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Building Quality Report Cards for Geriatric Care in The Netherlands: Using Concept Mapping to Identify the Appropriate "Building Blocks" From the Consumer's Perspective

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Purpose: This article reports on a study to identify ''building blocks'' for quality report cards for geriatric care. Its aim is to present (a) the results of the study and (b) the innovative step-by-step approach that was developed to arrive at these results. ***Design and Methods:*** We used Concept Mapping/Structured Conceptualization to define the building blocks. Applied to this study, we carried out Concept Mapping using several data collection methods: (a) a Web search, (b) semistructured interviews, (c) document analysis, (d) questionnaires, and (e) focus groups. ***Results:*** The findings showed that, although home care and institutional care for elderly adults share many quality themes, experts need to develop separate quality report cards for the two types of geriatric care. Home care consumers attach more value to the availability, continuity, and reliability of care, whereas consumers of institutional care value privacy, respect, and autonomy most. This study also showed, unlike many other quality report card studies, that consumers want information on structure, process and outcome indicators, and rating outcome indicators such as effectiveness and safety of care both for home care and for institutional care. Concept Mapping proved to be a valuable method for developing quality report cards in health care. ***Implications:*** Building blocks were delivered for two quality report cards for geriatric care and will be used when quality report cards are built in The Netherlands. For the U.S. context, this study shows that current national report cards for geriatric care should be supplemented with quality-of-life data.

Key Words: Indicators, Quality information, Choice, Performance, Health care consumers, Regulated competition

On January 1, 2006, a new Health Care Insurance Act came into effect in The Netherlands. This act gives the Dutch health care system many features of the American system of preferred provider organizations. Citizens now choose their own health care insurer and, when they need care, their own provider. Insurers bid for the public's favor by selectively contracting the best performing providers (in terms of costs and quality) and by offering clients a wider range of insurance and care options. The purpose of the new act is to increase competition between health care providers and between health care insurers, and thus raise quality of care while constraining costs (Schut & Van de Ven, 2005). Notwithstanding the debate about the benefits and desirability of such a system, most parties agree that its adequate functioning depends on reliable and accessible comparative consumer information on the quality of health care insurers and providers. Information asymmetry is recognized as one of the main deficiencies of the health care market (Arrow, 1963). Therefore, the Dutch Ministry of Health, Welfare and Sport launched the Choosing in Health Care program, which aims to develop quality report cards for insurers; hospitals; and providers of mental health care, care for disabled persons, and geriatric

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care (defined here as home care, homes for elderly adults, and nursing homes).

Current Approaches and Their Problems

The key question when developing a quality report card is what information it should contain (i.e., what the appropriate ‘‘building blocks’’ are). In this article we use *building blocks, quality themes*, and *quality domains* as synonyms. Building blocks (such as ‘‘ambience and privacy in a nursing home’’) can be subdivided into quality aspects (e.g., ‘‘feeling at home’’), which in turn can be measured by quality indicators (‘‘percentage of clients who say they feel at home when they are asked’’). The literature describes several approaches to developing quality report cards (e.g., see Harrington, O’Meara, Kitchener, Payne Simon, & Schnelle, 2003; Mattke, Reilly, Martinez-Vidal, McLean, & Gifford, 2003). In the United States, for example, preliminary versions of the Centers for Medicare and Medicaid Services (CMS) Nursing Home Compare Web site (the largest and most well-defined nursing home report card in the United States) were mainly based on the work of researchers at the University of Wisconsin’s Center for Health Systems Research and Analysis. These researchers developed a set of nursing home quality indicators from existing items in the Minimum Data Set (MDS), a set of 15 clinical outcome indicators such as pressure ulcers and weight loss (K. Berg et al., 2002; CMS, 2005; Zimmerman et al., 1995). Another way of developing a report card is to look at existing cards (in other countries; Castle & Lowe, 2005) or to ask the public what it wants to know about health care quality (Hibbard & Jewett, 1996). Other techniques include Delphi techniques (Normand, McNeil, Peterson & Palmer, 1998), storytelling methodology (Sofaer, Gruman, Connaughton, Grier & Maule, 2000), and the Balanced Scorecard approach (Hall et al., 2003).

All of these methods share the same two problems, however. First there is the trichotomy between the quality report card’s technical validity (do the indicators measure what they are supposed to measure?), its appropriateness (does it contain the information consumers need and want?) and its feasibility (are measurable data available?). Selecting indicators from the literature, from carefully chosen existing quality report cards, or on the basis of expert opinion may guarantee validity and technical adequacy but will not necessarily fit with consumers’ perspectives. However, giving consumers *carte blanche* when building a quality report card might lead to a rather utopian set of indicators that is hard to measure or that goes beyond common and feasible health policy objectives, and as such constitutes an undesirable incentive mechanism for care providers from the health care perspective.

M. Berg and colleagues (2005) stressed the importance of feasibility of public performance data. They argued that feasibility is the most important prerequisite for public reporting, more than perfect technical validity of the indicators, say. The appropriateness dilemma is well illustrated in studies by Arling, Kane, Lewis, and Mueller (2005), Castle and Lowe (2005), and Harrington and colleagues (2003). Arling and colleagues critically evaluated nursing home quality indicators used in the United States for measuring and comparing nursing homes, including the CMS Nursing Home Compare indicators. One of their conclusions was that quality indicator reporting systems should be tailored to specific stakeholder needs, for example to consumers. The second study examined nursing home report cards in 19 U.S. states and found that the information presented differed substantially. Castle and Lowe concluded that this variation in types of information—caused by the specific needs of regulators, provider organizations, and consumer groups—imposes a considerable limitation on current quality report cards, as it creates a situation in which few elderly people are capable of judging report card information. Based on a literature review, Harrington and colleagues presented a rationale and a framework for presenting comprehensive consumer information on nursing homes through report cards. They found six key information areas: (a) facility characteristics and ownership; (b) resident characteristics; (c) staffing indicators; (d) clinical quality indicators; (e) deficiencies, complaints, and enforcement actions; and (f) financial indicators. However, their claim that all of these areas are important in informing consumers fully was not substantiated by testing their findings against consumer preferences.

