



**GARIS PANDUAN PENGENDALIAN INFLUENZA A (H1N1)
DI KLINIK KESIHATAN**

**CAWANGAN KESIHATAN PRIMER
BAHAGIAN PEMBANGUNAN KESIHATAN KELUARGA
KEMENTERIAN KESIHATAN MALAYSIA**

PINDAAN 17 OGOS 2009

GARISPANDUAN PENGENDALIAN INFLUENZA A (H1N1) DI KLINIK KESIHATAN

1. POLISI OPERASI:

i. Di Pintu Masuk Klinik

- a. Sediakan **Kaunter Triage** di pintu masuk bangunan klinik. Kaunter Triage hendaklah di kendalikan oleh anggota kesihatan terlatih.
- b. Anggota kesihatan yang mengendalikan kaunter triage mesti memakai sekurang-kurangnya **mask 3-Ply** ('3-Ply surgical mask') dan sarung tangan pakai buang.
- c. Anggota mesti membasuh tangan dengan hand rub sebelum dan selepas menyentuh pesakit.
- d. **Tanya** setiap pesakit yang datang tentang simptom dan tanda-tanda 'Influenza-like Illness' (ILI).
- e. **Asingkan** pesakit yang mempunyai simptom atau tanda-tanda ILI untuk mengurangkan risiko jangkitan kepada pesakit lain.
- f. **Beri mask** kepada pesakit yang mempunyai simptom ILI untuk dipakai.
- g. Saringan untuk tahap keterukan (Home Assessment Tool for H1N1). Sekiranya tahap serius, terus rujuk ke bilik konsultasi.
- h. Paparkan poster berkaitan Influenza (AH1N1) di semua pintu masuk.
- i. Paparkan arahan seperti:
 - *Sentiasa memakai mask sekiranya anda batuk/bersin.*
 - *Tutup mulut dan hidung apabila batuk atau bersin dengan tisu.*
 - *Buangkan tisu kedalam bakul sampah.*

ii. Ruang Menunggu

- a. **Asingkan** ruang menunggu pesakit ILI diruang/bilik khusus.
- b. Ruang/bilik pengasingan mestilah mempunyai ventilasi udara yang baik.
- c. Jarak antara pesakit sekurang-kurangnya satu meter, sekiranya boleh.
- d. Pesakit dikehendaki sentiasa memakai mask 3-ply.

Peralatan diruang menunggu:

- a. Kertas Tisu
- b. 'Hand rub'
- c. 'Pedal bin' (Clinical Waste Bin)

Pengendalian Khas Ibu Hamil dan Kanak-kanak bagi Pemeriksaan Rutin

Golongan ibu hamil dan kanak-kanak merupakan golongan berisiko dan mudah dijangkiti. Antara langkah-langkah yang boleh diambil untuk mengurangkan risiko jangkitan adalah seperti berikut:

- a. Tempatkan ibu hamil dan kanak-kanak di ruang yang berasingan dengan pesakit-pesakit lain.
- b. Sekiranya klinik merupakan klinik dua tingkat, aras atas boleh dikhaskan untuk ibu hamil dan kanak-kanak.
- c. Pihak JKN Negeri juga boleh tempatkan klinik untuk ibu hamil dan kanak-kanak dilokasi yang lain sebagai langkah sementara (seperti Klinik Desa).
- d. Bagi Klinik Desa, Pasukan Klinik Bergerak, Klinik Kesihatan Ibu dan Anak dan Pasukan Kesihatan Sekolah, kawalan infeksi mesti dipatuhi sama seperti di atas.

iii. Pendaftaran pesakit ILI

- a. Pendaftaran pesakit ILI hendaklah dibuat secara berasingan dengan pesakit-pesakit lain.
- b. Anggota kesihatan yang mengendalikan kaunter pendaftaran mesti memakai sekurang-kurangnya **mask 3-Ply** ('3-Ply surgical mask').

