



# Deciding about treatment through Discovery Hospital at Home

A touch of care, in every home

## Criteria we use to decide if a patient can receive treatment through Discovery Hospital at Home

We can now deliver hospital-level care in the homes of over 750 patients at any point in time across South Africa for many medical and surgical conditions. Hospital at Home uses integrated, cutting-edge technology and highly-skilled clinical staff, clinical protocols and the best clinical practices. This document gives the inclusion and exclusion criteria for Discovery Hospital at Home. The below entry criteria apply to all designated service providers of the hospital at home programme, including Discovery Hospital at Home, Mediclinic at Home and Quro Medical.

### GENERAL INCLUSION CRITERIA FOR HOSPITAL AT HOME

- Be an adult (18 years or older)
- Need hospital-level care that can be given in a general ward
- Be an active member of Discovery Health Medical Scheme
- For COVID-19 admissions only, they must be a member of any medical scheme administered by Discovery Health
- For medical and post-surgical admissions, they must be a member of Discovery Health Medical Scheme or KeyCare
- Live within 30 kilometers of a hospital or emergency room (casualty unit)
- Have enough family support to be safe at home
- Have running water within the home
- Have electricity within the home

NO

NO HOSPITAL AT HOME

YES

## GENERAL EXCLUSION CRITERIA FOR HOSPITAL AT HOME

If the patient meets ANY of the following criteria , they cannot be treated at home. If they:

- Have a GCS < 15/15
- Have an active psychiatric diagnosis that would prevent successful Hospital at Home care
- Present with features suggestive of an acute myocardial infarction (AMI), acute cerebrovascular accident (CVA) or acute haemorrhage
- Have symptoms of ischemic chest pain or findings of acute ischemia on an ECG, elevated troponin levels or abnormal cardiac imaging.
- Have a undifferentiated diagnosis
- Need critical care: such as needing vasopressors, inotropes, mechanical ventilation, frequent suctioning or frequent ABG monitoring
- Need noninvasive positive pressure ventilation for respiratory distress
- Cannot to ambulate (move) to a bedside commode with home resources
- Have readings for their most recent vitals signs of SBP < 90mmHg (but account for baseline); RR > 35; pulse oximetry less than 90% on 4L of oxygen (but account for baseline) or PO2 < 60
- Do not have peripheral intravenous access and it cannot be established
- Have acute delirium without clear cause (or that cannot be managed with home resources)
- Need to leave the home on a near-daily basis for care that cannot be given at home (excludes scheduled chemo and dialysis)
- Need an advanced procedure, such as imaging, cardiac catheterisation, cardiac stress test, EGD/colonoscopy, dialysis, invasive procedure or surgery
- Need a blood transfusion
- Need IV opioids
- Need heparin or cardiac drips
- Have severe immunosuppression (AIDS, neutropenia, organ transplant with immunosuppressive therapy, chemotherapy or cytotoxic drug use, multiple myeloma or lymphoma)
- Are pregnant
- Expected to have a terminal event unless they are on hospice or palliative care

YES

NO HOSPITAL AT HOME

## SELECT THE PATIENT'S DIAGNOSIS AND GO TO THE CORRESPONDING PAGE



01 | COMPLICATED UTI



05 | DIABETES AND COMPLICATIONS



02 | ASTHMA EXACERBATION



06 | DVT OR PE



03 | COMMUNITY ACQUIRED PNEUMONIA



07 | COPD EXACERBATION



04 | HEART FAILURE EXACERBATION



08 | CELLULITIS



09 | COVID-19 PNEUMONIA AND COMPLICATIONS



# Complicated UTI

## THE PATIENT MEETS THE FOLLOWING CRITERIA:

- They must need acute care for a complicated UTI

NO

YES

## IF THE PATIENT MEETS ANY OF THE FOLLOWING CRITERIA, THEY CANNOT BE TREATED AT HOME IF:

- The obstruction is not relieved by an indwelling urinary catheter
- There is evidence of new hydronephrosis or ureteral obstruction on the imaging for which the patient needs urgent intervention or if there is concern for post-renal AKI that is not improving
- They do not have of pyuria
- Their most recent qSOFA score is >1
- They have immunosuppression, such as HIV with a CD4 count < 200, getting chemotherapy or if they have had a transplant
- They are pregnant
- They have infected nephrolithiasis
- They have polycystic kidney disease (PCKD)
- They have end-stage kidney disease (ESKD)