The second problem with current approaches is the dichotomy between the ‘‘ivory tower strategy’’ and the ‘‘consensus strategy.’’ Some report cards are developed by one or a very limited number of parties. These report cards often lack consensus and support and are consequently rarely fully implemented or have a short lifespan. Castle and Lowe (2005) warned that they had based their cross-section of 19 report cards on the opinion of only one research team and that their results should be presented to consumers before any conclusions could be drawn regarding their appropriateness. Other report cards are developed jointly by regulators, providers, insurers, and consumers. Such a consensus process usually leads to a greater diversity of information, making it much more difficult for users to understand the information provided, make tradeoffs between information items, use the information to prioritize provider organizations, and come to a well-considered decision (Jewett & Hibbard, 1996). In the United States, this problem is well illustrated by the CMS Nursing Home Compare Web site, probably the best known example of a consensus-seeking report card development process. From 2002 to 2004, the National Quality Forum developed 16 performance measures that

> facilitate standardized comparison of the quality of nursing homes. These quality measures were carefully reviewed and endorsed by a diverse group of stakeholders: consumer and patient groups, health care purchasers, health care providers and health plans, research and quality improvement organizations. (National Quality Forum, 2004, p. E1)

However, despite the thoroughness of the consensus process, evaluations of the Nursing Home Compare initiative reported several problems, including the appropriateness of the indicators for consumers, as well as failure to identify key conceptual dimensions and to aggregate indicators into general categories or domains, which would make it easier for consumers to understand information (Arling et al., 2005; U.S. General Accounting Office, 2002).

What is needed, apparently, is a method for developing quality report cards that strikes a balance between validity, appropriateness, and feasibility of content while generating sufficient consensus and support in the development process. In this article we present an approach to meet this challenge that was recently developed and applied in The Netherlands.

Objectives

This article (a) reports on a study conducted to identify the appropriate building blocks for quality report cards for geriatric care from the consumer's perspective and (b) aims to describe the results of the study—the building blocks—plus the innovative step-by-step approach developed to arrive at these results. The article ends with a discussion of the results and methodology, plus some suggestions for future quality report card initiatives and applications of the method.

Methods

After studying various earlier methods for developing quality report cards, performance indicators, and potential innovative approaches (Castle & Lowe, 2005; Hall et al., 2003; Harrington et al., 2003; Hibbard & Jewett, 1996; National Quality Forum, 2004; Normand et al., 1998; Sofaer et al., 2000), we selected Concept Mapping as the most promising approach for building a feasible and valid quality report card from a consumer's perspective, based on consensus among the main actors in the field.

William Trochim first introduced Concept Mapping in 1989 as "a type of structured conceptualization which can be used by groups to develop a conceptual framework which can guide evaluation or planning" (Trochim, 1989). Over the past 15 years, experts have used Concept Mapping in areas other than evaluation and planning (e.g., for defining and assessing quality of care; Trochim & Kane, 2005). Concept Mapping can take various forms, such as Idea Mapping, Mind Mapping, Causal Mapping, or Cognitive Mapping (Trochim & Kane, 2005). Here we focus on the form used in the Trochim and Kane study, Structured Conceptualization. This is a mixed-method, participatory, group idea-mapping methodology that integrates well-known group processes such as brainstorming (Bowling, 2002) and unstructured sorting (Coxon, 1999; Weller & Romney, 1988) with a sequence of multivariate statistical methods. From this point forward, we use the term *Concept Mapping*.

In its most extensive form, Concept Mapping comprises six steps (Trochim & Kane, 2005): (a) In the *preparation step*, the focus for the mapping project is identified, participants are selected, and the project schedule and logistics are determined; (b) the *generation of ideas and statements* often involves some form of brainstorming, and the ideas generated are synthesized into statements; (c) participants then *sort* the statements and *rate* them according to one or more variables (e.g., importance, feasibility); (d) multivariate statistical analyses of multidimensional scaling (Davison, 1992; Kruskal & Wish, 1978) and hierarchical cluster analysis (Anderberg, 1973; Everitt, Landau, & Leese, 2001) are used for the *representation of the ideas in maps*; (e) next, participants are involved in the *interpretation* of these maps; (f) finally, in the *utilization phase,* the maps and all associated information are used to define the concepts (e.g., quality themes or purposes of a project).

Table 1 summarizes the Concept Mapping procedure as used in this study (i.e., identifying the appropriate building blocks for quality report cards for geriatric care from the consumer's perspective).

Results

Existing Quality Information About Geriatric Care

We found 22 sources for existing quality information during the first part of the study—10 related to home care (providers), and 12 focused on institutional care. We retrieved a list of more than 750 quality aspects, criteria, and indicators from these sources—more than 350 for home care, and more than 400 for institutional care. A first review of these quality aspects, criteria, and indicators and the underlying themes revealed such dissimilarities that it proved more appropriate to work toward two more focused quality report cards, one for home care and one for institutional care, rather than striving for a single comprehensive quality report card for geriatric care. Analysis of the 22 sources of quality in-

Table 1. Using Concept Mapping to Identify the Appropriate Building Blocks for Quality Report Cards for Geriatric Care