iv. Pengendalian Pesakit ILI Di Bilik Konsultasi

- i. Pergerakan pesakit ILI di klinik mesti dihadkan bagi mengurangkan penularan jangkitan bersilang.
- ii. Pesakit ILI hendaklah diperiksa di bilik konsultasi yang berasingan dengan pesakit-pesakit lain.
- iii. Anggota yang bertugas di bilik konsultasi hendaklah memakai **mask N95** dan sarung tangan pakai buang.
- iv. Pengambilan sampel bagi pemeriksaan makmal dan pemberian ubat adalah melalui bilik konsultasi.
- v. Lantai mesti dibersihkan menggunakan disinfektant sekurang-kurangnya 3 kali sehari.
- vi. Semua permukaan mesti dibersihkan menggunakan disinfektant tissue (seperti permukaan meja, kaunter, tombol pintu).
- vii. Cadar dan sarung bantal ditukar setiap hari.
- viii. Peralatan seperti 'hand sanitizers' dan tong sampah bertutup mestilah mencukupi.

v. Pengendalian Pesakit ILI Di Bilik Rawatan

- a. Anggota yang bertugas di bilik rawatan hendaklah memakai **mask N95** dan sarung tangan pakai buang.
- b. Lantai mesti dibersihkan menggunakan disinfectant sekurang- kurangnya 3 kali sehari.
- c. Semua permukaan mesti dibersihkan menggunakan disinfectant tissue (seperti permukaan meja, kaunter, tombol pintu).
- d. Cadar dan sarung bantal ditukar setiap hari.
- e. Peralatan seperti 'hand sanitizers' dan tong sampah bertutup mestilah mencukupi.

vi. Panduan Rujukan dan Mengangkut Pesakit

- a. Ikuti mekanisma sedia ada untuk rujukan pesakit ke hospital dan pastikan langkah kawalan jangkitan diambil semasa pengangkutan pesakit ke hospital.

vii. Pendidikan dan Informasi Kesihatan

Sediakan maklumat dan pendidikan kesihatan mengenai Influenza (AH1N1) di klinik kesihatan:

- a. Poster, risalah mengenai Influenza A (H1N1).
- b. Video, risalah etika batuk, kebersihan diri, kaedah membasuh tangan dan kaedah pemakaian mask dengan betul.
- c. Menyediakan bahan-bahan maklumat dan pendidikan kesihatan di bilik konsultasi, ruang-ruang menunggu termasuk farmasi dan kaunter pendaftaran.

2. PENCEGAHAN AWAL UNTUK ANGGOTA KESIHATAN

Selain daripada langkah-langkah di bawah 'Universal Precaution', semua anggota di kehendaki mematuhi langkah-langkah pencegahan berikut:

- a. Kebersihan diri
 - Membasuh tangan dengan betul sebelum dan selepas mengendalikan pesakit ILI.
 - Gunakan 'hand rub' sebelum dan selepas mengendalikan pesakit.
 - Elakkan menyentuh permukaan mukosa seperti hidung, mulut dan mata.
 - Basuh tangan sebelum dan selepas menyentuh permukaan mukosa.
 - Basuh tangan sekerap mungkin.
 - Mandi dan tukar pakaian sebelum pulang ke rumah, jika boleh.

b. Perlindungan diri

Pakai alat perlindungan diri bila mengendalikan pesakit ILI:

- sarung tangan pakai buang
- Mask N95
- gaun pakai buang

3. KAWALAN INFEKSI DI KLINIK KESIHATAN

i. **Kawalan Infeksi dikalangan Anggota Klinik Kesihatan.**

- a. Semua anggota klinik kesihatan perlu mendapat suntikan vaksin Influenza.
- b. Semua anggota klinik kesihatan mesti memakai mask (3-Ply) sepanjang waktu bekerja.
- c. Pihak Pejabat Kesihatan Daerah (PKD) mesti menjalankan latihan dalam perkhidmatan kepada anggota klinik kesihatan, dalam aspek berkaitan:
 - Epidemiologi Influenza A (H1N1)
 - Kawalan Infeksi:
 - Basuh Tangan
 - Mask
 - Pelupusan bahan
- d. Anggota klinik kesihatan yang mempunyai co-morbidity berikut tidak digalakkan mengendali kes-kes ILI:
 - Asthma
 - Pregnancy
 - Diabetes
 - Obes
 - Kurang DayaTahan
- e. Kenalpasti anggota yang bertugas barisan hadapan ('frontliners'):
 - Penyelia hendaklah sentiasa memantau anggota supaya mematuhi langkah-langkah pencegahan dan kawalan infeksi sepanjang masa.
 - Penyelia hendaklah memantau tahap kesihatan anggota bagi mengesan anggota frontliners' yang tidak sihat.
 - Anggota melakukan pemeriksaan suhu badan sendiri setiap hari.
 - Anggota kesihatan yang mengalami simptom seperti demam, batuk dan kesukaran bernafas perlu dirujuk kehospital.

f. 'Business Continuity Planning'

Pegawai bertanggungjawab perlu merancang dan mengatur semua aktiviti klinik mengambil kira kemungkinan bilangan anggota yang bekerja berkurangan sehingga tahap yang kritikal.

ii. **Keperluan Stok Peralatan/Ubatan bagi Pandemik H1N1 di Klinik Kesihatan**

a. Pastikan stok peralatan berikut mesti mencukupi pada setiap masa:

- Mask (3-Ply)
- Mask N95
- Glove
- Apron
- Gaun
- Disinfectant
- Hand sanitiser
- Covered dustbin
- Paper hand towel
- Liquid soap
- Thermal scan
- Anti viral: Oseltamivir
- Risalah pendidikan kesihatan

4. PEMANTAUAN KES ILI DI KLINIK KESIHATAN

Bilangan kes ILI di klinik kesihatan perlu di pantau dari masa ke semasa iaitu:

- i. Bilangan Kedatangan Harian Unit Pesakit Luar
- ii. Bilangan kes 'ILI/Flu-like'

