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Hospital Stakeholder Satisfaction: Linking Survey Methodology to Marketing Action

Project Report and Literature Review

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Hospital Stakeholder Satisfaction: Linking Survey Methodology to Marketing Action

Project Report and Literature Review

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1. Background

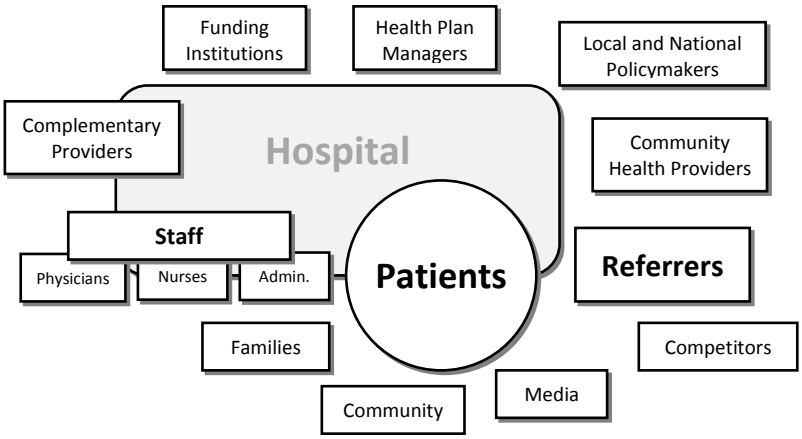
1.1 Customer Satisfaction in Hospital Marketing

1.1.1 Satisfaction Research – A Late Arrival to the Healthcare Sector

The Healthcare sector constitutes one of the oldest service industries in history, and its outcomes affect its customers in more fundamental ways than other services. Yet it is only recently that customer satisfaction has received increased attention from hospital managers, and is actively monitored. This is due to a number of reasons.

In most countries, hospitals are answerable to a greater **diversity of stakeholder groups** (cf. fig. 1) than businesses that cater to consumer markets (Scrivens 1995, pp.127-30). Besides patients, who bear the closest resemblance to customers in other service industries, hospitals have to comply with demands from referring doctors, complementary health services, payer and health maintenance organizations, academic and research institutions, local and national policymakers. Customer orientation, for that reason, historically has not been as pivotal a quality indicator as in other industries (Tregunno et al. 2004, pp.785-9).

Fig. 1: Hospital Stakeholder Groups



- In Healthcare services, there is a strong **information asymmetry** between caregivers and patients (Langer et al. 2009, p.99). Traditionally, the last word in decisions about diagnosis, treatment, and discharge lies exclusively with the doctors. Patient input during this process is often dismissed as being counterproductive, and customer satisfaction, therefore, not seen as an immediately helpful indicator for management. Other constraints, such as geography or Healthcare rationing, have further limited patients' choice and say in health matters (Leavey et al. 1989, p.737).

- To cope with these conditions in a highly professional and demanding task environment (Ramanujam & Rousseau 2006, pp.812-8), medical research, public policy and hospital management often assume an abstract and **simplified role model of the customer**, the sick patient. Under this view of paternalistic dependence, bureaucratic organizations are managed by input, not output parameters, and reactions to service are reduced to a set of medical or financial indicators, or seen at an aggregate level only (cf. Sang 2003). Individual customer satisfaction, more often than not, does not feature too prominently in this picture.

1.1.2 The Changing Landscape of Healthcare

For the past two decades, however, Healthcare sectors in Western nations and the rest of the world have been subject to a number of tendencies that gave customer satisfaction a more prominent role in hospital management decisions.

- **Holistic health**, along with trends towards community health and non-Western medicine, promotes health service outcomes beyond immediate medical results, i.e. healing over cure (Rudnick 2002, p.84). Patient satisfaction and other individual and subjective healing results feature within comprehensive quality-of-life assessments as a measure of health reestablished. Consumer expectations change accordingly: *"Young people desire a whole lifestyle approach to health rather than the traditional model based on diagnosis and disease."* (Kefford et al. 2005, p.420). Also, standard medical practice is increasingly acknowledging the influence of patient satisfaction on cooperation and compliance, medication adherence and placebo response.
- **Structured care** is the keyword for moving Healthcare from a transactional, single interface provider-patient context to networked provision and maintenance of health. *Integrated Care* pathways, for example, cut across established organizational boundaries in an effort to provide patients with better health outcomes (Zander 2002, pp.101-2). For hospitals, this concerns foremost internal structures and procedures, while *transmural care* in particular seeks to connect hospitals, clinics, and independent physicians. Patient-centeredness, the guiding principle in designing these new structures, depends on involving patients in distributed decision processes and gearing Healthcare delivery networks to their satisfaction (Fairfield et al. 1997, p.1896; Sepucha et al. 2004, p.55).
- **Consumerism**, as in other service sectors, has strengthened the legal and bargaining position of patients towards insurance and managed care organizations (Haeske-Seeberg 2001, pp.32-3). Providers hope that empowering the patient and giving him a greater role in the coproduction of health will lead to better outcomes and equality (Little 1981; Buetow 2005). Patient advocacy and support groups as well as consumer media have been pressing for greater transparency of Healthcare delivery and results (L. L. Miller et al. 2006, p.26), and hospital-sponsored patient advocacy programs have been instituted to answer such demands (B. H. Henthorne et al. 1994, pp.52-3).
- Adding to greater market transparency, patients benefit from **lower switching costs** due to more flexible health plans and greater physical mobility (S. Lee et al. 2008, p.315). Facing the decision which hospital to choose, they turn to experience qualities, like reported patient satisfaction levels, when comparing potential providers. Hospital management, in turn, must acknowledge patient satisfaction as a competitive parameter of increasing importance (Chaska 2006, pp.43-4).

In summary, hospitals must pay greater attention to more stakeholders than twenty years ago, with patients being the most outspoken among them, and the yardstick for all other stakeholder groups' involvement.

1.1.3 Broadening Requirements on Healthcare

Such developments have also changed the public notion of Healthcare quality, which is, as Donabedian (1966, p.692) notes, "a reflection of values and goals current in the medical care system and in the larger society of which it is a part." This translates into manifest consequences for Healthcare providers at the public policy level:

- All public Healthcare systems depend on indicators for **evaluation**. Beyond budgetary controls, these evolved from narrowly defined, medical "tracers" (Kessner & Kalk 1973, pp.11-3) into more comprehensive quality-of-life goals. Patient satisfaction, both with particular treatments and with their health status in general, is seen as a valid indicator of such broader goals (Clarke & Dawson 1999, pp.145-55).
- The new opportunity to measure outcomes quickly evolved into a responsibility to measure. Healthcare providers faced broadened **accountability** requirements, towards society in general as well as to particular stakeholder groups. Accordingly, public reports on health system performance progressively included satisfaction indicators. While this movement originated in the United States (Barr et al. 2002, pp.51-4; Barr et al.

2006, pp.663-5), it quickly spread to Europe (Ham & Brommels 1994, pp.107-8) and to the rest of the world. Patient satisfaction measures in particular are now commonly available for hospital comparison (Cleary 1999, p.720; Scanlon et al. 2001, p.628). In addition, funding (Chao et al. 2006, p.S12) and governance structures (Porter & Teisberg 2006, p.156) increasingly reward patient-centered outcome measures and local cooperation in Healthcare delivery.

- To answer this demand, **external benchmarking** tools have been made available (Shaw 2003, pp.7-8). For application on a national or international scale, government and non-profit as well as for-profit solutions exist. Corresponding examples from the United States include CAHPS, the American Consumer Assessment of Healthcare Providers and Systems (Goldstein et al. 2005; Jha et al. 2008), the Picker Institute's Questionnaire (Coulter & Cleary 2001), and survey tools from market leader Press Ganey (Press Ganey Inc. 2008). Similar instruments are being applied in countries like France (Merdinger-Rumpler 2009, p.45), Japan (Amira & Hisao 2007) or Pakistan (Shaikh 2005).
- Scarcity of funds, another endemic trait of public healthcare systems, forces ever-increasing operational efficiency, often attempted through economies of scale in provider cooperation. We see this convergence towards bigger units regardless of form of ownership, i.e. in government-run trusts (UK), in mixed-type HMOs (health maintenance organizations, US) or in privately owned hospital groups like Rhön-Klinikum AG (Germany). Such conglomerates rely on **internal benchmarking** for management and resource allocation, again with satisfaction of patients and other stakeholder groups as an important variable (Haeske-Seeberg 2001, p.135).

As a result, local hospitals now face demands from funding organizations to substantiate their integration with stakeholders, and to prove they provide good outcomes in the eyes of the patient. This concerns a hospital as a management unit in its entirety, and might be called a responsibility for stakeholder satisfaction on the macro scale.

1.1.4 Stakeholder Satisfaction as a Marketing Task

Apart from such requirements at the financing, or macro scale, Healthcare providers are feeling grassroots pressure coming from consumers of health, along with the need to adapt Healthcare delivery processes on a micro scale.

When being put into their new role as active coproducers of health, patients do not necessarily feel more comfortable right away. Increased responsibility goes along with greater uncertainty as to how they should exert their newly-won freedoms of choice, with traditional role models of active patientship ostensibly being absent. In addition, Healthcare, of all services, is especially rich in experience and credence qualities (Parasuraman et al. 1985, p.48). All hints from all sources, every perception in the process of care delivery, and all kinds of background intelligence are welcomed as sources of information under such circumstances.

For hospital managers or physicians, this leads to new experiences too, because patients' view of things invariably differs from their own. *"A doctor can save a person's* life, *and then the patient gets angry because the referral letter arrives two hours late!"* (H. Hansen 2004, p.219, transl. Chr.K.). In doctors' traditional view, lay patients do not appear as arbiters of quality, let alone as customers to whom their own cure must be advertised and sold. Yet *"one cannot not communicate,"* as Watzlawick (Watzlawick et al. 1967, p.49) has noted, and all interactions with patients, direct or indirect, must be seen as potential sources of their satisfaction. It is a new task even for seasoned hospital staff to learn just how this is happening. One main lesson seems to be that the caring is more important than the cure, but this has not yet led to a consistent understanding of quality, let alone reliable state-of-the-art delivery of Healthcare (Sheth & Mittal 1997, p.30).

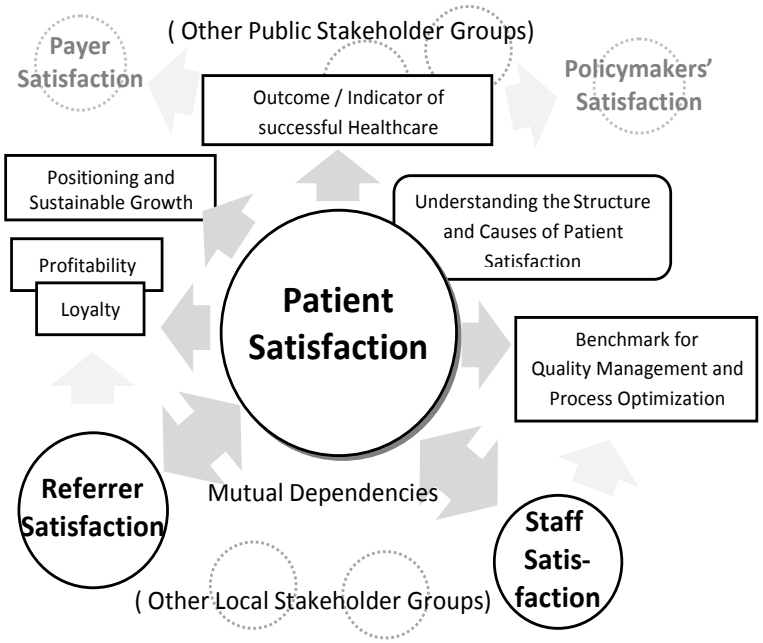
And a hospital's marketing responsibilities go way beyond communication tasks in the delivery process, they extend into an increasingly competitive marketplace. When patients are afforded provider options within individual health plans, they base their choices on provider image and word-of-mouth as well as published quality and customer service rankings (S. K. Baker 1998, para.2). Their rising bargaining power is felt most acutely in extensive vendor selection processes, e.g. for specialty treatments, or where a greater range of alternatives is available, e.g. in metropolitan areas (Çaha 2007, pp.55-8). While larger urban hospitals or tertiary care units lead the adoption of patient-centered satisfaction management, it becomes an inevitable strategy for smaller primary and rural providers too, as Healthcare systems and buying behavior evolve.

Actively gathering satisfaction information, in this situation, has a number of benefits for hospitals. Strategically, it provides a guideline for positioning and organizational development. On an operational level, it aids in streamlining delivery processes and in fine-tuning stakeholder relations with referrers, health plan managers and local policy actors. Staff integration, medical, nursing and administrative, is another big issue here, so that human

resource considerations get involved, too. All these measures remain piecemeal however, if the effort is not carried back to the customer. A complete map of satisfaction management and its benefits would therefore read as follows (cf. Fig. 2 below):

- Patient satisfaction as an outcome of Healthcare is the primary goal at the top of the list.
- On an aggregate level, it serves as a parameter of accountability and negotiation towards payers, policymakers, and other stakeholders at the public level (R. B. Smith et al. 1986, p.321).
- A workable definition of Healthcare quality, and guidelines for Healthcare process management can be derived from understanding patient satisfaction at every stage of delivery.
- Staff satisfaction, a goal in its own right, is both an outcome and a driver of patient satisfaction.
- Referrer satisfaction, like satisfaction of other partners in local networks, is an indicator of effective leverage of Healthcare beyond the narrow confines of the hospital itself.
- Patient satisfaction, in all likeliness, is an antecedent to customer loyalty and, therefore, hospital profitability.
- Finally, understanding the structure and causes of patient satisfaction gives hospitals a compass for positioning themselves relative to their competitors, and from this, a roadmap for organizational development.

Fig. 2: Hospital Stakeholder Satisfaction Map



1.1.5 Hospitals Take On Satisfaction Surveys

Prior to using satisfaction information in hospital management, it must be collected and compiled, which is anything but a trivial task. Following research and practice in services marketing outside the Healthcare sector, hospitals have adapted both the virtues and the vices of satisfaction surveys, which, as Reichheld (2006, p.3) puts it, *"have become a long-running, bad joke."* (cp. Tasso et al. 2002, p.4) Evidence abounds of satisfaction survey reports which disappear into drawers and never are acted upon (H. Hansen 2004, pp.211-2). With standardized survey tools widely available – as has been reported above –, this seems to contradict common sense. Hospital administrators should gladly embrace the tools offered to them, shouldn't they? And surveys should be as much a part of hospital routine as using the stethoscope, right? But things are more complex, if one takes a closer look.

- **Conceptualization of satisfaction.** Of course, consumer satisfaction has been studied exhaustively since the early 1970s (Churchill Jr. & Surprenant 1982, p.491), but research into patient satisfaction remained scarce for considerable time (R. B. Smith et al. 1986, p.321). Today, many conceptual and measurement issues about satisfaction with Healthcare are far from being settled. Instead, a debate is still raging the field wheth-

er patients should be considered customers at all (R. K. Thomas 2003, p.38 et pass.; cf. Sullydog 2009), hardly a sign that consensus about satisfaction management is reached.

- **The Global vs. Local Dilemma.** The widespread availability of standardized survey tools for national or international benchmarking obscures the fact that the majority of instruments in use are local developments, and that monocentric projects are much more common than comparative applications (Castle et al. 2005, pp.2001-4). The main reason for such diversity is that the drivers of satisfaction indeed need to be determined on a local scale, and that they vary across regions, specializations, patient segments, even within individual hospital departments. Finding the right balance between local adaptation and global comparability is a major problem here (Burns et al. 2004, p.398).
- **Averse Organizational Culture.** Finally, as with all management innovations, lack of support by top management and of a receptive company culture must be cited as standing in the way of more complete adoption. If a hospital is conducting satisfaction surveys at all, they are likely not to cover multiple stakeholder groups, not to be sufficiently adapted to local conditions, and not to be fed back all the way through the organization's hierarchy to yield perceivable benefits at the provider-patient interface (Seltman 2003, p.3). Stakeholder satisfaction management still has a long way to come around in the hospital world, just as the marketing concept itself has to.

The present article attempts to make a contribution to overcoming these obstacles. It reports a hospital stakeholder satisfaction survey project on a local scale, and draws conclusions for the development of similar tools. The accent will be on the link between methodology and marketing application; i.e. in discussing how marketing goals are to be brought to life in the art and craft of conducting a survey, and in demonstrating how the information learned may be brought to use in customer-oriented hospital management.

1.2 Case Situation

Around the year 2000, the Healthcare sector in east Germany was in the final phase of a major restructuring effort, following the reunification of the country and the return of the region from socialism to a market economy and a public-private welfare system. The hospital in question at that time had a capacity of 450 staffed beds, was organized into 15 medical departments or wards and received 17,000 inpatients annually (all numbers approximate). Ranked at the third-highest level in the four-tier hierarchy of the German hospital system, it provides full-scale emergency, primary and secondary Healthcare to a mainly rural population of 150,000. With a limited number of tertiary care services, it reaches out to patients beyond the local perimeter. In addition, it serves as a teaching hospital in conjunction with the medical school in the state capital's university.

The establishment is part of a hospital group run by a religious order, which comprises of fifteen regionally dispersed units of varying size and orientation. Both the group itself and the individual hospitals are incorporated as limited, not-for-profit companies. This means relative autonomy for local management as opposed to, e.g., municipal hospitals. Entrepreneurial freedom thus is bound only by their status as a legal charity and the organization's charter. The latter underlines its Christian mission and vision, in particular compassion towards patients and the hospital's integration into the local community. This suggests that corporate culture could be more open towards considering stakeholder satisfaction data.

While group management had been promoting satisfaction research for a while – both as a tool for local administration and for intra-group benchmarking purposes – no mandatory standards or requirements had been established at the time the research project took place. During the first half of the 1990s, the hospital itself already had made a first attempt at measuring patient satisfaction, using a standard questionnaire developed for West German hospitals in the 1980s. The results however, were deemed limited in scope and soon-to-be outdated in the light of ongoing developments. Management therefore considered a new and more comprehensive study, spanning a wider range of service dimensions, departments and stakeholder groups.

The developments the hospital was experiencing at the time were quite substantial. From the beginning of the 1990s, it had undergone major building and renovation activities to bring its structures and equipment up to contemporary Western standards. Despite the effort, some departments still had to struggle with substandard accommodation and equipment, causing an apparent quality imbalance between wards, and between medical care and hotel facilities. Comprehensive staff training, reorganization and turnover brought additional change. While renewals were underway, patients, doctors etc. to a large extent still relied on service expectations developed within the pre-1990 socialist health system, leaving management uncertain about which reactions to expect. Hence, a better insight into the hospital's constituency, their preferences, attitudes and opinions, would be highly welcomed by its management.

Along with the internal changes, the hospital's outside arena underwent transformations, too. After 1990, free choice of insurance companies and medical practitioners became a reality for East Germans, thus weakening their affiliation with local Healthcare providers. Regarding the rural character of the hospital's service area (50 ppl/km² as opposed to 230 ppl/km² nationwide, 2004; (Bundeswahlleiter 2005, pp.166-9, 188-9), and increased availability of passenger cars after 1990 (a doubling of car density in East Germany, 1990-2000; VDA 2001) added to patients' switching propensity. On the supply side, referring doctors set up practice networks and clinics of their own and started to employ highly targeted marketing methods. Larger hospitals in neighboring regional centers began to tap the local population for new patients, too. In the case discussed here, reports became increasingly available about local patients choosing Healthcare providers situated in nearby state and national capitals (road travel times 1h and 2h, respectively). The role of patient satisfaction in such decisions however remained to be confirmed.

