Using client experiences for quality improvement in long-term care organizations

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Abstract

Objective. To examine whether client experiences measured with the Consumer Quality Index (CQ-index or CQI) questionnaires are used in Dutch nursing homes and homes for the elderly for quality improvement.

Design. Information was gathered through face-to-face interviews with day-to-day workers, quality managers and middle and senior management representatives on the subjects of quality policy and CQI.

Setting. Twelve long-term care organizations in the Netherlands.

Study Participants. A total of 47 employees were interviewed.

Results. Long-term care organizations that systematically incorporate client experiences into their quality system are more active in using the CQI for quality improvement: information was disseminated throughout the organization, project groups pointed out quality improvement initiatives and every worker was involved in this process. These organizations had often held a certificate for their quality policy for some length of time. In other organizations, CQI information was used less systematically. For instance, only the quality manager was involved, or improvement initiatives were left to employees working in the primary process. The actual improvement initiatives varied. For example, employees created more individual time for clients to avoid the feeling of being rushed; other organizations changed the food delivery to enhance food enjoyment.

Conclusions. Although measuring client experiences obligatory, it is not sufficient guarantee that client feedback is used for quality improvement. Although measuring client experiences has led to various improvement initiatives, their effectiveness remains unclear. There is need for guidance on effective improvement of client experiences.

Keywords: customer experiences, nursing homes or homes for the elderly, CQ-index use, healthcare improvement initiatives

Introduction

Every year, Dutch nursing homes and homes for the elderly are obliged to account for the quality of their care in a mandatory report [1]. This quality information relates to effectiveness, safety and patient orientation [2]. Patient orientation is measured by asking clients about their experiences of care. This is done using a standardized methodology called the Consumer Quality Index (CQ-index or CQI). In addition to guidelines for measuring the client experiences, this methodology also contains guidelines for analysing and reporting [3]. Using standardized information is efficient; several parties (each with their own needs) are provided with performance information through one single measurement [4]. For example, the collected information should serve healthcare users on the healthcare market who are increasingly expected to act as informed decision makers, managers and professionals in healthcare to monitor and improve their healthcare quality, and health plans on the health purchaser market. In this study, the focus is on the use of CQI data within healthcare organizations to improve the quality of care.

According to Berwick et al. [5], there are two mechanisms whereby the measurement of quality can lead to improvement. First, this can occur via the selection mechanism. This means that—on the basis of the published results of the quality measurements—(future) healthcare users choose, and
health plans contract, care organizations that perform better. This causes shifts in market shares, so that organizations that perform well grow, and those that perform poorly shrink or even collapse. However, it is reported that transparent quality information has little effect on the consumption behaviour of healthcare users [5, 6]. The second mechanism possibly works through change. This presumes that, if there is dissatisfaction about the results, healthcare providers will themselves initiate changes because of their intrinsic motivation to provide good quality care [5, 7]. The actual use of this information may also depend on factors related to the data such as credibility, reliability and validity [8, 9], factors related to staff such as being open to feedback, enough time and resources and no resistance to change [8, 10] and factors related to the organization such as capacity and an infrastructure for quality improvement [8, 11]. Additionally, there is a greater chance of success in initiating and maintaining quality improvements when senior management is involved [12] and when the management demonstrates leadership [8]. Making the data available on the Internet also provides a stimulus for quality improvement [5, 13]. This is apparent, for example, from research in the USA, where homes for the elderly re-organize their quality programmes and start up new programmes as a reaction to comparative quality information [14–17]. This effect was stronger among homes performing less well than among homes that scored better [14], and was also observed by Dutch health insurers [18].

Following this line of reasoning, our research question is: ‘How is CQI information used in nursing homes and homes for the elderly for quality improvement?’

Method

First, before presenting the current study, background information is provided on the CQ-index ‘Long-term care’ and on data collection, in order to give a realistic picture of the CQI methodology.

CQI ‘Long-term care’

