Support for commissioning for intravenous fluid therapy in adults in hospital

Overview and resources

This resource helps with quality improvement by providing information on key clinical, cost and service-related issues to consider during the commissioning process and signposting other implementation support tools.

More information about NICE support for commissioning

Use the NICE pathway on intravenous fluid therapy in adults in hospital for fast access to NICE guidance and implementation resources to support commissioning for this condition.

Why the quality standard on intravenous fluid therapy in adults in hospital is needed.

Who is responsible for commissioning for intravenous fluid therapy in adults in hospital?

- Clinical commissioning groups (CCGs) commission most of the acute care for their local population.
- NHS England commissions highly specialised acute and tertiary care at a national level.

Who should clinical commissioning groups and NHS England work with?

- Strategic/clinical networks
• Health and wellbeing boards

• Providers of hospital-based care in partnership to improve the quality of care for adults receiving intravenous fluid therapy in hospital.

More information about using NICE quality standards to improve practice

The quality statements and their commissioning and resource implications

Quality statement 1: Intravenous fluids lead

| Hospitals have an intravenous (IV) fluids lead, who has overall responsibility for training, clinical governance, audit and review of IV fluid prescribing, and patient outcomes. |

Rationale

The IV fluids lead in a hospital can promote best practice, ensuring that healthcare professionals are trained in prescribing and administering IV fluid therapy, and reviewing learning from 'near miss' and critical incident reporting. This leadership role can ensure continuity in care in relation to fluid management through coordination between different hospital departments.

Commissioner and provider actions

• CCGs and NHS England area teams should ensure that an IV fluids lead is nominated at all hospitals from whom they commission hospital-based care.

• Hospitals should have a nominated IV fluids lead – this should be a senior clinician with responsibility for the entire hospital.

Estimated resource impact

Significant costs are not expected from using this statement. It is anticipated that in most cases, the IV fluid therapy lead will be an existing senior clinician who will delegate tasks to other clinical staff members. Depending on the local approach to the IV fluids lead role, there could be a resource impact of a time commitment of around 1 session per week to perform this role, which could cost in the region of £530 (based on the cost of a 4-hour session for a medical consultant from Unit costs of health and social care, 2013). The amount of time needed will depend on the level of delegation employed by the IV fluids lead.
For a discussion of possible savings associated with meeting the quality standard, please see NICE’s costing statement for intravenous fluid therapy in adults in hospital. Overall, it is anticipated that meeting the quality standard will improve patient safety and may create savings at a local level. Savings may be possible from a reduction in the number of hospital bed days because of a reduction in complications created by IV fluid mismanagement. The average cost per bed day is around £240.

Quality statement 2: Healthcare professionals’ competencies in hospitals

Adults receiving intravenous (IV) fluid therapy in hospital are cared for by healthcare professionals competent in assessing patients’ fluid and electrolyte needs, prescribing and administering IV fluids, and monitoring patient response.

Rationale

Fluid assessment, prescription and administration are essential daily tasks in many hospital departments. These are complex responsibilities that entail careful clinical and biochemical assessment, good understanding of the principles of fluid physiology in health and disease, and appropriate supervision and training. Inadequate knowledge, failure to recognise the importance of fluid management in patient care and acting on this issue are major factors in poor fluid management, and poor education, training and supervision are major contributors. Different healthcare professionals will have different skills and competencies, relevant to their roles.

Commissioner and provider actions

- CCGs and NHS England area teams should seek assurances from hospitals that their healthcare professionals are competent in their ability to assess need, prescribe and administer IV fluid therapy and to monitor the patient response (section 1.6, NICE clinical guideline 174). This could be achieved by requiring hospitals to report to commissioners how many staff have been assessed or are awaiting assessment and by providing training plans for staff who are not competent.

- Hospitals should assess the competence of all staff who will be involved in the prescription, administration and monitoring of IV fluid therapy.

- Hospitals should review their staff training to ensure that there is an appropriate level of expertise in IV fluid therapy for the roles that staff will be undertaking.

[Recommendations 1.6.1–1.6.3, NICE clinical guideline 174]
Estimated resource impact

Significant costs are not expected from achieving this statement. It is anticipated that staff would receive 'on the job' assessment and training as part of continuous professional development. However, if training is delivered in a classroom setting, then this would take staff away from caring for patients. It may be necessary to bring in additional staff to maintain safe care, which would have cost implications for providers. NICE has developed an e-learning tool for IV fluids that could help with training.

In the medium to longer term, the training should be primarily through undergraduate training.

