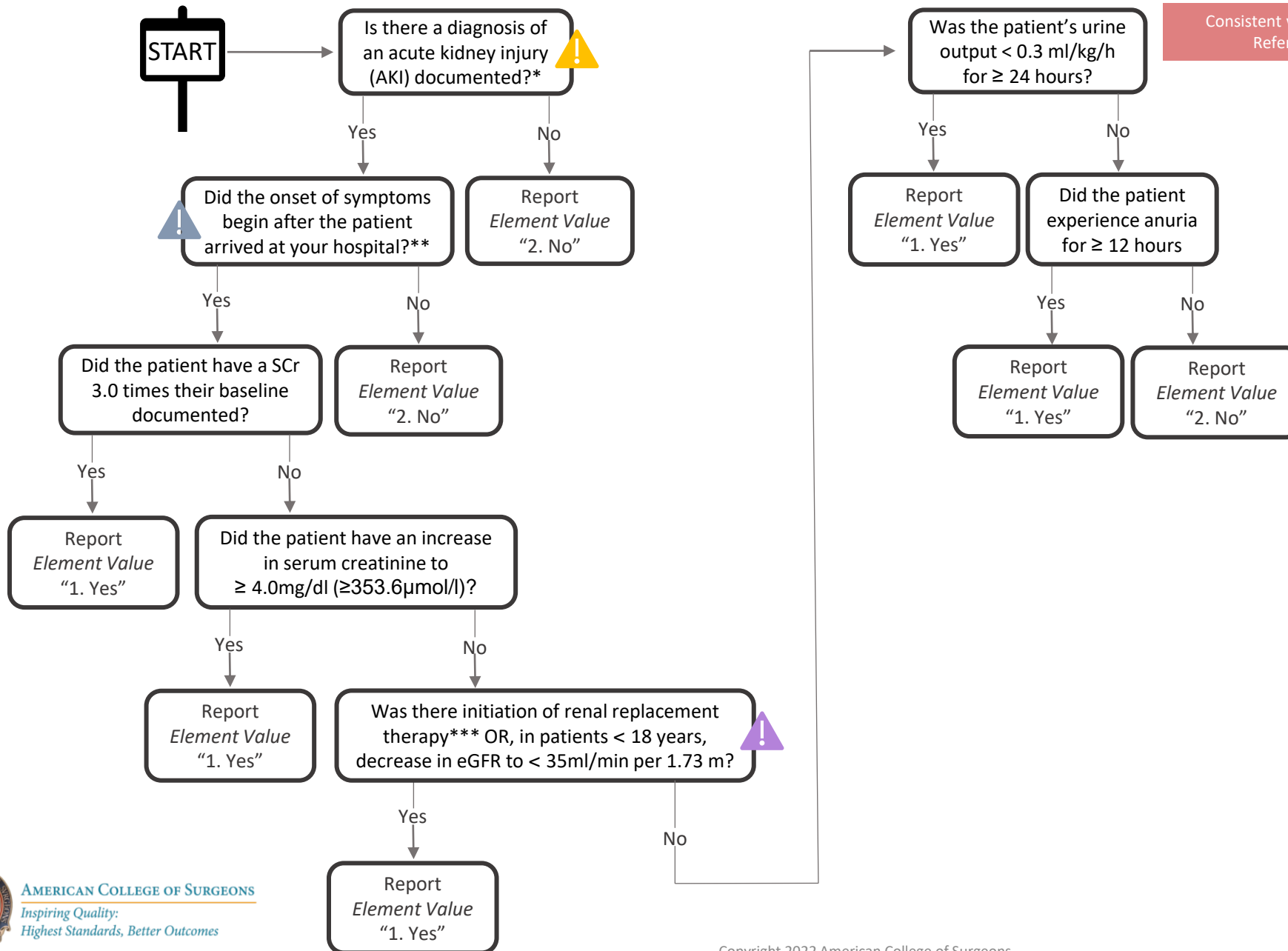


2022 HE Updated Data Element Algorithms

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information

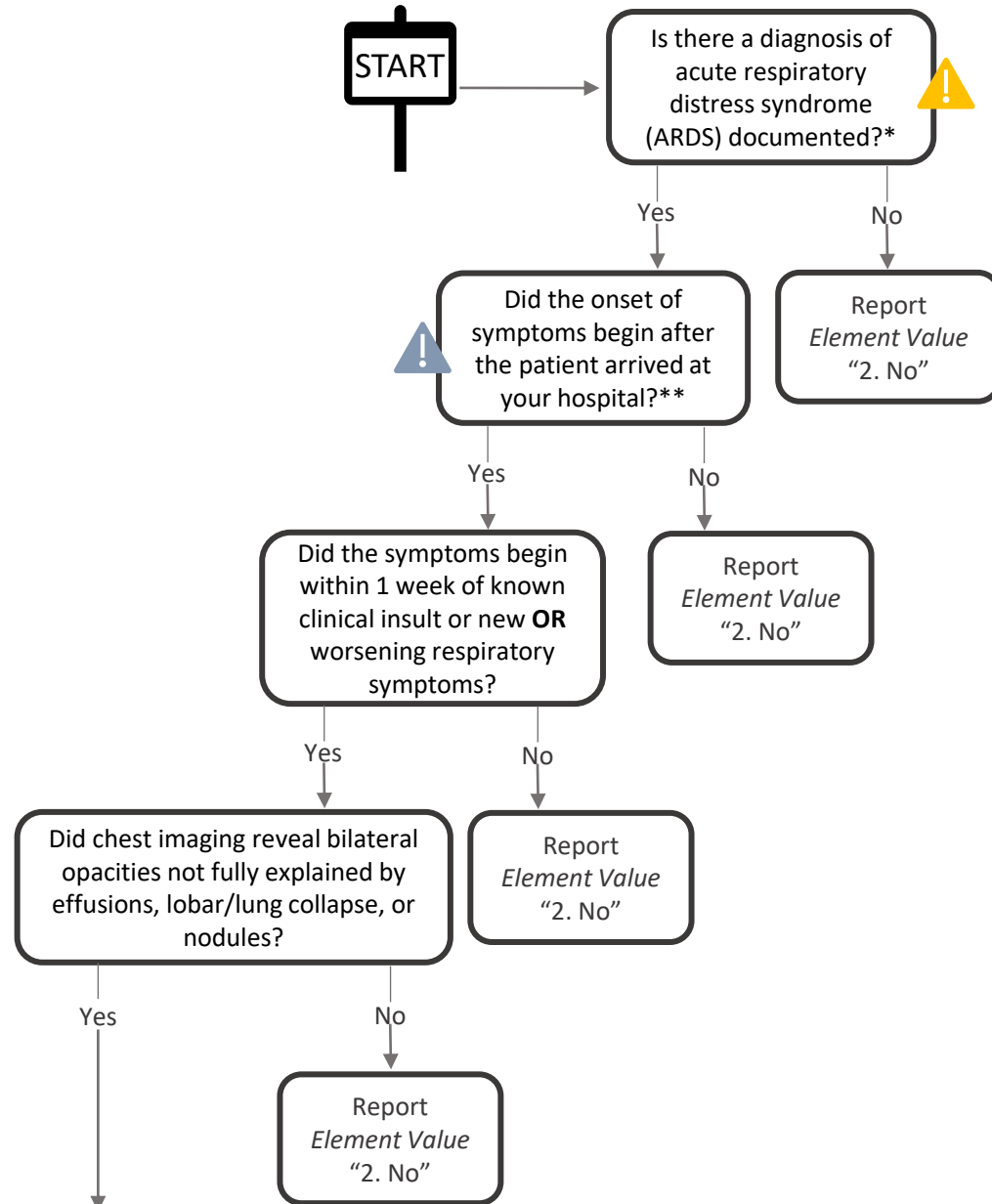


! *The NTDS definition is consistent with the March 2022 KIDGO Guideline. Please refer to that or the TPM/TMD for additional information regarding Stage 3 AKI

! **Exclude if AKI was present on arrival at your hospital. Exclude patients with renal failure that were requiring chronic renal replacement therapy prior to injury.

! *** If the patient or family refuses treatment (e.g., dialysis,) the condition is still considered to be present if a combination of oliguria and creatinine are present.

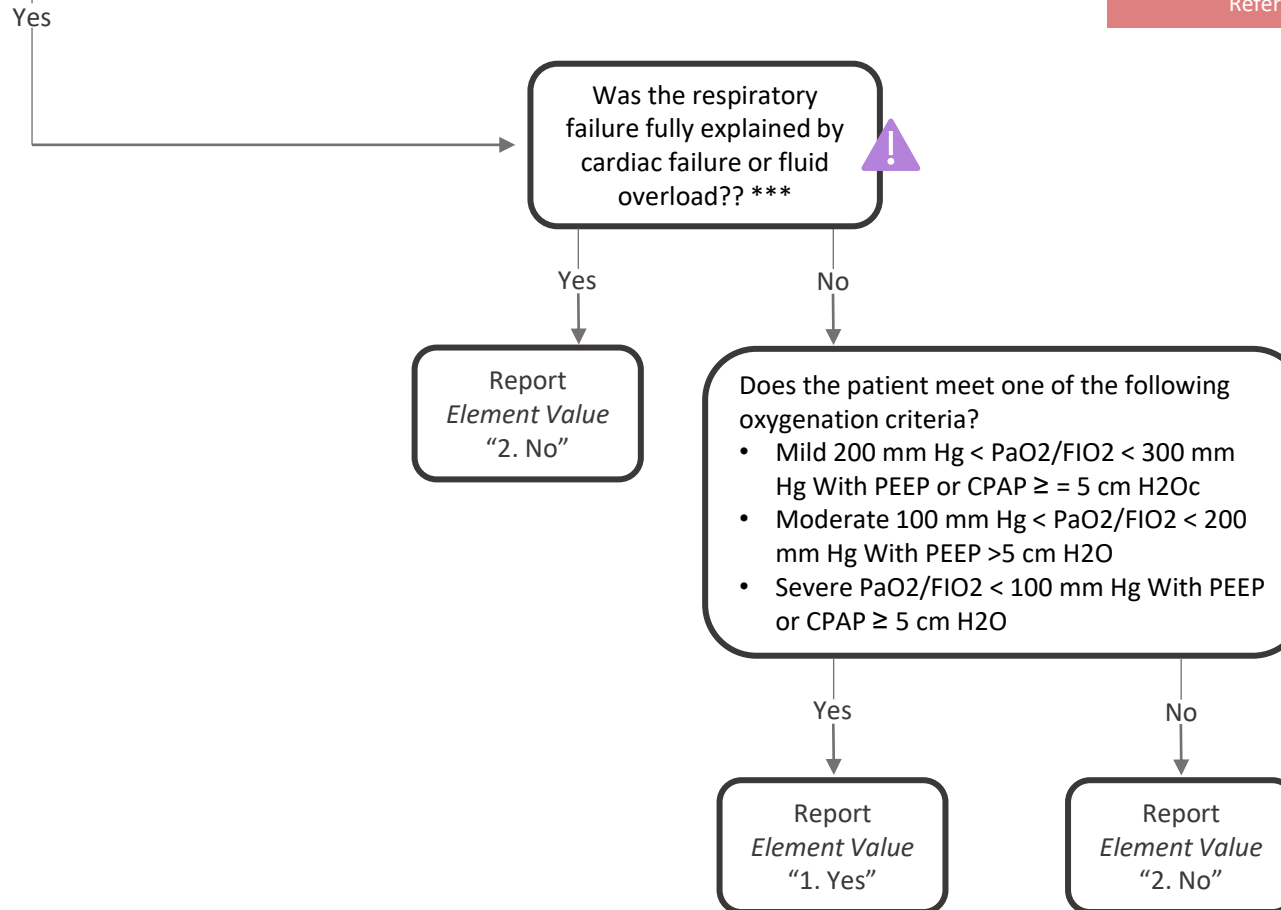
Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



*The NTDS definition of ARDS is consistent with the 2012 New Berlin Definition.

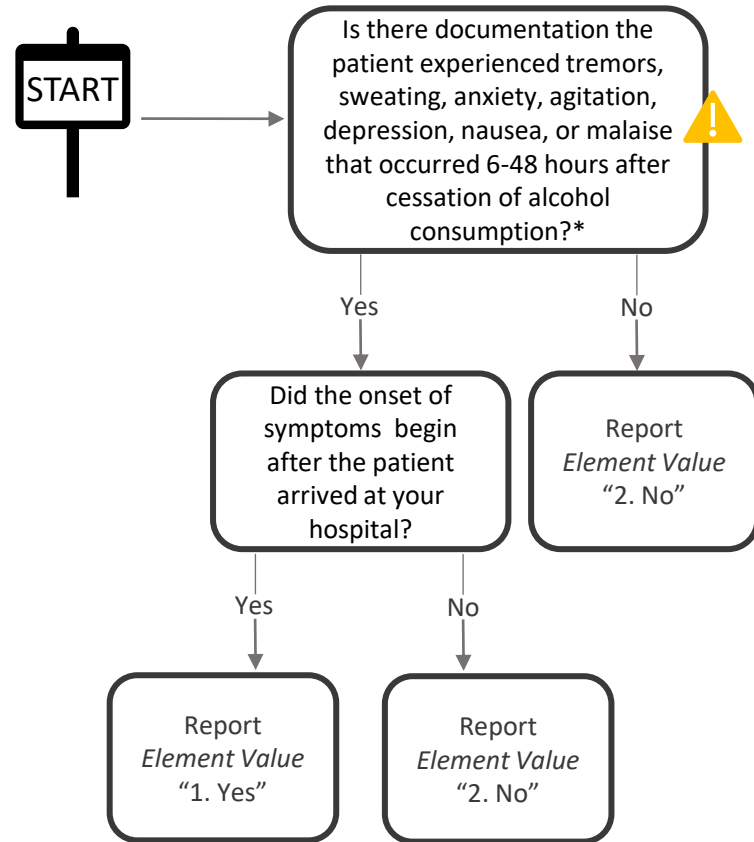
**Exclude if ARDS was present on arrival at your hospital.


Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



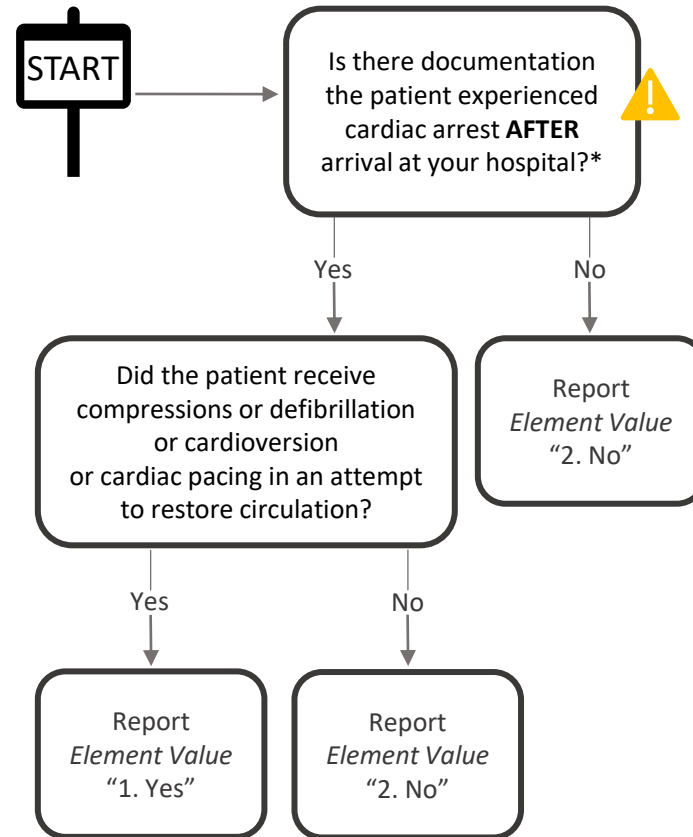
***Need objective assessment (e.g., echocardiography) to exclude hydrostatic edema if no risk factor present.