Step	Explanation
1. Preparation	
Participants:	Included were:
• Consumers of geriatric care (both elders and their representatives)	• Elders and/or representatives who were receiving geriatric care (residential or home care). We believed these people to be better able than those who had not yet chosen a care provider to reflect on their decision-making processes. – Both elders and their representatives were involved because the latter play an important role in the decision-making process (Castle, 2003; Lambert et al., 2005; Wackerbarth, 1999). We included representatives not as proxies but as the ones who make decisions when an elder is not able to do so. We believe this best reflects the real decision-making process.
• Experts in quality of geriatric care (representatives of patient and sector organizations)	• Experts were representatives of consumer and provider organizations and think tanks concerned either with the development of quality criteria for geriatric care or the assessment of quality among providers. We included experts because they – have access to existing information on quality criteria (from the consumer perspective) and could thus make a valuable contribution to the generation of ideas (Step 2); – were expected to be better able than the average consumer of care to think about and discuss the contents of quality report cards in a more conceptual way; – would be helpful in generating support for the methodology and the results of the study, which was one of the explicit aims.
2. Generation of ideas and statements	
Inventory of existing sources of care quality information using a combination of data collection methods:	Objective of the inventory: to ascertain what quality data are already collected on a regular basis, to provide a quick and easy starting point, and to ensure that maximum use is made of existing information. The intention was definitely not to limit quality report cards to data that are easily available (one of the known pitfalls of using indicators; Boyce, 2002; Giuffrida, Gravelle, & Roland, 1999; van Thiel & Leeuw, 2002).
• Web search	• Dutch Web sites containing relevant quality information or documents with quality criteria for geriatric care, as well as • Web sites of organizations concerned with the development of quality criteria of geriatric care, or that measure quality among providers. • Keywords: Dutch-language equivalents of *quality* and *performance* combined with *indicators, criteria, measurement, check*, and *information* and with the terms *home care, homes for the elderly, nursing homes, consumers, clients*, and *patients*. • Search performed in September and October 2004.
• Semistructured interviews	• 22 semistructured interviews with experts (12 experts on quality of home care and 10 in the field of institutional care). • Topics: (a) whether the organization had a set of quality criteria or quality indicators of its own; (b) which dimensions, criteria, or indicators made up the set; (c) how the set had been developed; (d) whether and how the set was used for quality measurement; and (e) whether data were (or were expected to become) available for health care consumers.
• Document analysis	• Documents gathered during interviews that contained quality criteria and indicators for providers of home care and institutional care. • Topics for analysis: the same topics that were used for the interviews. All quality aspects, criteria, and indicators distilled from the Web search, semistructured interviews, and document analysis were gathered in a large database and analyzed by two researchers by • extracting common themes from the database entries and categorizing all entries in accordance with these themes, eliminating overlapping entries and merging highly similar entries, and converting all remaining database entries into statements about the quality of home care and institutional care.
3. Sorting and rating of the statements	
• Sorting by experts	• Statements were printed on cards and presented to the experts who had been interviewed earlier (Step 2) and to at least one colleague in the same organization. • Each expert was sent a package by mail containing two sets of cards, a questionnaire, and instructions; each expert received a follow-up call to ascertain that the materials had arrived in good order, emphasize the importance of their participation, and give them an opportunity to ask questions.

(Table continues on next page)

Table 1. (*Continued*)

Step	Explanation
	• Respondents were asked to read the cards carefully, sort them into piles in a way that made sense to them (Trochim, 1989), and provide a label for each of the piles they created.
• Rating by experts	• Experts were asked to rate the full list of statements according to the following instruction: "Please tick on the 7-point scale how important you think each statement would be for you if you had to choose a provider of home care or institutional care (where 1 means not important at all and 7 means very important)."
• Rating by consumers	• Consumers who attended the focus groups (see Step 5) were asked to fill out the same rating questionnaire as the experts. Consumers were not asked to sort the statements, because the cognitive load of such an exercise would have been too heavy for them.
4. Representation of the ideas in maps	
	Concept Mapping software was used to analyze the sorting and rating data using the following methods:
• Multidimensional scaling	• Multidimensional scaling results in a map, with each statement plotted as a separate point. The more closely statements are positioned to each other on this map, the more likely it is that these statements were sorted into the same pile by the experts;
• Hierarchical cluster analysis	• Hierarchical cluster analysis groups the statements on this map into clusters. Statements that show a high level of coherence (given their position on the point map) end up in one cluster. Each cluster represents higher order conceptual groupings of the original set of statements. Not all clusters have the same level of homogeneity. Therefore, a cluster's bridging score (a number between 0 and 1, with 0 representing the highest level of homogeneity and 1 the lowest) shows the power of that cluster. This analysis also constructs map overlays presenting average ratings by point (i.e., the point rating map) or by cluster (i.e., the cluster rating map).
5. Interpretation	
Four focus group sessions:	
• Expert panel • Home care • Nursing home	• Maps were discussed during expert group meetings. Consensus was obtained regarding the appropriateness of the proposed building blocks for future quality report cards.
• Homes for elderly adults	• Consumer focus groups used a mix of three methods: (a) open brainstorming on quality aspects considered important when choosing a provider, (b) prioritization of the building blocks generated by the experts using Q-methodology, and (c) rating of the statements using the same questionnaire that the experts had filled out earlier.
6. Utilization	
• Written report and oral presentation	The aim of this study was to identify building blocks for quality report cards, not to create a report card. The results were passed to the developers of the report cards in a written report and through an oral presentation. In addition, we assisted a National Steering Group with the development of a national set of quality indicators for geriatric care.

formation also showed that only 4 of them could effectively be used to supplement report card data: 2 consumer satisfaction instruments and 2 instruments from the Dutch Health Care Inspectorate. Other sources were not publicly accessible or did not generate data frequently enough to enable report cards to be based on them.

Ideas and Statements

The Concept Mapping process resulted in two lists of quality aspects, criteria, and indicators, some 350 for home care and 400 for institutional care. We condensed these into a short list of 88 statements for quality of home care and 90 statements for quality of institutional care. Tables 2 and 3 present a selection of these statements.

Sorting, Ratings, and Maps

In all, 14 experts on the quality of home care and 11 experts on the quality of institutional care participated in the clustering exercise and sorted the statements. These same experts, as well as 13 home care consumers and 17 consumers of institutional care, rated the individual statements.

