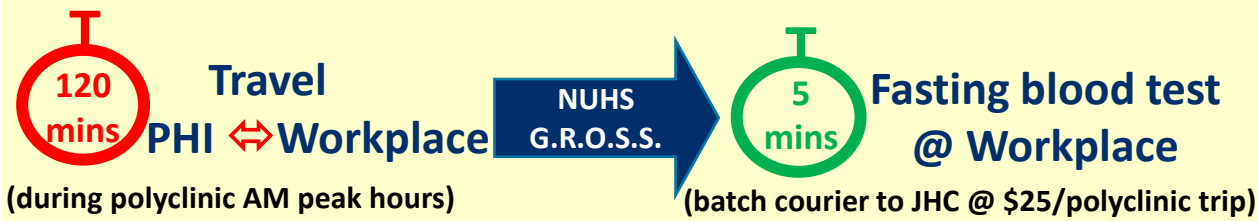| Implementation Site	NUP	Date of Implementation	24 Aug 2023

NUHS G.R.O.S.S. #102

Health Screening Process for NUHS Diagnostics & Pharmacy (D&P) Staff at NUP

What is Stupid? Why is it Stupid?

1. D&P Staff participating in Health Screening needs to take time off and travel to NTF/NUH for fasting blood taking and biometric measurements

2. These could have been done onsite at their deployed polyclinics, bringing greater convenience to staff

What was Implemented?

Effective 24 August 2023, NUHS D&P Staff participating in Health Screening can get their fasting blood drawn onsite at the Polyclinics where they work.

120 mins Travel PHI ⇔ Workplace
(during polyclinic AM peak hours)

NUHS G.R.O.S.S. →

5 mins Fasting blood test @ Workplace
(batch courier to JHC @ $25/polyclinic trip)

Impact

a) **76%** (247 / 327) D&P Staff signed up for Health Screening

b) **473.5 Hours** of Travelling Time Saved

c) **Potential to Scale** to NUP or any other NUHS staff working at polyclinic

Blood Taking	Diagnostics	Pharmacy
BBK – 24 Aug 23	17	26
CLM – 31 Aug 23	13	24
CCK – 6 Sep 23	20	15
BPJ – 7 Sep 23	12	16
JUR – 13 Sep 23	10	24
PIO – 14 Sep 23	21	25
QTP – 20 Sep 23	10	14
Total	247 (327)	

2

Thank You!

NUHS G.R.O.S.S. #102

Health Screening Process for NUHS Diagnostics & Pharmacy (D&P) Staff at NUP

Dr Christina Yip

Judy Yong

Gwendoline Ng

Seow Muay Muay

Xu Hexin

Tan Sin Yee

Constance Chua

May Lim

Implementation Site	AH	Date of Implementation	July 2023

NUHS G.R.O.S.S. #166

POCT Glucometer Competency Assessment Workflows for POCT Users

What is Stupid?
Why is it Stupid?

a) Existing POCT competency assessment workflows consist of 2 components:
- Practical competency assessment
- Online theory competency quiz

Cons: Huge effort and time spent by POCT coordinator to monitor and certify users. POCT users need to spend more time to complete 2 modes of competency assessments.

b) Different competency assessment schedules were assigned to the wards/clinics throughout the year.
Cons: Caused confusions to POCT users especially nurses who transfer from different locations on their assessment dates.

c) Using of hardcopy competency checklists.
Cons: Used 3-4 pages per checklists for ~500 nurses. Waste paper and storage space.

What was Implemented?

a) Removed online theory competency quiz. Consolidate problem solving questions into the practical competency checklist. Only 1 mode of annual competency assessment is required.

b) Standardised the annual competency assessment schedules to July – Aug yearly for all wards/clinics.

c) Using the M365 Lists to manage the documentation and storage of checklist electronically. All stakeholders (Lab & nursing team) have the access and visibility to the training folder via M365 Lists.

Impact

- 250-500 manhours saved annually (30-60 minutes x 500 POCT user) as they do not need to spend time to complete the annual online theory competency quiz.

- Go GREEN. Reduced cost. Saved ~ 2000 pieces of paper annually. Saved time and printer cartridge for printing the assessment checklists.

- Work Made Simple with M365 List: Improved work efficiency that enabled easy access of POCT users assessment checklists by the lab POCT coordinators, nurse in-charge and nurse educators.

- M365 List platform allows tracking of the progress of competency assessment for POCT users. This allows a more transparent approach for all involved.

- Saved storage space: Competency checklists to be stored electronically in M365 List.

Thank You!

POCT Glucometer Competency Assessment Workflows for POCT Users

Dr Ong Lizhen

Doreen Heng

Lim Sian Foong

Amanda Mong

Joanne Chin

Leong Mei Foong

Wan Swe Nei

| Implementation Site | NTFGH | Date of Implementation | 25 Aug 2023 |

NUHS G.R.O.S.S. #201

Ceasing Scope Culture Test After Being Used by CRE* Patients

What is Stupid? Why is it stupid?

Performing MSC Test for Scope after Being Used by CRE patient is **overprocessing.**

- All scopes after patient use will be undergone High Level Disinfection which can kill the CRE bacteria.

- There is existing Quality Assurance that all scopes have a planned MSC at monthly or 3 monthly basis according to the type of the scopes.

Hence, the additional MSC test after used by CRE patient is not necessary.

What was Implemented?