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



 *Note that a diagnosis of alcohol withdrawal syndrome is not required by the NTDS definition.

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information

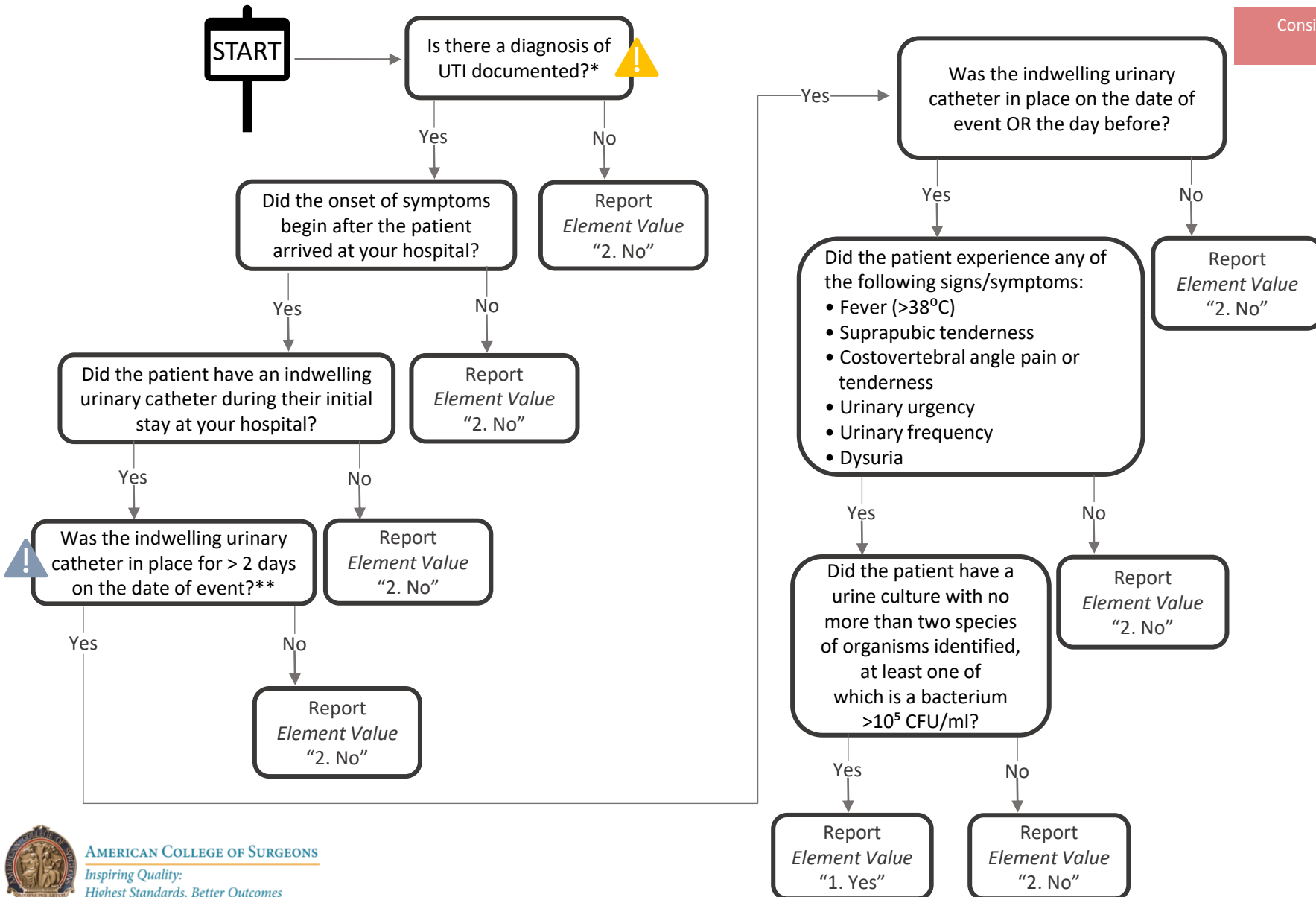


*Cardiac arrest is the sudden cessation of cardiac activity after hospital arrival. The patient becomes unresponsive with no normal breathing and no signs of circulation. If corrective measures are not taken rapidly, this condition progresses to sudden death.

EXCLUDE patients whose ONLY episode of cardiac arrest with CPR was on arrival to your hospital.

Catheter-associated Urinary Tract Infection (CAUTI) SUTI 1a (Patients >1 year of age)

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information

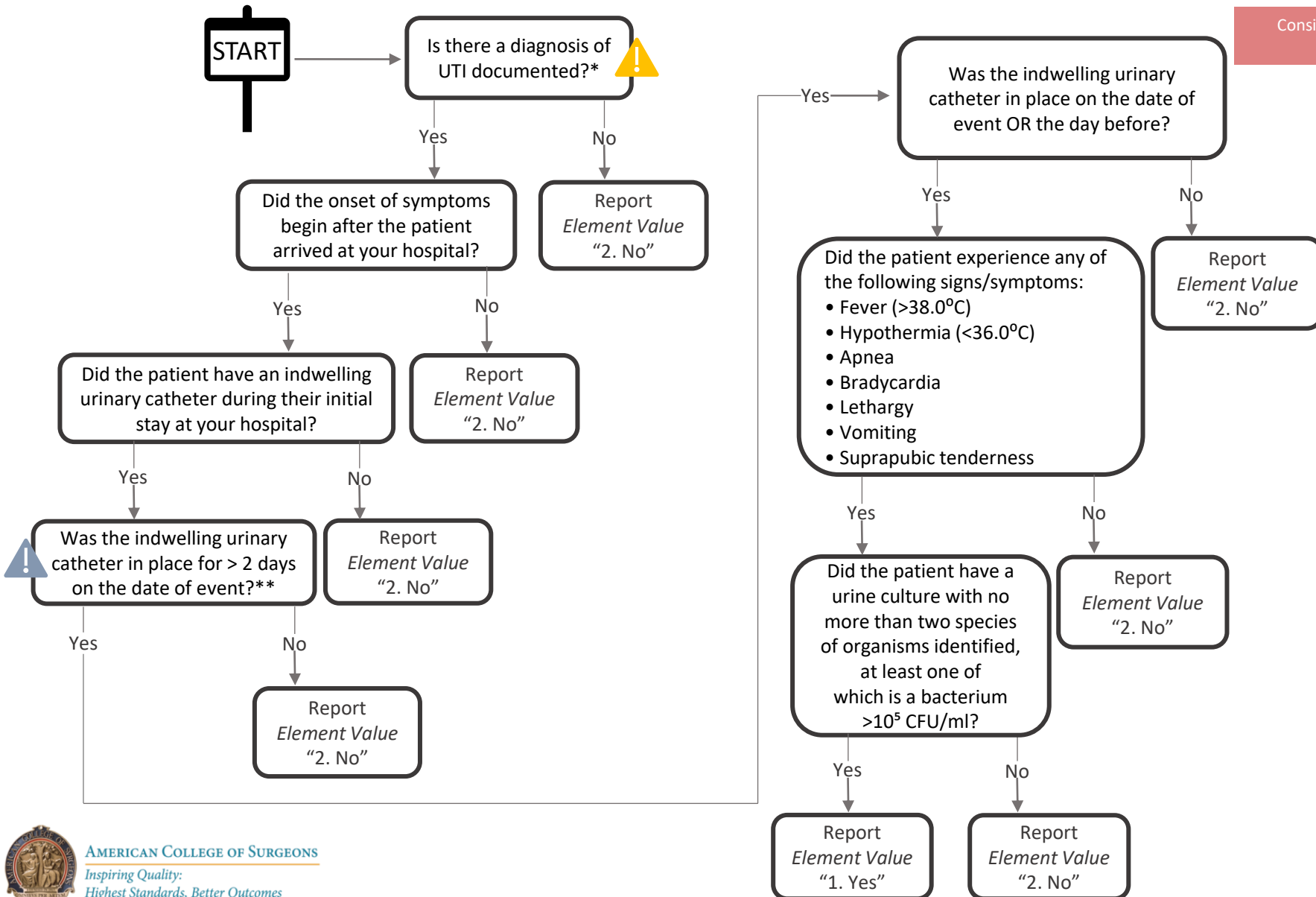


*The NTDS definition is consistent with the January 2019 CDC CAUTI definition. If information not contained in the NTDS definition is needed, please refer to the CDC or your hospital's infection control department.

**The Date of Event is the date the first element used to meet an NHSN site-specific infection criterion occurs for the first time within the seven-day infection window period. The day of device placement is Day 1.

Catheter-associated Urinary Tract Infection (CAUTI) SUTI 2 (Patients ≤ 1 year of age)

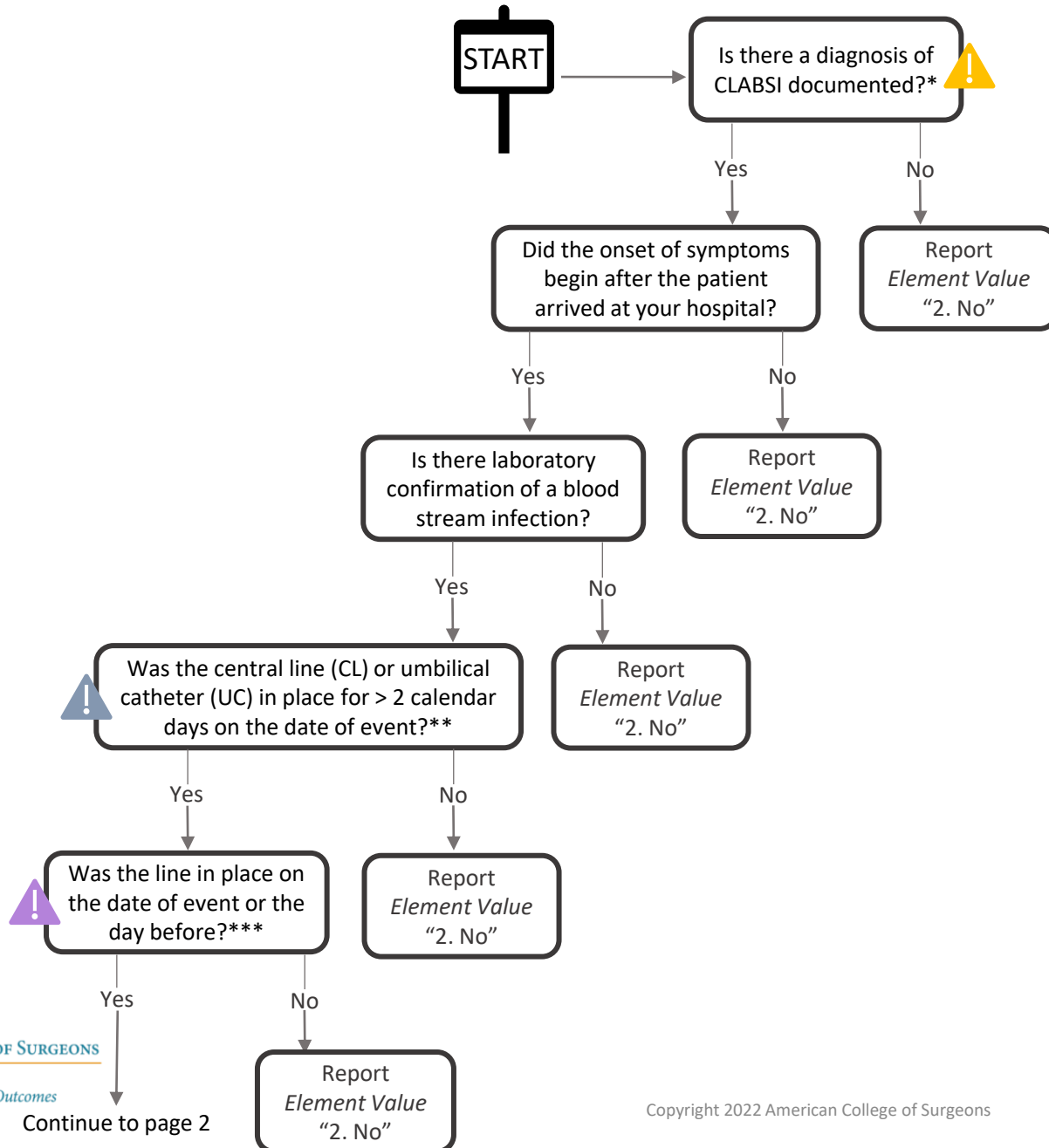
Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



*The NTDS definition is consistent with the January 2019 CDC CAUTI definition. If information not contained in the NTDS definition is needed, please refer to the CDC or your hospital's infection control department.

**The Date of Event is the date the first element used to meet an NHSN site-specific infection criterion occurs for the first time within the seven-day infection window period. The day of device placement is Day 1.

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



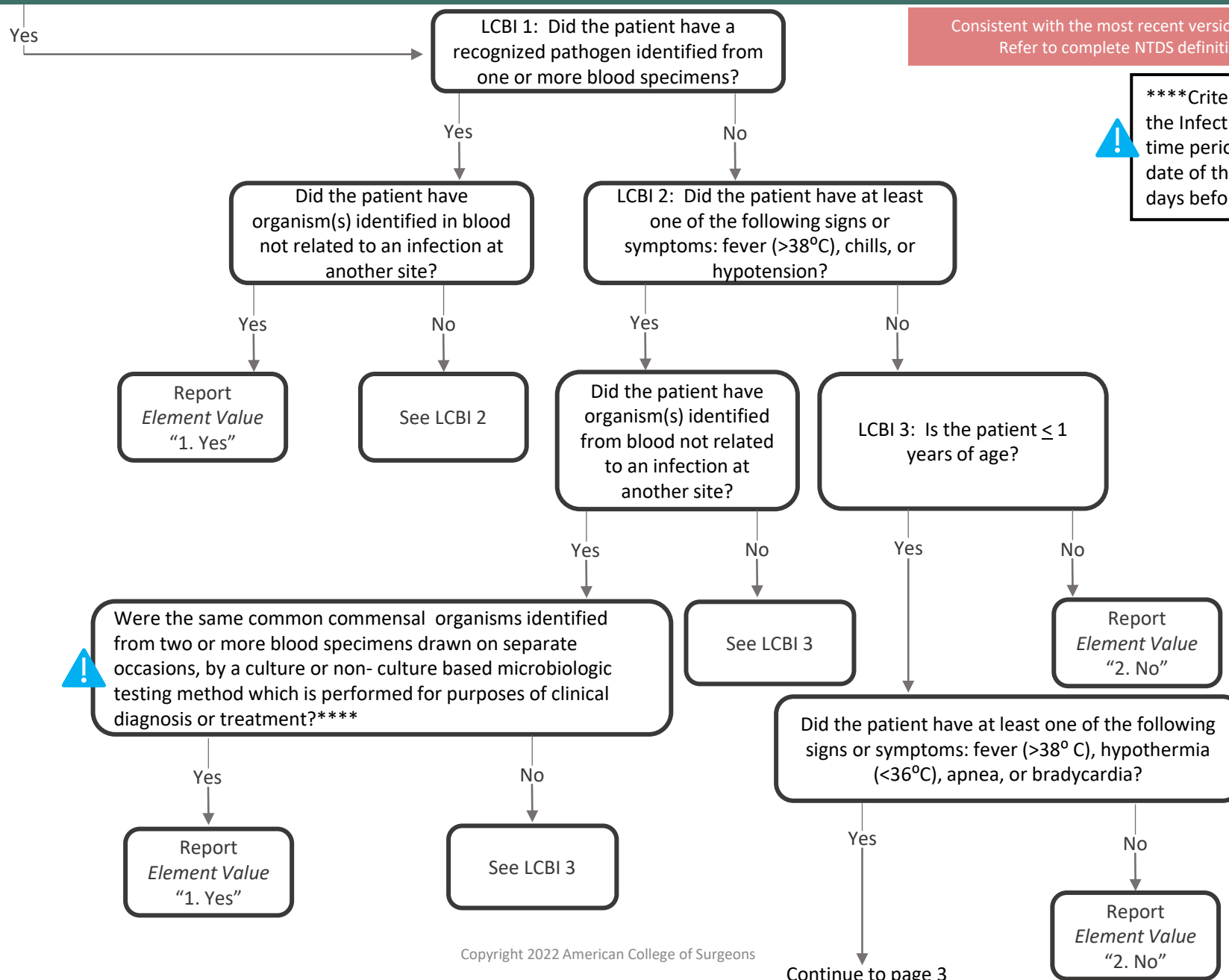
! *The NTDS definition is consistent with the January 2016 CDC CLABSI definition. If information not contained in the NTDS definition is needed, please refer to the CDC or your hospital's infection control department.

