## **Project Brief – SLE352 Community Science Project**

**Project title & number:**#22 Rostering optimisation in a large tertiary hospital pharmacy department

**Client:** Andrew Chong (on behalf of Monash Medical Centre - Pharmacy Department)

**Team members:** Chris Swan, Kipp Hughes

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| Project Outcomes | | Proposed Date |
| * Demonstrate the advantages of using optimisation software * Offer some examples of optimised rosters - Accrued Days Off Roster (ADO) - Intern Roster * Deliver a cost estimate of implementation   Initial meeting with client for project briefing | | 24/03/2019  24/03/2019  24/03/2019  04/03/2019 |
| Summary of Objectives | | **Expected Time-frame** |
| Develop an Integer Program (IP) for ADO rosters | | 50 - 70 hours |
| * This IP should incorporate 4 clinical teams: General Medicine, Special Medicine, Critical Care, Digestive Health * In order to create an appropriate IP model, it is anticipated that it will be also necessary to recreate the roster for the clinical teams as well * This has the natural potential scope to encompass the entire rostering done within the pharmacy, however for practicability, we will use dummy values for many of these requisites | |  |
| Develop an Integer Program (IP) for the Intern roster | | 60 - 80 hours |
| * Each year the pharmacy department has 11 interns that do a placement in each of a wide variety of rotations in the pharmacy over a 50-week period * It is important that each intern gets an equal distribution of time in each rotation to maximise their learning experience * This model should provide a comprehensive roster of each intern’s placement * The model will be based on 2018 data and can thus be compared to the roster of that year | |  |
| Demonstration of the advantages of using optimisation software | | 2 - 5 hours  (0.5-hour presentation time) |
| * One of the challenges with the Optimisation field is a lack of understanding of its nuances in the wider community. A key component of this project is having it serve as a platform for demonstrating some of the potential applications in which optimisation can be used, but in such a way that a layperson can garner some insight into its process * A presentation also offers good experience in conveying and summarising project work | |  |
| Deliver a cost estimate of implementation | | 2 - 5 hours |
| * Simply presenting an optimisation model and example of how it is done is hardly offering a solution to the problem. In order to deliver something that might contribute to a long-term solution, it is pragmatic to incorporate an outline of the financial costs of building an optimisation program for use in a hospital pharmacy context. | |  |
| Other Deadlines | | **Proposed Date** |
| Week 11 Community Science Forum presentation | | 21/03/2019 |
| Final meeting and hand over of resources to client | | 24/03/2019 |
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| *Team members:*  *(1) Chris Swan*  *(2) Kipp Hughes* | ***Student Numbers***  *700148732*  *214128788* | ***Team members’ emails:***  *caswan@deakin.edu.au*  *khhughes@deakin.edu.au* |
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| *Client name:*  *Andrew Chong*  *Assistant Deputy Director of Pharmacy* | | ***Client email:***  andrew.chong@monashhealth.org |

### Agreement for Project Brief

We, *Chris Swan* and *Kipp Hughes* have met with the client and discussed and agreed upon the outcomes listed in the table. A copy of the project brief documents has been uploaded to the cloud unit site (Group Locker) and uploaded to the Assignment Assessment Folder.