Cost-effectiveness Analysis on the use of Disposable Delivery Set in Delivery Suite

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Introduction
Non-nursing activities takes away the time nurses spend on patient care. One such example is the use of re-usable delivery set in Delivery Suite. On average, a nurse can spend up to 30 minutes after each delivery to wipe down the used instruments that were stained with blood.

Methodology
Disposable delivery sets were sourced. The use of disposable delivery sets was suggested as it was observed that the cleaning process of the instruments after each delivery was time-consuming and reduced the time spent on nursing care. 10 disposable delivery sets were used for trial and evaluated by its end-users, which included obstetricians and nurses working in Delivery Suite.

Disposal Delivery Set
• Manufactured and packed like an autoclaved set
• Material of the instruments in the disposable set are similar to that of an autoclaved set

Aim
The aim of this project is to reduce the time nurses spend on non-nursing activities by introducing the use of disposable delivery set.

Results
Feedback from the obstetricians and nurses who participated in the evaluation were generally positive.

• High quality and sterile content
• Convenience and ease of use
• Did not differ much from the autoclaved sets

Nurses commented that with the elimination of the cleaning process they have more time to render quality care to their patients.

• Elimination of unnecessary steps in the care process → Better Efficiency
• Able to spend more time with patient → To deliver highest standard of care

Conclusion
The benefits of using disposable instruments speak for itself. With the introduction of disposable delivery set in Delivery Suite, it has reduces staff time, instrument maintenance and utility consumption that is associated with re-usable items. More importantly, it has allowed nurses to be able to spend more time at the bedside to provide care for their patients. This is especially important in a unit like the Delivery Suite, where labouring patients and newborn require constant care and monitoring from nurses. Therefore, this project has not only enhanced the quality of nursing care, and also greatly improved patient satisfaction as well as job satisfaction of the nurses working in Delivery Suite.

Potential Savings

<table>
<thead>
<tr>
<th></th>
<th>KKH Staff</th>
<th>Man hour Saved</th>
<th>Man hour cost for cleaning and autoclaving process</th>
<th>Potential man hour cost saving per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery Suite Nurse</td>
<td>35 Minutes</td>
<td></td>
<td>$43</td>
<td></td>
</tr>
<tr>
<td>CSSD Staff</td>
<td>110 minutes</td>
<td></td>
<td></td>
<td>$301,000</td>
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