Version 19  13/05/2009

Functional Specification

Pharmacy Recording of Medication Incidents and Services
Electronic documentation system (PROMISe III)

USER INTERFACE – Fred.dispense and Aquarius

This document is the initial draft, which may be reviewed by parties and amended accordingly following their review. The functional specifications and subsequent information identified in this document are intended to be a guide for users in understanding the functionality of the system. Subsequent changes to the scope of this system will require amendments to this documentation.
## DOCUMENT CONTROL

### Document Details

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### Revision History

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APPENDIX J: HEALTH PROFESSIONAL INTERVENTION RECORD
1.0 Introduction
This document provides an overview of the technical specifications required for the PROMISe Project.

1.1 What is an intervention?
A clinical intervention by a pharmacist is defined as any professional activity directed towards improving the quality use of medicines, and resulting in a recommendation for a change in the patient’s medication therapy, means of administration or medication-taking behaviour. An intervention record is therefore a mechanism for recording details (outlined below) relating to a specified problem such as a drug overdose or underdose, a drug interaction, patient counselling etc.

1.2 Intervention Interface Workflow
The user interface allows the Pharmacist to record an intervention using this logical sequence. There is a logical sequence of events in clarifying and addressing issues elated to a clinical activity. The sequence is as follows:
a) Initially you decide what type of problem or issue you are dealing with (select a category);
b) Then you make a recommendation to resolve the issue;
c) Then you consider the potential severity of the situation (significance).

2.0 Intervention recording
Where a pharmacist needs to record an intervention, the pharmacist needs to activate the intervention software. The intervention screen should record all the required information. This information is then stored in the local pharmacy records, and this information is also transferred to the Logica repository. Where an intervention is recorded, a six month history of that patient’s medications should also be sent to the repository. We want to know what other medical conditions that patient has, as these details may be relevant to any interventions performed.

2.4 Consumer Intervention Record Form
Pharmacies will be able to provide patients with a Consumer Intervention Record Form. This printed form should be able to be printed out for any intervention that has been recorded, at the time or afterwards. Refer to Appendix E and Appendix H.
**2.4a Health Professional Intervention Record form**

Pharmacies will be able to provide information to other health professionals with a Health Professional Intervention Record Form. This printed form should be able to be printed out for any intervention that has been recorded, at the time or afterwards. Refer to Appendix J.

**2.5 Prescription records**

Every prescription for every patient that is dispensed during the trial is to be sent to the Logica repository. Note that the six month patient prescription history is only to be sent to the repository for a patient that has an intervention recorded.

**2.6 Required Information for each Clinical Activity**

In order to make the information useful for research, a number of critical fields require collection. Previous research has identified that each of the data fields in the repository are related to one or more of the following aspects of the clinical activity:

- Clinical activity type;
- Recommendations that occur; or
- Clinical significance of the activity.

**2.7 Patient Demographics**

**2.7.1 Age**

The age group of the patient has an impact on the clinical significance of the activity. The specific age is not critical, but whether the patient is a baby, child, teenager, adult or elderly is relevant to the potential outcomes and severity of certain activities.

**2.7.2 Gender**

The gender of the person also has an impact on the types of activities that occur, as the severity of an adverse effect can be different for each sex.

**2.7.3 Number of different items for patient in past 6 months**

There is good evidence that the rate of clinical services is related to the number of medications and that those patients with multiple medications have a higher rate of clinical services. The number of different medications prescribed for the patient in the last 6 months will give a measure of the degree of “polypharmacy” in the particular patient.

**2.8 Items that relate to the Intervention**

Each of the items below have been determined through the stepwise development of the categorisation and coding system D.O.C.U.M.E.N.T. This unique system was developed after extensive review of available categorisation systems in Australia and internationally, and has had significant input from stakeholders throughout the various pharmacy organisations in Australia. The system categorises clinical activities by type (category) and also provides codes for categorisation of recommendations and clinical severity.

This aspect of the activity codes the nature of the problem or potential problem. Drug related problems fall into many categories, and within each category there are many possible subcategories. In the D.O.C.U.M.E.N.T. system, there are eight major types of activities recordable, with each category having several subcategories. The reasons for collecting the type of activity are manifold.

- The frequency of each type of activity will provide information on the pattern of activities undertaken in community pharmacies.
• The type of each activity is likely to be related to other aspects of the activity such as clinical significance. When such relationships are clarified, this will enable targeting of particular activities that are more likely to result in more significant outcomes.

• The recommendations made by the pharmacist will also be likely to be related to the types. Recommendations and their acceptance or not will have major impact on the economic impact of the activity.

• Type of activity will also likely be related to various aspects of the pharmacy, in terms of the socio-economic background of the customers, pharmacy type (chain vs. privately owned) and also aspect of the pharmacist’s background.

2.8.1 Date/time of intervention
The actual day and time of the intervention will be relevant as it can then be related to workload statistics for the pharmacy. It will also be relevant in terms of determining the “busy times” for interventions and may inform recommendations about the optimum workload in order to optimise clinical service rates.

2.8.2 Drug involved (and Code)
The actual drug involved and a unique code is also required information. The drug code should be linkable to the Autonomic Therapeutic Coding system. Link table to be prepared by PROMISe staff using drug tables supplied by Fred and Aquarius. As a minimum, the PBS code and manufacturer code should be incorporated. Reports will be based on individual drugs and drug groups. The final clinical services database will be a valuable resource that will enable such reports to be prepared.

If there is no drug code for an item the drug code entered will be ‘0’ (zero).

2.9 Demographic and Workload Items that may be related to the Activity

2.9.1 Pharmacist initials
In multiple pharmacist pharmacies, determining which pharmacist was responsible for the activity will be relevant. Various aspects of the pharmacist’s training, education and employment background will be related to the clinical activity nature and rate.

2.9.2 Pharmacy Unique Trial Number
The pharmacy Unique Trial number will be an identical copy of initial pharmacy approval number when the pharmacy enrolls in the trial. If the pharmacy needs to change approval number during the course of this trial, this copy of the original pharmacy approval number will continue to be sent with intervention and script information to allow researchers to refer to each unique pharmacy. Future remuneration models will need to be linked to the pharmacy details via the pharmacy approval number.

2.9.3 Pharmacy Postcode / State
It may also be possible to link to other demographic information in the health area by using postcode or other means. (Information provided to Logica by PROMISe team)

2.9.4 Number of Prescriptions from pharmacy per day
Paragraph deleted. Not applicable to Fred / Aquarius.
2.9.5 Prescription type (repeat, original etc)

There is evidence that the rate of clinical services is higher in original compared to repeat prescriptions.

