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REDUCE THE NUMBER OF TOGGLES INTO ELECTRONIC MEDICAL RECORD SYSTEM FOR TRACING BLOOD RESULTS IN AN AMBULATORY CHEMOTHERAPY TREATMENT UNIT



National Cancer Centre Singapore
SingHealth

Mumtaz, B., Reyes, M.A.J., Huang, P., & Teow, G. E.

INTRODUCTION

One of the challenges faced in Ambulatory Treatment Unit (ATU) is the time taken for tracing patient's blood test results prior to receiving chemotherapy in the Unit. Nurses need to toggle between various management systems which is very time consuming leading to decreased efficiency in tracing these results. The notion of embarking on this project is to enhance the efficacy of tracing blood test results for patients receiving chemotherapy at ATU.

OBJECTIVES

This project aims to create a visual cue dashboard for the ATU's Screening Nurses. The dashboard served as an alert for the nurses when individual patient's blood test results are ready in the Electronic Medical Records.

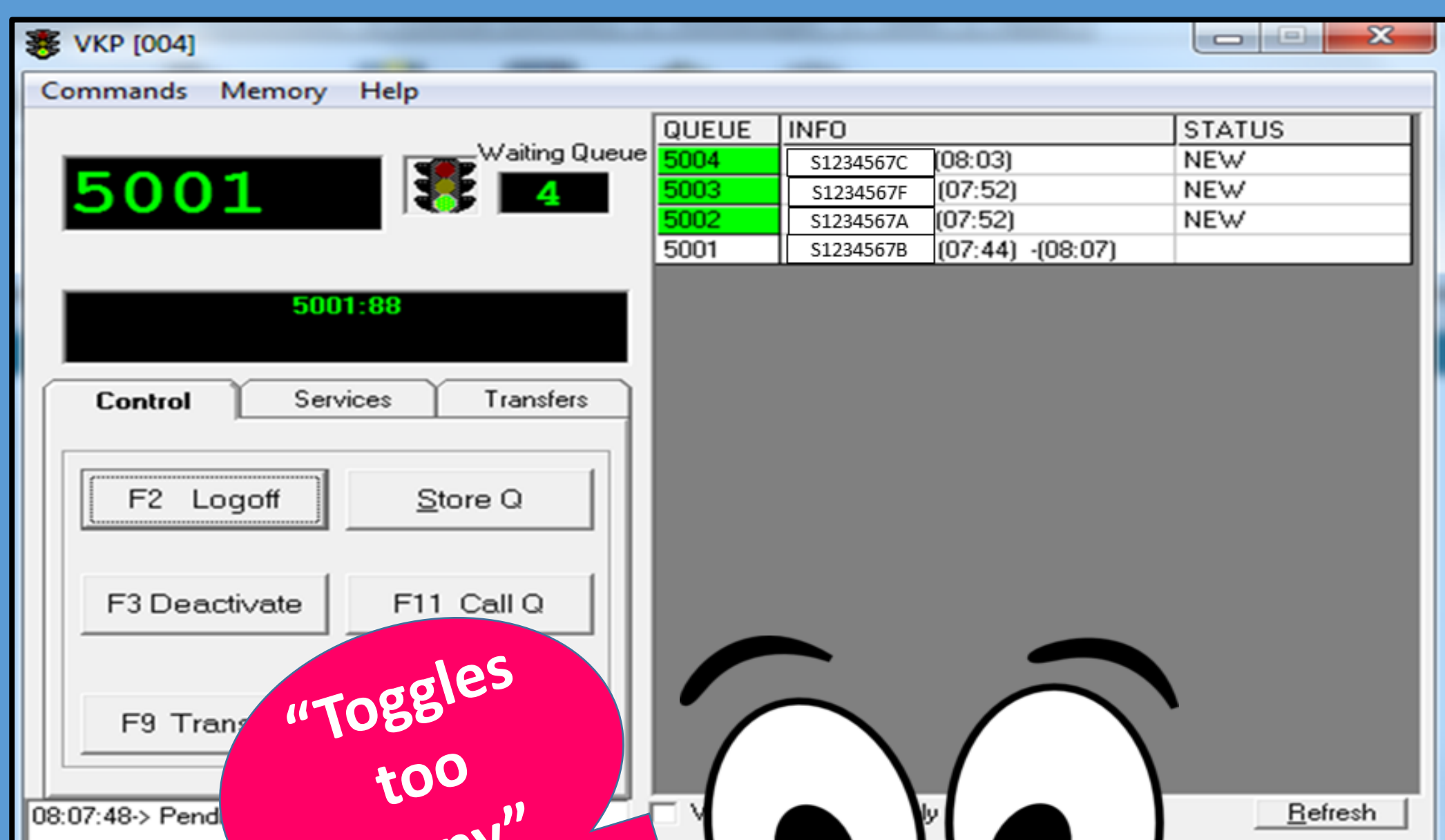
Desired outcomes are:

- Eliminating the waste (multiple toggling of systems)
- Reducing the time taken for screening individual patient's blood test results
- Reducing the patient's waiting time for screening process
- Eradicating the risk of 'missed' tracing of patient's blood test results causing a delay in patient's chemotherapy appointment time
- Improving on the timeliness of patients receiving their chemotherapy