The CQI ‘Long-term care’ that is used in the nursing and caring sector includes three different instruments: (i) a face-to-face interview questionnaire for long-term residents of nursing homes and homes for the elderly, (ii) a mail questionnaire for legal representatives of psycho-geriatric clients, and (iii) a mail questionnaire for assisted-living clients [19, 20]. These instruments comprise questions around seven themes with CQI indicators (Table 1). These indicators have been determined by factor and reliability analysis. Table 2 provides representative items of the two CQI indicators ‘3.2. Autonomy’ and ‘6.2. Involvement and consultation’. The response categories of the frequency items are on a four-point scale (never, sometimes, usually and always), asking whether the access to care was perceived as a problem (a large problem, a small problem and not a problem), and general ratings (ranging from 0 to 10, with a score of 10 indicating the best possible score) of the quality of care.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Sample Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2 Autonomy</td>
<td>Can you go anywhere you want to?</td>
</tr>
<tr>
<td>6.2 Involvement and consultation</td>
<td>Is the home responsive to your input, wishes and questions?</td>
</tr>
<tr>
<td>3.2 Autonomy</td>
<td>Can you get out of bed whenever you want to?</td>
</tr>
<tr>
<td>6.2 Involvement and consultation</td>
<td>Are you involved in decisions about your care or treatment?</td>
</tr>
<tr>
<td>3.2 Autonomy</td>
<td>Can you yourself determine how you spend your day?</td>
</tr>
<tr>
<td>6.2 Involvement and consultation</td>
<td>Do you decide which time and days you will get your care or treatments?</td>
</tr>
<tr>
<td>3.2 Autonomy</td>
<td>Can you go anywhere you want to in the home?</td>
</tr>
<tr>
<td>6.2 Involvement and consultation</td>
<td>Does the staff respond adequately (quickly and correctly) to your questions/suggestions/complaints?</td>
</tr>
<tr>
<td>3.2 Autonomy</td>
<td>Can you yourself decide about your care or treatment?</td>
</tr>
<tr>
<td>6.2 Involvement and consultation</td>
<td>Does the staff discuss with you what needs to be done?</td>
</tr>
</tbody>
</table>

Collecting data

Data collection with the three instruments is administered once per 2 years by a survey vendor that is authorized to conduct CQI research, and the data are used as accountability information. Performing CQI measurements is mandatory. The survey vendor provides a report for the organizational unit, location or concern, containing the data collected. The results are also included in a national databank, and are corrected for relevant case-mix variables such as age, health status and level of care required. The indicator scores were divided into five performance groups using (i) the average
score of all organizations on one indicator, (ii) the average score of the higher bound of the comparison intervals, and (iii) the average score of the lower bound of the comparison intervals (* for much below average to ***** for much above average). After approval by the organization, the star ratings were published on a government website—www.kiesBeter.nl.

Selection of long-term care organizations

Sixty organizational entities (OEs) were selected from 998 nursing home, homes for the elderly and home care OEs that published their data via an Accountability Report. This selection was based on the results of two CQI indicators, namely ‘Perceived autonomy’ and ‘Perceived involvement and consultation’ with ratings ranging from worst to best performance: ‘(much) below average (1 or 2 stars)’, ‘average (3 stars)’ and ‘(much) above average (4 or 5 stars)’. These indicators were chosen because actions to improve the scores of these indicators can, in principle, be achieved relatively quickly. We aimed to select a range of 15 organizations with different performance scores on these indicators, because we expected different uses of patient experience information.

There were no exclusion criteria regarding why some organizations were not selected to participate. The Boards of Management of the selected long-term care organizations received a letter inviting them to participate in this study. After 2 weeks, the quality manager or the secretariat was contacted by telephone to ask whether the letter had been received and whether the organization wished to take part in this study.

In total, 12 OEs distributed throughout the Netherlands took part in this study. Four organizations scored 1 and 2 stars (Homes 1, 4, 7, and 10), three organizations scored 4 or 5 stars (Homes 3, 5, 12), four organizations had a mixed performance (Homes 2, 8, 9, 11) and one organization scored 3 stars (Home 6) (Table 3). Reasons given by long-term care organizations for not taking part in this study were either that they were occupied with a merger/integration process, or that they were engaged in certification or other (obligatory) investigations. However, the majority of the organizations approached decided (with or without consultation with the Board or location manager) not to take part in this study, without giving a reason.

Participant interviews

In 2010, semi-structured interviews were held with various members of staff within each of the organizations that participated in order to obtain information on the use of client experience information. The participants per organization can differ, because each organization differs in how the CQI results are put into effect within the organization. Therefore, the number of each type of employee may also differ.

Day-to-day carers, representatives of middle management (manager, team leader or coordinator), quality managers and/or representatives of senior management (director, location or regional director) were interviewed by one interviewer (M.Z.). The following subjects were discussed: the organization, quality policy and CQI results. With permission, interviews were recorded digitally. Those who were interviewed received a summary of the interview for authorization. The interviews were performed at the locations of the participating organizations. In total, 47 employees were interviewed. Table 1 shows the number of people interviewed per organization and per employee type.