3.0 Information Technology Requirements

In order to allow for different dispensing programs to use the documentation system, each participating vendor will need to build additional data entry pages within their dispensing system that can send relevant information to the communications client. The communications client will then send appropriately secure messages to a secure web server that will de-identify the information and store it in a repository.

The web system will also have detailed specifications for connectivity and software vendors will be able to easily modify their solutions to enable sending and receiving of information relating to clinical interventions. The underlying messaging structure of the web system will use secure XML messaging which allows the best communications method for the software vendors without requiring them to do major modifications to their solutions.

The software is only to apply to PBS-online pharmacies.

Logica to prepare a standard messaging format for dispensing software vendors to follow.

Refer to Appendix D: Proposed IT Structure

4.0 Required information

4.1 Patient Intervention Record

4.1.1 Script Details (mandatory)

- Patient unique ID (pharmacy unique trial number plus patient ID)
- Prescriber number (non-mandatory)
- Prescription number
- Drug code Aquarius (links: ATC code)
- Drug code FRED (links: ATC code)
- Drug Quantity
- Drug Brand – the trade name of the drug eg: “Nexium 40mg”
- Drug Strength
- Drug Form
- Drug pack size
- Directions (expanded text)
- Pharmacist Script Initials
- Pharmacy Unique Trial Number
- Original or Repeat script
- Number of repeats
- Dispensed number of this supply
- Script status (cancelled, owing, held, deferred, active)
- Authority item
- Script type (concession, repat, general, private, PBS safety net, Doctors bag)
- Date of supply
- Original date of supply – on entering a new script, otherwise leave blank
- Original date of script
- Time
- Trial day (i.e., day 1 to day 84) – useful because of different pharmacy start dates

4.1.2 Patient Details
- Gender {m,f} (mandatory)
- Age (non-mandatory)
- DOB (non-mandatory)
- Age range (should be populated by above two fields if available) (mandatory)
- Medical conditions (non-mandatory)
- Allergies (non-mandatory)

4.1.3 Intervention Details
- Intervention ID (pharmacy unique trial number (5 digits and 1 letter) – day of trial (01-84) – intervention sequence number (001-999))
- Classification code: one entry only, mandatory
- Recommendation code: up to four entries, mandatory to have one entry
- Significance code: one entry only, mandatory
- Text field for further description of intervention (Maximum of 2000 chars)
- Time field to record how long the intervention took in minutes
- Time of intervention screen activation – get from the computers system clock (will provide a reasonable estimate of when the intervention occurred during the day, to compare with the timed prompts)
- Pharmacist initials of the pharmacist conducting the intervention.

Codes and descriptions in Appendix A.

4.1.4 Patient Script History
For patients that are subject to a recorded intervention as far as practicably the previous six month of script history for that patient needs to be transferred to the Data Repository, (as outlined in 4.1.1 with the exception of Trial Day). An exception needs to be considered for patient how are subject to more than one intervention.

Six months of history prescriptions to be backtracked from the date of the first intervention.

4.2 Non-script intervention
- Intervention Details as outlined in 4.1.3
- Patient details as outlined in 4.1.2 (gender and age group still mandatory)
- Patient ID for unknown patients (generated from pharmacy unique trial number and generic “unknown patient” number (ie. Unique trial number-xxxxxx))

- Drug (drop-down list for pharmacist to select drug if relevant – not mandatory: to fill the DrugBrand field, as a string with the Drug brand name. The pharmacist should have the options of entering a drug brand directly into this DrugBrand field.

- Date and time of intervention

- Pharmacist initials of the pharmacist conducting the intervention.

### 4.3 Non Intervention Prescription Record

#### 4.3.1 Script Details

- During the trial period the data for each and every prescription dispensed needs to be captured and recorded in the repository. Data to be captured is outlined in 4.1.1

- If a *non-intervention patient*, do not record the past six months of prescription history.

- For these prescriptions there is no need to collect patient details such as age, gender, medical conditions.

### 5.0 User Interface Requirements

See [Appendix B](#) for workflow diagram.

See [Appendix I](#) for screen shots.

#### 5.1 How to access the intervention screen

1. By shortcut key ‘Alt I’,
2. By clicking on an ‘Intervention’ button

#### 5.2 When the intervention screen can be accessed

1. At any stage during the dispensing process,
2. When viewing patient history (either whilst processing a script or not processing a script),
3. From the dispensing screen prior to entering a patient – for an unknown patient (e.g. an OTC intervention or information request).

#### 5.3 Intervention screen - Visual details

1. Separate tabs for Category, Recommendation, Significance and Notes
2. Each tab to have a drop-down menu. The subcategories can be shown as a list in a separate box (see [Appendix I](#) for example ‘intervention interface’). A help button will trigger a pop-up box with DOCUMENT help definitions and will trigger a pop-up box with descriptions of when to use, examples and when not to use (see [Appendix C](#) for the scope notes).
3. Shortcut keys for the tabs and menu items using mnemonics or keyboard accelerators.
4. All categories to use short text descriptions NOT the codes (see Appendix A)
5. Significance categories to be named

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6. Buttons: Option Buttons need to be built into the interface, as the example Introduction Screen for the Intervention Interface Pg 29 Appendix I.

### 5.4 Intervention screen will be prefilled with this data

1. Patients name
2. Prescribers name and number
3. Drug
4. Prescription number
5. Prescription type (original or repeat)
6. Intervention ID (unique pharmacy trial number (5 digits and 1 letter) – day of trial (01-84) – intervention sequence number (001-999))

The above will not be included for an unknown patient e.g. OTC intervention or information request, and will have to be entered manually by the pharmacist.

### 5.5 Intervention screen – Required Data

1. Intervention Category and Sub-category
2. Recommendations (up to four recommendations)
3. Significance
4. Patient details (may not be possible for an unknown patient e.g. OTC intervention or information request)
5. Patient age OR date of birth OR age group (if the age or DOB is known the age group should be populated automatically)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0-3</td>
<td>Infant/Toddler</td>
</tr>
<tr>
<td>2</td>
<td>4-12</td>
<td>Child</td>
</tr>
<tr>
<td>3</td>
<td>13-20</td>
<td>Teenager/Young Adult</td>
</tr>
<tr>
<td>4</td>
<td>21-64</td>
<td>Adult</td>
</tr>
<tr>
<td>5</td>
<td>65-80</td>
<td>Mature Adult</td>
</tr>
<tr>
<td>6</td>
<td>80+</td>
<td>Elderly</td>
</tr>
</tbody>
</table>

6. Patient gender
7. Text field with ability to hold more information (1xA4 page).
8. This text field to be available for every intervention on the notes tab page.
9. Button to save an intervention once finished. Also to save an incomplete intervention to be completed later.
10. Cancel Button to cancel the Intervention.
11. Reminder Button to pop-up an intervention on the next business day. Use for communication continuity between pharmacists and further follow up (note final format of this function still to be finalised).
12. A time field to record how long an intervention took.
13. Add free text field to enter allergy or medical conditions for an unknown patient (non-script intervention). This field located on the Significance tab of the intervention screen.

