (The VALMER Project)

4. The Role of the Community Pharmacist in Palliative Care