Table 2. Clusters, Aspects, Bridging Scores, and Ratings for Home Care

Cluster[a]	Bridging Score	Priority C	Priority E
1. Availability, continuity, reliability, and organization of care[b]	0.43	5.89	5.48
The organization is always (24/7) available (in the event of emergencies)		6.67	6.38
In emergencies a caregiver comes quickly		6.27	6.57
The manager ensures that the caregivers are aware of the (care) arrangements between the organization and the client		6.20	5.00
2. Waiting time[c]	0.57	5.89	4.61
Waiting time from the application for care to the delivery of care		6.23	5.07
The client can contact a manager if he or she is dissatisfied with the care provided or the caregiver		6.14	5.71
Waiting time before the client can talk to the right professional (e.g., designated contact, care coordinator) on the telephone		5.93	4.00
3. Staff expertise and effectiveness and safety of care[d]	0.30	5.82	5.29
The caregiver works independently, efficiently, carefully, and hygienically		6.47	6.07
The care provided is skilled, effective, safe, and demand led		6.40	6.07
The client has confidence in the expertise and quality of care of the caregiver		6.40	6.07
4. Personal care plan and care file[e]	0.72	5.77	5.31
On request, the client may always inspect his or her care plan and care file		6.33	6.07
The organization/caregiver uses a care file for each client in which aspects of the care given are recorded		6.00	5.79
The caregiver uses the care file for reports, coordination, and transfer		5.80	5.71
5. Privacy, respect, and autonomy[f]	0.37	5.75	5.85
The caregiver acts correctly in physical contact, waits for instructions from the client when providing physical care, and responds accordingly		6.31	6.54
During the care provision, the client feels at ease and not intimidated or threatened in any way		6.27	6.50
The client is helped correctly on the telephone		6.27	6.21
6. Complaints[g]	0.60	5.69	5.17
The organization provides good service to the client in the event of complaints about the quality or functionality of medical aids supplied and/or home adaptations carried out		5.80	6.00
The organization handles complaints correctly and always within 2 weeks		5.80	4.93
The organization operates an accessible complaints procedure		5.47	4.57
7. Participation and choice[h]	0.59	5.55	5.94
Client is able to change the caregiver if he or she is dissatisfied with the caregiver's approach, work attitude, care provided, or if he or she does not get on with the caregiver		6.20	6.64
The organization, caregiver, and client make agreements on what the client himself or herself can/wishes to do in terms of household tasks, care tasks, and coordination		5.80	6.57
The care plan is created after consultation between organization and client (with a cooling-off period for the client) about needs and wishes concerning the content and organization (e.g., days and times) of the care		5.79	6.46
8. Informal care[i]	0.52	5.48	5.57
Informal carers are involved in the drawing up of the care plan, with the task division between caregiver and informal carer being discussed		5.69	5.71

(Table continues on next page)

Table 2. (*Continued*)

Cluster[a]	Bridging Score	Priority	
		C	E
The caregiver identifies (the danger of) overloading of the informal carer and gives the informal carer information and expert advice on structural support available in the region		5.50	5.50
The caregiver knows what help the client receives from their informal carer and offers the informal carer occasional support at the latter's request		5.25	5.50
9. Information[j]	0.20	5.43	5.27
The client knows what to do in emergencies		6.20	6.57
The organization provides information to the client on the (telephone) accessibility of the organization and the caregivers during and outside of office hours		6.00	5.93
The organization provides information to the client on any waiting times, the designated contact or waiting list manager during the waiting period, and the possibilities of temporary bridging care or replacement care		5.86	5.86

Notes: C = consumers; E = experts.

[a] This table lists only the three most important statements per cluster, according to consumers. A list of the aspects covered by the remaining statements is provided with each cluster (in a note).

[b] Other: consumers receive care from a limited number of (social) workers; care is delivered in accordance with the agreed content, times, and level of expertise of the caregiver, permanent caregiver regardless of illness, holiday periods; client has a fixed point of contact at the organization.

[c] Waiting time from the application for (changes to) aids and appliances and/or home adaptations; waiting time before the client can talk to someone from the organization on the telephone.

[d] Other: health care workers: are careful with consumers' possessions; know how to use aids (pump, wheelchair, bed, etc.); do not exceed their competences, help to prevent accidents in/around the house, contribute to the physical and mental health status of consumers; work with guidelines and protocols and consumers have confidence in them; the caregiver has sufficient expertise with the disorder(s) and the limitation(s) of the client; caregiver contributes to the prevention of incorrect use of medicines.

[e] Other: the home care provider puts agreements down in writing within 6 weeks after they were made and asks the home care consumer's approval by signing; agreements are evaluated twice a year to see whether the delivered care still meets the consumer's needs; care plan reports the aim, content, and timing of the care provision and the level of expertise of the caregiver.

[f] Other: health care workers: respect consumers' privacy and private life; take sufficient time for their clients; take consumers seriously; confidentiality of client particulars is guaranteed; care provider is friendly, polite, respectful, and maintains a correct professional distance.

[g] Not applicable.

[h] Other: clients can choose a specific health care worker and a maximum number of substitutes; the organization promotes participation of consumers; consumers are free to choose what aids and adaptations are made in their homes; organization responds flexibly in individual cases to temporary or acute changes in the care need of the client in terms of volume, content, and timing of the care provision.

[i] Not applicable.

[j] Other: the organization provides good, understandable information about: how to change the delivery care (time, amount); costs; duties and rights; choice options; procedures for complaints; the client board; new technologies in home care; the religious identity of the organization and its mission and vision; organization provides all information to the client, both written and verbal, in a language that the client (or their representative) understands; organization provides a clear explanation and instructions to the client of any medical aids/appliances and/or home adaptations.

Cluster Analysis

Initial analysis of the clustering of statements by experts revealed 17 clusters for quality of home care and 18 for quality of institutional care. In both cases, we reduced the number of clusters step by step using Concept Mapping software (www.conceptsystems.com). We analyzed each step, taking into account the clusters being grouped together in that step and the content represented by the newly formed clusters. This resulted in 10 clusters for quality of home care (one of which, "Remainder," contained a noncoherent set of statements) and 8 clusters for quality of institutional care as potential building blocks for future quality report cards.