! **The Date of Event is the date the first element used to meet an NHSN site-specific infection criterion occurs for the first time within the seven-day infection window period. The day of device placement is Day 1.

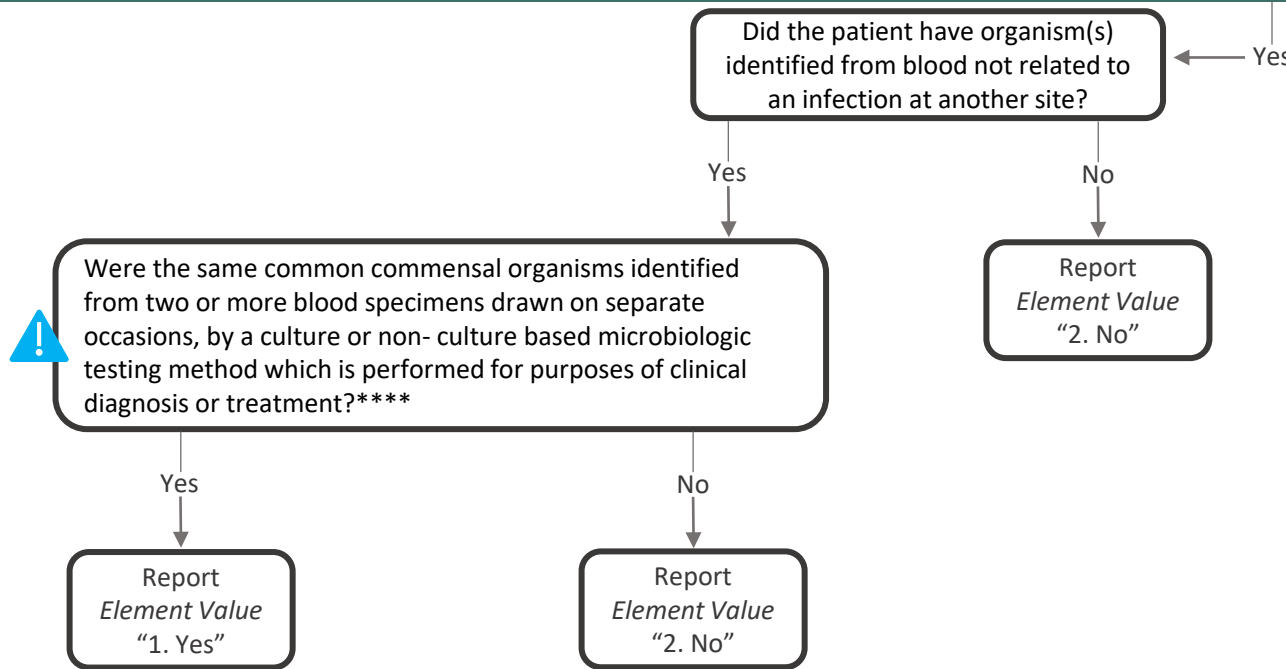
! ***If a CL or UC was in place for > 2 calendar days and then removed, the date of event of the LCBI must be the day of discontinuation or the next day to be a CLABSI. If the patient is admitted or transferred into a facility with an implanted central line (port) in place, and that is the patient's only central line, day of first access in an inpatient location is considered Day 1. "Access" is defined as line placement, infusion or withdrawal through the line. Such lines continue to be eligible for CLABSI once they are accessed until they are either discontinued or the day after patient discharge (as per the Transfer Rule.) Note that the "de-access" of a port does not result in the patient's removal from CLABSI surveillance.

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information

****Criterion elements must occur within the Infection Window Period, the 7-day time period which includes the collection date of the positive blood, the 3 calendar days before and the 3 calendar days after.

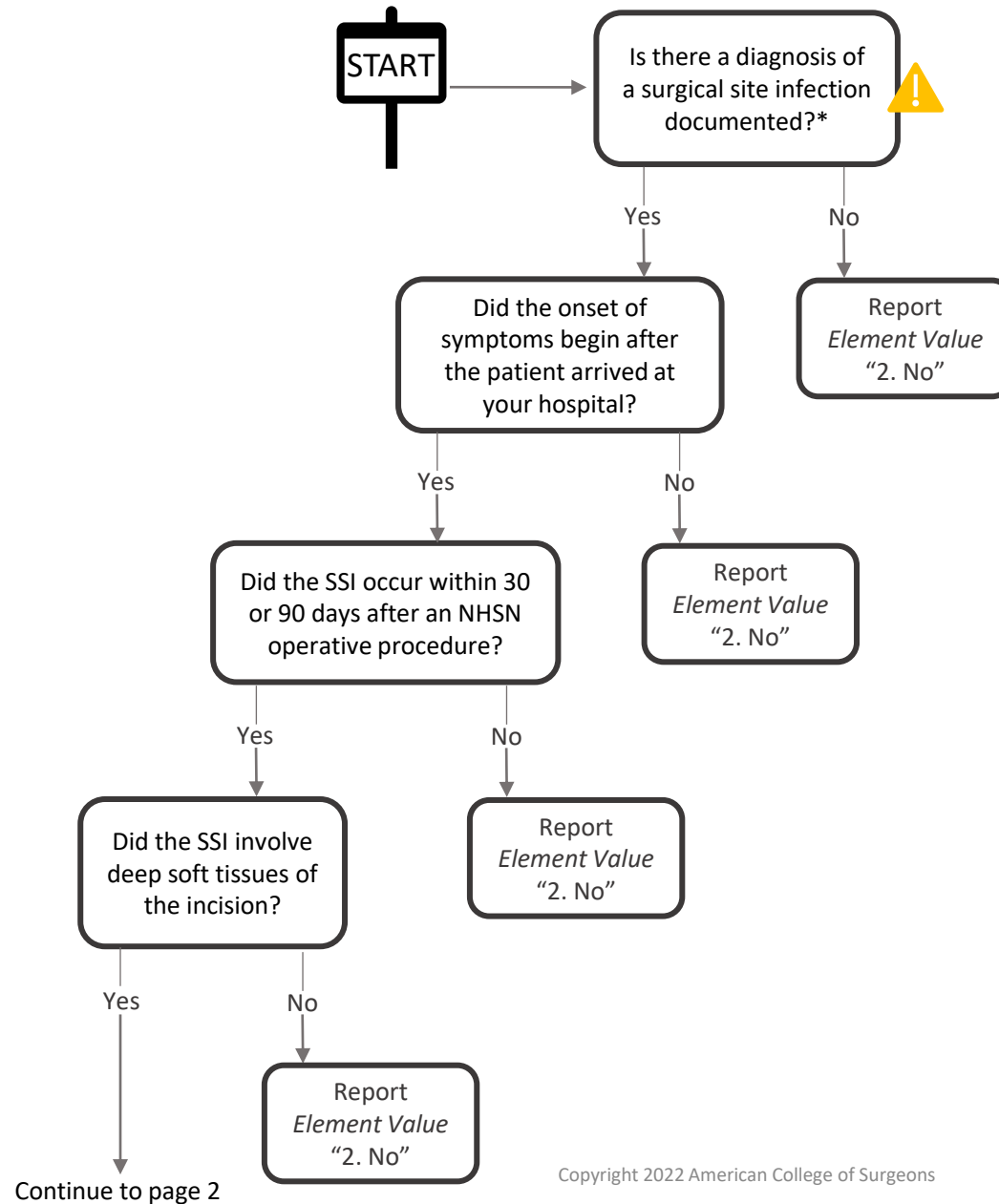



Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



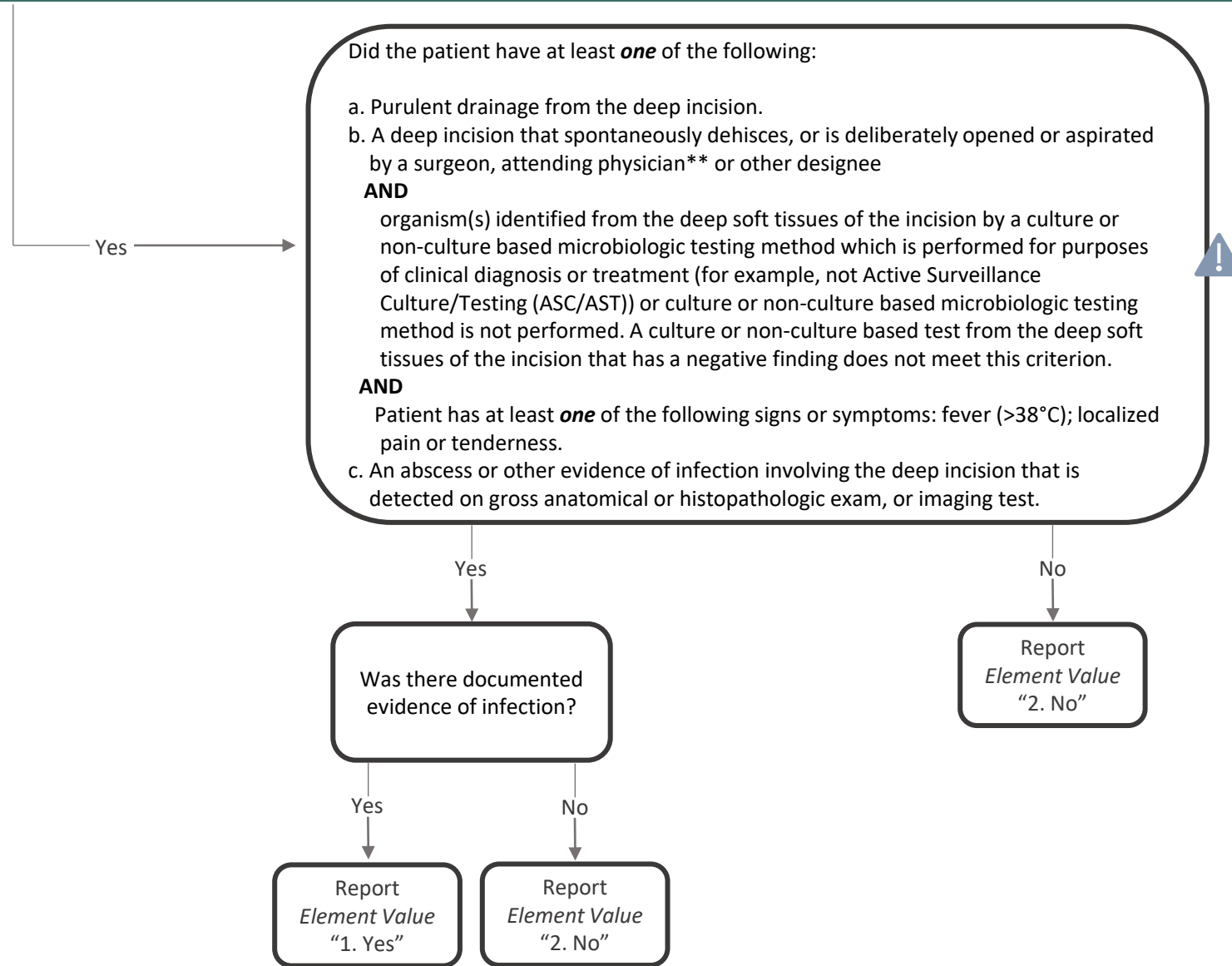
****Criterion elements must occur within the Infection Window Period, the 7-day time period which includes the collection date of the positive blood, the 3 calendar days before and the 3 calendar days after.

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



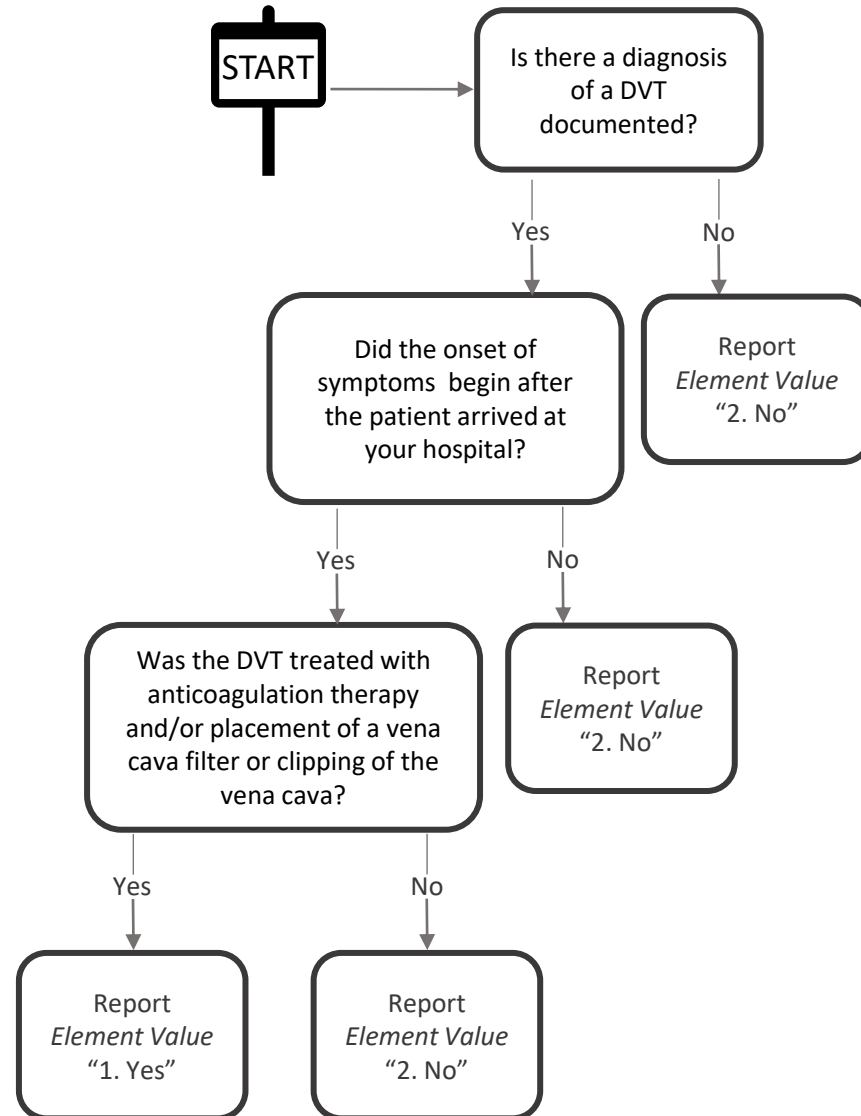
 *The NTDS definition is consistent with the January 2019 CDC SSI definition. If information not contained in the NTDS definition is needed, please refer to the CDC or your hospital's infection control department.

