# Hydration Status Critical Element Pathway

## Use

Use this protocol for a sampled resident with the potential for, or identified with, hydration issues, such as not being able to reach, pour, and drink without assistance.

## Procedure

- [ ] Briefly review the assessment, care plan, and orders to identify facility interventions and to guide observations to be made.
- [ ] Corroborate observations by interview and record review.

## Observations

### If the resident is still in the facility:

Observe whether staff consistently implement the care plan over time and across various shifts. Staff are expected to assess and provide appropriate care for residents from the day of admission. During observations of the interventions, note and/or follow up on deviations from the care plan as well as potential negative outcomes, including but not limited to the following:

- [ ] Observe to determine whether staff provide care in accord with the care plan. Note and follow up on negative outcomes and deviations from the care plan or accepted standards of practice. Note any signs that might indicate an altered hydration status, such as:
  - Decreased or absent urine output;
  - Decreased tears, complaints of dry eyes;
  - Poor oral health (including obvious dental problems);
**Hydration Status Critical Element Pathway**

**Observations**

- Dry chapped lips, tongue dryness, longitudinal tongue furrows, dryness of the mucous membranes of the mouth (resident may be mouth-breather that may mimic or contribute to dehydration); and
- Sunken eyes.

In addition, note whether the resident’s level of alertness and functioning permits oral intake, whether assistive devices and call bells are available for the resident who is able to use them, and whether staff provide assistance for the resident who is dependent upon staff for care. Note, for example, whether:

- The resident is resistant to assistance or refuses liquids and how staff respond;
- The resident is receiving therapy or restorative care to improve swallowing or feeding skills, if the comprehensive assessment indicates the resident has deficits and restorative potential;
- The extent and type of assistance during and in-between meals:
  - Promotes resident dignity and maintains resident’s rights (resident’s appearance, staff approach to the resident); and
  - Meets the resident’s needs and follows rehabilitation and restorative care schedules and instructions including the use of adaptive equipment; positioning to avoid aspiration of fluids; positioning at the table; cueing or totally feeding; etc.

**NOTE:** If you observe the resident being assisted by a staff member to drink and the resident is having problems with drinking, determine whether the staff member who is assisting the resident is a paid feeding assistant. If so, follow the procedures at F373.

- Staff are alert to reduced fluid intake and the nature of the staff response, including the types of alternative approaches utilized or substitutes offered.
**Observations**

Determine:

- Whether containers have fresh water (with or without ice according to resident preference), and a drinking glass/cup, or straw are available in the room and accessible to the resident, unless the resident is on fluid restriction or has swallowing precautions that would contradict the use of a straw (or for the dependent resident, staff offer assistance and encourage the resident to take fluids at each encounter, or on a routine basis);

- Whether fluids are provided at meal times and the resident is encouraged to drink them;

- If the resident is on fluid restrictions, how the restriction is monitored;

- If the resident has dysphagia, what approaches are being used to ensure adequate fluid intake; and

- Whether environmental issues such as excessive heat may be contributing factors.

**Notes:**
## Resident/Representative Interview

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<tr>
<th>Question</th>
<th>Notes:</th>
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<tr>
<td>Interview the resident and/or family or responsible party (as appropriate) to determine:</td>
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<tr>
<td>☐ The level of involvement in the development of the care plan and goals, and whether the interventions reflect resident choices, preferences, fluid restrictions, allergies, and intolerances;</td>
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<tr>
<td>☐ Whether care and services are provided as written, including the type of assistance/encouragement provided at meal times (e.g., cues, hand-over-hand, or extensive assistance) and at intervals to provide assistance/encouragement for fluid intake, and whether it is sufficient to meet needs;</td>
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<td>☐ Whether necessary adaptive equipment is available for use;</td>
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<td>☐ If the resident is on a special program for rehabilitation and restorative care, whether schedules and instructions were provided and are followed by staff;</td>
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<td>☐ Whether the resident has demonstrated or complained of persistent fatigue, lethargy, muscle weakness or cramps, headaches, dizziness, recent nausea, vomiting, diarrhea, constipation and/or impactions, or acute illness;</td>
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<td>☐ Whether there has been a condition change, a change in cognition (e.g., increasing and/or sudden confusion), an improvement or decline in condition, recent acute illness, is in a hospice program, or is imminently at the end of life;</td>
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<td>☐ If fluids are refused, whether other interventions or substitutions were offered and whether staff provided counseling on alternatives and potential consequences of refusing fluid;</td>
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<td>☐ Whether there is poor fluid intake because the resident &quot;can't keep anything down,&quot; lacks a sense of thirst, has difficulty getting to or using the bathroom, or there is a lack of staff assistance, etc.;</td>
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<td>Resident/Representative Interview</td>
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<td>□ Whether there are any concerns regarding how the fluids taste, variety, temperature, frequency of fluids offered, etc.;</td>
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<td>□ Whether the resident takes medications that may affect taste, such as chemotherapy, digoxin, or antibiotics and whether there have been changes in medications recently; and</td>
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<tr>
<td>□ Whether the resident is experiencing oral or other pain that might interfere with fluid consumption and how it is managed.</td>
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## Hydration Status Critical Element Pathway