Cluster Interpretation

Next, we presented the clusters to the expert panels, who discussed them with respect to content validity, clarity for consumers, and appropriateness of the proposed labeling. The home care expert panel proposed spreading the statements of one home care cluster ("Remainder," Cluster 3) over the other clusters. The institutional care expert panel suggested splitting two institutional care clusters (5 and 7) and distributing half of the statements in Cluster 5 over the other clusters. This left nine clusters (or quality themes) for both home care and institutional care for the future quality report card. The draft final maps, clusters, and aspects were also

Table 3. Clusters, Aspects, Bridging Scores, and Ratings for Institutional Care

		Priority	
Cluster[a]	Bridging Score	C	E
1. Privacy, respect, and autonomy[b]	0.45	6.21	6.41
The care provided contributes to improving the quality of life of clients		6.38	6.09
Caregivers do not take over more tasks from the client than necessary. The client may look after himself or herself in so far as he or she wishes to and is able to		6.35	6.00
Before and during the care provision, it is explained to the client what the care worker will do or is doing. During the care provision the caregiver talks to the client, not over his or her head		6.06	6.73
2. Staff expertise, effectiveness, and safety of care[c]	0.37	5.94	6.02
Staff make an effort to get to know the client well, display personal attention and patience, are open for questions, and also sometimes take the time to chat. The client never has the feeling of being a nuisance		6.76	6.64
Staff accept the client as he or she is, are polite and friendly toward the client, and treat him or her respectfully and with dignity (not being condescending or treating the client like a child). Care is taken with the client's possessions		6.35	6.82
Caregivers help the client on toilet visits in a pleasant and expert way using adequate aids. Toilet visits are possible at any time. There are no "toilet rounds" or needless use of catheters and incontinence material. After toilet visits, the client is given an opportunity to wash his or her hands		6.29	6.73
3. Personal care plan and care file[d]	0.66	5.79	5.57
The privacy of (confidential) client information is guaranteed		6.53	5.82
There is a good complaints procedure. There is an independent confidential adviser or complaints mediator present. Clients feel that they can make complaints without repercussions, that they will be taken seriously and that they will be dealt with correctly		6.50	5.45
It is laid down in the care file whether clients have made their wishes known regarding care and treatment at the end of life (comfort/palliative care, euthanasia, refusal of treatment, organ donor) and who is authorized by clients to make decisions when they are no longer able to do so themselves		6.13	5.91
4. Participation and choice[e]	0.47	5.74	6.05
The client board in the institution demonstrably looks after the interests of the residents, and the recommendations of the client board are taken seriously by the institution. For psychogeriatric clients, designated contacts are represented on the client board		6.19	5.45
The client has the right to choose the (para)medic (including the right to retain their own general practitioner) and to a second opinion where appropriate		6.13	6.00
Clients determine their daily rhythm themselves and how they fill their day, such as time of getting up and going to bed, how many visitors they wish to receive and when, whether they wish to withdraw, and what time they leave the institution when going home again. The care is geared to this		6.00	6.36
5. Protocols and procedures[f]	0.49	5.68	5.48
A bell or personal alarm system is within reach throughout the institution and clients know what to do in the event of accidents, incidents, or emergencies		6.53	5.82
Caregivers know what to do if mistakes are made in the administering of medication (type of drug, prescribed dose, or time of administering)		6.29	5.18
The institution contributes to the prevention of accidents in and around the building (e.g., preventing falls, signage, instructions) among other things through a good reporting procedure, registration, evaluation, and tackling of accidents and incidents		6.13	5.18
6. Ambience and privacy[g]	0.48	5.65	6.15
The institution meets the need for spiritual care and helps to enable clients to practice their religion and pursue their philosophy of life as they wish. There is a room for reflection and/or a quiet room; the client is offered the opportunity to attend a church service at least once a week; the client is given an opportunity to pray before and after eating; and the client or his or her family can call on spiritual care in their own religion, if desired from outside the institution		6.18	5.82
Clients feel at home in the institution, at ease, safe, and protected and in no way intimidated or threatened		5.88	6.45
Terminal care provision takes place in accordance with the wishes of the client or his or her legal representative		5.87	6.64

(Table continues on next page)

Table 3. (*Continued*)

Cluster[a]	Bridging Score	Priority	
		C	E
7. Information[h]	0.76	5.52	5.61
In the psychogeriatric wards, the days of the week and the seasons of public holidays are clearly indicated		5.87	5.45
The institution gives (potential) clients or their legal representative verbal and written information about the admission with regard to the institution's care philosophy, the house rules, policy on the end of life, client rights, the presence and functioning of the client board and the confidential adviser, the division of the day, activities and options for spending the day, who can be approached with questions, the complaints procedure, costs of accommodation (own contribution) and of all possible supplementary services, and rules and rights relating to measures restricting freedom		5.67	6.27
Clients are kept well informed for relevant events and elements within the institution		5.63	5.45
8. Quality of private and shared rooms[i]	0.23	5.40	5.55
The communal areas and toilets are clean		6.53	5.82
The temperature in the client's own room is pleasant and can be regulated by the client		6.41	6.27
The client's living/bedroom is clean and in a good state of maintenance on handover		5.88	6.18
9. Organization of care[j]	0.35	5.37	4.94
The efficiency of the institution		6.33	4.00
Staff satisfaction score		6.00	4.55
The institution carries out regular research into client and staff satisfaction and demonstrably makes use of the results		5.92	5.82

Notes: C = consumers; E = experts.

[a] This table lists only the five (or fewer) most important statements per cluster, according to consumers. A list of the aspects covered by the remaining statements is provided with each cluster (in a note).

[b] Other: Physical privacy guaranteed during the provision of the care. Clients are not treated in the living room (except with eating or drinking). Where personal care is provided in bed, curtains are drawn. During toilet visits toilet doors are closed. Terminal clients have a single room where family members can be with them.

[c] Other: Care contributes to improving physical and mental status of clients and preventing unnecessary complications. Staff have experience in helping clients with their aids and medication, caring for clients (clients look well groomed), preventing clients from troubling each other and so on, good laundry service.