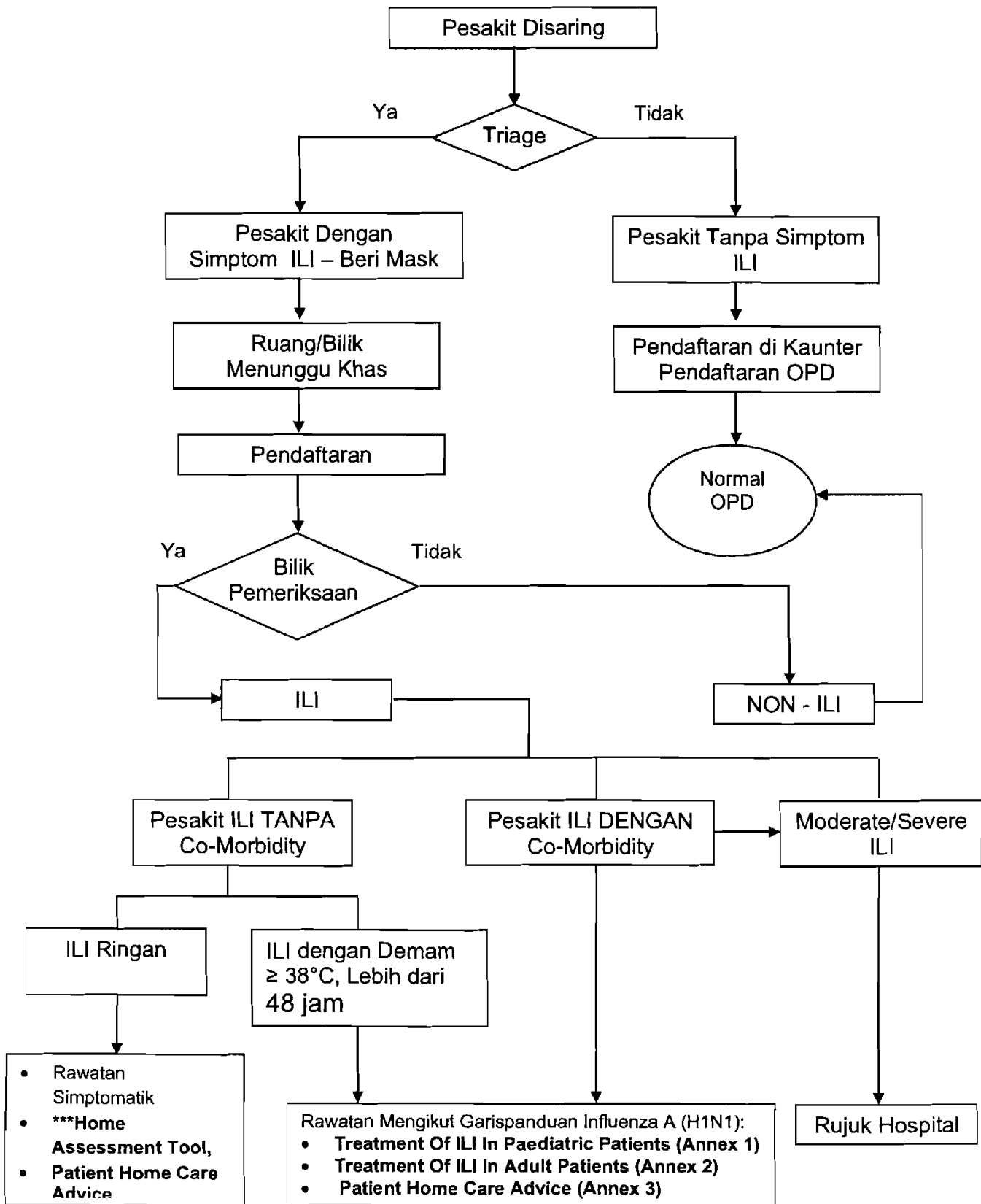
Data-data ini perlu dihantar ke Bahagian Pembangunan Kesihatan Keluarga, KKM melalui sistem **e-masa** bagi klinik yang mempunyai sistem ini atau menggunakan format di **Annex 4**.

Note: Definition of Influenza-like Illness (ILI)

