QLL-35

QUIT ASAP TOOLKIT(JKWPKL&P)
(NICOTINE MANAGEMENT TOOL KIT)

S.Sugendiren[1], Takdir Singh Riar[2], Nor Faizah Ghazali[2], Nur Syawiqa Tajul Amer[2], G Pravin[3], Mohammad Ehsan Mohammad Rosdi[4],

[1]Pharmacy Services Division, Federal Territory of Kuala Lumpur & Putrajaya Health Department
[2]Tanglin Primary Health Clinic, Kuala Lumpur
[3]Lembah Pantai Primer Unit, District Division, Kuala Lumpur
[4]Segambut Primary Health Clinic, Kuala Lumpur

KEMENTERIAN KESIHATAN MALAYSIA
JABATAN KESIHATAN WP KUALA LUMPUR DAN PUTRAJAYA

1. INTRODUCTION

1.1 Problem Prioritization

- Malaysia became a signatory to the World Health Organization (WHO) Framework Convention of Tobacco Control (FCTC) on 23 September 2003 and ratified on 16 September 2005.
- Based on the National Strategic Plan on Tobacco Control (NSPTC), the medium term target to reduce this smoking prevalence in Malaysia to 15% by year 2025.
- Besides that, Malaysia in line with WHO NCD Global Target long term is to achieve the Endgame of tobacco <5% by 2040.
- Every government primary care health clinic provides smoking cessation services. The rationale behind this innovation is to improve the smoking cessation services in Malaysia.
- This tool is to enable healthcare providers to manage nicotine addiction among our patients.

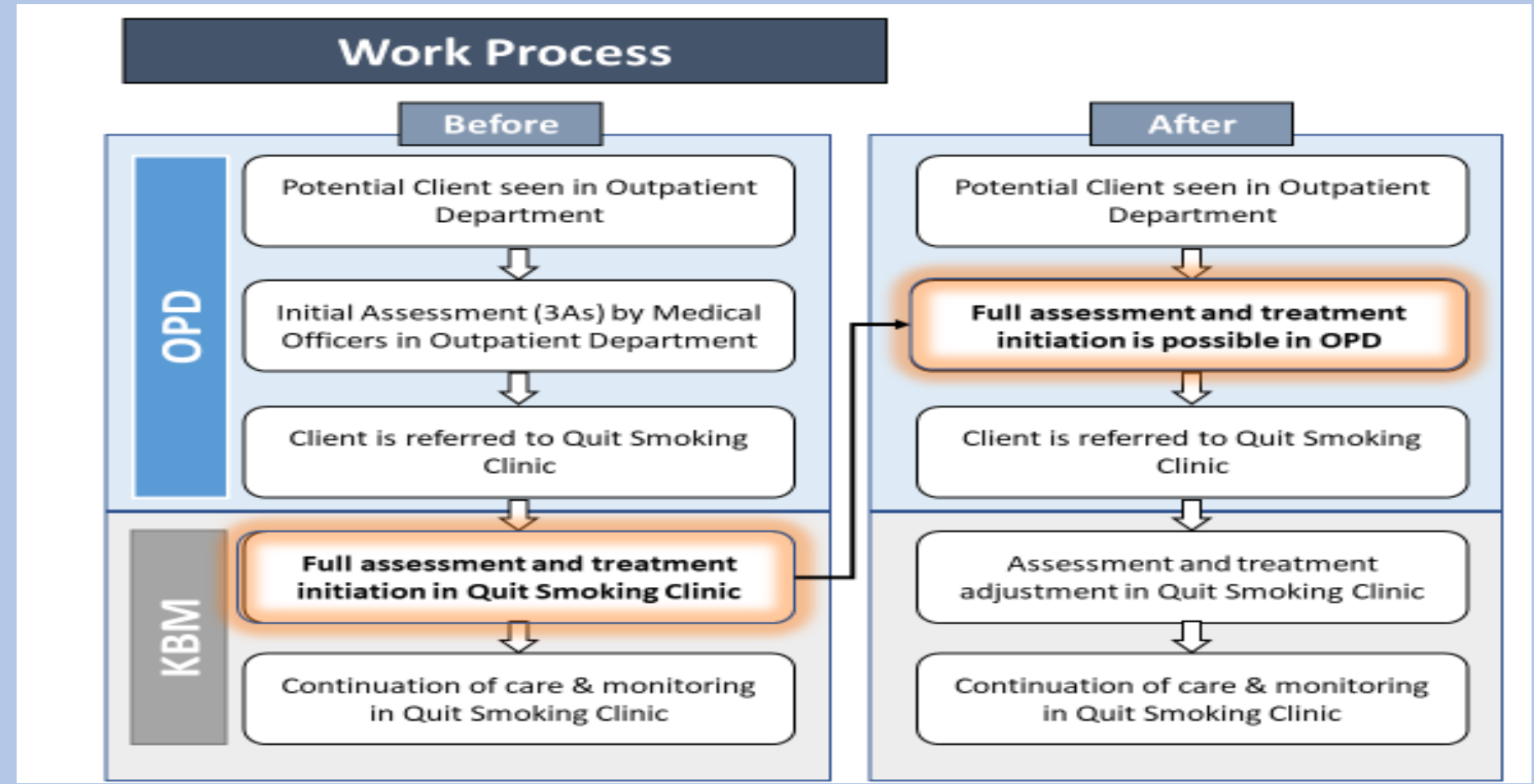### 1.1 What is QuitASAP Toolkit ?