Infection Control Committee reviewed the data that Endoscopy nurses provided, and reference to local and international infection control guidelines, and approved to **cease Scope Culture (MSC) test after used by Carbapenem-resistant Enterobacteriaceae (CRE) patients on 25 Aug 2023.**

What the Endoscopy Nurses did
- Reviewed the scopes MSC data related to CRE cases from Jan 2017 to Jun 2023. Total 272 cases. Only 1 (0.4%) result was positive in 2017 which might be due to sample contamination during collection.
- Reviewed previous CRE outbreak in overseas scope models which were different from ours.
- Reviewed local and international guidelines, nil recommendation to do MSC test after used for CRE cases.
- Reviewed the efficiency of the High Level Disinfectant used for scope disinfection which can kill the CRE bacteria
- Reviewed current SOPs
- Liaised with Infection Control Team and proposed to **cease Scope Culture (MSC) test after used by Carbapenem-resistant Enterobacteriaceae (CRE) patients** which was **Overprocessed** workflow. While continue with following safety measures :
  - All scopes are undergone MSC test at monthly or 3 monthly according to the types of scopes
  - Scopes used by Infectious cases will be undergone double brushing and double high level disinfection
  - Keep a record for the scopes used CRE cases for 6 months

Impact

1. Significantly reduced unnecessary cost for MSC performed for scopes used on CRE patients.
   (The total cost incurred of scope MSC from 2017 to 2023 was $34,638.32)

2. Drastically improved scope turnaround time from 5 days and 3 hrs to 1.5hrs

3. Improved staff satisfaction with better efficiency and productivity.
   (Total nursing time spent for the MSC was 136 hours from 2017 to 2023)

*CRE = Carbapenem-resistant Enterobacteriaceae

Thank You!

NUHS G.R.O.S.S. #201

Ceasing Scope Culture Test After Being Used by *Carbapenem-resistant Enterobacteriaceae* Patients

NTFGH Endoscopy Nursing Department

NUHS G.R.O.S.S. #83

Medical Group Therapy (MGT) for Medically-stable Patients
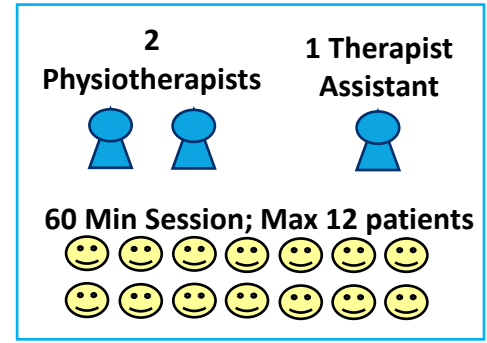
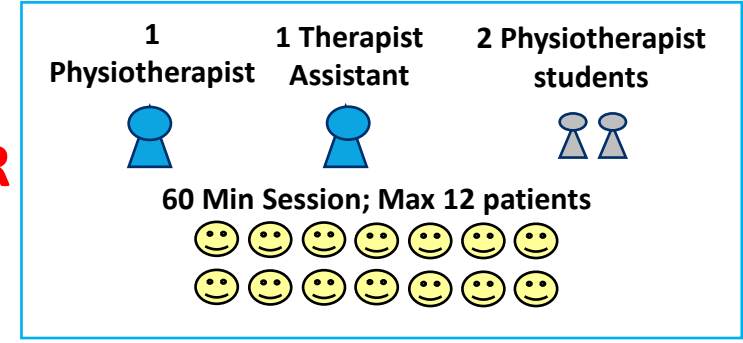| What is Stupid? Why is it Stupid?	What was Implemented?
Using fixed manpower planning norm 1:1 as the only option in attending to medically stable patients for Physiotherapy	• Physiotherapists are unable to provide timely / regular reviews for medically stable patients classified under 'maintenance rehab'*, during times of high bed occupancy rate and surge in new referrals. • New initiative to provide continual care and enhance psychosocial wellbeing of medically stable patients in Tower B. • At the same time, optimizing use of equipment/ facility in Tower B L11 Gym and enhancing students' learning experience.

1 : 1
Session

Staff — Patient

Staff — Patient

Staff — Patient

Staff — Patient

NUHS G.R.O.S.S.
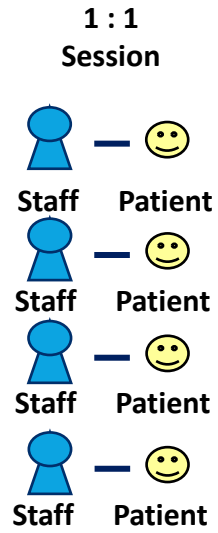
	Mon	Tue	Wed	Thu	Fri
AM	Morning Gym Therapy				
1400 – 1530	NeuroGeri Team			Ortho Team	
1530 – 1700	Ortho Team	Medicine Group Therapy (MGT)			

2 Physiotherapists   1 Therapist Assistant

60 Min Session; Max 12 patients

OR

1 Physiotherapist   1 Therapist Assistant   2 Physiotherapist students

60 Min Session; Max 12 patients

Impact

• With MGT, Physiotherapist will partner with therapy assistant to reach out to a greater pool of patients, saving about 60 manhours a month.

• SIT Physiotherapy Students on clinical training were roped in to assist in MGT, further increasing manhours saved

• Positive feedback from Physiotherapists, students and patients after implementation

To prevent risk of deconditioning during hospital stay.

13

Thank You!

