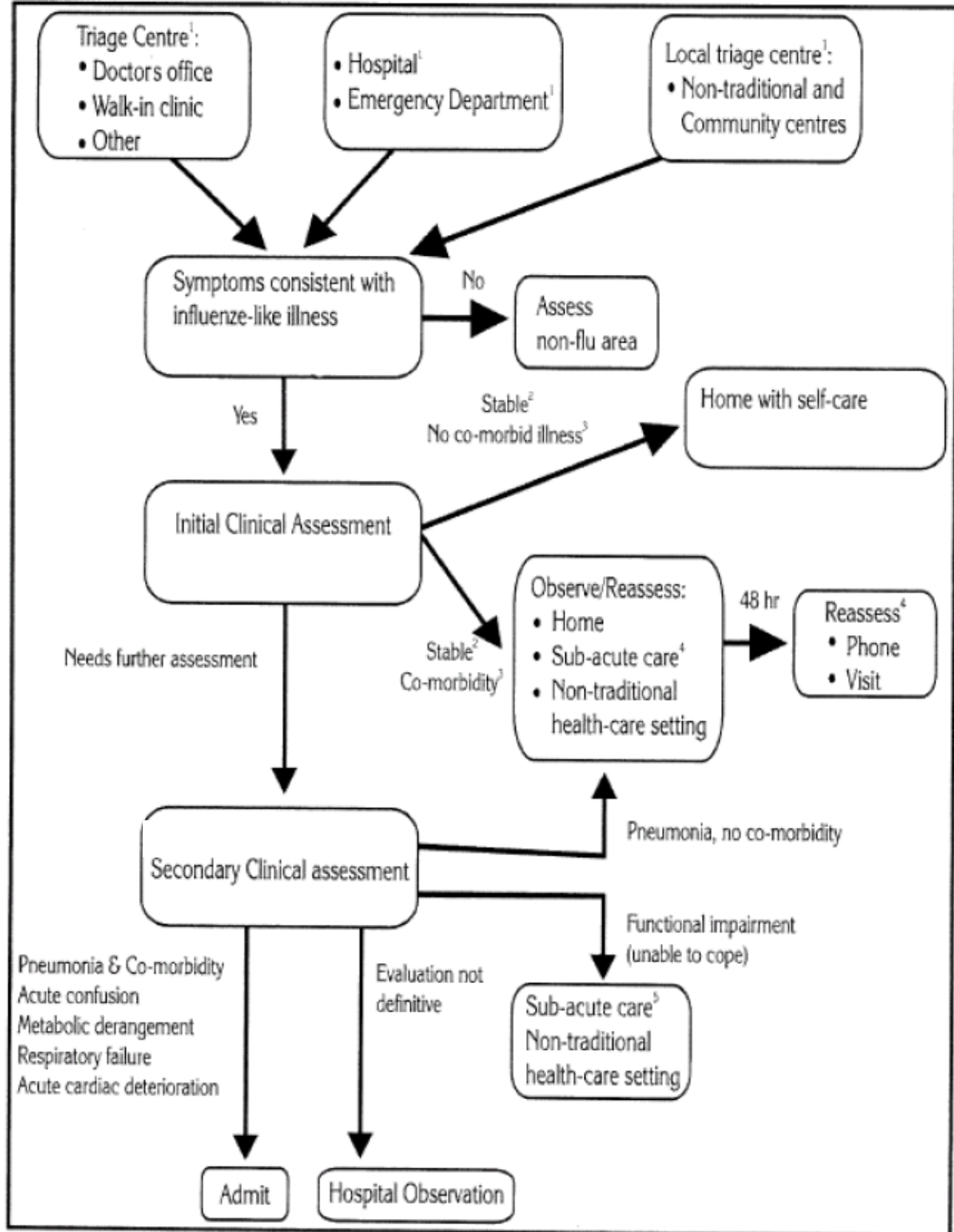


ALGORITHM FOR THE INITIAL ASSESSMENT OF PATIENTS OVER 18 YEARS OF AGE



INITIAL INFLUENZA ASSESSMENT (≥ 18 YEARS)

