

COTTONWOOD HEALTHCARE CENTER
625 COTTONWOOD STREET, WOODLAND, CA 95695

Citation Number: 030002916

Citation Date: 1/5/2007

Violation Date: 3/20/2005

Class: AA

Penalty: \$ 90,000.00

72311. Nursing Service-General

(a): Nursing service shall include, but not be limited to, the following: (1): Planning of patient care, which shall include at least the following: (A): Identification of care needs based upon an initial written and continuing assessment of the patient's needs with input, as necessary, from health professionals involved in the care of the patient. Initial assessments shall commence at the time of admission of the patient and be completed within seven days after admission.

72315. Nursing Service-Patient Care

(h): Each patient shall be provided with good nutrition and with necessary fluids for hydration.

72523. Patient Care Policies and Procedures

(a): Written patient care policies and procedures shall be established and implemented to ensure that patient related goals and facility objectives are achieved.

On 10/12/05 an unannounced facility visit and subsequent visits on 10/26/05, 11/10/05, 4/14/06 and 4/28/06 were conducted to investigate complaint number CA00041684 regarding patient care and services.

The Department determined that **the facility failed to:**

1. Provide a continuing assessment of Patient A's hydration as identified by the 8/06/04 "at risk for dehydration" care plan problem that required staff to monitor for signs and symptoms of dehydration, monitor fluid intake and output and encourage increased oral fluids to maintain adequate hydration. 2. Follow the facility's "Intake and Output Management" policy and procedure (undated) that required staff to maintain an accurate record of Patient A's fluid intake and output, notify the physician of symptoms of dehydration and notify dietary services to increase Patient A's fluid intake. 3. Provide necessary fluids to maintain Patient A's hydration and prevent development of urinary tract infections. From 3/10/05 to 3/19/05 (10-day period before transfer to the general acute care hospital (GACH) on 3/20/05), Patient A required total assistance with eating and only consumed an average of 34.2% of daily meals. Staff did not provide extra fluids to maintain hydration and Patient A was subsequently transferred to the GACH for evaluation of signs and symptoms of dehydration.

These failures resulted in Patient A developing dehydration that required transfer to the GACH on 3/20/05 with subsequent diagnoses that included pure water dehydration (a state of dehydration caused by insufficient fluids) and significant hyponatremia (elevated serum sodium). Patient A expired on 3/22/05 with immediate cause of death listed as sepsis syndrome and the underlying condition leading to cause of death as urinary tract infection.

Patient A's facility medical record documented an 89 year old female admitted to the facility on 8/06/04 with diagnoses that included osteoporosis, agitation and senile dementia.

The 1/31/05 Minimum Data Set (MDS, a tool used to assess a patient's physical and psychosocial functioning) described that Patient A required limited assistance with eating, had moderately impaired cognitive skills (related to dementia) and could usually make self understood. Physician's orders included a fortified pureed diet (ordered 9/23/04) and a urinary catheter (ordered 2/14/05).

Patient A's care plan contained a 8/06/04 problem for "at risk for dehydration" related to dementia with goals and interventions that included "will be free from s/s [signs and symptoms] of dehydration QD [daily]...", "monitor for s/s of dehydration (increased confusion, dry mucous membranes, poor skin turgor), monitor intake and output as ordered, labs as ordered and encourage increased oral fluids.

The facility's Intake and Output Management policy and procedure (undated) described, in part, management of patients who require monitoring of intake and output: "The purpose of this procedure is to maintain an accurate record of the Patient's intake and output." "The following Patient's require measurement of intake and output every eight hours, including a 24 hour total and weekly evaluation...All Patients with indwelling catheters for 30 days if adequate output may discontinue." "If the Intake is not adequate and the Patient has excessive signs and symptoms of dehydration or fluid volume overload the physician is to be notified and corrective measure taken." "Suggested corrective measure to increase fluid intake may include and are not limited to: notification of dietary to increase fluid intake with or between meals. Licensed nurse to offer and [sic] additional amount of fluid each shift and place amount accepted on the MAR [Medication Administration Record]."

The Registered Dietitian (RD) documented on a 9/02/04 initial nutritional assessment that Patient A weighed 100.1 lbs. (45.5 kg) and had an estimated fluid need of 1,365 cc per day (weight in kg times 30 cc/kg/day). On 3/04/05, the RD documented that Patient A was provided with a fortified pureed diet with nectar thick liquids, thickened ice cream with breakfast and lunch and vitamin and mineral supplementation. The RD wrote that Patient A weighed 102 lbs., intake "varies 10-100%, average 60%," and laboratory results (blood chemistries) on 2/24/05 were "within normal limits" except for an elevated blood urea nitrogen (BUN) level of 24.