### Staff Interviews

Interview staff on various shifts when concerns about hydration have been identified. Interview staff to determine:

- How staff are monitoring the resident’s fluid intake, including enteral feeding;
- Whether staff are aware of any evidence of potential hydration deficits, for example:
  - The resident's skin lacks its normal elasticity and sags back into position slowly when pinched up into a fold (slow retraction may also be due to loss of elasticity associated with aging);
  - The resident has recent upper body muscle weakness, confusion, speech difficulty;
  - The resident has a reduced sense of thirst (may be common among older adults);
  - The presence of episodes of vomiting, frequent urination, hard or impacted stools and/or episodes of diarrhea, indications of acute illness such as sweating and/or fever, deep rapid breathing, or an increased heart rate; and
  - Resident has poor intake of fluids.
- Whether staff are aware of any limitations or other factors affecting the resident’s hydration. For example:
  - Difficulty getting to or using the bathroom (especially if requires staff assistance);
  - Medications (e.g., diuretics);
  - Limited intake of fluids due to a physician ordered restriction (ESRD); or
  - Resident is imminently at the end of life.
- Whether staff are aware of facility-specific guidelines/protocols about what, when, and to whom to report changes in fluid intake.

### Notes:

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**FORM CMS–20092 (7/2015)**
## Hydration Status Critical Element Pathway

### Assessment

- Review the RAI and other documents such as history and physical; height and weight history; nutritional assessment; physician orders; progress notes; therapy notes if applicable; records of fluid consumption, if available; and other progress notes or records that may have information regarding the assessment of the resident’s hydration status, underlying factors affecting the status, and whether those factors can and should be modified to improve the status. Determine whether the assessment included, as appropriate:
  - Baseline hydration status indicators that include height, weight, and body mass index (BMI);
  - A calculation of fluid needs based on clinical condition (and calculation of free water for residents being fed by a naso-gastric or gastrostomy tube);
  - Adequacy of fluid intake, including significant changes in the resident’s overall intake in the last 90 days or since the last assessment was completed;
  - New or existing conditions or diagnoses that may affect overall intake such as:
    - Malnutrition, dehydration, cachexia, or failure-to-thrive;
    - Decreased kidney function or urine output, renal disease;
    - Decreased thirst perception, increased thirst, change in appetite, anorexia;
    - Cognitive and/or functional impairment (e.g., dysphagia, dependency on the staff for ADLs, inability to communicate needs);
    - Terminal, irreversible, or progressive conditions (e.g., incurable cancer, severe organ injury or failure, acquired immunodeficiency syndrome);
    - Constipation, impactions and/or diarrhea;

### Notes:
### Hydration Status Critical Element Pathway

#### Assessment

- Pressure ulcers and other chronic wounds, fractures;
- COPD, pneumonia, diabetes, cancer, hepatic disease, congestive heart failure, infection, fever, nausea/vomiting, orthostatic hypotension, hypertension;
- Psychiatric disturbances, significant changes in behavior or mood; and
- Lethargy or confusion.

- A hydration issue/deficit and lab values which may suggest dehydration (such as ratios of blood urea nitrogen to creatinine of 25 or more; or a serum sodium level greater than 148 mmol per L), efforts to address the issue (e.g., IV hydration) and the nature of the deficit:
  - Isotonic dehydration-a balanced loss of water and sodium typically resulting from a decreased intake, refusal to consume food and water, or large volume losses caused by diarrhea or vomiting;
  - Hyponatremic dehydration-a loss of more sodium than water, which has numerous etiologies, but is often due to the use of diuretics; or
  - Hypertonic dehydration-a loss of more water than sodium resulting in elevated serum sodium concentrations is often observed in residents with fever, since insensible water loss exceeds the ability to replace water through oral intake.