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information

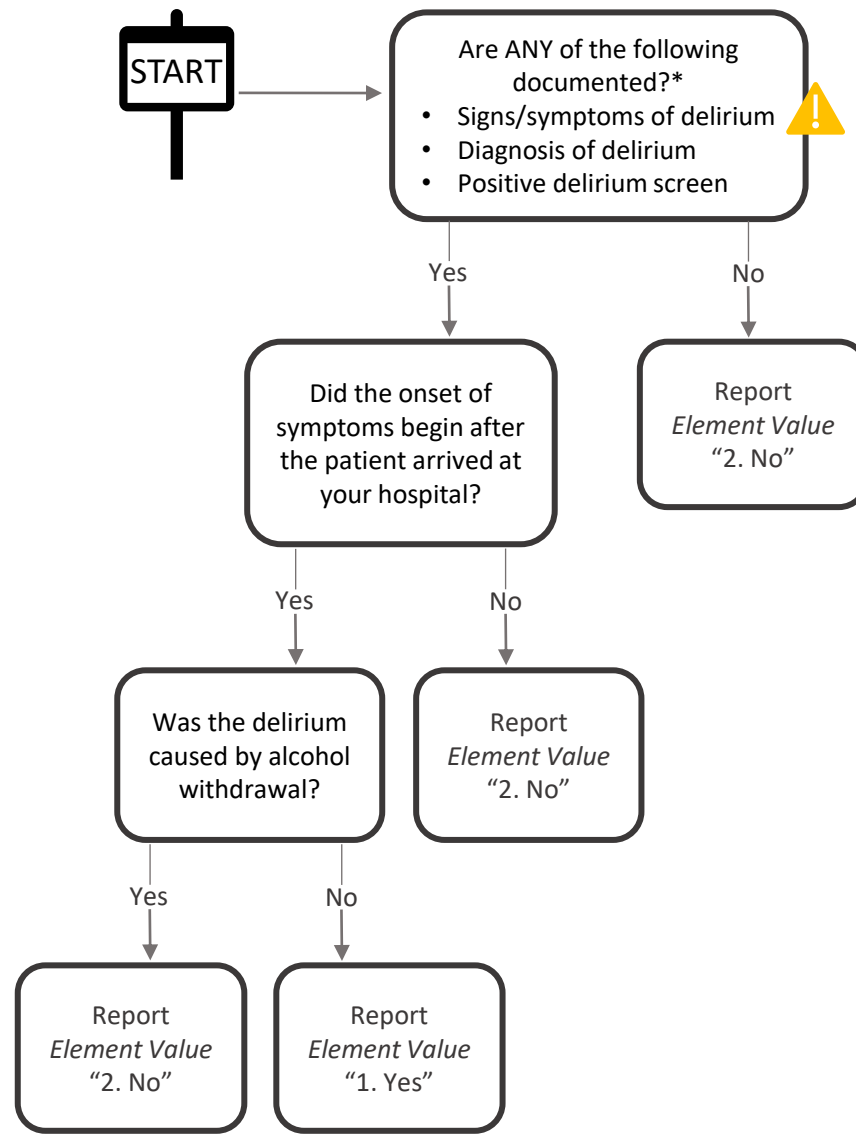



! **The term attending physician for the purposes of application of the NHSN SSI criteria may be interpreted to mean the surgeon(s), infectious disease, other physician on the case, emergency physician, or physician's designee (nurse practitioner or physician's assistant).

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information

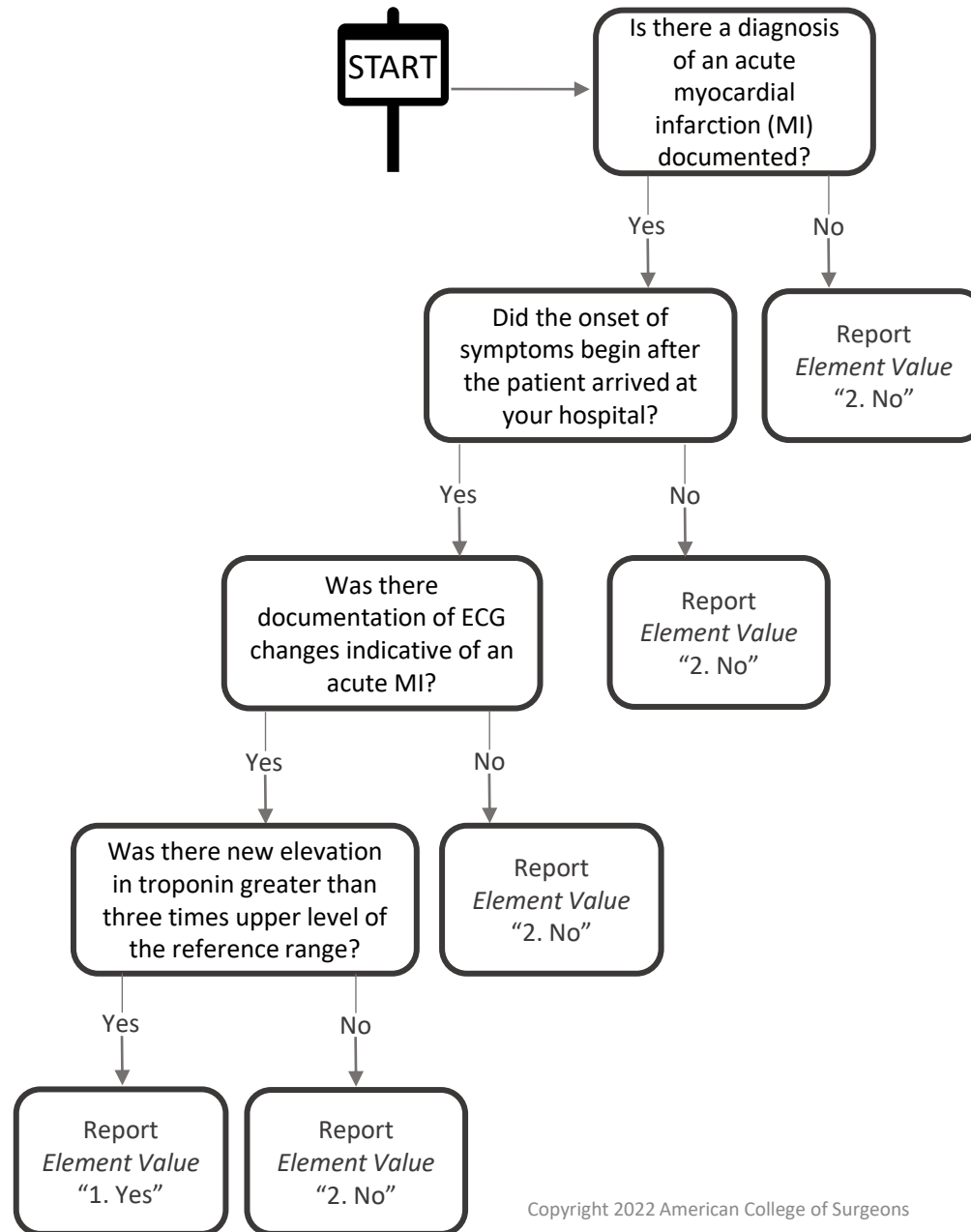


Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information

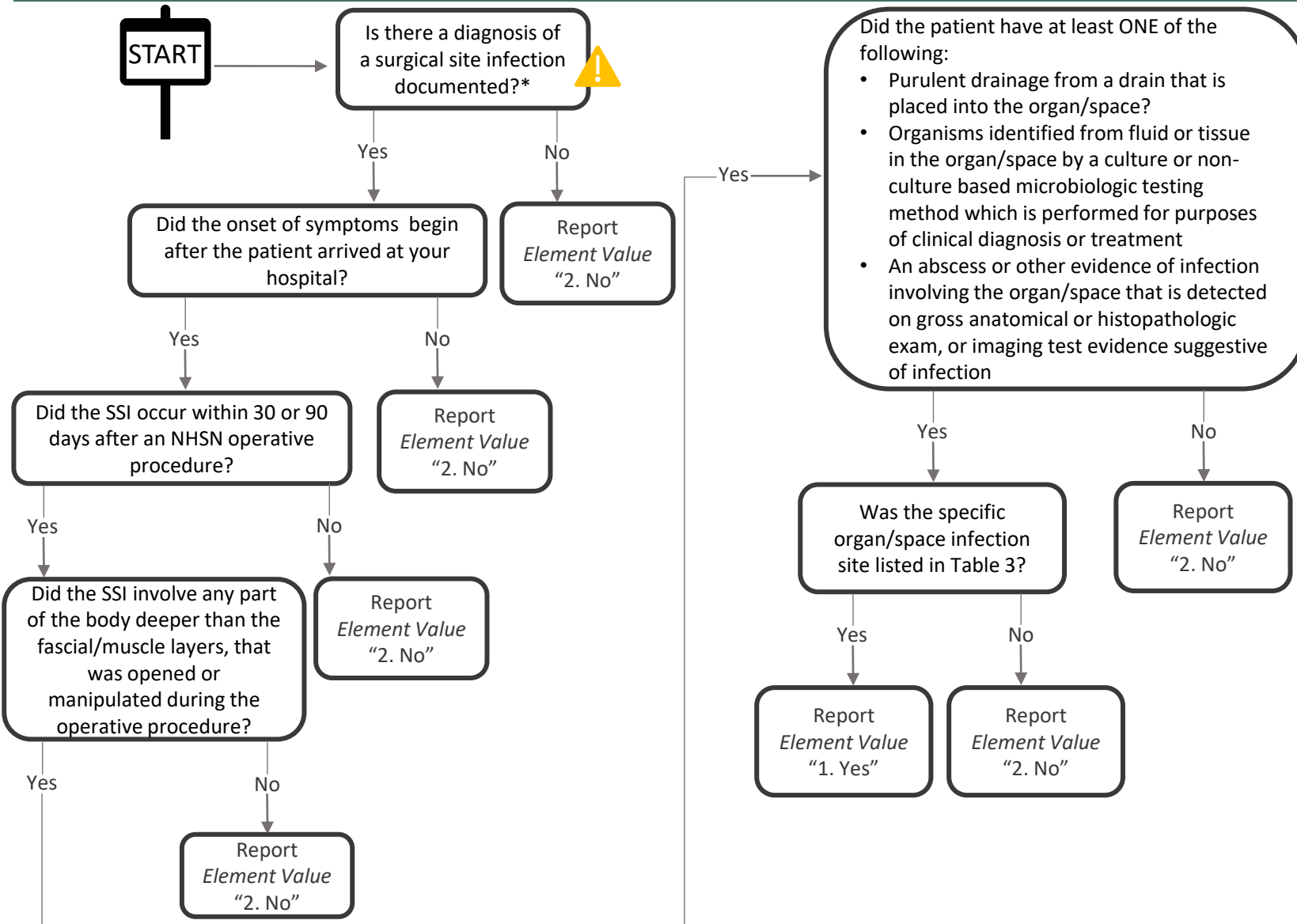



 *Delirium can often be traced to one or more contributing factors, such as a severe or chronic medical illness, changes in your metabolic balance (such as low sodium), medication, infection, surgery, or alcohol or drug withdrawal.

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information

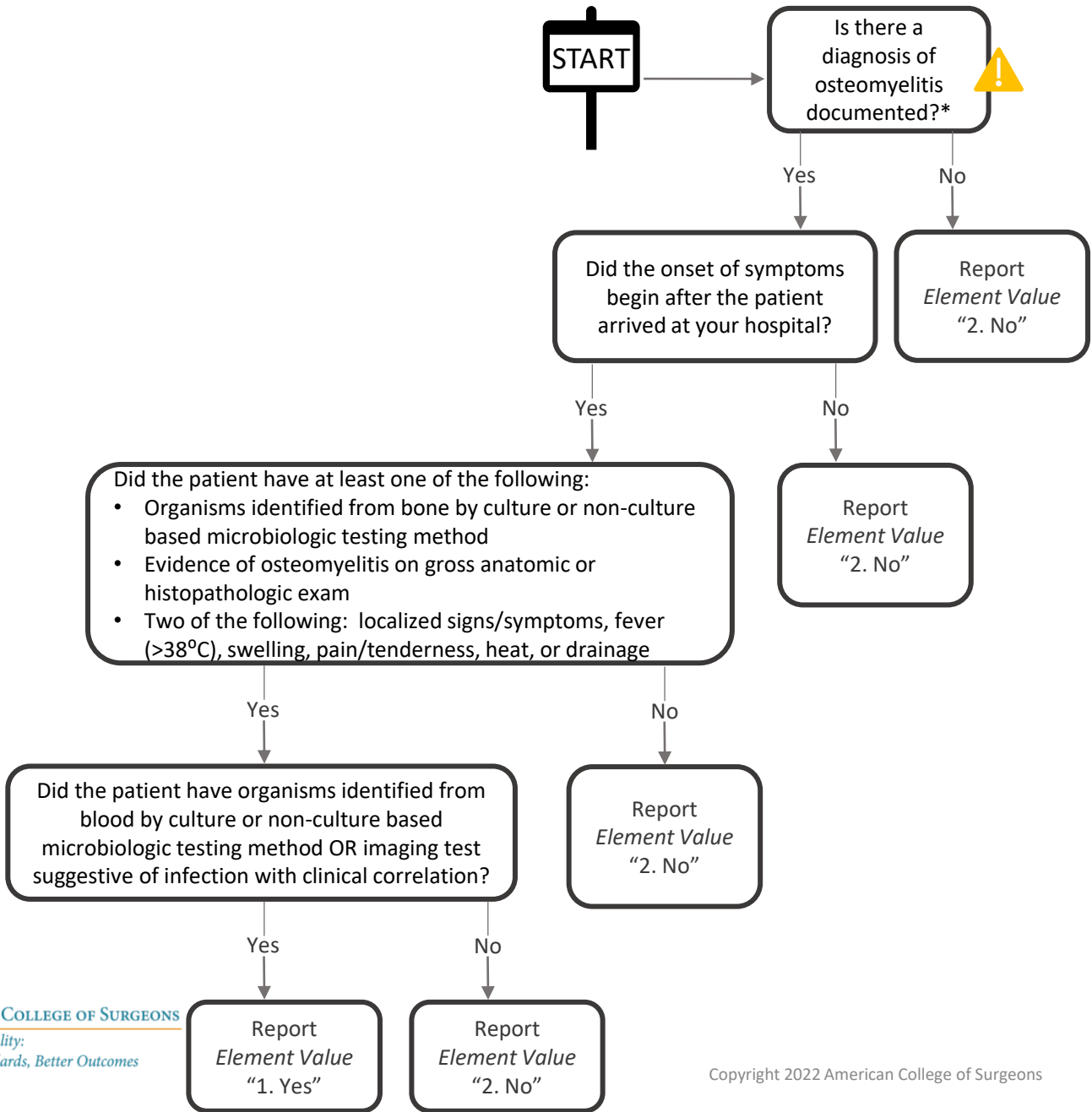



Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



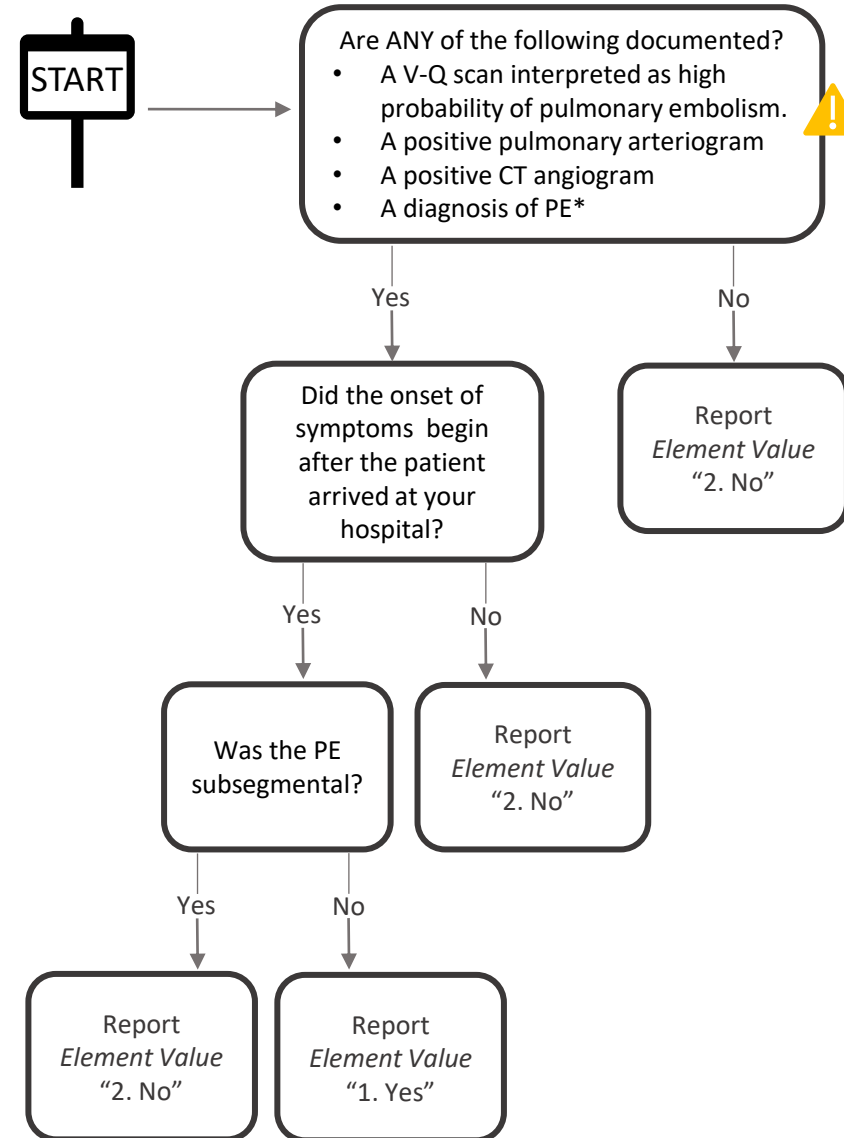
 *The NTDS definition is consistent with the January 2019 CDC SSI definition. If information not contained in the NTDS definition is needed, please refer to the CDC or your hospital's infection control department.


Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



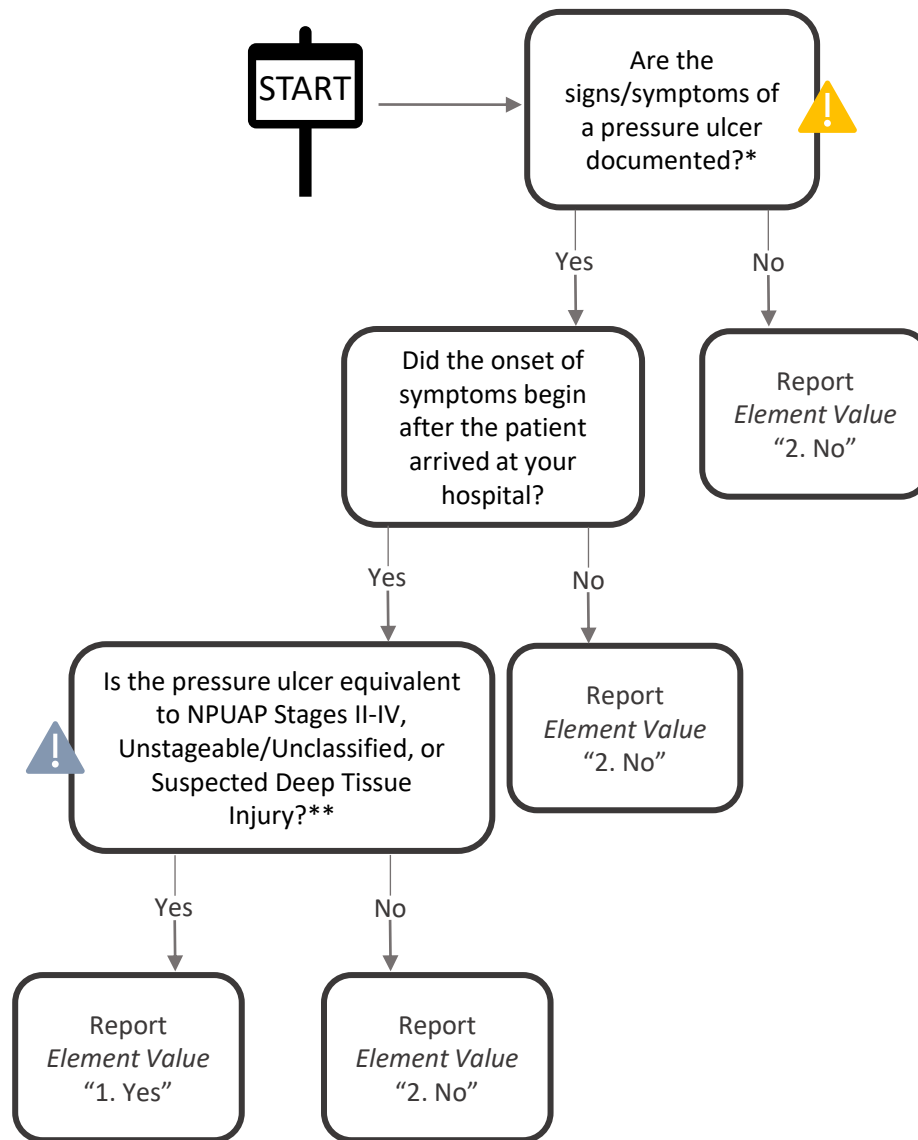
 *The NTDS definition is consistent with the January 2020 CDC Bone and Joint Infection definition. If information not contained in the NTDS definition is needed, please refer to the CDC or your hospital's infection control department.

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



 *Subsegmental PEs are excluded from the NTDS definition of PE.

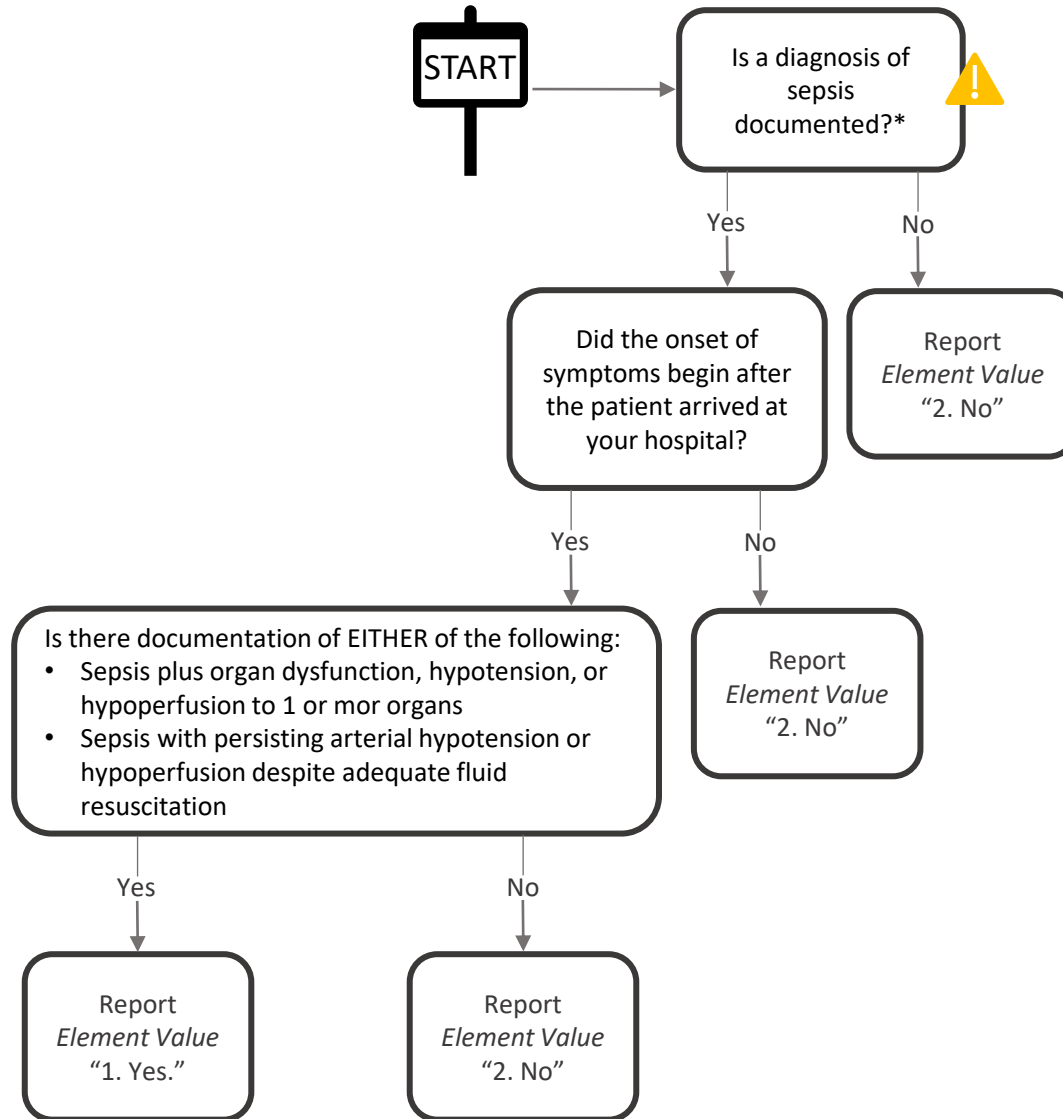
Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information




*A pressure ulcer is a localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear. A number of contributing or confounding factors are also associated with pressure ulcers; the significance of these factors is yet to be elucidated.

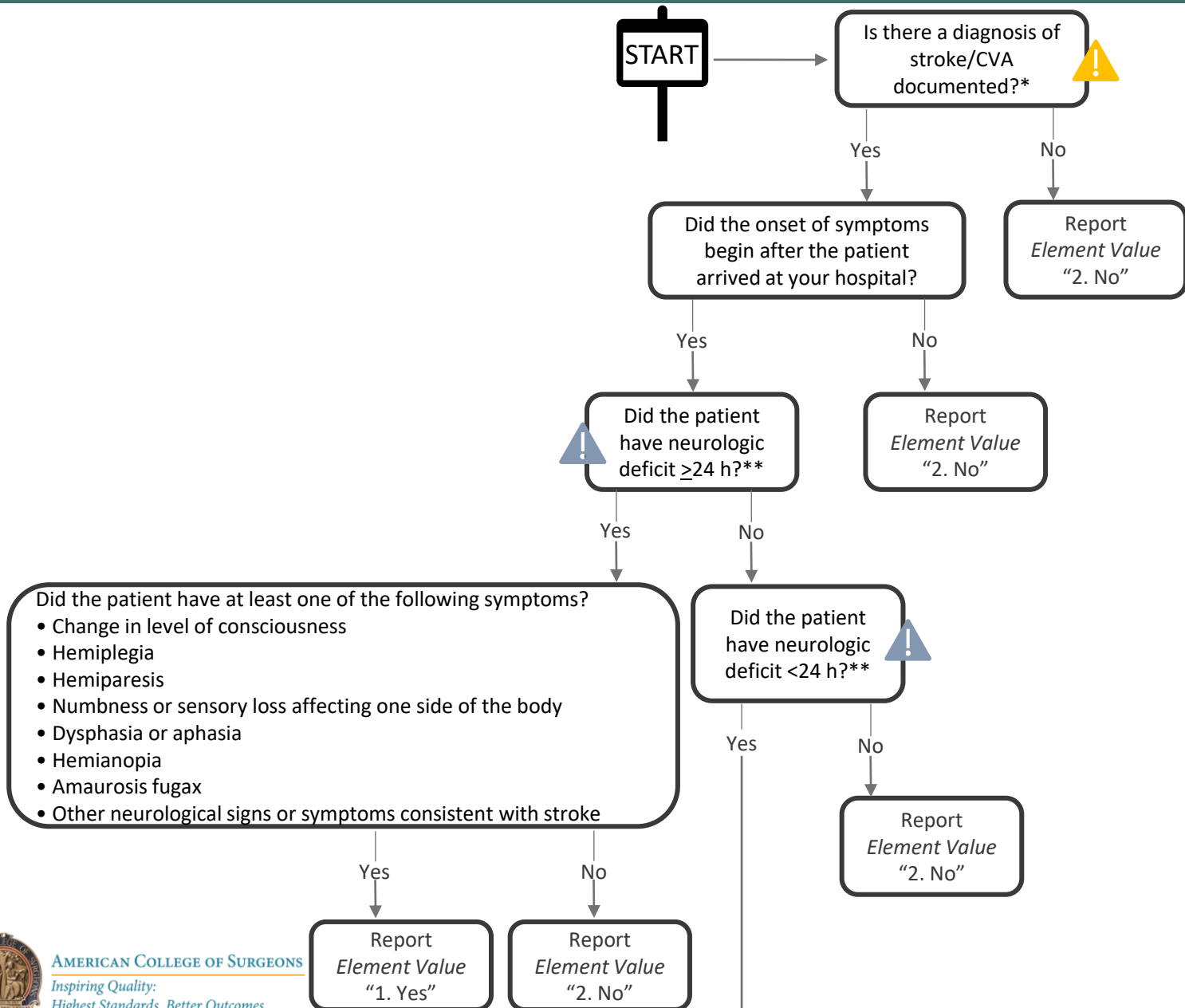
**The NTDS definition is consistent with the NPUAP 2014

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



 *The NTDS definition is consistent with the American College of Chest Physicians and the Society of Critical Care Medicine October 2010.