NUHS G.R.O.S.S. #83

Medical Group Therapy (MGT) for Medically-stable Patients

NTFGH Physiotherapy Department

Implementation Site	JCH	Date of Implementation	4 Sep 2023

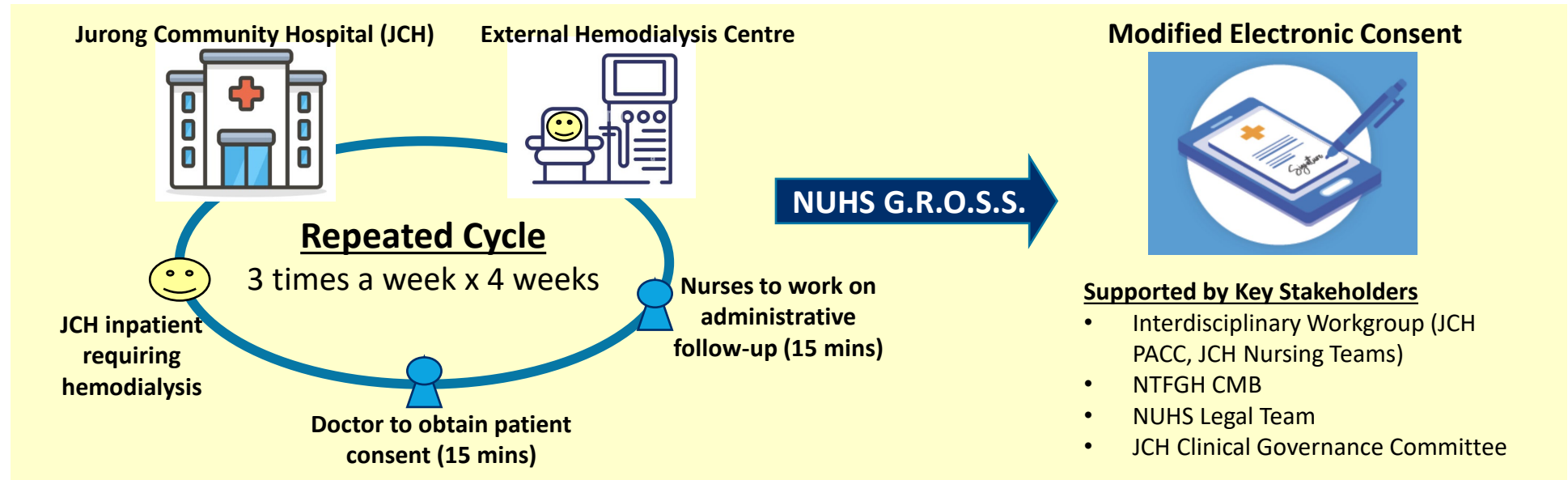# Repetitive Consent Taking for Dialysis Patients

What is Stupid? Why is it Stupid?

- JCH inpatients requiring hemodialysis need to leave the hospital 3 times a week to an external centre for hemodialysis sessions.

- Consent taking required each time such patients leave the hospital.

What was Implemented?

Modified Electronic Consent rolled out on 4 September 2023

One-time consent for JCH hemodialysis patients that would remain valid throughout admission period

Jurong Community Hospital (JCH)　　External Hemodialysis Centre　　Modified Electronic Consent

NUHS G.R.O.S.S.

Repeated Cycle
3 times a week x 4 weeks

JCH inpatient requiring hemodialysis

Doctor to obtain patient consent (15 mins)

Nurses to work on administrative follow-up (15 mins)

Supported by Key Stakeholders
- Interdisciplinary Workgroup (JCH PACC, JCH Nursing Teams)
- NTFGH CMB
- NUHS Legal Team
- JCH Clinical Governance Committee

Impact

Potential man-hours saved per month = 1,650 minutes or 27.5 hours

Working : n=5 patients x 3 times a week x 4 weeks admission period x (15 mins doctor time + 15 min nurses time) – 5 initial consent x (15mins doctor time + 15 min nurses time)

Thank You!

NUHS G.R.O.S.S. #138

Repetitive Consent Taking for Dialysis Patients

Dr Kelvin Koh

Devi Muruganandam

Chan Mei Mei

Khoo Yingxiang

Dr Low Li Lian

NUHS G.R.O.S.S. #50

Re-registered device with ITD / M365 Team upon changing a new phone
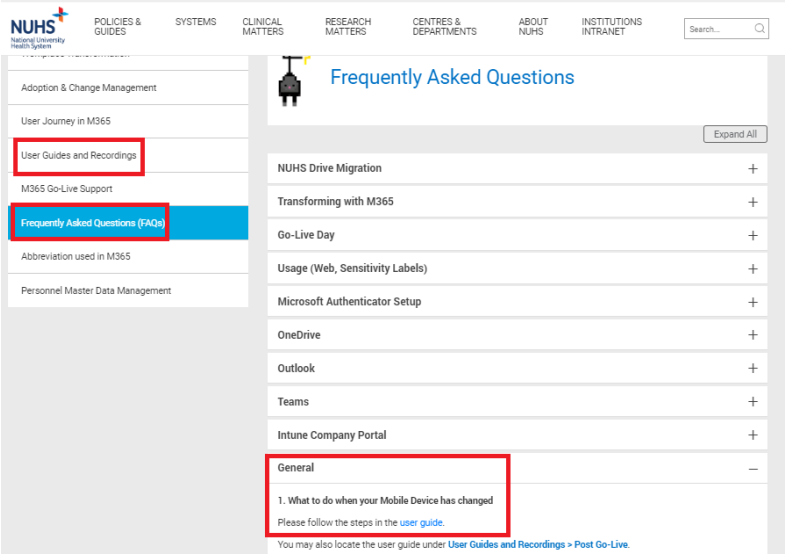
What is Stupid? Why is it stupid?

1. Re-registration has to be physically done at IT Clinic

2. IT Clinic opening hours : 9-1pm

3. Waiting time : 1 hour

What was Implemented? Alternative Solution

- Self-help for users are already available, and users are not required to go to IT clinic to effect these changes.

- With Effect from 1 July 2023, GITO created a single guide for changing of mobile device. It is now available in NUHS Intranet ->Workplace Transformation (M365):

  1. User Guides and Recordings section
  2. Frequently Asked Question (FAQs) -> General section

The team has also distributed this guide to all NUHS site managers, NUHS IT Helpdesk and EUC vendor.

