“My House Rules: A New Take On The House of Cannulas”

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Disclaimer

The information contained in this presentation is general in content and does not seek to comprehensively outline the issues raised in the presentation.

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Dr Cathryn Murphy is a casual consultant to medical industry and device manufacturers including 3M, BD and Teleflex. Today’s presentation is independent of all of those relationships.

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Objective

- Challenge your existing views
- Provoke and inspire you
- Provide you with an honest frank and fearless insight that is non-judgmental
- Work with you for creative and innovative ways to partner and make progress
- Consider topics which seem unrelated but are intrinsically linked
Discussion and debate about the roles of:

- Individual clinicians;
- Cannula inserters;
- Vascular Access Services;
- Infection Control and Prevention teams;
- Academics; and
- Medical industry.
My house rules

Living free from infection is everyone's right. Taking action to prevent it is everyone's responsibility.
First assumption

- There is room for improvement in our current approach to cannula use
  - Selection
  - Insertion
  - Access
  - Care and maintenance
  - Removal
  - Ongoing review of cannula
Second assumption

Someone is willing to take responsibility for every cannula that is inserted
Third assumption

• All stakeholders share and are motivated by a common goal that has the patient at the centre

• But what about:
  • Profit
  • Securing reputation – individual or organisation’s
  • Political point scoring
  • Research grant success, publication, elevated status – fame and glory
  • Self promotion
  • Avoiding penalty
Current situation

- Over a billion peripheral intravenous catheters (PIVCs) are inserted each year in hospitalized patients worldwide.\(^1\)
  - 59% of patients had at least 1 PIVC in place.\(^1\)
  - 16% had other types of vascular devices.\(^1\)
  - 25% of paediatric CVADs failed before completion of therapy.\(^2\)
  - 30% of peripheral venous catheters fail before treatment ends.\(^3\)
  - More, high quality research is needed regarding the relative effects of dressing and securement products for CVADs.\(^4\)
- The best available evidence is currently inconclusive regarding whether longer intervals between CVAD dressing changes are associated with more or less catheter-related infection, mortality or pain than shorter intervals.\(^5\)

The individual clinician
Current situation

- Clinicians do not comply with evidence-based practice infection prevention recommendations
  - compliance with the clinician bundle between 61% to 90% & with the patient bundle between 74.1% to 91.8%\(^1\)
  - overall hand hygiene compliance in Australia is only 84.1% (CI 95% 84.0-84.2)\(^2\)


The ideal role of the individual clinician

• Make it your business to:
  • know all you can about vascular devices, their care and their complications
  • access local resources including seeking the advice, knowledge, expertise and input of Vascular Access and Infection Prevention and Control teams
  • be familiar with your organisation's and your unit’s equipment, policies, procedures and protocol and follow them
  • understand your professional, ethical and moral obligations as a caregiver, service provider and in some cases registered healthcare professional
  • not tolerate less than perfect care by co-workers and colleagues
  • not perform work for which you have insufficient knowledge and/or expertise
  • lobby for translation of research to the bedside eg. extended dwell time
The role of the cannula inserter:
Current situation

• A peripheral venous catheter (PVC) is an essential element of modern medicine and the most frequent invasive procedure performed in hospitals.¹

• Failed attempts at peripheral i.v. cannula (PIVC) insertion in the ED are common.²

• 30% of PVCs often fail before intravenous treatment is completed.¹

• Intravascular catheter-related infections are still a major problem in health care and are associated with significant morbidity, mortality, and additional cost.³

The ideal role of the inserter

- Peripheral intravenous cannulation insertion success could be improved if performed by clinicians with greater procedural experience and increased perception of the likelihood of success.¹
- Accept referral of patients at high risk of PIVC failure²
- Consider the use of new or alternative technologies (eg. skin glue) in addition to standard care to reduce peripheral intravenous catheter failure rates³
- Use preferential forearm insertion, select appropriate PIVC diameter, and insertion by intravenous teams and other specialists. ⁴
- Inserter must be a “preferred inserter”⁵

