

# HOME MONITORING FOR CATEGORY 1 & 2 COVID-19 PATIENTS for GPs

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# TOPICS FOR DISCUSSION



SUITABLE PATIENT FOR HOME MONITORING



SUITABLE HOME ENVIRONMENT



TOOLS TO USE



MONITORING APPS

# OBJECTIVES OF CAC

- To identify patients who are suitable to be monitored at home.
- To monitor and assess patients at home using standardised tools
- To identify and assess patients with disease progression
- To identify patients for PKRC / hospital admission
- To coordinate referral from health clinic to PKRC / the hospital

# PATIENT SELECTION CRITERIA

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Adults  $\leq$  60 y.o  
with  
CAT 1 and CAT 2  
Mild

Paediatric:  
CAT 1:  
All age groups

Paediatric:  
CAT 2 Mild:  
 $\geq$  2 years old

No Comorbidity

Suitable care giver

Suitable Home  
condition

Able to adhere to  
SOP

# SUITABLE CAREGIVER

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## FUNCTIONS OF CAREGIVER

- To help patient follow instructions for self-care
  - To ensure patient have healthy meals, stay hydrated and get sufficient rest.
- To clean and disinfect areas frequently used or touched by the patient
- To call \*CAC for consultation or 999 if patient's condition deteriorates.

\*CAC

– covid-19 assessment center who is monitoring the patient



Parents/ caregiver should observe strict hygiene practices to avoid becoming infected

# THOSE WHO **SHOULD NOT** BE A CAREGIVER ARE:



- Adults over 60 years of age
- Pregnant women
- Patients with comorbidities e.g. chronic kidney diseases, chronic respiratory disease, uncontrolled diabetes mellitus, serious heart disease
- Immunocompromised persons (including those who have had transplants of a solid organ)
- People with other diseases considered as high risk by health personnel



# SUITABLE HOME CONDITION

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- Always has access to telephone
- Patient is able to adhere to home isolation (separate bedroom, well ventilated preferably with attached bathroom).
- Occupants in the house are not immunosuppressed.
- Suitable caregivers are present in the house.
- Preparation of patient's room for isolation at home
- Personal transport is available to bring patient from their home to the clinic/ hospital (avoid using public transport).



# ADHERANCE TO STANDARD OPERATING PROCEDURES

During home isolation patient should be able:

- To stay home, maintain physical distance with other house members, limit movements in the house and avoid visitors.
- To comply with basic preventive measures e.g. wear face mask, regular hand washing, practice cough etiquettes.
- To report health status to health care providers through MySejahtera or by phone call.
- To separate eating utensils, tableware (fork, knife, plate etc.), towels for their personal use.





## How to Prepare the Patient's Room for Isolation

### Prepare a room for the exclusive use of the patient.

If there is no room available for exclusive use, place a bed or mattress for the exclusive use of the patient as far as possible from the rest of the family, at a minimum distance of 3–6 feet.



### The patient's room should have its own bathroom.

If this is not possible, the patient may use a common bathroom, but it should be disinfected with a 0.1% chlorine solution after each use.



Set aside eating utensils and tableware (fork, knife, plate, etc.) for the exclusive use of the patient.

These items may be washed with dishwasher soap.



Keep the room and the home well ventilated (open windows).

Do not shake out clothing.

Change and wash bedding daily (bedding should be for the exclusive use of the patient).



### Disinfect frequently touched surfaces with a 0.1% chlorine solution or alcohol.

Disinfect doorknobs, light switches, bed, table, remote control, bathroom, and any other item used by the patient at least once daily.



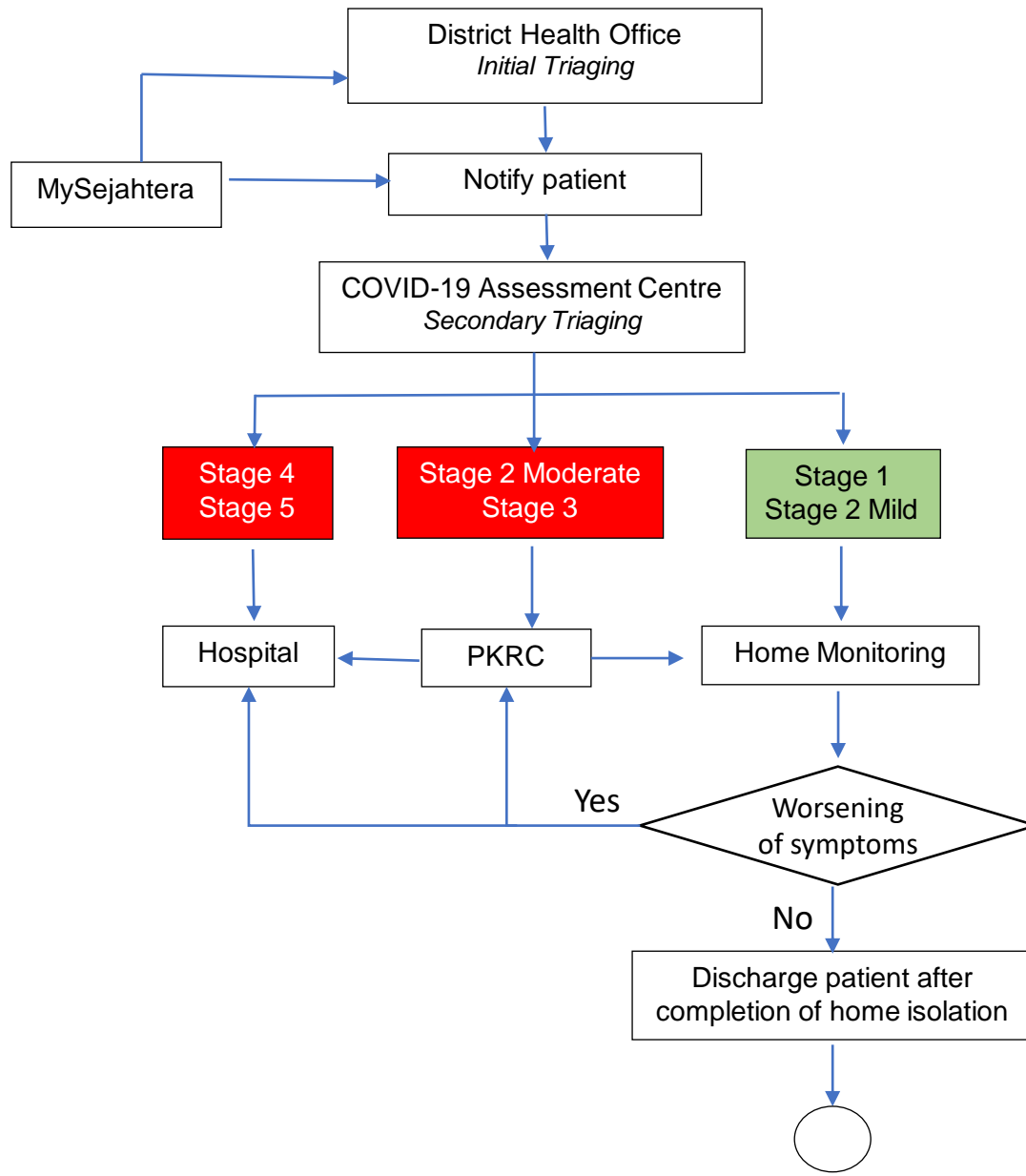
If the patient is allowed to have company, the caregiver should follow recommended biosafety measures (mask and hand hygiene).

Limit to two the number of caregivers. The caregiver should be a family member who is healthy, young, and free from chronic illness.

The caregiver should use a mask when in the same room as the patient, or when at a distance of less than two meters (six feet) from the patient.