Apart from patients, the hospital's partnerships with other stakeholders also became progressively more competitive. The change to a dual payer funding system in 1990 implied that the hospital now had to negotiate investments with state governments, and compensation for current costs with insurance companies. Both entities made their funding increasingly contingent on reported patient satisfaction, and this tendency was expected to intensify with the introduction of DRG (diagnosis related groups) and other instruments of evidence based medicine in the years 2000-2010.

Under these circumstances, the administration of the hospital in question decided to commission a comprehensive satisfaction survey. In order to guarantee expertise and neutrality, an external provider of academic standards was chosen, with a steering committee drawn from the hospital's top management, financial controlling and medical quality assurance overseeing the research. The study originally was intended to cover three stakeholder groups, i.e. patients, referring doctors, and employees. Due to an imminent hospital merger and subsequent reorganization however, surveying the latter was postponed. The project then went ahead investigating stakeholder satisfaction within the two former groups, patients and referring doctors.

2. Methodology

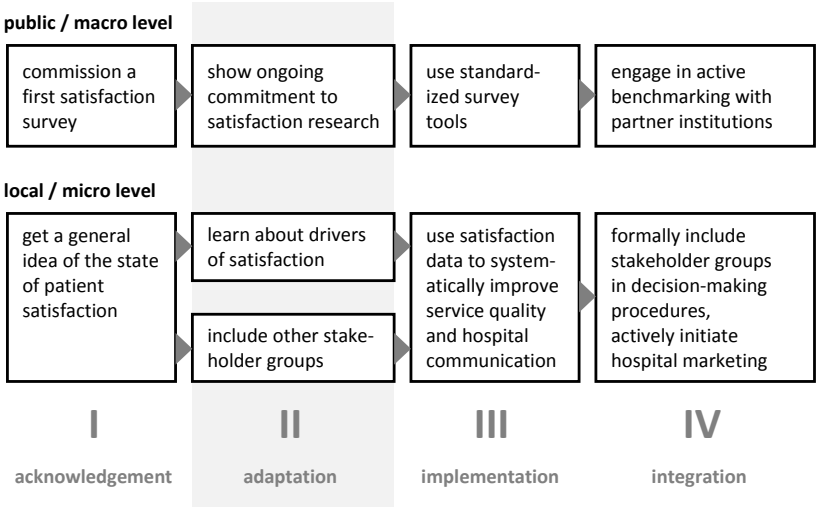
2.1 Research Design and Proposal

2.1.1 Translating Management Problems Into Research Questions

As in any empirical research project, decisions during the design phase bear the strongest influence on the quality of its results. In the project initiation phase of satisfaction surveys, these decisions mainly concern three areas, that is, formulating the research question, determining the scope of stakeholder groups covered, and setting basic project features like time frame and budget. In order to find an approach appropriate for the situation at hand, a number of preliminary client-researcher meetings served to make available in-depth information about the case situation, from medical and statistical reports to press clippings to anecdotal evidence. A literature review was conducted, and information about similar surveys compiled. The basic design decisions were then taken as follows.

Two management problems were identified that lay at the root of the project. Priority goal was hospital management's desire to have a patient satisfaction survey formally institutionalized, secondary goal, to have information for detailed quality management at their disposal. This corresponded with the moderately advanced state of satisfaction management at that institution, which ranged between "acknowledgement" and "adaptation" as shown in Fig. 3 (overleaf).

Fig. 3: Maturity stage model of hospital stakeholder satisfaction management



At the time of the project, this state of affairs (phase II, cf. Fig. 3 above) was not at all untypical for German hospitals. Albrecht and Töpfer (2006, p.184) observed that while patient satisfaction was part of some certification efforts, other stakeholder groups seldom were included. An American study, at the same time, reported 100% penetration for patient surveys, and 47% of hospitals performing staff satisfaction surveys on an annual basis (SHSMD 2005, pp.34-5).

In an attempt to fully implement the adaptation, and to prepare the implementation stage of stakeholder satisfaction management, the following research questions were formulated:

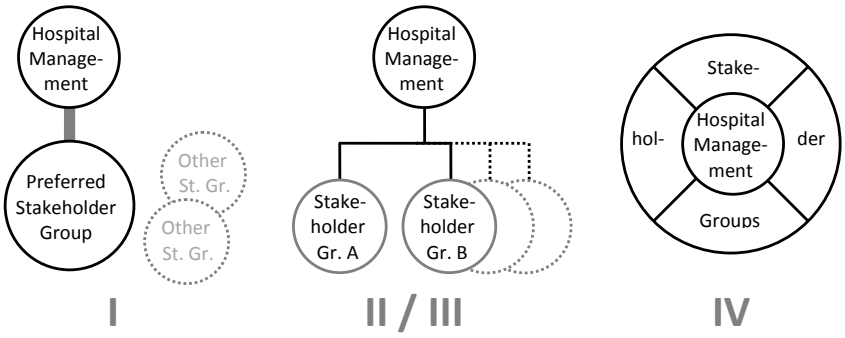
- What is the general state of the hospital's stakeholders' satisfaction?
- What are the top drivers of satisfaction? How satisfied are stakeholders with each of them?
- To which extent, and why, is satisfaction different between wards and departments?
- How can satisfaction data be used to improve the hospital's communication efforts?

With this set of explicitly agreed upon questions, the focus of the project was clearly set on the adaptation of instruments to the local conditions and management requirements of the hospital. They provided a well-defined client-researcher interface, guided the research process and, upon completion, served as a point of reference for determining project success.

2.1.2 *Scope of Stakeholder Group Inclusion*

The next design decision to be taken prior to project start was about which of the hospital's many stakeholder groups (cf. fig. 1 on page 3) should be included. This, too, as Fig. 4 (overleaf) shows, corresponds with the maturity stage model outlined in Fig. 3 above: While first-time projects typically consider only patients, other stakeholder groups are included consecutively through the following stages. Only in formal accreditation or community health projects a formal board structure is instituted (Scrivens 1995, pp.127-30; for an Indian example: Nandraj et al. 2001).

Fig. 4: Stages of stakeholder group inclusion in satisfaction management



For the project at hand, the stakeholder group list started with patients, more specifically defined as inpatients during their treatment or immediately after. As a second group, referring +doctors were identified. Following the gatekeeper model of Healthcare provision, independent family doctors are the almost exclusive providers of primary care in Germany. From the hospital's point of view, they act in a role as marketing intermediaries who channel patients to secondary and further treatment at the hospital. In comparison with patients, and in relation to their importance for hospital marketing, contact with referring doctors is relatively sparse; a condition which the survey project was expected to remedy.

Hospital staff, and nurses in particular, were named as another group of interest by the steering committee. It was felt that while doctors maintained a good rapport with management, and administrative personnel did not exert too much of an influence on quality, the most intense demand for data about staff satisfaction was about the nurses. While this decision has some face validity, the criterion for staff inclusion should not have been presence or absence of formal nursing education but whether employees had personal contact with the patient or not. This would have included call center, front desk, cafeteria and cleaning staff just as well as the nurses, while still excluding most clerical, janitorial and other secondary staff.

However, because management were preoccupied with an imminent organizational merger with a sister institution in a neighboring city, the steering committee decided to postpone the survey of staff satisfaction indeterminately. The project thus went ahead with patients and referring doctors as its relevant populations.

2.1.3 Other Considerations on Scope and Methodology

To determine a time frame and budget for the project, some basic decisions on methodology had to be taken. On the one hand, there is no limit to the toolset available: *"All of the standard social research methods are capable of measuring satisfaction: archival, ethnographic, focus groups, and survey research."* (M. A. Smith et al. 2005, p.194) The highly subjective nature of the satisfaction construct rather calls for qualitative methods for the collection of rich data, which only gradually can be aggregated and subjected to quantitative analysis and representative conclusions.

On the other hand, a consensus on methodology had emerged quite early: In a meta-analysis of 210 patient satisfaction studies published in 1994, Sitzia and Wood (1998, p.312) identified self-administered questionnaires in 63% percent of the cases, 27% questionnaire-guided interviews, and 10% unstructured or semi-structured interviews. Crow et al. (2002, p.35) reported 91% of a sample of 127 satisfaction studies making use of survey instruments. The main reason for the dominance of the self-administered questionnaire is its data gathering efficiency once a valid instrument is developed.

Another argument supports the mainstream choice of instruments: Studies have found that different tools have different bearings on strength and reasons of satisfaction reported (Castle et al. 2005, p.2009; Molina et al. 2009, p.492), and any deviation from current practice could jeopardize external validity. It seemed appropriate, for these reasons, to start with qualitative methods and then to gradually proceed towards greater standardization and quantitative analysis:

- For the smaller and better defined population of independent doctors, a series of semi-structured face-to-face interviews was envisaged to include a demographic variety of practitioners from every field of medical specialization (i.e., excluding dentists and veterinarians). Despite the smaller sample size, this part of the project was deemed to be the most demanding.

- For the considerably larger and more volatile patient population, a first phase of exploratory research, including focus group interviews and extensive testing of tools, was to generate a concise and standardized questionnaire. This response form would then be presented to all eligible inpatients present at the hospital over the course of four weeks, with an option to repeat the survey at a later time or on a regular basis.

Finally, a number of measures were included in the proposed design to guarantee the different aspects of **measurement quality** of the survey (Davies & Ware 1982, p.v). **Validity** ("measuring what should be measured") was to be ensured by committing the bulk of resources to the exploratory phase, in particular to item development and pretesting of tools. Extensive documentation of the research process and the tools developed was then foreseen to ensure **reliability** of measurements ("measuring the same repeatedly"). Finally, to guarantee their **practicability** ("usefulness of measurement results"), a final report on management implications and recommendations was commissioned as part of the documentation. Also, Intermediate progress report presentations and discussions with management at regular intervals were arranged for to provide some realism and feasibility check for the entire project. Because no full-time personnel was available to conduct the study, two years were envisaged for the development and application of appropriate survey tools. For an example of a similar research design compare Gasquet et al. (2004).

With these key points included in the contract signed, the proposal was accepted, and the project went forward as planned.

2.2 Conceptualizing Satisfaction

2.2.1 Methodological Framework and Scientific Traditions

"Satisfaction" is a sentiment accessible to everyone, but, in all its subjectiveness, difficult to define unequivocally. For the purposes of measurement, a good definition would properly capture the domain of the construct, give a comprehensive list of its dimensions, and allow generating items for use in a survey tool (Churchill Jr. 1979, p.67-8). Concerning a survey of dental patients, Davies and Ware (1982, p.v) accordingly postulate a "short, but comprehensive battery of items" that covers all major aspects of satisfaction and differentiates well between satisfied and non-satisfied patients – in short, a valid and reliable measurement tool. Satisfaction research in general as well as in Healthcare markets has discussed all stages of this process with great scrutiny. The following section (2.2) gives an account of how these considerations led to decisions for the design of the study at hand.

It should be noted that in the Healthcare arena, measurement traditions rooted in market research are competing against different scientific cultures. In particular, there is the public health tradition of outcomes research on the macro level, and the practice of determining clinical efficacy on the micro level. They both differ from market research in the way they handle causality:

- Outcomes research looks at the effects of political and structural decisions and how they play out in an entire population (Kane 2005, p.3). Within such a big picture, a hospital-based satisfaction survey must limit itself to a much smaller section of the general means-end chain leading towards better health, and the selection of target groups is determined by the interests and point of view of the single hospital. Still, this tradition feels that "at its heart is a clinical model of causation" (Radosevich 2005, p.19).
- The clinical measurement mode is perhaps best characterized by the PICO acronym for the single Patient as a unit of analysis, a medical Intervention, a Control group for statistical exactitude, and the, again, medical Outcome (Santos et al. 2007, p.510). Here, the scope of measurement is much more limited than in market research projects, and much greater experimental rigor is seen as the norm.

As a result, satisfaction researchers in Healthcare must brace themselves for two kinds of criticisms, one calling their insights limited at best, the other accusing them of substandard methodology (Lliffe et al. 2008, p.599). While such opposition remains an issue in the implementation of survey results, it certainly has motivated the quest for the appropriate conceptualization of hospital stakeholder satisfaction.

2.2.2 Satisfaction as an Outcome of Healthcare

Both the Healthcare and the marketing community needed some time to warm up to the fact that satisfaction is more than a nice side-effect of care delivery and service transactions. The change of mind came about in both camps differently:

- Medical practitioners began to acknowledge a positive correlation between patient satisfaction and clinical outcomes (Lowes 1998; Jha et al. 2008, p.1926). In particular, satisfied patients tend to better comply with

medication, maintain better contact with their physician, and perform better on health indicators in general (Isabelle Gasquet et al. 2004, p.2). Consequently, satisfaction has come to be accepted as a measure in health services evaluation (Clarke & Dawson 1999, pp.145-55).

- Following the engineering-led quality movement of the 1980s, marketers first concentrated on technical product characteristics, with the customer view playing only a minor role. In one checklist for example, "perceived quality" featured only as one of "eight dimensions of quality" (Garvin 1987, pp.107-8). In the concurrently emerging service marketing arena however, customer satisfaction played a major role from the start.

From these beginnings, first attempts at conceptualization developed. Healthcare evaluators put forward elaborated "quality of life" indicators, comprising patient satisfaction as one aspect among others. In this concept however, patients' opinion is relegated to being a background factor only, and patients' opinion-forming processes are kept in the blur. Likewise, Healthcare marketers first resorted to seeing satisfaction as an attitude (John 1992, p.56), that is, a catch-all concept which avoids the specificness of actual delivery processes. It took more than a decade – the 1990s – for the two strands to merge and to produce satisfaction measures that actually proved useful to marketing. A number of common themes however could be discerned throughout the process:

- Of all possible hospital stakeholder groups, the discussion has concentrated almost exclusively on **patients**. This is due to the fact that patients represent the ultimate consumers of Healthcare services, but it leaves other actors of the Health system out of the picture. The debate about how to measure patient satisfaction has, however, yielded insights that can be adapted to such other groups as well.
- There has been made little distinction between patient satisfaction and Healthcare **quality**. While the latter still tends to be seen from a provider's point of view, and as capturing more long-term effects (Bahia et al. 2000, p.34; Tam 2004, pp.898-9), the methodological debate has been using the two terms almost interchangeably (Iacobucci et al. 1995, pp.278-9). However, as quality judgments can derive from provider image, satisfaction stems from actual client experience (Rust & Oliver 1994, p.6), and much of the discussion has dwelt on how such experiences can be more thoroughly incorporated into the definition of Healthcare quality (Wicks & Roethlein 2009, pp.82-4).
- In practice, this discussion has centered on **SERVQUAL**, the dominant model for satisfaction measurement in the general arena (Parasuraman et al. 1985), and if and how this model can be adapted to the Healthcare sector. Likewise, this model will be the point of reference for the remainder of this section.

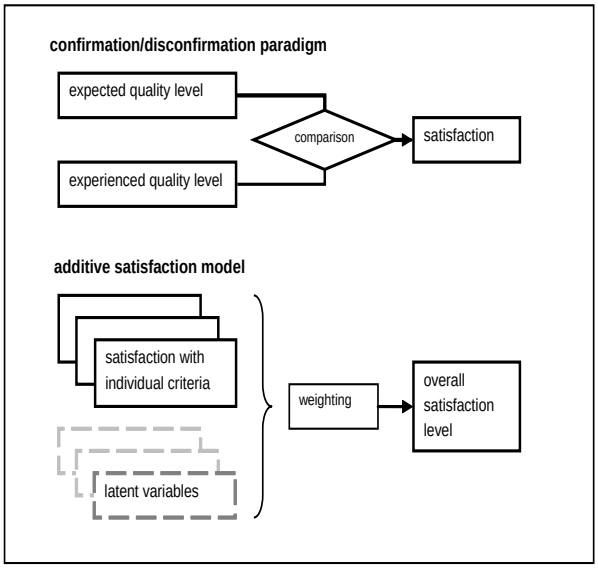
2.2.3 SERVQUAL, Model of Reference

In 1985, in the midst of a decade of rapid development in services marketing, Berry, Parasuraman and Zeithaml proposed their SERVQUAL model for conceptualizing and measuring service quality. SERVQUAL made two major contributions to the field, which could be termed the "how" and the "what" account of satisfaction:

One accomplishment is the "five gaps" framework, which describes how discrepancies can occur between the service customers want and the service they get. While four of these misalignments are located within the provider's process of service planning and delivery, only the fifth gap falls open between the client's own expectations and perceptions of the service (Quader 2009, p.127). It is here where the confirmation-disconfirmation, or C/D paradigm, the theoretical heartpiece of the SERVQUAL model, locates the source of client satisfaction. Under this explanation, satisfaction ensues to the extent the client finds his expectations confirmed or exceeded by the service. Correspondingly, dissatisfaction is seen as the result of unmet, or disconfirmed, expectations. This can be referred to as the "how" of satisfaction, or the nature of its formation.

The authors acknowledged however, that this mental calculation of difference is not unidimensional, but is performed for a number of relevant service attributes concurrently. Overall satisfaction with a service then is seen as a weighted average of disparate attribute judgments. In this vein, the second major contribution SERVQUAL made is a list of dimensions the authors derived from a comparative study of different service industries, and which they propagate as universal drivers of satisfaction with services, regardless of sector or industry. While the C/D paradigm gives an explanation of *how* satisfaction is caused, the factor list is an account of *what* causes it (cf. Fig. 5 overleaf).

Fig. 5: Basic SERVQUAL components



Perhaps due to its far-reaching contentions – Smith speaks of "extravagant claims" (A. M. Smith 1995, pp.270-2) – SERVQUAL received as much attention as it drew criticism. Interestingly, it was its application in the Healthcare sector what proved to be the model's acid test (Babakus & Mangold 1992; Taylor & Cronin Jr. 1994a). Numerous applications are recorded beginning in the late 1980s. Some recent examples of SERVQUAL adaptations to Healthcare concern occupational health in Great Britain (Baxter 2004), a comparison of private hospitals in India (Rohini & Mahadevappa 2006) or Turkey (Çaha 2007), and public hospitals in Greece (Priporas et al. 2008); a similar list of examples can be found in (Piligrimienė & Buciuniene 2005, p.129). The debate about SERVQUAL in Healthcare yielded valuable insights for satisfaction research, which are reported in the following sections.

2.2.4 Confirmation/Disconfirmation: The "How" of Satisfaction

Apart from the seeming plausibility of the C/D paradigm, there has been empirical support for it. Schlegelmilch (1992, p.279) reported findings pointing to its suitability, and Jackson et al. (2001) saw a "lack of unmet expectations" as a good predictor of patient satisfaction at all stages. Showing concern for patients' expectation has other benefits as well, as the act of asking a patient about his demands in itself has a positive influence on his satisfaction (Thiedke 2007). But this is where the empirical support ends.

