RCN IV Standards (4th edition) Update and Implementation

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IVRT LEAD
ROYAL WOLVERHAMPTON NHS TRUST
Introduction

- IV Resource Team Lead, Royal Wolverhampton NHS Trust
- Provision of long line insertion, OPAT and Device Related Hospital Acquired Bacteraemia reduction (DRHABs)
- Previous career Critical Care and Patient Safety
- Member of the RCN IV Standards (2016) project board
- Disclosure - RWT – education referral centre for Vygon UK
**Presentation Aims and Format**

**Aims** – to introduce the Standards, identify important changes, and describe approaches and challenges to their organisational introduction

**Format** – to follow the Standards through on their journey from conception to front line implementation
RCN Standards for infusion therapy – what are they?

- Evidence based guidelines regarding wide variety of infusion therapy (intravenous / osseous /subcutaneous/epidural) practice from device insertion to removal
- For all healthcare professionals (HCPs) - not only nurses
- Up to date (launched Dec 2016)
- Evidence based / expert consensus
- Keen to state that HCPs must continue to add to evidence base
Why are they so important?

- “HCPs have a responsibility to deliver safe and effective care based on current evidence, best practice, and where applicable validated research” (RCN standards point 2.8 - NMC)
- Represents clinical support provided by the RCN to front line nurses
- Protective and supportive at various levels
- NB: - In the public domain
The Journey – from inception to implementation

- Stage 1 - creation of clinician project board and literature search teams, aims identified
- Stage 2 – data sifting and initial document collation
- Stage 3 – document construction/ writing
- Stage 4 – document publication and launch
- Stage 5 – organisational awareness and procedure / practice amendment
- Stage 6 – implementation into bedside clinical practice
- Stage 7 - reassurance/ evidence of implementation
Stage 1 – Identification of aims and evidence collation

Project board formed – representatives from a wide range of related disciplines

Identified

- the need to update the document
- objectives
- the need for increased community based and patient experience/perception focus
- methodology to be applied – rapid evidence assessment
- randomised control trials, other quantitative research and evidence relating to patient experience
- 12 specific areas of practice
Stage 1 - 12 areas focussed on

- Add on devices
- Arterial catheters
- Blood sampling
- Central venous access devices
- Flow control devices
- Infusion related bloodstream infection
- Infusion therapy phlebitis
- Intraosseous access devices
- Midline catheters
- Parenteral nutrition
- Peripheral access devices and flushing
- Subcutaneous infusions
Stage 2 – data searches and sifting

- RCN library, RCN contractor (Bazian)
- 3 databases utilised (British Nursing Index, CINAHL, MEDLINE)
- 2010 onwards
- English language
- RCTs, systematic reviews, meta-analyses and cohort studies
- 3 sifts of data performed to identify most robust (1,824 papers reduced to 48, plus 22 relating to patient experience)
- Results presented to project board
- Expert consensus established for areas with limited evidence
Stage 3 - Document construction/ writing

- Findings formatted into usable document
- Structured so that each individual practice/procedure is divided into a standard accompanied by evidence based detailed guidance as to how this can be achieved
3 Infection prevention and control

3.1 General infection prevention and control principles and practices

Standard

All infection-related procedures (e.g., preparation, insertion of peripheral or central venous access devices, management of infection-related equipment, such as respiratory equipment, and disinfection of surgical areas) are performed under aseptic technique. Observation of standard precautions for medical asepsis and use of sterile products is mandatory (Lawley et al., 2004).

Minimally invasive surgical procedures must be used when performing specific infection procedures, such as insertion of central venous access devices, and local patient and device procedures, if used (Lawley et al., 2004).

All disposable blood contact materials and/or devices, which must be disposed of, are stored in a container that is properly labeled with the date and source of the material. The container must be appropriately labeled with the date and source of the material. The container must be appropriately labeled with the date and source of the material.

Guidance - general

- The healthcare and hospital personnel should be trained in the use of standard precautions, including: isolation, hand hygiene, and use of personal protective equipment.

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- The personnel should be trained in the use of standard precaution
Main changes - 1

Recognises that healthcare provision as a whole and IV therapy rapidly changing therefore incorporates these including:

- How to safely delegate to non registered clinical staff
- Revalidation issues
- Dedicated sections on patient safety, the patient experience and increased focus on community iv therapy (chemotherapy/ PN administration/OPAT service provision)
Main changes -2

- VHP pathway – 48 hour review of access need
- Administration set changing to 96 hours
- Protective caps
- CHG impregnated dressings
- Daily CHG washes for ICCU patients
- Prescription of saline flushes
- Sutureless fixation devices (NICE)
- Peripheral recannulation on clinical indication alone
- Medical adhesive related skin injury (MARSI)
- PN – dedicated team/use of dedicated single lumen catheter
NIVAS / IPS Vessel Health and Preservation Tool
Main changes - 3

Service development section -
- Organisations should consider the implementation of an IV team
- Example business cases for the creation of IV and OPAT teams included

Exclusion
- Some areas of practice – eg apheresis
Stage 4 – Document publication and launch

- Document published in paper and electronically
- Launch event December 2016 at RCN headquarters
- Launch events/workshops
- Referred to via other professional groups (e.g., BAPEN)
Local clinical staff awareness

- 30 staff questioned
- Ranging from ICCU consultant to student nurse
- 24 had never heard of them
- 4 had some awareness
- 2 had good awareness
- All thought they were very relevant to their practice
- Various IT communication aids suggested (computer home screens/ intranet/ all user emails/ illustrated books)
- Consensus – should be included in policies/ practices
- Mandatory training updates
Stage 5 - THE BIG HURDLE

– Organisational awareness and procedure /practice amendment
Stage 5 – Organisational awareness and procedure/practice amendment

- RCN aim - implementation in to local policies and practices
- Not exhaustive
- Awareness of other local and national guidelines
Stage 5 – Organisational awareness and procedure /practice amendment

- Consideration of implementation into clinical practices
- Need dedicated groups of specialist clinicians at organisational level – eg iv forums
- Delegate practice amendments to relevant trust leads (eg transfusion practice)
- Ensure timely practice update
- Need regular meetings - multiple national guidance
Stage 6 – THE BIGGEST HURDLE!