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information

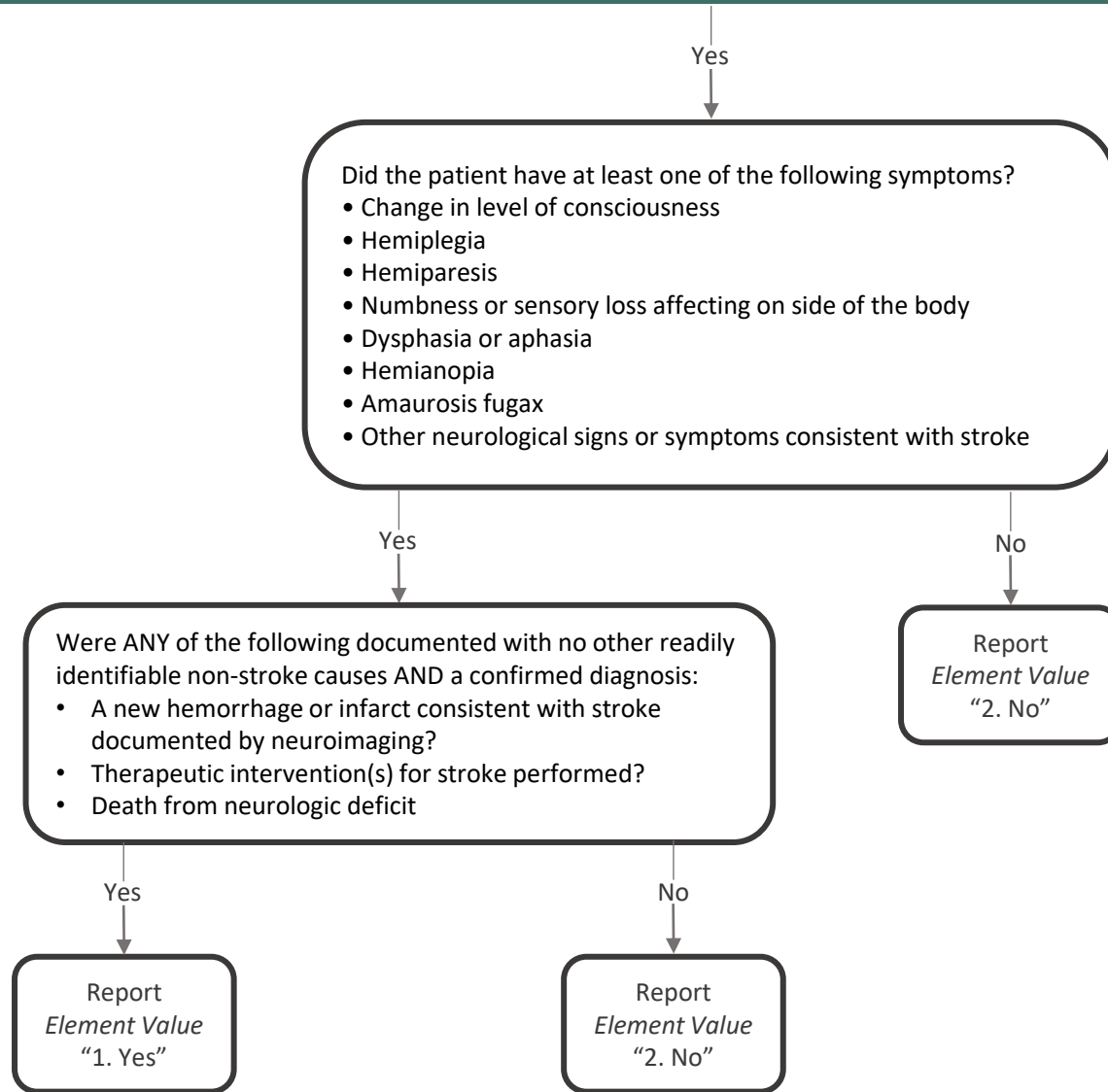


- Did the patient have at least one of the following symptoms?
- Change in level of consciousness
 - Hemiplegia
 - Hemiparesis
 - Numbness or sensory loss affecting one side of the body
 - Dysphasia or aphasia
 - Hemianopia
 - Amaurosis fugax
 - Other neurological signs or symptoms consistent with stroke

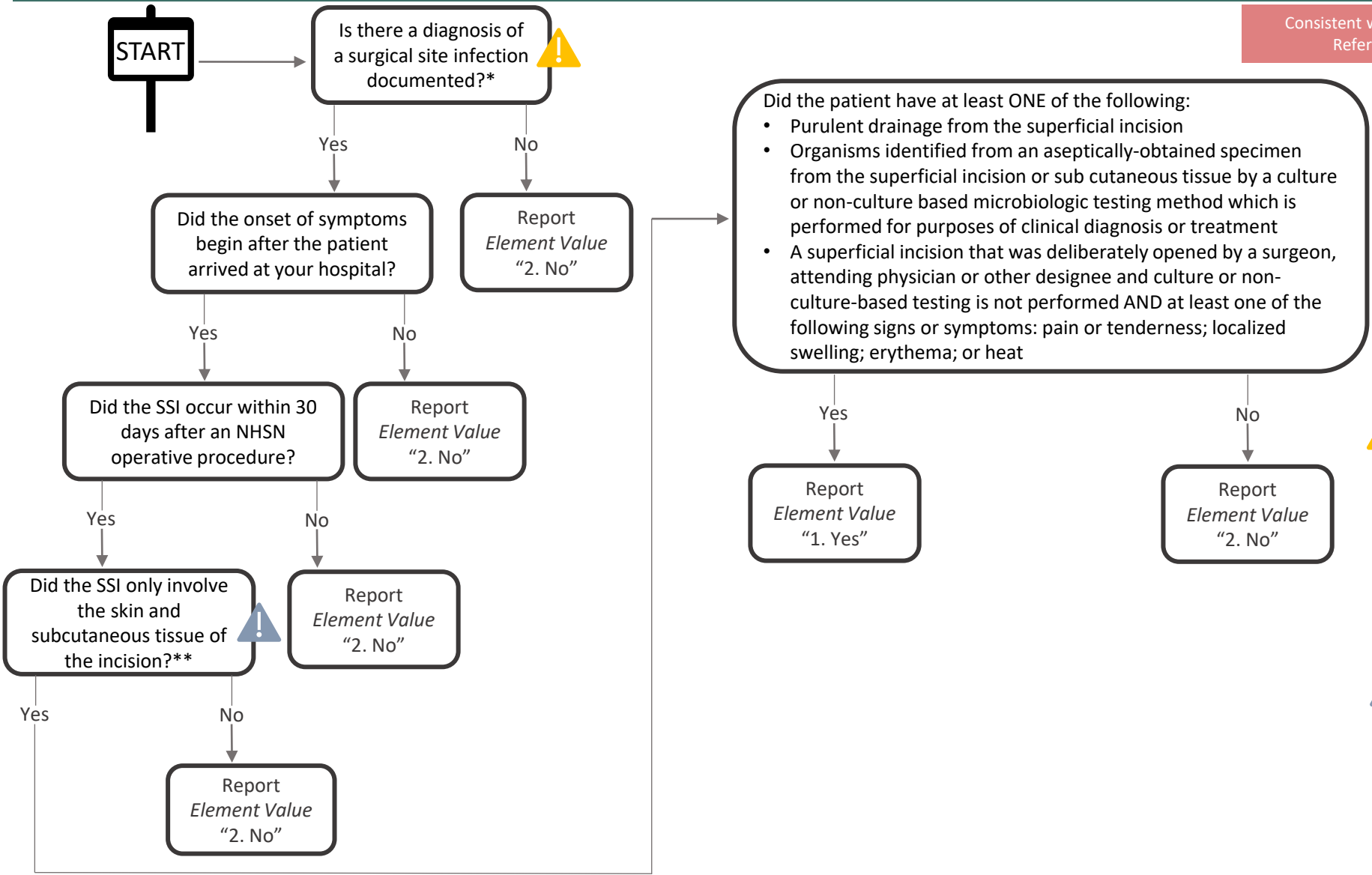
*A focal or global neurological deficit of rapid onset and NOT present on admission caused by a clot obstructing the flow of blood flow to the brain (ischemic stroke). Or by a blood vessel rupturing and preventing blood flow to the brain (hemorrhagic stroke). Or a transient ischemic attack which is temporary caused by a temporary clot.

**Although the neurologic deficit must not present on admission, risk factors predisposing to stroke (e.g., blunt cerebrovascular injury, dysrhythmia) may be present on admission.

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



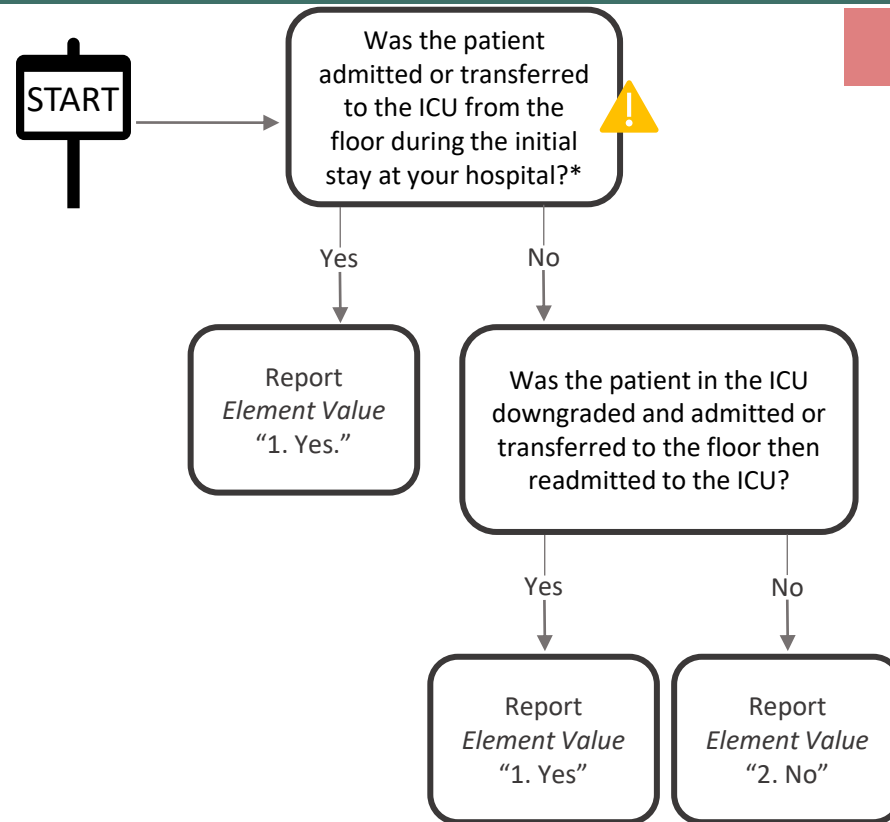
Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



*The NTDS definition is consistent with the January 2019 CDC SSI definition. If information not contained in the NTDS definition is needed, please refer to the CDC or your hospital's infection control department.

**There are two specific types of superficial incisional SSIs:
1. Superficial Incisional Primary (SIP) – a superficial incisional SSI that is identified in the primary incision in a patient that has had an operation with one or more incisions (e.g., C- section incision or chest incision for CBGB)
2. Superficial Incisional Secondary (SIS) – a superficial incisional SSI that is identified in the secondary incision in a patient that has had an operation with more than one incision (e.g., donor site incision for CBGB)

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information

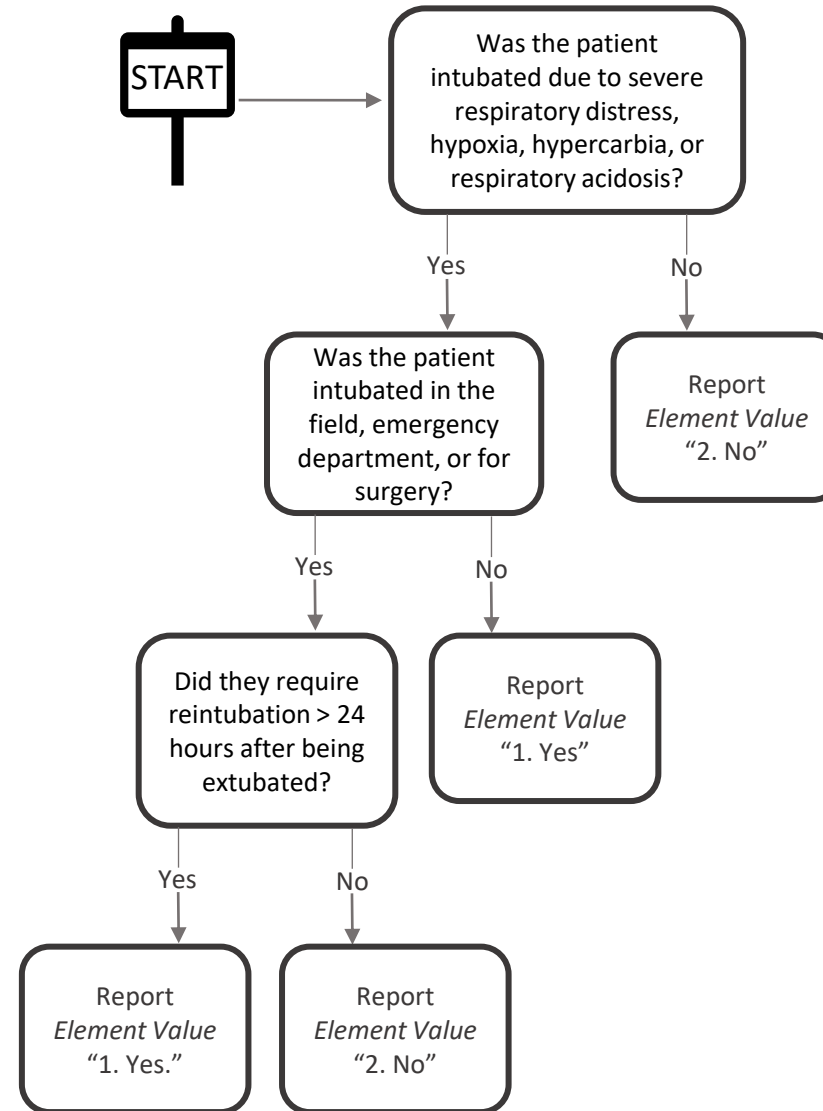


*Floor is defined as any other ward that is not an ICU. "Floor" also includes step-down units, intermediate care units, and the operating room for the purposes of this definition.

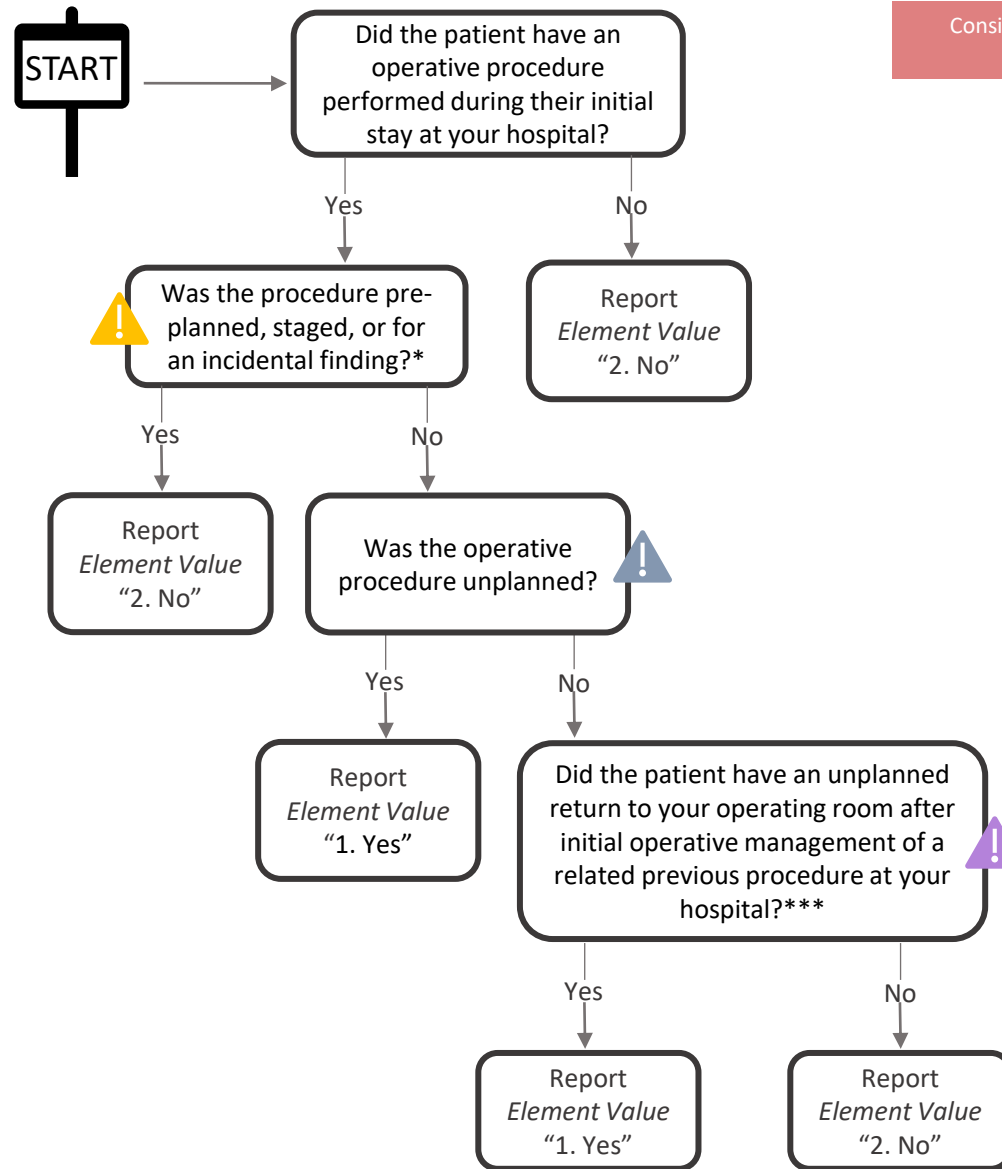
EXCLUDE: Patients with a planned post-operative ICU stay. This means that it was known prior to surgery that the patient would require post-operative ICU care.

