Introduction

The health care region of Winterthur (slightly over 200’000 inhabitants) is currently missing data indicating, if the region has a need for hospice beds. Furthermore, there is neither an overview of existing numbers of hospice beds, nor available information where terminally ill persons spend their last days or weeks of life. The aim of this study was to investigate these questions and to determine whether or which actions could be deduced from the findings.

Methods

Methods consisted of a literature review and a survey among the relevant institutions in the health care region of Winterthur. These institutions, referring organisations as well as subsequent organisations, were asked to take part in the survey, consisting of a retrospective assessment of the number of hospice patients passing the institution, as well as a quantitative and qualitative investigation lead by means of a slightly adapted group-Delphi-method [1]. The literature review revealed a definition for hospice beds that was slightly adapted for the study with the help of several experts [2].

Beside this bottom-up approach a top-down calculation was meant to validate the results, yet data from literature was not sufficient to finalise this calculation.

Results

Most contacted experts and service providers participated in the written interview (15, 94%) and in the workshop (12, 67%). Yet, almost all of them reported having problems estimating the number of hospice bed patients in the whole region over one year (personal estimation, Delphi), but also in retrospectively assessing the number of hospice bed patients having passed their institution in the past six month (retrospectively assessed data) due to missing data in the institutions. The obtained data (Table 1) should therefore only be interpreted with caution.

The qualitative investigation revealed, that the region is mostly missing one-bed rooms with short-term availability (less than 7 days) reasonably accessible for relatives. The biggest needs were detected in young palliative care patients and patients with complex medical conditions, difficult social circumstances, acute psychiatric diseases or addictions. These patients are currently mainly treated at the cantonal hospital or in regional nursing homes.

![Figure 1: Number of hospice beds needed in the health care region of Winterthur dependent on survey method](image)

Table 1: Estimated hospice bed patients per year dependent on survey method

<table>
<thead>
<tr>
<th>Survey Method</th>
<th>mean</th>
<th>std</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retros. assessed data (referring organisations)</td>
<td>88</td>
<td>n.a.</td>
<td>9</td>
</tr>
<tr>
<td>Retros. assessed data (subsequent organisations)</td>
<td>82</td>
<td>n.a.</td>
<td>6</td>
</tr>
<tr>
<td>Personal estimation, Delphi (questionnaire)</td>
<td>66</td>
<td>82.1</td>
<td>8</td>
</tr>
<tr>
<td>Personal estimation, Delphi (workshop)</td>
<td>50</td>
<td>41.1</td>
<td>12</td>
</tr>
</tbody>
</table>

N: Number; n.a.: not applicable; Retros.: retrospectively; std: standard deviation

Based on the assessed number of potential hospice bed patients per year, with a fixated dwell time based on experience (17.4 days) and depending on capacity utilisation the number of hospice beds needed resulted in 2.4 to 7.0 for the health care region of Winterthur (Figure 1, calculated by means of a slightly adapted equation by Haubrock et al. [3]).

Conclusion

Even though the analyses resulted in a distinct number of hospice beds needed, these results should be interpreted with caution, as experts taking part in the investigation had extensive difficulties to estimate the required data. Better estimations could be obtained by prospectively collecting data. The qualitative investigation led to the confirmation of the definition of hospice beds used in the survey and the conclusion that the currently available solutions for potential hospice patients did not meet several requirements. Institutions are mainly seeking for one-bed rooms with short waiting times for patients with complex palliative needs.


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