5.6 Intervention screen mandatory fields
1. Category and subcategory
2. Recommendations
3. Significance
4. Age range
5. Patient gender
6. If Moderate or Severe Significance (s3,s4) selected, the pop-up text field is mandatory for further explanation
7. Mandatory fields to be noted, perhaps by a red asterix.
8. Pharmacist initials of the pharmacist conducting the intervention.

6.0 Other system requirements

6.1 Dispensing screen
1. If the selected patient has an intervention in their history, an icon or box should declare this to the pharmacist. The particular intervention should have a ‘Don’t show again’ option to allow pharmacists to clear the reminder when necessary (but the actual intervention will always remain in the patient history).

6.2 Incomplete interventions
1. Incomplete intervention records should be shown on the dispensing screen. Visual identification should be used, similar to PBS online, with a colour and number of interventions to complete. Clicking here should bring up the list of incomplete interventions.
2. A pop-up prompt is required to remind pharmacists to complete an Intervention later in the day. It should have functionality to be set to a specific time of day (i.e. 4.30pm – half an hour before shift finishes)
3. When ‘alt I’ brings up the intervention screen, another intervention screen button should be available to view and complete incomplete interventions.

6.3 Viewing interventions
1. Interventions to be listed in patient history
2. Interventions to be highlighted in a different colour to the patient history
3. When in the patient history, there needs to be an option to show interventions separately from the dispensed medication history. This to allow comparison with the medication history and the intervention of interest. Perhaps two separate scrolling window areas.
4. The intervention in the patient history needs to display:
   - The date
   - The DOCUMENT classification wording (not as codes)
   - The Recommendations
   - The pharmacist notes (if any)
   - The initials of the pharmacist that conducted the intervention.

6.4 Reports to be accessible from the dispensing system
1. Selection for report criteria, see 6.8.
2. Summary reports: totals for chosen criteria, see 6.9
3. Detailed reporting option: for chosen criteria, see 6.10. To display a list of Individual Intervention Summaries – screenshot Appendix I.
5. Option to print reports
6. Creation of Consumer Intervention Record Report (see 6.5).
7. Creation of Health Professional Intervention Report (see 6.5a).
8. The ability to keep a tally of how many reports are printed with the information to be displayed on the deactivation screen.

6.4a Summary Counter for reports accessible from the dispensing system
1. Keep a summary count of how many;
   a) Consumer Intervention Reports were printed
   b) Health Professional Intervention Reports were printed
2. The trial deactivation screen will need to display the total number of each of these reports printed so that researchers can record these totals.

6.5 Consumer Intervention Record (CIR)
1. Printing of Consumer Intervention Record (CIR)
2. CIR created using ‘nice language’ built from the subcategory and recommendation codes (Appendix E)
3. Conversion of CIR into PDF or Word document. Used for email to other health professional or pharmacists own records.
4. Worded for consumers using conversion tables for the codes (written and supplied by the PROMISe team) and includes disclaimer: 'This intervention was undertaken on the basis of the patient specific information available at the time'.

5. Extra text field or white space for pharmacist to add additional information e.g. advice or references.

6. Extra area for consumer contact details, such as phone number

7. The layout in Appendix H.

8. Keep a count of the number of times the CIR is printed.

9. On the trial deactivation screen, to display the total number of CIRs printed so that researchers can record this total.

6.5a Health Professional Intervention Record (HPIR)

1. Printing of Health Intervention Record (HPIR) form

2. HPIR created using the intervention screen language (accessed from the appendix C and the separate DOCUMENT table: DOCUMENT_ScopeNotes.xls). Appendix J has an example of the report.

3. Ability to convert HPIR into PDF or Word document. Used for email to other health professional or pharmacists own records.

4. To include disclaimer: ‘This intervention was undertaken on the basis of the patient specific information available at the time’.

5. Extra text field or white space for pharmacist to add additional information e.g. advice or references.

6. Extra area for consumer contact details, such as phone number

7. The layout in Appendix J.

8. Keep a count of the number of times the HPIR is printed.

9. On the trial deactivation screen, to display the total number of HPIRs printed so that researchers can record this total.

6.6 Statistics display

1. All pharmacies to have a display of number of interventions recorded using local pharmacy data and data polled from the repository

2. The display should show:
   a. the current rate of interventions for that pharmacy (derived from number of local interventions per 100 prescriptions), and
   b. the current average rate of all pharmacies in the trial (derived from the number of interventions in the trial per 100 prescriptions per week)

3. The location of this display will be on the intervention screen.

6.7 Polling the repository for information

Under section 6.6 to generate statistics, the dispense system will poll the repository for the current average rate of all interventions in all trial pharmacies (derived from number of interventions divided by number of prescriptions). Frequency of polling: every few hours or once per day would be sufficient.

6.8 Report Criteria

Reports to be based on selection criteria:

<table>
<thead>
<tr>
<th>Summary report options</th>
<th>Detail Report Options</th>
</tr>
</thead>
</table>

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## 6.9 Summary Report

Summary reporting option for selection criteria.
Get totals based on selection criteria.
If no Radio button is selected:
The report page should display the selection criteria and a total intervention figure.

If a radio button is selected:
The report page should display the selection criteria and total intervention figures by row.
Each row to be labelled depending on the radio button selected.

If the Intervention Category radio button is selected AND Intervention Category is blank (Option B) then show rows labelled a D,O,C,U,M,E,N,T
If the Intervention Category radio button is selected AND Intervention Category is selected as: D, O, C, U, M, E, N, T, then show rows labelled for the sub-categories. EG: D0 – D7.