- QuitASAP [2.0] is a web-based toolkit developed to aid healthcare providers in three (3) main aspects of smoking cessation service including counselling, assessment and treatment.
- The first version of the toolkit has been developed by creating an algorithm based on 3 assessment components inclusive of Fagerstrom Score, Nicotine Intake, Stages of Change with 64 possible code combinations were matched with 8 possible treatments to create an algorithm.
- The second version was further improvised by simplified codes and expanding treatment option to 11. Counselling reference materials were also added in this second version.
- The third version, conversion into digital version (Microsoft Excel) by using Conditional Formatting.
- The digital version is much more cost effective, time saving and easy to access. Based on feedbacks by users, the tool kit has been further develop into web based platform (Quitasap.net).
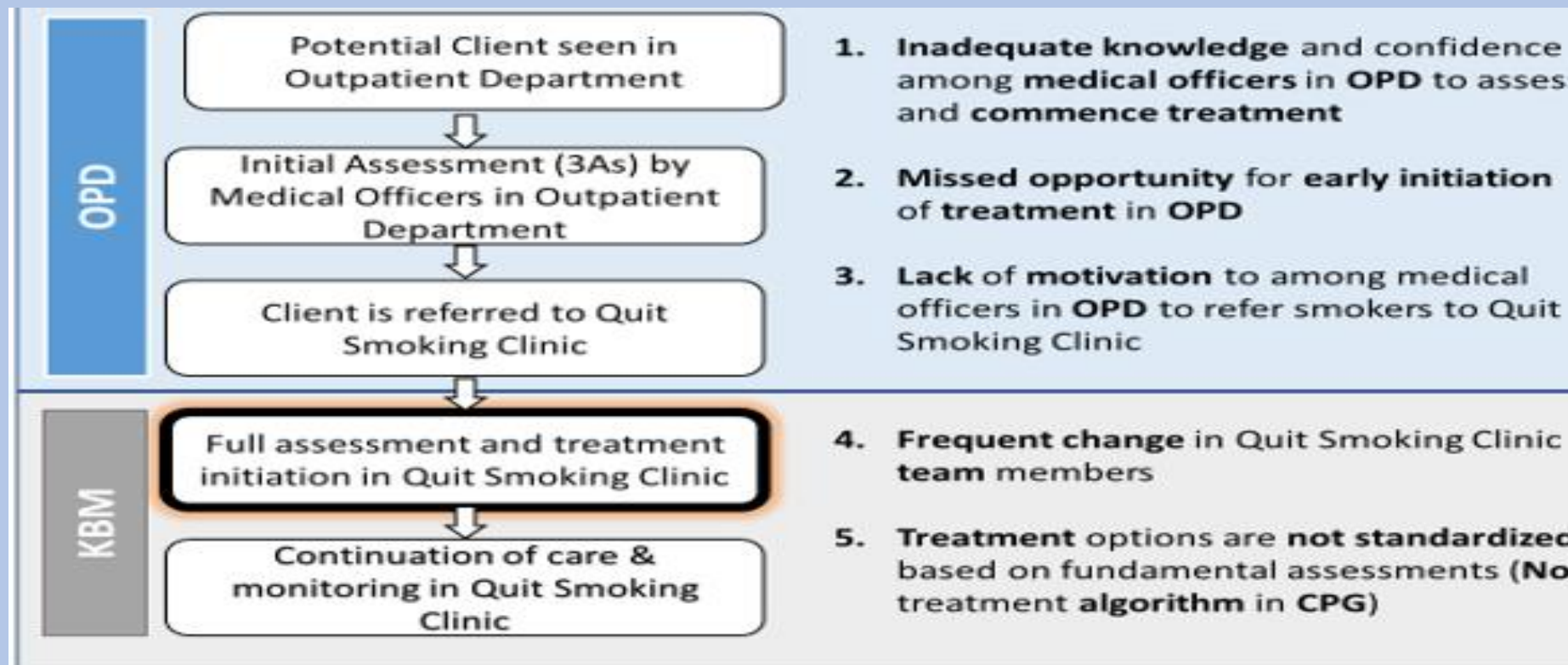
Objectives