In total, Crow et al. find in a comparison of 28 studies that explicitly deal with patients' expectations, that evidence is *"patchy"* (2002, p.72). To start with, patients with higher expectations also have reported higher satisfaction, contrary to the model's predictions (Crow et al. 2002, p.35); the same has been found for clinical outcomes (Myers et al. 2007, pp.151-2). Churchill and Surprenant set up an experiment to measure the impact of variations in expectations and performance, they discovered no direct, mathematical link between expectations and perceptions of quality. Instead, they found the nature of any psychological calculation leading to satisfaction to be highly subjective and inaccessible (Churchill Jr. & Surprenant 1982, p.502). As a consequence, *"executives cannot tell if changes in scores are due to changes in requirements/expectations or to changes in performance."* (Schmalensee 1994, p.27)

Adding to this, the C/D paradigm has been criticized on theoretical grounds, too. Brown et al. (1993) show that as a difference measure, the C/D paradigm systematically allows for less variance in the satisfaction result for clients with high expectations as opposed to those with more modest requirements (T. J. Brown et al. 1993, p.132). Then, there has been confusion as to the nature of the construct: Do clients base their calculations on how they think providers *should* perform ideally or on how they think providers *will* perform actually? Following a proposal by Boulding et al. (1993, p.24), Parasuraman, Berry and Zeithaml changed the wording from the former (desired service) to the latter (adequate service) in a revised version of their questionnaire (1994, p.202), but *"the substitute format, however, appears to have little advantage over the original scale."* (A. M. Smith 1995, p.262)

In this situation, concerns exist that patients' expectations might not only be difficult to elicit but that patients do not have a sufficiently clear or differentiated idea of what they expect at all (Peck et al. 2004, p.1085). As there is less than perfect knowledge about what Healthcare can do for them, and no logical upper limit to what they

may desire, patients will tend to report unspecific maximum demands that are not systematically related to how they form their satisfaction (McAlexander et al. 1994, p.38). In addition, measuring expected and experienced service quality separately leads to overly long questionnaires (Paul 2002, p.7) and is of limited value for decision making (McAlexander et al. 1994, pp.37-8). Peter, Churchill and Brown (1993, p.662) caution against the use of difference measures altogether and advocate indirect questioning or a reframing of the research question instead (Peter et al. 1993, pp.661-2).

But apparently there is a simpler way. Cronin Jr. and Taylor (1992; 1994), two of the most outspoken critics of SERVQUAL, dropped questions for the expected quality level altogether and found that asking for the experienced level only did no harm to the instrument. They termed their approach SERVPERF for "service performance", as perceived by the client (Cronin Jr. & Taylor 1992, pp.58-9). In a comparative evaluation, Boulding et al. (1993, p.24) followed their example and found clients' perceptions of performance a superior explanation to difference measures. Other authors, e.g. Teas (1993, p.31) or Brown et al. (1993, pp.137-9), put forward similar SERVQUAL criticisms and conclusions; Buttle (1996) gives a summary of the debate. The original authors replied with a further elaboration of their expectations measures (Parasuraman et al. 1994, pp.120-3), leaving a number of issues unresolved (Teas 1994, p.137). Moreover, as the Parasuraman et al. wished for a wider applicability of their model (1994, pp.202-3), they did not explicitly address Healthcare-specific concerns. To the contrary, Taylor and Cronin (1994b, p.36) could attest to the applicability of performance-only measures in modeling patient satisfaction, so that there seems to be adequate support for discarding explicit expectations measures in the hospital satisfaction surveys.

2.2.5 Factor Structure: The "What" of Satisfaction

In addition to the five-gap model of service quality, SERVQUAL introduced a framework of quality dimensions into the discussion. The authors' ambition was to provide "a model summarizing the nature and determinants of service quality as perceived by consumers" (Parasuraman et al. 1985, p.46). Would this be the philosopher's stone to capture all relevant aspects of the quality construct *and* generate a manageable, comprehensive list of survey items at the same time? In a first version, the authors started out with ten dimensions and 97 items, which, after further empirical research, they reduced to a mere five dimensions and 22 items (Parasuraman et al. 1988, pp.17,23).

The SERVQUAL dimensional structure won immediate popularity. The list of five dimensions, Reliability, Assurance, Tangibles, Empathy, and Responsiveness, soon became known as RATER, an acronym of the initial letters (Tenner & DeToro 1992, p.65). In combination with the shortlist of 22 directly applicable items, SERVQUAL served as a blueprint for countless pioneering survey projects in organizations that just were entering stage one of satisfaction management maturity (cf. above, Fig. 3 on page 9).

But the model's spread over so many different sectors and industries brought to light its deficiencies, too. Researchers felt the need to adapt SERVQUAL's factor structure to their field of application. Such adaptation can happen on three levels: by a plain rephrasing of items, by adding or subtracting items, or by challenging the basic, five-dimensional structure of the model. While all these vehicles for adaptation were used, proposals for improvement quickly leaped to the third level, a fundamental critique of the dimensional structure. SERVQUAL's *"dimensionality did not replicate,"* as Brown et al. (1993, p.137) remark in a banking sector study, and it failed to do so in hospital settings, too (e.g., Taylor & Cronin Jr. 1994b, pp.41-2).

Bearing in mind the characteristic information asymmetry of Healthcare, the medical specialist's view was particularly found to be missing. SERVQUAL factors failed to match perceptions of service quality in the eyes of hospital physicians (Walbridge & Delene 1993, p.15), or to replicate what matters to patients (Clemes et al. 2001, pp.15-6). Sureshchandar et al. (2001, p.117) consider the model unaware of the medical core service, of the human element of Healthcare delivery, and of matters of social responsibility. Altogether, *"the services marketing approach … ignores the necessity to include the evaluation of the technical skill of the provider and the nature of the medical outcome,"* as Piligrimiene and Buciuniene (2005, p.129) observe. Similarly, Ramsaran-Fowdar (2005, p.439) finds a perspective on *"Professionalism"* and *"core outcomes"* missing.

Alas, despite the received opinion that SERVQUAL needed sector-specific adaptation, there emerged much less consensus about how an appropriate dimensional structure of patient satisfaction, let alone for Healthcare in general, should look like (A. M. Smith 2000, pp.168-70). One approach is to limit the focus of the instrument and map the dimensions of satisfaction only to a particular service or industry, hoping to obtain a narrower, sector-specific instrument with similar appeal. REFERQUAL, for example, has been proposed to measure satisfaction with exercise referral schemes in the British National Health Service (Cock et al. 2009), while Vaughan and Shiu (2001, pp.141-2) suggested ARCHSECRET as a ten-factor acronym for measuring service

quality within the voluntary sector. But while doing so might reduce to some extent the need to adapt the instrument to a particular hospital, it cannot eradicate the problems inherent in generalized factor frameworks

Rather, indications are that a cure-all pattern simply doesn't exist. Evidence from other sectors points to the same conclusion, e.g. in retail (Fogarty et al. 2000, p.3). Hayes (2008, pp.11-7) explains that general or industry-specific lists of satisfaction dimensions might well serve as a starting point, but that they should be refined in the light of a trade journal review, and, eventually, first-hand empirical data. In other words, there is no way of knowing what really drives a hospital's patients' satisfaction but to learn it from them directly.

The discussion did reveal however, some clues into which direction the search for relevant factors should steer. Turner and Pol (P. D. Turner & Pol 1995, p.46) suggest to look both into the *micro* level of the single physician-patient session and the *macro* level of factors that apply to more than one encounter; i.e. to consider both transient and persistent factors. Woodall (2001, p.596) concurs by stating that SERVQUAL *"has encouraged a highly constrained reading of 'service' - one that implicitly denies the importance of attributes that might be best associated with consistency and longevity"*. Indeed it seems that the time dimension could be the key to the puzzle. The next section will therefore explore how the "When" of satisfaction can help to reconcile the "How" and "What" of the concept.

2.2.6 Delivery Process: The "When" of Satisfaction

The notion that service delivery plays out over time – in other words, a process perspective – has been a mainstay of services marketing for some time. Proponents of the Nordic (European) School of Marketing in particular(Grönroos 1994a, p.8; Grönroos 1994b, pp.352-3) have long argued for integrating an interaction or process view (e.g. U. Lehtinen & J. R. Lehtinen 1991, pp.289-93) into the measurement of quality, for the sake of "[p]enetrating the black box of consumption" (Grönroos 2006, p.319; cf. Walbridge & Delene 1993, p.8). Driven by these European contributions, the mainstream marketing literature warmed up to the new paradigm (Rust & Oliver 1994, p.3). In Healthcare, these ideas were preceded by a process view of public health outcomes on a macro scale. It was Donabedian above all who promoted a temporal view of Healthcare quality(Donabedian 1966, p.692; Donabedian 1980, p.79) , so much so that *"'structure-process-outcome' is virtually synonymous with his name,"* as Jonas and Yerby remark (1983, p.279). This framework, or S-P-O paradigm for short, is now well established in medical outcomes research (M. A. Smith et al. 2005, p.192). However, it took some time until these currents merged on the micro level of Healthcare delivery and until process-oriented instruments were developed to assess the formation of the patient's quality judgment.

For bringing the temporal view to fruition on a micro level, some possible approaches exist:

- **The consumption experience.** As Healthcare is *"probably the most intangible of all services"* (K. R. France & Grover 1992, p.32), it is rich in experience qualities (Woodside et al. 1989, p.6). This notion from economics of information, following Stigler (1961) and Nelson (1970), has only received limited attention in Healthcare (e.g. Lynch & Schuler 1990; Shemwell & Yavas 1999, p.69), but helped draw attention to the fact that *"hospital patients perform a sequence of evaluations over time"* (John 1992, p.57)(John 1992, p.57).
- **Provider-client interaction.** Long bound by a paternalistic view of its clients, Healthcare awakens to the fact that *"the consumer is an integral part of the service"* (Woodside et al. 1989, p.5), and providers begin to view *"patients as coproviding, not merely consuming health care"* (Buetow 2005, p.554). This implies an interaction view of Healthcare delivery, with client and provider taking turns in determining the outcome, and satisfaction in the process.
- **Process Reengineering.** While hospital organization for a long time followed an industrial paradigm of work division and specialization, the value of process management is no longer overlooked. Still, the intention is not primarily to increase patient satisfaction but to drive down the rate of medical failures, positively termed "patient safety" (Tucker & Edmondson 2003, p.55).

Following these and other suggestions, a number of models committed to the S-P-O paradigm have emerged. Smith et al. (2005, p.192) provide an overview of how the three components can be broken down into more specific aspects of Healthcare, and Sheppard (2002, p.2) lists examples of individual studies that concentrate on one such aspect at a time. Less numerous are models that attempt to integrate all of the S-P-O components. One such comprehensive interpretation has drawn some attention, though: Smith et al. (1986, p.322) distinguish a triad of 1) access mechanisms, corresponding to structural prerequisites, 2) the instrumental domain of the physician's professional abilities, and 3) the expressive domain of his personal qualities, the latter two expressing process qualities. Patient satisfaction would then feature as the outcome dimension of this model (similarly: White 1999, p.41). Corroborating feedback came from studies of patient satisfaction – Mishra et al. (1991) judged it superior to SERVQUAL – as well as from other service sectors (e.g. F. R. Smith & C. A. Brown 2008,

p.44). More recently, Piligrimiene and Buciuniene (2005, p.134) proposed an even more elaborate model, one that tracks technical and functional qualities of Healthcare throughout the whole S-P-O sequence.

Despite all these efforts, it is not doing justice to the S-P-O paradigm just to take it as a ready-made list of satisfaction-relevant factors. Rather, it should be viewed as a radar screen, or canvas, on which satisfaction relevant aspects of care can be traced and mapped. The source of this information however, can only be the stakeholder himself.

2.2.7 Towards the concept of a Service Encounter

Fortunately, there exist a number of tools that can help extract and frame satisfaction-relevant information along a timescale:

- **Service Scripts** are cognitive representations of what happens in service delivery. As a consumer research tool, they were introduced quite a while ago (R. A. Smith & Houston 1985, pp.504-5). A toolset to hierarchically map consecutive actions and episodes into longer sequences (Woodside et al. 1989, p.7), as well as verbal and visual stimuli for eliciting corresponding expectations from clients have been proposed (R. A. Smith & Houston 1986, pp.504-5).

  Satisfaction, in this framework, is determined by the degree of congruence between the *"learned pattern"* and the actual events (Solomon et al. 1985, p.100). Script-based instruments were soon used in Healthcare satisfaction surveys (Peyrot et al. 1993, pp.24-5). Solomon et al. (1985, p.100) praise their ability to capture both patient and staff perspectives, while others welcome their flexibility to accommodate functional, mechanic and humanic clues (Berry et al. 2006, pp.44-5). Orsingher (2006, p.118) summarizes: *"[L]e script cognitif est mieux adapté à l'étude du client … car il offre un cadre théorique suffisamment large pour englober à la fois la dimension cognitive de l'expérience de service (acteurs, objets, actions, enchaînement temporel des actions) et sa dimension comportementale (rôles attendus, « routinisation » du comportement)."*

- **Moments of truth.** Another tool grew out of existing complaint management procedures (Mayberry 2002), which were found to be geared towards administrative efficiency, and less to patients' actual concerns (Bark et al. 1994, p.123). In changing towards a patient-centered organizational culture, hospitals learn that complaint management can be a source of information, and, moreover, a source of patient satisfaction in itself (Johnston & Mehra 2002, pp.148-9). Other service industries have taken this to the extreme, notably airline manager Carlzon, who states: *"We see each contact with a customer as a moment of truth"* (Carlzon 1989, p.6). The tenet is that not only explicit complaints, but every contact with the customer has an information and satisfaction value, and that these must be recognized and actively managed (Beaujean et al. 2006, p.65). As a pragmatic measure, Baker (1998) recommends to set up a *"moments of truth chart"*, based on staff discussions.

- **Critical incidents.** Often used as a synonym for moments of truth (Hume & McColl-Kennedy 1999, p.2), the term "critical incidents" actually refers to a psychological questioning technique (cf.Flanagan 1954), which is widely used in clinical qualitative research (FitzGerald et al. 2008) for *"effectively turning anecdotes into data"* (FitzGerald et al. 2008, p.299). The technique was introduced into services marketing with an article by Bitner, Booms and Tetreault (1990), and hence adapted to Healthcare satisfaction research (e.g. Hartman 1998). It is of note that Healthcare professionals often become aware of the critical incident perspective only through their own, personal involvement as patients (Hoffman 1996; Gordon 1996), which speaks as much for the potential of the method as it points to barriers of acceptance under normal modes of operation.

- **Service Blueprinting** has been introduced as a method for mapping complex client-provider interactions in services (Shostack 1982; Shostack 1984): A graphical representation depicts tangible and intangible service elements, divided among client and provider contributions from both sides of a line of interaction, in a logical or temporal order. Potential "failure points", or causes for dissatisfaction, can be identified along this sequence (Shostack 1984, p.135), a resemblance of the *"moments of truth chart"* cited above. As an application in Healthcare, *"medical practice blueprints"* (Rodie et al. 1999, p.18) have been used to systematically improve patient interaction in family practices.

- **Value chain.** From a strategic point of view, each contact between provider and client is a potential source of differentiation, or value activity, and part of a larger value chain geared towards the customer (Porter 1985, pp.36-9). Originally, Porter defined value activities as *"the physically and technologically distinct activities a firm performs"* (Porter 1985, p.38), a view which might add a sense of concreteness, but does not take the customer explicitly into account. MacMillan and McGrath recommend *"mapping the consumption chain"* instead, or, *"the customer's total experience with a product or service"* (1997, pp.134-5). In "Redefining Health Care" (2006), Porter and Teisberg aim to reconcile the two perspectives when they define their concept

of a Care Delivery Value Chain (CDVC): *"It portrays the types of activities involved in caring for patients with a particular medical condition over the entire cycle of care."* (ibid., p.203).

The customer focus of the CDVC becomes apparent in that it is adapted to the organizational entity of a practice unit, i.e. an organizational layer which cuts across functional units within a hospital to provide patients with an integrated care pathway (ibid., p.167-79). Also, the patient-centeredness of the CDVC shows in comparison with other concepts of value chain analysis in hospitals: The *Wharton Healthcare Value Chain* (Burns et al. 2002) contrastingly depicts a hospital only within a larger system of actors, including some that have no direct contact with the patient at all (ibid., p.3-5). And Schneller et al. (Schneller et al. 2006, pp.5-13) include all kinds of internal customers into their model of a *Health Care Supply Chain*, while not focusing on patients in particular.

It becomes evident that all these approaches break down the many facets of client satisfaction into a chain of actions, or interactions, which are accessible both to the provider and to the client, and which evolve over a limited time interval. While all the concepts mentioned above remain valid tools in this context, the proper expression and thinking frame is the *service encounter*.

2.2.8 Conceptualizing the Service Encounter

Services marketing had embraced and popularized this concept by the mid-1980s (Czepiel et al. 1985). Solomon et al. (Solomon et al. 1985, pp.100-2) characterize service encounters as dyadic, role-based interactions, and Bitner, Booms and Tetreault (1990, p.72) employ the concept to *"identif[y] specific events and behaviors rather than general dimensions"*. The descriptive power of the concept is widely acknowledged. Siehl, Bowen and Pearson (1992, p.543) go as far as terming service encounters *"rites of integration"*, i.e., *"social dramas with well-defined roles for people to perform", "that have the objective of achieving 'a temporary sense of closeness' between customers and service providers."* Broderick (1999, pp.119-20) credits the underlying role theory for bringing interaction, uncertainty, evolution, and behavioral aspects into the picture.

Service encounters explicitly incorporate the perspectives of both staff and client (P. Durieux et al. 2004, p.201), who, through their role expectations, mutually determine interactive service delivery (Broderick 1999, pp.119-20). Satisfaction ensues if each such interaction stays within the patient's scripted expectations, while interferences and incongruence may lead to dissatisfaction (Price et al. 1995, p.86). It becomes clear now why the C/D paradigm at the same time has great descriptive power and yet poses so formidable problems of measurement (see above, section 2.2.4, p. 13): Expectations for particular attributes, and their confirmation or disconfirmation, become manifest only at certain times during the process of service delivery and might or might not be reinterpreted in the light of subsequent events. Clients are, however, able to perform a holistic *"gestalt evaluation"* of the encounter (Bitner et al. 1990, p.79), in other words, they can judge whether *"'everything went right' or 'everything went wrong.'"* (ibid.). In hindsight, they are also generally capable to assess their satisfaction with particular aspects of performance, which explains the empirical strength of the SERVPERF approach.

Service encounters span across a wide range of types. While some script patterns are common to, e.g., the airline, hotel and restaurant sectors (Bitner et al. 1990, p.81), most are specific to industries and national cultures (Winsted 1999, p.119), or to a multitude of other extraneous variables. At the extreme end there are extended, affectively charged and intimate encounters (Price et al. 1995, pp.83-7). Because these are more frequent in Healthcare than in other industries, the concept has particularly appeal in the context of the present study.

On the other hand, and luckily for measurement, there are limits to the individualization and variety of service encounters. Surprenant and Solomon (Surprenant & Solomon 1987, p.94) point out that personalization requires an investment from both sides, which neither party intends to carry beyond a certain level. Also, as scripts are socially learned and disseminated, one can expect patterns of scripted expectations and clusters of patients within a given population that respond uniformly to comparable service encounters. The measurement task is therefore twofold: find out which aspects of the service encounter matter to considerable segments of the population, and determine who the members of these segments are. All too often, satisfaction surveys stop short of the second task.