## 6.10 Detailed Report

Detailed reporting option: for selection criteria.
To display a list of Individual Intervention Summaries – screenshot Appendix I.
This report will contain:
- Intervention ID

---

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Option A</th>
<th>Option B</th>
<th>Radio Button (select one only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacist initials</td>
<td>Initials</td>
<td>Blank for all</td>
<td>Select = totals by pharmacist</td>
</tr>
<tr>
<td>Start Date</td>
<td>Date</td>
<td>Blank = current date</td>
<td>Select = totals by date</td>
</tr>
<tr>
<td>End Date</td>
<td>Date</td>
<td>Blank = current date</td>
<td>Not needed</td>
</tr>
<tr>
<td>Patient gender</td>
<td>M / f/ other</td>
<td>Blank for all</td>
<td>Select = totals by gender</td>
</tr>
<tr>
<td>Patient name</td>
<td>Name</td>
<td>Blank for all</td>
<td>Not used</td>
</tr>
<tr>
<td>Age range</td>
<td>Select an option</td>
<td>Blank for all</td>
<td>Select = totals by age range</td>
</tr>
<tr>
<td>Patient group</td>
<td>Nursing home/hospital group</td>
<td>Blank for all</td>
<td>Select = totals by patient group</td>
</tr>
<tr>
<td>Intervention Category</td>
<td>Example: D for all the D’s Or D1 for D1 only</td>
<td>Blank for all</td>
<td>Select = totals by category</td>
</tr>
<tr>
<td>Recommendations</td>
<td>R1 – R19</td>
<td>Blank for all</td>
<td>Select = totals by recommendation, if multiple recommendations add to individual recommendation totals</td>
</tr>
<tr>
<td>Significance</td>
<td>S1 – S4</td>
<td>Blank for all</td>
<td>Select = totals by significance</td>
</tr>
<tr>
<td>Drug name or generic</td>
<td>Losec</td>
<td>Blank for all</td>
<td>Not used</td>
</tr>
<tr>
<td>Prescriber name or number</td>
<td>34567</td>
<td>Blank for all</td>
<td>Select = totals by prescriber name / number</td>
</tr>
</tbody>
</table>

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\hs-s01\Research\PROMISE\PROMISE III\FOLDER REGISTERY (active)\IT\Fred Aquarius Specifications\Functional Specifications\Functional User Interface Aquarius - FRED [v19]19-05-09 copy.doc 18
• Patient name
• Age group
• Gender
• Script number
• Prescriber
• Drug
• DOCUMENT category
• Recommendation(s)
• Significance


7.0 Intervention Prompts

7.1 Prompts allocated to pharmacies
The effect of prompts are measured as part of the trial. Prompts are split into two categories; general reminder and specific reminder prompts. The structure for prompting is listed below.

1. Thirty pharmacies will be allocated no General Reminder Prompts, and No Specific Reminder Prompt
2. Ninety pharmacies will be allocated General Reminder Prompts only.
3. Ninety pharmacies will be allocated General Reminder Prompts and the unchanging Specific Reminder Prompt for 12 weeks.

Reference Appendix F

7.2 General Reminder Prompts

• In order to remind the pharmacists that the trial is underway and to record their interventions.
• General Reminder Prompt Timed Prompt (11am, 3pm)
• This prompt to activate ONLY for pharmacies in trial group 2 and trial group 3, see Appendix F.
• Final Appearance: provided as file: GeneralPrompt.jpg size: 746 x 259

7.3 Specific Reminder Prompt

• Option to turn off a specific prompt for a particular patient, to prevent the same prompt issue re-occurring whenever that patient record is used. THIS OPTION REMOVED.
• Specific reminder prompts are to activate when a patient is being dispensed Nexium 40mg (esomeprazole 40mg) or Somac 40mg (pantoprazole 40mg).
• Separate PDFs will be linked to the ’Patient Information Leaflet‘ and ’Pharmacist/GP Leaflet‘ (PDFs to be supplied ASAP. Once one PDF is selected and printed, the pharmacist will be returned to the ’Intervention Alert‘ screen so they can select the other PDF is necessary, or click on ‘continue dispensing‘.
• Specific reminder prompts to activate ONLY for pharmacies in trial group 3 see Appendix F.
• See Appendix G for details.

8.0 Pharmacy Activation and Deactivation

8.1 Pharmacy Activation

PROMISe project staff to allocate pharmacies into appropriate randomisation group and start date. PROMISe project staff to ensure that the pharmacy has the correct and updated version of the dispensing system before activation. Reference Appendix F.

1. The Intervention User Interface must be sent out to all pharmacies participating in the PROMISe III trial. The send should occur in the monthly software updates prior to the trial start date.
2. Rollout and initial start to be planned in conjunction with the PROMISe project team.
3. Activation will be managed through phone call by PROMISe researchers. All passwords are private and should not be disclosed to trial participants.
4. Activation involves creating a hexadecimal password from the pharmacy approval number and the trial stratification group.

For example:
Pharmacy approval number 1234D + Stratification group 2 = 12342 (note D has been removed)
12342 converted to a hexadecimal number = 3036.
5. Password lists must be validated with the PROMISe project staff for accuracy.
6. The software may need to be exited and restarted. A written protocol must be provided to the PROMISe project team on this process.
7. The activation/deactivation screen is to be accessible to the PROMISe project staff at all times to allow counts from the CIR (section 6.5), HPIR (section 6.5a) and locally generated reports to be recorded.

8.2 Pharmacy Deactivation

1. Deactivation to be planned in conjunction with PROMISe project team.
2. Deactivation will be managed by the PROMISe project team and facilitated via a phone call by PROMISe staff.
3. Deactivation password is a hexadecimal conversion of the pharmacy approval number.

9.0 Error Messaging and resolution

9.1 Technical errors and Support

Technical errors or faults must be report to the PROMISe project staff as soon as practicable.

The dispense vendor must provide technical support to the PROMISe project staff and to pharmacist for the duration of the trial period.
10 Information modification

10.1 Capacity to delete interventions
From time to time and for a variety of reason a pharmacist may need to delete an intervention. If an intervention is deleted then a deleted flag for that intervention must be sent to the repository. 

*Note:* That the repository will retain the script history that was sent with the intervention. This will be flagged inactive at the repository level. If the same patient has a subsequent intervention then there will not be a need to re-send the patient script history. At the repository level the script history will be reactivated.

10.2 When a script is cancelled in the dispense system
Option to message Repository to flag cancelled the script record in the repository. Script delete flag. When a script is modified in the dispense system provide an option to modify or replace the script in the repository.

10.3 Modification of Patient History Scripts (prior to trial start date)
Script history pre-trial are record for intervend patients. On rare occasions the script history may change. If this occur for a script that was dispensed pre trial then there is no requirement to update the data repository.

11 Privacy

*Patient Privacy*

The intent is to record only de-identified data. Patient’s personal information is not collected for storage in the repository. All activities related to the collection of de-identified data for or on behalf of PROMIsSe project must conform to the FEDERAL PRIVACY ACT 1988 and any relevant state legislation.

12. Approach and work breakdown structure

12.1 Lifecycle and phases

The PROMIsSe III project will be structured as follows:

1. Confirm Requirements and Functionality
2. Confirm technical environment requirements
3. Development and Unit Testing
4. Deployment and Acceptance Testing
5. Move to Live
6. Post implementation Development
7. Post implementation Support
12.2 Work breakdown structure

This section describes in detail the tasks that will need to be performed in each phase of the project. Detailed project tasks regarding implementation are being tracked and updated by the Project Manager weekly.