Outcomes

- Impact on Staff : Estimated new 3,840 employees per year

- Extent of Simplification (e.g. 50% reduction in workflow)

- 640 hours saved annually (10 mins faster onboarding time per staff with published guide)
  - Before: 1 employee takes up 20 mins to search/read and 20 mins to offboard and onboard MFA and Intune.
  - After: 1 employee takes up <10mins to search/read and 20 mins to offboard and onboard MFA and Intune

Thank You!

NUHS G.R.O.S.S. #50

Re-registered device with ITD / M365 Team upon changing a new phone

Seah Han Yong

Lang Siew Ping

Dawn Sim

Jonathan Lim

Bok Zhuang Hui

Sharon Aw

Yeo Siow Keong

Gwen Chong

Karl Trovela

Wong Cheok Chee

NUHS G.R.O.S.S. #9
Inpatient Physiotherapy Column in EPIC

What is Stupid? Why is it Stupid?

Needing to click in EPIC under IP therapy column: repeat/first visit and yes/no each time after seeing patients. if I'm not wrong the purpose is the track the stats for department ; may I check if there's a more efficient way to do that? This is very tedious to do after each patient daily as takes time to load, aside from clicking the charges in another column (which takes time to load but that's a must) and after documentation in notes column too. Thanks!
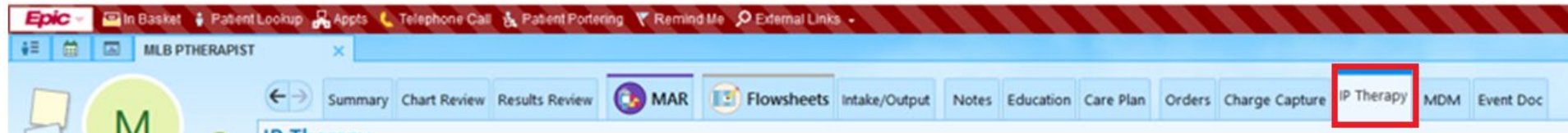
Alternative Solution

Alternative Method to Perform the Task Efficiently
There is no need to click in different "tabs" to complete the tasks above. All can be done in IP Therapy tab using the Navigator (side bar). This will save time from not having to wait for new tabs to load.

1 Less Click for each Clinical Documentation!
Physiotherapist also took the opportunity to review the need to click "yes/no" (i.e. for patient follow up) and concluded that it was a redundant step.

Good Outcomes
- Shared shortcuts with the team, as well as section heads in Rehab (OT, ST and Pod)

- EPIC tips and tricks to be shared at quarterly Rehab Town Halls

- Estimated **time savings of 47.2 man hours annually** (= Saving 2 seconds each patient encounter X 85,000 patients in inpatient physiotherapy annually)
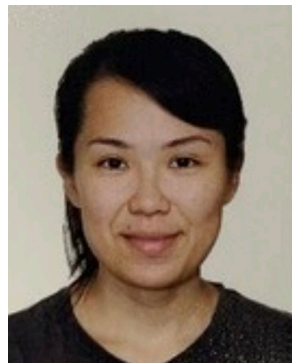
Thank You!

Inpatient Physiotherapy Column in EPIC

Chloe Chang

Kwan Peijun

Nicholas Chun

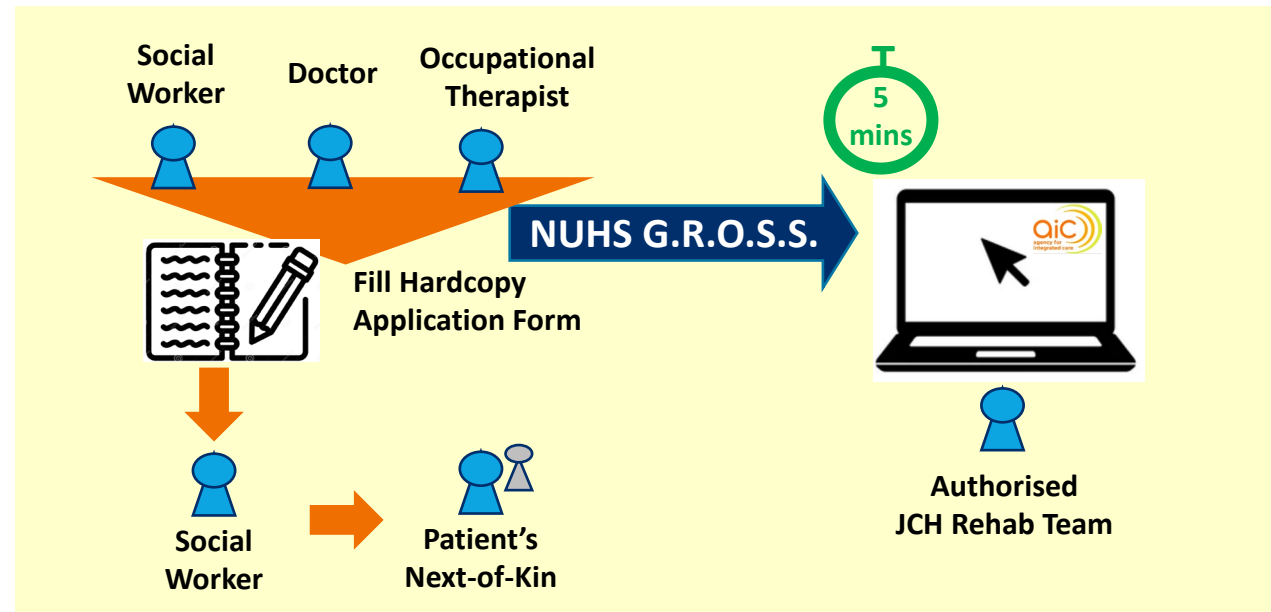| Implementation Site	JCH	Date of Implementation	End Aug 2023

NUHS G.R.O.S.S. #84
Get Rid of Hardcopy Functional Assessment Report (FAR)

What is Stupid?
Why is it Stupid?