As to the duration of service encounters, Hume and McColl-Kennedy divide into episodic, extended and continuous encounters (1999, p.7). Here, hospital treatments fall into the second, the *"extended"* category. This type *"allows for the delivery of multiple services within the one service encounter,"* and thus is *"accommodating many or few moments of truth."* (ibid.). The process dimension of the hospital-patient interface therefore *"relates to service events that patients encounter from the point they are notified that hospitalization is needed until the outcome is achieved."* (Zifko-Baliga & Krampf 1997, p.29)

2.2.9 Modeling the Service Encounter

To design a patient satisfaction survey tool following a service encounter logic, one needs to perform the following steps:

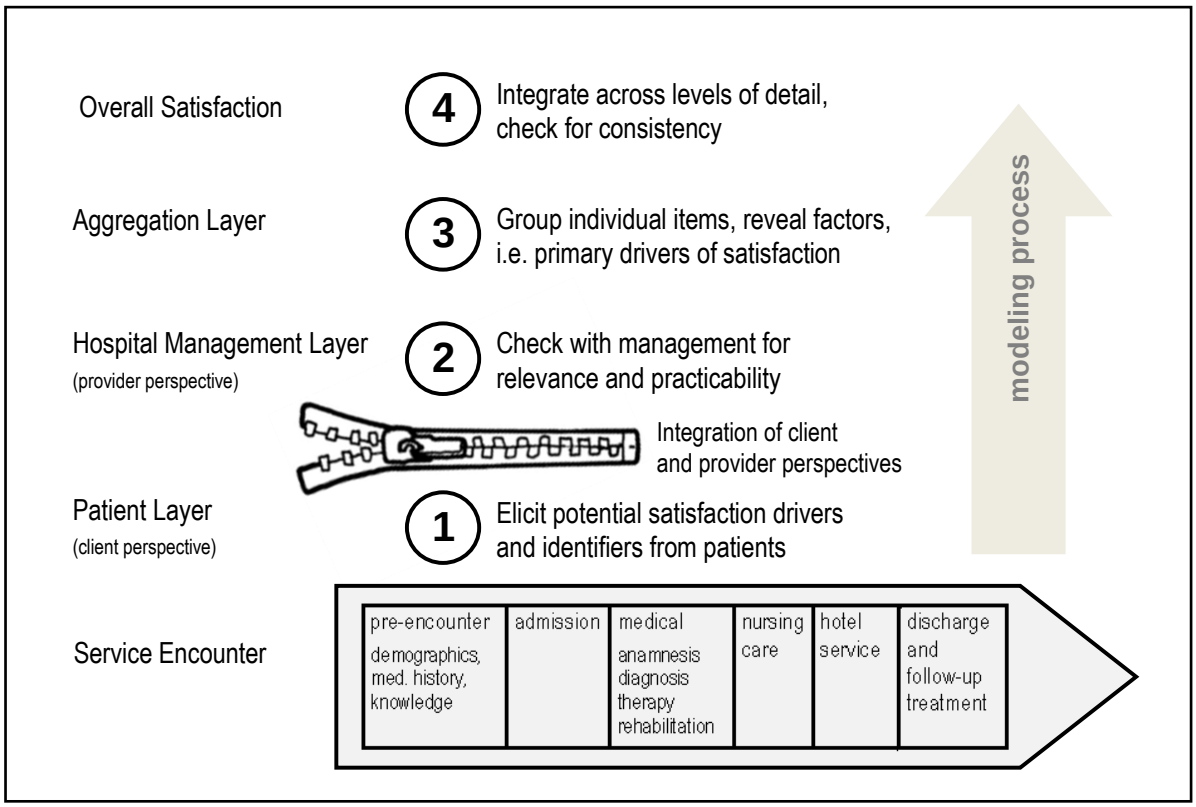
- At the patient level, as many as possible distinct characteristics of Healthcare delivery are to be elicited and recorded, describing individual interventions, actors and circumstances. This may draw upon secondary sources (literature, documentation, past surveys) as well as field research with actual patients. The resulting items are grouped in a logical or temporal sequence.
- On this list, management feedback and additional input is to be obtained regarding the manageability of items and their relative importance from a provider point of view. According to information from patients and management, items are then grouped into three categories:

1) Satisfaction Drivers	2) Patient Identifiers	3) Irrelevant Criteria
Items perceivable by patients, controllable by management, and potentially pertinent to patient satisfaction	These items help to describe patients and can be reported by them. They may have an influence on satisfaction or not.	Criteria invisible to patients, obviously irrelevant to their satisfaction, or unsuitable to identify them.
Ex.: Thoroughness of medical examinations, staff friendliness, food quality, waiting time	Ex.: Patients' demographics, medical histories and past experiences, word-of-mouth	Ex.: Staff pay grades, information relating to historic events, patient hobbies, urban legends
list of items		(discarded)

The result of this step will be an extended list of items containing satisfaction driver and identifier items. Identifiers usually are outside the control of management and outside the scope of the service encounter, and they are not needed to explain patient satisfaction. However, they are indispensable for subsequent management of satisfaction, and for targeting specified subgroups of the patient population.

- In the following phase of pretesting and refinement, the list of items will be sorted and reduced according to importance, i.e. the influence each of the items has on patient satisfaction. Building on top of the patient and management perspective, this constitutes an additional, logical layer where items may be grouped and aggregated to check for inconsistencies, and to identify satisfaction-relevant factors behind them. On top of it all, there is a layer of overall satisfaction with the service encounter (see Fig. 6 overleaf).

Fig. 6: The Service Encounter Modeling Process



2.3 Patient Satisfaction Survey

2.3.1 Focus group interviews

To get an authentic view of the hospital service encounter from a patient's perspective, two focus group interviews were conducted. Each had 12 participants who were inpatients of the hospital at the time, and who represented a variety of clinical pictures and demographic data. For the first but not the last time during the project, help from the nursing staff proved essential, particularly in selecting the patients, approaching them, explaining the project and assembling them at the planned interview time. With individual patients picked from different wards, the head nurse oversaw the overall composition of the groups.

Meetings were conducted by a team of two researchers, lasted 90 minutes each, and were tape recorded to be transcribed later. It was explained to the participants that the research team was independent from the hospital organization, and that confidentiality of the discussions was guaranteed. While the interviews took place in a separate meeting room on site, there was no participation, intervention or interruption from hospital staff during the sessions.

Despite their widespread application in market research and service quality management, focus groups have received criticism for avoiding controversial issues, being observer-dependent and producing ambiguous information at best. While such arguments have been brought forward against focus groups in product innovation (Rushkoff 2005, pp.38-9), they do not apply as rigorously to exploratory satisfaction research. Here, the objective is to add detail to a pre-established framework – the service encounter – and the information to be elicited deals with past events and existing notions, not with future innovations or creative ideas.

Among the virtues of focus groups as opposed to conventional and more structured methods of inquiry, there are the greater freedom of expression, positive group dynamics, and the possibility for immediate interviewer feedback. In fact, the interviews conducted turned out to fully confirm these notions. Patients spoke out openly, motivated each other and came up with well articulated ideas regarding the attributes they perceived as important about the hospital service encounter. The use of questioning aids – sentence completion test forms had been prepared – proved unnecessary.

Results from the interviews were discussed by the researchers immediately after the sessions had ended, again in a researchers' walk-through examination of conversation transcripts, and finally in a meeting with the steering committee. Along with records of anecdotal evidence, these discussions resulted in an extensive list of variables:

- One hundred variables related directly to the sequential steps of the service encounter. The admission phase, for example, included among others: Punctuality resp. swiftness of transport; appropriateness of vehicle; waiting time upon admission; thoroughness of medical interview and examination; correctness of medical diagnosis; information about clinical features, cost and duration of the planned treatment.
- During the first interview, aspects had emerged as relevant that concerned the patient's psychological state. These included his emotional wellbeing (e.g. perceived safety, confidence) as well as adverse feelings (e.g. perceived loss of control, anxiety) – variables which permeated the whole encounter and did not directly connect to observable indicators. During the second focus group session, patients were then asked to relate these aspects to specific events during the encounter, which resulted in another twenty variables integrated into the list: Staff friendliness during admission, patient involvement in medical decisions, flexibility in planning surgery appointments, convenience for visiting family, among others.
- More than thirty potential patient identifiers and pre-encounter variables turned up during the interviews. These fell roughly under four labels:
    - Demographic: (e.g. age, sex, place of birth, marital status, household size)
    - Previous knowledge (e.g. attitude towards and previous experience with the hospital)
    - Administrative issues (e.g. type of health plan, insurance company; path of admission: direct/by family physician/clinic etc.; length of stay so far; estimated length of stay)
    - Medical (e.g. reason for stay: illness/injury/pregnancy/health screening; pain level)
- As for the aggregation level, four topics emerged as possible labels for the grouping of variables: emotional wellbeing; quality of information and counsel; quality of medical treatment; quality of nursing care and hotel service.

In the following step, this list of variables was to be transformed into a workable survey tool.

2.3.2 Preliminary Research Tool Design

As established in the research design and proposal, satisfaction information sought from stakeholders is almost exclusively gathered by way of questioning. While relatively unstructured, face-to-face focus group interviews was the appropriate format for generating a list of variables, asking patients about their actual levels of satisfaction had to rely on a different method. Manpower limitations, the desire not to interrupt ongoing hospital operations (Ganova-Iolovska et al. 2008, p.8), and the necessity to give each patient time to respond at his own pace had to be considered. These restrictions called for a standardized, self-administered questionnaire.

To construct a suitable survey tool, the variables from the list were translated into questionnaire items. Particular attention was given to plain wording, to avoiding double-barreled questions, and to allowing for unambiguous answers. After completion of a first version, a simple pretest with few non-patient respondents allowed for additional refinements along these lines and ensured the practicability of the questionnaire. Before that was achieved however, the scaling of individual items was an area of concern.

For identifier items (demographics and pre-encounter variables), care was given to provide a number of scaling alternatives and not to impose scale divisions upon the respondent. Also, a breakout alternative (*"don't know box"*) was provided for each question (see Fig. 7 overleaf).

Fig. 7: Patient identifier item with different scales and a breakout option provided

How many days are you going to spend in the hospital from now until the end of your current stay, presumably?

Answer: _____ days

Or: If you do not know yet exactly how long your current stay will last,
please check one of the following:

Most likely, I will stay another
☐ few days / ☐ about a week / ☐ about two weeks / ☐ more than two weeks
... in the hospital.

Or: If you feel you cannot give an answer, please check here:
☐ I do not know how many days I will continue to stay at the hospital.

Different considerations governed the scaling of satisfaction driver items. Above all, it turned out during focus group interviews and questionnaire pretests that questioning had to take into account the limited answering capabilities of respondents. This is due to the fact that hospital patients come from quite varied educational backgrounds, and many are impeded by old age or their medical condition. Scaling decisions were taken accordingly:

- The confirmation/disconfirmation paradigm seems to favor indirect, two-scale measurement of satisfaction with each item, i.e. asking for expected and experienced service levels separately. However, earlier studies (as reported extensively above in section 2.2.4, Confirmation/Disconfirmation: The "How" of Satisfaction) had revealed difficulties with the operationalization of expected levels (e.g., realistic vs. maximum expectations) and with respondents' capability to provide sufficiently differentiated answers. Because these limitations seemed even more salient in a Healthcare context, direct, single-scale measurement of satisfaction was chosen instead.
- Similar deliberation was given to relative item importance. A preliminary version of the questionnaire was produced with a separate scale of importance per item (cf. Fig. 8). Pretests however showed that this lead to a overburdening of respondents' abilities, particularly given the large number of items used. Rather, items were given a single satisfaction scale, and relative item contribution to overall satisfaction was later obtained by means of statistical analysis.

Fig. 8: Pretest questionnaire item with five-part Likert scale for statement approval and a separate, six-part importance rating

Upon admission to the hospital, I received sufficient information about financial matters (costs, billing) concerning my stay.	totally agree ☐ ☐ ☐ ☐ ☐ totally disagree ☐ no answer	very important ☐ ☐ ☐ ☐ ☐ ☐ totally unimportant

- For individual items, different combinations of scale levels and labels were pretested, including binary choice (yes/no) as well as ordinal scales. As to the latter, the five-part, zero-centered Likert scale, so frequently used in consumer market research, proved to be overly demanding on respondents, too. However, virtually all patients were familiar with the grading system used in German schools, an ordinal scale from 6 (worst) to 1 (best, cf. Fig. 9 overleaf).

Fig. 9: Satisfaction driver item with ordinal school grade scale, explanations

In section two, we ask your judgment about a number of details regarding the hospital. For once, you can hand out grades yourself! Please use ordinary school grades, as shown in this list: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = deficient 6 = insufficient Feel free to use the whole range from 1 to 6 – just as it reflects your own, personal judgment!

Swiftness of diagnosis (examination) of my medical condition	school grade: 1 2 3 4 5 6 ☐ ☐ ☐ ☐ ☐ ☐ ☐ no answer 37

After pretesting, the comprehensive questionnaire comprised of 23 identifier and 100 satisfaction driver items in the following twenty item groups:

demographics and pre-encounter variables – transfer to hospital – admission – diagnosis – medical treatment – health and rehabilitation – doctors – nursing staff – procedures – hospital exterior – hospital interior, public area – patient rooms – bath/restrooms – administration of stay – catering – leisure activities – tranquility – general wellbeing – satisfaction aggregates, overall satisfaction

The questionnaire printed out on 13 A4 pages, including cover letter and concluding page. A welcome statement informed patients about the third-party nature of the research project and assured them confidentiality. All information asked from them would not have been sufficient to trace answers back to individual respondents.

400 questionnaires were printed, stapled, and made available to eight of the hospital's 13 wards. In particular, cardiology, urology, surgery, palliative care and maternity wards were chosen as they represent a reasonably diverse variety of patients. Nursing staff oversaw the distribution of questionnaires and writing material to individual patients, but were instructed not to interfere in the answering process. For collecting filled-in questionnaires, sealed ballot boxes were provided, one per ward. The questioning period lasted four weeks, allowing a sufficiently wide variety of patients to be included. A total of 209 filled-in questionnaires were returned.

2.3.3 Refining the Research Tool

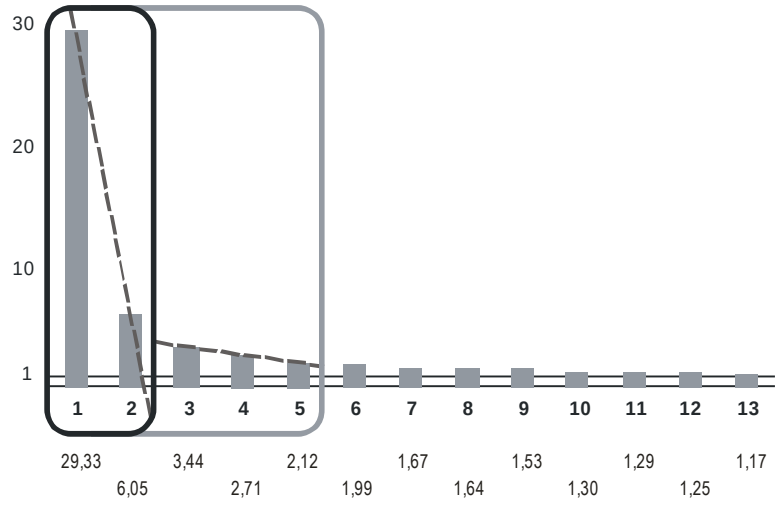
While the scaling process had revealed the limitations of questioning hospital patients, the actual survey confirmed their exceptional readiness to provide answers. Nurses reported only a negligible number of refusals among patients asked for participation, and returned questionnaires were fully completed in virtually all cases. The remainder of copies remained unused only out of administrative reasons, so that the survey's validity actually was supported by high return and response rates.

An interim report of satisfaction averages per item group and per ward was issued to management, but the main use of the data collected lay in the calibration of the survey tool. Some demographic items needed a revision of scales. Asking for place of birth by postcode, for example, had yielded excessively detailed information. This item was replaced by the approximate duration of residence at the current place, and this helped well enough to differentiate local natives and those who had moved in from outside the county.

Apart from such insights, looking behind the drivers of satisfaction was of much greater interest. The means of choice for extracting dimensions of satisfaction from empirical data is factor analysis (Singh 1990, p.18; Hayes 2008, p.72). Exploratory factor analysis of the 100 satisfaction driver items revealed 13 factors with an eigenvalue above 1. Below, Fig. 11 on page 23 shows a mapping of item variables onto these factors, exposing those sections of the service encounter that are well explained by each of the factors, and therefore critical to patients' satisfaction.

Taking share of variance, i.e. eigenvalues, as a measure of explanatory quality, two of the factors were well ahead of all others (cf. Fig. 10 overleaf), and it seemed tempting to isolate these two for an elegant if not simplistic explanation of patient satisfaction. Moreover, the item variables explaining these two factors each touched on different sections of the service encounter, but related well to each other semantically, thus lending themselves to compelling interpretations.

Fig. 10: Ranking of extracted factors according to their eigenvalues



Legend:
left to right: 13 extracted factors with an eigenvalue >1, in descending order (eigenvalues shown below); vertical axis: eigenvalue scale

circled in black: two-factor solution;
circled in grey: five-factor solution; both with visual selection guideline (dashed)

On the other hand, considerable portions of the service encounter would not have been covered by the two-factor solution. Recommendations derived from that solution would therefore have left management without any guidance as to what to do with other practical aspects of hospital procedures, and how patients perceived these. For that reason, the hospital's representatives felt that a more comprehensive approach would better reflect its mission statement and asked for the inclusion of additional factors.

A list of the 13 factors with eigenvalues above 1 was prepared for a meeting with hospital management. For each of the factors, the list included generic factor labels and a catalog of contributing item variables with an absolute factor loading above 0.5 (cf. Fig. 11).

Fig. 11: Example description of generic factor used for interpretation

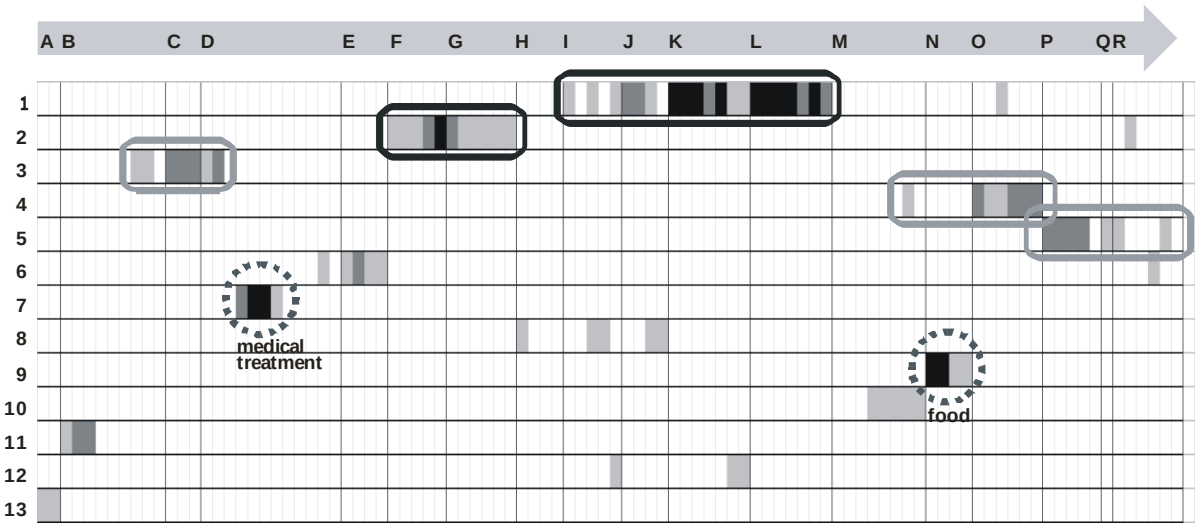
Factor 2 (eigenvalue: 6.05; average satisfaction rating: 1.51*)			
A	**B**	**C**	**D**
60	0,772	doctors' effort in caring for their patients	1,54
61	0,696	general appearance of nursing staff	1,50
59	0,677	friendliness of doctors	1,42
64	0,599	expertise of nursing staff	1,58
65	0,595	friendliness of nursing staff	1,38
56	0,573	general appearance of doctors	1,54
63	0,528	availability of nursing staff	1,59
A: item number in questionnaire (23-123), indicative of position during the service encounter — **B**: factor loading — **C**: descriptive item label — **D**: average satisfaction rating in first survey* *satisfaction rating scale according to German school grade scale, 1: best; 6:worst)			
Label found for factor: Staff			

For the first five of the factors, distinctive interpretive labels could be found after considerable discussion. The sixth factor, besides its rather low eigenvalue, was semantically too close to one of those already discussed to merit a label of its own. It was therefore decided to drop this and subsequent factors and to limit the list to five. The following graphic (Fig. 12 on page 24) maps the factors onto the service encounter vector underlying the questionnaire, showing quite favorable results:

- The factors spread well over the whole duration of the service encounter, thus ensuring the practicability, or management value, of the insights gained.