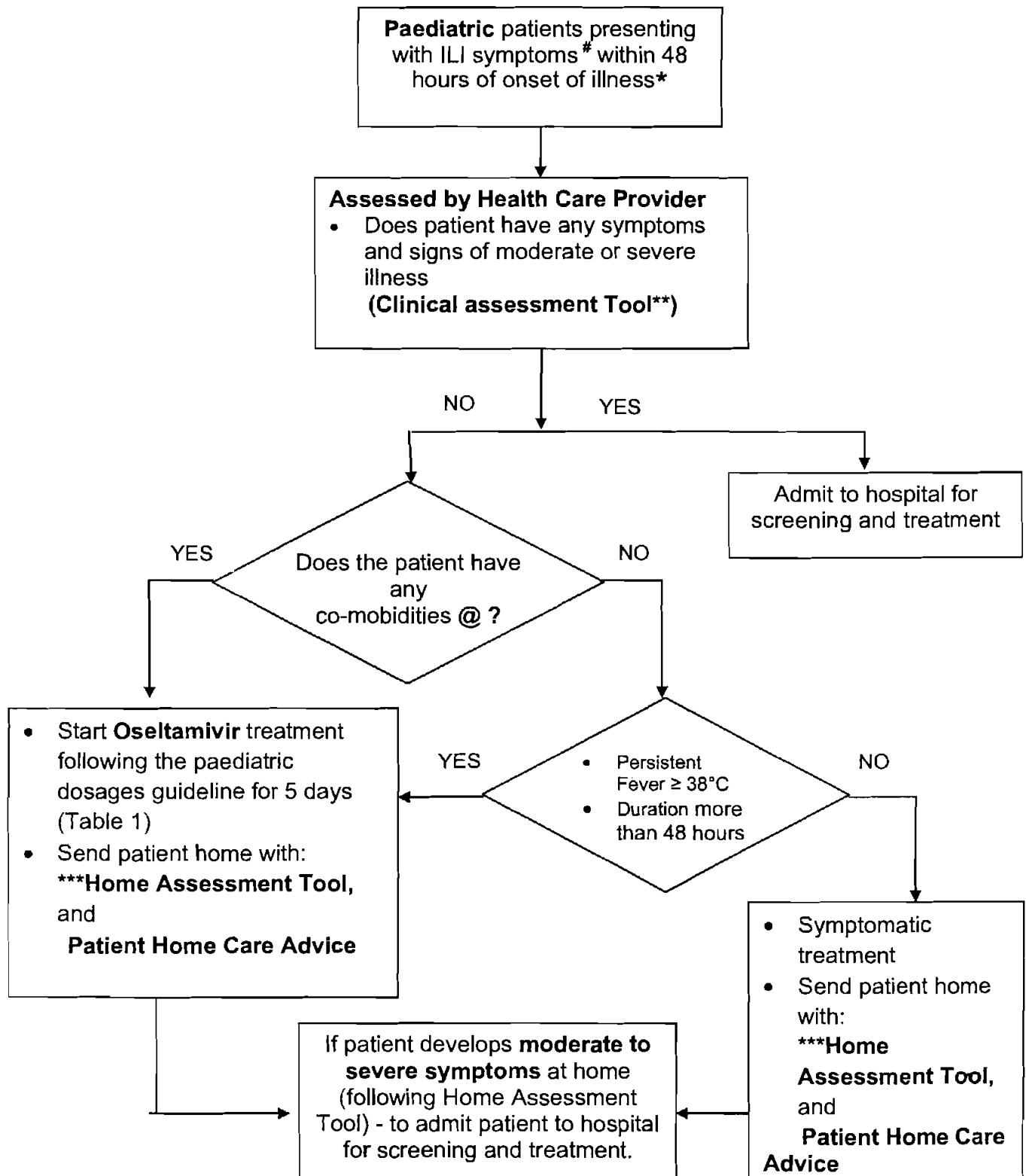
History of high fever with temperature $\geq 38^{\circ}\text{C}$ AND one or more of the following respiratory symptoms: cough, shortness of breath, body ache, sore throat.

CARTA ALIR PENGENDALIAN

'Influenza-like Illness (ILI)' DI KLINIK KESIHATAN



**Algorithm for Treatment of ILI in Paediatric Patients
In An Outpatient Setting**



Definition of Influenza-like Illness (ILI)

History of high fever with temperature $\geq 38^{\circ}\text{C}$ **AND** one or more of the following respiratory symptoms: cough, shortness of breath, body ache, sore throat.

* Treatment with influenza antivirals

Treatment with the antiviral drugs should be started as soon as possible after symptom onset. As the benefits are greatest when administered within 48 hours after symptom onset, clinicians should initiate treatment immediately and not wait for the results of laboratory tests.

While treatment within 48 hours of symptom onset brings the greatest benefits, later initiation of treatment may also be beneficial. This decision should be made on a case-by-case basis. If the symptoms are improving beyond the first 48 hours, treatment may not be necessary. Clinical benefits associated with oseltamivir treatment include a reduced risk of pneumonia (one of the most frequently reported causes of death in infected people) and a reduced need for hospitalization.

**Clinical Assessment Tool for Moderate to Severe Symptoms

1. Severe respiratory distress

Lower chest wall indrawing, sternal recession, grunting or noisy breathing when calm.

2. Increased respiratory rate

Measured over at least 30 seconds. ≥ 50 breaths per minute if under 1 year, or ≥ 40 breaths per minute if ≥ 1 year.

3. Oxygen saturation $\leq 92\%$ on pulse oximetry, breathing air or on oxygen

Absence of cyanosis is a poor discriminator for severe illness.

4. Respiratory exhaustion or apnoeic episode

Apnoea defined as a ≥ 20 second pause in breathing.