Objectives of the Innovation Project

- To develop a standard reference material
- To provide a compiled counselling material (based on CPG)
- To utilize as an training material

2. WHY THIS INNOVATION CREATED?

Work Process

Before	After
Potential Client seen in Outpatient Department	Potential Client seen in Outpatient Department
Initial Assessment (3As) by Medical Officers in Outpatient Department	Full assessment and treatment initiation is possible in OPD
Client is referred to Quit Smoking Clinic	Client is referred to Quit Smoking Clinic
Full assessment and treatment initiation in Quit Smoking Clinic	Assessment and treatment adjustment in Quit Smoking Clinic
Continuation of care & monitoring in Quit Smoking Clinic	Continuation of care & monitoring in Quit Smoking Clinic

(OPD / KBM)

Issue Prior to Innovation

1. Inadequate knowledge and confidence among medical officers in OPD to assess and commence treatment
2. Missed opportunity for early initiation of treatment in OPD
3. Lack of motivation to among medical officers in OPD to refer smokers to Quit Smoking Clinic
4. Frequent change in Quit Smoking Clinic team members
5. Treatment options are not standardized based on fundamental assessments (No treatment algorithm in CPG)
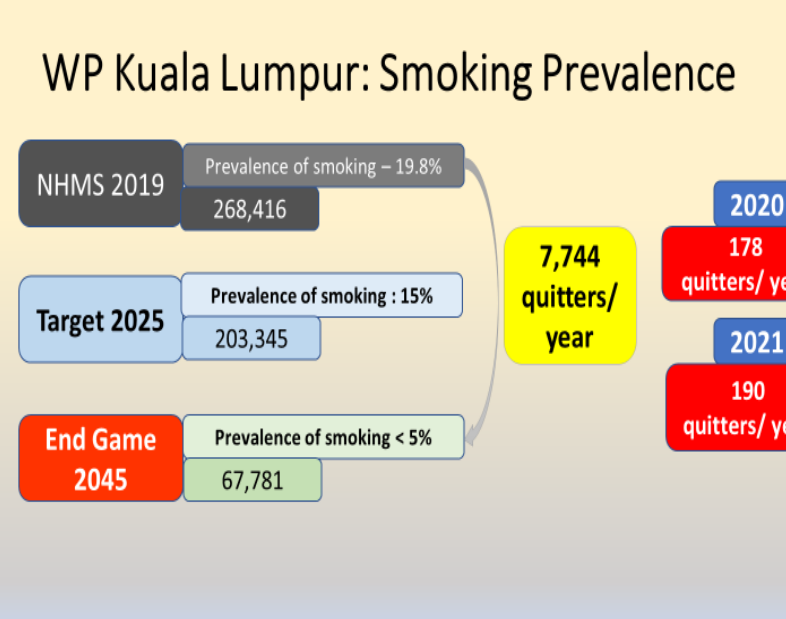
Why was this innovation created ?

