TABLE 10.

Categories of Symptoms That May Help to Define ACOCs

Physical Symptoms

Vital Signs

— *Respiration*

Observe the patient for the following signs and symptoms:

- Respiratory rate >28 breaths/min (normal in younger adults is 12–15 breaths/min; in the elderly, 16–25 breaths/min, with approximate 2:1 inspiration/expiration ratio)[14]
- Marked change from usual respiration pattern or rhythm
- Irregular breathing, long pauses between breaths, audible noises related to breathing
- Struggling to breathe (e.g., gasping for breath, using accessory muscles of the neck)

— *Temperature*

- A range of 98.2°F (36.8°C) to 99.9°F (37.7°C) oral temperature is considered normal. A patient's normal temperature will vary by up to 0.9°F (0.5°C) daily.[15] As quickly as possible after admission, try to establish the patient's normal temperature range.
- A sudden or rapid change from normal temperature may suggest an ACOC.[16] One temperature reading above 100°F, two readings above 99°F, or an increase of 2°F above the upper end of the patient's normal range may indicate an ACOC.
- After an isolated temperature reading that is outside the patient's normal range, repeat temperature readings approximately every 4 hours for up to 24 hours and seek other signs and symptoms to determine whether an ACOC exists.
- Hypothermia may also indicate a possible ACOC.
- An electronic thermometer is the preferred method for taking temperature.
- Assess the patient for factors that may affect temperature, such as medications.

— *Blood Pressure*

- As soon as possible after admission, establish the patient's usual blood pressure (BP) range. (Normal range is approximately systolic 100–140 mmHg, diastolic 60–90 mmHg.[17])
- A change in BP is more often a symptom than a cause of an ACOC. Isolated BP elevations generally are not significant. Sustained elevations in systolic pressure should trigger further assessment. A BP change alone should not trigger a call to the practitioner without additional signs or symptoms (e.g., sustained elevation, new neurological symptoms).
- A decrease in systolic BP ≥20 mmHg when moving from a prone to a seated position or from a seated to a standing position signals orthostatic hypotension.[15]
- Any significant decrease in BP may signal an ACOC (e.g., systolic BP <100 mmHg if baseline is 110 mmHg, decline in BP accompanied by other symptoms such as dizziness, decline ≥15 mm in systolic BP, combination of pulse >100 beats per minute [BPM] and/or systolic BP <100 mmHg).[18]

— *Pulse*

Normal pulse ranges from approximately 60–100 BPM, but this can vary by about 10%. The following clinical presentations may indicate an ACOC and should be assessed further:

- Sustained change from normal range
- Change in usual pulse rhythm or regularity
- Pulse >120 BPM or <50 BPM
- Pulse >100 BPM combined with other symptoms (e.g., palpitations, dyspnea, or dizziness)

Pain

The following may indicate an ACOC and should be assessed further:

- Pain worsening in severity, intensity, or duration, and/or occurring in a new location
- New onset of pain associated with trauma
- New onset of pain greater than 4 on a 10-point scale (for more information about pain scales, please refer to AMDA's clinical practice guideline Pain Management in the Long-Term Care Setting[b])

Weight/Eating Patterns

- An abrupt change in appetite may indicate an ACOC before a significant change in weight occurs.
- Rate of weight gain or loss may be a more important indicator of a possible ACOC than amount of weight gain or loss.
- A change in intake patterns (e.g., consuming <75% of all meals in 24 hours or <25% of any one meal) should trigger additional evaluation for a possible ACOC.
- In documentation of intake, identify both solid and liquid intake in as much detail as possible.
- Evaluate signs and symptoms that may suggest fluid imbalance (e.g., edema or change in edema).
  - Acute, rapid weight gain may indicate an ACOC that is accompanied by fluid accumulation (e.g., acute CHF).
  - Acute, rapid weight loss over several days should trigger concern about a hydration emergency.

  (For more information about fluid imbalance, please refer to AMDA's 2001 clinical practice guideline Dehydration and Fluid Maintenance.[c])

Level of Consciousness

- Level of consciousness (LOC) should be distinguished from aspects of cognition such as orientation and memory.
- Levels of consciousness are alert, drowsy/lethargic, stuporous, and comatose.
- The following may indicate an ACOC and should be assessed further:
  - Frequent fluctuations in LOC
  - A reduction of one level or more in LOC (e.g., from alert to lethargic, or from lethargic to stuporous)
  - Hypersomnolence (more sleepy than usual or sleepy for most of the day)

Weakness

- New onset of weakness or significant change from baseline may indicate an ACOC and should be assessed further.
- Classify weakness as generalized or localized and describe in detail.

Falls

The following may indicate an ACOC and should be assessed further:

- Repeated falls on the same day
- Recurrent falls over several days to weeks
- New onset of falls not attributable to a readily identifiable cause
- A fall with consequent change in neurological status, or findings suggesting a possible injury

(continues on next page)

TABLE 10.
(continued)

Change in Elimination Patterns

The following may indicate an ACOC and should be assessed further:

- Appearance of frank blood in stool, urine, or vomit
- Abrupt change in frequency of urination or defecation
- Frequent loose stools (three or more in 24 hours)
- Worsening incontinence of bowel or bladder

Behavioral Symptoms

- Significant change in nature or pattern of usual behavior
- New onset of resistance to care
- Abrupt onset or progression of significant agitation or combative behavior
- Significant change in affect or mood
- Violent/destructive behaviors directed at self or others

Cognitive Symptoms

- Abrupt onset of or increase in confusion
- Onset of hallucinations, delusions, or paranoia
- Significant fluctuations in level of confusion during the day or over several days

Functional Symptoms

- Sudden or persistent decline in function (i.e., ability to perform ADLs)

[b] American Medical Directors Association Pain Management in the Long-Term Care Setting. Clinical Practice Guideline. Columbia, MD.
[c] American Medical Directors Association. Dehydration and Fluid Maintenance. Clinical Practice Guideline. Columbia, MD.