12.2.1 Confirm Requirements and Functionality

This phase involves investigation of University of Tasmania key stakeholder business requirements, system integration variables and technical solutions.

- Document Functional Specifications
- Document Specifications for the Web Interface
- Document System Technical Architecture

12.2.2 Deployment and Acceptance Testing

This phase will involve system implementation in the test environment and all aspects of user testing.

- Testing coordination: this step includes identification of testers, test schedule distribution and confirmation of test plans.
- Configuration of test data
- Testing pharmacy software data transmission
- System testing of all service interfaces
- Performance and load testing
- User Acceptance testing in the PROD environment

12.2.3 Move to Live

This phase involves commencing use of the intervention Interface and system in a production capacity.

- Finalise production data, including data cleansing.
- Reconfigure interfaces to point to live ports
- User Acceptance Testing
- Move to Production

12.2.4 Post Implementation Support

- Management of the solution environment to ensure agreed system availability
- Provide technical and application support during business hours for a period of 5 months from the date of Acceptance of the System.
12.3 Lifecycle support processes

12.3.1 Handovers of responsibility

Responsibility for delivery will be handed to the project manager by the University of Tasmania.

Responsibility will be delegated by the project manager to project team members via discussions in the weekly project review meetings, action items list and will be tracked in the overall project plan.

12.3.2 Documentation management

All documentation associated with this project will in the first instance be stored by FRED and Aquarius.

On completion of the project, or on an as required basis, documents will be sent to the University of Tasmania.

Prior to release, all documents will be reviewed and approved by the project manager.

12.3.3 Configuration and release management

All changes made during the course of the project will be documented and approved using the current standard change control process.

12.3.4 Issues management

All issues identified during the project will be tracked on an issues register which will be distributed at weekly project meetings. The project manager will be responsible for maintaining the issues register and escalating issues which are seen as a threat to the project.
13 Management processes

13.1 Contract change control

The contract for this project is the document titled “RESEARCH SERVICES SUB SUBCONTRACT – RESEARCH AND DEVELOPMENT PROGRAM” and any variations have been mutually agreed upon by both the FRED or Aquarius project manager and the customer. Additionally, change will be formally controlled through project status reports.

13.2 Planning controls

It will be the responsibility of the FRED or Aquarius project managers to appropriately record changes to the project plan. In circumstances where a new version of the project and quality plan is generated, the document will be redistributed to all stakeholders listed on the distribution list.

13.3 Work delegation and monitoring

As described in section 5.1, responsibility will be formally delegated to project team members via weekly project manager updates to the Action Item list and the project plan. It will be the responsibility of the FRED or Aquarius project managers to track progress by project team members against expectations, and to report this progress at weekly project team meetings.

13.4 Risk management

It will be the responsibility of the FRED and Aquarius project managers to track risks, and communicate changes in the risk factors to stakeholders at weekly project meetings. Risks will be tracked using a risk register, which will be maintained by the FRED or Aquarius project managers.

13.5 Status reporting

Reporting project status will be the responsibility of the FRED or Aquarius project managers. Project status will be formally reported on a weekly basis using the weekly project review meeting minutes and weekly updates to the action item list.
### Appendix A: Codes

#### Classification codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
<th>Description</th>
<th>Code</th>
<th>Subtype</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Drug selection</td>
<td>(Problems relating to the choice of drug prescribed or taken)</td>
<td>D1</td>
<td></td>
<td>Duplication</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D2</td>
<td></td>
<td>Drug interaction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D3</td>
<td></td>
<td>Wrong drug</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D4</td>
<td></td>
<td>Incorrect strength</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D5</td>
<td></td>
<td>Inappropriate dosage form</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D6</td>
<td></td>
<td>Contraindications apparent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D7</td>
<td></td>
<td>No indication apparent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D0</td>
<td></td>
<td>Other drug selection problem</td>
</tr>
<tr>
<td>O</td>
<td>Over or underdose</td>
<td>(Problems relating to the prescribed dose or schedule of a drug)</td>
<td>O1</td>
<td></td>
<td>Prescribed dose too high</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>O2</td>
<td></td>
<td>Prescribed dose too low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>O3</td>
<td></td>
<td>Incorrect or unclear dosing instructions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>O0</td>
<td></td>
<td>Other dose problem</td>
</tr>
<tr>
<td>C</td>
<td>Compliance</td>
<td>(Problems relating to the way the patient takes the medication)</td>
<td>C1</td>
<td></td>
<td>Taking too little</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C2</td>
<td></td>
<td>Taking too much</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C3</td>
<td></td>
<td>Erratic use of medication</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C4</td>
<td></td>
<td>Intentional drug misuse (incl. OTCs)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C5</td>
<td></td>
<td>Difficulty using dosage form</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C0</td>
<td></td>
<td>Other compliance problem</td>
</tr>
<tr>
<td>U</td>
<td>Undertreated</td>
<td>(Problems relating to actual or potential conditions that require management)</td>
<td>U1</td>
<td></td>
<td>Condition undertreated</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>U2</td>
<td></td>
<td>Condition untreated</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>U3</td>
<td></td>
<td>Preventative therapy required</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>U0</td>
<td></td>
<td>Other undertreated indication problem</td>
</tr>
<tr>
<td>M</td>
<td>Monitoring</td>
<td>(Problems relating to monitoring the efficacy or adverse effects of a drug)</td>
<td>M1</td>
<td></td>
<td>Laboratory monitoring</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M2</td>
<td></td>
<td>Non-laboratory monitoring</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M0</td>
<td></td>
<td>Other monitoring problem</td>
</tr>
<tr>
<td>E</td>
<td>Education or information</td>
<td>(Where a patient requests further information about a drug or disease state)</td>
<td>E1</td>
<td></td>
<td>Patient requests drug information</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>E2</td>
<td></td>
<td>Patient requests disease management advice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>E0</td>
<td></td>
<td>Other education or information problem</td>
</tr>
<tr>
<td>N</td>
<td>Not classifiable</td>
<td>(Problems that cannot be classified under another category)</td>
<td>N0</td>
<td></td>
<td>Clinical interventions that cannot be classified under another category</td>
</tr>
<tr>
<td>T</td>
<td>Toxicity or adverse reaction</td>
<td>(Problems relating to the presence of signs or symptoms that can be attributed to a drug)</td>
<td>T1</td>
<td></td>
<td>Toxicity, allergic reaction or adverse effect present</td>
</tr>
</tbody>
</table>
## Recommendation codes