- Not all healthcare providers are familiar with Smoking Cessation Service
- Not all Health Clinics having successful Smoking Cessation Services
- Outpatient Department not initiating Smoking Cessation Treatment (confined to specific dedicated team)
- Long training time for newcomers
- Clinical Practice Guidelines has no algorithm to start treatment
- Lots of trial and errors in treatment (not cost effective and treatment is not appropriate)
- Poor and unstructured counselling conducted
- High staff turnover

OUR GOAL FOR THIS PROJECT

1. Maintain successful quit rate while recruiting more clients
2. Empower more healthcare providers to initiate Smoking Cessation Treatment
3. Provide material for counselling
4. To encourage new Smoking Cessation Services to start
5. Cost effective usage of medication

RATIONAL FOR THE PROJECT

- Malaysia became a signatory to the World Health Organization (WHO) Framework Convention of Tobacco Control (FCTC) on 23 September 2003 and ratified on 16 September 2005.
- The National Strategic Plan on Tobacco Control (NSPTC) based on the WHO-FCTC.
  - medium term target to reduce this smoking prevalence in Malaysia to 15% by year 2025
  - long term target, in line with WHO NCD Global Target to achieve 'Endgame' of tobacco (<5% by 2045)

WP Kuala Lumpur: Smoking Prevalence

NHMS 2019	Prevalence of smoking = 19.8% 268,456	
Target 2025	Prevalence of smoking ≤ 15% 203,345	2020
		7,744 quitters/ year
End Game 2045	Prevalence of smoking <5% 67,781	178 quitters/ year 2021
		190 quitters/ year

ACKWOLEDGMENT

We would like to thank State Director of Health Kuala Lumpur & Putrajaya for supporting this project. Gratitude to medical personnels in health clinics for their commitment and support.

3. DEVELOPMENT PHASE TOOLKIT

History of the Toolkit

This ALGORITHM is one of its kind, its created for the smoking cessation services management by our team. As below :

☐ Three Assessment Component:

FAGERSTROM SCORE	NICOTINE INTAKE/DAY	STAGES OF CHANGE
0 - 3 Very Low Dependence	5 0 - 10mg	9 Pre-Contemplation
4 - 5 Low Dependence	6 11 - 20mg	10 Contemplation
5 - 7 Moderate Dependence	7 21 - 30mg	11 Preparation
8 + High Dependence	8 >30mg	12 Action

☐ 64 possible code combinations were matched with 8 possible treatments to create an algorithm

A	C1
B1	C2
B2	D1
B3	D2

Brainstorming: April – May 2021
Development: June – July2021

Handwritten code combination & corresponding treatment options

History of the Toolkit

- Why this version was to be upgraded ?
- Fragile
- Complicated codes
- Limited treatment options
- Lacking counselling material

Version 1
Trial: July – Aug 2021

Flipchart- Version 1

VERSION 2

EPIDEMIOLOGY	WITHDRAWAL SYMPTOMS
BENEFITS OF QUIT SMOKING	RELAPSE PREVENTION
WORKFLOW IN SCREENING PATIENT	ADDRESSING WITHDRAWAL SYMPTOMS
ASSESSMENT OF TOBACCO DEPENDENCE	NICOTINE GUM
BEHAVIORAL INTERVENTION	NICOTINE PATCH
	VARENICLINE

Front / Back
Version 2
Implementation: Jan – Feb 2022

Flipchart- Version 2

KK TANGLIN'S NICOTINE ADDICTION MANAGEMENT TOOLKIT

11 Key Messages (CPG)

Microsoft Excel version

Quit ASAP by KBM-ers

KK Tanglin's Nicotine Addiction Management Toolkit

Well done for recruiting a client for smoking cessation

CHOOSE SMOKING PRODUCT THAT CLIENT USES

- CIGARETTES / HEATED TOBACCO PRODUCTS
- VAPE / ELECTRONIC CIGARETTES

(if client uses both, choose the most frequently used product)

For counselling methods, click the button below.
COUNSELLING AIDS

For additional references, click the button below.
QUICK REFERENCES

Web based version
https://quitasap.net

QuitASAP [2.0] is available at
https://quitasap.net

REFERENCES

1. WHO Framework Concention on Tobacco Control .
2. National Strategic Plan on Tobacco Control 2015-2020.
3. Treatment of Tobacco Use Disorder .
4. Garis Panduan Farmakoterapi Berhenti Merokok.