- Factors contributing to or causing the resident to refuse or resist care and alternative efforts to find means to address hydration needs;
- Purposeful restriction of fluid intake and/or not consuming all or almost all liquids provided;
### Hydration Status Critical Element Pathway

**Assessment**

- Problems with the teeth, mouth, or gums (for example, oral cavity lesions, mouth pain, decayed teeth, or poorly fitting dentures); various causes of swallowing problems;

- Determine whether there was a "significant change" in the resident's condition and whether the facility conducted a significant change comprehensive assessment within 14 days. A "significant change" is a decline or improvement in a resident's status that:
  1. Will not normally resolve itself without intervention by staff or by implementing standard disease-related clinical interventions, is not "self-limiting"
  2. Impacts more than one area of the resident's health status; and
  3. Requires interdisciplinary review and/or revision of the care plan.

If there was a "significant change" in the resident's condition and the facility did not conduct a significant change comprehensive assessment within 14 days, initiate **F274, Resident Assessment When Required**. If a comprehensive assessment was not conducted, also cite F272.

1. **If the condition or risks were present at the time of the required comprehensive assessment, did the facility comprehensively assess the resident's physical, mental, and psychosocial needs to identify the risks and/or determine underlying causes (to the extent possible) of the resident's hydration status?**
   - Yes
   - No  

- **NA, condition/risks were identified after completion of the required comprehensive assessment and did not meet the criteria for a significant change MDS**

**NOTE:** Although Federal requirements dictate the completion of RAI assessments according to certain time frames, standards of good clinical practice dictate that the assessment process is more fluid and should be ongoing.
## Hydration Status Critical Element Pathway

### Assessment

*The comprehensive assessment is not required to be completed until 14 days after admission. For newly admitted residents, before the 14–day assessment is complete, the lack of sufficient assessment and care planning to meet the resident’s needs should be addressed under F281, Professional Standards of Quality.*

### Care Planning

If the comprehensive assessment was not completed (CE#1 = No), mark CE#2 “NA, the comprehensive assessment was not completed.”

- Determine whether the facility developed a care plan that was consistent with the resident’s specific conditions, risks, needs, behaviors, preferences, and current standards of practice and included measurable objectives and timetables with specific interventions/services to prevent or address dehydration with plans to meet the fluid needs identified on the assessment.

- If the care plan refers to a specific facility treatment protocol that contains details of the treatment regimen, the care plan should refer to that protocol and should clarify any major deviations from or revisions to the protocol for this resident. The treatment protocol must be available to the caregivers and staff should be familiar with the protocol requirements.

- Review the care plan to determine whether the plan is based upon the goals, needs, and strengths specific to the resident and reflects the comprehensive assessment. Determine whether the care plan addresses, as appropriate:
  - Efforts to seek alternatives to address the needs identified in the assessment, if the resident refuses or resists staff interventions to consume fluids;

### Notes:
## Hydration Status Critical Element Pathway

### Care Planning

- Interventions used to assist with hydration efforts to provide fluid intake between and with meals, including alternative methods of providing fluids (gelatins, soups, broths, frozen drinks, etc.) if concern with fluid intake is identified;

- **NOTE:** In general, to determine fluid requirements, multiply the resident's body weight in kg times 30cc (2.2 lbs=1kg). (Assessment and care planning must take into consideration the clinical condition of the resident in order to prevent overhydration, which could lead to congestive heart failure or death.)

