Following three years of continuous growth, the number of facilities repackaging medications has leveled off, reflecting the increasing availability of such products from the manufacturer. While the use of outsourced services decreased this year, DoPs predict an upswing in both the use of outsourced services and the implementation of in-house packaging operations.

For more information on unit dose packaging, circle reader service numbers 905-907, 911-913, 916-918, 921-925, or visit www.findit.pppmag.com

Medi-Dose and McKesson retained their first and second place standings in market share this year. Medical Packaging Inc surpassed Health Care Logistics to move into third place. Other vendors with significant market share growth this year were Euclid, Talyst and Swisslog.

NOTE: Totals exceed 100% as some facilities use products from multiple vendors.

Following three years of continuous growth, there has been a leveling off this year in the number of facilities packaging medications in bar coded, unit dose.

DIRECTORS OF PHARMACY planning to establish bar code packaging operations are reviewing a deep list of vendors. Medi-Dose, Cardinal, McKesson, and Talyst are the top vendors under consideration.

NOTE: Totals exceed 100% as most facilities are considering multiple vendors.
**Trends in Packaging Methods**

- **In-house packaging** remains the primary approach to unit dose packaging. Both outsourced repackaging and in-house repackaging services saw declining use during 2009 despite last year’s projections by DoPs that their use of these outsourced methods would increase over the next five years.

**Projected Packaging Methods**

- DoPs project a move toward more outsourcing of unit dose packaging in the next five years. This matches the projections made in 2008.

**Packaging Oral Solids**

**Methods for Packaging Oral Solids**

- **Tabletop unit dose packaging machines** continue to enjoy widespread usage in the packaging of oral solids.

**Scenarios for Using Manual Systems**

- The manual approach to packaging medications in unit dose is still common, though primarily used for ancillary packaging, such as short runs, non-formulary products, controlled substances, allergy risks, etc.
Unit Dose Packaging

User Satisfaction

<table>
<thead>
<tr>
<th>Less than satisfactory</th>
<th>Poor</th>
<th>Excellent</th>
<th>Satisfactory</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>6%</td>
<td>1%</td>
<td>20%</td>
<td>27%</td>
<td>46%</td>
</tr>
</tbody>
</table>

^ Satisfaction with packaging methods continued to grow this year. 66% of users rated their equipment “good” or “excellent” up from 59% in 2008.

Reasons for Not Adopting Bar Coded Unit Dose Packaging

<table>
<thead>
<tr>
<th>Lack of administration support</th>
<th>Lack of budget</th>
<th>See no need</th>
</tr>
</thead>
<tbody>
<tr>
<td>57%</td>
<td>53%</td>
<td>37%</td>
</tr>
</tbody>
</table>

^ Of the 22% of facilities that do not plan to implement a packaging operation, most (63%) are amongst the smallest hospitals with fewer than 100 beds. Interestingly, a lack of support from administration edged out budget constraints this year as the primary reason for not moving forward.

Timeline to Adoption of Bar Coded Unit Dose Packaging

- Within 6 months: 6%
- 6 months–1 year: 22%
- 1-2 years: 22%
- 2-3 years: 9%
- 3+ years: 10%
- No plans to implement: 22%

^ Facilities with packaging operations are projected to grow: 78% of those currently without internal unit dose packaging operations plan to implement one with the majority of those implementation occurring in the next two years.

Bar Code Symbologies

Trends in Two-Dimensional Bar Code Usage

- 2-D codes in use: 25% (2007), 46% (2008), 41% (2009)
- Plan to use 2-D in future: 15% (2007), 19% (2008), 19% (2009)

^ While two-dimensional bar codes remain fairly common, their usage diminished this year and projections for future growth remain surprisingly flat. Given the rapid acceptance of this technology over standard bar codes in the two previous years, this stagnation was unexpected.