5. Evidence of severe clinical dehydration or clinical shock

Sternal capillary refill time > 2 seconds, reduced skin turgor, sunken eyes or fontanelle.

6. Altered conscious level

Strikingly agitated or irritable, seizures, or floppy infant.

@ List of Co-Morbidities In Paediatric Patients

1. Cardiac disease
2. Chronic respiratory disease (e.g. asthma, bronchopulmonary dysplasia)
3. Other chronic diseases (e.g., diabetes mellitus, chronic metabolic diseases, chronic renal failure, haemoglobinopathies)
4. Chronic neurological disorders e.g. muscular dystrophies
5. Impaired immunity, including HIV infection, child with malignancy or immunosuppressive therapy
6. Children aged 6 months – 10 years on long-term aspirin therapy
7. Malnourished or obesity

*** Home Assessment Tool for Parents and Caregivers

Children should be brought to the nearest hospital for further assessment if they developed the following symptoms and signs:

1. Lethargy or poor oral intake
2. Change in mental status or behavior eg. drowsiness , irritability
3. Signs of dehydration: sunken eyes, dry tongue, absence of tears during crying or poor urine output.
4. Increasing respiratory rate: fast breathing, noisy breathing, presence of chest recession (chest in-drawing)
5. Fits.
6. Cyanosis.
7. Persistent fever.

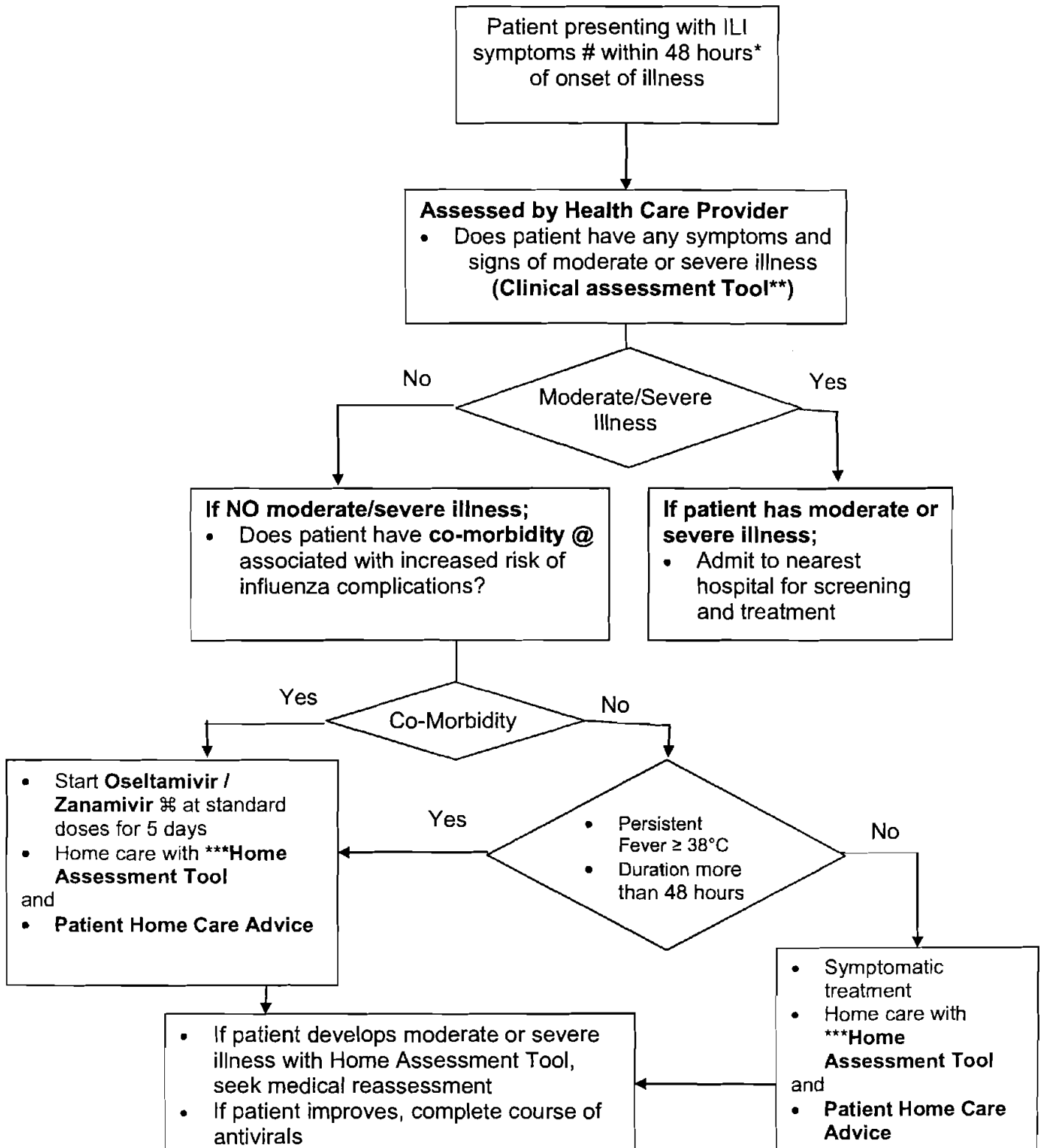
Antiviral Medication Dosing Recommendations for Treatment Of Novel Influenza A (H1N1) Infection.

