Introducing Waste Separation and Recycling to the Operating Theatre Complex at Princess Alexandra Hospital, Brisbane, Australia

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Introduction
Operating theatres (OT) typically produce up to 30% of the total hospital clinical waste. Literature suggests that up to 80% of general hospital waste is incorrectly disposed as clinical waste. Of the non-infectious OT waste, approximately 70% is potentially recyclable and should be separated. At a 7 to 1 cost difference between clinical waste and general waste disposal at our hospital, appropriate waste separation and recycling seems to be a logical consequence.

Aims
The aim of this project was to introduce waste separation and recycling to the OT complex.

Methods
An audit of OT complex waste weights and expenditures was performed pre and post induction of the program.

Results

<table>
<thead>
<tr>
<th>Date</th>
<th>Clinical Waste</th>
<th>General Waste</th>
<th>Total Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009 September</td>
<td>21,500</td>
<td>7,000</td>
<td>28,500</td>
</tr>
<tr>
<td>2009 November</td>
<td>21,500</td>
<td>13,720</td>
<td>35,220</td>
</tr>
<tr>
<td>2013 March</td>
<td></td>
<td>5,562</td>
<td>10,190</td>
</tr>
</tbody>
</table>

Since introduction of the OT waste management program, we have reduced the amount of total waste by 50%. At the same time we have reduced the amount of clinical waste by 79%. Savings achieved amount to approximately $155,000 per annum. Recycling of cardboard, clean plastics and Kimguards generates revenue additionally to the savings.

Conclusions
Cost savings and generation of revenue will have immediate effect on patient care. Medical waste is related to good clinical practice. It highlights utilisation/underutilisation of resources that could have been spent on patient care. This project has not only increased environmental awareness but also inspires theatre staff to be proactive and innovative. It has
created a desire to participate, to make a difference and to help reducing our carbon footprint.