YES

NO

## DOES THE PATIENT HAVE ANY OTHER CONDITIONS TO CONSIDER?

NO

YES

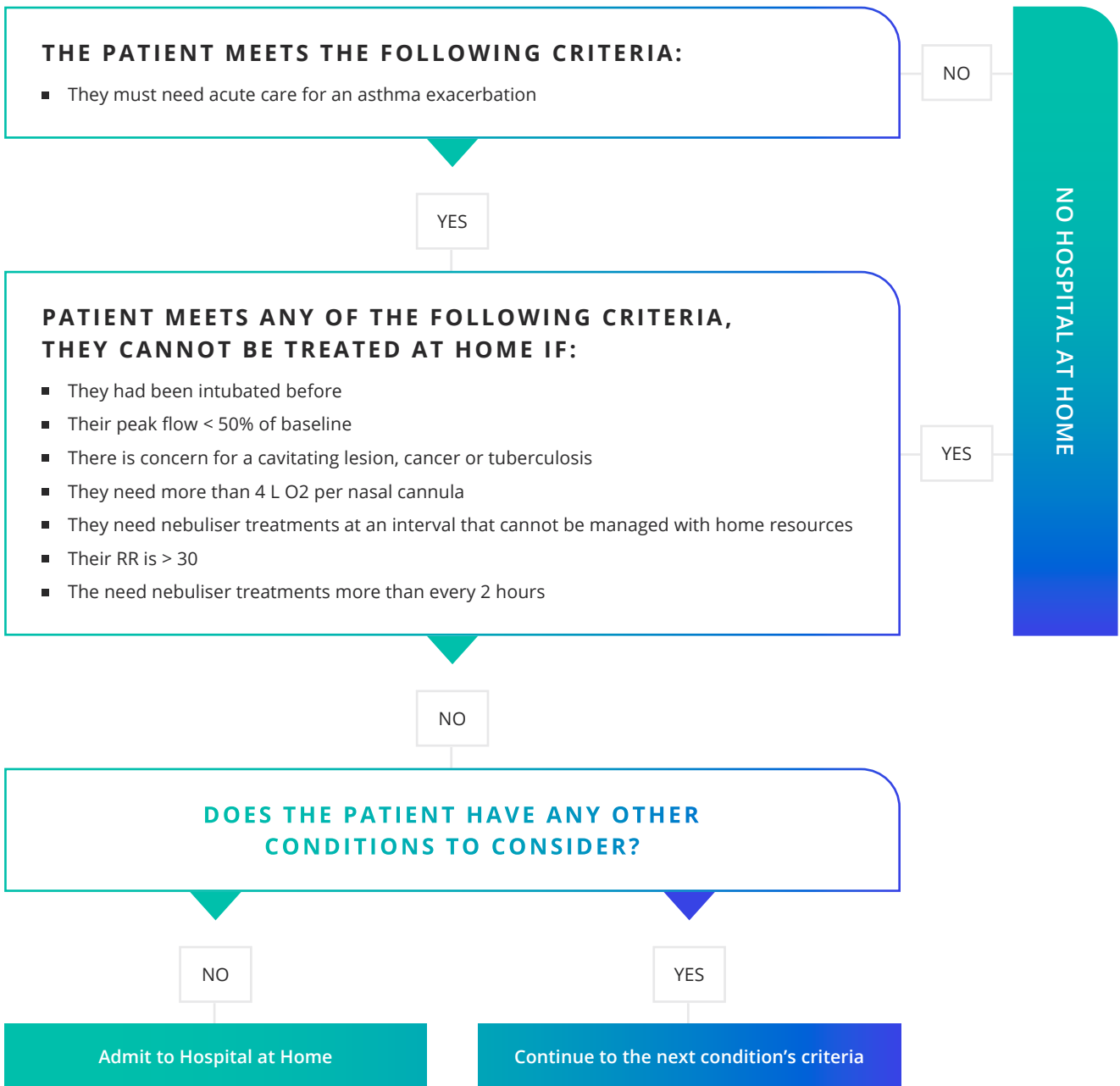
Admit to Hospital at Home

Continue to the next condition's criteria