Agent, Group		Treatment
Oseltamivir		
Children ≥ 12 months	15 kg or less	30 mg twice daily
	16-23 kg	45 mg twice daily
	24-40 kg	60 mg twice daily
	>40 kg	75 mg twice daily
Zanamivir		
Children		Two 5-mg inhalations (10 mg total) twice per day (age 7 years or older)

Dosing recommendations for antiviral treatment of children younger than 1 year using Oseltamivir.

Age	Recommended treatment dose for 5 days
<3 months	12 mg twice daily
3-5 months	20 mg twice daily
6-11 months	25 mg twice daily

**Algorithm For Treatment of ILI In Adult Patients
With Co-morbidities in an Outpatient Setting**



Notes:**# Definition of Influenza-like Illness (ILI):**

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*** Treatment with influenza antivirals:**

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**** Clinical assessment Tool:**

Patients with ILI and any of the following parameters should be considered for admission to the of nearest hospital
Respiratory impairment: any of the following <ul style="list-style-type: none">▪ Tachypnoea, respiratory rate $> 24/\text{min}$▪ Inability to complete sentence in one breath▪ Use of accessory muscles of respiration, supraclavicular recession▪ Oxygen saturation $\leq 92\%$ on pulse oximetry▪ Decreased effort tolerance since onset of ILI▪ Respiratory exhaustion▪ Chest pains
Evidence of clinical dehydration or clinical shock <ul style="list-style-type: none">▪ Systolic BP $< 90\text{mmHg}$ and/or diastolic BP $< 60\text{mmHg}$▪ Capillary refill time > 2 seconds, reduced skin turgor
Altered Conscious level (esp. in extremes of age) <ul style="list-style-type: none">▪ New confusion, striking agitation or seizures
Other clinical concerns: <ul style="list-style-type: none">▪ Rapidly progressive (esp. high fever > 3 days) or serious atypical illness▪ Severe & persistent vomiting

@ Co-morbidities / Risk factors:

Patients who are considered vulnerable to severe outcomes and should be a focus of early identification, assessment and treatment, include the following:

- Chronic respiratory conditions, including asthma, COPD, Obstructive sleep apnoea
- Pregnant women, esp. in second or third trimester
- Obesity
- Other possible predisposing conditions, such as chronic cardiac disease (not simple hypertension), and chronic illnesses including diabetes mellitus, renal failure, haemoglobinopathies, immunosuppression (including cancer, HIV/AIDS, chemotherapy, long term steroids).
- Adults \geq 65 years of age esp. those with other chronic diseases

As more epidemiologic and clinical data become available, these risk groups might be revised.