Table 3 The number of stars per indicator and the number of interviewees per group for each participating organization

<table>
<thead>
<tr>
<th>Organization</th>
<th>Number of stars per indicator</th>
<th>Interviewees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Auto Involvement and Consultation</td>
<td>Care worker Management</td>
<td>Middle</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quality</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
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<td>3</td>
<td>4</td>
<td>2</td>
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<tr>
<td>4</td>
<td>1</td>
<td>2</td>
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<td>5</td>
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<td>6</td>
<td>3</td>
<td>2</td>
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<tr>
<td>7</td>
<td>1</td>
<td>1</td>
<td>2</td>
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<tr>
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<td>2</td>
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<tr>
<td>10</td>
<td>2</td>
<td>1</td>
<td>1</td>
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<tr>
<td>11</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>16</td>
<td>12</td>
</tr>
</tbody>
</table>

*a1 or 2 stars = below average, 3 stars = average, and 4 or 5 stars = above average.*
Table 4 Themes and subthemes

1. Overall opinion about quality measurements
   e.g. accountability, external parties, transparency
2. Features of the CQI measurement
   e.g. recognizability, reliability, validity
3. Organization-related issues
   e.g. structure, involvement of quality managers, infrastructure for quality improvement

Data analysis

The interviews were transcribed and analysed using Atlas.ti version 6 with open coding [20]; this means that the text determines which codes arise. The themes to which the codes belonged were then determined. This process was done by two researchers (M.Z. and K.L.) to ensure the rigour of this analysis. Overall, the information retrieved could be categorized into three overall themes (Table 4).

Results

Before quality improvement can be initiated, quality measurement needs to be performed; staff opinion is relevant for this, because quality measurement determines whether they will perform CQI measurements. Therefore, we first address the opinion of the interviewees about the quality measurement, and then discuss the facilitators/barriers related to features of the CQI measurement and organizational issues.

Opinions on quality measurements

According to interviewees, quality measurements with the CQI-index take place for several reasons. First, organizations undertake these measurements because they are required to do so by the Dutch Government, the branch organization ActiZ, and by health plans. More specifically, organizations feel obliged to perform CQI measurements because the costs for long-term care are paid through collective financing of health care; they want to stay a member of the branch organization; or they want to receive full reimbursement for the care provided. The latter point is illustrated by the following quotation: ‘The health plan sets pre-conditions: (1) perform a CQI measurement once per two years, and (2) if we as an organization do not score well enough on certain aspects, a deduction of a certain percentage from our tariff is imposed’ (home 6, senior management).

In some care purchase discussions, improvement plans based on the results were also central. These plans had to be approved by the client council in order to guarantee the client perspective. Secondly, besides measuring client experiences, the information collected is published on the Internet. Organizations do not perceive this as obligatory, but as a consequence about the organizational policy and attitude towards transparency, as expressed in the following statement: ‘The organisation wants to be transparent about the care that it provides, and publishing on www.kiesBeter.nl [website of the Government] is part of that’ (Home 3, middle management).

Thirdly, organizations use the CQ-index to measure client experiences because it is a national instrument that allows them to compare their own scores with those of other organizations, and comparative data provide a frame of reference. Other reasons for measuring client experiences were: ‘the results keep the organisation alert’ (Home 2, senior management) and ‘the results are an incentive to keep us on our toes’ (Home 8, senior management).

Features of the CQ-index

Besides providing a frame of reference, those interviewed found that the CQI results were not surprising or new; but did confirm what an organization already knew. In that order, the information was recognizable in the way their organization works. If the data had not been recognizable, interviewees would have had doubts about the methodology or instrument. This is illustrated as follows: ‘Last year, the CQI information was not recognizable. One location scored structurally lower than the other locations; there is no explanation for this. The only logical explanation lies in the person who conducted the interviews (Home 7, senior management)’. CQI data are collected by survey vendors to ensure that the measurement is independent from the organization and therefore reliable. The CQI methodology employs questionnaires with predefined categories of answers. Some quality managers and members of senior management were of the opinion that the extra information received from clients during the interview had ‘got lost’. They would prefer follow-up questions and record this extra information. In their opinion, this would provide information on the actions for improvement required. On the other hand, interviewees from other healthcare organizations indicated that, as a follow-up to the CQI results, management itself should determine which aspects they want to focus on—and this will differ for each organization.