4. STRATEGIES FOR CHANGE

FEEDBACK FOR VERSION 1

- THE CODES ARE DIFFICULT TO LOCATE FROM THE TREATMENT CODE TABLE
- TREATMENT OPTION WERE GOOD BUT NEED TO CREATE MORE OPTIONS
- NO MATERIAL FOR COUNSELLING AVAILABLE

LEARNING EXPERIENCE
1. To create a simpler code combinations
2. To expand more treatment options
3. To include relevant counselling & reference material

FEEDBACK FOR VERSION 2

- Requires more time and energy (and cost) for replication
- Need more codes to be used by more KK as well
- ONESTOP TOOLKIT – that could be plagiarized
- Updating information is a tedious process
- Didn't seen technological equipped
- Bulky to carry – with risk of physical damage
- Easily getting damaged
- Difficult to edit and update – limited options

LEARNING EXPERIENCE
- Vast difficulties to share with KK in different facilities
- Didn't seen technological equipped

Digital Version
- Conversion to Microsoft Excel
- Algorithm of the toolkit set in Conditional Formatting
- Dr. Nor Faizah (FMS) presented this project to Timbalan Pengarah Kesihatan Negeri (Kesihatan Awam) in the Technical Working Group meeting held on 23rd February 2022.
- Suggestion to develop a digital edition of the tool was proposed

Development: Feb – Mar 2022
Trial: Feb – Mar 2022

5. EFFECTS OF CHANGE

Work Process

(Before / After — OPD / KBM)

Time & Cost (Physical Version)
- Time
  - Each version took almost 2 months to develop i.e. from the conception, designing, testing prototype and executing the actual piece
  - Estimated ten hours to produce an actual piece = 1 – 2 full working days
- Cost
  - No out of pocket money were used *readily available materials and tools in the clinic and office were used
  - Estimated cost ~ RM 10 for the final physical version

Time & Cost (Digital Version)
- Time
  - 2 weeks to develop using Microsoft Excel (Macro-Enabled)
  - Treatment algorithm were colour-coded via conditional formatting
  - Estimated net time for digitalization = 2 – 3 working days
- Cost
  - No cost involved other than licensed installation or subscription of Microsoft Excel

REPLICATION
- No production Cost
- No production Time

ACCESSIBILITY
- Microsoft Windows operating system with Microsoft Excel (Enable Macro)

SECURITY
- Password protected (Microsoft Excel)