***** Home Assessment Tool:**

1	Respiratory Difficulties: Shortness of breath, rapid breathing or Purple or blue discoloration of lips
2	Coughing out blood or blood streaked sputum
3	Persistent chest pains
4	Persistent diarrhoea and / or vomiting
5	Fever persisting beyond 3 days or recurring after 3 days
6	Abnormal behaviour , confusion, less responsive , convulsion
7	Dizziness when standing and/or reduced urine production

⌘ Zanamivir

Zanamivir is not advised in patients with history of bronchospasm.

Influenza A (H1N1): Patient Home Care Advice

1. Home self-care:

- If fever is uncomfortable, take paracetamol at standard recommended doses.
- Lowering the fever will not make your illness go away faster, but it may make you more comfortable.

Follow instructions on the label. Talk to your health-care provider about what product to use, dosage, possible side effects, and conditions when you should not use the remedy.

- Get adequate rest. Bed rest can help you feel better.
- Drink plenty of fluids (such as water, broth, sports drinks, juice, soup) to keep from being dehydrated.
- Be watchful for emergency warning signs (refer to home monitoring tool *) which will indicate when you need to seek medical attention.
- If possible, consideration should be given to maintaining good ventilation in shared household areas (e.g. keeping windows open in restrooms, kitchen, bathroom, etc.).

2. Patient Advice for Infection Control at Home

- i. Practice Cough Etiquette:
 - Patients must cover their mouth and nose when coughing or sneezing with tissues and clean their hands with soap and water or an alcohol-based hand rub after that. Used tissues should be disposed appropriately in disposal bins.
- ii. Improve Personal Hygiene for All:
 - Everyone in the household must clean their hands often, using soap and water or an alcohol-based hand rub.
 - Use paper towels for drying hands after hand washing or dedicate cloth towels to each person in the household.
 - Clean commonly used utensils or frequent touched surfaces regularly with household detergents.
- iii. Do not share personal utensils:
 - Linen, eating utensils and dishes belonging to those who are sick do not need to be cleaned separately, but importantly these items should not be shared without washing thoroughly first
 - Used linen, eating utensils should be washed with water and soap.

3. Social Distancing:

- Persons with flu are advised not to leave their home when they have fever or during the time they are most likely to spread their infection to others (Patients are likely to spread the virus from one day before they develop symptoms to up to 7 days after they get sick).
- It is preferable for the sick individual to stay in a room separate from other household members, whenever possible.
- Household contacts especially those who have co-morbidities (including pregnant women) are advised to stay at least 1 meter away from the patient, whenever possible.
- If a person with the flu needs to leave the home (eg. for medical care), they should wear a surgical mask and practice cough etiquette and good hand hygiene.

4. Patient Home Assessment Tool

You are advised to seek medical care should you developed any of the symptoms and signs listed below:

Signs and symptoms of moderate to severe influenza

1. Respiratory difficulty :
Shortness of breath , rapid breathing or purple or blue discoloration of lips
2. Coughing out blood or blood streaked sputum
3. Persistent chest pains
4. Persistent diarrhoea and /or vomiting
5. Fever persisting beyond 3 days or recurring after 3 days
6. Abnormal behaviour , confusion , less responsive , convulsion
7. Dizziness when standing and/ or reduced urine production

ANNEX 4

PEMANTAUAN KES 'Influenza-like Illness (ILI)' DI KLINIK KESIHATAN

NEGERI: _____

DAERAH: _____

BULAN: _____

TARIKH: _____

Klinik Kesihatan	Bilangan Kedatangan Harian Unit Pesakit Luar	Bilangan Kes Influenza-Like Illness (ILI)

Sila Faks Format ini ke: **FAKS: 03 8883 2210**

Timbalan Pengarah
Cawangan Kesihatan Primer
Bahagian Pembangunan Kesihatan Keluarga
Kementerian Kesihatan Malaysia

Note: Definition of Influenza-like Illness (ILI)

History of high fever with temperature $\geq 38^{\circ}\text{C}$ AND one or more of the following respiratory symptoms: cough, shortness of breath, body ache, sore throat