



Find Consultation Rooms in SOC Easily!

Shawn Poh, SOC Operations

Background

Consultation rooms are key resources in SOC which the department aims to maximise the booking and utilization. The individual clinic-in-charge will tend to offer available room/sessions to doctors who are running sessions in their own clinic first, before allowing other clinic-in-charge to request for their rooms as part of expansion of services. However, there is no standardised clinic roster used across all SOC clinics – each clinic has their own way of presenting the information. As a result, the in-charge will need to spend time referring to numerous rosters in different formats to find the required room/session.

Aims

The main aims of this project are to leverage Microsoft Excel functions to:

- 1. Create a standardised clinic roster that is applicable and relevant to all 23 outpatient clinics with varying number of consultation rooms and non-consultation rooms (as an added feature)
- 2. Use the standardised clinic roster to provide an overview of the available session (day and week of the month) within each outpatient clinic
- 3. Create 1 single file as a generator/interface for the user to search for the required session across all 23 clinic rosters
- 4. Be scalable as more clinics / rooms are added in the future

Methodology



Study Existing

Studied the different clinic roster formats and the information presented



Gather Requirements

Engaged the individual clinic-in-charge on what additional features they would like to have as they are the eventual end users of the file



Build **Prototype**

Iterative approach to build: based on envisioned layout, list of added features, solicited feedback as well as addressing problems observed in current rosters

Utilized Excel formulas and Visual

Basic for Application (VBA)



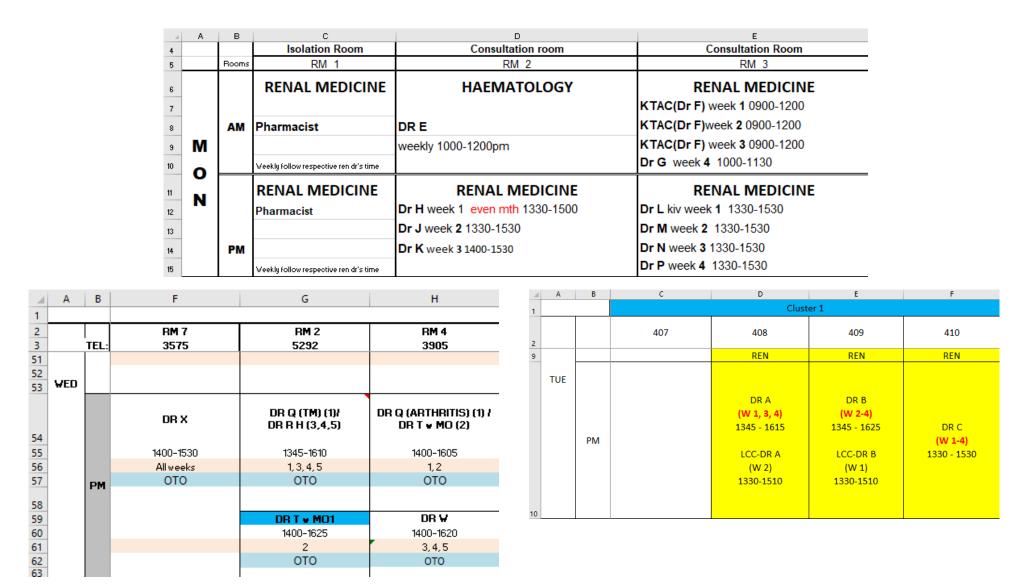
Constant two-way feedback sessions with various clinic managers on the ease of use, user interface and functionality

