IMPROVING THE PERCENTAGE OF PRESCRIPTIONS REGISTERED THROUGH MYUBAT MOBILE APP FOR PHARMACY VALUE-ADDED SERVICE (VAS)

K.L. Lai[1], P. Saratha Thevi[1], N. Mohd Nazri[1], Z. Hamizah[1], B.T. Lau[1], Y.C. Sim[1], M.P. Chin[1], J.M. See[1]

[1]Pharmacy Department, Port Dickson Hospital, Negeri Sembilan State Health Department, Ministry of Health Malaysia

QLL 11

1. SELECTION OF OPPORTUNITIES FOR IMPROVEMENT

Problem Identification	S	M	A	R	T	TOTAL
Low usage of MyUBAT mobile app among the patients in Port Dickson Hospital	23	20	24	20	19	**106**
Frequent indent of psychotropics after office hours	14	24	17	15	15	85
High usage of list A item in ETD	15	24	15	21	20	95
High number of patients/ caregivers collected medication refills after office hours	20	19	18	18	17	92

Rating scale: 1 – Low 2 – Moderate 3 – High — 8 group members

- VAS was introduced by the Malaysia Pharmacy Service Division to improve the quality of medication deliveries for refill prescriptions.[1]
- MyUBAT was developed and approved by the Ministry Of Health (MOH), Malaysia since 2020 to resume patient's medication via VAS, especially during Covid-19

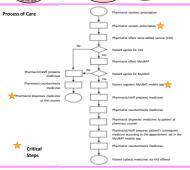|	
Seriousness	Only **0.54%** (3 out of 552) of new prescriptions registered using the MyUBAT mobile app by the end of November 2021. This indicated that the patients needed to collect their medications through traditional counter service instead of VAS, which increased their waiting time, impacted patients' satisfaction towards pharmacy service, and increased the risk of communicable disease transmission, especially in the congested pharmacy waiting area.
Measurable	Can be monitored via MyUBAT Web Console Management database.
Appropriate	Pharmacy core business & indirectly improves patient' safety.
Remediable	Multiple strategies can be implemented to solve the problem.
Timeliness	Can be completed within short period of time.

2. KEY MEASURES FOR IMPROVEMENT

Problem Analysis Chart

Process of Care

★ **Critical Steps**

General Objective
To improve the % of prescriptions registered via the MyUBAT mobile app for Pharmacy VAS.

Specific Objectives
1. To verify the % of new prescriptions registered through the MyUBAT mobile app.
2. To identify factors contributing to the low % of new prescriptions registered through the MyUBAT mobile app.
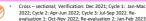3. To formulate and implement appropriate remedial measures.

Study Indicator & Standard

Indicator	The % of prescriptions registered through the MyUBAT mobile app
Formula	No. of new prescription registered through MyUBAT mobile app x 100% / Total number of new prescription registered in web console
Standard	15% (Adapted from 2022 MOH VAS Action Plan[3])

3. PROCESS OF GATHERING INFORMATION

Study Design & Duration	Cross – sectional; Verification: Dec 2021; Cycle 1: Jan-Mac 2022; Cycle 2: Apr-Jun 2022; Cycle 3: Jul-Sep 2022. Re-evaluation 1: Oct-Nov 2022; Re-evaluation 2: Jan-Feb 2023
Sampling Method Criteria	- Purposive sampling - Included new prescription that requires subsequent supplies & all new VAS prescription enrolled for Appointment Card & postal medicine. No exclusion criteria

Variable	Study location	Data collector	Data collection time	Data collection method
Indicator		Pharmacist	At the beginning of every month	Pharmacy MyUBAT Web Console Management database
Contributing factors	Outpatient pharmacy department	Pharmacy staff	Office hours (8am to 5pm)	Self-developed survey form (Staff / Public)
Critical steps				Direct observation & data collection form

4. ANALYSIS AND INTERPRETATION

Verification study (data from Jul-Nov 2021):
Only **0.54%** (3/552) new prescriptions registered using MyUBAT mobile app

Survey on **20** Pharmacy staff & **50** patients/ caregivers

Three main contributing factors to the problem:
- A **38.80%** - Patient reluctance to use/ accept MyUBAT mobile app.
- B **23.08%** - Lack of technical support.
- C **13.60%** - Lack of patient awareness/ knowledge.