[d] Other: Shortly after admission (no longer than 6 weeks), individual care plan is prepared in consultation with client or legal representative. The plan sets out content, aims, and timing of care provision. Both parties sign for agreement. Care plan is evaluated at least twice a year or whenever the client's needs change radically. Within a few weeks of the death of the client, the care is evaluated with family. Care is delivered in accordance with the plan. The professionals use a multidisciplinary patient record, and clients are confronted with a limited number of health care workers.

[e] Other: Adequate response to alarms raised by clients; in balancing risks and restriction of freedom, clients are able to make choices and to have these recorded in the care plan. These choices will be respected. Clients have options for meals, activities, accommodation, and rooms (no forced separation of married couples), transport, work, education, hobbies and leisure time; there are enough activities; meals are spread over the day, there is enough time to eat and the quality of the food is good.

[f] Other: Personnel operate in accordance with a recent protocol for the setting out and administering of drugs. The medical team keeps a close eye on (the safety of) the use of medicines (number of different medicines, administering of correct dose at correct time). Introduction of clients into the home is well organized by means of protocols; there are protocols for risky and (health-) threatening situations; the home is safe from burglary and fire; and there are protocols for the limitation of clients' freedom.

[g] Other: Attention is paid to the atmosphere/ambience (tablecloth, serving dishes) and the atmosphere is quiet during meals (TV and radio off). The atmosphere among the residents is pleasant; clients experience warmth and coziness. Clients are given sufficient opportunity to be alone, whether or not they have visitors. Staff and fellow residents may not enter client's living space without his or her permission.

[h] Other: The institution keeps (potential) clients well informed of all relevant events and developments in the institution.

[i] Other: Clients may go where they please inside and around the building: rooms, corridors, and the surrounding grounds are easily accessible, large enough, and suitable for people with disabilities.

[j] Other: Quality, comfort, and size of: own apartment and other rooms; rooms and sanitary facilities are cleaned properly; the vicinity of the home; the number of single or multiple rooms and average number of clients per multiple room; the furniture; whether pets are allowed or not. Clients may go where they please inside and around the building: rooms, corridors, and the surrounding grounds are easily accessible, large enough, and suitable for people with disabilities; sufficient capacity available to provide crucial elements of care; medicines are available; group areas are supervised by qualified staff; sufficient geriatric expertise; and sufficient help/aids are available during eating and drinking; clients who can potentially improve their daily living activities receive therapy; one fixed person clients can talk to; good cooperation with other health care providers (integrated care); proportion of time spent on clients versus time for other activities; provider has a quality label; patient satisfaction score; innovation and development within the organization; multidisciplinary staff meetings; quality of technical services; financial soundness of the organization.

discussed during focus groups with consumers. No major amendments were required, merely a few changes in wording and labeling to increase clarity for consumers. Tables 2 and 3 present the final clusters, ranked according to their mean rating by consumers. The tables also show a selection of the five statements that consumers rated highest, the experts' mean statement and cluster ratings, and the bridging scores.

Discussion

This article has a dual aim: (a) to identify appropriate building blocks for quality report cards for geriatric care from the consumer's perspective, and (b) to present the newly developed step-by-step approach based on the Concept Mapping method. According to this dual objective, we discuss the results and the methodology separately. This section also embeds the study findings in the existing body of knowledge from prior studies and current initiatives on report cards for geriatric care. The discussion ends with some future challenges and current developments in health care in The Netherlands and other Western countries that may affect the creation of report cards for geriatric home and residential care.

Reflection on the Results

This study showed that, although home care and institutional care for elderly adults share many quality themes, the two types of geriatric care need separate quality report cards.

Differences and Similarities Between Home Care and Institutional Care.—Early in the study, we decided to develop two separate quality report cards for geriatric care: one for home care and one for institutional care. This decision was based on the information gathered during the expert interviews and was reaffirmed later by the differences in content and consumer ratings between the quality themes. "Availability, continuity, reliability, and organization of care" (Cluster 1), "waiting time" (2), "complaints" (6), and "informal care" (8) were defined for home care and not for institutional care (see Table 2). "Protocols and procedures" (Cluster 5), "ambience and privacy" (6), "quality of rooms" (8), and "organization of care" (9) were unique to institutional care (see Table 3). We found that consumers of home care and institutional care attached different values to corresponding quality themes. For instance, institutional care consumers rated the themes "privacy, respect, and autonomy" and "participation and choice" higher than home care consumers, whereas the latter found the themes "availability, continuity, reliability, and organization of care" and "waiting time" more important. These differences may reflect the differing impacts of having to leave home for a nursing or residential home as compared to having caregivers come into the home setting. People moving to a new environment because of their need for care may be more preoccupied with preserving some autonomy, retaining some privacy, and having some say in their day-to-day schedule of care provision, (social) activities, meals, and so on. The high rating of "privacy, respect, and autonomy" supported this. People receiving care at home are more concerned with availability and reliability of caregivers, caregivers keeping appointments, having a limited number of different caregivers, and organizing care provision in such a way that it fits in with their home and family life.

There was a striking similarity in the high ratings attached to "staff expertise" and "personal care plan and care file." The underlying reasons appear to differ, however. In home care, the staff experience relates to quality of care in terms of safety and effectiveness, independence, and responsiveness to individual consumer demands. The personal care plan, by contrast, is important primarily because it constitutes the person's care entitlements, whereas the care file is important as a means of communication and coordination between the different caregivers. In the institutional care context, staff experience relates not just to effectiveness and safety of care, but also to the patient–caregiver relationship and caregivers' efforts to promote patient well-being. Quality of care appears to be seen more as a responsibility of the institution than of individual caregivers, and this is also reflected in the themes "protocols and procedures" and "organization of care." Furthermore, both the personal care plan and the care file are mainly relevant as a means of communicating with and rendering account to the patient and his or her family.

Differences and Similarities Between Consumer and Expert Perspectives.—The most striking difference between consumers and experts was the experts' expectations that home care consumers would value responsiveness to consumer demands (and would hence give high ratings to "participation and choice" and "privacy, respect, and autonomy"). In the experts' view, the timeliness and effectiveness of home care would be less important to consumers, because most of the past waiting list problems in home care have now been resolved and consumers were believed to be less involved with the medical (outcome) aspects of care. Apparently, the day-to-day experiences of many home care consumers are different, given the high value they attached to receiving high-quality care from highly qualified health care workers and at the appointed times.