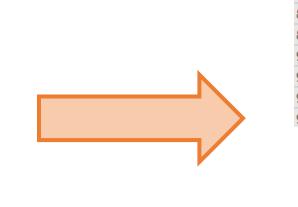
Solicit

Feedback

Outcome

-Phase 1 -





-4	Α	В	С	D	E F	G	Н	1	J K	L M N	- 4	Α	В	С	D	E	F G	H	1 1	J	K	L	M	1 N
1	1		Room	RM 1				RM 3					Room			RM 3			RM 4					
2		CLINIC		Tel	CONSULT					2		CENTRE		Tel	1									
3	3			Туре				CONSULT						Туре	CONSULT				CONSULT					
84	Resource 1 Name			DR GCM				DR GCM					Resource 1	Name	UR	RO TEAM - DR KC 1				URO TEAM - DR KC 2				
85		Duration 0900-1200				0900	0-1200	5				Duration	0815 - 1145				0815 - 1145							
86		AM		Frequency	2,3,4,5				2,3,4,5			MON	AM		Frequency	1,2,3,4,5					1,2,3,4,5			
87	Specialty Remarks			ото				ото						Specialty	URO				URO					
88								2nd room						Remarks										
2 3 84 85 86 87 88 89 90 91 92 93			Resource 2	Name	ARTHRIT	IS CLINIC	CLINIC - DR PHN		ARTHRITIS CLINIC - DR PHN					Resource 1	Name	URO TEAM - DR NA 1			URO T	EAM	- DR N	IA 2		
90				Duration	1400-1605				1400-1605			5 6 MON			Duration	1330 - 1700				1330 - 1700				
91	WED	WED AM Frequency		1				1			MON	PM		Frequency	1,2,3,4,5				1,2,3,4,5					
92				Specialty		ОТО			C	OTO	27 28				Specialty	URO			URO					
93				Remarks					2nd room						Remarks									
					4	Α	В	С	D	0 P Q R	S	T U	V V	v x 1	Z AA	AB AC								
			1	1			Room	RM 303		RM 325			RM 324											
				2 CLINIC			C	Tel																
			3				Туре	CONSULT					CONSULT											
				144 145 146 147			Resource 1		DR E 1400-1700			DR F 1300-1700		DR G 1400-1630										
				145		PM		Duration Frequency	1,2,3			1,2,3,4,5		1,2,3,4,5	·									
				147				Specialty	RMD			SOG		END										
			148	THU			Remarks																	
				148 149 150 151 PM			Resource 2		DR H															
			150		PM		Duration	1300-1700 4																
					151		PIVI		Frequency Specialty	S0G														
					152 153				Remarks															

Conversion of clinic rosters from varying formats and layouts to a standardised layout with the flexibility to add remarks and colour coding cells for easy reference

--- Phase 2 ---

		Overview of available rooms for each week													
			RM 307	RM 308	RM 309	RM 310	RM 312	RM 313	RM 334						
Mon	AM	Week No.				5			5						
Mon	PM	Week No.													
Tue	AM	Week No.							1,2,3,4,5						
Tue	PM	Week No.		4,5		1,3,4,5			1,2,3,4,5						
Wed	AM	Week No.							1,2,3,4,5						
Wed	PM	Week No.					1,2,3,4,5		1,2,3,4,5						
Thu	AM	Week No.													
Thu	PM	Week No.													
Fri	AM	Week No.													
Fri	PM	Week No.		1,2,3,4,5				1,2,3,4,5							

Standardised clinic roster in Phase 1 facilitated the creation of an overview table for each individual clinic – Identifying which room is available on the different days, sessions and weeks.

Overview table was derived through a series of complex formulas.

-	A B	С	D	E F	G	H	1	J	K		1 N	0	P	Q
	What kind	l of setup you a	are looking for?		Adhoc / Make Up			Cle	ar all selections	/ Reset Excel File >> De	lete			
				X	Permanent / Long Te	rm						_		
									_					
									manent / Long					
ı								2) Ent	er the day that	you are looking for		MONDAY		
								3) Ent	er the session ti	hat you are looking for		PM		
ł														
								A) Cal	act the week nu	ımber that you are looking f	or X	Week 1	Х	Wee
ł								4) 30	ect the week nu	iniber that you are looking i	" <u>^</u>	-	<u> </u>	Weel
											_^	Week 3		WCC
1												_ WCCK 5		
	5) Select wh	ich clinic vou w	ould like to search the room	from										
	-	Name	Room(s) available		Clinic Name	Room(s) available		Clin	nic Name	Room(s) available				
	X Clin		RM 14, RM 16, RM 17	X	Clinic M	No room available	Γ		ology Centre	RM 7, RM 8				
1	X Clin	ic B	No room available		Clinic P			08	G Centre					
1	X CDLI)	RM 6		Health Assessment	Centre		DN	IC Level 1					
	ENT	H&N Centre		X	MSC	No room available	Г	X DN	IC Level 3	RM 346				
	X Clin	ic H	RM 14	X	OSJC	RM 404, RM 405		X DN	IC Level 4	No room available				
	X Clin	ic J	RM 4		Haematology Centre			X SO	C @ SH Tower L	No room available				
	X Clin	ic K	No room available		ImmunoHub			SIe	ep Centre					
	X Clin	ic L	No room available		ARC		Г	Tra	insplant Centre	=				

A standalone file that is able to scan across the selected clinic rosters to return rooms that are available, based on user's input.

VBA coding was heavily used to derive the output while keeping this standalone file lightweight (file size of 640kb)

Conclusion

While it is still preferred that a bespoke IT application which takes in information from the Outpatient Administrative System (OAS), can be created for the department to identify available rooms across all outpatient clinics easily, both the standardised clinic roster and the rooms availability Excel files have demonstrated that we can make use of an everyday software – Microsoft Excel to deliver our desired outcomes. Rather than waiting for an application to be created, the department took a small step forward to leverage on VBA coding and functions and created a pseudo software to shorten the process time of finding available rooms.