- The factors group together adjacent item categories, which means that meaningful interpretation of factors is possible.
- The internal factor loading structure (grayscale coded) provides reasonable differentiation between the constituting item variables, thus lending further depth to the interpretation.
- Beyond the five factors chosen, factor loadings are scattered or limited to very few item variables per factor. This indicates that the list is exhaustive, i.e. no important factors are left out of the picture.

Fig. 12: Factor loadings of satisfaction driver items mapped to the stages of the service encounter



Legend: **From left to right,** the 100 individual items that span the entirety of the service encounter in chronological fashion, grouped into twenty topical sections (A-R): **A)** transfer to hospital – **B)** admission – **C)** diagnosis – **D)** medical treatment – **E)** health and rehabilitation – **F)** doctors – **G)** nursing staff – **H)** procedures – **I)** hospital exterior – **J)** hospital interior, public area – **K)** patient rooms – **L)** bath/restrooms – **M)** administration of stay – **N)** catering – **O)** leisure activities – **P)** tranquility – **Q)** general wellbeing – **R)** satisfaction aggregates, overall satisfaction.
From top to bottom, there are 13 extracted factors with an eigenvalue above 1, ordered by decreasing eigenvalue. The table itself holds the items' factor loadings, color coded by their absolute values: □ <0.4; ▒ 0.4-0.6; ▓ 0.6-0.7; ■ >0.7. Loadings >0.4 for the two most important factors are enclosed in black, those of the additional three factors are enclosed in grey. Dotted circles are around isolated influences discussed in section 3.

A much more efficient version of the satisfaction questionnaire could now be constructed on the basis of the five main factors. After a section asking for patient identifiers, five sections dealt with one factor at a time, and a concluding section asked for overall satisfaction. In any case, order effects were not likely to occur, because the questionnaire organization based on empirically determined dimensions, and because it referred to recent experiences of the respondents (Auh et al. 2003, pp.392-5). For each of the five factors, a battery of different questions was used (Hayes 2008, pp.62-3), including ordinal-scaled items (school grades) for general satisfaction with the factor, binary choice items highlighting particular aspects of the factor, and free-format open questions asking for the respondent's remarks (cf. Fig. 13 overleaf).

Fig. 13: Battery of questions for factor 2, "staff", questionnaire items 21 through 26

Staff		
General appearance of staff (doctors, nurses, etc.)	☐ no answer	school grade: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 — 21
Friendliness of hospital staff	☐ no answer	school grade: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 — 22
Expertise of nursing staff	☐ no answer	school grade: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 — 23
Is there always someone available for you?		☐ yes ☐ no ☐ no answer — 24
Do the hospital employees really care for you?		☐ yes ☐ no ☐ no answer — 25
Your remarks:		26

The revised questionnaire had 42 items on four pages (A3 backfolded), including the cover page with explanations. In comparison with the 120-item, 13-page preliminary version, this considerably eased the burden on respondents and analysts, and made the tool suitable for repeated application.

2.3.4 Collection and Treatment of Patient Satisfaction Data

To test the instrument for reliability, a complementary follow-up survey was implemented: A separate, single-page form (A4) was inserted into each questionnaire, asking respondents to provide their residential addresses for a follow-up mailing six weeks after finishing the in-house survey. Respondents were instructed to insert questionnaires and address forms separately into the collection boxes, in order to protect the confidentiality of their answers.

960 copies were held available in all of the hospital's wards over a six-week period, using the same procedure as with the first version. Patients' willingness to cooperate was even higher as with the more voluminous first version of the questionnaire; a total of 485 filled-in questionnaires and 338 postal addresses were returned. The follow-up mailing then contained a slightly adapted questionnaire with the same set of items and a stamped addressed return envelope. This way, another 113 filled-in copies were turned in, a return rate of 33.4%. Results of these diverged only marginally from those of the in-house survey, which corroborated both validity and reliability of the measurement. A total of 598 questionnaires could finally be coded into a database for further analysis.

Immediate satisfaction results were reported to hospital management, including average grades per satisfaction driver item and cross-tabulations by factors, demographics and wards of the hospital. This report answered directly to the research questions formulated for the project. Beyond this, a more profound investigation was done by means of a cluster analysis of the large patient sample now available. Various configurations of items for input and different degrees of partitioning (number of clusters) were tested for interpretability. A seven-cluster solution based on patient identifiers as well as satisfaction drivers proved superior. Such a typology of patients derived from multivariate analysis (Quintana et al. 2006, p.7) *"seeks to uncover 'natural' groupings of patients who are more or less satisfied with different objects (e.g., physician, hospital, insurance provider) in their health care delivery system"* (Singh 1990, p.8-9). These results further added depth to the hospital management's knowledge of their patients, and made a new dimension available for cross-tabulation. A discussion of results follows in section 3 below.

2.4 Referring Physicians' Satisfaction Survey

2.4.1 Differences between Physicians and Patients

Next to patients, the survey design had identified referring doctors as the hospital's second most important stakeholder group. Within the German Healthcare System, family and specialist physicians operate independently from the hospital sector, and act as gatekeepers for 90% of patient admissions to hospitals. Besides the direct patient referrals, doctors have a dominant influence on word of mouth and dissemination of hospital-related information. Likewise, their recommendations as to which hospital to choose are followed by the majority of their patients, so that doctors' satisfaction has a major influence on the number and regularity of patient admissions as well as on patients' attitudes toward the hospital.

Measurement of referring physicians' satisfaction with the hospital followed the same lines as the patient satisfaction survey described above. Due to differences between the two stakeholder groups, the survey's methodology had to be applied in a different way. The remainder of this section will outline these differences, and thus give another example of how an empirical methodology can be adapted to different conditions.

Relationships between independent physicians and hospitals are both more stable and more complex than those between patients and either of them (Wachter et al. 2005, p.25). To begin with, there are fewer doctor stakeholders than patients, and they maintain constant ties with hospitals over the entire duration of their professional activity. As a result, doctors and hospitals develop long-standing business relationships, as opposed to individual patients, who mostly are transitory elements of a local Healthcare network. However, patients provide the main link between the two groups of providers, and doctors tend to view hospitals through the eyes of "their patients". Besides this patient-mediated connection, doctors typically rely on a local hospital as a hub in local professional communication networks and as a proponent of innovation, of cooperation and of vocational training. Further complexity is added to doctor-hospital relationships through financing institutions by means of local network sponsorship, rationing and process standardization.

When modeling the doctor-hospital interface, the notion of one archetypal service encounter between the two has therefore to be extended to a more multifaceted view. On the one hand, there is the single episode of one *patient* being referred to the hospital, admitted, treated and discharged there again, and received back for further treatment in the doctor's practice. On the other hand, there are numerous and quite diverse encounters like information gatherings, training events and social functions, as well as ongoing informal exchange between colleagues, hospital newsletters and local media reporting. Exploratory research becomes even more important in a setting like this.

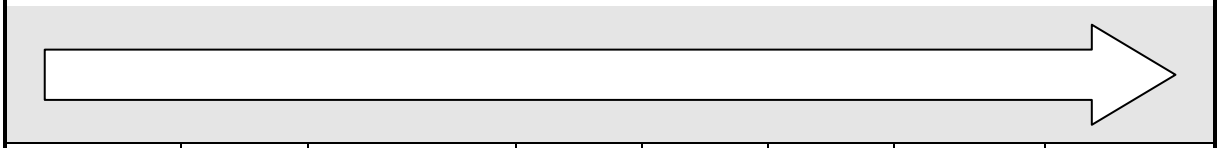
Furthermore, the referring doctor population calls for different surveying techniques. Because of their lesser numbers, researchers can devote more attention to a single respondent. Then, a physician's ability to understand and communicate complex assessments of the hospital is higher than in the average patient. Also, because of their professional interest in the functioning of the local Healthcare network, doctors show a considerable readiness to cooperate. Given independent doctor's workloads however, the time and attention they actually can spend on a survey project is limited. In the present project, a surveying technique adapted to these circumstances was used.

2.4.2 An Adapted Survey Method

Due to the greater importance of individual respondents, in-depth face-to-face interviews were chosen over focus groups for the exploratory phase. A sample of 14 doctor's practices was chosen from within county limits, including both family physicians and specialists. Each interview, held with two researchers and the chief physician of the practice, typically lasted one hour. As a point of departure, a pictorial description of the referral process was presented (cf. Fig. 14 overleaf), and the interviewee freely developed his thoughts.

Fig. 14: Visualization of Patient Referral, used to elicit Referring Doctors' categories of judgment

This timeline symbolizes different stages of a patient's stay at the hospital. Please check those sections which you feel need improvement by the hospital.

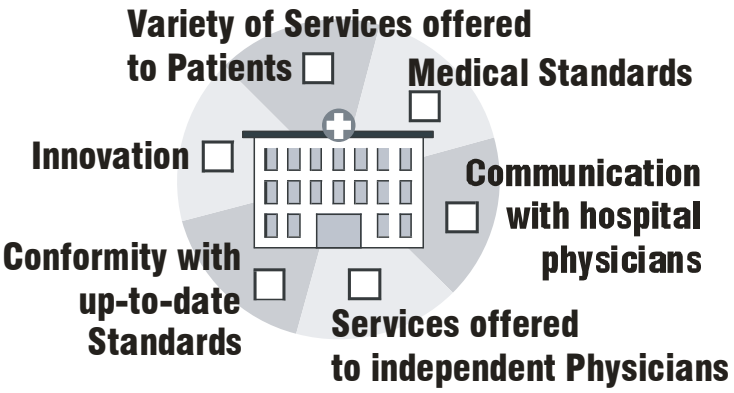


☐ background information from hospital	☐ patient referral and admission	☐ patient's stay in hospital (nursing care, hotel service)	☐ diagnosis	☐ treatment	☐ medication	☐ discharge, transfer	☐ post-acute care

After each session, the researchers analyzed their minutes and the notes provided by the respondent, and in detailed discussion further developed the catalog of variables, both doctor identifiers and potential drivers of satisfaction. A feedback session with hospital management on the results of the first four interviews further ensured relevance of these variables and content validity of the measurement (Hayes 2008, p.54). The list was enlarged and refined during subsequent physician interviews. Over time, a comprehensive interview guideline was developed, and the free-associative discussions evolved into semi-structured interviews.

Accordingly, the topics of discussion advanced from directly observable procedures (fig. 10) to more fundamental categories (Fig. 15). By and by, the greater complexity of the doctor-hospital interface could be sufficiently conceptualized. In the end, four top dimensions remained: general impression, hospital-doctor cooperation, treatment of patients referred to the hospital, and the hospital's information policy. These were broken down into an extensive list of about 20 variables per dimension, based on individual observations and anecdotal evidence from doctors.

Fig. 15: Illustration used to elicit and further detail doctors' satisfaction judgments



The illustration shows some characteristics of a hospital, as seen from the point of view of a referring physician. For each of these categories, please fill in a school grade into the appropriate box.

1 = very good
2 = good
3 = satisfactory
4 = sufficient
5 = deficient
6 = insufficient

Once it was felt that a complete list of variables had been found, an appropriate survey instrument could be developed. This would take into account doctors' better answering capacities as well as try to yield the best information value from each of the relatively few respondents. Apart from the identifier variables, potential satisfaction driver variables were therefore transformed into items the following way:

- While patients were asked to express their satisfaction with particular variables directly, i.e. in unidimensional items, doctors could be presented with multiple dimensions per variable. Apart from satisfaction itself, they were polled for relative item importance, for their knowledge background or power of judgment, for the influences on the formation of that judgment, and for individual components of their satisfaction.
- In order to avoid anticipation bias, items had to be designed as uniformly as possible. For that purpose, statement questions were chosen of which doctors were asked to state their approval or disapproval. Because respondents were familiar with Likert-style scales, a standard five-part, zero-based approval scale was used

for each item. In another effort to curb bias, for each positively formulated statement a negatively formulated control item was included. A total of 80 items were constructed and presented in a randomized order.

The final version of the questionnaire contained 130 items, including 80 statement as described; Fig. 16 shows a cutout from the statement section of the resulting questionnaire. In addition, doctors were given the opportunity to relate their impressions, requirements and recommendations in free text format.

Fig. 16: Cutout from final questionnaire for doctors

Section D: Assessment of Particular Hospital Characteristics

In this section you will find statements about particular aspects of the hospital. By design, the formulations are rather pronounced, so feel free to make use of the whole grading range. Please rate your approval or disapproval of each statement on the following scale:

-2 Strongly disagree	-1 Disagree	0 Neither agree nor disagree	1 Agree	2 Strongly agree

	←disapproval approval→
I have a complete understanding of the quality of the hospital in question.	☐-2 ☐-1 ☐0 ☐1 ☐2 ☐ n/a 35
The quality of a single hospital is not a decisive factor in regional Healthcare.	☐-2 ☐-1 ☐0 ☐1 ☐2 ☐ n/a 42
This hospital is a bad hospital.	☐-2 ☐-1 ☐0 ☐1 ☐2 ☐ n/a 52
I have no idea about what the general population thinks about the hospital.	☐-2 ☐-1 ☐0 ☐1 ☐2 ☐ n/a 59
In professional conversations with colleagues, the hospital comes up often.	☐-2 ☐-1 ☐0 ☐1 ☐2 ☐ n/a 61
I have a very good impression of the hospital.	☐-2 ☐-1 ☐0 ☐1 ☐2 ☐ n/a 73
A functioning hospital is of utmost importance for the region.	☐-2 ☐-1 ☐0 ☐1 ☐2 ☐ n/a 84
Without exception, all hospital departments have up-to-date equipment.	☐-2 ☐-1 ☐0 ☐1 ☐2 ☐ n/a 91
The local press virtually ignores the hospital.	☐-2 ☐-1 ☐0 ☐1 ☐2 ☐ n/a 94

Legend: For the satisfaction dimension "General impression", the battery of items is shown in the order they appeared in the questionnaire. Their respective roles are as follows: directly related to satisfaction (item numbers 52, 73, shown in small print at the right margin), relative importance (42, 84), knowledge background (35, 59), judgment formation (61, 94), components of satisfaction (91, and further items not listed here).

2.4.3 Collection and Treatment of Referring Physician Satisfaction Data

For drawing a sample of doctors for the survey, local public phone books served as a starting point. Because of the overwhelming market share of the formerly monopolist phone company, and due to the public character of doctors' health services, a virtually complete census of independent doctors practicing within the county could be achieved. This was merged with another list provided by the hospital administration containing addresses of all doctor's practices that had referred patients to the hospital within a year. These lists had to be extensively edited, i.e. by verifying or and finding and adding academic titles for proper addressing and salutations. In the end, sample size was 380. The questionnaire was printed on eight A4 pages (double A3 backfolded) and mailed to respondents together with a personalized cover letter and a stamped addressed return envelope.

These efforts were rewarded with a rich return. Only two mailings came back as undeliverable. 61 valid questionnaires were returned on time for the analysis, a high return rate of 16%. Doctors' willingness to cooperate also showed in the extensive written remarks, which added depth and perspective to the quantitative analysis. After coding, item averages were computed, and results discussed and interpreted by the researchers. An extensive report on doctors' satisfaction was compiled, organized into the four dimensions of satisfaction and clearly displaying and distinguishing results (item averages), doctors' remarks, discussion of the data and recommendations for improvement. Despite the smaller sample size, the adapted methodology had yielded rich results and insights, as presentation and discussion with hospital management confirmed. The main differences in approach are summarized in Fig. 17.

Fig. 17: Differences in approach towards the two stakeholder groups sampled

Task	patient sample	doctor sample
satisfaction management awareness stage of the hospital	adaptation (stage II)	acknowledgement (stage I)
focus of approach	quantitative analysis	qualitative analysis
Sample	cluster sample of patients in the hospital over a period of 4 weeks	Census of referring physicians (county-based and/or registered with the hospital)
measurement tool	focus groups, self-administered questionnaire (on-site and mail)	in-depth interviews, mail questionnaire
extraction of satisfaction dimensions / drivers	quantitative factor analysis	grounded research

Findings about patient and doctor satisfaction were then amalgamated into a joint report, and a catalog of integrated management suggestions formulated. The study was concluded with extensive printed documentation of results and discussions, an executive summary and plan for action. Several presentations to hospital management as well as senior medical and nursing staff were held

3. Results and Discussion

3.1 Patient Satisfaction Drivers

Patients, as opposed to non-Healthcare service clients, typically report high levels of satisfaction. Not surprisingly, this pattern repeated itself in the study reported here: The first wave of 209 answers yielded a satisfaction average of 1.86, i.e. "good (2)" tending towards "very good (1)" in German school grade terms. The best performing item was "nursing staff friendliness" with an average rating of 1.38; the worst performer, "leisure activities offered" received a 3.32, i.e. "satisfactory (3)" leaning towards "sufficient (4)". The spread of values among items and respondents was wide enough to ensure applicability of statistical methods to refine the survey instrument.

Subsequent factor analysis of dimensions, or main drivers of satisfaction, then brought confirmation of typical patterns as well as some surprise for the researchers. Common wisdom might have expected that the standards of medical treatment, i.e. the technical core of the industry, and food quality, a popular pet peeve, were at the center of patients' attention (cf. Priporas et al. 2008, p.334). However, only isolated items related to treatment or food had bearings on factors (cf. Fig. 12 on page 24, and these factors ranked low in importance to that (similar

findings: Stanga et al. 2003). Such counterintuitive results should serve as another warning against ad-hoc or off-the-shelf survey designs, which are prone to bias through preconceived notions (Stephen Bruster et al. 1994, p.1542).