NO HOSPITAL AT HOME

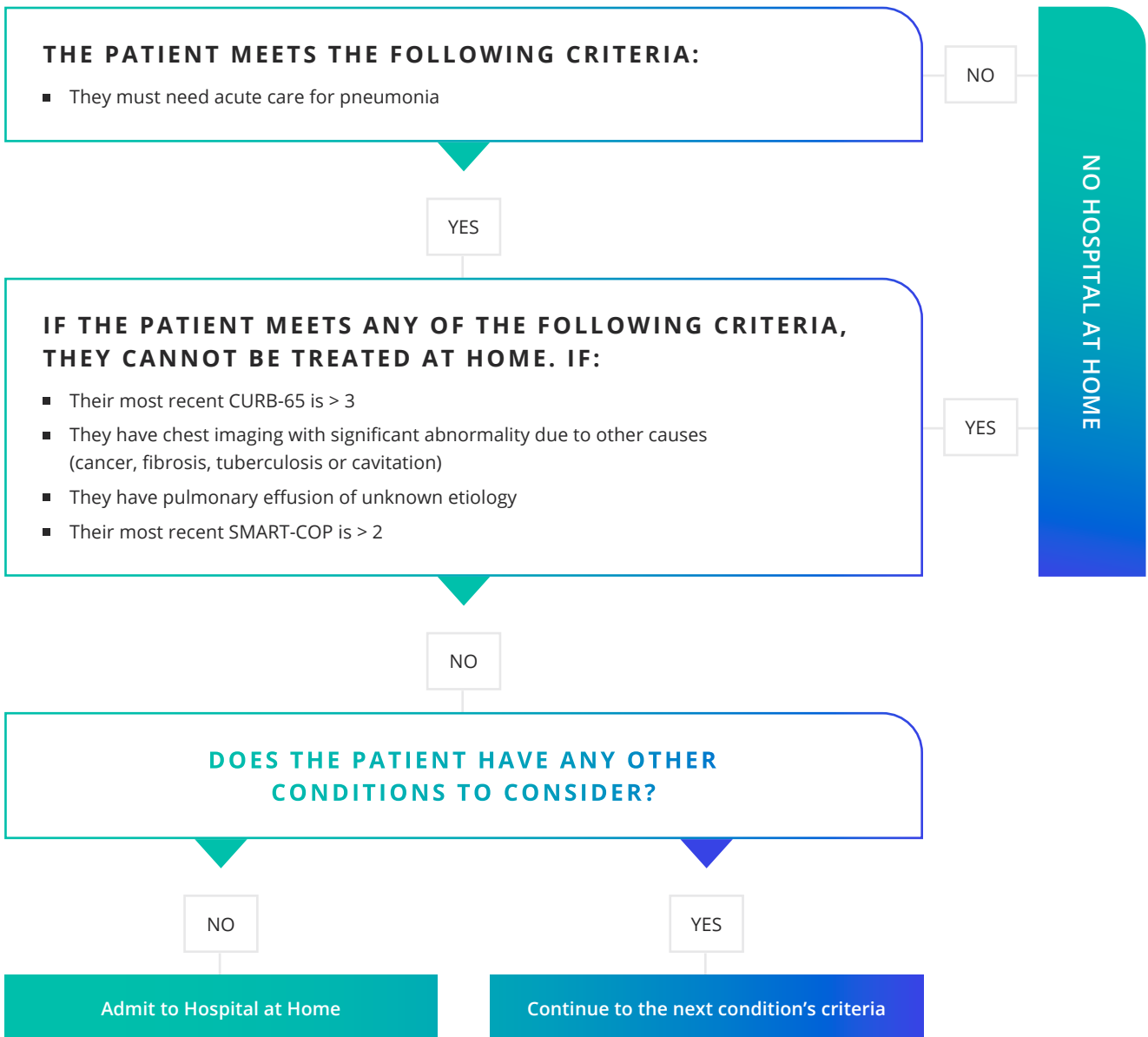


# Asthma exacerbation



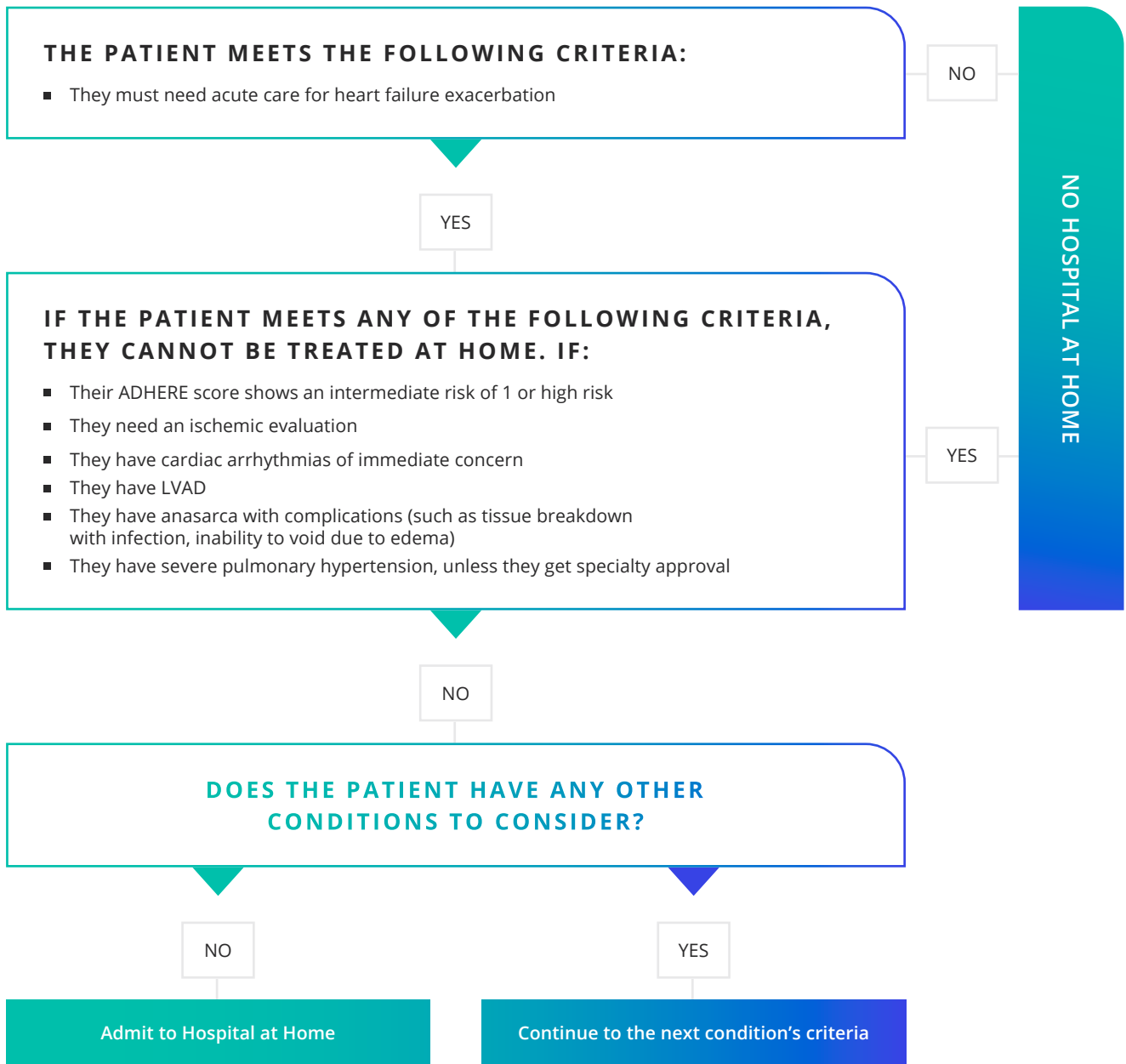


# Pneumonia



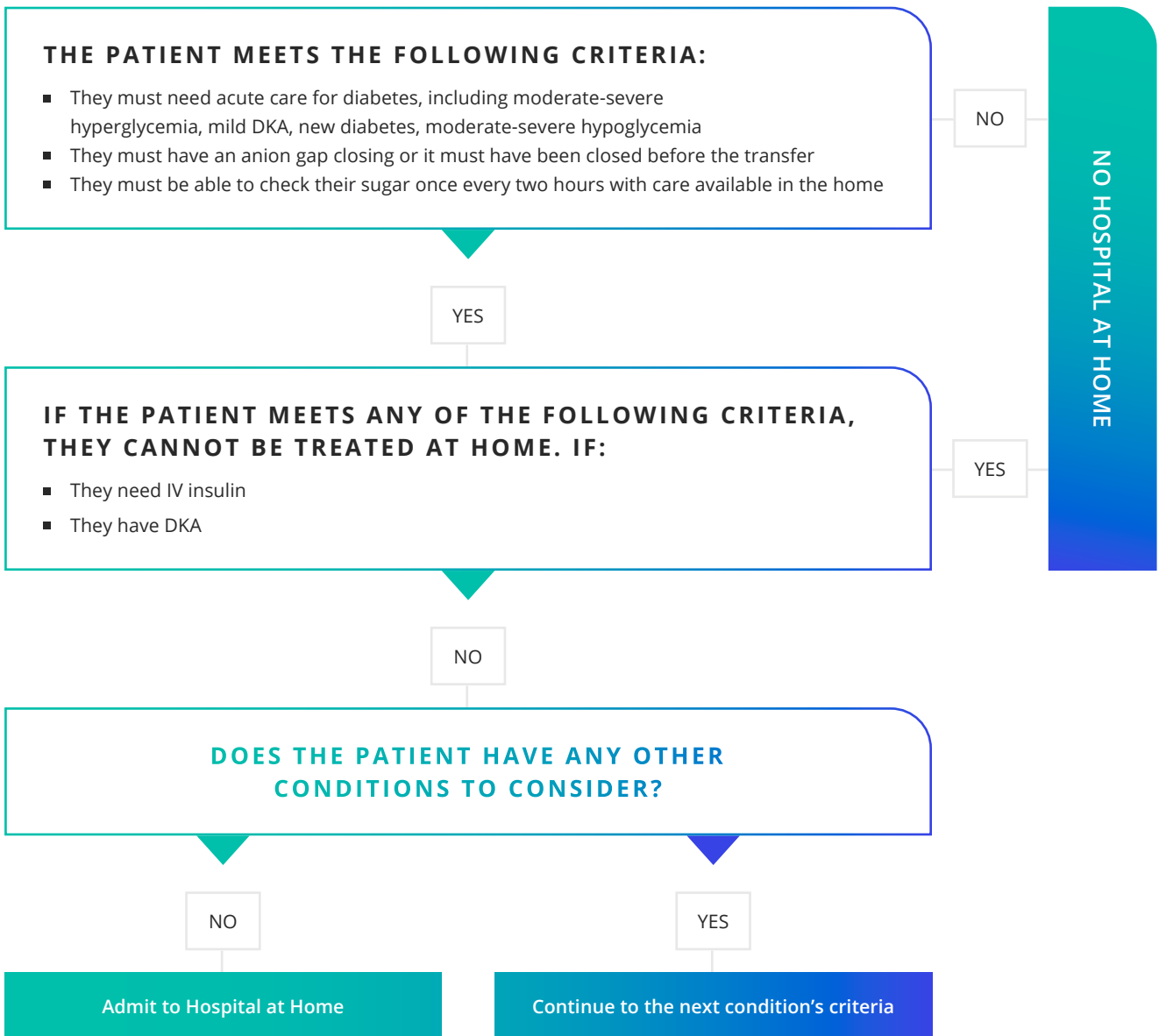