1. When patient needs to apply for AIC schemes, our social worker, doctors and occupational therapist will fill up a hard copy form

2. The team will need to communicate and ensure it is handed over to Patient's NOK.

3. It involves many steps and communication.

4. The online FAR can be completed in 5 minutes

What was Implemented?

Apply for AIC Schemes Using Online Functional Assessment Report

Social Worker · Doctor · Occupational Therapist

Fill Hardcopy Application Form

NUHS G.R.O.S.S.

5 mins

Social Worker → Patient's Next-of-Kin

Authorised JCH Rehab Team

Impact

- **300 man-hours saved annually** (50 FAR/ month x 12 months x 0.5 hours)

Thank You!

NUHS G.R.O.S.S. #84
Get Rid of Hardcopy Functional Assessment Report (FAR)

Chen Changwu

NUHS G.R.O.S.S. #136
Digitalising Diabetes Resource File
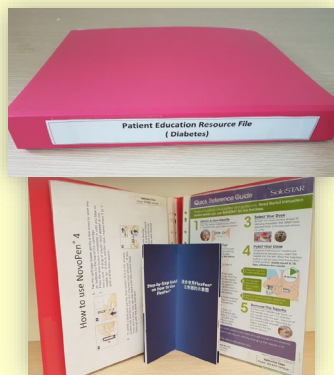
What is Stupid? Why is it Stupid?

- The current Diabetes Resource File in all the wards are poorly maintained

- Time consuming and labor intensive for Diabetes Nurse Educator to manually locate and update files

What was Implemented?

Digitalised Diabetes Resource File for inpatient nurses to provide training and delivering patient education to patients on insulin therapy

22 physical files to maintain

NUHS G.R.O.S.S.

Nurses to provide QR codes for patient to access diabetes resources

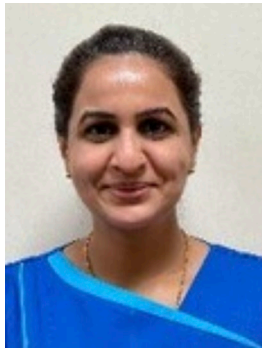## Impact

18.3 man-hours saved annually (22 files in Tower B x 25 mins/ file x 2 review/ year)

Thank You!

Digitalising Diabetes Resource File

Praveen Kaur Gosal

Geng Haiyu

Masdiana Binte Mohamed Yusof

Serenity Ang

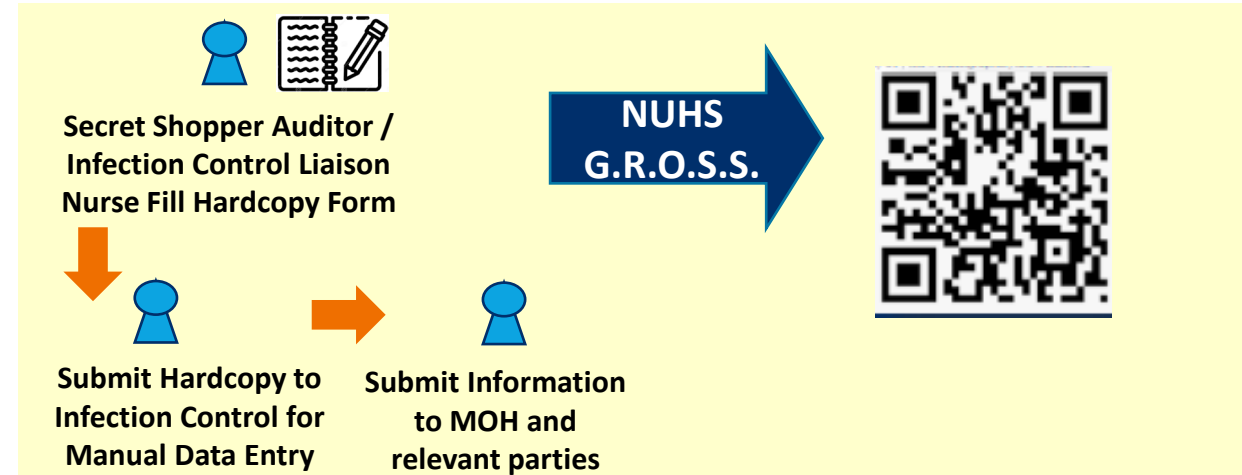| Implementation Site	NTFGH	Date of Implementation	1 Apr 2023

NUHS G.R.O.S.S. #143
Digitalisation of Hand Hygiene Audit Form

What is Stupid? Why is it Stupid?

- Hand Hygiene audit is conducted through observational inspection of handwashing technique by infection control liaison nurses and secret shoppers.

- It is one of Infection Control core programme and hospital KPI

- Hospital is required to submit 6 monthly report to MOH.

- Data collection and extraction are manual and laborious.

- Some data collection could be unaccounted

- The whole process is very unproductive as there is no electronic system to support the entry and data extraction.

What was Implemented?

Going Digital and Paperless!

Secret Shopper Auditor / Infection Control Liaison Nurse Fill Hardcopy Form

Submit Hardcopy to Infection Control for Manual Data Entry

Submit Information to MOH and relevant parties

NUHS G.R.O.S.S.

Impact

- **456 man-hours saved annually** (admin time spent on data entry)

- Reduce paper wastage

Thank You!