In the field of institutional care, experts and consumers largely agreed on the most important quality aspects when choosing a provider. A striking similarity was the low rating of aspects of organization of care that are usually propagated as quality performance indicators, such as the availability of a quality system and employee satisfaction.

Conclusions Regarding the Results

The findings show that, although home care and institutional care share many quality themes, separate quality report cards are needed for the two types of geriatric care. Home care consumers attach more value to the availability, continuity, and reliability of care, whereas consumers of institutional care value privacy, respect, and autonomy most. This study also shows, unlike many other quality report card studies, that consumers want information on structure, process and outcome indicators, and rating outcome indicators such as effectiveness and safety of care both for geriatric home and for residential care.

Reflection on the Methodology

This study shows how Concept Mapping can be used to identify building blocks for quality report cards. Integration of existing quality information sources and viewpoints of experts in the field of geriatric care supports the validity and feasibility of the content of the quality cards, whereas integration of consumer preferences supports its appropriateness. Furthermore, participation by all stakeholders helped to build consensus about the building blocks, which may be expected to facilitate implementation.

Limitations and Suggestions

We need to mention some limitations of the current study, but first it is important to look at a key assumption made at the beginning of the study. Developing a quality report card for elderly people presumes that they want quality information and that they will use report cards. Although this study did not seek to verify this assumption, prior (and some current) research has shown that such an assumption does not always hold (Castle, 2003; Cheek & Ballantyne, 2001; Wackerbarth, 1999). Further research is needed in The Netherlands to explore the decision-making processes of older adults and to determine how helpful quality report cards would be.

The first limitation concerns the number of respondents rating the statements (and hence clusters): Between 11 and 17 respondents participated in the focus groups. This is not so much a problem for the definition of clusters (i.e., quality themes), but it does limit the ability to generalize the prioritization of quality themes to larger groups of consumers. However, a second method that was used to sort the themes: Q-methodology revealed support for the ranking of quality themes as presented in Tables 2 and 3. Q-methodology (Brown, 1980; Stephenson, 1953; Van Exel & De Graaf, 2005) was used as a supportive tool during the focus groups; we do not discuss the method and its results in detail here. Q-methodology provides a foundation for the systematic study of subjectivity, a person's viewpoint, opinion, beliefs, attitude, and so on. Typically, a Q-methodological study presents people with a sample of statements about some topic, called the *Q-set* (here, the quality themes). Respondents are asked to rank the statements from their individual point of view, according to some preference, using a quasinormal distribution (here, desirability for inclusion in a report card). These individual rankings are then subjected to factor analysis, resulting in factors representing operational clusters of subjectivity (here, both studies showed very similar results, indicating the existence of two archetypal preference structures: one that emphasizes availability, reliability, and continuity of care and the expertise of caregivers; the other that finds these same quality themes important but attaches higher value to demand-oriented care. In home care, this primarily refers to patient involvement in care decisions, so that home care provision fits in with the home or family situation and the informal caregiver network. In institutional care, it refers more to privacy, flexibility of services, and treatment by professionals, so that individuals moving into an institution are able to retain some level of autonomy). In this way, Q-methodology can be very helpful in exploring tastes, preferences, sentiments, motives, and goals (here, knowledge of the archetypal preference structures helped to assess whether potentially diverging views on items to be included on quality report cards (a) were adequately represented in the results from the rating exercise and (b) provided a broader perspective on the need, development, and use of quality report cards).

A second limitation may be the focus on existing quality information: There might conceivably be quality aspects that are very important to consumers but are not yet measured in any existing instrument. The focus groups addressed this by starting with an open brainstorming session, but it did not reveal any new quality items. Ongoing changes in the market structure and consumer preferences do, however, mean that experts should evaluate quality report cards regularly.

Third, in this study experts performed the sorting of statements, whereas in order to limit cognitive load consumers were only asked to reflect on this sorting (88–90 statements). Though in theory consumers could have sorted the statements, we found extensive support for the experts' clustering during the focus groups.

Finally, the double-barreled statements and quality aspects in this study may be problematic. For example, we grouped the items "the caregiver works independently, efficiently, carefully, and hygienically" into one quality aspect. This statement might not have meant the same thing to all respondents. Future research needs to examine the (relative) weight consumers attach to each of these items.

We can make some suggestions for improvement. Concept Mapping is a consensus method. Here, consensus was created among experts from various parts of the health care field and among consumers, with the two groups reaching this consensus independently of each other. The consensus effect might have been even stronger if experts had discussed the results with consumers. A further improvement would be to ask respondents (i.e., the experts) not only to rate the statements, but also to give a feasibility score. When quality aspects and indicators have to be selected for the quality report card, both the rating and the feasibility score can function as selection criteria (Nabitz, van den Brink, & Jansen, 2005; Trochim, 2005).

Embedding Study Results

Compared to other studies and initiatives in relation to performance indicators for care (see the introductory paragraphs to this article), the quality themes identified in the current study are more about quality and less about facts (i.e., aspects of structures like facilities, residents, deficiencies), just as the Online Survey Certification and Reporting data partially fill the CMS Nursing Home Compare Web site in the United States (Cowles Research Group, 2006). This is obviously due in part to the aim of this study, which was to define building blocks for quality report cards. However, during the focus groups consumers said that quality information on report cards should be supplemented with factual information, an easy task using existing sources of information.

Nonetheless, comparing the quality aspects identified in other studies and initiatives such as Nursing Home Compare reveals important differences in how quality is defined. For example, Nursing Home Compare assesses quality by means of the MDS. In the current study, however, quality items that can be measured with clinical indicators (such as the aspects within Cluster 2 in Table 3) are only one side of the quality coin. Most of the quality themes for institutional care (Clusters 1, 4, 6, 7, and 8 in Table 3) and many quality themes for home care (Clusters 5, 6, 7, and 9 in Table 2) deal with quality of life. This is poorly measured by clinical indicators such as the MDS, which we cited earlier as an important deficiency of the Nursing Home Compare initiative (Arling et al., 2005; Kane et al., 2003).