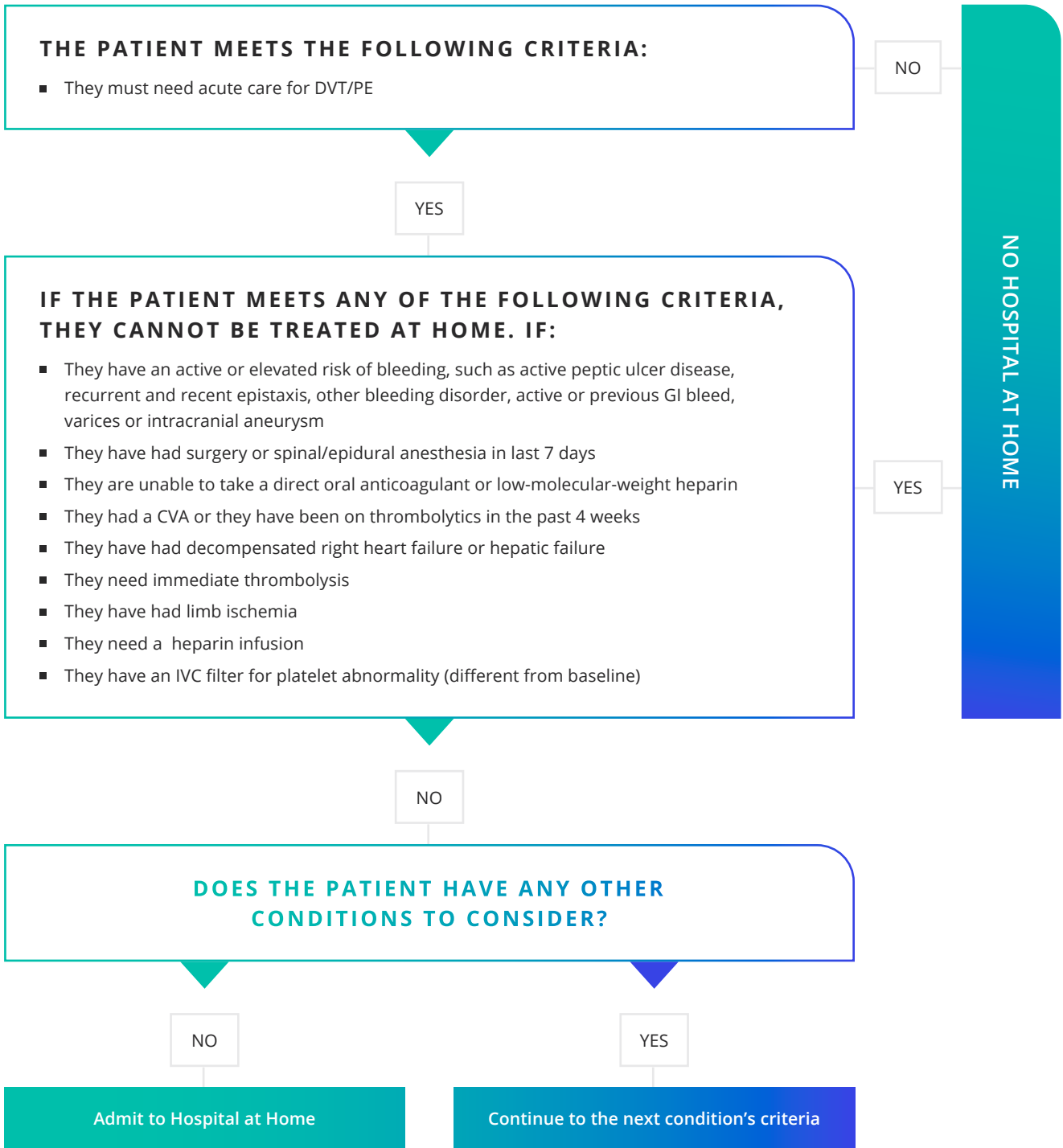
# Heart failure exacerbation





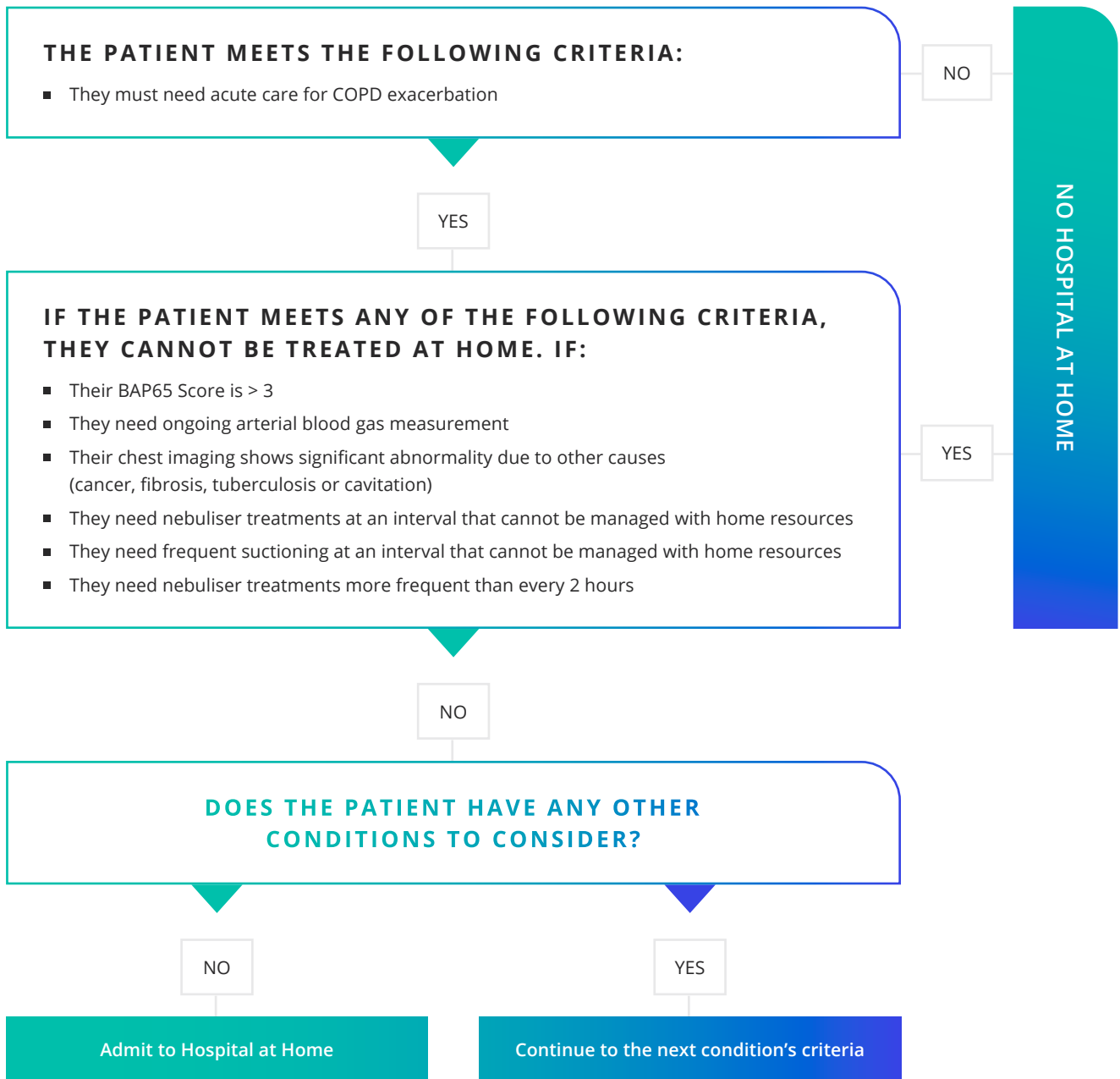
# Diabetes and complications



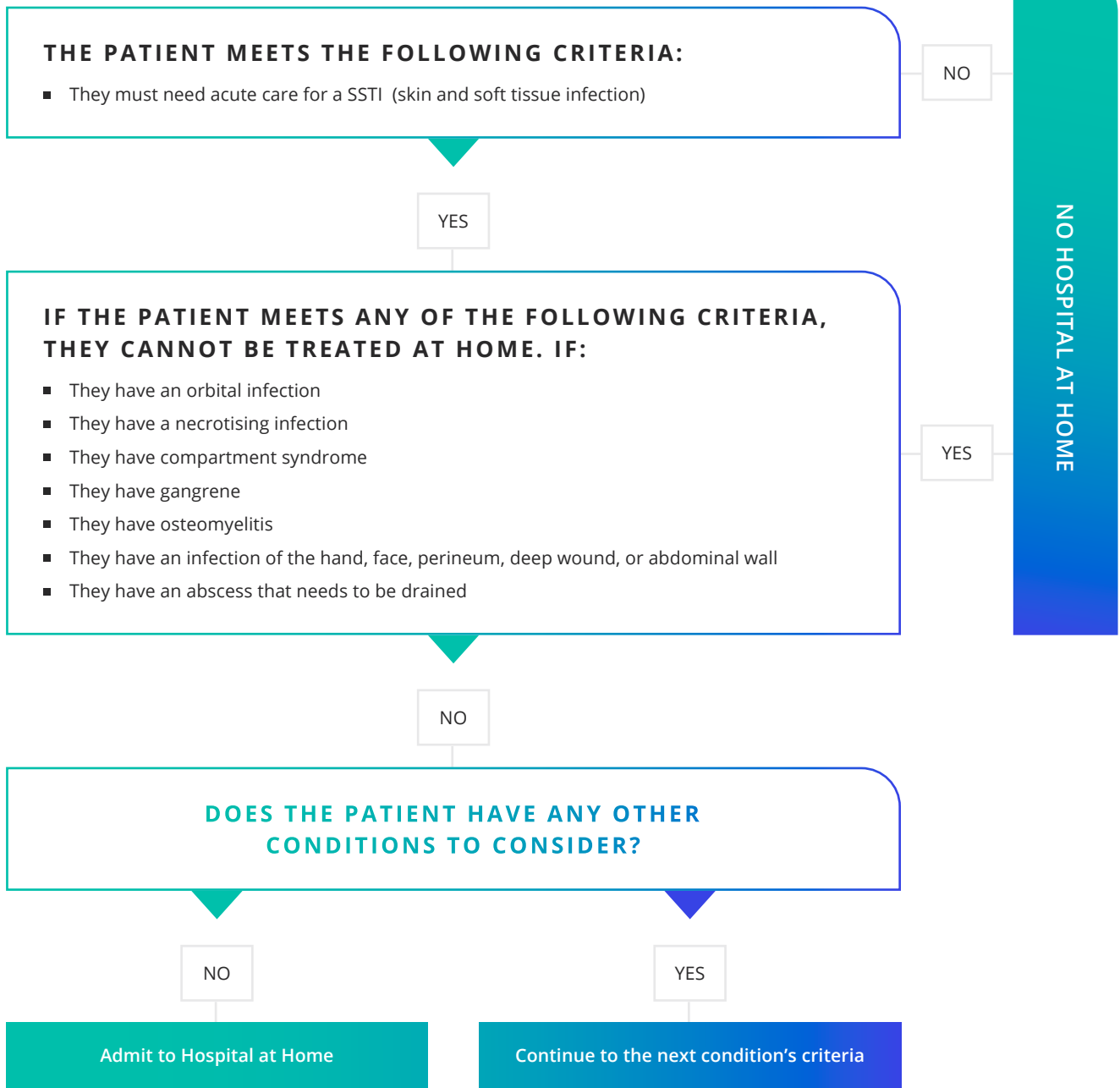