Customary findings from other studies, in contrast, appeared largely replicated in the extracted factor structure. The five dimensions selected were labeled and rated as follows (Fig. 18):

Fig. 18: Reported satisfaction means for the five factors polled

No.	Factor Label	Eigenvalue (importance measure)	Satisfaction score	Deviation from mean score (1.86)
1	Outward Appearance of the Facility	29.33	2.22	↓ 0.36
2	Staff	6.05	1.51	0.35 ↑
3	Medical Exam	3.44	1.63	0.23 ↑
4	Leisure	2.71	2.43	↓ 0.57
5	Tranquility	2.12	1.99	↓ 0.13

As reported elsewhere (T. Sørlie et al. 2000, p.39), interpersonal behavior ("Staff") proved important for patient satisfaction, in lieu of purely medical factors: *"Patients use emotional criteria to evaluate technical quality."* (Zifko-Baliga & Krampf 1997, p.29). On the other hand, tangibles, which often play a supporting role to the human factor (Boshoff & Gray 2004, p.33), took an undisputed lead in the present study ("Outward Appearance of the Facility"). This might be due to the fact that this particular hospital was in full swing of post-socialism renovation works (cf. section 1.2 on on page 7), which made disparities in equipment and furnishings being felt more intensively. If this is the case, the relative importance of this factor can be expected to diminish over time.

Answering to one of the initially formulated research questions (cf. section 2.1.1 on on page 8), the survey also yielded insights for individual wards of the hospital. As Draper et al. confirm (Draper et al. 2001, p.466), information at this level is crucial for hospital management, both for resource allocation and benchmarking, and both in-house and in comparison with other hospitals. Fig. 19 below shows differences in performance in overall satisfaction and satisfaction with the two most important factors for a selection of wards. The following conclusions can be drawn:

- Inter-ward differences are pronounced and substantial. Evidence like this serves as a welcome discussion starter for quality circle meetings.
- Patients' judgment patterns vary considerably for different factors. This means that patients can well discern between the dimensions, and that wards display specific patterns of strengths and weaknesses.
- Inter-ward differences for overall satisfaction do not resemble an arithmetic mean of the factor patterns. On the one hand, this might be due to variance in respondents' judgments not explained by the five chosen factors, on the other hand, it points to the fact that patients perform their mental calculation not in a linear or otherwise fully predictable fashion.

Fig. 19: Inter-ward comparison of patient satisfaction

Legend: For the two most important factors, and for overall satisfaction, the graphs show differences in patient satisfaction between seven selected wards: 1) general and trauma surgery – 2) urology – 6) general and abdominal surgery – 7) orthopedic surgery – 8) cardiology – 10) internal medicine – 11) internal medicine and radiotherapy

Anecdotal evidence from responses to open-ended questions presented some illustrations of the circumstances. Patients hospitalized in not-yet renovated wards, for example, complained about the inconveniences of mixed-

sex sanitary facilities. Similar conditions elsewhere have understandably prompted self-esteem issues in patients, who *"are not just medical conditions but are in fact human beings with their own requirements."* (Hadden et al. 1993, p.356) This is a clear example of hard factors on the ground translating into much more severely felt qualitative concerns in the patient's judgment. Another patient related: *"When the nurses finish their lunch break in the staff room, they get up from the table all at once, shuffling their chairs on the floor, which makes an awful noise right at siesta time!"* While apparently not a big issue on the surface, such critical incidents shed ample light on the more serious issues underneath, helping to confirm and refine the findings from structured questioning. Here, it pointed to the dismal sound insulation in the pre-1990 ward building.

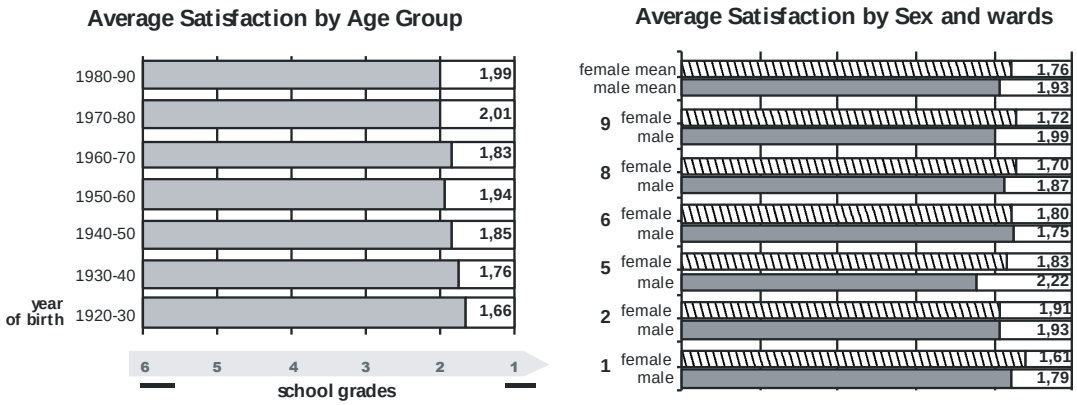
Also confirming predictions (Sibley 2007, p.47), the follow-up mail survey brought a slight blurring of results. Leisure activities, which had fared not so well in on-site questioning, were generally seen a tad more positive, while the excellent scores for overall satisfaction slightly tended to deteriorate. This can be attributed to the differences in encounter-related satisfaction and hospital-related attitude discussed earlier (cf. section 2.2.2on page 11).

3.2 Patient Identifiers

Patient identifiers are variables that serve to describe patients or groups of patients with different levels of satisfaction (cf. section 2.2.9 on on page 18). These variables are needed if hospital managers seek to turn satisfaction information into marketing action, i.e. to address patients or groups of patients according to their levels and patterns of satisfaction. Patient identifiers are generally outside the control of hospital management, and they may have an influence on satisfaction or not. One such example is demographic variables.

To illustrate, findings on the demographic variables age and sex are presented in Fig. 20: Patients of higher age tend to show greater levels of satisfaction, which is in accordance with findings from other studies (Rahmqvist 2001, p.387) but does not show a uniform trend. On average, female patients also showed higher satisfaction than male patients, but this pattern did not replicate for all wards. Findings reported in the literature are also inconsistent in this respect (José M. Quintana et al. 2006, p.7).

Fig. 20: Demographic variables and patient satisfaction

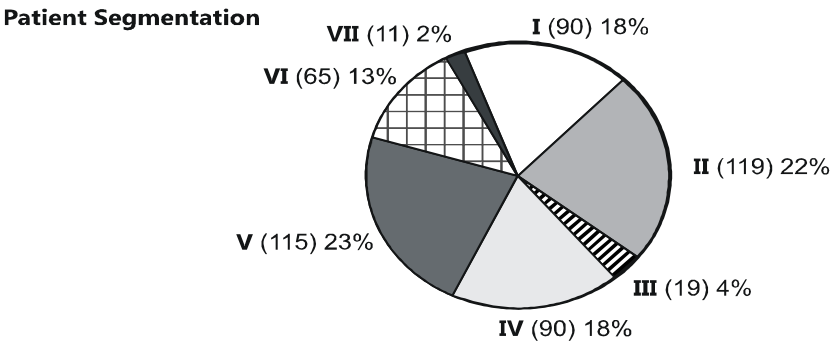


Considering the higher complexity of provider-client interaction in Healthcare services as opposed to mass markets for tangibles, it comes as no surprise that simple patient demographics cannot yield a comprehensive picture of the patient population. In combination with qualitative research however, the informative value can be greatly enhanced:

- During focus group interviews it had emerged that the duration of residence within the county mattered much to patients. Among the elderly in particular, there were those who had traditional family roots within the region, and another group of former displaced persons (DP) who had resettled here in the aftermath of the Second World War. The issue being a sensitive topic, direct questions had to be avoided. Instead, a combined variable computed from age, place of birth and current residence was used.
- As patients' families play an important role in the healing process, they should also be taken into account when describing the patient population. For this purpose, another combined variable was composed from age, household size and marital status to reflect different stages in a family life cycle (single; with children; empty nesters).

Building on the data obtained in the second wave of questionnaires, a segmentation model of the patient population was obtained by means of cluster analysis (cf. Fig. 21):

Fig. 21: Patient segments and their profiles



(I) grateful DP: elderly male (born 1920-1940), DP (displaced person after WW II), family lifecycle phase 2-3 (married or widowed), returning patient, prolonged stay in wards: orthopedics, cardiology, internal med.; very positive attitude

(II) enthusiastic, local, elderly lady: elderly female (born 1920-1950, some younger), never moved from county, family lifecycle phase 3 (divorced or widowed), orthopedics and gynecology, very positive attitude

(III) contented first-timer: elderly male/female (born 1920-1950), moved into county after WWII, family lifecycle phase 2-3 (single household), first stay in hospital ever or after prolonged interval; all wards except vascular surgery, urology, internal and obstetrics; tends to complain about tranquility; positive attitude in general

(IV) young and demanding: younger male/female (born after 1960), local city dweller who moved to the countryside, family lifecycle phase 1 (not yet married), short stay for trauma surgery; tends to complain about leisure activities, overall neutral attitude

(V) badly treated: elderly male/female (born 1920-1940), DP or moved into county otherwise, family lifecycle phase 3, cardiology and internal med.; tends to complain about staff; generally negative attitude

(VI) dissatisfied: elderly (born 1930-1940) or middle aged (born 1950-1960), mostly male, moved into county during post-war or 1970s reconstruction, family lifecycle phase 2, short stay in cardiology or internal wards; tends to complain about cleanliness, leisure activities, tranquility; generally negative attitude

(VII) frustrated youth: quite young (born 1970-1980), mostly male, local, family lifecycle phase 1; longer stay in surgery, internal med. wards; tends to complain about staff and leisure activities

How far apart satisfaction patterns of different clusters are showed in patients' attitudes towards leisure activities: While one patient ("frustrated youth") voiced discontent about only three TV channels being available on his remote, another patient ("enthusiastic, local, elderly lady") reported her delight when she found a bible in her bedside table.

3.3 Referring Physicians' Satisfaction

The composition of the referring physicians' population, the second most important stakeholder group, reflected the same influences as the patients' group, albeit in unforeseen ways. German unification and the subsequent change in Healthcare market structure had divided the independent physician community into two distinct cohorts. Those who had been practicing in socialist times were much more oriented towards personal relationships with colleagues at the hospital, and they showed greater tolerance towards administrative hiccups and irregularities in information exchange. Conversely, those who had received their medical education and had established their practices after reunification displayed greater attention to formal procedures and took critical incidents more seriously.

At the same time, East vs. West German provenience remained a socially sensitive issue, and direct questioning for this variable was not feasible. Instead, a combination of questions was used in the questionnaire:

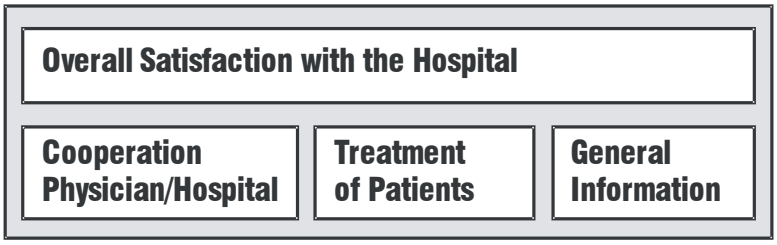
- physician characteristics: year of birth, year of graduation, place (university) of graduation

- practice characteristics: year of establishment, year of construction (building), year of latest substantial investment

These variables were estimated to bear the highest significance for a segmentation of the referring physicians' population, but such analysis was postponed upon the hospital's request. On the other hand, the information gathered about physicians' satisfaction was received with great attention to detail.

Due to the long-term nature of the physician's relationship with the local hospital, the service encounter methodology had to take into account different types of contact (cf. Fig. 22).

Fig. 22: Structure of questionnaire for referring physicians, reflecting satisfaction driver structure



Distinction between satisfaction drivers ran along the long-term (relationship) vs. short-term (episode) dimension, and whether contacts with the hospital occurred directly or mediated by patients:

- "Overall Satisfaction": Aggregate category covering all aspects
- Episode-related (direct): "Cooperation with the Hospital" in individual and direct exchanges like coordination meetings, seminars, continuing education, etc.
- Episode-related (indirect): "Treatment of patients" referred to the hospital, as seen from the physician's point of view, and mostly reported through the patients
- Long-term: "General Information" policy of the hospital, concerning range of services offered, quality indicators, medical developments, state of modernization etc.

Results for these categories were as follows:

Overall Satisfaction: Physicians viewed hospital quality as important (items 73 and 52 in Fig. 16, p. 28), and they reported a high degree of satisfaction in general (84, 42). Medical standards, ethical standards, and post-1990 improvement efforts received highest grades (items not shown). On the negative side, physicians did generally not feel well informed about the hospital (35, 59). Contacts with colleagues at the hospital (61) and the local press (94) were not seen as providing enough information. Also, the hospital's image with the local population, nursing care, and internal coordination between hospital wards were seen lacking (items not shown). To illustrate, Fig. 23 shows average ratings for overall satisfaction items presented earlier (Fig. 16 on on page 28).

Fig. 23: Results for selected items from the doctors' questionnaire (cf. Fig. 16 on on page 28)

Section D: Assessment of Particular Hospital Characteristics – (Results)		
no.		☐-2 ☐-1 ☐0 ☐1 ☐2
35	I have a complete understanding of the quality of the hospital in question.	0,21
42	The quality of a single hospital is not a decisive factor in regional Healthcare.	- 1,38
52	This hospital is a bad hospital.	- 1,55
59	I have no idea about what the general population thinks about the hospital.	- 0,40
61	In professional conversations with colleagues, the hospital comes up often.	0,09
73	I have a very good impression of the hospital.	1,14
84	A functioning hospital is of utmost importance for the region.	1,82
91	Without exception, all hospital departments have up-to-date equipment.	- 0,26
94	The local press virtually ignores the hospital.	- 0,05

- **Cooperation with the hospital:** Physicians attribute high importance to direct cooperation with their local hospital, and they feel sufficiently informed to arrive at a judgment. Apart from isolated incidents, the state of

cooperation is viewed as good. Positive aspects are accessibility and cooperativeness of hospital physicians on a professional level. The direct patient transfer interface, i.e., admission and discharge at the hospital, were generally not seen as problematic, referral letters considered instructive. Problems occurred with medication, information provided to patients' family members, and timing issues with patient discharge. Despite the good state of technical cooperation, physicians felt a spirit of true partnership was missing in their hospital partners, and they saw deficits on the interpersonal level of their relationship.

- **Treatment of patients:** Information concerning and related via patients referred to the hospital were seen as the most important factor shaping physicians' opinions about the hospital. Vice versa, physicians were well aware about the decisive influence they exert on patients' choice of hospital. As particularly critical incidents were reported neither to the negative nor to the positive however, physicians did not actively counsel for or against the local hospital. Less than optimal results were reported for the information patients received from the hospital and for the degree to which their individual preferences were taken into account. Referring physicians feel that hospital doctors are not well informed about workflow procedures in independent practices.
- **General information:** Although referring physicians deem the communication interface with the hospital as highly important and wish to intensify it, hospital activities (e.g. public or community relations) in this field are perceived as virtually non-existent. Likewise, there is no discussion with partners at the hospital, nor with other independent colleagues about the hospital's information policy in general. A more positive evaluation is given of individual events in continuing education organized by the hospital.

Besides the demographical and Likert-scaled satisfaction information, the research process yielded a wealth of anecdotal information and suggestions for improvement, as recounted in Fig. 24:

Fig. 24: Free-format information gathered from referring physicians (examples)

The attending physician in the paediatric ward acts like a supervisor towards his independent colleagues, just because he has a licence!

positive experiences with doctor (name), cardiology, orthopedics

Negative: Emergency procedures in urology, unfriendly treatment of patients

A systematic directory of all hospital services provided should be provided, along with telephone numbers of contact persons

The information gathered confirms, although in much greater detail, accounts of physician satisfaction drivers sporadically reported in the literature: The patient referral episode appears as the focal point (T. J. Brown 1997, p.19) of interaction, with inter-department coordination at the hospital and post-discharge information as important aspects at detail level (Berendsen et al. 2009). Patient satisfaction and referring physicians' satisfaction are supposed to bear mutual influence on each other (Greenhow et al. 1998, pp.911-2; Bertakis et al. 2001, pp.203-4).

4. Implications

4.1 Overview

As the inquiry undertaken was intended as a model research project, rich implications emerged for future endeavors in the same domain. These concern

- the application of satisfaction research methods in a hospital environment,
- conceptualization of the satisfaction construct for hospital stakeholder groups,
- and translation of findings into hospital marketing action,

which will be presented in turn in the remainder of this section, along with related suggestions from the literature and recommendations for future research. In agreement with the literature, the account given here will concentrate on patient satisfaction, to be followed by a brief comparison to other stakeholder groups.

4.2 Towards a Flexible Standard in Methodology

4.2.1 Research Question Formulation

To start with the beginning stage of the project, interaction with the client's steering committee had proved even more important as usually estimated in the literature. An example of the established opinion is Balderston's stance that *"[t]he best possible research job on the wrong problem is a wasted effort"* (Balderston 1971, p.36; for a modern paraphrase cf. Baines & Chansarkar 2002). But the importance of the project definition phase goes beyond that. Before the researcher can have a clear idea of the research question, hospital management must be aware of the underlying management problems. As this awareness often is lacking, it is the researcher's responsibility to provide proper consulting.

From this angle, Semon points out that *"definition of a problem is essentially definition of a solution domain"* (1999, p.H30), and Goldmann advises that *"research should begin with the end in mind"* (Goldmann 2009). This implies that the *"end in mind"* should less be regarded as an objectively given problem situation and more as an actively defined client goal. An out-of-the-box approach to satisfaction research appears even less appropriate in this perspective.

Consequently, the researcher and the user of the research need to develop a common understanding of the problem, in SACHS' words, "a good rapport between the two" (1976, p.118). An obvious starting point is given by COWAN, who recommends to *"write your questions down before you pay for your research"* (1992, p.65). A more systematic technique is provided by **cognitive mapping**, or the attempt to *"represent, in their own language, persons' particular constructions of situations."* (S. Jones 1985, p.87). This interpretive process should be systematically approached as a consulting service in its own right, with the following goals in mind:

- to define a common vocabulary between hospital managers and researchers
- to show the client possible uses and implications of satisfaction-related information,
- and to establish the organization's maturity stage in satisfaction management (cf. 2.1.1 from page 8).

Cognitive mapping could provide a methodology for communication and documentation during this process, but further research needs to be done in this direction.

4.2.2 Patients as Respondents

Patients, above all other stakeholder groups, most closely resemble what can be called a hospital's customers (cf. section 1.1.1 on page 3). Yet when it comes to survey methodology, hospital patients differ in a number of ways from respondents in consumer market research.

Patient Cooperativeness. On the positive side, patient's willingness to cooperate in a survey is much greater than seen in interviewees outside Healthcare, where satisfaction surveys often amount to a nuisance rather than to a welcome change (Reichheld 2006, p.4). Two factors contribute to this positive attitude in patients: First, during hospitalization, inpatients can devote more time and attention to a survey, as can ambulatory patients during waiting times. Also, patients customarily appreciate the researcher's interest in their situation, condition and opinion, probably taking it as a surrogate for empathy they would otherwise expect from the nursing and medical staff. The resulting high level of cooperativeness permits the testing of lengthy questionnaires, and hence the thorough calibration of individual survey tools.

The literature largely suports this finding: Hays' et al. questionnaire presented 153 items, and in their meta-analysis, Bruster et al. (1994, p.1543) report an average completion time of not less than 47 minutes. In particular, questionnaire length has found not to be related to fatigue (Castle et al. 2005, p.2009), or changes in response rate (Sitzia & N. Wood 1998, p.316), or changes in satisfaction driver structure (A. M. Smith 2000, p.178). As in the survey reported here, Jenkinson et al. (2003, p.198) found no difference in response behavior between 4- and 12-page versions of their questionnaire. San Martin et al. however describe respondent fatigue due to lengthy questionnaires (San Martín et al. 2008), so this effect may have its limits, or depend on intervening factors like cultural background.