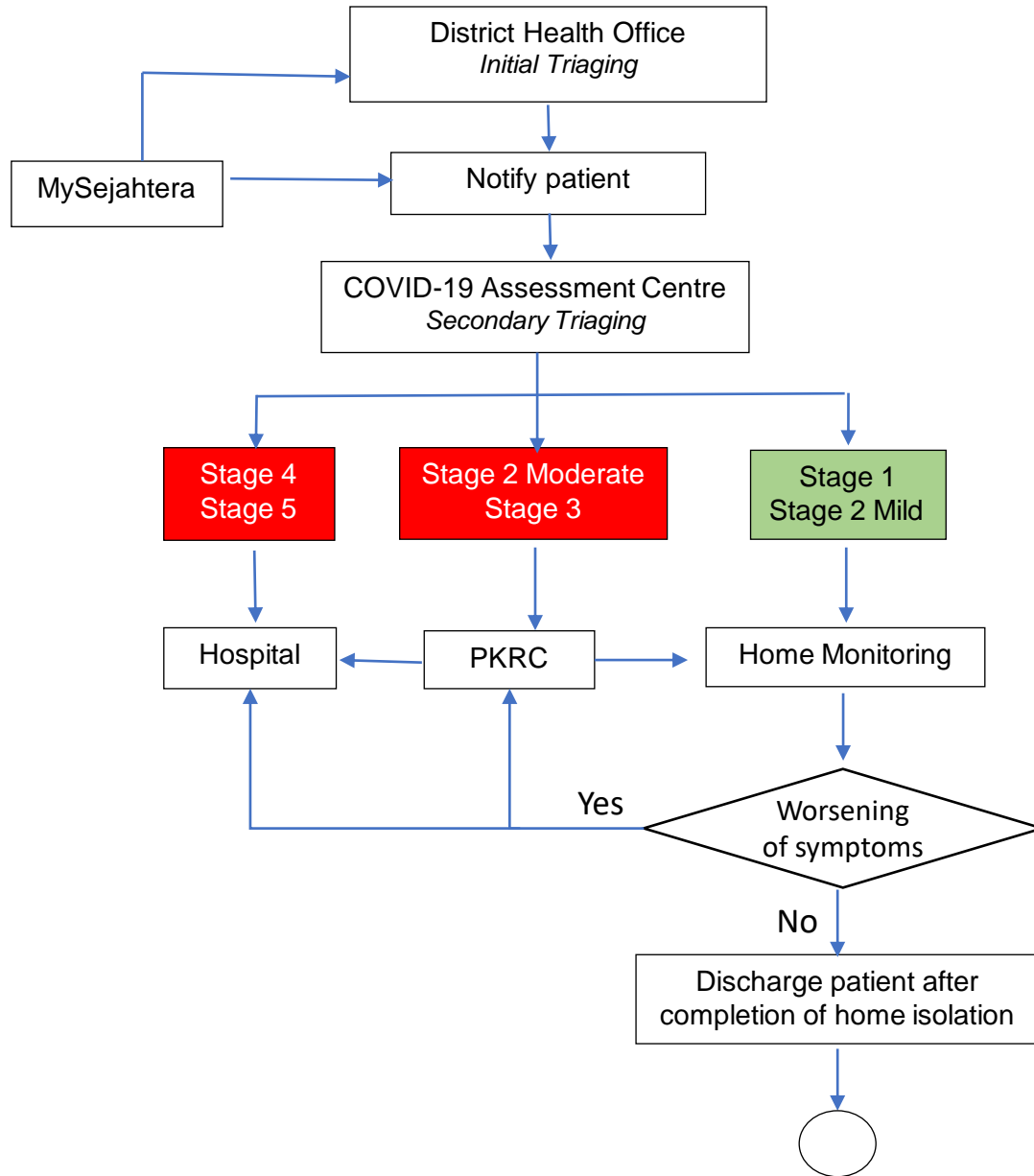


**FLOW CHART TO TRIAGE COVID-19 POSITIVE CASE IN PRIMARY CARE**



| Activities:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Action by: |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <p><b>Initial Triage (Call patient)</b></p> <ul style="list-style-type: none"> <li>• Verify details, location, contact number, IC number</li> <li>• Age stratification</li> <li>• Identify comorbidities</li> <li>• Assess symptoms using questionnaire</li> <li>• Enquire/ suitability of home environment</li> <li>• Decision for admission/ home monitoring</li> <li>• Give appointment date to attend CAC</li> <li>• Provide patient with a contact number (CAC/ On Call as decided by local setting)</li> <li>• Advice patient on steps of self-care at home<br/>Issue Home Isolation Order (Annex 14c – Perintah Pengawasan Dan Pemerhatian Bagi Kes Jangkitan Penyakit Korona Virus 2019 (COVID-19) Di Bawah Seksyen 11(3) Akta Pencegahan Dan Pengawalan Penyakit Berjangkit 1988 – Akta 342)</li> <li>• Provide wristband.</li> </ul> | <p>DHO</p> |

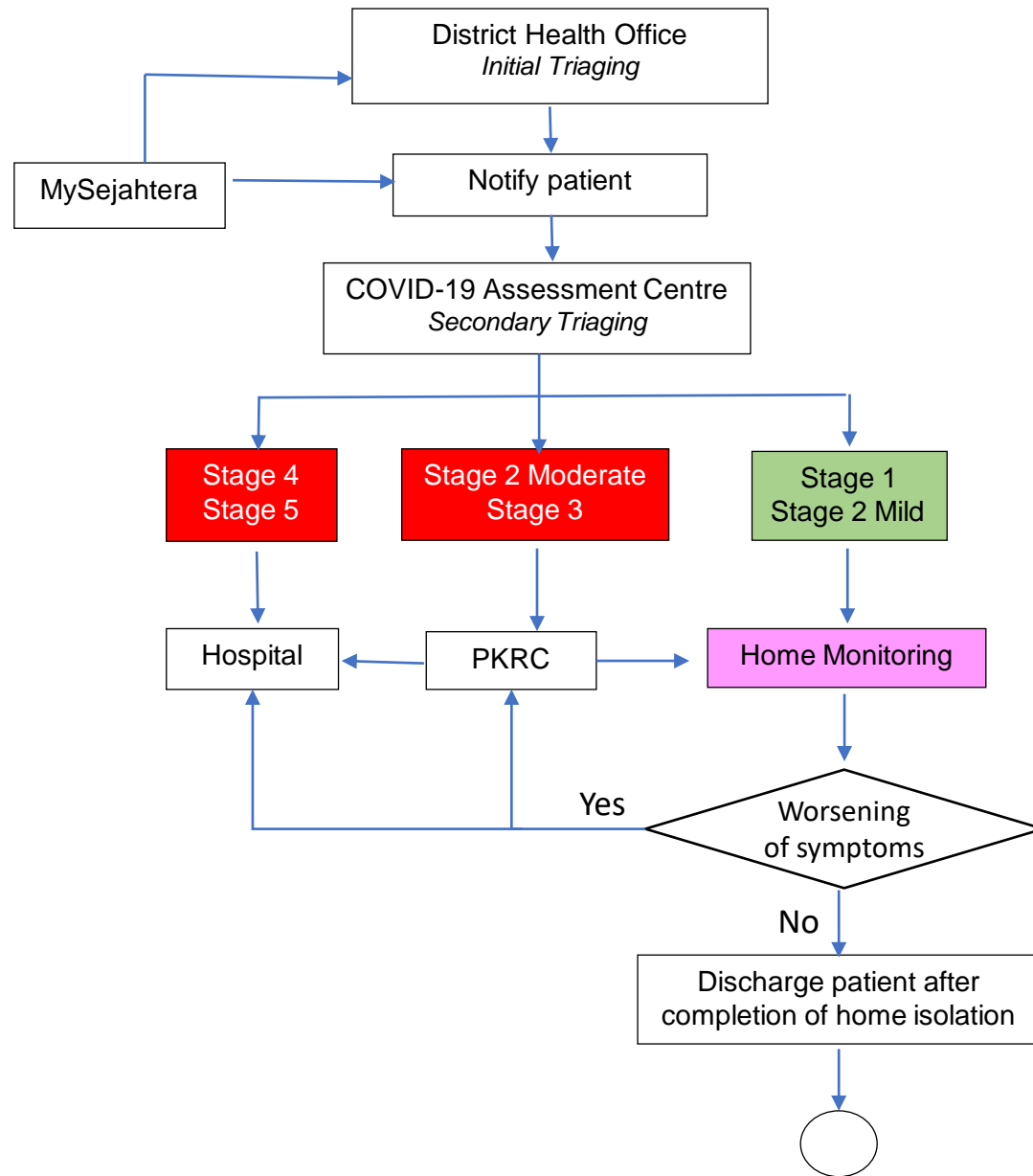
**FLOW CHART TO TRIAGE COVID-19 POSITIVE CASE IN PRIMARY CARE**



| Activities:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Action by:                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| <p><b>Secondary triaging (At CAC)</b></p> <ul style="list-style-type: none"> <li>• Clinical assessment of patient (1<sup>st</sup> encounter)</li> <li>• Check vital signs (BP, Temp, pulse, RR, SpO2)</li> <li>• Assess patient using the clerking sheet</li> <li>• Decision for admission or home monitoring</li> <li>• Provide patient with Adult/ Paediatric COVID-19 Home Assessment Tool</li> <li>• Arrange admission, if required</li> <li>• Issue medical certificate, if required</li> <li>• Issue Home Isolation Order (Annex 14c – Perintah Pengawasan Dan Pemerhatian Bagi Kes Jangkitan Penyakit Korona Virus 2019 (COVID-19) Di Bawah Seksyen 11(3) Akta Pencegahan Dan Pengawalan Penyakit Berjangkit 1988 – Akta 342)</li> <li>• Provide wristband (if not provided by DHO)</li> </ul> | <p>CAC<br/>(Clinical team)</p> |