# COPD exacerbation

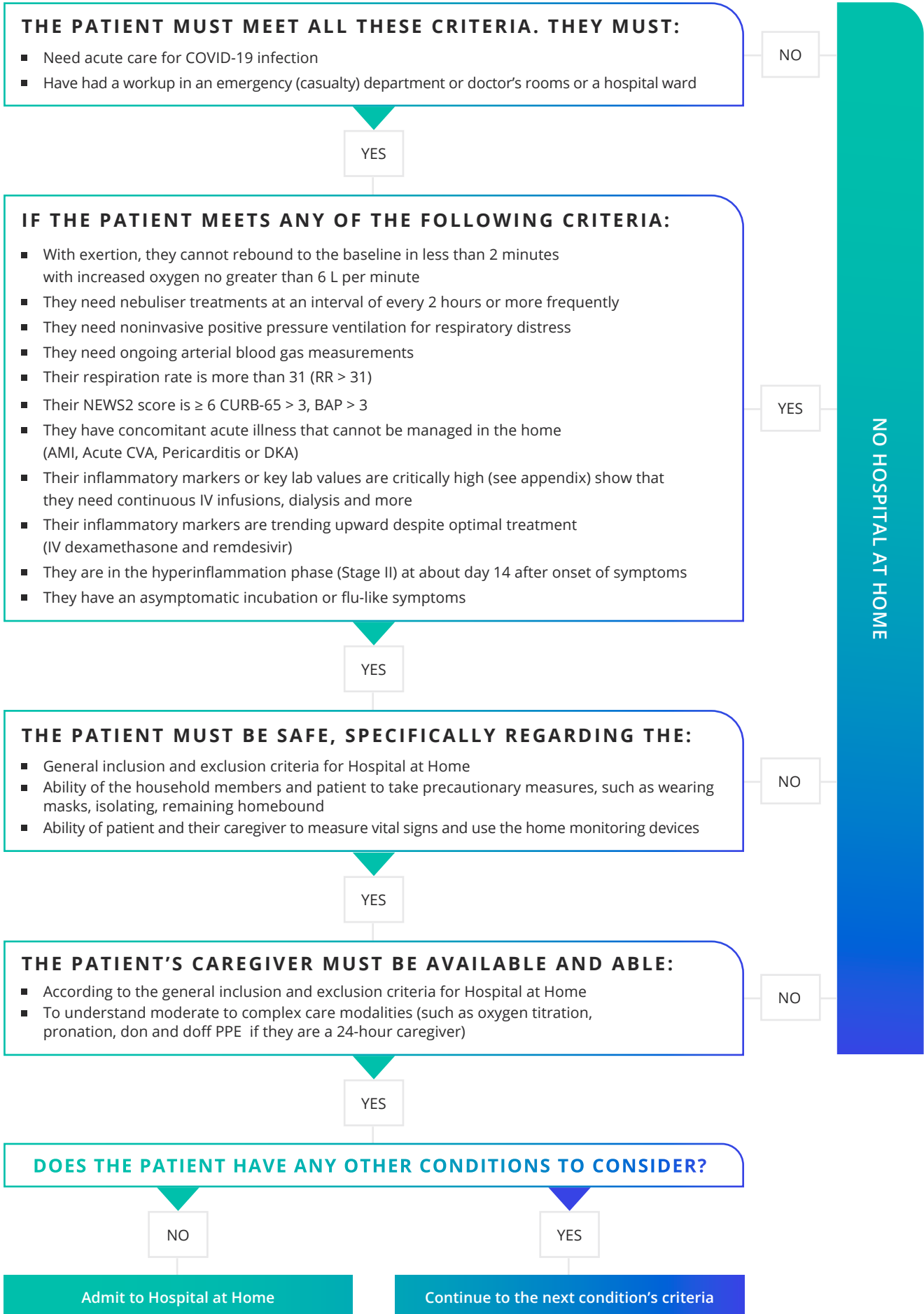


# SSTI (skin and soft tissue infections)





# COVID-19 pneumonia and complications



## NEWS2

Parameters	-3	-2	-1	0	1	2	3
Age				< 65			≥ 65
Respiration rate	≤ 8		9 – 11	12 – 10		21 – 24	≥ 25
Oxygen saturations	≤ 91	92 – 93	94 – 95	≥ 96			
Any supplemental oxygen		yes		no			
Systolic blood pressure	≤ 91	91 – 100	101 – 110	111– 219			≥ 220
Heart rate	≤ 40		41 – 50	51 – 90	91 – 110	111 – 130	≥ 131
Consciousness				Alert			Drowsiness Lethargy Coma Confusion
Temperature	≤ 35.2		35.1 – 36.0	36.1 – 38.0	38.1 – 39.0	≥ 39.1	

