Rules :

- Each episode includes a time series of vital signs (e.g., heart rate, blood pressure, oxygen saturation, temperature) that evolve over time.

For **sick patients**, these vital signs may worsen and follow disease-specific patterns. However, it's important to note that not all sick patients exhibit immediate or obvious changes in vital signs. Early-stage illnesses or chronic conditions may present with stable or even normal vital signs.

For **healthy patients**, vital signs may fluctuate due to normal variability but do not show a sustained decline or progressive worsening.

- Healthy patients can experience occasional abnormal readings caused by factors such as **stress**, **fatigue**, **menstruations** or **measurement noise**. These irregularities are transient and do not escalate over time, helping to distinguish them from genuine illness.

For vitals normal values:

HR = 60-100bpm

SpO2 = >95%

Temperature <37.5 and >36

BP = systolic 90-139,

Diastolyc 60-89

Pediatric :

Age Group	Respiratory Rate	Heart Rate	Systolic Blood Pressure	Diastolic Blood Pressure
Newborn	30 - 50	120 - 160	50 - 70	40 - 55
Infant (1-12 mos.)	20 - 30	80 - 140	70 - 100	50 - 65
Toddler (1-3 yrs.)	20 - 30	80 - 130	80 - 110	55 - 70
Preschooler (3-5 yrs.)	20 - 30	80 - 120	80 - 110	60 - 75
School Age (6-12 yrs.)	20 - 30	70 - 110	80 - 120	60 - 75
Adolescent (13+ yrs.)	12 - 20	55 - 105	110 - 120	65 - 85

- Some patients may start the episode in a healthy state but transition to a sick state partway through.

This models the real-world onset of disease and requires the diagnostic model to update its assessment dynamically as new evidence appears.

- Diagnostic tests are imperfect :

test accuracy generally improves as the disease progresses because symptoms and biomarkers become more detectable.

Medications can interfere with diagnostic test results, leading to false positives or false negatives. This interference can occur due to cross-reactivity with test components or physiological changes induced by the medication (antibiotics, NSAIDs like iboprofen, decongestants and cough suppressants...) so be sure to always ask if the patient is on any medication or if he took one recently.

Test accuracy may be influenced by factors such as a patient's **mental state** (e.g., confusion or anxiety), which can occasionally reduce reliability, though this occurs with low probability.

- Adults parameters are different than children's so age is very important+++, you can also ask about the gender some diseases are more frequent in agender compared to the other

- Replace vague "symptom score" with structured self-reported experiences:

You suggested 5 parameters, but they seem lacking to me, they're not enough for accurate diagnosis

1/ fever and temperature sensation

2/ breathing difficulty including cough

3/ pain localized in a specific area or diffused, radiant or not (abdominal, chest, back...) body wide

4/ Fatigue

5/ gastro-intestinal symptoms : Nausea, vomiting, diarrhea, constipation

6/ Mental state : confusion, dizziness, anxiety

7/ Appetite and hydration

If you can add more :

8/ weight changes : recent weight loss or gain on how much time

9/ urination changes: frequency, pain

10/ skin rash or itching

Sored in a score from 0-3 :

	0	1	2	3
Fever	no	Slight warmth	Burning hot or sweating	Shaking chills or sweating
If you have a thermometer	<37.5	37.5-38	38.1-39	>39
breathing	normal	Breathless when walkin or climbing (stairs)	Breathless when talking or at rest	Gasping or can't complete sentences
cough	no	Mild, <3days	>3days	Severe or coughing blood
pain	no	Mild	noticeable	intense
Pain location	Multiple choices			
Fatigue	normal	slightly	Very tired	Can't move much
Mental clarity	Fully allert	Slight dizziness	Hard to focus	Confused or fainting
Nausea/vomiting	no	Mild nausea	Vomiting 1-2/day	Vomiting anything you eat or drink
appetite	normal	Less hungry	Not hungry at all	Can't eat even if you try
Weight loss/gain	no	Slight	Clear loss/gain	Major >5kg loss/gain
urination	normal	Some pain	Very frequent/very painful	Can't urinate or painful every time
Skin rash or itching	no	Mild itching	Rash or swelling	Spreading or painful rash

For context you can add : pregnancy, pre-existing chronic illness (s=diabetes, asthma,hypertension..), recent travel or exposure to an ill person, medication taken, vaccination status

I'd recommend for each major symptom that scores 1 or more to add :

Onset of the symptom :

<24h

1-7days

>7days

>3weeks

Sudden or gradual onset or unkown?

Stable, pregressive or improving?

Is it continuous, intermittent or triggered?

If we're talking about children some parameters will change because children do not repport symptoms correctly and the parents will be in charge of repporting them

If you r going to include pediatric patients let me know