Users Feedback

- Already started sharing with other KK and focusing on the usage in OPD
- Can use this tool when OPD not too busy probably. Will try to use the tool when meet pts who are smoker.
- Suggest to be used to other KK as well
- Nicotine content conversion (i.e how many sticks equals to how many mg)
- This has been added under the counselling section 'Nicotine Content'
- To indicate the nicotine intake by "number of sticks" rather than by "mg". Suggest to have a reference on nicotine intake for vape users.
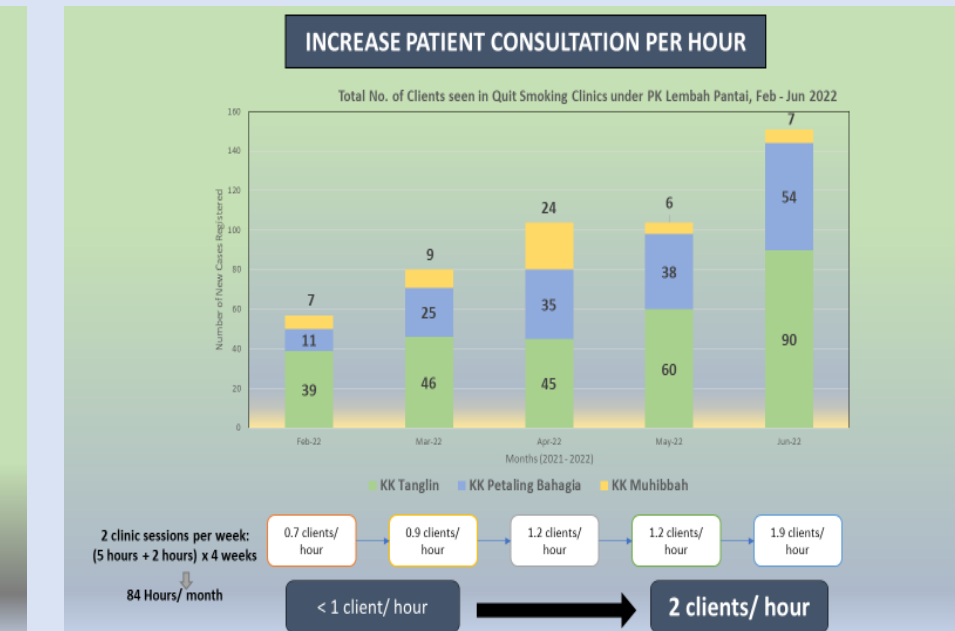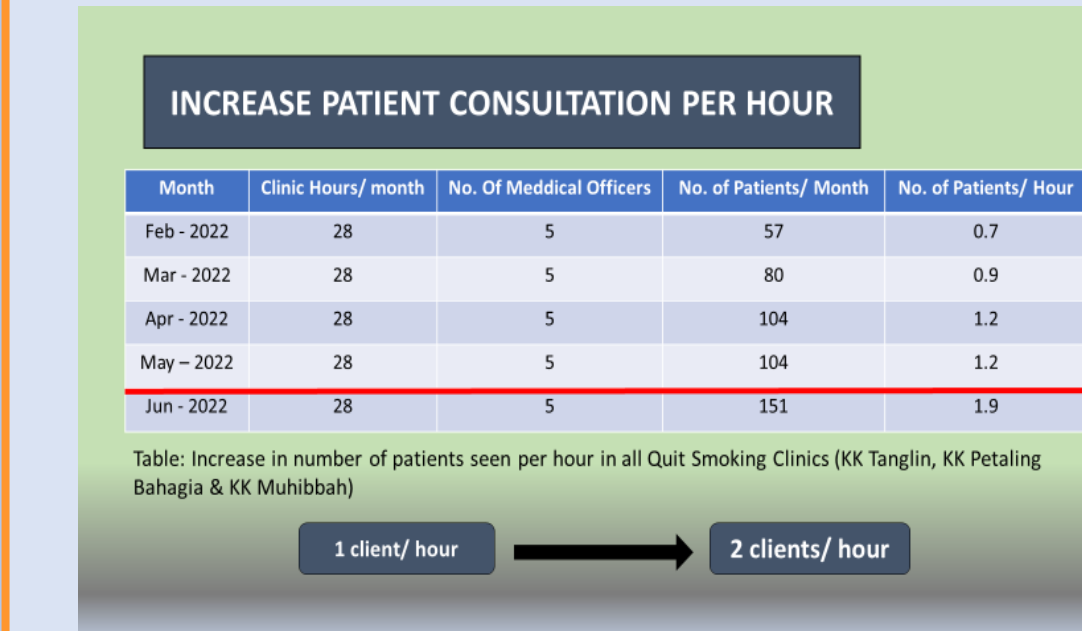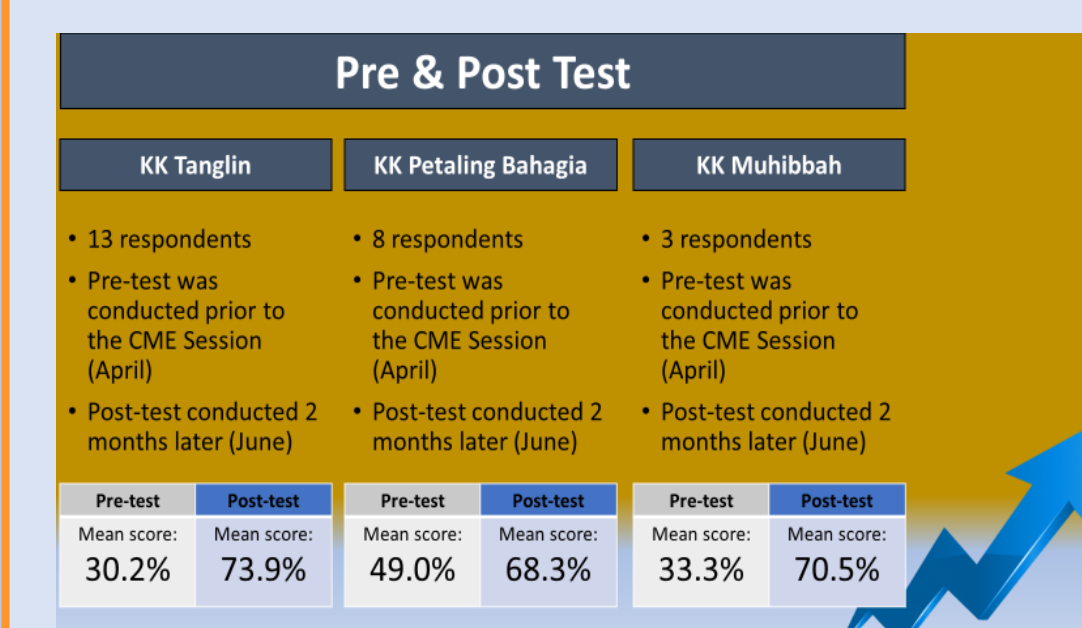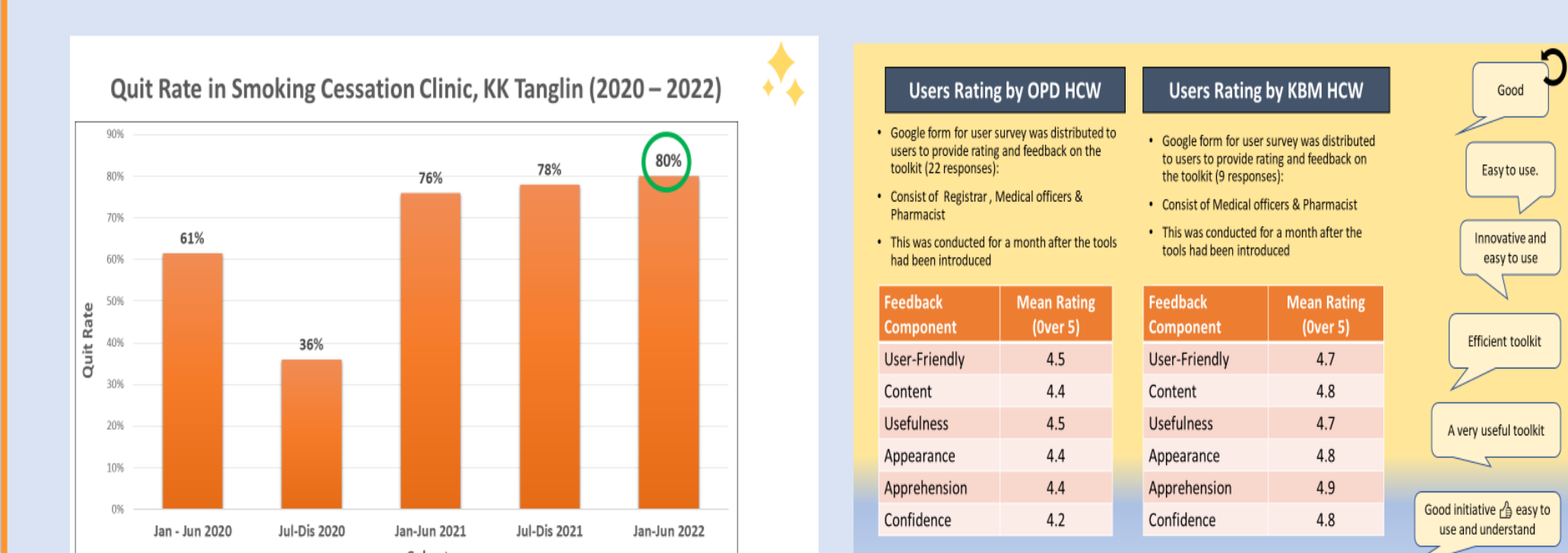- On the nicotine intake/day, preferably if put number of sticks/day instead of mg of nicotine and in case of vape (nicotine content) should be measured by QSC member
- QuitASAP 2.0 has began planning & development of a web based platform.
- Come up with an app can download on the phone and used
- If made into an apps can be easier to use than the current excel format
- To include Champix counselling points too.
- Added into counselling section "Varenicline"