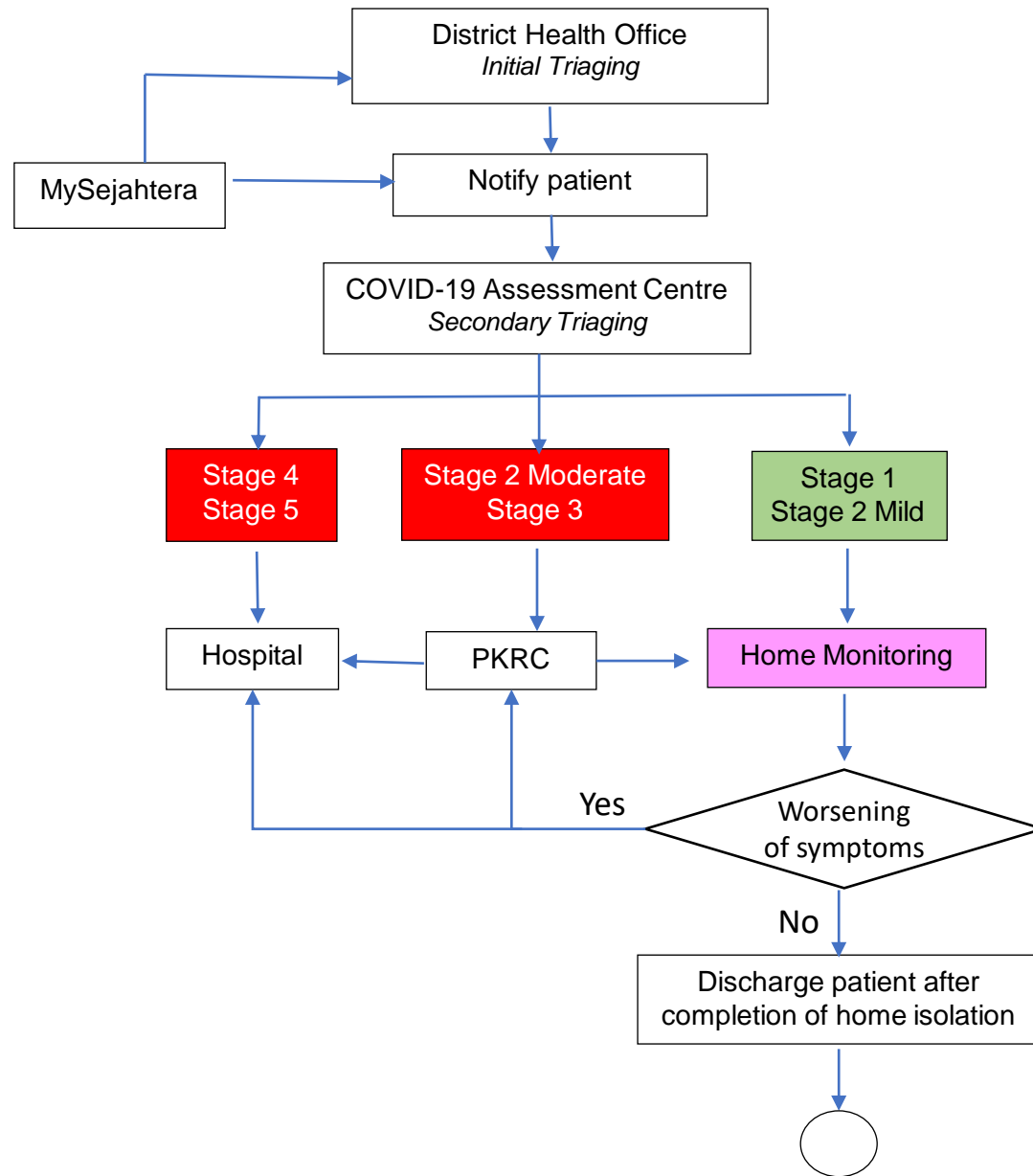
*NOTE: There maybe overlapping of activities by DHO and CAC Home Monitoring Team*

## FLOW CHART TO TRIAGE COVID-19 POSITIVE CASE IN PRIMARY CARE



| Activities:                                                                                                                                                                                                                                                                 | Action by:             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <ul style="list-style-type: none"> <li>• Monitor MySejahtera data daily</li> <li>• Call patients and assess using A-Cohat and P-Cohat questionnaire</li> <li>• Manage Hotline</li> <li>• Arrange admission, if required</li> <li>• Provide feedback/ data to DHO</li> </ul> | CAC<br>(Case managers) |

## FLOW CHART TO TRIAGE COVID-19 POSITIVE CASE IN PRIMARY CARE



| Activities:                                                                                                                                                                                                                                                                                                                                                                                                                          | Action by:                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Discharge</b></p> <ul style="list-style-type: none"> <li>At Day 11 or at least 10 days have passed since symptoms onset</li> <li>Release Order (Annex 17a - Surat Pelepasan Dari Menjalani Perintah Pengawasan Dan Pemerhatian di Tempat Kediaman Di Bawah Akta Pencegahan Dan Pengawalan Penyakit Berjangkit 1988 -Akta 342)</li> <li>Remove Isolation Wrist Band</li> <li>Issue medical certificate (if required)</li> </ul> | <p>CAC</p> <ul style="list-style-type: none"> <li>Medical officer</li> <li>Assistant Environmental Health Officer</li> <li>Authorised personnel</li> </ul> |

CLERKING SHEET FOR COVID 19 POSITIVE CASE (ADULT)

**A. Personal details**

- |                          |                  |
|--------------------------|------------------|
| 1. Name:                 | 5. Nationality:  |
| 2. Age:                  | 6. Phone Number: |
| 3. Gender:               | 7. Address:      |
| 4. IC / Passport number: |                  |

**B. History**

- Date of symptoms onset:
- Date of COVID-19 swab for RT PCR taken:
- Co-morbidity:

**C. Clinical**

**SYMPTOMS**

**WARNING SIGNS/ RED FLAGS**



If any present, consult FMS/ physician for admission

|                                                                                   |                                                                                                   |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Sore throat                                              | <input type="checkbox"/> Persistent fever (2 days or more) or new onset of fever                  |
| <input type="checkbox"/> Running nose                                             | <input type="checkbox"/> Shortness of breath                                                      |
| <input type="checkbox"/> Cough                                                    | <input type="checkbox"/> Chest pain                                                               |
| <input type="checkbox"/> Loss of taste                                            | <input type="checkbox"/> Unable to tolerate orally                                                |
| <input type="checkbox"/> Loss of smell                                            | <input type="checkbox"/> Worsening of lethargy                                                    |
| <input type="checkbox"/> Diarrhea < 2x/24hrs with normal urine output             | <input type="checkbox"/> Unable to ambulate without assistance                                    |
| <input type="checkbox"/> Nausea or vomiting <2x/24 hours with normal urine output | <input type="checkbox"/> Worsening or persistent symptoms e.g., cough, nausea, vomiting, diarrhea |
| <input type="checkbox"/> Myalgia                                                  | <input type="checkbox"/> Reduced level of consciousness                                           |
| <input type="checkbox"/> Other symptoms<br>Please specify -----                   | <input type="checkbox"/> Reduced urine output in last 24 hours                                    |
|                                                                                   | <input type="checkbox"/> Severe giddiness                                                         |

**Physical examination**

- General appearance
- Hydrational status:
- Vital signs
- BP:
- PR:
- Temperature:
- RR:
- SPO2:
- Lungs:

**Depression assessment**

- (if yes, assess with DASS)
- Persistent low mood: Yes/ No
  - Self-harm thought: Yes/ No
  - Anxiety: Yes/ No

**D. Home condition:** Suitable/ Unsuitable

**E. Caregiver:** Suitable/ Unsuitable

**F. Clinical Staging:** (Cat 1, Cat 2A, Cat 2B, Cat 3, Cat 4)

**G. Impression:**

**Seen by: (Sign & Chop)**

**H. Management:**

**Date:**

CLERKING SHEET FOR COVID 19 POSITIVE CASE (PAEDIATRIC)

**A. Personal details**

- Name:
- Age:
- Gender:
- IC / Passport number:
- Nationality:
- Phone Number:
- Address:

**B. History**

- Date of symptoms onset:
- Date of COVID-19 swab for RT PCR taken:
- Any other illness:

**C. Clinical**

**SYMPTOMS:**

**WARNING SIGNS:**

If any present, consult FMS/ pediatrician for admission

|                                                          |                                                                                               |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Sore throat                     | <input type="checkbox"/> URTI symptoms more than 7 days                                       |
| <input type="checkbox"/> Running nose                    | <input type="checkbox"/> Shortness of breath                                                  |
| <input type="checkbox"/> Cough                           | <input type="checkbox"/> Inactive on handling/ Lethargy                                       |
| <input type="checkbox"/> Vomiting                        | <input type="checkbox"/> Poor feeding                                                         |
| <input type="checkbox"/> Diarrhea                        | <input type="checkbox"/> Chest or abdominal pain                                              |
| <input type="checkbox"/> Others.<br>Please specify ----- | <input type="checkbox"/> Cold or clammy peripheries                                           |
|                                                          | <input type="checkbox"/> Signs of dehydration                                                 |
| <input type="checkbox"/> Myalgia                         | <input type="checkbox"/> Change in mental status                                              |
|                                                          | <input type="checkbox"/> Seizures                                                             |
|                                                          | <input type="checkbox"/> Persistent fever, new onset fever and temp. >38.5                    |
|                                                          | <input type="checkbox"/> Worsening or persistent symptoms like nausea, vomiting and diarrhoea |

**Physical examination**

- General examination: appearance
- Hydrational status:
- Vital signs
- BP:
- PR:
- Temperature:
- RR:
- SPO2:
- Lungs:

**D. Home condition:** Suitable/ Unsuitable

**E. Caregiver:** Suitable/ Unsuitable

**D. Clinical Staging:** (Cat 1, Cat 2A, Cat 2B, Cat 3, Cat 4)

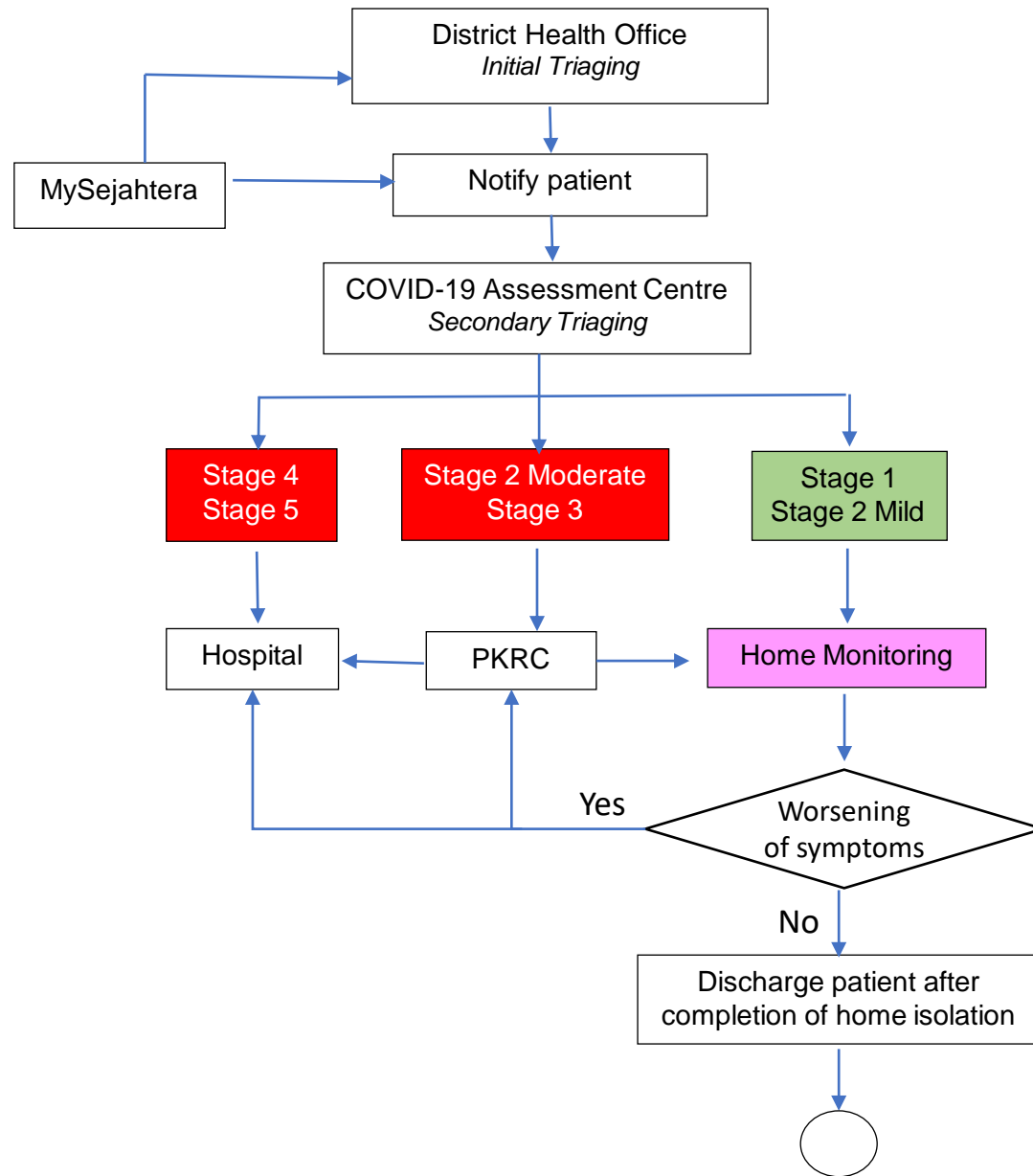
**E. Impression:**

**Seen by: (Sign & chop)**

**F. Management:**

**Date:**

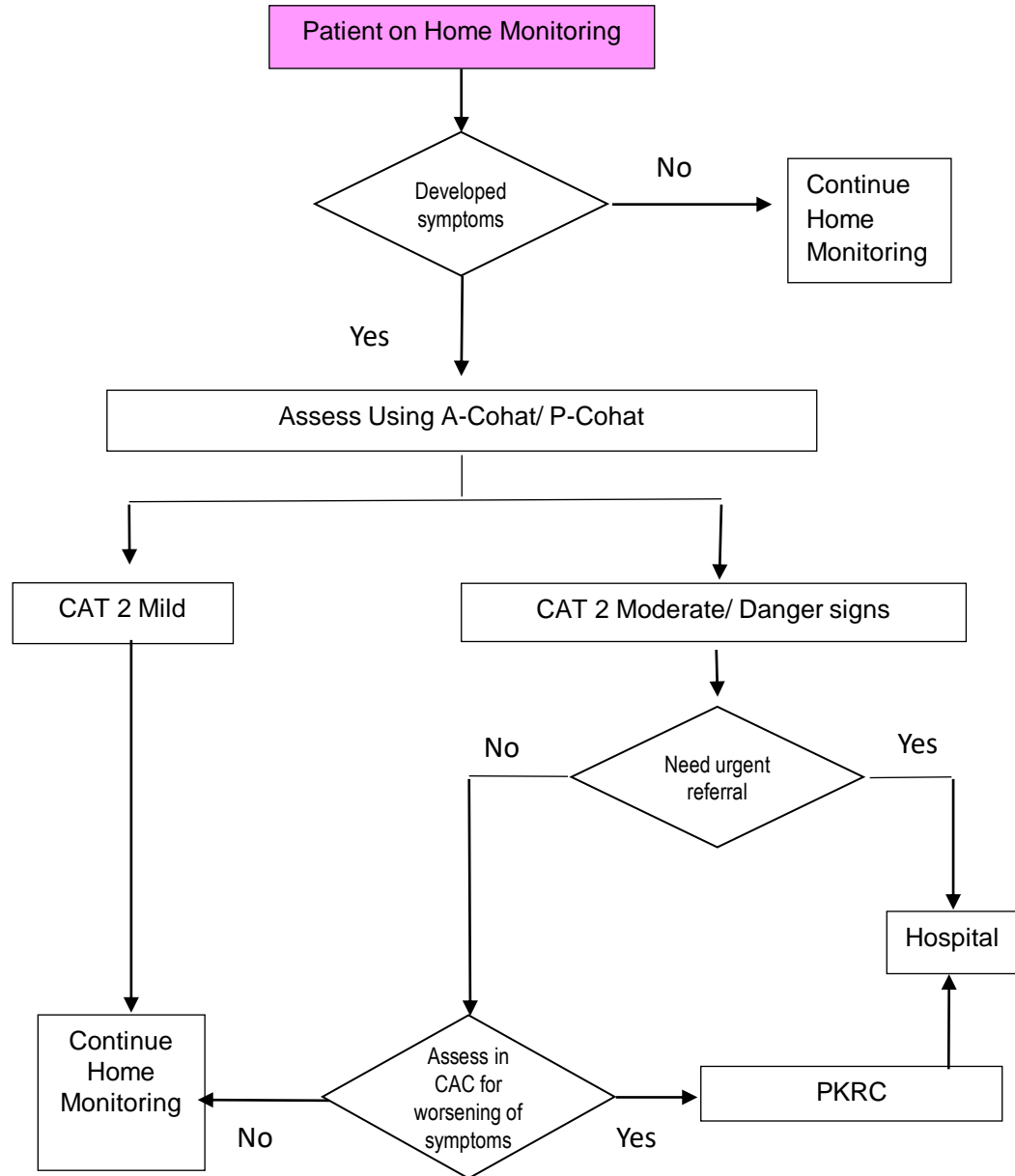
## FLOW CHART TO TRIAGE COVID-19 POSITIVE CASE IN PRIMARY CARE



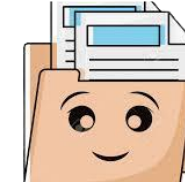
# HOME MONITORING

- Tools
- Apps
- Process

## FLOW CHART FOR DAILY MONITORING AT CAC



# TOOLS



## Patient

- Home assessment tool for adult
- Home assessment tool for paediatric

## Health care provider

- Adult covid-19 home assessment tool (a-cohat) for health care provider
- Paediatric covid-19 home assessment tool (p-cohat) for health care provider











# APPS FOR MONITORING



# MySejahtera

COVID-19 Self Reporting



Slides from the team

Acknowledgment to Dr Mahesh and MySejahtera team

# MySejahtera



Status Risiko



Hotspot



Helpdesk



Kesihatan Digital



Fasiliti Kesihatan



Lain

1

Perlu Diketahui

Perlu Dilakukan 1



CPRC KKM

17 Jan 2021, 6:29 PM

COVID-19 IN MALAYSIA AS OF 17 JANUARY 2021

STATUS TERKINI COVID-19 MALAYSIA 17.1.2021



Kes baharu  
Confirmed cases  
**3,339**

Kes tempatan  
3,324  
Kes import  
15

Jumlah kes aktif  
Total active case  
**37,782**

Jumlah kes ICU  
Total ICU cases  
**240**

Termasuk  
Bantuan Alat  
Pernafasan  
**93**

Kematian baharu  
New death  
**7**

Jumlah Kematian  
Total death  
**601**

Kes sembuh baharu  
New recovered cases  
**2,676**

Jumlah kes sembuh  
Total recovered cases  
**120,051**

Jumlah kes keseluruhan  
Total confirmed cases  
**158,434**



MySejahtera



Statistik



Check-in



Profil

## Helpdesk



Selamat datang ke MySejahtera Helpdesk

Mula

2

Pilih Bahasa

Bahasa Melayu | English



## Helpdesk



MySejahtera: Bagaimana kami boleh membantu anda?

A Saya tidak boleh membuat pendaftaran

B Saya tidak boleh log masuk ke aplikasi

C Saya menghadapi masalah untuk mengimbas kod QR/ tidak boleh Check-in

D Saya ingin bertanya mengenai kategori risiko / penilaian kesihatan

E Saya ingin mengemaskini butiran peribadi

F Hal-hal lain

G Saya telah disahkan COVID-19 positif dan sedang menunggu panggilan dari KKM

3

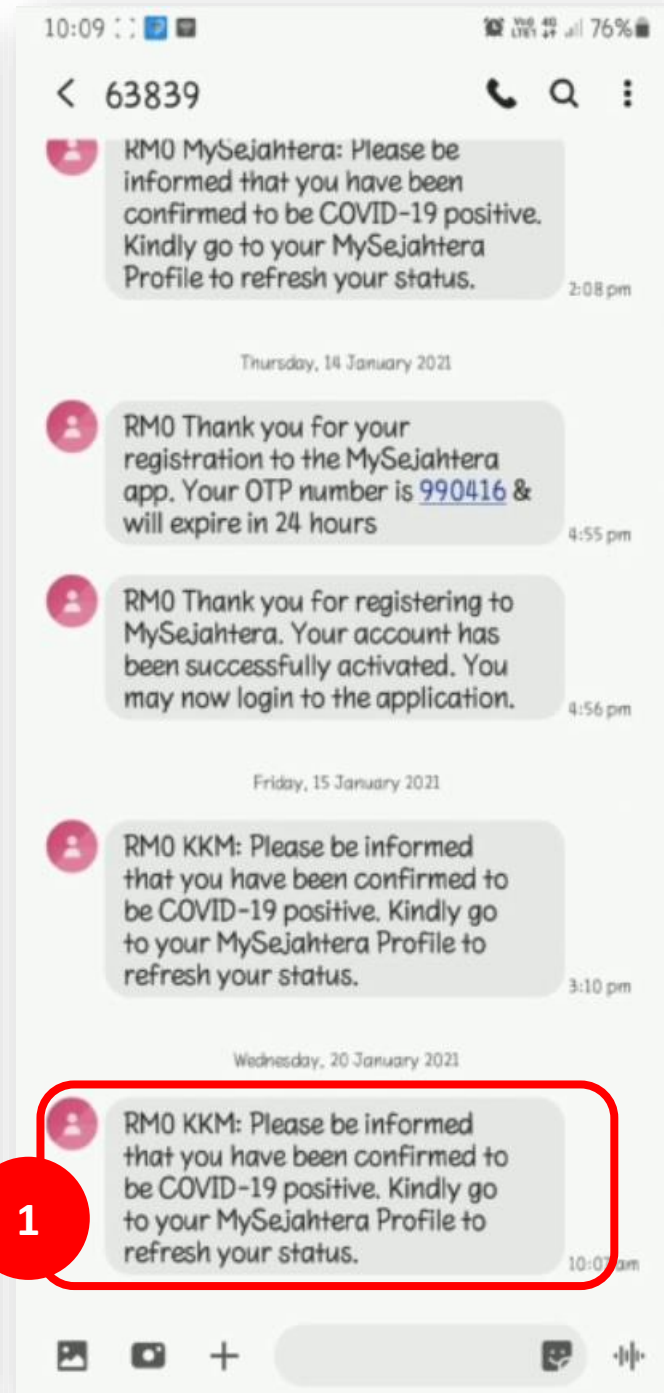
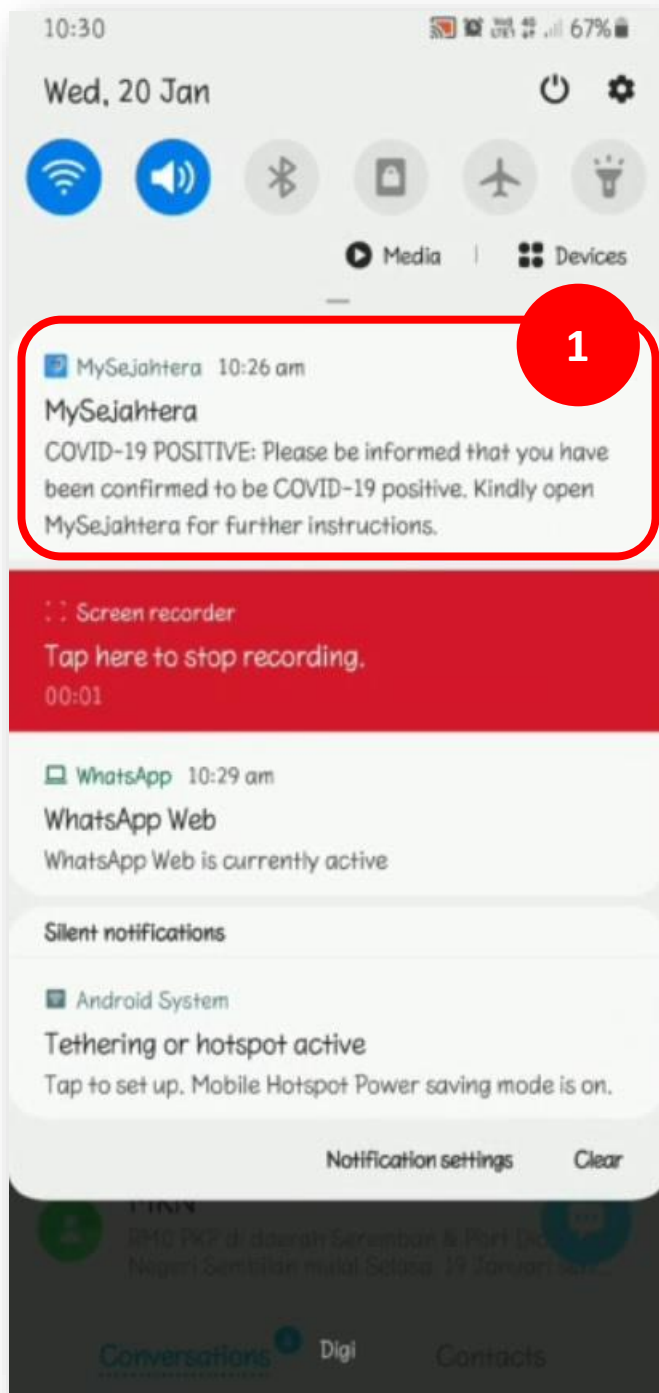