<table>
<thead>
<tr>
<th>Types of Recommendation</th>
<th>R1</th>
<th>R2</th>
<th>R3</th>
<th>R4</th>
<th>R5</th>
<th>R6</th>
<th>R7</th>
<th>R8</th>
</tr>
</thead>
<tbody>
<tr>
<td>A change in therapy</td>
<td>Dose increase</td>
<td>Dose decrease</td>
<td>Drug change</td>
<td>Drug formulation change</td>
<td>Drug brand change</td>
<td>Dose frequency/schedule change</td>
<td>Prescription not dispensed</td>
<td>Other changes to therapy</td>
</tr>
<tr>
<td>A referral required</td>
<td>Refer to prescriber</td>
<td>Refer to hospital</td>
<td>Refer for medication review</td>
<td>Other referral required</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of information</td>
<td>Education or counselling session</td>
<td>Written summary of medications</td>
<td>Commence dose administration aid</td>
<td>Other written information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring</td>
<td>Monitoring: Non-laboratory</td>
<td>Monitoring: Laboratory test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>No recommendation necessary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Significance codes

| S1 | Consequences related to information |
| S2 | Prevented mild symptom or improved compliance |
| S3 | Prevented or required a GP visit |
| S4 | Prevented or required a hospital admission |
Appendix B: Work Flow Diagram

1. Initiate intervention
   Using button or alt 'I'

2. Complete mandatory fields.
   Age/age range, gender

3. Enter intervention type

4. Enter up to four recommendations

5. Enter significance

6. Notes
   (Mandatory if significance severe (S4) or moderate (S3))

7. Submit

8. Complete later

9. Print Consumer Intervention Form
### Appendix C: Example DOCUMENT Scope Notes

Help Files for each category and Recommendation and Significance provides a pop-up box containing:
- When to Use
- Examples of When to Use
- When Not to Use

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>U1</td>
<td>Undertreated</td>
<td>Problems relating to actual or potential conditions that require management or prevention</td>
<td>Condition untreated</td>
<td>When the patient has a symptom or disease condition that not being treated adequately.</td>
<td>Patient taking Hydrenge and Coversyl for high blood pressure, but blood pressure continues to be high. Patient taking metformin 1g BD but has BSLs consistently over 10mmol/L</td>
<td>If the patient requires additional therapy as a preventative strategy (eg potassium when on a loop diuretic), then use “Preventive therapy required (U3)”. If the patient takes too little and suffers worsening of their condition as a result, then use “Taking too little (C1)”.</td>
</tr>
<tr>
<td>U2</td>
<td>Undertreated</td>
<td>Problems relating to actual or potential conditions that require management or prevention</td>
<td>Condition untreated</td>
<td>When the patient has a symptom or disease condition that is not currently being treated.</td>
<td>Patient has had consistently high blood pressure in the pharmacy over the past few weeks and may require antihypertensive treatment. Patient develops nausea as part of a viral illness and requires addition of anti-nauseant medication.</td>
<td>If the patient has a condition that is currently being treated, but is not adequately, then use “Condition undertreated (U1)”. If the patient requires additional therapy as a preventative strategy (eg potassium when on a loop diuretic), then use “Preventive therapy required (U3)”. If the patient takes too little and suffers worsening of their condition as a result, then use “Taking too little (C1)”.</td>
</tr>
<tr>
<td>U3</td>
<td>Undertreated</td>
<td>Problems relating to actual or potential conditions that require management or prevention</td>
<td>Preventative therapy required</td>
<td>When the patient requires additional therapy to prevent a likely adverse event as a result of the patient’s therapy, coexisting diseases or risk factors. Not to be used if the patient already has the condition.</td>
<td>Patient commences on morphine slow release without laxative therapy. You suggest the addition of antiplatelet therapy in an elderly, obese, male patient with diabetes and hypertension.</td>
<td>If the patient already has treatment for a particular problem, but it is not effective enough, then use “Condition undertreated (U1)”. If the patient already has a condition that is not currently being treated with any medication, then use “Condition untreated (U2)”.</td>
</tr>
<tr>
<td>U0</td>
<td>Undertreated</td>
<td>Problems relating to actual or potential conditions that require management or prevention</td>
<td>Other undertreated indication problem</td>
<td>When the patient has any other problem relating to actual or potential conditions that you think requires management.</td>
<td>Other untreated indication problem</td>
<td>If the patient already has treatment for a particular problem, but it is not effective enough, then use “Condition undertreated (U1)”.</td>
</tr>
</tbody>
</table>

DocCodeDesc will be contained within a drop-down menu on the intervention screen, which will activate the DocSubCodeDesc once a DocCodeDesc is clicked on. Next to the DocCodeDesc, a help button or similar mechanism will trigger DocWhenToUse to appear in a box. The box will contain a ‘Click here for Examples and When not to Use’ link, which will trigger DocExamples and DocWhenNotToUse to appear.
For Example:
Pharmacist clicks on ‘Undertreated’ and 4 options appear.
‘Preventative therapy required’ is selected and the help button appears.
Pharmacist clicks the help button and the following table is displayed:

<table>
<thead>
<tr>
<th>When to Use:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>When the patient requires additional therapy to prevent a <strong>likely</strong> adverse event as a result of the patient’s therapy, coexisting diseases or risk factors. Not to be used if the patient already has the condition.</td>
<td></td>
</tr>
</tbody>
</table>

Click here for Examples and When Not to Use

Pharmacist clicks on the underlined text and the following box appears:

<table>
<thead>
<tr>
<th>Examples of when to use:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient commences on morphine slow release without laxative therapy.</td>
<td></td>
</tr>
<tr>
<td>You suggest the addition of antiplatelet therapy in an elderly, obese, male patient with diabetes and hypertension.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>When Not to Use:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>If the patient already has treatment for a particular problem, but it is not effective enough, then use “Condition undertreated (U1)”.</em></td>
<td></td>
</tr>
<tr>
<td><em>If the patient already has a condition that is not currently being treated with any medication, then use “Condition untreated (U2)”.</em></td>
<td></td>
</tr>
</tbody>
</table>

Recommendation and Significance menus to work in a similar manner.
Full appendix of codes and examples is attached as a separate file: DOCUMENT_ScopeNotes.xls
APPENDIX D: Proposed IT Structure
### Appendix E: Language Conversions for Consumer Intervention Record

Note: the wording here is current but may change due to feedback from a Consumer Representative.