INCLUDE: Patients who required ICU care due to an event that occurred during surgery or in the PACU.

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



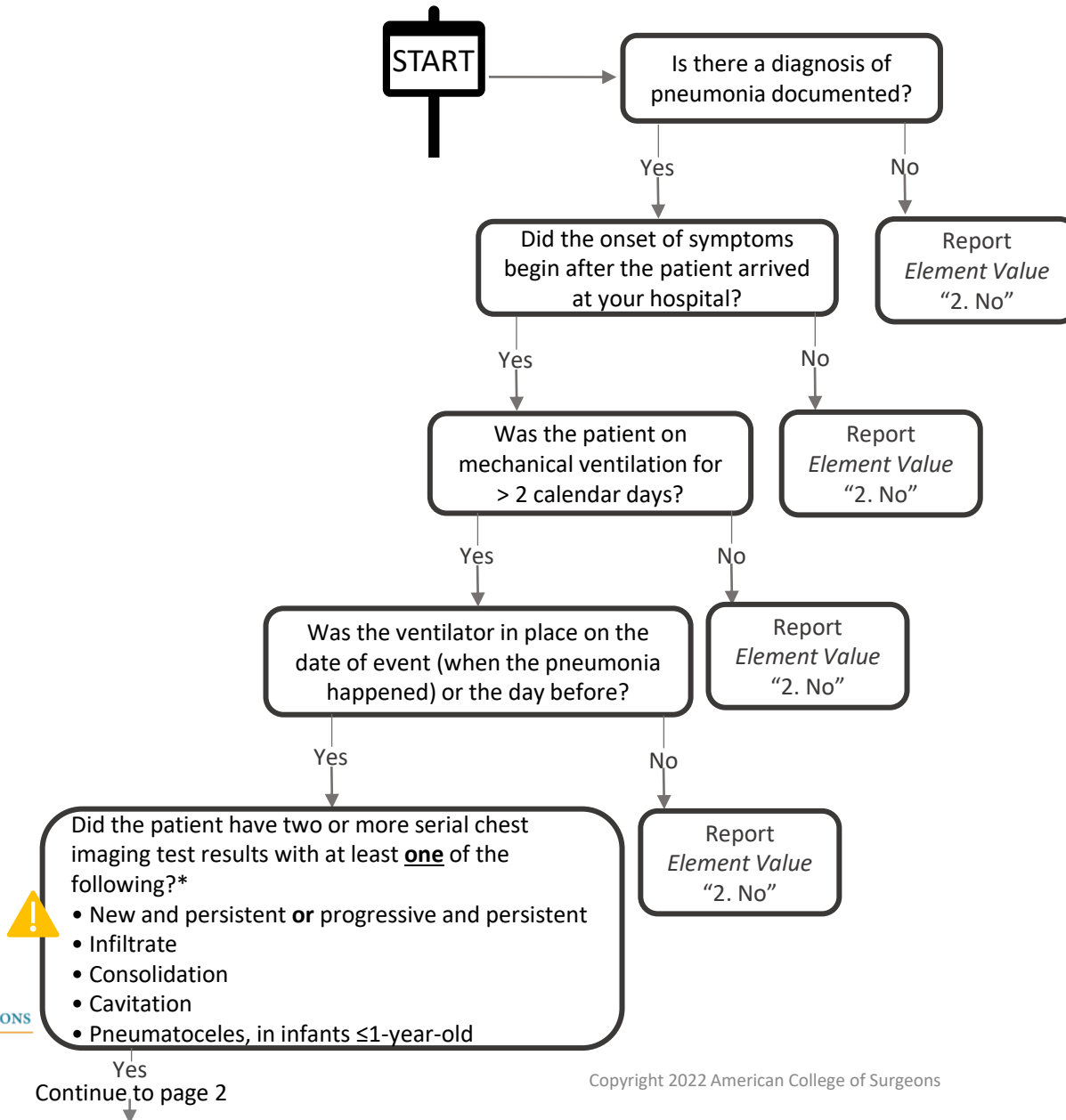
! *A pre-planned procedure is a procedure indicated in the patient's original plan of care.

! **An unplanned procedure is a procedure that was not indicated in the patient's original plan of care.
EXCLUDE: Non-urgent tracheostomy and percutaneous endoscopic gastrostomy.

! ***EXCLUDE: operative management of related procedures performed prior to arrival at your hospital.

Ventilator-Associated Pneumonia (VAP) PNU2 Bacterial or Filamentous Fungal Pathogens (pg. 1 of 2)

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



! NOTE: In patients without underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.

Ventilator-Associated Pneumonia (VAP) PNU2 Bacterial or Filamentous Fungal Pathogens (pg. 2 of 2)

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information

Did the patient have at least **one** of the following "Signs/Symptoms"?

- Fever (>38°C or >100.4°F)
- Leukopenia (<4000 WBC/mm³) or leukocytosis (≥12,000 WBC/mm³)
- For adults ≥70 years old, altered mental status with no other recognized cause

Yes →

Yes ↓

No ↓

AND at least **one** of the following:

- New onset of purulent sputum or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements
- New onset or worsening cough, or dyspnea, or tachypnea
- Rales or bronchial breath sounds
- Worsening gas exchange (for example: O₂ desaturations [for example: PaO₂/FiO₂ <240], increased oxygen requirements, or increased ventilator demand)

Yes ↓

No ↓

Report
Element Value
"2. No"

Report
Element Value
"2. No"

Did the patient have at least **one** of the following "Laboratory" findings?

- Organism identified from blood
- Organism identified from pleural fluid
- Positive quantitative culture or corresponding semi-quantitative culture result from minimally contaminated LRT specimen (specifically, BAL, protected specimen brushing or endotracheal aspirate)
- ≥5% BAL-obtained cells contain intracellular bacteria on direct microscopic exam (for example: Gram's stain)
- Positive quantitative culture or corresponding semi-quantitative culture result of lung tissue
- Histopathologic exam shows at least one of the following evidences of pneumonia:
 - Abscess formation or foci of consolidation with intense PMN accumulation in bronchioles and alveoli
 - Evidence of lung parenchyma invasion by fungal hyphae or pseudohyphae

Yes →

Yes ↓

No ↓

Report
Element Value
"1. Yes"

Report
Element Value
"2. No"



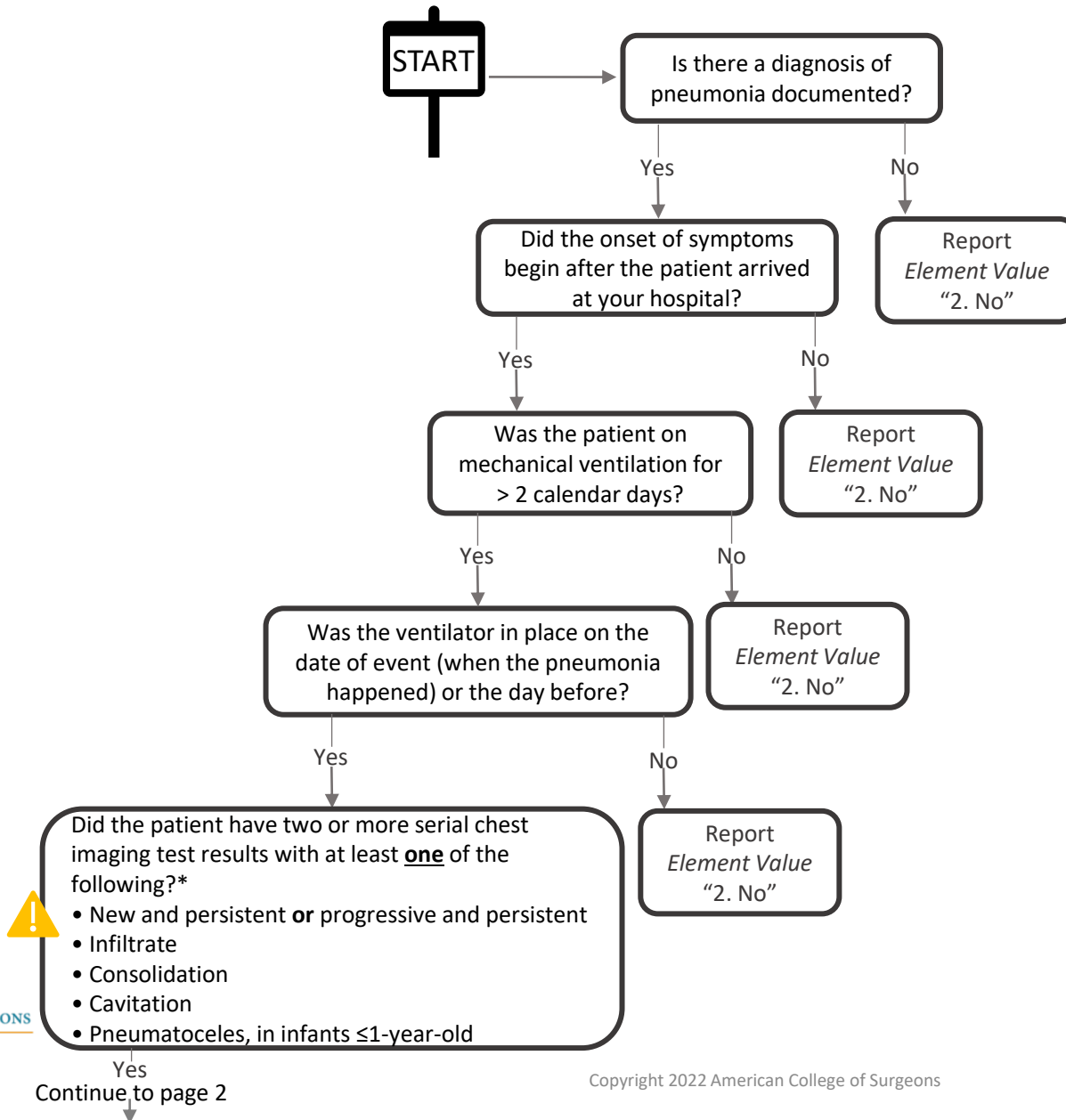
AMERICAN COLLEGE OF SURGEONS

Inspiring Quality:
Highest Standards, Better Outcomes

100+ years

Ventilator-Associated Pneumonia (VAP) PNU2 Viral, Legionella, and other Bacterial Pneumonias (pg. 1 of 2)

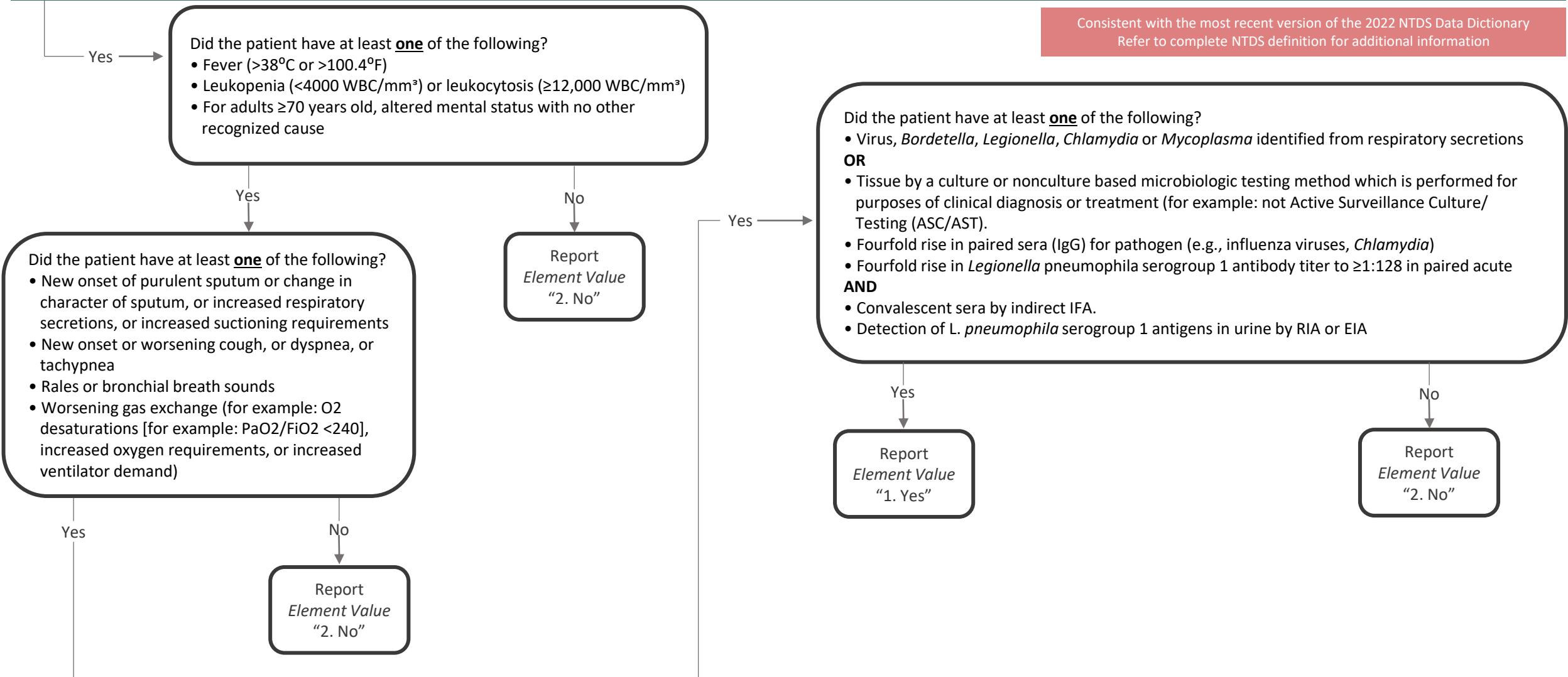
Consistent with the most recent version of the 2022 NTDS Data Dictionary
 Refer to complete NTDS definition for additional information



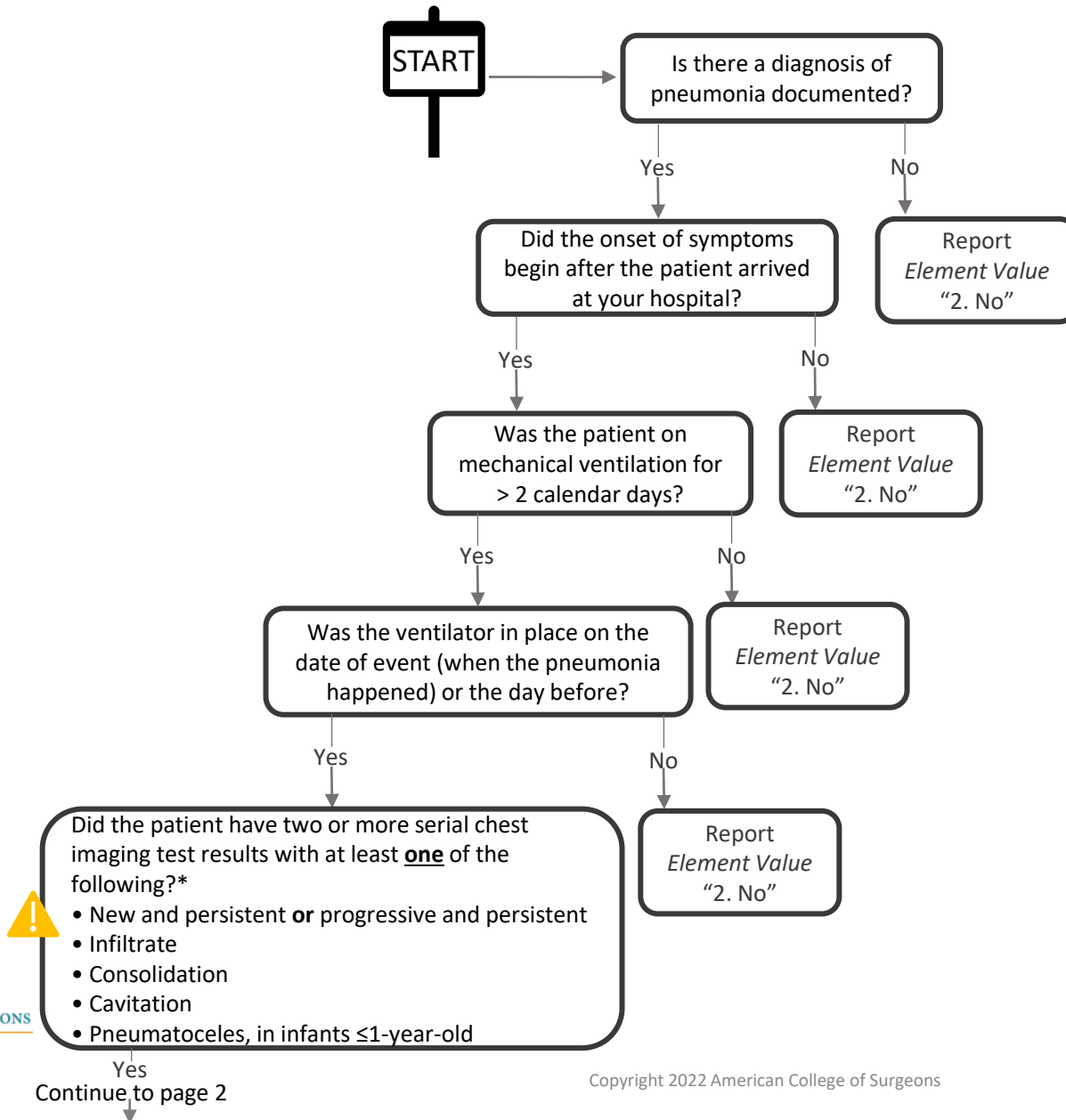
! NOTE: In patients without underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.