Real Benefits from the Project

- Healthcare providers are more confident to manage smoking cessation patients
- Improvement in score of management in health providers
- Enables recruitment of more clients
- Able to see more patients within the same clinic time
- Shorter duration for training and attachment for new smoking cessation health care provider
- An Interactive toolkit to engage healthcare providers

6. ANALYSIS & INTERPRETATION

Quit Rate in Smoking Cessation Clinic, KK Tanglin (2020 – 2022)

Jan – Jun 2020	Jul-Dis 2020	Jan-Jun 2021	Jul-Dis 2021	Jan-Jun 2022
61%	36%	76%	78%	80%

(Cohorts)

Users Rating by OPD HCW / Users Rating by KBM HCW

Feedback Component	Mean Rating (Over 5)
User-Friendly	4.5
Content	4.6
Usefulness	4.5
Appearance	4.4
Apprehension	4.4
Confidence	4.2

Feedback Component	Mean Rating (Over 5)
User-Friendly	4.7
Content	4.9
Usefulness	4.9
Appearance	4.8
Apprehension	4.9
Confidence	4.8

Pre & Post Test

KK Tanglin
- 13 respondents
- Pre-test was conducted prior to the CME Session (April)
- Post-test conducted 2 months later (June)

Pre-test	Post-test
Mean score: 30.2%	Mean score: 73.9%

KK Petaling Bahagia
- 8 respondents
- Pre-test was conducted prior to the CME Session (April)
- Post-test conducted 2 months later (June)

Pre-test	Post-test
Mean score: 49.0%	Mean score: 68.3%

KK Muhibbah
- 3 respondents
- Pre-test was conducted prior to the CME Session (April)
- Post-test conducted 2 months later (June)

Pre-test	Post-test
Mean score: 33.3%	Mean score: 70.5%

New Clients Recruitment
New Cases Registered by Quit Smoking Clinics under PK Lembah Pantai, Jan 2021– Jun 2022

INCREASE PATIENT CONSULTATION PER HOUR

Month	Clinic Hours/ month	No. Of Medical Officers	No. of Patients/ Month	No. of Patients/ Hour
Feb - 2022	28	5	57	0.7
Mar - 2022	28	5	80	0.9
Apr - 2022	28	5	104	1.2
May - 2022	28	5	104	1.2
Jun - 2022	28	5	151	1.9

Table: Increase in number of patients seen per hour in all Quit Smoking Clinics (KK Tanglin, KK Petaling Bahagia & KK Muhibbah)

1 client/ hour → 2 clients/ hour

INCREASE PATIENT CONSULTATION PER HOUR

≤1 client/ hour → 2 clients/ hour

5.1. OTHER IMPACTS OF THE PROJECT

6. CHALLENGES

Challenges
- Not all Health clinics are equipped with ICT facilities (Computers & Internet).
- Co-operation & commitment from non-KBM HCP.
- Inadequate supply of medications.

7. THE NEXT STEP

The way forward
- To encourage more usage in OPDs and coach with Pharmacist for medication supply.
- To expand the usage of QuitASAP in more facilities (KKM & non-KKM facilities)
- Continue refining the tool to improve user-friendliness and relevance.
- Include management for subsequent visits & relapses (Sustainity for web based) – QuitASAP 2.0