NUHS G.R.O.S.S. #143
Digitalisation of Hand Hygiene Audit Form

NTFGH Nursing – Infection Control Department

Implementation Site	AH	Date of Implementation	1 Jun 2023

NUHS G.R.O.S.S. #160
Daily printing of doctor's on-call roster as a mitigation for intranet downtime measure

What is Stupid? Why is it Stupid?

- Daily printing of doctor's on-call roster as a mitigation for intranet downtime measure.

- "Not worth" the daily printing given the low chance of intranet downtime + other way of accessing required information available.
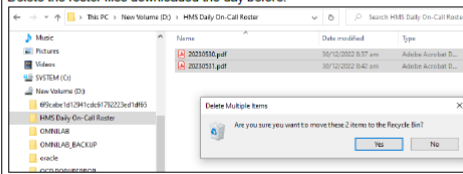
What was Implemented?

Alexandra Hospital

Restricted, Non-Sensitive

REVISED WORKFLOW ON DOCTOR'S ON-CALL ROSTER

With effect from **01 June 2023 Thursday**, doctor's on-call rosters do not need to be printed. Staff is to download the rosters as PDF files onto the Chemistry bench PC (Host name: LXCCLD000010PWC).

Step	Actions / Screenshots
1.	On the Chemistry bench PC, go to folder "HMS Daily On-Call Roster" on local D drive (not Share Drive).
2.	Delete the roster files downloaded the day before.
3.	Download the new rosters as PDF onto the same folder. Name the file according to the date. For example:

Date of the roster	Name file as
24 May 2023	24052023

In the event both the intranet and the roster PDF files are not accessible, contact AH Call Centre at 6472 2000 for the required information.

- Process change from daily printing to daily downloading the roster onto a local PC drive.

- The revised process won't be affected by intranet downtime.

Impact

Save 8 double-side printed papers daily, and manpower on shredding previous day's rosters.

Implementation Site	AH	Date of Implementation	6 July 2023

NUHS G.R.O.S.S. #161

Printing Proficiency Testing (PT) Reports for Review & Filing

What is Stupid? Why is it Stupid?

- PT is a regular process to fulfil regulatory requirement & maintain accreditation for Lab Medicine.

- All PT reports need to be reviewed by Section Leaders & Lab Director/ Pathologists.

- Staff questioned the existing workflow:
  - ☐ Is it necessary to print out the PT reports for review, instead of reviewing on electronic copies?

  - ☐ Is it necessary to keep the EPIC printouts, when data on EPIC is always retrievable?

What was Implemented?

With effect from 6 July 2023, paperless workflow implemented for PT review:

- Review stamp inserted to PT reports;

- PT reports sent via email to reviewers;

- E-sign on pdf reports;

- Reviewed reports archived in Share Point;

- To disable auto-print setting on EPIC for PT results.

Impact

- Reduce cost (save paper)
- Increase efficiency (speed up review time when reviewed by off-site visiting consultants)
- Save space (electronic filing vs hardcopy filing)

Thank You!

NUHS G.R.O.S.S. #160
Daily printing of doctor's on-call roster as a mitigation for intranet downtime measure

NUHS G.R.O.S.S. #161
Printing Proficiency Testing (PT) Reports for Review & Filing

AH Laboratory Medicine Department

Implementation Site	AH	Date of Implementation	10 Sep 2023

NUHS G.R.O.S.S. #211

Automate loading of blood culture bottles from laboratory analyser

What is Stupid? Why is it stupid?

- Manually unloading of blood culture bottles from laboratory analyser.

- It causes Blood Culture test result reporting to have a longer turnaround time (TAT) as it requires user intervention.

What was Implemented?

Change the setting from the analyser by unchecking "user must request unload of negative bottles".

Impact

1-week pre and post implementation TAT for negative culture bottles:

	TAT (days)
Pre implementation	5.5
Post implementation	5
Total reduction in TAT	0.5

Data extracted from 10 to 25 Sep 2023, total of 241 negative culture bottles.
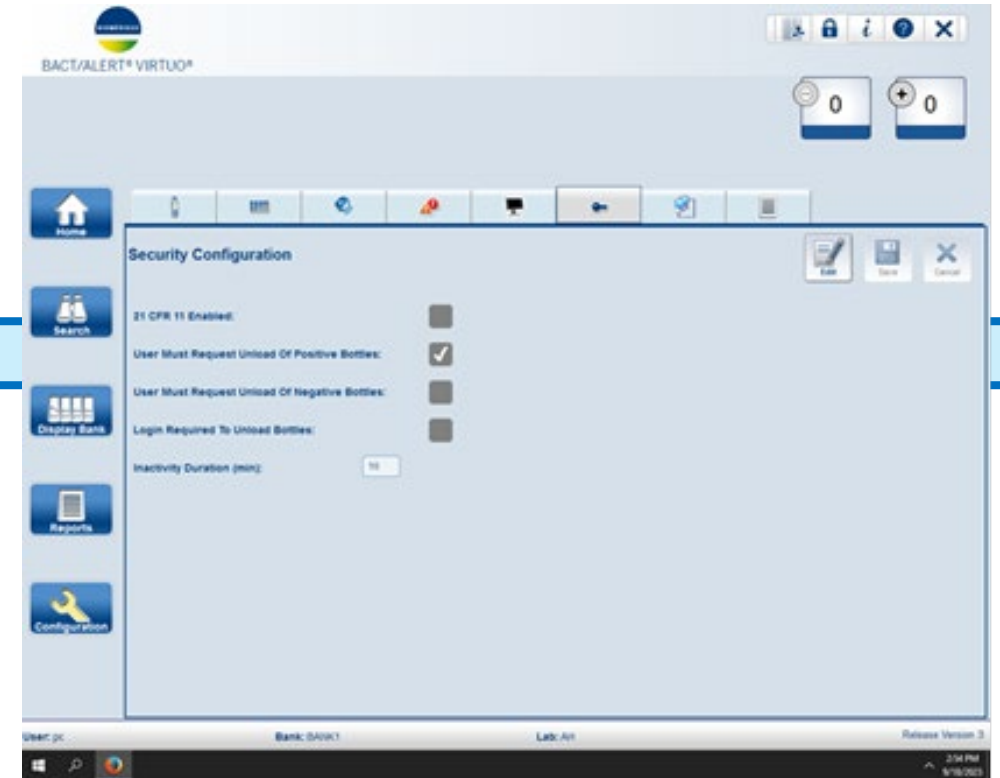
Thank You!