On 3/10/05 staff documented in the weekly Nurse's Progress Note that Patient A's communication had "deteriorated," was "mostly non-verbal unless being handled," required "total dependence" to eat and consumed an average of 75% of foods. On 3/17/05 Licensed Nurse (LN) 3 documented in the weekly Nurse's Progress Note that Patient A required "total dependence" to eat, consumed an average of 75% of foods, hydration status was "fair" and acceptance of diet was "poor."

Patient A's March 2005 activities of daily living (ADL) record documented meal percentage intakes from 3/10/05 to 3/19/05 (10 days) for breakfast, lunch and dinner. The ADL record showed that Patient A refused breakfast for 9 out of 10 days, refused lunch for 7 out of 10 days, and consumed 70% to 100% of dinner. Based on the documented meal percentage intake from 3/10/05 to 3/19/05 (for 9 days, 3/16/05 meal percentages incomplete), Patient A's average daily meal percentage intake for breakfast, lunch and dinner was just 34.2%.

LN 3 stated during a 4/28/06, 3:10 p.m. interview the following regarding Patient A's care at the facility: Regarding her entry of "75%" average of meals consumed in the 3/17/05 Nurse's Progress Note, LN 3 said that the 75% was determined by asking the certified nursing assistant (CNA) staff how much the patient consumed and by looking at the CNA record. After reviewing the March 2005 ADL record, LN 3 said that her entry of 75% average of meals consumed was not accurate. A hydration status of "fair" (as marked on the 3/17/05 Nurse's Progress Note) means that a patient has dry mucous membranes. LN 3 was not sure if Patient A had signs and symptoms of dehydration on 3/17/05. A "poor" acceptance of diet (as marked on the 3/17/05 Nurse's Progress Note) means that the patient refused the diet. LN 3 said that a referral to the interdisciplinary team (IDT) or RD should have been made for a "poor" acceptance of diet. LN 3 did not recall making a referral. A patient refusal of meals is a concern and should be discussed with the nursing supervisor and dietary staff. LN 3 did not recall discussing Patient A's refusal of meals with other staff. If a patient has a urinary catheter, then intake and output should be "watched" related to the meal refusal and documented on the intake and output form. A physician's order is not required to monitor urinary catheter output if there is a concern about nutrition/fluid status. LN 3 could not locate in the medical record documentation of monitoring of Patient A's intake and output in March 2005. A patient with a new urinary catheter, as per the facility's policy, should receive urine output monitoring but LN 3 was not sure for how long.

The Dietary Supervisor (DS) stated during a 4/14/06, 9:20 a.m. interview (after reviewing Patient A's medical record) that the last dietary note in the medical record was on 3/04/05 (the RD note). The DS said that if Patient A had a decreased oral intake then she would expect nursing staff to notify the DS who would then notify the RD to assess the patient. The DS said that if Patient A was offered increased fluids then there would be specific documentation in the care plan and nutrition notes. The DS said that she was not aware of any increased fluid offered to Patient A in March 2005. The DS said that she had no recollection of nursing or other staff communication about Patient A's decreased oral intake in March 2005.

The RD stated during a 4/28/06, 1:00 p.m. interview that the estimated daily fluid needs for a patient with a history of dehydration may be in the range of 30 to 35 cc/kg/day depending on clinical condition (Patient A's documented weight on 3/08/05 was 102 lb. or 46.36 kg., and according to the RD's fluid parameters, Patient A would require up to 1,622 cc of fluid per day). The RD said that her 3/04/05 RD note was related to a routine skin review because of Patient A's pressure sores (Stage 4, 3.5 by 3.3 cm to the sacrum area; Stage 2, 1.0 by 0.5 cm to the right foot) and did not include assessment of dehydration because there were no reported signs and symptoms of dehydration. The RD said that if Patient A had a decreased oral intake, then that would be a concern and it would be ideal for nursing to check fluid intake and output. The RD stated that if Patient A had signs and symptoms of dehydration, then the RD would expect that Patient A would receive extra fluids.

The RD confirmed that the March 2005 ADL record showed percentages of meal intake but not fluid intake and output measurement. The RD said that a urinary catheter is a valuable tool to measure urine output to determine patient hydration status. The RD stated that based on Patient A's documented meal intake percentage in the ADL record from 3/09/05 to 3/20/05, the calculated average daily meal intake was about 33% and she would expect that nursing staff would notify the IDT staff or the RD about the decreased oral intake. The RD said that she received no communication from the facility about Patient A's status after she evaluated Patient A on 3/04/05.