# MySejahtera

COVID-19 Home Patient Management

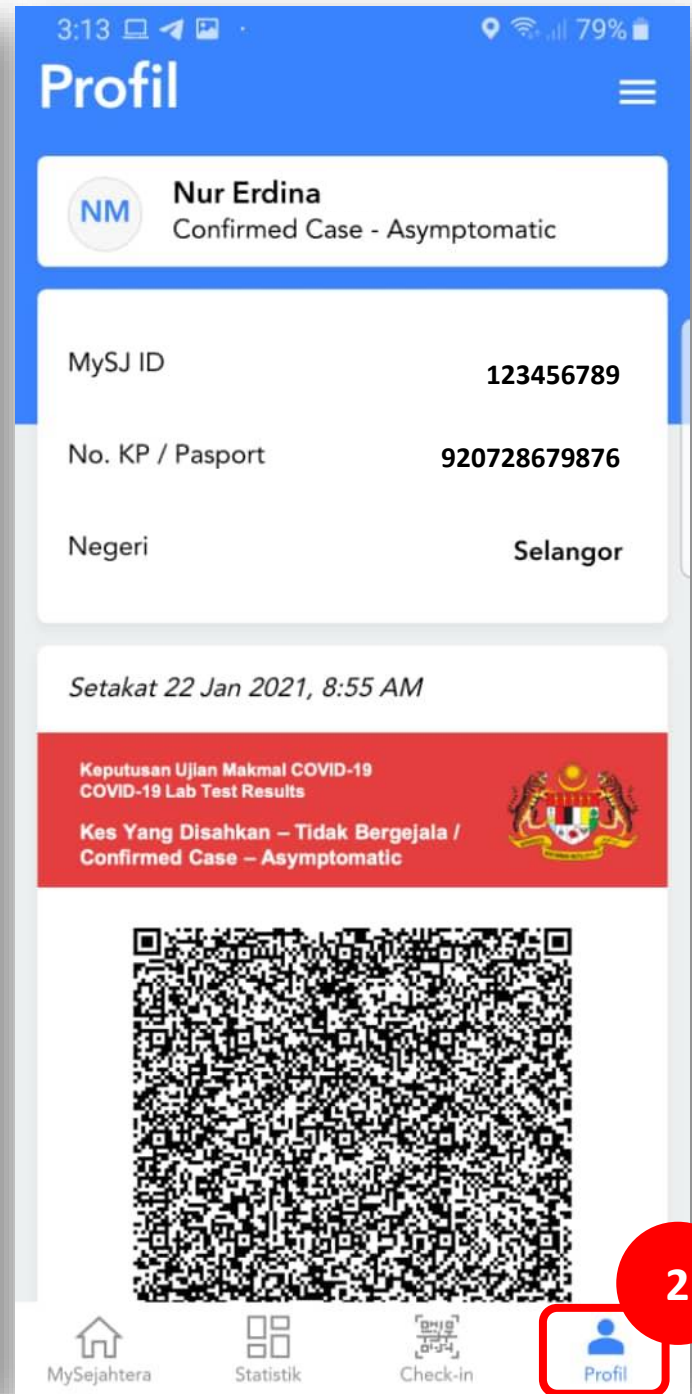
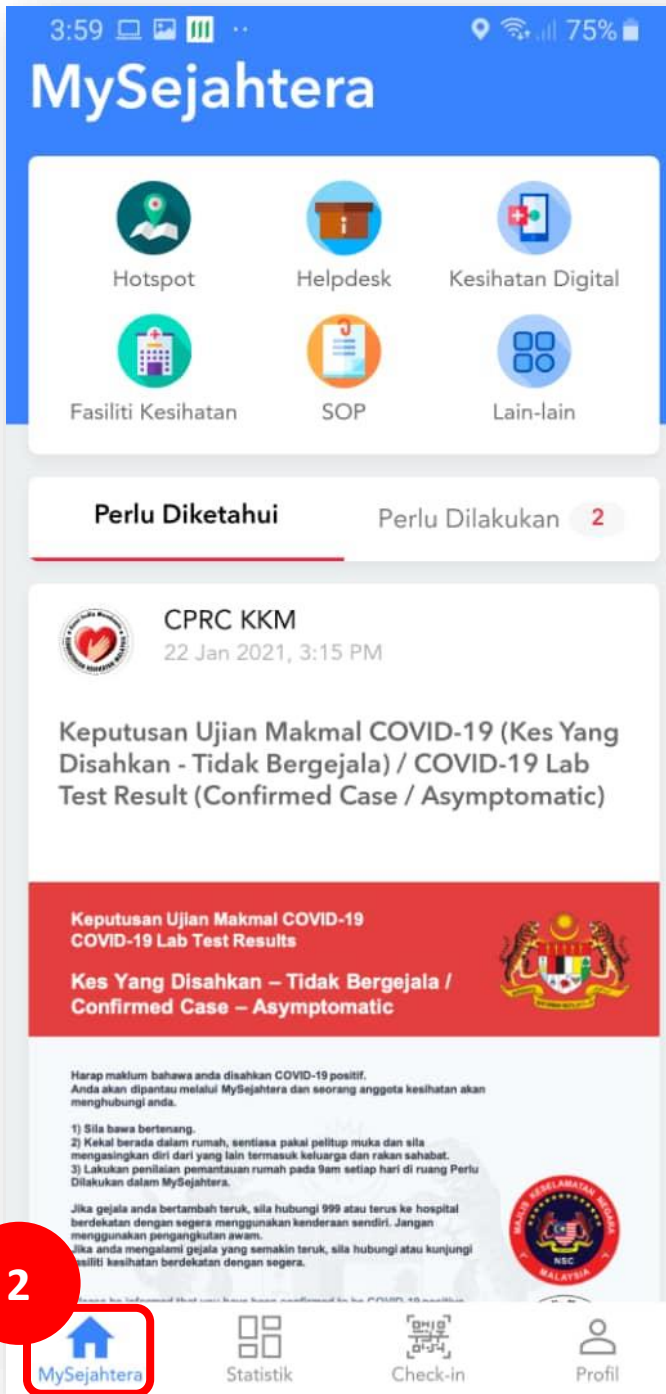