For a discussion of possible savings associated with meeting the quality standard, please see NICE’s costing statement for intravenous fluid therapy in adults in hospital. Overall, it is anticipated that meeting the quality standard will improve patient safety and may create savings at a local level. Savings may be possible from a reduction in the number of hospital bed days because of a reduction in complications created by IV fluid mismanagement. The average cost per bed day is around £240.

Quality statement 3: Intravenous fluid management plan

Adults receiving intravenous (IV) fluid therapy in hospital have an IV fluid management plan, determined by and reviewed by an expert, which includes the fluid and electrolyte prescription for the next 24 hours and arrangements for assessing patients and monitoring their plan.

Rationale

Hospital inpatients may need IV fluid and electrolytes for fluid resuscitation, routine maintenance, replacement of existing deficits or abnormal ongoing losses, or complex issues of fluid redistribution. Patients' needs for IV fluid therapy and their responses to it will vary. Careful monitoring and daily assessment, informed by communication between the expert and patients, should therefore be detailed in an IV fluid management plan in the medical record.

Commissioner and provider actions

- CCGs and NHS England area teams should consider Commissioning for Quality and Innovation (CQUIN) for adults who receive IV fluid therapy in hospital. Achieving this CQUIN could allow hospitals to meet audit standards 3 and 4 in NICE’s clinical audit tool in a locally determined percentage of cases.
Hospitals should ensure that adults who receive IV fluid therapy in hospital have a management plan in place that is prescribed and reviewed by an expert and then delivered and monitored by staff competent in the management of IV fluids.

Estimated resource impact

Hospitals are not expected to incur significant costs meeting this statement. Although there is the potential for additional expert input, the plan will be prescribed and delivered by existing staff as part of the normal management of patients under their care.

There is a potential impact for CQUIN money to transfer from commissioners to providers. However, if there was no CQUIN for this statement, the money would be attached to a different CQUIN scheme and would still flow from commissioner to provider.

For a discussion of potential savings associated with meeting the quality standard, please see NICE’s [costing statement for intravenous fluid therapy in adults in hospital](#). Overall, it is anticipated that achieving the quality standard will improve patient safety and may create savings at a local level. Savings may be possible from a reduction in the number of hospital bed days because of a reduction in complications created by IV fluid mismanagement. The average cost per bed day is around £240.

Quality statement 4: Identifying and reporting consequences of fluid mismanagement

For adults who receive intravenous (IV) fluid therapy in hospital, clear incidents of fluid mismanagement are reported as critical incidents.

Rationale

There are a number of potential adverse consequences of IV fluid therapy, including unnecessarily prolonged dehydration, over hydration or significant electrolyte imbalance, which may be identified by clinical and biochemical monitoring. Not all adverse consequences of IV fluid therapy are due to fluid mismanagement, but clinically significant problems caused by IV fluid mismanagement should be reported as critical incidents. By routinely reporting these events, even when they are well-managed, hospitals will increase learning, improving the likelihood of better patient outcomes.
Commissioner and provider actions

- CCGs and NHS England area teams should require providers to include metrics on the assessment of adults receiving IV fluid therapy in hospital who are assessed for the consequences of fluid mismanagement and the number of critical incidents logged as a result of these assessments in their monthly performance monitoring.

- CCGs and NHS England area teams should consider meeting with their provider quarterly to review critical incidents that relate to fluid therapy mismanagement to discuss learning outcomes and remedial actions.

- Hospitals should assess all adults who receive IV fluid therapy for consequences of fluid mismanagement within an appropriate timescale based on the level of risk that fluid mismanagement could occur.

- Hospital IV fluid leads should review all critical incidents related to fluid mismanagement to help refine training methods and identify possible improvements to internal processes.

Estimated resource impact

There is a potential impact on resources such as increased workload for staff required to conduct investigations into critical incidents. However, this is best practice and any cost impact is not expected to be significant.

For a discussion of potential savings associated with meeting the quality standard, please see NICE's costing statement for intravenous fluid therapy in adults in hospital. Overall, it is anticipated that meeting the quality standard will improve patient safety and may create savings at a local level. Savings may be possible from a reduction in the number of hospital bed days because of a reduction in complications created by IV fluid mismanagement. The average cost per bed day is around £240.

Other useful resources

- Safe staffing for nursing in adult inpatient wards in acute hospitals. NICE safe staffing guideline 1 (2014).


• Using NICE guidance and quality standards to improve practice. NICE into practice guide 1. NICE clinical guideline (2013).

• E-learning tool for intravenous fluid therapy. NICE clinical guideline 174 (2013).

Disclaimer

This resource provides support for the local implementation of NICE quality standards. It does not constitute formal NICE guidance. Each resource should therefore be used in conjunction with the relevant NICE quality standard and current national guidance on commissioning.

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