On the other hand, there are a number of patient characteristics that call for greater caution when developing research tools:

Patient Answering Capabilities: While patients' *willingness* to cooperate may be higher than among other constituencies, their *ability* to do so is impeded by several facts. For one, because health matters affect all levels of society, patients display a maximum variety of educational backgrounds. This restricts the level of questioning abstraction and sophistication that might otherwise be available for research in homogenous consumer market

segments. Also, the very medical condition that has brought a patient into hospital, may impair his ability for reasoning and responding. This may reach up to a level where self-administered questionnaires present not an option at all; Maffei et al. (2003) note related difficulties in surveying psychiatric patients (cp. A. M. Smith & Fischbacher 2002, p.939). Consequently, patient questionnaires impose greater requirements on clarity, conciseness and commonality of language than elsewhere in market research. Such caution needs to be applied in sampling patients, too: San Martín et al. give an example of how 341 patients had to be excluded from a random sample of 1186 due to *"illiteracy, not understanding either language, cognitive impairment, sight, or writing disability"* (2008, p.615). A pragmatic answer to this is to discard random sampling altogether and use a convenience sample instead, enhanced by an additional "booster sample" (G. Cohen et al. 1996, p.841), or quota selection of patients.

Satisfaction Overreporting: When it comes to results, satisfaction levels in patient populations are unfailingly higher than among clients in other service sectors (Hsiao et al. 2009). In a 10-year meta-analysis for a group of hospitals, Spahr et al. found that even the lowest performing 5-percentile of physicians scored more than 90% of "good" and "very good" responses on a 5-part Likert scale (Spahr et al. 2007, p.9). Correspondingly, patients have difficulties in voicing specific dissatisfactions (de Oliveira et al. 2006, p.735). Reasons for this behavior might lie in the immediacy of the caring and healing experience, inpatients' perceived dependency, or an unfulfilled longing for reciprocity in the physician-patient interaction. That at least some of the reasons are related to patient hospitalization is shown in the fact that reported satisfaction levels tend to drop off in the weeks following discharge. The relative unavailability of comparison standards might play a further role: In the present study, a typically positive patient attitude revealed itself more in their assessments of medical treatment than in their judgement of hotel services at the hospital (cf. section 3.1 on page 29).

The overreporting phenomenon calls for caution in the use and interpretation of the otherwise ubiquitous Likert scale, the lower end of which might not reveal any relevant information at all: *"What distinguishes an outstanding provider from the rest is the proportion of 4s (good ratings) and 5s (very good ratings) in patient responses."* (Spahr et al. 2007, p.8) Possible remedies for this effect, i.e., means to achieve a greater discerning capacity of the survey tool, is the use of indirect questions (R. B. Smith et al. 1986, p.323), mixing quantitative and incident-based survey methods, triangulation of information from different sources (nurses, doctors, relatives) and follow-up surveys, and, most importantly, careful calibration of questionnaire items (cf. below, section 4.2.5, p. 38). Even though they are subjective; patients' assessments still are seen as of greater value than purely process-related quality measures (Cleary et al. 1991, p.624).

4.2.3 Staff Involvement

Besides being stakeholder groups in their own right, this study showed that nursing and medical staff should be made an integral part of the patient satisfaction survey in two respects: implementation of the survey tool and interpretation of results.

- **Implementation:** For reasons of privacy and practicality, interviewers cannot have direct access to patients, especially inpatients. Pure self-administration of questionnaires, on the other hand, is difficult to make fit with patients' schedules and staff routines: Most importantly, nurses are needed to judge whether a patient is in a condition for answering. Inhouse advertising or specifically inviting complaining patients and interest groups can complement, but not replace nurses' role in patient sampling (Avis 1997, p.89) Then, nurses are needed to hand out the material and explain, or psychologically frame, the survey. Such framing should stress that the hospital endorses the project, that an independent third party is conducting it, and that results will be anonymized and made available to the hospital only in aggregated form. This is necessary to counter non-response or bias out of patients' privacy concerns, and ensure wide coverage of the patient population.
- **Interpretation:** Because of their unique knowledge of conditions in individual wards, nurses in particular are qualified to lend additional meaning to survey findings or anecdotal evidence. Employees concerned should take part in a debriefing session with researchers and hospital management to shed light on findings or unanswered research questions. To a lesser extent, this applies to medical staff as well, who customarily have a narrower view of the patient experience. From still another angle, such debriefing rounds can prove a valuable personnel management tool in that they support employee motivation and understanding of their tasks. Careful planning is therefore advised.

These aspects are under discussion, at times controversially, by numerous authors on the topic. A practical advice, to start with, is given by Courts (1995, pp.6400-1): *"Physicians, physician assistants, dietitians, physical therapists, occupational therapists and other auxiliary personnel should be given an opportunity to complete the questionnaire."* Tarantino (2004, p.64) suggests staff involvement as early as in the survey design stage and recommends the incorporation of staff performance parameters to insure employee buy-in. Caution is advised,

however, to not let the survey appear as a staff surveillance tool (a danger some see in Managed Care in general, cf. Fairfield et al. 1997, p.1896).

Then, nurses have been reported to judge their own performance less favorably than they are perceived by their patients, probably due to professional self-criticism (Mangold & Babakus 1990, section "implications"). In similar vein, medical staff has been found to have different views on the relative importance of service measures (Quader 2009, pp.124-6). A typical example is given by Gupta, who reports that doctors think it is not important to remember and address patients by their names: *"[They] were of the view that it could not be a constituent as it did not add to the quality of service in any way,"* quite contrary to the patients' own view (Gupta 2008, pp.23-4; cp. S. K. Baker 1998). In other cases, physicians may be better satisfied with the outcome of a treatment than the patient himself, especially when pain is involved (Brokelman et al. 2003, pp.497-8).

This has lead some to advocate bypassing staff altogether in patient satisfaction queries, and using post-discharge mail questionnaires instead (e.g. White 1999, p.41), a stance that is taken also by commercial providers of standardized survey tools (e.g. Press & Ganey 1989, p.68). Such forethought is pointless though, when applied to survey *implementation*. Gobo (2006, p.293) points out that *"interviewer's errors are of secondary importance and far smaller than the researcher's and respondent's errors."* Staff, especially nursing staff, should nonetheless be called upon in questionnaire administration (P. Durieux et al. 2004, p.201). And when it comes to providing additional evidence, personnel contributions should not be solely intended to identically replicate patients' views, but rather to offer context information and help management translate findings into recommendations for action (Walbridge & Delene 1993, p.8; S. K. Baker 1998; Piligrimienė & Bučiūnienė 2008, p.108; Quader 2009, p.127). The reverse route finally, using staff discussions to increase employees' awareness of patient concerns, is altogether seen as underdeveloped, and therefore holding potential for quality improvements (Boyer et al. 2006, p.362).

4.2.4 Balancing Qualitative and Quantitative Survey Tools

For the patient satisfaction survey, standardized questionnaires remain the tool of choice, allowing for quantitative analysis and for generalizations across the patient population (Molina et al. 2009, pp.487-8):

- Due to the inherent variations of the patient experience, pooling a large number of individual responses is necessary for deriving conclusions general enough to act upon.
- Moreover, the organization structure of a hospital requires subsample sizes that allow for meaningful conclusions on a per-ward basis.
- Only with a high degree of standardization the research tool will allow for benchmarking, both between hospitals and on an intertemporal scale.

This assertion nevertheless comes with limitations, as qualitative methods still are indispensable both in the process of questionnaire construction and in the interpretation of results. As Avis states, *"A qualitative approach to obtaining patients' views about health care remains essential to maintain a critical perspective on the quality of care."* (Avis 1997, p.89) A mix of different approaches is seen as essential in finding a balance between depth of insight and generalizability (M. A. Smith et al. 2005, p.194). Concerns that divergence of results might jeopardize translation into management action have been dismissed early on (J. G. Roberts & Tugwell 1987, p.648).

The ubiquitous focus group has emerged as the qualitative tool of choice in patient satisfaction surveys as it has in other areas of market research (Labarere et al. 2001, p.100). Data generated by focus groups are subject to established methods of qualitative analysis loke content analysis and triangulation (e.g. de Paival & Gomes 2007, p.975). Even so, there remains ample room for improvements both within the application of the tool itself as well as in its supplementation by other, including novel approaches. An example of the former is the use of rank-order evaluations of previously defined items by focus group members (R. A. Smith & Houston 1985, p.217). This might even prove to be the silver bullet for incorporating relative importance and patient expectation data into satisfaction research, a dimension otherwise absent in unidimensional, performance-related measures (cf. section 2.2.4, p. 13). Some proposals as how to complement standard focus groups designs are the following:

- **Task-oriented teams.** While the dynamics of focus groups make them suitable for item generation and creative tasks in general, subsequent steps in tool construction require more rigorous work organization. Zifko-Baliga and Krampf (1997, pp.29-30) give account of how the task of item aggregation was assigned to a two-person expert teams after the larger focus group had generated the items.
- The **mystery patient** – a participant observer in analogy to the mystery shopper in mainstream services marketing research – can provide a firsthand, focused account of one patient experience (Cardello 2001). Due to the controlled conditions of this method, validity is higher than in the arbitrary anecdotal evidence

compiled from regular patients. For practical reasons though, this method is restricted to health screenings and other non-critical, foreseeable conditions (e.g., obstetrics). To get around this limitation, Chen et al. (2007) make use of a "semi-mystery shopper", an observer appearing as a patient's visiting friend or relative.

- **Linguistic profiling**, modeled after methods used in forensic inquiry, has been demonstrated to unveil patient motivations, and hence drivers of satisfaction. This technique aims to replace the speculative nature of projective psychological methods with more reliable, evidence-based conclusions (Yeager 2003, p.148).

While the researcher-moderated patient focus group remains essential in the development of survey tools, more research is needed how and under what circumstances this method should be balanced with other qualitative approaches.

4.2.5 Questionnaire Construction

In constructing the survey tool, questionnaire organization and scaling had proven to be issues of particular importance.

Size: As to the length of the questionnaire, the 42 items of the refined version (cf. section 2.3.3, p. 22) fell in neatly with the 45 item average found by Castle et al. (2005, p.2000) in their meta-analysis of 54 patient satisfaction questionnaires. Also, the length of the preliminary tool coincided with the maximum of 121 items they reported. These limits, therefore, can serve as upper / lower limits for future studies as well.

Cover Letter: In accordance with the general literature (e.g. Hayes 2008, pp.66-8), starting the questionnaire with a detailed cover letter revealed itself crucial. For the nurses, it minimized their workload in distruibuting and explaining the tool, and for patients, it helped increase response rate and depth of information revealed. Likewise, showing both the logos of the hospital and the third party conducting the survey communicated just the right mix of authority and neutrality, as did the presence of sealed ballot boxes in every ward.

Demographics Section: While some authors advocate placing patient identifier (demographic) questions at the end of the questionnaire (e.g. Johnson & Gustafsson 2000, p.72), it would be wrong to do so just because they are deemed less complex and should be asked at a time the respondent already is suffering from fatigue. To the contrary, patient identifiers should rely on indirect questioning and the combination of different items into complex variables (e.g. household situation, cf. section 3.2, p. 31). Providing the pertaining information may require just as much mental effort and can moreover serve to frame respondents for producing more valid satisfaction scores. It is the second questionnaire section therefore that should deal with patient identifiers.

Item Choice and Wording: When selecting and formulating satisfaction-related items, practitioners recommend "brevity, clarity and consistency" (White 1999, p.41), which cannot be emphasized enough in the context of patient surveys. Items need to be specifically related to the actual patient experience (Hayes 2008, p.58). Pettersen et al. similarly recount: *"We then selected items that satisfied the following criteria: (i) items relevant to at least 25% of patients admitted to general surgical or medical departments; (ii) items focusing on specific aspects of hospital care rather than satisfaction with care; (iii) items focusing on medical and nursing aspects of hospital services."* (2004, p.454) Further measures to ensure this would be cognitive pretesting of the issues and the wording involved (Levine et al. 2005, pp.2039-41). Also for these matters, a two-stage survey like in the present example remains highly recommended. This allows for patient and other stakeholder group participation (staff, family) both in generating items as in pretesting for reliability (Gavin & M. J. Turner 1997).

Scaling Issues: In scaling satisfaction items, a single-column performance measure (cf. the overview given by Parasuraman et al. 1994, p.221) had revealed itself most appropriate. In other words, an explicit performance comparison (expected-experienced) or item importance ranking is not necessary for gaining actionable insights into patients' satisfaction structure (Schmalensee 2003, p.48), or may even put excessive stress on respondents (Chrzan & Golovashkina 2006). On the other hand, researchers stress the ability of patients to provide item importance rankings (Längle et al. 2003), and the value of such information in understanding satisfaction (Wasfi et al. 2008). An appropriate setting to elicit such information would therefore be a second round of focus group sessions inbetween the administration of the first and refined versions of the questionnaire.

Likert-style scales are the format of choice for most researchers in rating individual satisfaction items, especially with printed questionnaires (Press & Ganey 1989, p.68). Beyond this consensus however, Allen and Rao (2000, p.20) report a variety of different styles being used when it comes to division, anchoring and labeling. As to the number of points on the scale, up to ten points have been recommended (Wittink & Bayer 1994, p.20), but the more common five-point version (White 1999, p.41) is deemed sufficient to produce reliable results (Hayes 2008, pp.63-66). However, issues of how fine the scale division should be, or if choices should be forced (even vs. odd number of points), stand back behind the question of a scale's meaningfulness to respondents.

While market researchers might have shown a preference for centered, numerical scales (e.g., -2/-1/0/+1/+2) for reasons of better arithmetical tractability, these have turned out to require too much abstraction from some patients. When using endpoint anchors however (e.g., poor/-/-/-/excellent), problems of midpoint interpretation have been recorded (A. M. Smith 1995, pp.269-70). Also, patients' tendency to overreport, or the "ceiling effect", can reduce the validity of endpoint-only anchored scales, and proposed variations in label wording (Schmalensee 1994, p.26; Moret et al. 2007) might not be sufficient to remedy this. The fully anchored Likert scale therefore remains the tool of choice for patient satisfaction surveys.

In addition, researchers ought not to feel overly bound by industry conventions when designing their scales. Schmalensee notes that *"the selection of labels and number of points on the scale should be driven largely by company objectives and market situations."* (1994, p. 24). Likewise, a full and uniform understanding of label meanings throughout the diverse patient population, and the ready applicability of labels to the items measured, should be of paramount concern in hospital satisfaction surveys. These considerations in mind, the following lessons can be drawn:

- A fully worded school grade scale, familiar to the majority of patients and not exceeding seven points, is the scale of choice, if available. In some countries (e.g., Poland), number labels are sufficiently meaningful to the population to take the place of word labels.
- If such cannot be obtained – e.g., a numerical 20-point scale is used in public schools in France –, a fully anchored, symmetrical five-point scale should be chosen in order to minimize respondent stress (plain wording, no forced choice, no distortion to counter bias).

Question Batteries: Beyond this, it proved to be a good idea to complement Likert-scaled ordinal-level questions with others, scaled at nominal level (Stephen Bruster et al. 1994, p.1545):

- Yes/no questions can provide examples for an appropriate framing of Likert-scaled questions, and in repeat surveys they allow for effectiveness testing of particular measures. Allen and Rao (2000, p.21) find them methodologically equal to questions on higher scaling levels.
- Open-ended questions operate like catch-all, or safety valve, for respondents' desire to express anything that does not fit into the constrained framework of close-ended questions. White quotes an industry expert: *"'On your scaled questions, you're going to find out you're, say, a 4.2 out of 5. The verbatim responses will help you understand what is behind that score,' says Myers. 'It's pretty powerful to see exactly what some of your patients are saying about you.'"* (White 1999, p.41)

Several items with differently scaled question formats can be grouped together in a battery, with one such battery for each of the satisfaction drivers identified during the exploratory phase. The questions of one battery should be presented coherently; any bias due to halo effects can be neglected over concerns for respondent confusion if the sequence of questions would be split or randomized. Within a battery, questions should progress from closed to open formats, both to allow respondents to gradually refine their answers, and to avoid the impression of repetitive questioning if they were presented in reverse or random order. With closed-ended questions, a breakout option ("not applicable", or "no answer") should be provided also to reduce respondent stress and to invite explications in subsequent questions. – Delbanco (1996) advocates further research on how to best mix factual, satisfaction-related and open-ended questions, in order to permit the researcher to neutralize the effects of different medical conditions.

Follow-up Survey Design: Included in this study for reasons of validity testing, the follow-up survey administered by mail six weeks after the inhouse collection of data did largely confirm the results obtained otherwise. Altogether, it seems unnecessary to include such a measure, and it should hence be dropped from future research designs. To the contrary, researchers warn against time-shift effects in follow-up surveys (Powers & Bendall-Lyon 2001, p.34), and against validity issues in surveys repeated with the same patients over an extended period of time. Between polls, patients' focus will shift from the treatment received to their own health status, hence to issues outside the control of hospital management (M. A. Smith et al. 2005, pp.193-4). Instead of the original satisfaction drivers, factors like *"symptom resolution, need for repeat visits, functional status"* will become more prominent (J. L. Jackson et al. 2001), due to reasons that might be difficult to track (Radosevich 2005, p.42; Castle et al. 2005, p.2009). Within the context of customer relationship management however, follow-up questionnaires can effectively serve as a tool to manage customer satisfaction and should therefore be taken seriously (Bendall & Powers 1995, p.51).

Return Rates: With such mailed questionnaires, return rates can be a meaningful metric. Actual return rates are reported *"of the order of 39%."* (Singh 1990, p.18), or to vary between 15-30 and 60 percent, depending on address data quality (Tasso et al. 2002, p. 5). According to Press and Ganey (1989), *"at return rates of 25 to 40%, questionnaire respondents can be very representative of the hospital patient population as a whole."* Such

desire to produce metrics like those used in classical consumer market research notwithstanding, there is no single acceptable response rate in patient satisfaction research, as the process of questionnaire distribution is subject to too many influences (Sitzia & N. Wood 1998, p.316). Instead, a minimum of 200 completed responses is recommended (White 1999, p.43). A pragmatic approach would then make available this many copies per ward, and leave their distribution to the nurses, keeping the operation up until all questionnaires are used. Return rates as a metric are not applicable in this scenario.

4.3 A Deepened Understanding of Satisfaction

4.3.1 Towards Patient Satisfaction as a Negotiated Concept

The need to make design choices and adapt existing research tools to the local situation, a running theme over the whole duration of the project, suggested a whole new view on the idea of satisfaction altogether. Instead of having one clear-cut, authoritative and single definition, satisfaction appeared more like a moving target, a concept that emerged from a discourse between the project stakeholders, their set of potential objectives, and the data available. Therefore, the definition that was eventually settled upon constitutes an example of patient satisfaction as a *negotiated concept*, an idea that will be briefly outlined in the following section, and that merits closer scrutiny in future projects.