Other studies ignore outcome measures completely and limit quality assessment to process or structure indicators. However, the current study shows that consumers are interested in a broad range of issues incorporating structure, process, and outcome aspects that measure quality (see Table 3). As discussed earlier, consumers assign the highest importance to outcome indicators. Unlike other studies, this study did not find consumers to be interested in cost and financial performance of care providers. This is probably related to the Dutch health care market structure, which has very small user fees and little danger of provider bankruptcy.

Because consumers were actively involved in the Concept Mapping approach adopted in this study, we expected that it would generate quality indicators that fit consumers' needs for information more closely.

Challenges for the Future

As stated, the aim of this study was not to develop the report card itself but to identify appropriate building blocks from the consumer's perspective. The Dutch National Institute for Public Health and the Environment will create the report card; this agency develops all consumer report cards in Dutch health care. The fact that one agency develops all report cards contributes to the homogeneity of health care report cards, making them easier for consumers to understand. However, some challenges remain before the report cards for geriatric care are ready for use.

First, the most important quality aspects per quality theme need to be selected. The rating of quality aspects by consumers seems to be a reasonable criterion; alternatively, the ratings by the experts could be used, or so could a mix of the two ratings. The number of aspects per theme could also be varied. For instance, themes with a higher average cluster rating could be assigned more aspects, or more homogeneous clusters (with a lower bridging score) fewer aspects.

Second, a system of checks and balances could increase the reliability of the report card, such that at least one indicator for each aspect is measured objectively (by recording of facts such as falls or complications) and one is measured through consumer consultation (e.g., patient experience questionnaires). The inventory of existing data sources in Step 2 of this study revealed the indicators that are already measured for each aspect and, more important, the indicators that are actually accessible and useful for filling the report cards. Four data sources were available: two consumer satisfaction instruments and two instruments of the Dutch Health Care Inspectorate. In the next section we discuss current developments in the health care system in The Netherlands and other Western countries that will ensure quality in long-term geriatric care and increase the availability, comparability, and reliability of data sources.

Third, the indicators and scores have to be translated into comprehensible, everyday language. Several authors have stressed the importance of the communicative aspects of report cards (Agency for Healthcare Research and Quality/CMS, 2006; Hibbard, Slovic, Peters, & Finucane, 2002). The key issue here is the layered construction of the report cards. Information should not be too detailed, but it needs to be detailed enough for those who want to learn more about how scores are composed.

Fourth, the Concept Mapping procedure should be repeated regularly to reflect changes in consumer preferences, the market structure, and provider performance. Once quality report cards are in use, health care providers are known to begin focusing on the quality aspects that are measured on the report cards in order to improve quality and (perhaps more important in their view) their league table rankings (Zinn, Spector, Hsieh, & Mukamel, 2005). This is a powerful and beneficial impulse, but focusing on a limited number of aspects over an extended period might lead to unintentional effects, such as short-sightedness (van Thiel & Leeuw, 2002). Although close correspondence between the core themes of providers' quality policy and current consumer preferences is clearly not a problem, it is worthwhile monitoring trends in quality on aspects that are currently less highly valued by consumers (but that may be of societal value).

Recent Developments

Recent developments in Dutch and other Western health care systems have created a number of opportunities and challenges for consumers faced with choices, and hence for the development of quality report cards. An important positive development is the creation of one uniform set of performance indicators for the whole Dutch geriatric care sector. This was recently done by a steering group comprising all stakeholders in Dutch geriatric care; the group was led by the Dutch Health Care Inspectorate and was assisted by us. A total of 40 indicators will be measured by health care providers themselves by completing MDS-based forms at the patient level (covering Cluster 3 in Table 2 and Cluster 2 in Table 3), through consumer consultation (using uniform questionnaires based on the Consumer Assessment of Health Care Survey methodology; covering Clusters 1, 2, and 4–9 in Table 2 and Clusters 1, 3, 4, and 6–9 in Table 3), and through surveillance by the Health Care Inspectorate (covering Cluster 5 in Table 3). Beginning in January 2007, all Dutch geriatric care providers must use these instruments to measure consumers' experiences every 2 years and must use the MDS indicators continuously or at least once a year. Providers must also report on their quality to the public, both in an annual report and through the national consumer report cards for geriatric care. All in all, this system of checks and balances seems to guarantee the feasibility of consumer report cards for geriatric care in The Netherlands. For the U.S. Nursing Home Compare Web site, a similar procedure, especially the use of consumer experiences (using Consumer Assessment of Health Care Survey questionnaires that had already been developed for nursing homes) would be beneficial to supplement the report card with currently absent quality-of-life data (Arling et al., 2005; Kane et al., 2003). A good example of what we propose here is Ohio's report card for nursing homes. This initiative combines both consumer-survey data with MDS quality indicators and gives consumers a broad overview of what they may expect from a nursing home (State of Ohio, 2006).

Some developments might not facilitate the creation of consumer report cards on geriatric care providers, but rather give cause for critical reflection. First, care for elderly people with a chronic condition is increasingly being redesigned into integrated care pathways. Consequently, people might become more interested in the quality of disease-specific care arrangements rather than the quality of specific care providers. Second, following the liberalization of the Dutch health care market, home care split into product groups, enabling the access of different types of providers. For instance, domestic help—the largest segment of home care—can be provided by a range of service organizations outside the health care sector. As a result, in the near future people may be more interested in the quality of providers with respect to individual product groups than in the quality of the total organization. Another consequence of the ongoing liberalization is the emergence of large conglomerates of care providers with local branches that may vary in type and quality of service provision. Such mergers reduce consumer choice and raise questions as to the level at which quality should be reported: organizational or local branch level (given that quality may already vary substantially between caregivers from the same provider, hence the consumer's focus on continuity and expertise).

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