Score	Risk grading	Warning level	Monitoring frequency	Clinical response	Solution
0			Q12H	Routine monitoring	
1 – 4	Low	Yellow	Q6H	Bedside evaluation by nurse	Maintain existing monitoring / increase monitoring frequency / inform MD
5 – 6	Medium	Orange	Q1-2H	Bedside nurse notified doctor for evaluation	Maintain existing treatment / adjust treatment / critical care rapid response team remote consultation
≥ 7	High	Red	Continuous	Bedside nurse notified doctor for emergency bedside evaluation / critical care rapid response team remote consultation	Critical care rapid response team on-site consultation
≥ 7	High	Black	Continuous	Patients are extremely severe with irreversible end-stage diseases facing death, such as serious irreversible brain injury, irreversible multiple organ failure, end-stage chronic lung or liver disease and metastatic tumors. The expert group must urgently discuss the admission decision.	

## QSOFA

Altered mental status (GCS < 15)	Score: 1 = Patient does not classify as high risk 2 = Patient classifies as high risk 3 = Patient classifies as high risk
Respiratory rate $\geq 22$ bpm	
Systolic blood pressure $\leq 100$ mmHg	

## CURB-65

Confusion	Yes = 1 point No = 0 points	Score: 0 = Low risk 1 = Low risk 2 = Moderate risk 3 = Severe risk 4 = Severe risk 5 = Severe risk
Blood nitrogen urea > 19mg/dl (> 7mmol/L)	Yes = 1 point No = 0 points	
Respiratory rate $\geq 30$ /min	Yes = 1 point No = 0 points	
Systolic blood pressure < 90mmHg OR Diastolic blood pressure $\leq 60$ mmHg	Yes = 1 point No = 0 points	
Age $\geq 65$	Yes = 1 point No = 0 points	
Total: Add total points		

## SMART-COP

Systolic blood pressure < 90mmHg	Yes = 2 points No = 0 points	Score: 0 - 2 = Low risk of needing intensive respiratory or vasopressor support (IRVS) 3 - 4 = Moderate risk of needing IRVS 5 - 6 = High risk of needing IRVS $\geq 7$ = Very high risk of needing IRVS
Multilobar CXR involvement	Yes = 1 point No = 0 points	
Albumin < 3/5g/dL	Yes = 1 point No = 0 points	
Respiratory rate (age adjusted) < 50 yo = $\geq 25$ br/min > 50 yo = $\geq 30$ br/min	Yes = 1 point No = 0 points	
Tachycardia $\geq 125$ bpm	Yes = 1 point No = 0 points	
Confusion (new onset)	Yes = 1 point No = 0 points	
Oxygen low (age adjusted) $\geq 50$ y = PaO <sub>2</sub> < 70mmHg OR O <sub>2</sub> $\leq 93\%$ OR (if on O <sub>2</sub> ): PaO <sub>2</sub> /FiO <sub>2</sub> < 333 > 50 yo = PaO <sub>2</sub> < 60mmHg OR O <sub>2</sub> $\leq 90\%$ OR (if on O <sub>2</sub> ): PaO <sub>2</sub> /FiO <sub>2</sub> < 250	Yes = 2 points No = 0 points	
Arterial pH < 7.35	Yes = 2 points No = 0 points	

## BAP-65

BUN $\geq$ 25mg/dL (8.9mmol/L)	Yes = 1 point No = 0 points	Score: 1 = Low risk 2 = Moderate risk 3 = Severe risk 4 = Severe risk
Altered mental status	Yes = 1 point No = 0 points	
Pulse $\geq$ 109 bpm	Yes = 1 point No = 0 points	
Age $\geq$ 65	Yes = 1 point No = 0 points	

## ADHERE

BUN > 43mg/dL (15.35mmol/L)	Yes No	Score: ■ Low mortality risk for ADHF: 2.1 – 2.3% – BUN < 43mg/dL (15.35mmol/L) – SBP > 115mmHg ■ Intermediate mortality risk for ADHF: 5.5 – 13.2% – BUN $\geq$ 43mg/dL (15.35mmol/L) – SBP > 115mmHg – Creatinine < 2.75mg/dL (243.1mmol/L) ■ High mortality risk of ADHF: 19.8 – 21.9% – BUN $\geq$ 43mg/dL (15.35mmol/L) – SBP < 115mmHg – Creatinine $\geq$ 2.75mg/dL (243.1mmol/L)
Systolic BP < 115mmHg	Yes No	
Creatinine $\geq$ 2.75mg/dL (243.1mmol/L)	Yes No	



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