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Dr Fidelma Fitzpatrick
Chair, SARI subcommittee on prevention of IV catheter-associated infection

**Re: Prevention of Intravascular Catheter-related Infection in Ireland
Draft Guidelines for Consultation - February 2009**

Dear Dr Fitzpatrick

Thank you for sending a copy of these draft guidelines which I have passed to all members of the Irish Association for Emergency Medicine. My response to you represents the views of my membership. Please note that the correct title of the Association is the **Irish Association for Emergency Medicine** and not *Emergency Medicine Association* as referred to in the document. **I would be grateful if you would ensure that the reference to consultation (on page 67) is amended accordingly**, to reflect the correct name of the Association.

My members are Consultants, trainees and other doctors working in Emergency Medicine and therefore our responses reflect the **Emergency Medicine perspective** on this issue. Our sense is that your committee did not specifically consider the particular issues of vascular catheterisation in Emergency Departments (EDs) which are often carried out in suboptimal conditions in emergency situations. Given the higher rates of bacterial contamination and colonisation associated with ED insertion, it would have been appropriate that your committee would have considered this particular issue and made recommendations on it. I note that the membership of your committee does not contain any practitioner with an Emergency Medicine background and perhaps this explains the oversight.

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Furthermore, the arrangements for catheter surveillance, replacement, etc do not apply in EDs. Our expectation is that a patient will be admitted from the ED to an appropriate ward or intensive care environment and these matters will arise then.

For your attention please find attached a critique of the document from an Emergency Medicine perspective carried out by a member of the Association's Academic Committee which I think you may find helpful.

The goal of prevention of intravascular catheter-related infection is one which we would all share and we commend your committee on its efforts in this regard. Given these specific issues that arise in EDs it would be important that this environment is considered in the final version of the document.

Yours Sincerely

A handwritten signature in black ink that reads "Fergal Hickey". The signature is written in a cursive, slightly slanted style.

**Fergal Hickey FRCS FRCS Ed (A&E) DA (UK) FCEM
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Emergency Medicine (EM)-Relevant comments on the Draft Copy of SARI Guidelines for the prevention of iv catheter-associated infection

Central venous catheters (CVCs), peripheral vascular catheters (PVCs) and peripheral arterial catheters (PACs) inserted in the Emergency Department (ED) have higher rates of bacterial contamination and colonization than those inserted in other hospital settings (Gowardman et al., 2008; Koh et al., 2008; Pujol et al., 2007; Trick et al., 2006). It is therefore, a major limitation of the draft copy of these guidelines that there are no specific recommendations regarding the insertion of intravascular catheters in the ED and the management of intravascular catheters inserted in the ED. In particular, under the section entitled “Specific settings”, although the insertion and management of intravascular catheters in the Haemodialysis and Critical care settings are detailed, there is no reference to the ED! This is despite the fact that CVCs and PACs inserted in the ED are more colonized than those inserted in the Critical care setting (Gowardman et al., 2008; Koh et al., 2007). So much so that it has even been recommended that CVC insertion should be postponed until the patient is transferred from the ED to the Intensive Care Unit (ICU) or Operating Theatre (Eggimann & Zanetti, 2008). Postponement of CVC insertion until transfer of the patient from the ED to the ICU or Operating Theatre has been suggested as a valid intervention strategy towards eradication of catheter-related infections in critically ill patients (Eggimann & Zanetti, 2008). The IAEM does not necessarily support this approach, however its existence does indicate the problems associated with ED insertion. Another suggested intervention strategy for the eradication of catheter-related infections in critically ill patients is the early removal or replacement of intravascular catheters inserted in the ED (Trick et al., 2006).

Specific guidance from SARI on the indications for intravascular catheter insertion in the ED and for the management of intravascular catheters inserted in the ED would therefore be clinically important.

Although the evidence base is relatively weak, it has been recommended that antiseptic or antibiotic coated central venous catheters should be used in preference to uncoated catheters for CVC insertion in ED patients, due to the higher rates of CVC bacterial contamination and colonization associated with CVC insertion in the ED (Smith & Clark, 2004). Up-to-date guidance from SARI on whether EDs should consider using antiseptic or antibiotic coated central venous catheters, in preference to uncoated catheters, is highly relevant to Emergency Medicine practice.

The subclavian route is associated with lower rates of catheter-related infection in the acute setting (Gowardman et al., 2008; Lorente et al. 2005). Therefore, it is intuitively logical that it should be the route of choice for insertion of CVCs in the ED with regard to intervention strategies for the prevention of catheter-related infections. However, the draft guidelines do not provide any specific guidance about the selection of CVC insertion site in the ED.

In conclusion, the draft guidelines do not acknowledge the substantial evidence from the literature demonstrating that (regarding insertion of intravascular catheters in the hospital setting) insertion of intravascular catheters in the ED is associated with the highest risk of bacterial contamination and colonization. An ED specific insertion protocol for intravascular catheters, providing up-to-date guidance and evidence-based recommendations regarding interventional strategies for the prevention of intravascular catheter-related infection in Irish Emergency Departments, would greatly enhance the clinical utility of the SARI guidelines.

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