Outcomes of a Community-based Clinical Prevention Service

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Randomized controlled evaluation of Clinical Prevention Model with high risk Medicaid recipients

Sample
Families of 98 Medicaid recipients from a rural western state who were:
• Receiving two or more state services
• Prescribed 10 or more unique drugs in the year prior to the study
• Not over 65 or receiving Medicare

Measures
Pre-post evaluation over a nine month period

- Cost and service data from an integrated state database
  • Claims data (drugs and treatment) + Service data + Benefits data
- CDC Health Related Quality of Life (HRQOL-4)
  • Four core questions: health rating, days physical health poor, days mental health poor, days daily activities limited
  • Ten questions about symptoms, pain, depression

METHODS

Table 1: Comparisons of Self-rating of health pre and post for control and study group

<table>
<thead>
<tr>
<th>Group</th>
<th>Initial Health Rating</th>
<th>Final Health Rating</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control n = 44</td>
<td>M = 3.38</td>
<td>M = 3.41</td>
<td>0.03 – n.s.</td>
</tr>
<tr>
<td>Study n = 54</td>
<td>M = 3.35</td>
<td>M = 2.93</td>
<td>0.42 – p = 0.000**</td>
</tr>
<tr>
<td>Difference</td>
<td>0.40 – n.s.</td>
<td>0.48 – p = 0.02</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Comparisons of numbers of days activity was limited by physical or mental health

<table>
<thead>
<tr>
<th>Group</th>
<th>Initial No. of Days</th>
<th>Final No. of Days</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control n = 44</td>
<td>M = 8.55</td>
<td>M = 6.67</td>
<td>-0.91 – n.s.</td>
</tr>
<tr>
<td>Study n = 54</td>
<td>M = 8.96</td>
<td>M = 4.35</td>
<td>4.65 – p = .001</td>
</tr>
<tr>
<td>Difference</td>
<td>8.40 – n.s.</td>
<td>4.23 – p = .01</td>
<td></td>
</tr>
</tbody>
</table>

FINDINGS

- Control group (n = 44) and Study group (n = 54) had no pre-test differences in costs, numbers of services or HRQOL
- Self-rated health was markedly lower for both groups than state norms
  • 45% rated health as fair to poor versus 12% of state residents
- Families used approximately 2 to 3 hours of service per month
- Statistically significant improvements in numbers of poor health days (physical or mental) for the study group
- Study group had a 14% decrease in public assistance costs while control group had an 8% increase in costs (not statistically significant but an important trend)

CONCLUSIONS

- Service led to healthier families – increased quality of life
- Service led to increased functioning – decreased number of days with activity limit
- Families relied less on agency services – increased self-sufficiency
- Clinical Prevention Model shows great promise as a model for advanced nursing practice to improve health as human capital and provide market solutions to the healthcare cost and quality problem