- Advance directives and other relevant declarations of wishes regarding aggressive support which honor the resident’s wishes regarding the withholding or withdrawing of undesired interventions;

- If palliative and/or end of life care is appropriate and goals are consistent with the resident’s wishes, interventions to address dehydration, good mouth care, preservation of resident dignity, and promotion of comfort rather than specific fluid intake goals;

- Preventive care that promotes a specific amount of fluid intake each day to prevent dehydration rather than treat signs of dehydration when these appear;

- Methods to monitor the intake of fluids daily and when to report deviations;

- The provision of hydration intake for a resident with cognitive impairment or dysphagia, minimizing aspiration risk, and providing sufficient time and assistance to consume fluids, including the degree of staff assistance needed to meet hydration needs;

- Interventions that honor individual preferences and accommodate the resident’s fluid restrictions and intolerances;
Hydration Status Critical Element Pathway

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<th>Care Planning</th>
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<tr>
<td>▪ Rehabilitative/restorative interventions and specific measures to promote involvement in improving functional skills;</td>
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<td>▪ Assistive devices needed for drinking skills; and</td>
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<td>▪ Environmental concerns that may affect accommodating the needs of the resident, such as access to tables and equipment to allow for intake, liberal use of fans or air conditioners in hot weather, appropriate clothing and supplemental efforts to retain body heat in drafts and winter.</td>
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☐ If care plan concerns are noted, interview staff responsible for care planning as to the rationale for the current plan of care.

2. Did the facility develop a plan of care with measurable goals and interventions to address the care and treatment for hydration needs, in accordance with the assessment, resident’s wishes, and current standards of practice?

☐ Yes  ☐ No  F279

☐ NA, the comprehensive assessment was not completed

The comprehensive care plan does not need to be completed until 7 days after the comprehensive assessment (the assessment completed with the CAAS). Lack of sufficient care planning to meet the needs of a newly admitted resident should be addressed under F281, Professional Standards of Quality.
Hydration Status Critical Element Pathway

### Care Plan Implementation by Qualified Persons

Observe care and interview staff over several shifts and determine whether:

- [ ] Care is being provided by qualified staff, and/or
- [ ] The care plan is adequately and/or correctly implemented.

#### 3. Did the facility provide or arrange services to be provided by qualified persons in accordance with the resident’s written plan of care?

[ ] Yes  [ ] No  **F282**

- [ ] NA, no provision in the written plan of care for the concern being evaluated

**NOTE:** If there is a failure to provide necessary care and services, the related care issue should also be cited when there is actual or potential outcome.

### Care Plan Revision

*If the comprehensive assessment was not completed (CE#1 = No), OR, if the care plan was not developed (CE#2 = No), mark CE#4 “NA, the comprehensive assessment was not completed OR the care plan was not developed.”*

- [ ] Determine whether the staff have been monitoring the resident's response to interventions for prevention and/or treatment, have evaluated, and revised the care plan based on the resident’s response, outcomes, and needs.

- [ ] Review the record and interview staff for information and/or evidence that:
  - Continuing the current approaches meets the resident’s needs, if the resident has experienced recurring hydration deficits; and
  - The care plan was revised to modify the prevention strategies and to address the presence and treatment of newly identified hydration problems.

**Notes:**
## Care Plan Revision

4. Did the facility reassess the effectiveness of the interventions and review and revise the plan of care (with input from the resident or representative, to the extent possible), if necessary, to meet the needs of the resident?  
- Yes  
- No  
- F280

- NA, the comprehensive assessment was not completed OR the care plan was not developed

## Provision of Care and Services

For a resident who is not consuming sufficient fluid **intake** to maintain proper hydration and health, the facility is in compliance with this requirement, if staff have:

- Recognized and assessed factors placing the resident at risk for dehydration due to not being able to consume fluids, including specific conditions, causes and/or problems, needs and behaviors;
- Defined and implemented interventions for the provision of fluids, in accordance with resident needs, goals, and recognized standards of practice;
- Monitored and evaluated the resident’s response to the efforts; and
- Revised the approaches as appropriate.

5. Based on observation, interviews, and record review, did the facility provide each resident with sufficient fluid intake to maintain proper hydration and health?  
- Yes  
- No  
- F327

### Notes:
Hydration Status Critical Element Pathway

Concerns with Independent but Associated Structure, Process, and/or Outcome Requirements

During the investigation of care and services provided to meet the needs of the resident, the surveyor may have identified concerns with related structure, process and/or outcome requirements, such as the examples listed below. If an additional concern has been identified, the surveyor should initiate the appropriate care area or F tag and investigate the identified concern. Do not cite any related or associated requirements before first conducting an investigation to determine compliance.

**Notification of Change** — Determine whether staff:

- Consulted with the physician regarding significant changes in the resident’s condition, including the need to alter treatment significantly or failure of the treatment plan to prevent or address hydration, weight loss/gain, naso-gastric or gastrosomy tube services/care; and

- Notified the resident’s representative (if known) of significant changes in the resident’s condition in relation to the development of a pressure ulcer, or a change in the resident’s condition with these issues.