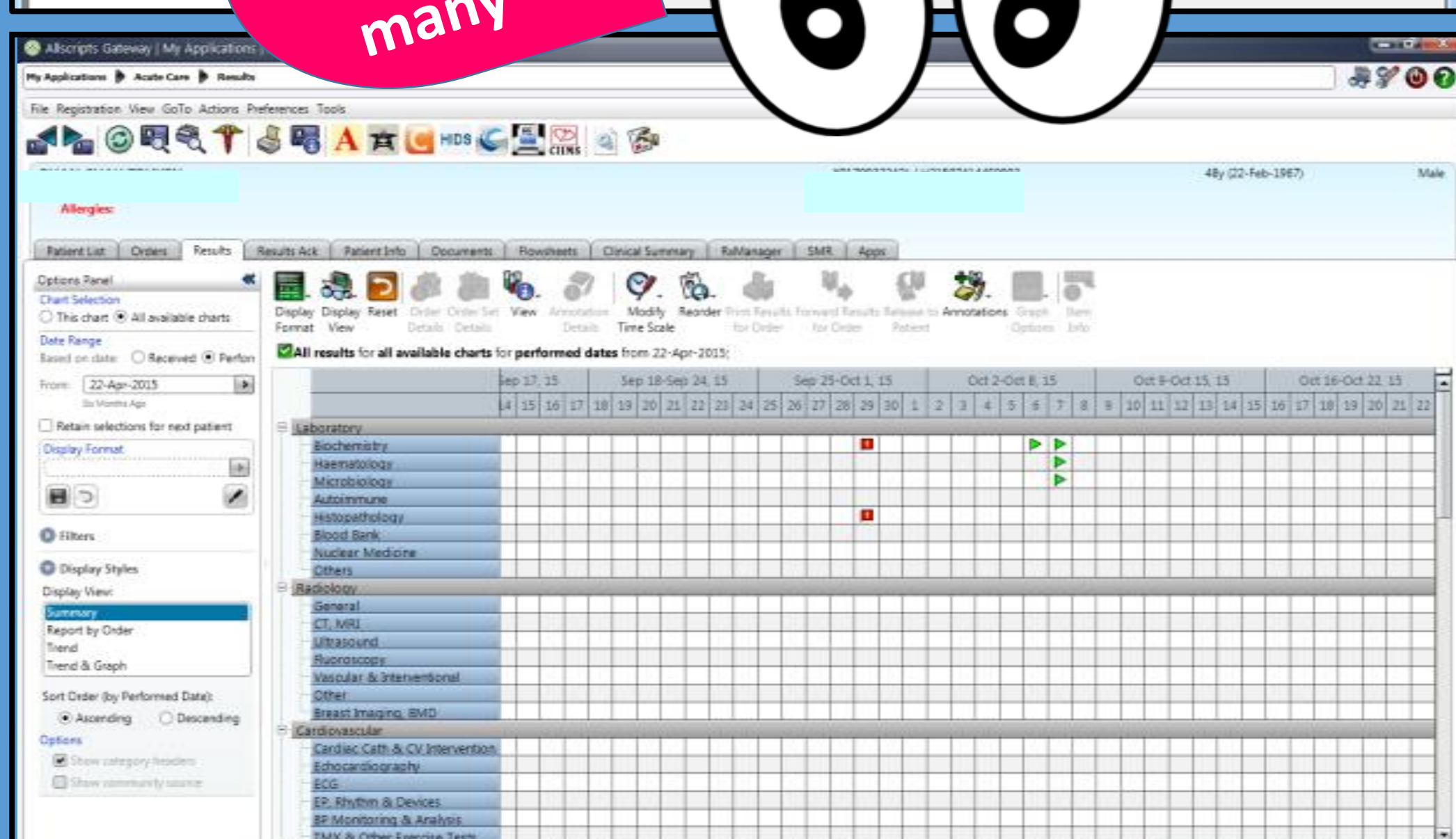
GAPS ANALYSIS

- Time wasted for nurses to toggle between Virtual Key Pad (VKP - queue system for screening blood test results) and Sunrise Clinical Manager (SCM - report of blood test results)
- No visual cue to alert nurses that the blood test results are ready
- Failure to know when the blood test results are ready leading to a delay in the transfer of queue number to the counter staff for registration

CURRENT PROCESS



(VKP) Queue for Screening of Blood Test Result



(SCM) Blood Test Result

METHODOLOGY

Creation of Dashboard for Display Alert

- Cancer Informatics created visual cue in the MOSAIQ – Oncology Practice Management System

ATU Dashboard (Screening)

Screening List			
5008 S1234567G App Time : Walk-in	5021 TAN AH KOW S1234567A App Time :	5030 LIM AH BENG S1234567B App Time :	5035 CHUA CHAR BOH S1234567C App Time :
5037 JOHARI BIN JAFFAR S1234567D App Time : Walk-in	5054 PAUL KANG S1234567E App Time :	5055 CHITHRA D/O RAJAH S1234567F App Time : 03:00 PM	5056 SIMI THIN X0001234567G App Time : 03:00 PM

Time to Chemo	Lab Status	Lab Results
> 30 min	Wait for Lab	CBC
10 ~ 30 min	Wait for Result	Renal Function
< 10 min		Liver Function

RESULTS

	BEFORE	AFTER
Average Patient per day	140	140
Average Toggles per patient	5	1
Total Toggles per day	700	140

Total Time = 1.5 hours per day Saved

Reduction in toggles by 560 times per day!

Benefit

1. Increased efficiency (eliminate time wasting to toggle)
2. Increased patient satisfaction (no delay and missed appointment)
3. Increased staff satisfaction (decrease eye fatigue)
4. Reduced risk of missing blood test results that were ready

CONCLUSION

With the significant decrease in the number of toggles, there is also the positive coefficient minimisation of technology fatigue experienced by the Screening Nurses. This in turn, maintains their high level of performance and efficiency in the screening process of patient's blood test results prior to chemotherapy administration.