



NOSOCOMIAL INFECTION

2016 (November) – Day 2, Q5 (Choice)

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| Medical Leader | ✓ |
| Medical Expert | • |
| Communicator | ✓ |
| Advocate | ✓ |
| Scholar | |
| Professional | ✓ |
| Collaborator | ✓ |
| Manager | ✓ |

You are the Director of Medical Services in a metropolitan hospital with a large Adult ICU and a Level 3 Neonatal ICU that treats the most complex preterm babies.

Microbial colonisation has been an ongoing issue in both the Adult and Neonatal ICUs. The Infection Control Nurse Educator (ICNE) claims it correlates directly with doctors not washing their hands because there is a culture that 'hand hygiene is just a nursing KPI', despite the online Hand Hygiene course being mandatory for all clinical staff. Just yesterday the ICNE told a senior doctor that he had breached hand hygiene 14 times in 10 minutes in the Adult ICU the day before, and he defended himself indignantly, saying that he wore the same pair of gloves the whole time, from before he even came into the ICU!

Benchmarking of hand hygiene rates against peer hospitals supports the ICNE's view – your hospital's rates compare favourably for nurses at 90% (85% being your jurisdictional average) but medical staff are around 55% (compared to the jurisdictional average of 75%).

Rates of resistant organisms such as VRE in the Adult ICU are at an all-time high, causing significant morbidity, longer lengths of stay, and use of high cost antibiotics. In Neonatal ICU, infection outbreaks have twice resulted in labouring women being diverted to other facilities. But thankfully no tragic outcomes - until now.

This morning the ICNE lets you know about Zoe and Chloe, identical twins, born at the hospital two weeks ago at 28 weeks gestation. They had been progressing as well as could be expected, but Zoe has now developed a life threatening nosocomial infection.

Questions:

1. What are the issues involved here?
2. What actions would you consider and with what priority?

CENSOR NOTES

Competencies include: Expert, Communicator, Collaborator, Manager, Scholar, and Professional.

Issues/Approach:

To obtain a pass a candidate must clearly indicate that there is an immediate problem with a sick neonate (and possibly others as well), and a high risk NICU that may need to be temporarily closed. There is also a major, whole of hospital quality and safety issue that must be addressed with an appropriate medium term strategy – most importantly, the poor clinician adherence to hand hygiene. It is unlikely that this hospital will meet national standards for infection control. There must also be commentary on all of the potential medico legal issues.

In this scenario, the candidate should appreciate that the core problem has obviously been present for some time and that their own actions (or lack of action) may have contributed to the problem.

Elements for the short term:

- Is remaining twin ok? Are other babies ok? Isolation, treatment, testing of staff, etc.
- Investigation into infection source and its significance– involve Infectious Disease experts
- Open disclosure with parents of the twins re infection/investigation findings
- Transparent information for all parents of babies in NICU re colonisation
- Close unit to new admissions until outbreak under control – there must be an understanding of the implications of a 'temporary' closure of a NICU
- Media management, briefing of CEO/Minister, support for staff and parents
- The adult ICU is also at risk and may need an urgent plan of management

Medium to longer term:

- Recognition that there is a whole of hospital quality and safety issue
- Education of clinicians re infection control, difference between hand hygiene and barrier precautions – evidence based approach – strategies for getting medical staff to comply with safe clinical practice and mandatory training requirements
- Strategies to reduce infections/eradicate colonisation – increase cleaning, signage, more frequent testing/monitoring, place of antimicrobial stewardship



| | | Knowledge Knows what to do | Skills Knows how to do | Attitude/Behaviour Shows s/he knows the consequences, leadership responsibility |
|----------------|-----|---|--|--|
| Poor | 1 | A rambling answer that does not clearly indicate the significant issues that need to be addressed. | A non-structured description of how they would logically implement the immediate and medium term actions that are required. | Does not demonstrate an appreciation of the consequences of doing, or not doing, the required management activities. |
| Limited | 2 | May include a limited discussion of 1 or both of the key issues that needed to be addressed but there is little in depth understanding of the significance of the issues. | May describe some elements of how they would manage the issues, but there is only very basic appreciation of the skills that are needed to manage the situations safely and effectively. | Only minimal appreciation of the consequences of doing or not doing the required management activities. In particular does not understand the significant medico-legal and broad quality and safety issues that is harming patients and the damage this could cause. |
| Marginal | 2.5 | Even with prompting, only provides a basic overview of the issues involved and does not do it in a logical manner and/or leaves out one or more elements that may let an issue get out of control or cause more problems. | Even with prompting, only gives a basic 'text book' answer of some of the actions that are required. Does not demonstrate any substance to the answer to convince the censors they could effectively manage the key issues in a real life situation. In particular, does not fully appreciate the risks in the NICU. | Even with prompting, only outlines a couple of the consequences of doing, or not doing, some elements. Misses one element that would not address the key issues to protect patients from harm. |
| Meets standard | 3 | Without any, or only minimal prompting, articulates the main elements that need to be addressed and the right priority sequence. May not necessarily have ideal integration of all the actions that are required. | Without any, or only minimal prompting, demonstrates that they have the skills to manage key issues and would minimise the most significant risks to both patients and the hospital. Must mention the need for expert infectious disease opinion and how | Without any, or only minimal prompting, demonstrates that he/she understands that some tough decisions must be made and that they will have some predictable consequences that will need to be managed. Should mention at least a couple of the significant |



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| | | to address the main medico-legal issues. | consequences of actions e.g. media, political, Board, community, union issues. |
| Good 4 | <p>Not only articulates the main issues and priorities for action but also demonstrates a coherent logic as to the actions that must occur.</p> <p>Understands that as this issue has been present for some time, they (and the other members of the executive) may not have been doing enough to address the underlying issues.</p> | <p>Can demonstrate that they know how to address all of the main issues and be able to articulate some of the expected individual and organisational problems that may arise and how they would be addressed.</p> <p>In particular, they appreciate that changing poor clinician behaviour will not be an easy task.</p> | <p>Not only demonstrates an understanding of the significance of addressing all of the issues, but also demonstrates that they understand the expected reactions that will occur i.e. media, political, Board, community, union issues etc., and how they would be approached.</p> <p>Understands that the scenario may have an impact on him/herself, as the issue could have been prevented.</p> |
| Outstanding 5 | Excellent coverage of all of the issues that are involved and inspires confidence that they would be able to quickly and accurately assess such a situation and plan for all of the elements that need to be addressed. | Excellent presentation with a clear and methodical logic as to how they would priority set the necessary actions. Also demonstrates the ability to predict possible consequences if actions do not go according to plan. | Clearly demonstrates that they know the full implications of the consequences of both successful and unsuccessful actions including those upon him/her self, the broader hospital staff and its service community. |