Patient A's medical record did not document that staff monitored or assessed Patient A's fluid intake and urine output in February or March 2005 as required by the Intake and Output Management policy and procedure, even though Patient A had a urinary catheter in place since 2/14/05 and a daily average meal percentage intake of just 34.2% in the last 10 days of admission (3/10/05 to 3/19/05). Because staff failed to monitor Patient A's fluid intake, it was not possible to determine if Patient A received her estimated fluid requirement of up to 1,622 cc per day as calculated by the RD.

Furthermore, Patient A's medical record did not document that staff notified a physician or communicated with the RD when, beginning on 3/10/05, Patient A's condition deteriorated to mostly non-verbal communication, requiring total dependence to eat and having a poor acceptance of diet. In addition, staff did not document that Patient A was offered increased fluids as required by the dehydration risk care plan problem and the Intake and Output Management policy and procedure.

On 3/20/05, LN 2 documented in a Nurse's Note that Patient A had a decreased level of consciousness, responded verbally to painful stimuli, had a decreased intake, decreased output, skin turgor was poor and the urinary catheter had dark amber urine. LN 2 documented that the physician was notified and ordered transfer to the GACH for evaluation. LN 2 documented on a 3/20/05 transfer form that Patient A was transferred to the GACH for evaluation of "dehydration" and "deterioration."

LN 2 stated during interviews on 11/10/05 and 4/14/06 at 10:45 a.m. and 9:45 a.m. respectively that on 3/20/05, Patient A had decreased oral intake and urine output, poor skin turgor and thick amber urine, all signs of possible dehydration. LN 2 said that Patient A's physician was notified of the change in condition and Patient A was transported to the GACH by ambulance. In addition, LN 2 stated the following about Patient A's care at the facility: LN 2 confirmed that according to the medication administration record, she had cared for Patient A in the 4 days prior to the transfer to the GACH (3/17/05 to 3/20/05). Patient A had a urinary catheter with decreased urine output but intake and output was not measured. If Patient A's urinary catheter had been inserted in the last 30 days, then per facility protocol, fluid intake and output should have been measured. When asked about the meaning of Patient A's dehydration risk care plan goal of "free from signs and symptoms daily" LN 2 said that it means daily assessment of signs and symptoms of dehydration. LN 2 believes that she made daily dehydration assessments of Patient A on 3/17/05, 3/18/05 and 3/19/05 but made no record of a dehydration assessment because Patient A did not have any signs and symptoms of dehydration until 3/20/05. LN 2 did not recall if Patient A was offered extra fluids in the days before transfer, but said if it were done, then it should have been recorded in the medical record. Regarding the 3/17/05 entry in the weekly nurse's progress notes that Patient A's acceptance of diet was "poor," LN 2 said that a referral should have been made to dietary staff (to follow up on the patient's poor acceptance of diet) and the dietary referral should have been charted in the nurse's notes. LN 2 agreed that if Patient A was admitted to the GACH with a diagnosis of dehydration on 3/20/05, then a state of dehydration probably existed in the days before admission.

The Director of Nurses (DON) stated during interviews on 10/26/05, 11/10/05 and 4/14/06 at 2:15 p.m., 11:30 a.m. and 10:25 a.m. respectively, the following based on her review of Patient A's medical record: The undated Intake and Output Management policy and procedure was in effect at the time of Patient A's admission as confirmed by facility nursing staff. The medical record did not contain staff documentation of measurement of Patient A's fluid intake and output in February and March 2005. Signs and symptoms of dehydration may include dry mucous

membranes in the oral cavity, increased confusion, poor skin turgor, decreased fluid intake and for a patient with a urinary catheter, decreased urine output. Patient A's medical record in the last month (30-days or 2/20/05 to 3/20/05) of stay did not contain staff documentation of offering Patient A increased fluids, communication with dietary staff about Patient A's hydration status or communication with the physician regarding signs and symptoms of dehydration, including Patient A's poor oral intake, until 3/20/05. Patient A's care plan problem related to dehydration risk was not implemented by staff (interventions to assess for and prevent dehydration not performed by staff).

LN 1 (facility risk coordinator) stated during interviews on 11/10/05 and 4/14/06 at 10:15 a.m. and 9:05 a.m. respectively that staff recording of fluid intake and output did not require a physician's order and could be a nursing intervention for a patient with decreased oral intake and a urinary catheter (like Patient A) to determine adequate fluid status. LN 1 said that it was the facility's policy to monitor intake and output for 1 month for patients' who have a new urinary catheter. LN 1, after reviewing Patient A's medical record, confirmed that there was no fluid intake and output recorded for Patient A during the months of February and March, 2005.

