

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

Project Outcomes	Proposed Date
<ul style="list-style-type: none"> Demonstrate the advantages of using optimisation software 	24/03/2019
<ul style="list-style-type: none"> Offer some examples of optimised rosters <ul style="list-style-type: none"> - Accrued Days Off Roster (ADO) - Intern Roster 	24/03/2019
<ul style="list-style-type: none"> Deliver a cost estimate of implementation 	24/03/2019
Initial meeting with client for project briefing	04/03/2019
Summary of Objectives	Expected Time-frame
Develop an Integer Program (IP) for ADO rosters	50 - 70 hours
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> 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)
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> 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
Team members:	Student Numbers	Team members' emails:
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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.