Development of a standardised patient-centred care model (Monash Model of CARE) for teaching second year pharmacy students

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Introduction

A model of care broadly defines the way health services are delivered

- It outlines best practice care and services for a person, population group or patient cohort as they progress through the stages of a condition, injury or event

Globally, professional bodies have created standardised processes for approaching patient care

- Adoption of these in practice has resulted in fewer medication errors and improved overall outcomes
Introduction

- Although some countries have extended these practice models into the undergraduate educational space, this was not the case at our Faculty.

- Concomitant with a new curriculum design, we sought to harmonise our teaching by creating a holistic model for approaching clinical decision-making.
Objective

To describe the development and piloting of the Monash Model of CARE (MMOC) for use by second year pharmacy students
Methodology

- We reviewed existing frameworks endorsed by professional bodies in Australia and other countries.\(^2,3,4,5\).
Methodology

Key themes within these frameworks were extracted and included:

- Collaborative care
- Communication
- Collect, interpret and analyse information
  - Identifying and resolving medication-related problems
- Establishing goals
- Advantages, disadvantages and patient preferences
- Evidence-based practice
- Evaluate progress and monitor health outcomes
Methodology

These common elements were refined and validated with Australian preceptors to ensure suitability in both our community and hospital practice settings.

Subsequently, we developed a MMOC template to guide educators and clinicians in formatting their case-based instruction (e.g. preparatory materials, lectures, workshops) and assessments in a standardised manner.

- This template was also used by the students to guide them through this new process for the case studies encountered in their instructional units.
# Methodology

## Patient Details

<table>
<thead>
<tr>
<th>Patient Details</th>
<th>Allergies &amp; Adverse Drug Reactions</th>
<th>Social History Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Gender</td>
<td>Occupation</td>
</tr>
<tr>
<td>Age</td>
<td>Address</td>
<td>Education</td>
</tr>
<tr>
<td>Height</td>
<td>Ethnicity</td>
<td>Marital Status</td>
</tr>
<tr>
<td>Weight</td>
<td>Race</td>
<td>Employment</td>
</tr>
<tr>
<td>Blood Pressure</td>
<td>SMH</td>
<td>Income</td>
</tr>
<tr>
<td>BMI</td>
<td>Primary Care Provider</td>
<td>Smoking Status</td>
</tr>
<tr>
<td>Family History</td>
<td>Meds</td>
<td>Alcohol Use</td>
</tr>
<tr>
<td>Medical History</td>
<td>Drugs</td>
<td>Physical Activity</td>
</tr>
</tbody>
</table>

## Medical Problem List

Priority: Medical Related Problem Statement

<table>
<thead>
<tr>
<th>Problem Statement</th>
<th>Meds</th>
<th>Nutritional Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Assessing Medication-related problems

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Recommendations</th>
<th>Options</th>
<th>Inpatient</th>
<th>Outpatient</th>
<th>Discharge Status</th>
<th>Follow Up (Who/What/When)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNS</td>
<td>HEENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CVS</td>
<td>Resp</td>
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<tr>
<td>GT</td>
<td>GU</td>
<td></td>
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<td></td>
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<tr>
<td>MSK/SK/Extremities</td>
<td>FA/H</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

## Patient Management Plan

<table>
<thead>
<tr>
<th>Date</th>
<th>Medication-Related Problem</th>
<th>Goals of Therapy</th>
<th>Recommendations/Plan</th>
<th>Monitoring Parameters (Efficacy &amp; Safety of Drug Therapy)</th>
<th>Follow Up (Who/What/When)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Cure Disease, Decrease/eliminate symptoms, Slow/stop progression of disease, Prevent disease, Normalise lab values, Improve quality of life</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Signature: ______________________ Date: ____________
Methodology

We trialled the MMOC with visiting undergraduate pharmacy students (n = 8) to simulate the intended target audience.

Gordon, the seeing eye dog in-training & unofficial MMOC mascot
Results

The final MMOC includes 7 elements illustrating the CARE acronym; **Connect & Collaborate, Assess & Apply, Recommend, Educate and Ensure** monitoring & follow up.
Results

Feedback from:

- students suggest that the model is a useful framework for addressing medication-related problems in case patients
- academics and practitioners confirm that the template is feasible for design of instructional materials across units
  - Included both community and hospital-based case studies across a diverse range of topics (GORD, IBS, Pain, Dermatology and Wound care)
Discussion

Students & teaching staff have embraced the use of this standardised approach to patient centred care.

- MMOC is well integrated into our course and will continue to be utilised in second year units
- It is integrated into third year units, with minor amendments
Discussion

As we plan for third year, direct instructional elements will be taken away from our MMOC template to prepare students to use the process in the absence of step by step prompts.

- The intention is to make them practice ready where these prompts are unlikely to be present in their day to day work environment

Training of new & existing staff who teach using the Model has been time consuming

- Working with our educational designer to create on-boarding tools for new staff & those new to teaching MMOC
Discussion

- Currently MMOC has only been utilised in one student cohort in our course
- Dissemination of the MMOC process to our placement sites is an important consideration
- Additionally, linking MMOC to similar processes students may encounter in Australian pharmacist practice is being done concurrently (e.g. home medication reviews)
Conclusion

The MMOC has been successfully integrated into our instructional units creating unity and systematic processes for students to use to provide patient centred care, relevant to Australian pharmacy practice.
References