NUHS G.R.O.S.S. #211

Automate loading of blood culture bottles from laboratory analyser

Esther Tay Xue Ying

Chai Shwu Tyng, Polly

Implementation Site	AH	Date of Implementation	4 Oct 2023

NUHS G.R.O.S.S. #207

Digitising the Process of Placing Hearing Aid Orders
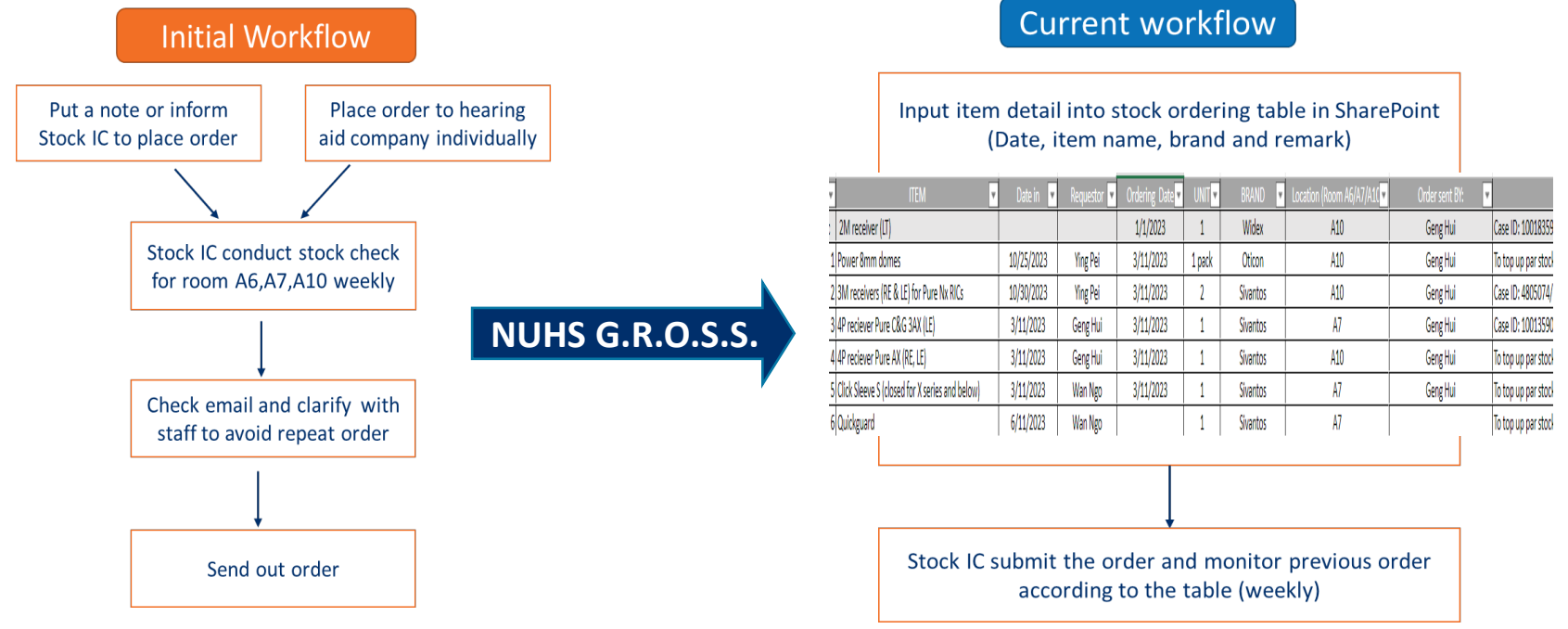
What is Stupid?
Why is it Stupid?

Staff is required to leave a note in the hearing aid box to indicate the quantity and detail of hearing aid accessories that has been issued to patient, so that stock in-charge can place an order to respective hearing aid company (6 hearing aid companies in total).

This is double work because staff also need to notify stock ordering IC when they conduct stock checking for the 3 locations.

What was Implemented?

Get rid of the manual process of placing hearing aid orders by adopting an online stock ordering spreadsheet in Sharepoint

Initial Workflow

Put a note or inform Stock IC to place order

Place order to hearing aid company individually

Stock IC conduct stock check for room A6, A7, A10 weekly

Check email and clarify with staff to avoid repeat order

Send out order

NUHS G.R.O.S.S.