#### Drug selection

<table>
<thead>
<tr>
<th>(D1)</th>
<th>Duplication</th>
<th>The pharmacist identified that this medication is in the same drug group as a medication you are already taking.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(D2)</td>
<td>Drug interaction</td>
<td>The pharmacist identified that this medication may interact with a medication that you are already taking.</td>
</tr>
<tr>
<td>(D3)</td>
<td>Wrong drug</td>
<td>The pharmacist believes that this medication may have been supplied to you in error. You should have received ...</td>
</tr>
<tr>
<td>(D4)</td>
<td>Incorrect strength</td>
<td>The pharmacist believes that the strength of this medication may not be ideal for you.</td>
</tr>
<tr>
<td>(D5)</td>
<td>Inappropriate dosage form</td>
<td>The pharmacist believes that this dosage form is not the most appropriate form for its intended use.</td>
</tr>
<tr>
<td>(D6)</td>
<td>Contraindication apparent</td>
<td>The pharmacist believes that it may not be advisable to take this medication with your medical history.</td>
</tr>
<tr>
<td>(D7)</td>
<td>No indication apparent</td>
<td>The pharmacist believes that this medication may not be necessary for you.</td>
</tr>
<tr>
<td>(D0)</td>
<td>Other drug selection problem</td>
<td>The pharmacist believes that this medication may not be appropriate for you.</td>
</tr>
</tbody>
</table>

#### Over or under dose prescribed

<table>
<thead>
<tr>
<th>(O1)</th>
<th>Prescribed dose too high</th>
<th>On review, the pharmacist found that this dose may not be the most ideal dose for you.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(O2)</td>
<td>Prescribed dose too low</td>
<td>On review, the pharmacist found that this dose may not be the most ideal dose for you.</td>
</tr>
<tr>
<td>(O3)</td>
<td>Incorrect or unclear dosing instructions</td>
<td>On review, the pharmacist found that these dosing instructions may not be ideal for your medical condition.</td>
</tr>
<tr>
<td>(O0)</td>
<td>Other dose problem</td>
<td>On review, the pharmacist found that this dose may not be the most ideal dose for you.</td>
</tr>
</tbody>
</table>
## Compliance

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(C1)</td>
<td>Taking too little</td>
<td>The pharmacist found that you were having difficulty taking your medication correctly. You may not have been taking enough medication to adequately treat your medical condition.</td>
</tr>
<tr>
<td>(C2)</td>
<td>Taking too much</td>
<td>The pharmacist found that you were having difficulty taking your medication correctly. You may have been taking too much medication for your medical condition.</td>
</tr>
<tr>
<td>(C3)</td>
<td>Erratic use of medication</td>
<td>The pharmacist found that you were having difficulty taking your medication correctly. You may have been taking your medication on an irregular basis.</td>
</tr>
<tr>
<td>(C4)</td>
<td>Intentional drug misuse</td>
<td>The pharmacist found medication was being consumed in larger amounts or more frequently than was prescribed.</td>
</tr>
<tr>
<td>(C5)</td>
<td>Difficulty using dosage form</td>
<td>The pharmacist noted that you have a physical problem that was preventing you from correctly using your medication.</td>
</tr>
<tr>
<td>(C0)</td>
<td>Other compliance problem</td>
<td>The pharmacist found that you were having difficulty taking your medication correctly.</td>
</tr>
</tbody>
</table>

## Under-treated

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(U1)</td>
<td>Condition under-treated</td>
<td>The pharmacist found that you were still experiencing symptoms of a medical condition that you were already being treated for.</td>
</tr>
<tr>
<td>(U2)</td>
<td>Condition untreated</td>
<td>The pharmacist found that you were experiencing symptoms of a medical condition that you were not receiving treatment for.</td>
</tr>
<tr>
<td>(U3)</td>
<td>Preventive therapy required</td>
<td>The pharmacist found that you have a health condition or are at risk of developing a health condition that could benefit from additional treatment.</td>
</tr>
<tr>
<td>(U0)</td>
<td>Other untreated indication problem</td>
<td>The pharmacist believes you might benefit from additional treatment for your symptoms.</td>
</tr>
</tbody>
</table>

## Monitoring

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(M1)</td>
<td>Laboratory monitoring</td>
<td>The pharmacist believes that you could benefit from a laboratory test to monitor your medication therapy.</td>
</tr>
<tr>
<td>(M2)</td>
<td>Non-laboratory monitoring</td>
<td>The pharmacist believes that you could benefit from a test to monitor your medication therapy.</td>
</tr>
<tr>
<td>(M0)</td>
<td>Other monitoring</td>
<td>The pharmacist believes that you could benefit from a test to monitor your medication therapy.</td>
</tr>
</tbody>
</table>
**Education or Information**

| (E1) Patient requests drug information | You asked the pharmacist for further information on your medications. |
| (E4) Patient requests disease management advice | You asked the pharmacist for advice about management of your medical condition. |
| (E0) Other education or information problem | The pharmacist gave you advice. |

**Not-classifiable**

| (N0) Not-classifiable | The pharmacist believes that there is an issue with the management of your medications. |

**Toxicity or Adverse reaction**

| (T1) Toxicity, allergic reaction or adverse effect present | The pharmacist believes that the signs or symptoms you are experiencing may be due to your medication. |

**Recommendations (A change in therapy)**

| (R1) Dose increase | The pharmacist recommended an adjustment of the dose of your medication to a dose that is more suitable for you. |
| (R2) Dose decrease | The pharmacist recommended an adjustment of the dose of your medication to a dose that is more suitable for you. |
| (R3) Drug change | The pharmacist recommended an adjustment of your medication list to make it more suitable for you. |
| (R4) Drug formulation change | The pharmacist recommended an adjustment of your medication to make it more suitable for you. |
| (R5) Drug brand change | The pharmacist changed the brand of your medication to make it more suitable for you. |
| (R6) Dose frequency/schedule change | The pharmacist recommended an adjustment of your medication schedule to make it more suitable for you. |
| (R7) Prescription not dispensed | The pharmacist did not dispense your prescription. You may need to return to your doctor. |
### Other changes to therapy

The pharmacist recommended an adjustment to your medication.

### A referral required

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>(R9)</td>
<td>Refer to prescriber</td>
<td>The pharmacist believes you need to see your doctor.</td>
</tr>
<tr>
<td>(R10)</td>
<td>Refer to hospital</td>
<td>The pharmacist believes you need to go to the hospital.</td>
</tr>
<tr>
<td>(R11)</td>
<td>Refer for medication review</td>
<td>The pharmacist believes you would benefit from a Home Medication Review. Talk to your doctor about a HMR at your next appointment.</td>
</tr>
<tr>
<td>(R12)</td>
<td>Other referral required</td>
<td>The pharmacist believes you should visit another health professional, such as the ...</td>
</tr>
</tbody>
</table>

### Provision of information

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>(R13)</td>
<td>Education/counselling session</td>
<td>The pharmacist provided you with education or counselling on a particular medication or medical condition. This medication or medical condition was...</td>
</tr>
<tr>
<td>(R14)</td>
<td>Written summary of medications or a 'Patient Medication Profile (PMP)'</td>
<td>The pharmacist provided you with a written summary of your medications.</td>
</tr>
<tr>
<td>(R15)</td>
<td>Commence dose administration aid</td>
<td>The pharmacist believes you would benefit from a device that will help you administer your medications. The device the pharmacist thinks you should have is...</td>
</tr>
<tr>
<td>(R16)</td>
<td>Other written information</td>
<td>The pharmacist provided you with written information about your medication or medical condition.</td>
</tr>
</tbody>
</table>

