NESC Intravenous device management: The peripheral lines project

B. Buchanan

Senior Nurse Specialist Portsmouth NHS Trust
Introduction to essential work streams

1. Equipment
2. Policy and protocol
3. Documentation +/- Care bundles
4. Standardisation of clinical education
5. Internet based resources
6. Root cause analysis and CEO commitment
The Vasofix Safety Cannula

- stopper
- grip plate
- flashback chamber
- injection port
- wings
- cannula
- needle
- Hydrophobic membrane
- safety clip
Policy and protocol

- Examine and discuss cannulation policy, guidelines and protocol

- Asepsis vs. ANTT
- RCA analysis
- Standard formatting
Portsmouth Hospitals

― Saving lives

Adoption of DoH tools

Going further faster:
Implementing the Saving Lives delivery programme
Sustainable change for cleaner, safer care

High Impact Intervention No2b:
Peripheral line care

“going nowhere faster?”
Review of existant practice
The documentation reviewed
Root cause analysis

- Reporting mechanism when individuals fail to comply with policy
- Explicit CEO responsibility
MRSA device related bacteraemias 2006-2007

Source: Data Department of Infection prevention and control (2007)
2006-2007
- 38 device related bacteraemias
- Estimated clinical management expenditure approximately £266,000

2007-date
- 7 device related bacteraemias
- Expenditure to date approximately £49,000
- Estimated annual saving £217,000
MRSA bacteraemia 12 month rolling total with 2009/10 target and limits.
MRSA bacteraemia cumulatives

- SHA Target 09/10
- Cum Act 09/10
MRSA bacteraemias % split of pre and post 48 hour based on rolling 12 month totals

% pre 48 hours
MSSA bacteraemia
12 month rolling total
MRSA and MSSA bacteraemia
12 month rolling total

- MSSA
- MRSA
Vitalpac system: the electronic future

- Data input and display.
  - PDA
  - Tablet PC
  - Desktop PC
- Patient assessments and alerts.
  - Vital signs (EWS)
  - VTE
- Links with other systems.
- Audit and compliance.
Peripheral venous cannulae

- Historically high risk for infection / bacteraemia
- Poor documentation
- Poor ongoing care
- Uncertain Removal
Cannula insertion
Cannula management

Cannulae

Check cannula
lower right arm

- Indicate which signs apply to the IV site
- Pain at or near site: Yes/No
- Redness (erythema): Yes/No
- Hardening/swelling: Yes/No
- Palpable venous cord: Yes/No

Menu

Cannulae

Remove cannula
lower right arm

- VIP score: Inserted: 28-Feb, 12:17
- Advanced stage of phlebitis or thrombosis
  - Remove cannula
  - Resite if necessary
  - Consider treatment

Has this cannula been removed?
- Yes/No

Menu

Cannulae

Click on body map to log new cannula

Menu
High impact interventions

High impact intervention 2 a/b peripheral cannula care and insertion
March 09
Refinement of Vitalpac cannulae management tool

- Piloted but not meeting needs initially.
- HI1 – saving lives.
- Paper form currently being used.
- Re-launched to aid real-time collection of this data.
- Real time quality assurance.
Any further discussion?