Technical Data Evaluation of a Palliative Care Web-Based Documentation System
Background

Ambulatory Palliative Care

Providing comprehensive services to ill patients within their personal surroundings.

Goal

Relieving patients of their symptoms, improving quality of life.

Requirements

- Multi-professional teams (doctors, nurses, psychologists, social workers, ...),
- Access to current patient data at all times.
Project timeline

eKern PäP

2002
• Access based documentation system.

2008
• Development of a web-based documentation solution.

2010
• Release of new system.
• Implementation of an offline solution.

2011
• Technical analysis.
• Further improvement.

2011
• Official release by vendor.
Technical Analysis

Goal

In order to understand how the system is used in order to draw conclusions on how to further improve it.
Methods

Data Source:
- 3 PCTs (using system since 1 year).
- 33 different forms.
- 61 users.
- 215 patients.
Results 1
Edits and Views of users

Question:
Why are some forms used more often than others?
## Results 2
Data completeness of a specific form

<table>
<thead>
<tr>
<th>Selection of items from the pain form</th>
<th>Input Type</th>
<th>Data entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongest pain (24h)</td>
<td>Radio button</td>
<td>456</td>
</tr>
<tr>
<td>What does relieve your pain?</td>
<td>Text</td>
<td>180</td>
</tr>
<tr>
<td>Pain relief through treatment</td>
<td>Radio button</td>
<td>96</td>
</tr>
<tr>
<td>Sense of pain: dull, onerous</td>
<td>Radio button</td>
<td>32</td>
</tr>
<tr>
<td>Negative effect of pain concerning vitality</td>
<td>Radio button</td>
<td>6</td>
</tr>
</tbody>
</table>

### Question:
Can items be omitted?
## Results 3
How user navigate through the system.

<table>
<thead>
<tr>
<th>Origin / Target</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selecting Patient Contact</td>
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<td>12%</td>
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<td>Assessment</td>
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<td>42%</td>
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<td>Base data</td>
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<td>Physical Examination</td>
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<td>Symptoms overview</td>
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<td>List of Symptoms</td>
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</table>

### Question:

How can we improve the navigation?

How do we influence how health professionals think and work?
Discussion

A technical data analysis gives an overview how system is used.

- Different possible interpretations.

Advantages of PIWIK:

- easy to integrate
- anonymous logs
- real time data
"I think you should be more explicit here in step two."
Last but not least.

Thank you for your interest.

Any questions?

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More Information
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