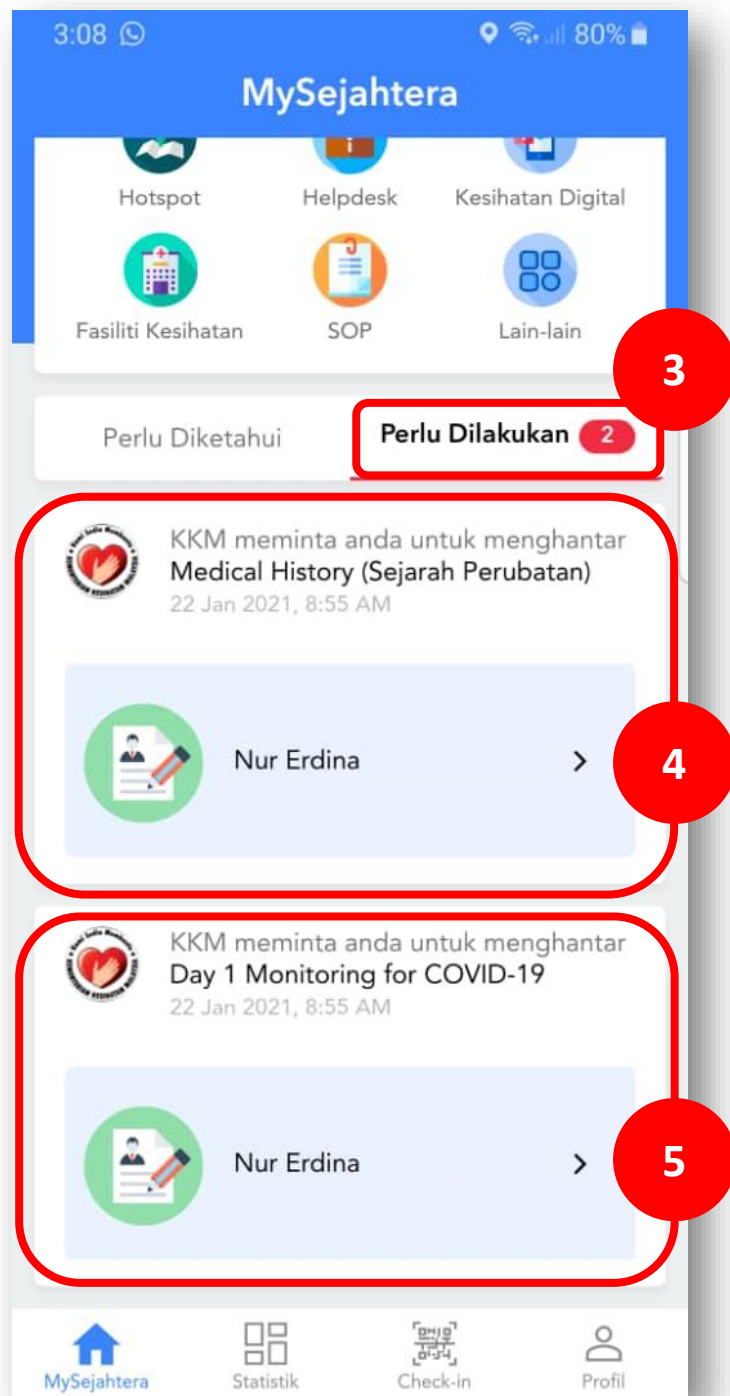
Pengguna terima notifikasi MySejahtera & SMS

*User receives notification via MySejahtera & SMS*



Pengguna terima kad “Kes COVID-19 Disahkan” di halaman utama & profil

*User receives “COVID-19 Confirmed Case” card in main page & profile*



Kemas kini **sejarah perubatan** untuk sekali di ruang “Perlu Dilakukan”.  
Lakukan **penilaian pemantauan rumah** pada 9am setiap hari di ruang yang sama.

*Update **medical history** for once at “Things To Do” section.*

*Perform **home monitoring assessment** at 9am daily at the same section.*

10:30 67%

< Question

1. Adakah anda mempunyai penyakit seperti berikut, cth: penyakit kencing manis, penyakit tekanan darah tinggi, penyakit buah pinggang, penyakit asma, penyakit jantung?  
*Do you have the following medical condition? i.e: Diabetes mellitus, Hypertension, Kidney disease, Asthma, Heart disease? \**

Ya/Yes

Tidak/No

Cancel Submit

10:30 67%

< Question

1.2 Penyakit tekanan darah tinggi  
*Hypertension \**

Ya/Yes

Tidak/No

1.3 Penyakit buah pinggang  
*Kidney disease \**

Ya/Yes

Tidak/No

1.4 Penyakit asma  
*Asthma \**

Ya/Yes

Tidak/No

1.5 Penyakit jantung  
*Heart disease \**

Ya/Yes

Tidak/No

Cancel Submit

Kemas kini **sejarah perubatan** untuk sekali di ruang “Perlu Dilakukan”.

*Update **medical history** for once at “Things To Do” section.*

10:54 59%

Question

1. Adakah anda demam?  
*Do you have a fever? \**

Ya/Yes

Tidak/No

2. Adakah anda sakit tekak?  
*Do you have a sore throat? \**

Ya/Yes

Tidak/No

3. Adakah anda berasa loya dan muntah?  
*Do you have any nausea and vomiting? \**

Ya/Yes

Tidak/No

4. Adakah anda mengalami cirit-birit?  
*Do you have any diarrhea? \**

Ya/Yes

Cancel Submit

10:54 59%

Question

13. Di manakah anda sekarang?  
*Where are you currently staying? \**

Saya dikuarantin di rumah/I'm quarantined at home.

Saya dikuarantin di pusat kuarantin/I'm quarantined at a quarantine centre

Saya sedang dirawat di Pusat Rawatan COVID-19 Berisiko Rendah/I'm being treated at COVID-19 low risk treatment centre

Saya dirawat di hospital/I'm admitted to a hospital

14. Pernahkah anda diperiksa di mana-mana fasiliti kesihatan KKM / COVID-19 Assessment Centre (CAC) selepas anda disahkan COVID-19 positif?  
*Have you been assessed in any MOH health facility / COVID-19 Assessment Centre (CAC) after you're confirmed to be COVID-19 positive? \**

Ya/Yes

Tidak/No

Cancel Submit

Lakukan **penilaian pemantauan rumah** pada 9am setiap hari di ruang yang sama.

*Perform **home monitoring assessment** at 9am daily at the same section.*

## Penilaian pemantauan rumah selesai.

### *Home monitoring assessment completed.*

Harap maklum bahawa anda disahkan COVID-19 positif.  
Anda akan dipantau melalui MySejahtera dan seorang anggota kesihatan akan menghubungi anda.

- 1) Sila bawa bertenang.
- 2) Kekal berada dalam rumah, sentiasa pakai pelitup muka dan sila mengasingkan diri dari yang lain termasuk keluarga dan rakan sahabat.
- 3) Lakukan penilaian pemantauan rumah pada 9am setiap hari di ruang *Perlu Dilakukan* dalam MySejahtera.

Jika gejala anda bertambah teruk, sila hubungi 999 atau terus ke hospital berdekatan dengan segera menggunakan kenderaan sendiri. Jangan menggunakan pengangkutan awam.

*Please be informed that you have been confirmed to be COVID-19 positive. You will be monitored through MySejahtera and a healthcare provider will contact you.*

- 1) *Please remain calm.*
- 2) *Stay at home, always wear a face mask and please isolate yourself from others including families & friends.*
- 3) *Perform home monitoring assessment at 9am daily at Things To Do in MySejahtera.*

*If you are experiencing any worsening symptoms, please contact 999 or visit the nearest hospital immediately with your own vehicle. Do not use public transport.*

# COMPLETION OF HOME MONITORING

If patient remains asymptomatic till Day 10 after the date of their first positive test

OR

At least 10 days have passed since onset of illness.

# COMPLETION OF HOME MONITORING



Assessment:

- Stable vital signs and no hypoxia
- Stable/ controlled comorbid, if any
- Improved or stable laboratory data including inflammatory markers (especially C-reactive protein or lactate dehydrogenase)
- Able to ambulate without assistance and self-administer medications
- Do not have ongoing clinical needs such as haemodialysis





# COMPLETION OF HOME MONITORING



- Attend CAC on Day 11
- to be assessed
- get a Release Order
- get medical certificate (if required) and
- remove their isolation wrist band.
- Repeat PCR test is not required before discharge from home monitoring.