**F271, Admission Orders** — Determine whether the facility received physician orders for provision of immediate care before conducting the comprehensive assessment and developing an interdisciplinary care plan.

**F278, Accuracy of Assessments** — Determine whether staff that are qualified to assess relevant care areas and are knowledgeable about the resident’s status, needs, strengths, and areas of decline conducted an accurate assessment.

**F281, Professional Standards of Quality** — Determine whether the services provided or arranged by the facility met professional standards of quality. Professional standards of quality is defined as services that are provided according to accepted standards of clinical practice. Interview health care practitioners and professionals if the

| Notes: |  |
Hydration Status Critical Element Pathway

**Concerns with Independent but Associated Structure, Process, and/or Outcome Requirements**

Interventions defined or care provided appears not to be consistent with recognized standards of practice, such as:

- Observations that indicate that fluids are held to control incontinence episodes, or alternatives are not provided if resident refuses fluids served;
- Environmental conditions, such as excessive heat, which staff have not evaluated and provided the use of fans or air conditioners in hot weather, or extra fluids; or have not addressed the reduced humidity in cold winter weather.

If the interventions defined or care provided appear not to be consistent with recognized standards of practice, interview one or more health care practitioners and professionals as necessary (e.g., physician, charge nurse, director of nursing, dietitian) who, by virtue of training and knowledge of the resident, should be able to provide information about the causes, treatment and evaluation of the resident’s condition or problem. If there is a medical question, contact the physician if he/she is the most appropriate person to interview. If the attending physician is unavailable, interview the medical director, as appropriate. Depending on the issue, ask about:

- How it was determined that chosen interventions were appropriate;
- Risks identified for which there were no interventions;
- Changes in condition that may justify additional or different interventions;
- How they validated the effectiveness of current interventions;
- How they assure staff demonstrate an understanding of and comply with the facility’s system for providing hydration programs, (for example policies/procedures, staffing requirements, how facility identifies problems and implements action plans, how facility monitors and evaluates the resident’s...
### Hydration Status Critical Element Pathway

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<th>Concerns with Independent but Associated Structure, Process, and/or Outcome Requirements</th>
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<tr>
<td>responses, etc.); and</td>
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<tr>
<td>- Who monitors for the provision of assistance for encouraging sufficient fluid intake and for the frequency of review and evaluation.</td>
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</table>

In addition, review staffing if observations indicate that meal service is rushed, residents are not properly positioned, offered fluids, offered timely assistance; or there is a lack of programs to offer fluids between scheduled meal services.

- **Sufficient Nursing Staff** — Determine whether the facility had qualified staff in sufficient numbers to assure the resident was provided necessary care and services, based upon the comprehensive assessment and care plan, to provide fluids.

- **F373, Paid Feeding Assistants** — Determine whether:
  - The paid feeding assistant who is assisting this resident has completed a State-approved training course;
  - Use of the feeding assistant is consistent with State law;
  - The feeding assistant is working under the supervision of a registered nurse or licensed practical nurse;
  - This resident is eligible to receive assistance from a paid feeding assistant due to an absence of complicated feeding problems and based on the charge nurse’s assessment and resident’s latest assessment and plan of care.

- **F385, Physician Supervision** — Determine whether the physician has assessed and developed a treatment regimen relevant to hydration issues and responded appropriately to the notice of changes in condition.
Hydration Status Critical Element Pathway

### Concerns with Independent but Associated Structure, Process, and/or Outcome Requirements

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<tr>
<th><strong>F501, Medical Director</strong> — Determine whether the medical director:</th>
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<tr>
<td>- Assisted the facility in the development and implementation of policies and procedures for fluid requirements, and that these are based on current standards of practice; and</td>
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<td>- Interacts with the physician supervising the care of the resident, if requested by the facility, to intervene on behalf of the resident with fluid issues.</td>
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<tr>
<th><strong>F514, Clinical Records</strong> — Determine whether the clinical records:</th>
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<tr>
<td>- Accurately and completely document the resident's status, the care and services provided in accordance with current professional standards and practices; and</td>
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<tr>
<td>- Provide a basis for determining and managing the resident's progress, including response to treatment, change in condition, and changes in treatment.</td>
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