Current workflow

Input item detail into stock ordering table in SharePoint (Date, item name, brand and remark)

	ITEM	Date in	Requestor	Ordering Date	UNIT	BRAND	Location (Room A6/A7/A10	Order sent BY:	
:	2M receiver (LT)			1/1/2023	1	Widex	A10	Geng Hui	Case ID: 10018359
1	Power 8mm domes	10/25/2023	Ying Pei	3/11/2023	1 pack	Oticon	A10	Geng Hui	To top up par stock
2	3M receivers (RE & LE) for Pure Nx RICs	10/30/2023	Ying Pei	3/11/2023	2	Sivantos	A10	Geng Hui	Case ID: 4805074/
3	4P reciever Pure C&G 3AX (LE)	3/11/2023	Geng Hui	3/11/2023	1	Sivantos	A7	Geng Hui	Case ID: 10013590
4	4P reciever Pure AX (RE, LE)	3/11/2023	Geng Hui	3/11/2023	1	Sivantos	A10	Geng Hui	To top up par stock
5	Click Sleeve S (closed for X series and below)	3/11/2023	Wan Ngo	3/11/2023	1	Sivantos	A7	Geng Hui	To top up par stock
6	Quickguard	6/11/2023	Wan Ngo		1	Sivantos	A7		To top up par stock

Stock IC submit the order and monitor previous order according to the table (weekly)

Impact

- Time-consuming(double work) : Total Time Saved per week: 15mins 30sec
- High chance of missed out the order due to miscommunication
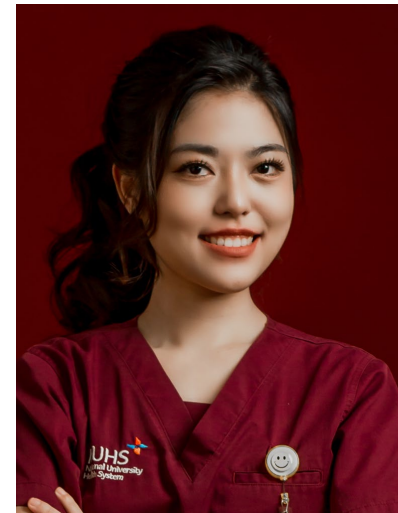
Thank You!

NUHS G.R.O.S.S. #207

Digitising the Process of Placing Hearing Aid Orders

Soo Ying Pei

Wong Geng Hui

Pang Wan Ngo

NUHS G.R.O.S.S. #217

Duplication of EPIC documentation for Geriatric Nursing assessment in flowsheet and progress note

What is Stupid? Why is it Stupid?

In a full day clinic, geriatric nurse are reviewing about 6-7 patients.

Time spent doing the documentation in flowsheet and progress note take about 10-15 minutes/patient.

The flowsheet documentation adds no additional benefits to patient care and does not include any patient details which guides the physician on diagnosis and treatment plans.

What was Implemented?

Cut Down on Unnecessary Documentation

Nurses will document comprehensive geriatric assessment in progress note and only fill up necessary column in EPIC flowsheet for the purpose of data tracking. This had cut down 7 minutes/patient on documentation and this will allow nurse to have more time to focus on the care for patient or reviewing the next patient.

Progress Note
(Comprehensive Geriatric Assessment)

Flowsheet
(No additional benefits to patient care. Does not include any patient details to guide physician on diagnosis and treatment plan)

NUHS G.R.O.S.S. →

Progress Note
(Comprehensive Geriatric Assessment)

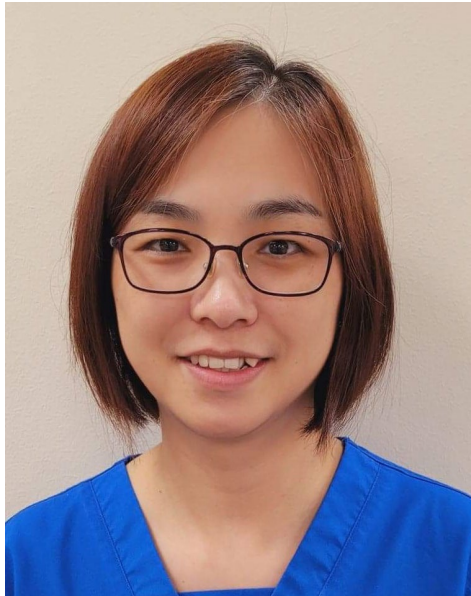**+ Fill up necessary columns in Flowsheet**

Impact

Quantified Outcomes = 24.5hours per month

- 7 mins reduction / patient x 7 patients in a day x 30 days a month = 1,470 minutes per month
- Cut down on documentation = less manpower and data storage time better utilized on patient care.
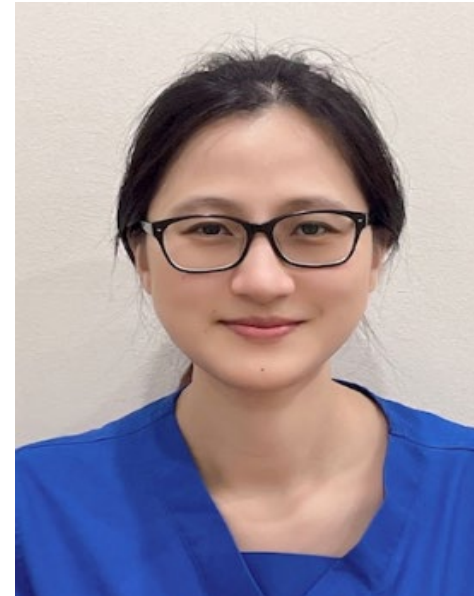
42

Congratulations!

NUHS G.R.O.S.S. #217

Duplication of EPIC documentation for Geriatric Nursing assessment in flowsheet and progress note

Li Yan

Sun Lingling

THANK YOU for your dedication in making our workplace more efficient.
We look forward to seeing more such G.R.O.S.S. submissions from staff in the future.

Let's continue getting rid of

G.R.O.S.S.
GET RID OF STUPID STUFF
At the heart of G.R.O.S.S. is Simplification

APPRECIATION LUNCH 30 JANUARY 2024

G.R.O.S.S.
GET RID OF STUPID STUFF

At the heart of G.R.O.S.S. is Simplification

APPRECIATION LUNCH   30 JANUARY 2024

Thank you.