Structure of the organization

In organizations certified as providing qualitative good care for a longer period of time, the staff at various level more often spoke about initiating ideas for improvement actions, and implementing, monitoring and evaluating these actions. In contrast, with recently certified organizations, this was seen mainly among the quality managers. Most of the quality managers worked for the concern (the overall organization), and different locations within that concern ‘hired’ the services of the quality manager. For this reason, quality managers were assigned only to obtain or extend a certificate on location level, or research on concern level, and not for actions in response to a CQI measurement. Consequently, analysing CQI information and generating and initiating improvement actions fell to the middle management and the care workers of the locations. The following example was proposed by care workers to improve a poor score on the indicator ‘respectful approach’ and ‘staff availability’. The staff explained that these low scores were due to being too busy.
At a subsequent meeting, the care workers were asked ‘How can staff appear to be calm even when they are busy?’ A care worker proposed ‘Thea’s count up to 5’, whereby each carer stops and counts up to five before entering a client’s room. Then, they go in and sit down for a moment so that the client thinks: ‘She’s sitting down, so she can’t be that rushed.’ (Home 8, care worker). In the following example, a member of senior management decided to change the provision of hot meals to enhance food enjoyment. Previously, clients filled in a menu list 2 weeks in advance. After changing the preparation process, the hot meal is now served in dishes on the table, with a choice of vegetables, meat and dessert.

In several organizations, through mergers and cost containment, local middle management was replaced by a single regional manager who had overall responsibility for several locations. These changes in structure meant that care workers had (even) more tasks, leading to an increased workload. This resulted in the postponement or cancellation of (improvement) actions stemming from the CQI measurement.

**Discussion**

In the present study, we interviewed staff in 12 nursing homes and homes for the elderly to investigate the use of CQI information for quality improvement.

**External and internal motivation**

The findings show that external parties (i.e. government, branch organization, health plans) (in part) stimulated performance of the CQI measurements and the publication of data on the Internet. However, the organizations themselves had an internal motivation to be transparent about the care provided. Although these motives reinforce the performance of CQI measurements, measurement alone is not sufficient to guarantee that the information is actually used for quality improvement [5]. There are facilitators, as well as barriers, to using the information for improving quality of care.

**Data feedback**

Facilitators using the data from CQI-index measurements were reliable and recognizable information. These two aspects supported healthcare organizations in the continual improvement of their performance [11]. Having the data collected by an independent survey vendor increased the idea that the data are reliable. Also, because one threat to the credibility of CQI data is the role of the interviewer, the guidelines for performing interviews have been improved to avoid interviewer effects. These can be avoided by performing each interview at any location with a minimum of three interviewers, by randomly dividing the clients between the interviewers, and by interviewer accepting only those answers that are mentioned in the answering categories [22]. Some thought that the overall picture provided by the CQI-index was too general, which hampers using the data because further investigation is necessary. Others reported that detailed information at the right level encourages the use of information [8]. This does not necessarily imply that as detailed as possible information should be collected in standardized quantitative surveys. It is probably better to elucidate the findings by supplementing them with qualitative data. Qualitative research provides a more comprehensive picture and in-depth understanding of client experiences, and can offer concrete and significant examples [23]. This can be carried out by the survey vendor that performs the CQI measurement, or by the organization itself.

**Organizational infrastructure**

The infrastructure for quality improvement differed between the organizations. In the case of recently certified organizations, the improvement cycle was familiar to the quality managers but not to other members of staff. This is probably because the quality managers were hired by middle management in order to gain specific certificates. For organizations that had been certified for a longer period of time, this cycle was also familiar to the management. In some organizations, improvement actions were not delegated to the quality managers but to middle management and care workers; the rationale for this being that they probably better relate the results to the working processes than the quality manager. However, because improvement initiatives are not part of their normal activities, there is insufficient time to achieve change. This is a barrier to the use of CQI results. Actions were initiated by various levels of staff within the organization to improve the quality of care. Which persons actually carried out the actions (e.g. the quality manager or staff involved in the daily care) depended on the infrastructure for quality improvement, the policy and the structure of the organization. There is (as yet) no standard training or support for (quality) staff to facilitate the use of the results of the CQI measurements. If the ‘Best practices’ to improve client experiences are documented, all those involved can learn from each other; such guidance is currently lacking.

**Limitations of the study**

The use of CQI information for quality improvement has been described. Our selection procedure aimed to include organizations with different performance scores, because we expected they would use the information on patient’s experience in different ways. Our results revealed no connection between the star rating performance of the organizations and the initiated actions. Further systematic research should investigate whether such a relationship exists. The participating long-term care organizations probably represent a positive selection of those who are interested in and/or recognized the importance of this study. Direct day-to-day workers were not interviewed in every organization; this could have biased our results. Although these staff are closely concerned with what is going on within the organization, they showed limited knowledge and involvement in the process of client experience questionnaires. A drawback of the study is that the statements made by the interviewees on the use of
information could not be verified by checking documents (data triangulation). Also, the effects of a different balance between the contribution of the quality manager and implementation by other care staff needs further study, as does the effectiveness of the actions taken, e.g. do they lead to measurably better client experiences?

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**References**


