From hotel to hospital: technological transfer and process innovation in the housekeeping department

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The project

We bring to your attention an innovative solution implemented by the Swiss multisite hospital Ente Ospedaliero Cantonale (EOC), which introduced a digital platform to enhance the management of housekeeping as a pilot project at the Lugano Regional Hospital. The objective is to illustrate how this innovation has improved staff safety and satisfaction, service quality, operational management, while reducing delays and costs.
**Ente Ospedaliero Cantonale**

<table>
<thead>
<tr>
<th>Category</th>
<th>2023</th>
</tr>
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<tbody>
<tr>
<td>Employees</td>
<td>6,775</td>
</tr>
<tr>
<td>Inpatients</td>
<td>44,418</td>
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<td>ALOS (days)</td>
<td>6.18</td>
</tr>
<tr>
<td>Outpatient visits</td>
<td>637,452</td>
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Resource allocation & operational efficiency

Optimizing cleaning staff management involves **strategic resource allocation** and **operational efficiency**. Effective management ensures that cleaning staff are properly **trained**, adequately **equipped** and have the **time** they need to carry out thorough cleaning. This contributes directly to infection control and patient safety, aligning healthcare facilities with their core mission.
The role of cleaning staff

The literature underscores the indispensable role of cleaning staff in hospitals and emphasizes the need for optimal management practices. Recognizing their impact on infection control, patient satisfaction and overall healthcare outcomes, investing in effective management of cleaning resources is becoming paramount for healthcare facilities. This aligns not only with the principles of patient-centred care, but also with the broader objectives of operational efficiency and employee well-being.
The platform – Hoxell
Outcomes

Firstly, the safety of domestic economy service collaborators has greatly improved. By having clear and constantly updated indications regarding the status of rooms (i.e., isolations and infectious diseases), as well as digital SOPs accessible at any time, the risk of contagion is significantly reduced. Additionally, successfully determining, through environmental investigations conducted by the Infection Prevention and Personnel Medicine Service, which collaborators may have been in contact with infected patients has notably decreased the clinical care process and associated costs.
Outcomes

*Internal communication* has also significantly improved through the use of the platform, as well as *personnel and activity management* with complete *real-time monitoring*. The team leader and the service manager can assign rooms to collaborators for cleaning and monitor the activities performed. Simultaneously, collaborators can report anomalies and non-conformities. Using the tablets provided to all housekeepers, they can send maintenance requests to the technical service, attaching photographs.
Outcomes

Furthermore, activities and time spent by both collaborators and team leaders have been considerably reduced. This has allowed the latter to focus on quality controls, ultimately increasing patient satisfaction. Having images of how the room should be prepared also enhances the standardization of provided quality.
Outcomes

Finally, thanks to the platform, it is possible to develop a multitude of statistics and reports useful for management.

These data also contribute to an improvement in the quality of the hospital’s cost accounting, enabling a more precise allocation of domestic economy service costs and allowing a better control.
Previous habitual process (PHP)
PHP and activities eliminated by innovation
New process

- Daily planning management
- Quality control
- Daily planning management
- Quality control
- Word editing
- Entering/Updating estimated outputs in the system

- Notes and self-assessments
- Referring the patient
- Referring the patient
- Referring the patient
- Referring the patient
- Notes and self-assessments
- Referring the patient
- Entering/Updating estimated outputs in the system
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- Entering/Updating estimated outputs in the system

Daily planning management

Update, entering, and retrieving estimated outputs in the system

Daily planning management

Entering/Updating estimated outputs in the system
Conclusions

This project highlights how a digital innovation, developed by transferring and further developing a solution adopted in the hotel sector to the hospital sector, has generated significant added value for the organization, collaborators, and patients on various fronts. Moreover, this platform still has development potential, allowing for numerous future improvements.
Conclusions

This project also aims to emphasize the importance of housekeeping, cleaning, and hygiene in the hospital field, underscoring its central role in the quality of care. A role often relegated to the background but unquestionably deserving attention and investment, as evident in the substantial benefits it can bring to the organization, collaborators, and patients.
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Thank you for your attention

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