

GUIDELINE FOR FLUID BALANCE AND SUPPORTING OPTIMAL HYDRATION IN ADULTS DURING HOSPITAL STAY

1. INTRODUCTION	3
2. AIM OF THE GUIDELINES	3
3. GUIDELINE SCOPE.....	3
4. GUIDELINES FOR FLUID BALANCE AND SUPPORTING OPTIMAL HYDRATION IN ADULTS DURING HOSPITAL STAY	3
5. STARTING A FLUID BALANCE CHART	4
6. COMPLETING A FLUID BALANCE CHART	5
7. WHEN TO REVIEW A FLUID BALANCE CHART	5
8. WHEN TO STOP A FLUID BALANCE CHART.....	6

1. Introduction

The purpose of this guideline is to raise staff awareness and provide clear standards in managing optimal hydration and maintaining effective fluid balance in the adult patient.

2. Aim of the Guidelines

The guidance aims to:

Prevent or reduce adverse consequences associated with patient dehydration by establishing an effective standard and management for optimal hydration.

Create one set method for recording detailed and accurate fluid input and output.

Support staff to determine a timely and appropriate rationale for starting and stopping a fluid balance chart.

Support person centred planning

3. Guideline scope

This document applies to all staff regardless of grade or profession who provide patient care in an inpatient clinical environment, including the taking and recording of clinical observations (vital signs).

4. Guidelines for fluid balance and supporting optimal hydration in adults during hospital stay

Studies have shown that dehydration is associated with poor clinical outcomes, including:

- constipation and subsequent medication
- confusion (with risks of falls and fractures)
- headaches
- urinary tract infections
- increased risk of pressure sores
- increased risk of heart disease
- hypotension and developing a venous thromboembolism (VTE)
- increased mortality
- increased hospital stay

Dehydration in individuals in hospital is often linked to those with cognitive impairment, changes in functional ability, taking certain medication such as

laxatives, diuretics or hypnotics, acute illness, diarrhoea and vomiting, haemorrhage, or stress arising from other factors.

In addition, thirst, the body's natural response to dehydration, has been shown to be impaired in older people, patients with stroke and Alzheimer's disease (RCN & NPSA,2007).

Additional measures must be taken to identify patients at risk of dehydration by using the red lids on the water jugs. This approach partners the red tray that signifies those patients at risk of malnutrition. Water jugs and cups must be placed within the patient's reach and assistance provided where required.

Local processes must be in place to ensure regular provision of drinking water is part of the daily ward/department routine and that water jugs are adequately cleaned and drinking water refreshed at least three times a day (RCN & NPSA, 2007).

Incorrect clinical interpretation of fluid balance charts is related with the general inconsistency and poor documentation of fluid balance charts, lack of education and competency (Daffurn et al,1994; Tang & Lee, 2010). The following standards of practice will apply to all staff involved in patient monitoring and recording of vital signs and fluid balance charts.

5. Starting a Fluid Balance Chart

Fluid balance charts must be completed for the following patients unless a decision has been made otherwise by a medical practitioner or a registered nurse. The variance must be documented in the patient's healthcare record.

- Scoring 3 or more on the SEWS.
- Patients discharged from ICU / HDU for a minimum of 48 hours post transfer.
- Patients with a temperature greater than 38 Centigrade.
- Individuals who are nil by mouth more than 12 hours.
- Individuals with diarrhoea and / or vomiting.
- Post-operative patients as part of routine post-surgery patient management.
- Patients experiencing any excessive fluid loss from surgical drains/ cavity drains, wounds /stomas.
- Individuals on Intravenous Fluids and / or parenteral nutrition
- Individuals on a restricted fluid intake, with known or suspected renal impairment or cardiac conditions i.e. electrolyte imbalance, or upward trend in
- urea and creatinine etc.
- Patients with urinary catheters, except for those patients with long term catheters who do not have an acute onset of illness.
- All sickle cell disease patients should have a carefully maintained fluid balance chart for the duration of their admission (NCEPOD, 2008).

- Patients who are not catheterised and it is documented on the observation chart that they have not passed urine within 12 hours.
- When any doubt exists over fluid status.

This is not an exhaustive list and there may be other indications for starting a fluid balance chart.

6. Completing a Fluid Balance Chart

The patient's intake and output must be recorded accurately. Ambiguous comments, for e.g. pu'd ++ is not acceptable.

7. When to review a Fluid Balance Chart

Patient monitoring and review of the daily fluid balance chart should take place as often as required. Nursing staff should include in the shift handover a clear indication of the patient requiring fluid balance monitoring and any who present concerns as this may mean reviewing the patient and completing the chart more regularly.

Staff must refer immediately to the senior clinical team any concerns over a patient's fluid balance, if their condition deteriorates or their MEWS triggers any concerns. This includes:

- the patient has poor oral intake and / or poor urine output (<0.5mL/kg/hr)
- the patient has a urine output greater than 2mL/kg/hr and no diuretics have been given.
- The patient is nil by mouth but replacement Intravenous Fluids have not been prescribed.
- Stoma / drain output greater than 1000 mLs in 24 hours.

Urine output should not be used as the sole indicator of dehydration and any of the following clinical signs must result in a positive MEWS score.

- Dry mouth (xerostomia)
- Chapped / dry lips
- Dry eyes
- Dry, loose skin with lack of elasticity
- Sunken features, particularly the eyes
- Clammy hands and feet
- Headaches
- Light-headedness or dizziness
- Sudden tiredness, confusion and irritability
- Loss of appetite
- Burning sensation in the stomach, abdominal pain
- Concentrated, dark urine with a strong odour.

When patients are transferred to other wards / departments the verbal and written documentation / handover must include whether the patient is on a fluid balance chart and if there are any concerns.

8. When to stop a fluid balance chart

Fluid Balance monitoring should only stop when the underlying reason for starting it has resolved, or the individual commences the end of life care pathway. Each patient must be assessed thoroughly before stopping their fluid balance chart and it remains the clinical decision of a senior clinician or the nurse in charge. The rationale for stopping fluid balance must be documented in the patients' records.

Incorrect or poorly completed fluid balance charts and ineffective monitoring can result in detrimental effects on patient outcomes including; delayed medical review, unexpected patient deterioration, over or under- prescribing of fluids, prolonged hospital stay and in some cases, result in patient morbidity and mortality (NICE, 2007).