Benchmark No. 7
Inotrope Administration

British Association of Neuroscience Nurses

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History

The Neuroscience Nursing Benchmarking Group (NNBG) was established in the 1990`s as a result of increasing concerns over inconsistencies in practices as part of a subsidiary of BANN. The group aims to improve on the quality of care by comparing and sharing practice with each other, and set explicit standards for comparison of current practice against the ideal standard. The group is committed to searching for the best evidence related to specific areas of neuroscience practice. Membership of the group consists of representatives from neuroscience units within the UK and Ireland, together with educational colleagues from both the NHS/HSC and Higher Educational Institutes. The group is further subdivided into regions and this benchmark was developed by the North East group of the NNBG in 2007.

In 2016, the NNBG consolidated back into BANN and further information about NNBG can be found on the BANN website www.BANN.org.uk .

BANN would like to acknowledge the leadership and significant contribution made by the NNBG, and all its contributors, to neuroscience nursing over the years.

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Key Points

- Patients are nursed in a level 2/3 facility
    - The effect of these drugs vary greatly so close observation is essential
- Continuous monitoring of ECG
- Blood pressure via an arterial line providing a continuous recording
- Parameters are set for drug delivery and therapeutic goals by medical staff and documented on individual Care Plans
    - It is important that parameters for drug delivery and therapeutic goals are clearly discussed and recorded
    - Equally, any changes in vital signs and subsequent drug delivery are clearly documented so that the response or effect of the drug can be assessed easily
- Evidence based guidelines are available as a key way of improving and achieving a consistent quality of care
- Staff receive training in managing a patient with Inotropes and competency in Inotrope administration is completed
    - Maintaining a stable cardiovascular status will for many patients depend on continuous drug delivery
    - Nurses need to be familiar with and ensure that the correct equipment ins working order is used
    - Adequate supplies of the drug need to be accessible and prepared in good time
    - All infusions must be checked at nurse/shift handover
    - Drug calculations are complex and nurses must be familiar with and understand calculations required to work out the doses
- Education is available, including guidelines for changing syringes and drug calculations. This is reviewed every two years

FACTOR 1 – Documentation – Assessment and Implementation of Care

STATEMENT OF BEST PRACTICE	POOR ← LEVEL OF ACHIEVEMENT → EXCELLENT
1.0 Decision to use Inotropes should be based on clinical needs and documented in patient's Care Plan [Davies 2001].	
1.1 The Care Plan meets individual needs of the patient and should be regularly re-evaluated	
1.2 Baseline observations should be recorded prior to commencement of inotrope therapy	
1.3 Parameters to be set for the Inotrope therapy rate and patient blood pressure (regularly reviewed) and documented in Care Plan.[Davies 2001]	
1.4 Patient blood pressure must be continuously monitored and recorded hourly on the patient's record/chart [Juarez 2005].	
1.5 All documentation has been reviewed within the last 2 years	

FACTOR 2 – Protocol

STATEMENT OF BEST PRACTICE	POOR ← LEVEL OF ACHIEVEMENT → EXCELLENT
2.0 The Protocol is research evidence based [Juarez 2005]	
2.1 The Protocol will include the following FACTORS: ▪ Criteria for commencement of therapy ▪ Procedure for administration ▪ Guidelines for double pumping ▪ CVP level as a baseline recording ▪ Calculation of drug dosage ▪ Frequency of line changing ▪ Invasive monitoring equipment required for Inotrope therapy administration (including continuous ECG monitoring) [Crisp 2002]. ▪ Dedicated line for Inotrope therapy - appropriately labelled ▪ Inotrope should **ALWAYS** be administered via a central line ▪ Identification of syringes	

FACTOR 3 – Education

STATEMENT OF BEST PRACTICE		POOR ← LEVEL OF ACHIEVEMENT → EXCELLENT
3.0	A structured training programme for staff is available and includes.	
3.1	Professional accountability issues related to Inotrope therapy [Juarez 2005]	
3.2	Safe practice in changing lines and labelling. Reducing and increasing patient Inotrope therapy. Importance of single use line with Inotropes and the reason flushes are not given [Quinn 2000].	
3.3	Anatomy and physiology [Marieb 2001].	
3.4	Application of Inotrope Protocol and documentation process	
3.5	Checking patient Inotrope infusion at handover period [NMC 2002, Juarez 2005]	

FACTOR 4 – Patient Information

STATEMENT OF BEST PRACTICE		POOR ← LEVEL OF ACHIEVEMENT → EXCELLENT
4.0	Patient / carer informed of procedure [NMC 2004, DOH 2001]	
4.1	Information given to patient / carer recorded in patient documentation. [NMC 2004]	
4.2	Information provided to be supplied by evidenced of good practice. [NMC 2004]	

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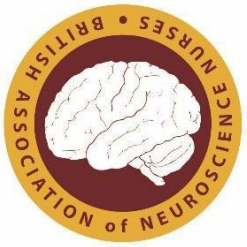

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