The Merck Manual of Geriatrics, 3rd Edition described that dehydration is the most common fluid and electrolyte disturbance of the elderly and a history of factors including decreased food or fluid intake is common. Other dehydration factors include reduced thirst and impaired access to water due to neurologic or medical or surgical conditions (like Patient A's cognitive impairment related to dementia). "Nurses can help prevent dehydration by closely monitoring fluid balance in elderly patients."

Patient A's GACH medical record documented a 3/20/05 ambulance report that described Patient A's 3/20/05 transport from the facility to the GACH. The report identified that facility staff stated to the emergency medical technician (EMT) that "...pt. [patient] has refused food and liquid times 7 days."

The GACH physician documented on the 3/20/05 admission history and physical report the following related to Patient A's transfer and hydration at the time of arrival at the GACH: History of Present Illness: "I was contacted earlier today by staff at [the facility] and they informed me that the patient appeared to be "dehydrated." They also noted that she had an overall decreased level of consciousness ongoing for a least one week. She apparently has had very poor intake over the past week or so...In the emergency room the patient was found to have an abnormal chemistry panel demonstrating a sodium of 162 [elevated]." Impression: "pure water dehydration with subsequent significant hyponatremia [elevated serum sodium]."

According to the Merck Manual of Geriatrics, 3rd Edition, hyponatremia represents a condition of pure water loss. More severe hyponatremia (serum sodium concentrations > 152) may cause focal neurologic impairment like severe obtundation, stupor, coma, and seizures. Central nervous system manifestations are common and often lead to a depressed sensorium and chronic functional decline in patients who survive the acute episode.

The GACH general chemistry laboratory reports documented that on 3/20/05, Patient A's sodium level was elevated at 162 (normal range 136 to 145 mmol/L). On 3/22/05, after 2 days of treatment at the GACH, Patient A's sodium level returned to a normal level of 140.

A physician documented on the 3/23/05 Expiration Summary that Patient A's urinalysis (performed on 3/20/05) was consistent with pyuria and bacteriuria (UTI). On 3/21/05, Patient A

began having problems with hypotension (low blood pressure) that required fluid boluses. Patient A's condition continued to deteriorate and she expired on 3/22/05. Discharge diagnoses at the time of death included septic shock secondary to urinary tract infection, dehydration and secondary hypernatremia and severe dementia.

The Merck Manual of Geriatrics, 3rd Edition, described, in part that urinary tract infection (UTI) is a common problem in the elderly. Common risk factors include the use of a bladder catheter. Foreign bodies, most commonly indwelling bladder catheters (like Patient A's Foley catheter), promote bacterial growth. Bacteria proliferate in stagnant bladder urine (as found with decreased urine output related to dehydration), and clinically important bacteriuria (bacteria in the urine) becomes established. Severe UTIs, particularly those complicated by septicemia (blood infection) originating from the urinary tract (urosepsis), become more common with age, in part because of more frequent bladder catheterization. Urosepsis in elderly persons may give rise to high morbidity and mortality rates.

Patient A's death certificate documented expiration on 3/22/05 with immediate cause of death as sepsis syndrome and the underlying condition leading to cause of death as urinary tract infection. The death certificate listed other significant conditions contributing to death as Alzheimer's dementia, sacral decubitus ulcer, hypernatremia and renal insufficiency.

The Department determined that the facility failed to:

1. Provide a continuing assessment of Patient A's hydration as identified by the 8/06/04 "at risk for dehydration" care plan problem that required staff to monitor for signs and symptoms of dehydration, monitor fluid intake and output and encourage increased oral fluids to maintain adequate hydration.
2. Follow the facility's "Intake and Output Management" policy and procedure (undated) that required staff to maintain an accurate record of Patient A's intake and output, notify the physician of symptoms of dehydration and notify dietary services to increase Patient A's fluid intake.
3. Provide necessary fluids to maintain Patient A's hydration and prevent development of urinary tract infections.

From 3/10/05 to 3/19/05 (10-day period before transfer to the general acute care hospital (GACH) on 3/20/05), Patient A required total assistance with eating and only consumed an average of 34.2% of daily meals. Staff did not provide extra fluids to maintain hydration and Patient A was subsequently transferred to the GACH for evaluation of signs and symptoms of dehydration.

The Department determined that the above violations presented an imminent danger or substantial probability that death or serious harm would occur, and were a direct proximate cause of the death of Patient A.