The role of vascular access services:
Current situation

- little work has been done to understand how vascular access nurses perceive their role and whether this might influence practices and ultimately appropriateness of PICC use (and any other vascular device)

- In 2015 among the 1147 vascular access nurse respondents,
  - 18% viewed themselves as operators whose primary role was to insert PICCs,
  - 21% identified as unvalued consultants,
  - 59% as valued consultants, and
  - 2% provided responses that could not be categorized and were dropped from subsequent analysis

- ? Technical function
- ? Consultants
- ? Specialised knowledge and skills

The ideal role of vascular access services:

- Be identified as a valued consultant
- Have their experience and contributions recognized
- Be provided with opportunities to work in relationships that are based on mutual respect, trust and shared decision making
- Participate in ongoing interaction with other members of the care team
- Recognise the strengths and limits of their knowledge, skills and expertise
- Work within and with organisations and systems that encourage and promote effective interprofessional collaboration
- These elements are critical for safe and appropriate vascular access device use
The role of infection control and prevention teams
Current situation

• Reduce and prevent infection transmission;
• Protect patients, staff and visitors;
• Provide quality care with minimal side effects;
• Avoid disruption to throughput and additional cost;
• Minimise invasive procedures/ device use as alternatives to good care;
• Ensure supply of quality equipment and technology;
• Ensure preparedness for anticipated and unexpected outbreaks;
• Ensure compliance with regulatory and accreditation criteria;
• Generalist vs specialist; and
• Getting further and further from the point of care.
The ideal role of infection control and prevention teams

- Be identified as a valued consultant
- Have their experience and contributions recognized
- Be provided with opportunities to work in relationships that are based on mutual respect, trust and shared decision making
- Participate in ongoing interaction with other members of the care team
- Recognise the strengths and limits of their knowledge, skills and expertise
- Work within and with organisations and systems that encourage and promote effective extraprofessional collaboration
- These elements are critical for safe and appropriate device use including vascular access device.
The role of Academics:

Image sourced from www.ivas.org Accessed 22/04/2017
Current situation

• Perceptions that researchers are either more or less important than clinically-based members of the vascular access community;
• Driving national and global research agendas BUT often only with the cooperation of clinically-based members of the vascular access community;
• Overt recognition, exposure, opportunities and funding heaped on clinical research while clinically-based members of the vascular access community are relatively neglected;
• Reality is that both roles are important, neither more than the other; and
• Some clinicians are more naturally suited to non-clinician environments and academia benefits from and relies on insights from clinicians who have clinical currency.
The ideal role of academics

• Share expertise, opportunities and recognition;
• Maintain humility despite fancy titles and benefits beyond those ever imagined;
• Continue to drive the agenda for improvement but always in collaboration;
• Share access to alternate views and ways of approaching and doing vascular access work gained from international activities; and
• Be integrous, honest, open, transparent and respectful.
The role of Medical Industry:
Current situation

• Never deviate from the “bottom line”;
• Invest substantial finance and effort in bringing new technologies to market and making them accessible;
• Masters of strategic thinking;
• Goal driven execution of strategy;
• Human factors and lean systems-like approaches;
• Target is growth driven;
• Incentives, rewards & recognition;
• Good manufacturing principles; and
• Often comment on how difficult it is to access hospital-based key opinion leaders.
Medical industry’s ideal role

• Leading by example
  • Professionalism;
  • Presentation;
  • Commitment to cause;
  • Loyalty to company, brand and product;
  • Team-playing;
  • Developing & managing relationships; and
  • Integrity, respect, honesty and openness.
New reality and new house rules for all of us
Ideal "House" Rules

- Shared goals
- Pt outcome focus
- Shared information & contacts
- Encourage Access
- Remove barriers
- Redefine perceptions
- Legitimise each others’ expertise
- Shows empathy

Equals

Remove barriers

Legitimise each others’ expertise

Redefine perceptions

Pt outcome focus

Shared information & contacts

Encourage Access

Equals

Show empathy
Thank you for listening and letting me escape alive