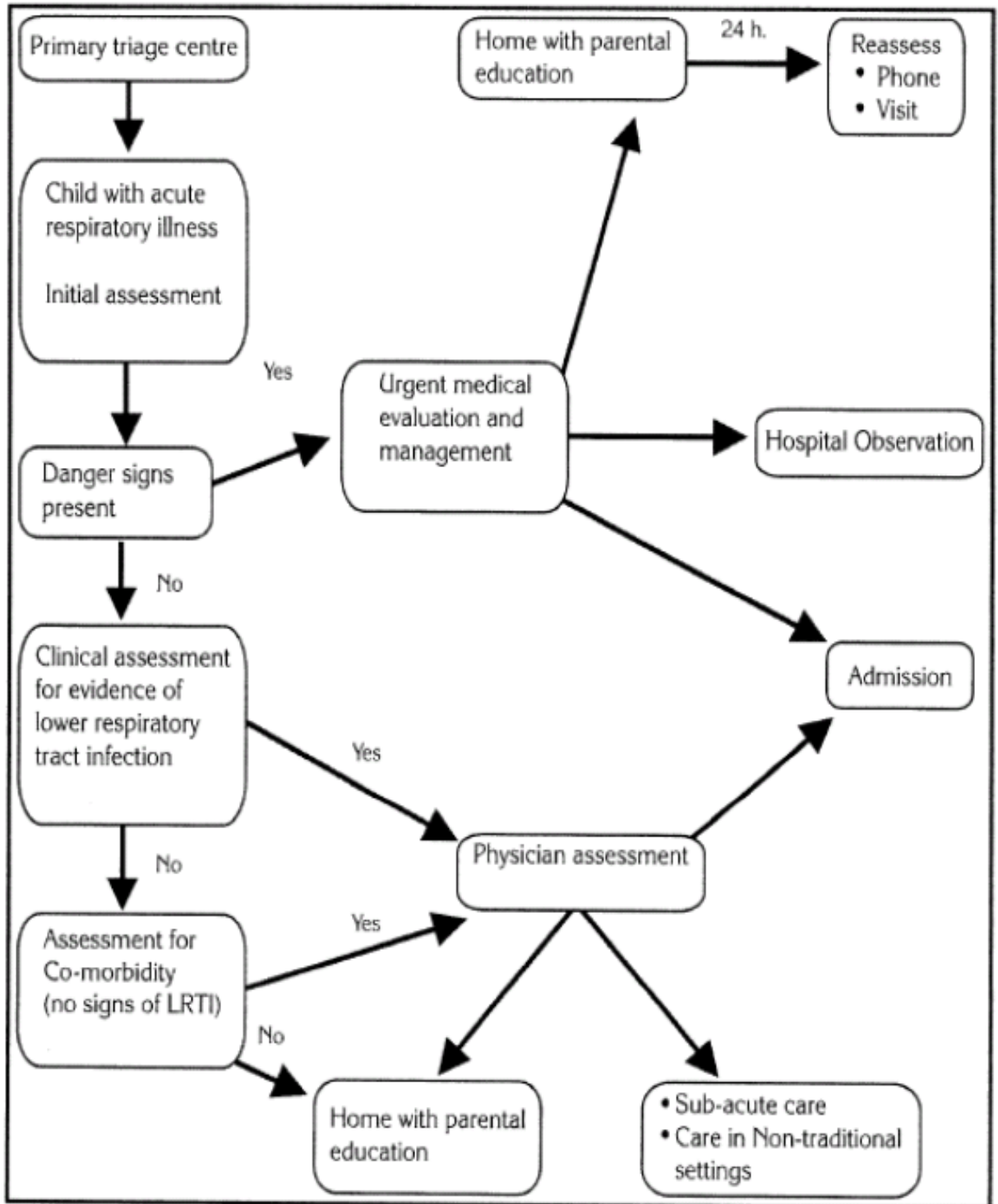
Primary Assessment	Results Requiring Secondary Assessment
Temperature	≤35°C or ≥39°C
Pulse	New arrhythmia (irregular pulse) / >100 beats/min (if 16 years or older)
Blood pressure	<100 systolic or Dizziness on standing
Respiratory rate	>24 / minute (tachypnea)
Skin color (lips, hands)	Cyanosis
Chest signs or symptoms	Any abnormality on auscultation or chest pain
Mental status	New confusion
Function	New inability to function independently / Persistent vomiting (2-3 times/24 hr.)
Oxygen saturation	≤90% on room air

SECONDARY INFLUENZA ASSESSMENT (≥ 18 YEARS)