5. STRATEGIES FOR CHANGE

Cycle 1: January - March 2022 — Factors to be tackled: A + B + C

1. Dedicated VAS dispensing counter to display banner & leaflet; provide counselling using the MyUBAT Flip Chart

2. Staff immediately assisted the patients/ caregivers to download & register the MyUBAT mobile app

3. Continuous medical education (CME) for patients/ caregivers in the waiting area of the outpatient pharmacy for further explanation

4. MyUBAT & 'Kenali Ubat Anda' teams with the ambassadors to create awareness among the public

5. CME based on the MOH guidelines for existing & new pharmacy staff to remind them on the standard operating procedure (SOP)

6. Workshops & hands-on tutorials using the MyUBAT Training Mobile Apps & Training Server to stimulate the actual scenario and ensure the staff were well-equipped with essential knowledge

MyUBAT Training Mobile Apps (Black Icon)

MyUBAT Training Server: https://stgwebconsole.pharmacy.gov.my

Cycle 2: April - June 2022 — Factors to be tackled: C

7. Provided the MyUBAT promotional leaflets at the outpatient pharmacy prescription screening counter & enable patients/ caregivers to have more time to understand MyUBAT while waiting for their medication collection

8. Designed slip incorporating a QR code directly linked to MyUBAT MOH's official website & stapled with prescription, to ease the patients/ caregivers downloading the MyUBAT mobile app

9. Designed & ordered a new stamp chop 'MyUBAT' & stamp on the queuing no. on the prescription during screening process to alert pharmacy staff that the patient was interested to use MyUBAT

Cycle 3: July - September 2022 — Factors to be tackled: B

10. Inserted the MyUBAT promotional leaflets into appointment card/postal medicine parcels to create awareness among the patient's family members & help illiterate patient to use/register MyUBAT mobile app
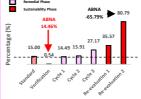

11. Pharmacy staff shared cellular data hotspots with patients/ caregivers without cellular data plans in their smartphones to enable them to download the MyUBAT mobile app instantly & perform new registration/service application on the spot

6. EFFECTS OF CHANGE

Achievable-Benefit-Not-Achieved (ABNA)

□ Remedial Phase
■ Sustainability Phase

ABNA 14.46%
ABNA -65.79%
80.79

Standard 15.00 | Verification 0.54 | Cycle 1 14.49 | Cycle 2 15.91 | Cycle 3 27.17 | Re-evaluation 1 35.57 | Re-evaluation 2 80.79

Model of Good Care (MOGC)

Process	Criteria	Standard (%)	Verification (%)	Cycle 1 (%)	Cycle 2 (%)	Cycle 3 (%)	Re-evaluation 1 (%)	Re-evaluation 2 (%)
Pharmacist screens the prescription	Ensure the prescription is for the right patient, with right dose, frequency, duration, and route	100	100	100	100	100	100	100
	Provide leaflet about the MyUBAT mobile app to patient/caretaker while waiting for medicine collection	100	0	85.5	89	93	90	90
	Stamp 'MyUBAT' chop on the prescription queuing number for potential MyUBAT mobile app user	100	0	0	100	92.4	93.8	
Pharmacist dispenses medicines at the pharmacy counter	Dispense the medicines to the right patient, with right dose, frequency, duration, and route	100	100	100	100	100	100	100
	Attach slip with a QR Code link directly to the MyUBAT MOH's official website to download the MyUBAT mobile app	100	0	0	100	88.7	95.4	97.3
Patient registers MyUBAT mobile app	Patient use own cellular data plan to download MyUBAT app on the spot	100	100	100	100	100	61	55.55
	Pharmacy staff share cellular data hotspot with patient/caregiver without cellular data plan to download the MyUBAT mobile app on-the-spot	100	0	0	0	0	39	44.4

Impact from the project

- **Waiting Time**: The % of prescriptions dispensed within 30 minutes remained >95%.
- **VAS**: Total % of prescriptions registered with VAS in 2021 was 2966 & 4208 in 2022.
- **Unclaimed medicine**: No. of unclaimed medicines for VAS in 2021 was 388 and 289 in 2022.
- **Cost**: RM 35 involved in this project, for ordering the MyUBAT stamp chop.

Limitations

- Patients/caregivers without a smartphone, who are illiterate or patients without family support.

Lesson leant

Most effective strategies to improve the % of new prescriptions registered through the MyUBAT mobile app:

Staff Response (n=20)

1. Providing immediate assistance to download and register the MyUBAT mobile app. — **75%**
2. Inserting MyUBAT promotional leaflets into medication parcel for patients signed up for VAS. — **15%**
3. Sharing cellular data hotspot with patients/caregivers without cellular data plan. — **10%**

7. THE NEXT STEP

- The strategies implemented in this study could be replicated to other health care facilities in the nation with similar problems.
- We would continuously monitor the work process to ensure the targets are achieved and maintained throughout the year.

REFERENCES

1. Norazmah AM. 2005. Value added service of dispensing medicines. Putrajaya: Health Online Unit, Ministry of Health Malaysia. Retrieved from: www.myhealth.gov.my/en/value-added-service-of-dispensing-medi
2. Berita Harian. 2020. COVID-19: Pesakit disaran guna VAS untuk ubat susulan. Retrieved from: https://www.bharian.com.my/berita/nasional/2020/04/674092/covid-19-pesakit-disaran-guna-vas-untuk-ubat-susulan
3. Pharmaceutical Services Program, Ministry of Health Malaysia. 2022. Value-added service action plan 2022.