Ventilator-Associated Pneumonia (VAP) PNU2 Viral, Legionella, and other Bacterial Pneumonias (pg. 2 of 2)

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



Consistent with the most recent version of the 2022 NTDS Data Dictionary
 Refer to complete NTDS definition for additional information



! NOTE: In patients without underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.

Ventilator-Associated Pneumonia (VAP) PNU3 Immunocompromised Patients (pg. 2 of 2)

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information

Did the patient have at least **one** of the following?

- Fever ($>38^{\circ}\text{C}$ or $>100.4^{\circ}\text{F}$)
- For adults ≥ 70 years old, altered mental status with no other recognized cause
- New onset of purulent sputum or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements
- New onset or worsening cough, or dyspnea, or tachypnea
- Rales or bronchial breath sounds
- Worsening gas exchange (for example: O_2 desaturations [for example: $\text{PaO}_2/\text{FiO}_2 < 240$], increased oxygen requirements, or increased ventilator demand)
- Hemoptysis
- Pleuritic chest pain

Yes

Yes

No

Did the patient have at least **one** of the following?

- Identification of matching *Candida* spp. from blood and one of the following: sputum, endotracheal aspirate, BAL or protected specimen brushing.
- Evidence of fungi from minimally-contaminated LRT specimen (e.g., BAL or protected specimen brushing) from one of the following:
 - Direct microscopic exam
 - Positive culture of fungi
 - Non-culture diagnostic laboratory test

OR

- Any of the “LABORATORY CRITERIA” defined under PNU2

Yes

No

Report
Element Value
“1. Yes”

Report
Element Value
“2. No”

Report
Element Value
“2. No”



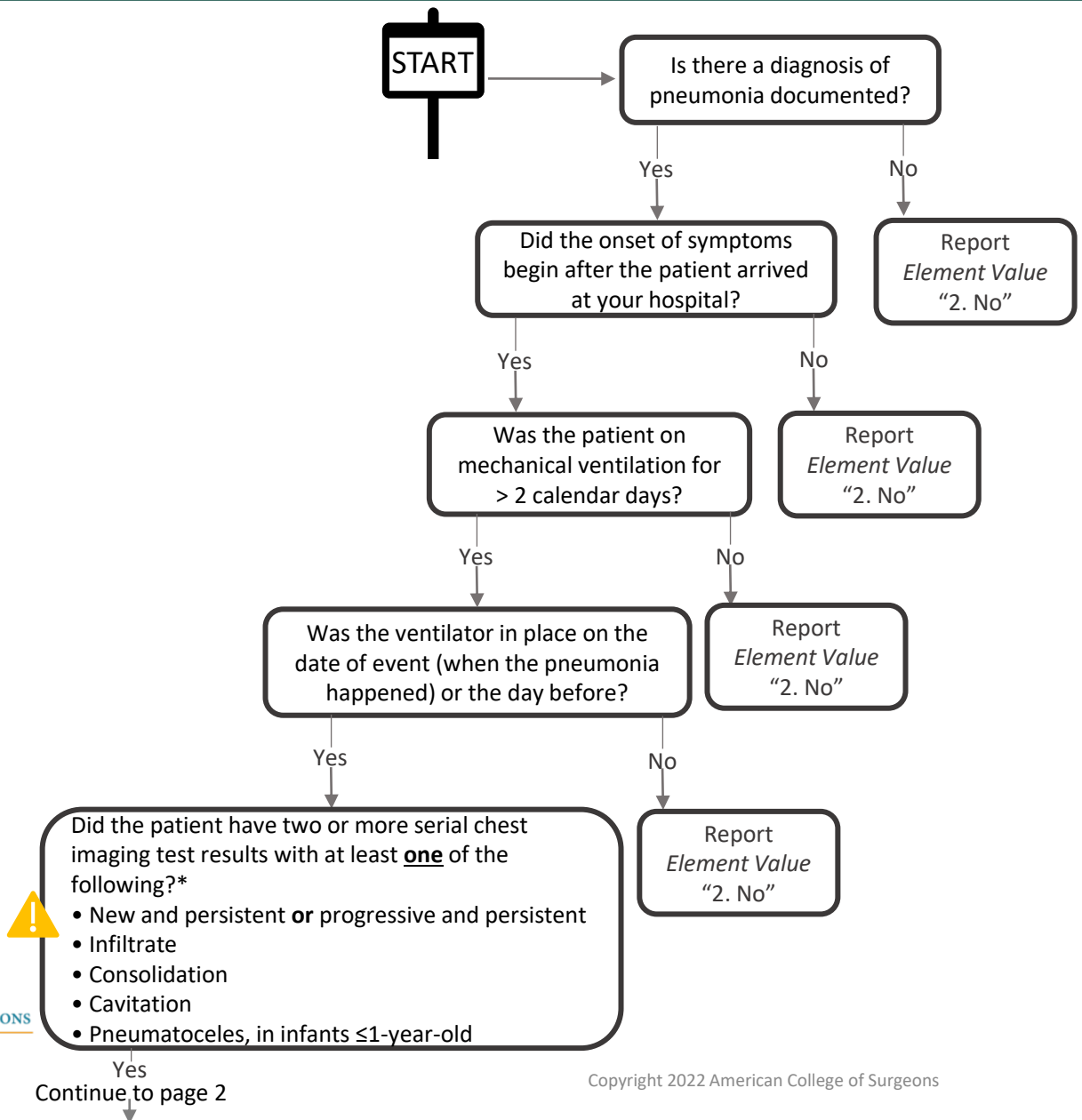
AMERICAN COLLEGE OF SURGEONS

Inspiring Quality:
Highest Standards, Better Outcomes

100+ years

Ventilator-Associated Pneumonia (VAP) ALTERNATE CRITERIA (PNU1), for infants ≤ 1-year-old (pg. 1 of 2)

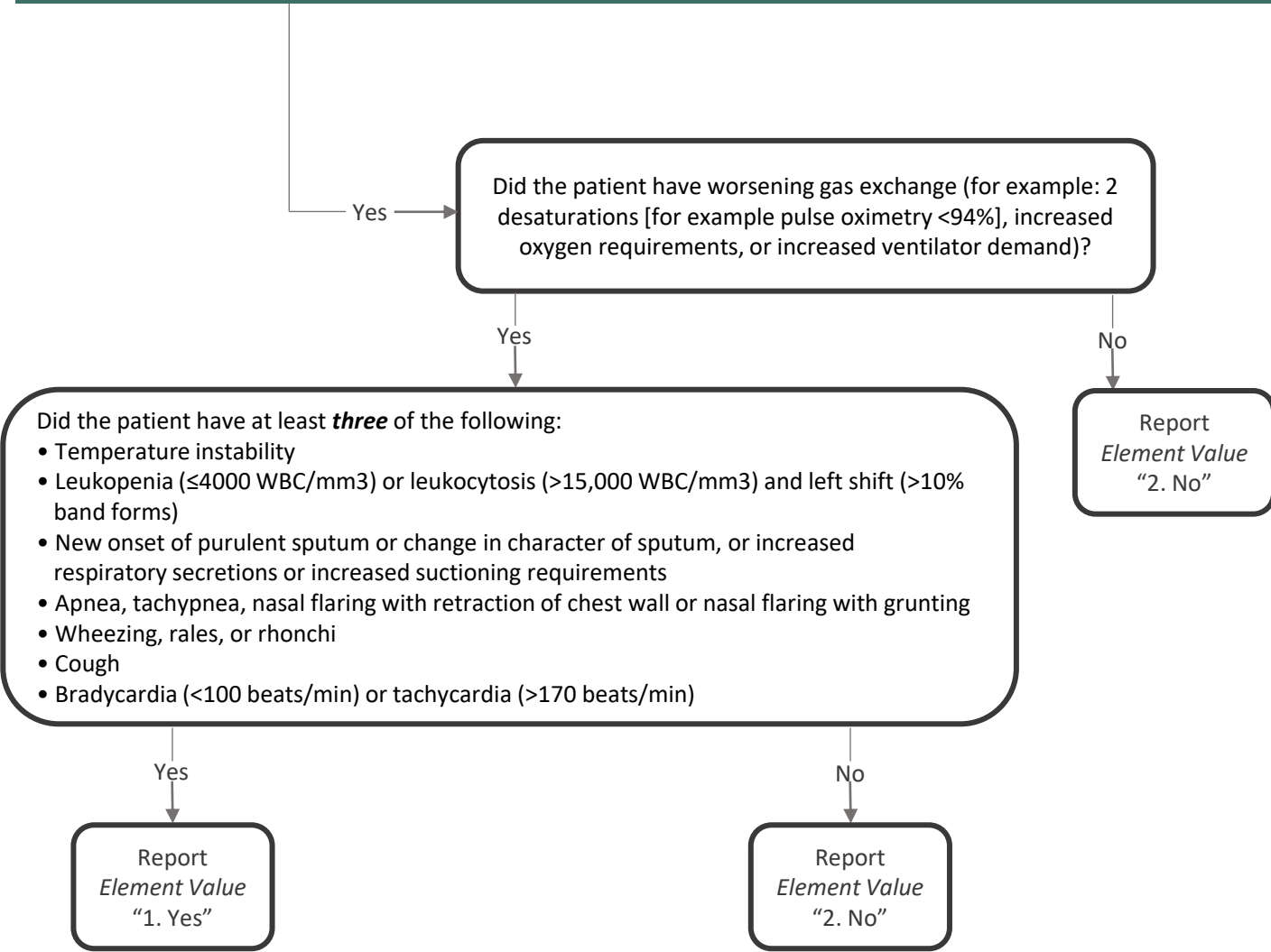
Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



! NOTE: In patients without underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.

Ventilator-Associated Pneumonia (VAP) ALTERNATE CRITERIA (PNU1), for infants ≤ 1-year-old (pg. 2 of 2)

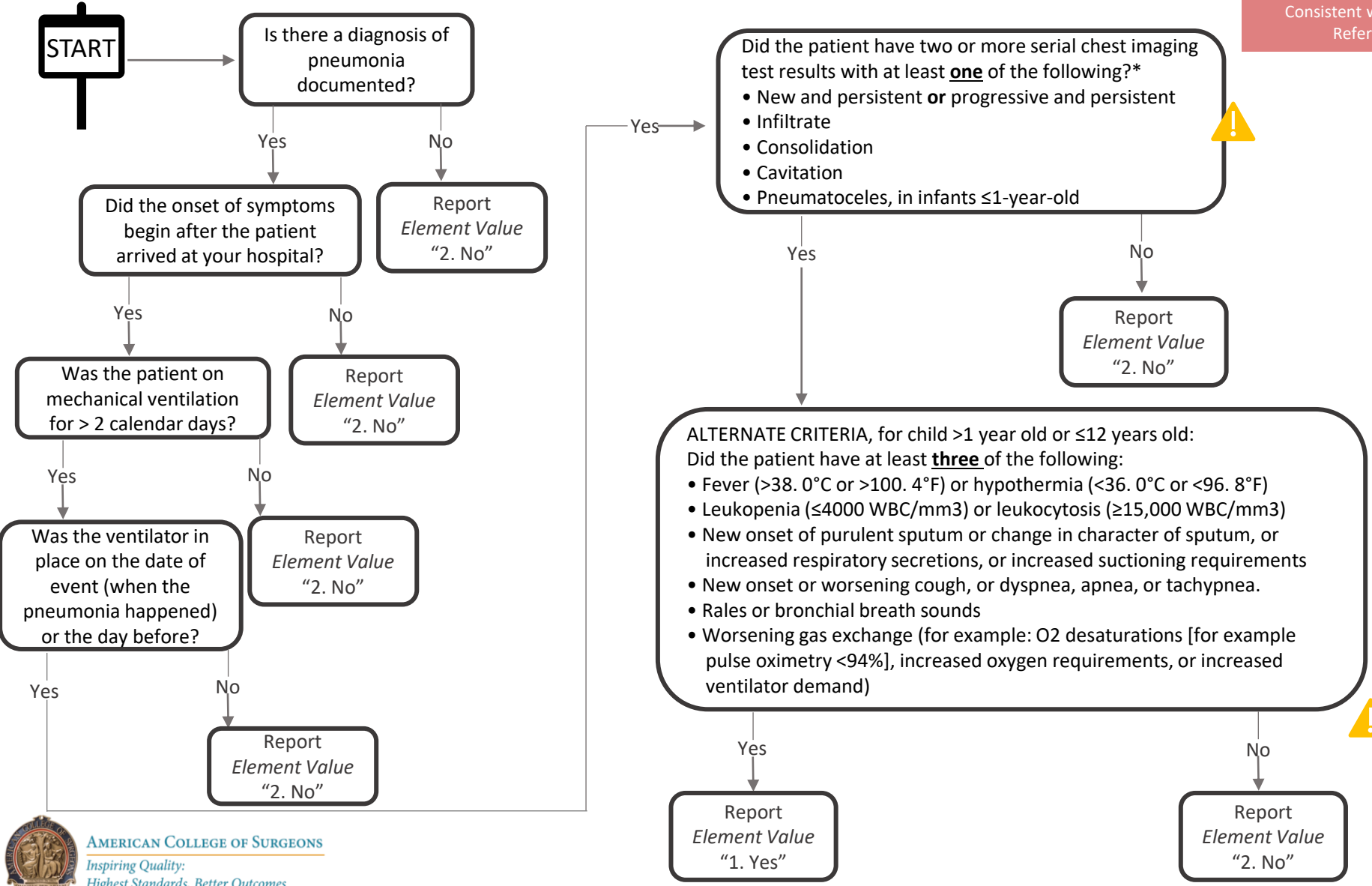
Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



Ventilator-Associated Pneumonia (VAP)

ALTERNATE CRITERIA (PNU1), for children > 1-year-old or ≤ 12-years-old

Consistent with the most recent version of the 2022 NTDS Data Dictionary
Refer to complete NTDS definition for additional information



*NOTE: In patients without underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.