# SUMMARY

Figure 1: Flow Chart for triaging adult patients

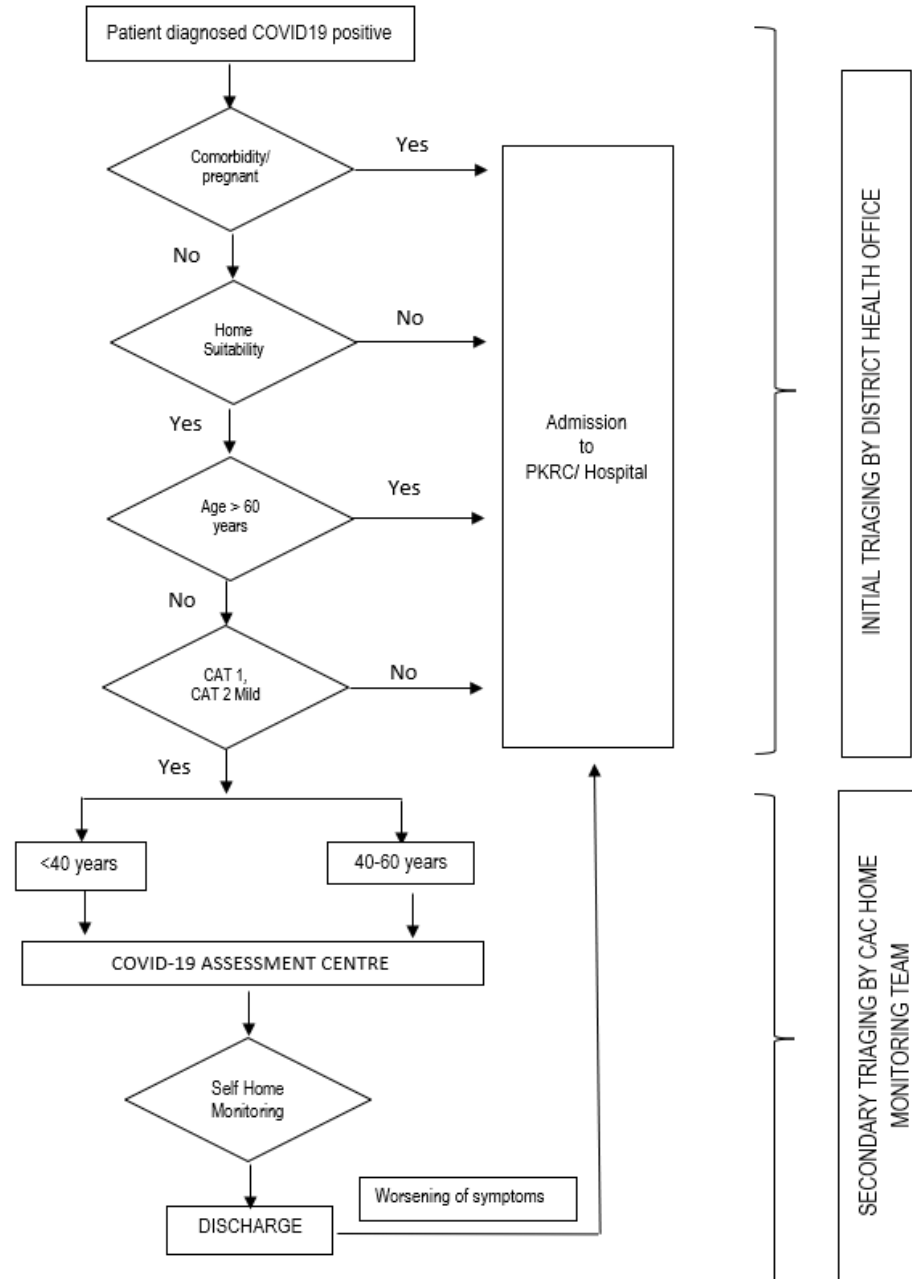
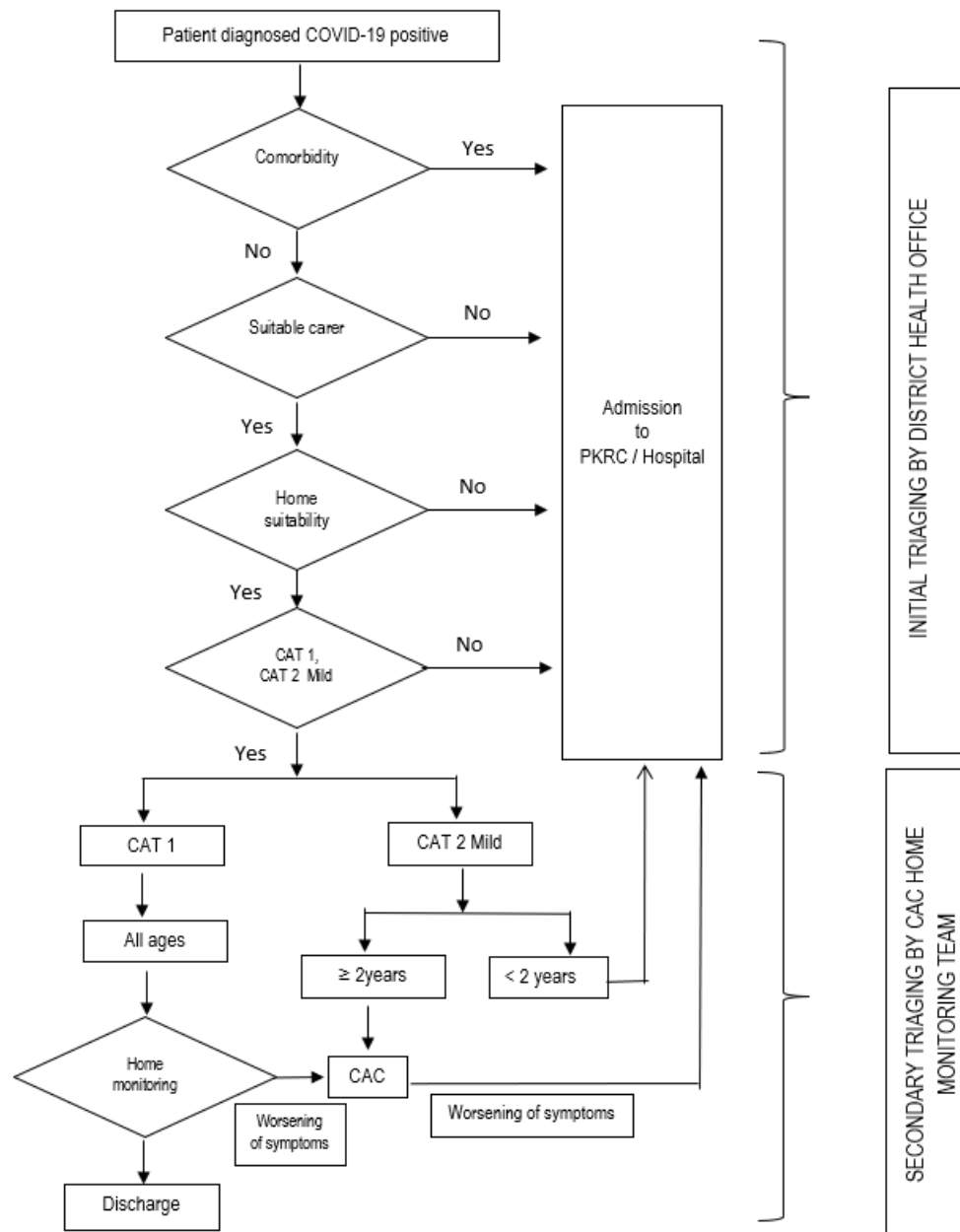


Figure 2: Flow chart for triaging paediatric patients





# FUNCTION OF CAC

- i. Monitor patient's condition daily through telephone/ virtual clinic/ Virtual
  - For patients using Adult/ Paediatric COVID-19 Home Assessment Tool
  - for Health Care Provider (A-COHAT/ P-COHAT)
- ii. Assess patients with symptoms and determine if there is need for admission.
- iii. Discuss with physician in charge on admission or further management of the patient.
- iv. Arrange for admission of patients when needed.
- v. Provide feedback to DHO on the outcome of the patient.
- vi. Evaluate and discharge patients who has completed the home isolation period.
- vii. Arrange home visit if necessary (e.g., unable to contact/ no response from patient).
- viii. Contact tracing by Assistant Environmental Health Officer if he/ she stationed in CAC.

THANK YOU



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