The Hierarchy of Evidence

The Hierarchy of evidence is based on summaries from the National Health and Medical Research Council (2009), the Oxford Centre for Evidence-based Medicine Levels of Evidence (2011) and Melynyk and Fineout-Overholt (2011).

I  Evidence obtained from a systematic review of all relevant randomised control trials.

II Evidence obtained from at least one well designed randomised control trial.

III Evidence obtained from well-designed controlled trials without randomisation.

IV Evidence obtained from well designed cohort studies, case control studies, interrupted time series with a control group, historically controlled studies, interrupted time series without a control group or with case-series

V Evidence obtained from systematic reviews of descriptive and qualitative studies

VI Evidence obtained from single descriptive and qualitative studies

VII Expert opinion from clinicians, authorities and/or reports of expert committees or based on physiology


<table>
<thead>
<tr>
<th>Reference (include title, author, journal title, year of publication, volume and issue, pages)</th>
<th>Evidence level (I-VII)</th>
<th>Key findings, outcomes or recommendations</th>
</tr>
</thead>
</table>
▪ Nurses sampled interpreted RPAO’s to mean half hourly vital sign measurements for four hours  
▪ Belief that this frequency of observation was necessary to detect complications of anaesthesia or surgery  
▪ Procedure driven assessment rather than individualized patient assessment was directing post operative nursing actions |
| Zeitz, K., & McCutcheon, H. (2002). Policies that drive the nursing postoperative observations; International Journal of Nursing Studies, 39(8), 831-839 | VI | ▪ 75 surgical hospitals surveyed  
▪ Non paediatric population  
▪ Most common pattern of postoperative vital sign collection is hourly for 4 hours then 4 hourly in 27% of cases (procedure dependent)  
▪ Neurovascular, wound + drain checks most frequent observations collected in addition to vital signs |
| Zeitz, K. (2003). Nursing observations during the first 24 hours after a surgical procedure: what do we do? Journal of Clinical Nursing, 14, 334-343 | VI | ▪ Confirmed that the literature provides little guidance as to the best practice of postoperative surveillance  
▪ Generally reflected a traditional pattern of hourly for the first 4 hours, reducing to four hourly across the 12 – 24 hour period  
▪ After the initial intensive monitoring for individual patients, vital sounds are collected in ‘rounds’, four hourly which relates to hospital culture rather than evidence based practice  
▪ A clear cognisance of practice needs to be identified |
| Zeitz, K. (2006). Observations and Vital Signs: ritual or vital for the monitoring of postoperative patients? Applied Nursing Research, 19, 204-211 | IV | ▪ Vital signs are collected based on tradition and are collected routinely  
▪ Not determined by clinician or individual patient  
▪ There may not be a relationship between vital signs collection and the occurrence or detection of complications |
| ACORN Standards for Peri-operative Nursing; Australian College of Operating Room Nurses (ACORN), 2011 | VII | ▪ Identifies paediatric patients as unique in their management requirements + are more vulnerable + a greater safety risk than adults  
▪ States that effective management of post operative nausea + vomiting post anaesthetic shall be provided  
▪ Details information that should be included in handover to receiving unit staff |
<table>
<thead>
<tr>
<th>Implementation Guide for Organisational Introduction + Use of the Post Operative Orders Format; Victorian Surgical Consultative Council (VSCC), 2009</th>
<th>VII</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Post Operative Orders need to include both past anaesthetic + post surgical orders</td>
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<tr>
<td>▪ Six benefits of a standardize post operative orders format identified</td>
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<td>▪ Project Plan detailed for implementation (set up, preparation, implementation, evaluation)</td>
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