### Monitor

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>(R17)</td>
<td>Monitoring: non-laboratory</td>
<td>The pharmacist believes you could benefit from monitoring your medication or medical condition. The monitoring suggested is...</td>
</tr>
<tr>
<td>(R18)</td>
<td>Monitoring: laboratory test</td>
<td>The pharmacist believes you could benefit from having a laboratory test for your medication or medical condition. The test suggested is...</td>
</tr>
</tbody>
</table>

### Other

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>(R19)</td>
<td>No recommendation necessary</td>
<td>The pharmacist resolved the problem and does not have any further recommendations for you.</td>
</tr>
</tbody>
</table>
Appendix F: Randomisation of the pharmacies in the trial

210 Pharmacies in Tas, Vic and NSW

Group 1
Pharmacy and Consumer Sub-Study (6)

Group 2
Pharmacy and Consumer Sub-Study (18)

Group 3
Pharmacy and Consumer Sub-Study (9)

Convenience Sample

30
No Feedback
No Reminder
No Prompts

90
Feedback
Reminder
No Prompts

90
Feedback
Reminder
1 Prompt

45
Feedback
Reminder
3 Prompts

Removed
Appendix G: Specific Prompts

1. **Specific Prompt**
   This prompt for trial group 3 pharmacies only

   **Prompt activation:**
   - Specific reminder prompts are to activate when a patient is being dispensed Nexium 40mg (esomeprazole 40mg) or Somac 40mg (pantoprazole 40mg).

   Dispensing screen will display:

   **INTERVENTION ALERT:**
   Assess whether this patient would be a suitable candidate for considering a decrease in the dose of their proton-pump inhibitor (PPI).

   It is recommended that all patients taking a PPI should be on the minimum dose needed to control their symptoms, in order to minimise any long-term effects (see NPS News 46: Proton Pump Inhibitors [http://www.nps.org.au/__data/assets/pdf_file/0016/23821/news46.pdf](http://www.nps.org.au/__data/assets/pdf_file/0016/23821/news46.pdf))

   This patient may be suitable for a lower dose if they:
   - Have been taking a high or standard PPI dose for longer than 8 weeks
   - Currently have well-controlled symptoms
   - Do not have any conditions that prohibit the use of a lower dose
   (see pharmacist information leaflet for more details)

   Please choose an action:
   - Continue dispensing
   - Patient information leaflet
   - Pharmacist/GP information leaflet

   NB:- The buttons for the two leaflets will link to a PDF. Once one PDF is selected and printed, the pharmacist will be returned to the above screen so they can select the other PDF if necessary, or click on ‘continue dispensing’.

   NB:- The above weblink will be updated at a later date as there has been a newer release from NPS about PPIs (May 09) that has not been uploaded onto their website yet.

   **What activates the prompt:**
   The prompt is activated when dispensing a script for esomeprazole 40mg and pantoprazole 40mg (considered high or standard doses that could be reduced, according to NPS).

   Prompt appears every time one of these items is dispensed.

   NB:- The buttons for the two leaflets will link to a PDF. Once one PDF is selected and printed, the pharmacist will be returned to the above screen so they can select the other PDF if necessary, or click on ‘continue dispensing’.
Appendix H: Consumer Intervention Record

Pharmacy Name
Consumer Intervention Record
Pharmacy Recording of Medication Incidents and Services electronically
Documenting Clinical Interventions in Community Pharmacy

Printed: <date printed>

Patient details
<Date of birth> Script Number:<script number>
<patient name> Gender: <gender>
<prescriber>
<drug>

Intervention Details:
<intervention wording>
EG (D2): The pharmacist identified that this medication may interact with a medication that you are already taking.

Recommendation(s)

<list up to 4 recommendations>
EG(R9): The pharmacist believes you need to see your doctor.

Notes

Please see: Within: days/weeks/months

This intervention was undertaken on the basis of the patient specific information available at the time.
Appendix I: Screenshots from PROMISe II

Intervention Note In Patient History

Reports For Interventions Available at Each Pharmacy
Intervention Summary

Generated on: 26 July 2005

Patient and Script

Intervention ID: 0
Re Form Type: Original
Re Number: 0
Gender: Male
Patient: Mr John Citizen
Age Group:

Prescriber: Ian Smith 68481
Drug: Metformin (diem-mard) Tab 850mg
Med Count: 2

Category

Category: Unhealed distractions
Sub Category: Preventive therapy required
Category Notes:

Actions

Selected Actions:
Discussion with patient or carer

Action Notes:

Recommendations

Selected Recommendations:
Drug Change

Printable Individual Intervention Summary
### Detailed Report of Interventions

**Generated on:** 08 July 2005

**Filter Conditions**
- **Date:** From: 01/01/2005 To: 08/07/2005
- **Intervention ID:** 16
- **Date:** 05/06/2005 04:12:42 PM
- **Time taken:** 2
- **Rx Number:** 0
- **Rx Form Type:** Original
- **Med Count:** 0
- **Drug:** Blank
- **Prescriber:** 0
- **Category:** Overdose Prescribed
- **Sub Category:** Dose too high
- **Selected Actions:**
  - Investigation: Patient History
  - Discussion with patient or carer
  - Discussion with patient or carer
- **Recommendations:**
  - Refer to Prescriber
  - Drug Brand Change
  - Other Changes to Therapy
- **Outcome:** Accepted
- **Significance:** Moderate - Likely Doctors Consultation Avoided or Required
- **Other Condition Notes:**

---

**Pharmacy-Based Detailed Report Of Interventions**
Introduction screen for intervention interface
Introduction screen populated
Saving and Re-Accessing a Draft Intervention
Help screen
Recording recommendations
Recording significance (mild)
Recording significance – moderate or high
Appendix J: Health Professional Intervention Record

Pharmacy Name
Health Professional Intervention Record
Pharmacy Recording of Medication Incidents and Services electronically
Documenting Clinical Interventions in Community Pharmacy

Printed: <date printed>

Patient details
<Date of birth>    Script Number:<script number>
<patient name>    Gender: <gender>
<prescriber>    <drug>

Intervention Category
Category: DocCodeDescriptExtra – see appendix C
Sub-category: DocSubCodeDescrip - see appendix C

Category Notes:
DocWhenToUse - see appendix C

Recommendation(s)
<list up to 4 recommendations>
Wording to be as in appendix A

Notes

Patient was advised to see:    Within:  days/weeks/months

This intervention was undertaken on the basis of the patient specific information available at the time.