Bedside implementation
Risk that this can remain “dead”
Stage 6 – implementation into bedside clinical practice

- As leaders, how do we support our staff and ensure implementation?
- As leaders, how do we protect patients and ensure compliance?
Stage 6 – implementation into bedside clinical practice

- Previous local grounded theory research project with ten Band 7 ward managers
- “Are ward managers confident that their staff can access long intravenous lines competently?”

“its taking ownership of your ward area and actually feeling really proud of it and wanting the best for ....your staff and ultimately your patients” (WM 1)

“I like to know my, you need to know...your staff and the only way to do that is to work with people, work alongside people” (WM 8)
Stage 6 – implementation into bedside clinical practice

- Problem staff groups – new staff, experienced nursing staff, out of hours nurses, frequently transferring staff, medical staff.
- Re new staff – “she came from the chemo unit at .....and her ANTT was appalling. Didn’t clean the tops of bottles, put the needle straight through the silver thing” (WM 4)
- Re out of hours nurses - “They are longstanding staff, so whether they develop poor habits I am not there around to see” (WM 1)
- Re medical staff – “I don’t have anything to do with their training......I picked one up drawing the flush up over the bin” (WM 1)
Stage 6 – implementation into bedside clinical practice

- WARD BASED PRACTICAL COMPETENCY ASSESSMENT
- Training of key groups – ward managers, link nurses, out of hours practitioners
- Face to face IV sessions via link nurses (Band 6)
  - Advantages over electronic training – “I mean they’re sat on the computer...in the end what you get is staff going around with A,B,C,D,E,” on a piece of paper (WM 7)
  - Disadvantages – “every day there is something one or more of us has to go off the ward for” (WM 9)
- Detailed checklist competency documents
- Certificates for Trainers and Trainees
- Use of support videos/ dvds/ photostories
- Aim – annual standard mandatory training, currently 3 yearly
- Aim - for all clinicians - “I think it would be much easier if we were at a level across the (Trust)” (WM 5)
Implementing Nursing Practices/Competencies

Nursing Practice

3.0 Detailed Action
3.1 Verify patient identity, and identify any allergies
3.2 Check the patients’ personalised management plan to confirm the procedure is due
3.3 Explain the procedure to the patient and gain consent to proceed
3.4 Assist the patient into a comfortable position. Maintaining privacy and dignity
3.5 Remove any restrictive garments the patient may have so that the line hangs freely
3.6 Apply apron
3.7 Decontaminate hands with soap and water and dry thoroughly
3.8 Decontaminate the trolley or ANTT tray with decontamination wipe and allow to dry for 30 seconds. Within the Community setting prepare a clean surface
3.9 Gather equipment required
3.10 Check the expiry date of the 0.9% normal saline solution in line with Royal Wolverhampton NHS Trust policy for Prescribing, Storing and Administration of drugs

NB: Within the community check the 0.9% normal saline chloride solution again
3.11 Decontaminate hands with alcohol hand gel

<table>
<thead>
<tr>
<th>Procedure stage</th>
<th>Nurse sig/date</th>
<th>Assess sig/date</th>
<th>Nurse sig/date</th>
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<tbody>
<tr>
<td>1</td>
<td>Explains procedure to patient and gains consent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Checks patient’s management plan/care plan to identify any allergies</td>
<td></td>
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<tr>
<td>3</td>
<td>Assists the patient into a comfortable position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Assists the patient to remove any restrictive clothing, to ensure line is exposed</td>
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</tbody>
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Stage 7 – Reassurance / evidence of implementation

- Observe practice
- Challenge poor practice
- Audit practice and feed back to ward staff and managers
- Patient feedback “Friends and Family Test”
- Key performance indicators (eg DRHABs/ staff sickness/ retention and recruitment)
Our Evidence - 1

![Graph showing DRHABs and HABs numbers from 2009-10 to 2016-17]
## Our Evidence -2

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<thead>
<tr>
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<th>2009-10</th>
<th>2014-15</th>
<th>2016-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Cultures taken</td>
<td>10943</td>
<td>15,640</td>
<td>15,303</td>
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<tr>
<td>Blood Culture positives</td>
<td>1113</td>
<td>1,019</td>
<td>1,058</td>
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<tr>
<td>Blood Culture significant</td>
<td>824</td>
<td>796</td>
<td>830</td>
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<tr>
<td>Blood Culture contaminants</td>
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<td>223</td>
<td>228</td>
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<tr>
<td>Hospital Acquired Bacteraemia (HABs)</td>
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<td></td>
</tr>
<tr>
<td>Device-Related HABs:</td>
<td>140</td>
<td>53</td>
<td>53</td>
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<tr>
<td>Lines</td>
<td>91</td>
<td>32</td>
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<tr>
<td>Urinary Catheters</td>
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<tr>
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<td>PEG</td>
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<td>0</td>
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<tr>
<td>Other</td>
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<td>2</td>
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</table>
In conclusion

- High quality, comprehensive document
- Empowers and supports HCPs
- Need for appropriate implementation into organisational policies/procedures
- Many challenges to be faced regarding clinician awareness and volume of clinical guidance/educational update
- Increased future focus on clinical research/evidence collection/publication
- Increased/improved patient awareness and feedback
Thank you

Any questions?