Complementary laboratory studies	Results requiring supervision or admission
CBC (core battery, if appropriate) <sup>a</sup>	Hgb ≤ 80 g/l WBC ≤2,500 or ≥12, 000 Bands <sup>b</sup> >15% Platelets <50, 000/L
Electrolytes	Na ≤125 meq/L or ≥148 meq/L K <3 meq/L or >5.5 meq/L
BUN, creatinine	BUN ≥10.7 mmol/L Creatinine ≥150 mol/L
Glucose	<3mmol/L or ≥13.9 mmol/L
CPK (only in patients with severe muscle pain)	CKMB > 50% Total CK >1,000 /L
Blood gases, O2 saturation	Blood gases pO2 ≤60 % on room air O2 saturation <90% on room air
Chest x-ray (CXR) <sup>a</sup>	Abnormal, consistent with pneumonia or with congestive heart failure
EKG (clinical criteria)	Evidence of ischemia, new arrhythmia

<sup>a</sup> Under optimal circumstances, blood work and CXR should be obtained before admission. If resources are limited, priority should be given to patients with co-morbidity or suspected complications (i.e., pneumonia, etc.). Patients with normal gases and normal chest auscultation do not need CXR. Likewise, when the clinical diagnosis of pneumonia is unquestionable and the resources are scarce, no CXR need to be taken unless there is suspicion of a complication of the pneumonia (i.e., empyema). If antibiotics are limited, however, CXR may be indicated to confirm pneumonia before prescribing any drug. Conversely, if pneumonia is suspected but the radiology resources are limited, antibiotics may be prescribed without radiological confirmation.

ALGORITHM FOR THE INITIAL ASSESSMENT OF PATIENTS UNDER 18 YEARS OF AGE



## INITIAL INFLUENZA ILLNESS ASSESSMENT (<18 YEARS)

Primary Assessment	Results Requiring Secondary Assessment
Temperature <sup>a</sup>	≤ 35°C or ≥ 39°C core temperature
Respiratory rate	< 2 months = >60 breaths per minute 2-12 months = >50 breaths per minute > 12 months to 5 years = >40 breaths per minute > 5 years = > 30 breaths per minute
Skin color and temperature (lips, hands)	Cyanosis, sudden pallor, cold legs up to the knee
Chest signs and symptoms <sup>b</sup> (pain may be difficult to detect in young children)	Chest indrawing, wheezing, grunting, inquire for chest pain
Mental status	Lethargic or unconscious, confused <sup>c</sup>
Function	Unable to breastfeed or drink, persistent vomiting (>2-3 times/24 hr) <sup>d</sup> Inability to function independently <sup>e</sup>
Neurologic symptoms and signs	Convulsions, full fontanel, stiff neck, photophobia
Oxygen saturation <sup>e</sup>	≤ 90% on room air
Signs of dehydration	Sunken eyes, no saliva, doughy skin

<sup>a</sup> Temperature ≥ 39° C in adolescents is a warning sign and needs further assessment.

<sup>b</sup>Children with ARI and chest pain should always have medical evaluation, since it may be a sign of pneumonia (chest pain on inspiration). It may also appear as retrosternal pain (tracheal/bronchial pain) or as a pleuritic pain.

<sup>c</sup>A deterioration of consciousness and functional status, lack of interest in playing and inappropriate sleepiness should be further investigated.

<sup>d</sup>Vomiting (>2-3 times/24 hr.), particularly if the children are not feeding or drinking well, requires secondary assessment.

<sup>e</sup>Determination of blood gases by pulse oximetry as sign of respiratory failure.

## SECONDARY ASSESSMENT TESTS

Complementary laboratory studies	Results requiring supervision or admission For all of the quantities below, check age appropriate values
CBC (core battery, if appropriate) <sup>a</sup>	Hgb <sup>b</sup> ≤8.0 g/dL WBC <sup>c</sup> <2,500 or ≥12,000 cells/ l Bands <sup>d</sup> >15% Platelets <sup>e</sup> ≤50,000/ l
Electrolytes	Na <sup>f</sup> ≤ 125 meq/L or ≥148 meq/L K <sup>f</sup> ≤3 meq/L or ≥5.5 meq/L
BUN, creatinine	BUN <sup>f</sup> ≥ 10.7 mmol/L Creatinine <sup>f</sup> ≥ 150 mol/L
Glucose <sup>f</sup>	≤3mmol/L or ≥13.9 mmol/L
CPK <sup>f</sup> (only in patients with severe muscle pain)	CKMB > 50% Total CK >1,000 mol/L
Blood gases, O <sub>2</sub> saturation	Blood gases pO <sub>2</sub> ≤60% on room air O <sub>2</sub> saturation ≤ 90% on room air
Chest x-ray <sup>a</sup>	Abnormal, consistent with pneumonia