Multiple satisfactions. Discussion about an appropriate definition of satisfaction in general has been intense (as reported in section 2.2). In contrast, only sparse progress has been made towards a *standardized procedure* that would be able to lend substance to this general concept in any given case of application. Standardized survey tools available on a national level seem to be of little attractiveness to researchers in individual cases of application: Sitzia, in a comparison of 195 papers from 1994, found *"that 80% of studies produced a new satisfaction assessment instrument, and that a further 10% modified an existing instrument"* (Sitzia 1999, p.325). Similarly, Crow et al. found that *"the authors of 13 of [eighteen studies on in-hospital care] sought to identify the most important dimensions of hospital care contributing to satisfaction"* (2002, p.52). According to Singh (1989, p.177), differences between such individual conceptualizations suggest *"that patient satisfaction can be accurately understood as a collection of multiple satisfactions with various objects that comprise the health care system."*

Adherence to a unitary concept. On the other hand, there still are reasons that prevent researchers from opening up to a more malleable concept of satisfaction:

- Certainly, there has been a desire to replicate the dimensions of the widely accepted SERVQUAL model within the healthcare sector (cf. section 2.2.3). In our view such a desire is an indicator of an intermediate stage of maturity in hospital stakeholder satisfaction management, where management has acknowledged the usefulness of such information, but wants to rely on existing examples in their measurement approach. While this motivation may provide a welcome project ignition in many organizations, it also constitutes an obstacle to sound theory development however.
- A more fundamental goal that might stand in the way of proper conceptualization has been epitomized by Churchill's *"Paradigm for Developing Better Measures of Marketing Constructs"*. He contends that *"one can conceive at any given point in time that every customer has a 'true' level of satisfaction"* (Churchill Jr. 1979, p.65). At least with patient satisfaction, his clarion call for reliability seems to have come to grief though, as a consensus about the "true" dimensions of this construct seems more elusive than ever.

Negotiated Conceptualization as a possible solution. Instead, the notion of multiple satisfactions, and the lessons learned during the project reported here, call for a different approach. On the on hand, it should be acknowledged that conditions and the meaning of satisfaction are different for every hospital, and these individual conditions should be given adequate consideration both in benchmarking tools as in local surveys. On the other hand, much more regard should be given to the *process* of conceptualizing satisfaction. This echoes the call for "grounded theory" development by Glaser and Strauss (1967), who suggested a more flexible stance – *"generating theory goes hand in hand with verifying it,"* as they put it (ibid., p. 2). In the present context, it may also open the road to a more inductive approach to integrating, for example, different stakeholders' views on the quality of healthcare (Sheppard 2002, p.6). In total, there are three areas where reconciling different views on patient satisfaction may help avoiding the "cookie-cutter" solutions satisfaction research has degenerated into in some industries (Reichheld 2006, p.4):

- **Triangulation of Stakeholder Perspectives:** Starting from practical considerations, it emerged during the survey (cf. section 4.2.3) that nursing and medical personnel should be given a role in the research process also in order to triangulate, or give additional meaning to findings on patient satisfaction. Other groups that might

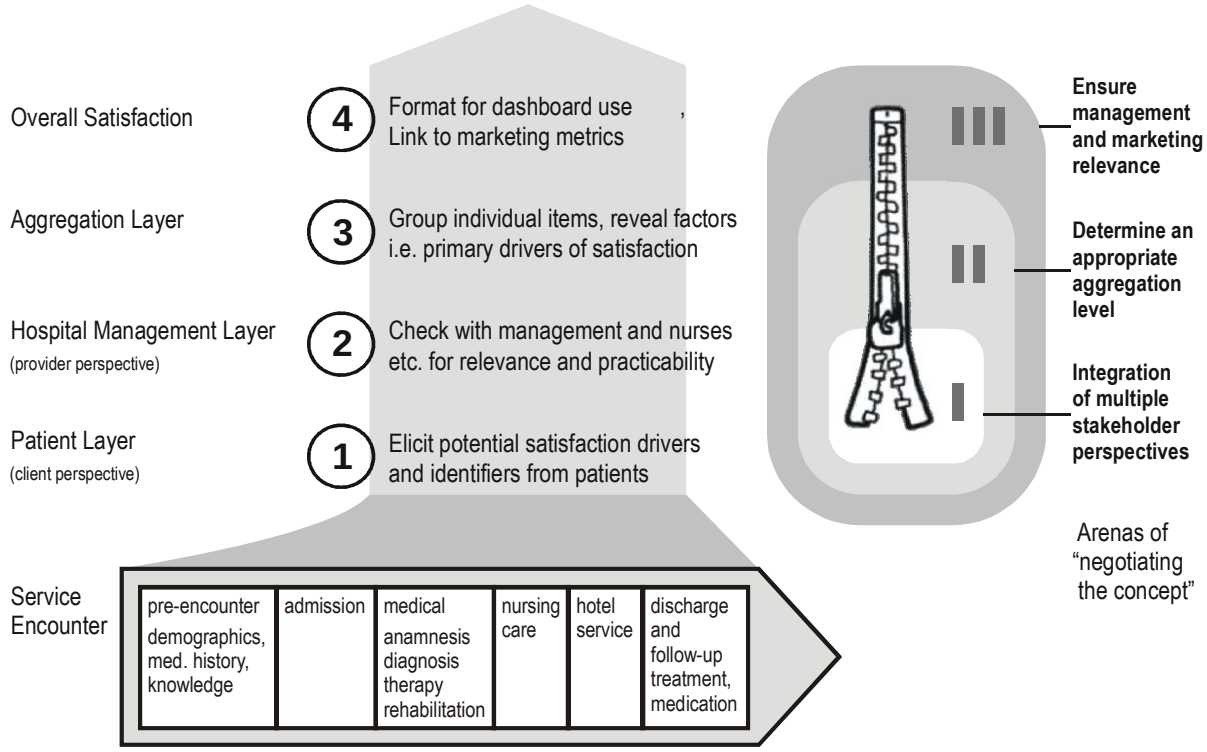
be included in a review of results comprise patients' relatives, advocacy groups, the local press, policymakers and the general public. This is further supported by the fact that interaction with other stakeholder groups, in particular with nursing staff, has an effect on patients as a satisfaction driver in its own right. Then, working in the opposite direction, patient satisfaction serves as a motivating factor and performance measure for these internal stakeholder groups.

- **Aggregation Level:** As pointed out earlier (cf. section 2.2.1), satisfaction surveys may fill requests on the macro, i.e. public policy level (benchmarking), or on the micro, i.e. individual hospital organization level (quality management). Because these two perspectives call for different levels of aggregation, a compromise must be found between an abstract and universal definition of satisfaction on the one hand and retaining details of individual service encounters on the other (Babakus & Mangold 1992, p.779; Taylor & T. L. Baker 1994, p.173; T. L. Baker & Taylor 1997; Castle et al. 2005, p.2008).
- **Consequences of Patient Satisfaction.** By the end of the project, another area had emerged where different views call for reconciliation: the extent to which possible consequences of patient satisfaction would be included in the survey, and fed back into the management process. At one extreme, satisfaction would be seen only as one component of health, to be optimized within the medical care process. At the other end, patient satisfaction, loyalty and profitability would be seen as determinants of the hospital's commercial success, and optimized within a dedicated process of Customer Relation Management. This corresponds with our "Maturity stage model of hospital stakeholder satisfaction management" (cf. Fig. 3 on page 9), where a hospital's management would gradually progress up to the point of formally establishing a satisfaction management system. Behind this lies the fundamental question, should the patient be treated as a customer at all, a dispute running deep in the medical profession (cf. Sullydog 2009).

Considering these lessons learned, we propose an enhancement to our original "Service Encounter Modeling Process" (cf. Fig. 6 on page 9), as illustrated in Fig. 25 (overleaf). Still (layer ①), the full length of a possible service encounter serves as a basis for eliciting potential satisfaction drivers that might be meaningful to patients (cp. Bendall & Powers 1995, p.52). Also, the integration of multiple stakeholder perspectives during the qualitative phase of the project provides the link between layers ① and ②. In the revised model though, it is only the first of three "arenas" where different views on satisfaction are reconciled. How this is done has been extensively discussed in sections 2.1.2 ("Scope of Stakeholder Group Inclusion", cf. p. 9) and 4.2.3 ("Staff Involvement", cf. p. 36). Here, the researcher acts as a moderator between different stakeholder interests and views.

What is new however, is the notion that such reconciliation of views must extend way beyond these basic layers. Few projects will have, for instance, an a-priori defined objective on the continuum between micro and macro management, i.e. between local quality management and universal benchmarking. It is the researcher's duty to negotiate possible conflicts between these objectives on layer ③, where the data gathered will be processed and aggregated. Another arena for negotiation is entered on layer ④, when it comes to formatting survey results for use within corporate dashboard systems, i.e. feeding them back into the management cycle. Here, the researcher will have to adopt the role of a business consultant and open up possible routes for enhancing the hospital's marketing approach.

Fig. 25: The Service Encounter Modeling Process Revisited



Because the inclusion of multiple stakeholder groups in the conceptualization process has been examined already (see above), the following sections will discuss how a case-based consensus, or a "negotiated concept" of satisfaction, can be reached for the second and third arenas of such negotiation.

4.3.2 Determining the Aggregation Level

As working with the data gathered lies within the researchers own responsibility, reconciling micro and macro requirements of the project is mainly a question of how to apply the available methods for data analysis. An overview of similar research projects and contributions from the literature will show the options from which the researcher may choose, starting with those models with the highest degree of aggregation (cf. Fig. 26, overleaf).

SERVQUAL, the model of reference itself, is an example of how an original pool of ten satisfaction drivers has been reduced to half that number in order to attain further abstraction and wider applicability (cf. Fig. 26, nos. i and ii). Both versions are dominated by nominalized adjectives, i.e. highly abstract terms, as they are meant to capture client satisfaction regardless of industry sector.

With regard to the American healthcare industry, the Institute of Medicine (IOM) takes off from the public policy goal of improving health care delivery and endeavours to *"translate this general statement into a more specific agenda for improvement – a list of performance characteristics."* Still, their list (no. iii) contains rather general attributes intended to guide political rather than management action (Institute of Medicine 2003, pp.39-40).

As we venture further into hospital healthcare proper, the proposed batteries of satisfaction drivers get more differentiated and closer to the level of application. The Boston-based Picker Institute, seeing *"Through the Patient's Eyes"* (Gerteis et al. 1993, title), identifies seven dimensions of hospital care (no. iv) that are credited as a *"paradigm for synthesizing the information provided by patients in order to categorize the aspect of care they found especially critic"* (Tabolli et al. 2003, p.180). The dual goal of general accountability (macro) and quality improvement (micro) is helped by allowing for a differentiated level of detail in breaking these dimensions down into individual survey items (Rogers & D. P. Smith 1999, p.255).

Also in the United States, HCAHPS[1] (Hospital Consumer Assessment of Healthcare Providers and Systems) survey "is the first national, standardized, publicly reported survey of patients' perspectives of hospital care."

[1] pronounced "H-Caps"

(CAHPS Hospital Survey 2009, p.1) As its goal lies in *"valid comparisons to be made across hospitals locally, regionally and nationally"* and *"to assure that the survey is credible, useful, and practical,"* (ibid.), their collection of satisfaction drivers is much closer to the application level (no. v). The labels represent activities rather than attributes, and it is even possible to discern the outlines of a basic service encounter between "nurse communication" and "discharge information". – The results for the study reported here (no. vi) show an approach and level of detail similar to the HCAHPS framework.

It is all the more surprising, given the groundwork laid by these and other studies, that most individual research projects still take refuge to abstract attributes for describing the drivers of satisfaction. The labels recounted in the meta-comparison of Piligrimienė and Buciuniene, for instance (no. vii), spanning nine studies from the years 1985-2000, are such abstract attributes without exception.

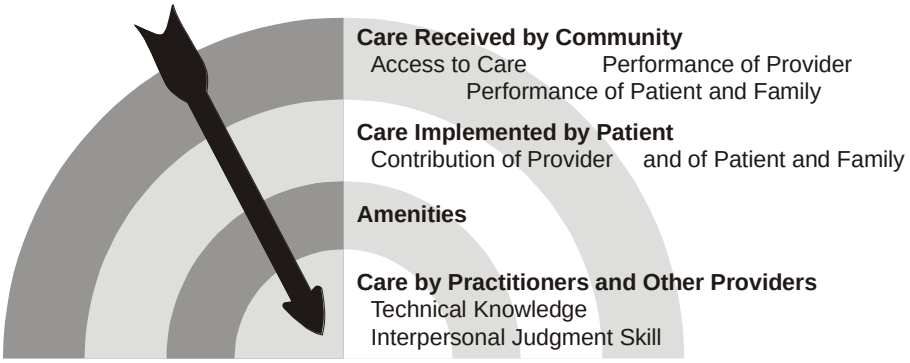
Fig. 26: Factor frameworks (drivers of satisfaction) from selected studies at the macro level

(i) SERVQUAL (Parasuraman et al. 1985, p.48)	Access	Communication	Competence	Courtesy	Credibility		
	Reliability	Responsive-ness	Security	Tangibles	Understanding / Knowing the Customer		
(ii) SERVQUAL (Parasuraman et al. 1988, p.23)	Tangibles	Reliability	Responsiveness	Assurance	Empathy		
(iii) Institute of Medicine (Institute of Medicine 2003, pp.39-40)	safe	effective	patient-centered	timely	efficient	equitable	
(iv) Picker Institute (Gerteis et al. 1993)	Respect for Patients' Values, Prefer-ences, and Expressed Needs	Coordina-tion and Integration of Care	Information, Communi-cation, and Education	Physical Comfort (emotional support and Alleviation of Fear and Anxiety)	Emotional Support and Alleviation of Fear and Anxiety	Involve-ment of Family and Friends	Transition and Continuity
(v) HCAHPS (Goldstein et al. 2005)	nurse communi-cation	nursing services	doctor communi-cation	physical environ-ment	pain control	communi-cation about medicines	discharge information
(vi) this project	Outward Appearance of the Facility	Staff	Medical Exam	Leisure	Tranquility		
(vii) nine studies, 1985-2000 (Piligrimienė & Buciuniene 2005, p.132)	Security, Communication, Competence, Courtesy, Credibility, Assurance, Reliability, Responsiveness, Understanding Customer, Accessibility/Access, Empathy, Tangibles, Core Service, Knowledge, Customization, Professionalism/Skill, Continuity, Affordability, Caring, Patient Outcomes, Collaboration						

This comparison, as well as the lessons learned from the project reported here, suggests that the challenge in conceptualizing patient satisfaction lies not so much in providing a sufficiently diversified set of descriptive labels (horizontal extension of the concept) but rather determining the appropriate level of aggregation (vertical extension of the concept). Speaking of different levels of conceptualization, the objective of breaking down satis-

faction drivers into more detailed criteria at the health care delivery level is nicely illustrated by Donabedian's levels of quality assessment (Donabedian 1988, p.1146), or "bull's eye" paradigm, as Gasquet et al. term it (cf. Fig. 27).

Fig. 27: "Bull's Eye" paradigm of quality assessment levels (adapted from Donabedian 1988)



In the terms of Grönroos' model of service quality perception (Grönroos 1994a, pp.11-12), this would lead to a rediscovery of technical as opposed to functional qualities, and hence to a refocusing on the manageable aspects of service delivery. Woodall concurs that SERVQUAL so far *"has encouraged a highly constrained reading of 'service' - one that implicitly denies the importance of attributes that might be best associated with consistency and longevity"*, and that technical aspects, i.e. those at the "bull's eye", should be given greater emphasis (Woodall 2001, p.596). In the terms of the structure–process–outcome framework supported by Donabedian (cf. section 2.2.6), this would mean going back and behind measuring satisfaction as a resulting perception, and as much possible bringing to light the factors within the control of management (input and implementation).

How this can lead to conceptualizations of patient satisfaction with different levels of detail or aggregation is conveniently illustrated by a comparison of benchmarking frameworks from nations that have taken different approaches to inter-hospital comparisons at a local or regional level (Shaw 2003, p.8). *"Patient-centeredness"* for instance, a performance characteristic in the American IOM framework (cf. above, Fig. 26, no. iii), may translate into a factor *"treating patients as individuals"* for French-speaking patients, while it is conceptualized as *"involving patients in decision making"* for German speakers (Dullenkopf & Rothen 2009, p.47).

The following table (Fig. 28, overleaf) shows a selection of national factor frameworks with varying levels of detail. At the top (no. i), there is the comprehensive, 11-factor framework of the British National Health Service NHS, which simply enumerates the sections of the "patient's charter" (Stephen Bruster et al. 1994, pp.1542-3) a binding covenant for all British hospitals (Stocking 1991). By contrast, a simple transfer of frameworks developed in the United States has found to be unfeasible for the conditions of the British NHS (Crow et al. 2002, p.73). — From here (nos. ii-vi), the examples shown narrow down their collections of satisfaction drivers, either using episodes within the service encounter (e.g., no. iv), or particular attributes of the patient experience (e.g., no. v). At the end of the list there is one example from three French hospitals that makes use of only four elements, which correspond to highly specific aspects of the service encounter (no. vi).

Fig. 28: Factor frameworks (satisfaction drivers) from selected non-American national benchmarking studies

(i) 36 British hospitals (Stephen Bruster et al. 1994, p.1543)	preadmission	admission	communication with staff	physical care	tests and operations	
	help from staff	pain management	discharge planning	patients' views on hospital treatment	sociodemographic factors	other items on the Patient's Charter
(ii) 14 hospitals in Norway (Pettersen et al. 2004, p.457)	Information future complaints	Nursing services	Communication	Information examinations	Contact with next-of-kin	
	Doctor services	Hospital and equipment	Information medication	Organization	General Satisfaction	
(iii) 13 hospitals in Ireland (Sweeney et al. 2003, p.164)	overall impression	admission procedure	information given	care and assistance		
	tests and operations	pain management	physical environment	discharge procedure		
(iv) 97 hospitals in Victoria, Australia (Draper et al. 2001, p.467)	Access and Admission	General Patient Information	Treatment and Related Information	Complaints Management	Physical Environment	Discharge and Follow-up
(v) 4 Basque hospitals (González et al. 2005, p.467)	information and medical care	nursing care	comfort	visiting	privacy	cleanliness
(vi) 3 French hospitals (Isabelle Gasquet et al. 2004, pp.8-10)	Consultation with the Doctor	Appointment Making	Reception and Facilities	Waiting Time		

Below the national level, further examples show how factor frameworks may be adapted by industry sector (cf. Fig. 29, overleaf). A model claiming validity for the entire public sector (including Healthcare) would enumerate as many as ten rather general labels (no. i), while satisfaction drivers for a dentist's practice include the highly specific – and important – issue of pain management (no. ii, cp. Hayes 2008, p.171). Further examples illustrate specialized factor lists for subdivisions of a hospital, in particular the emergency department (no. iii) and food service (no. iv).

Fig. 29: Factor frameworks (satisfaction drivers) for different Healthcare-related industry sectors

ARCHSECRET for public sector (Vaughan & Shiu 2001, pp.141-2)	A Access	R Responsive-ness	C Communica-tion	H Humaneness	S Security
	E Enabling/ Empowerment	C Competence	R Reliability	E Equity	T Tangibles
Dentist's Practice (Davies & Ware 1982, p.v.)	Access	Access Continuity	Availability / Convenience	Pain Manage-ment	Quality
	Access Total (aggregated)		Cost	General Satisfac-tion	Overall Satisfac-tion (aggregat-ed)
Emergency Department (Chaska 2006, p.45)	Patients' satisfac-tion with pain control	Wait time	Physician satis-faction	Overall satisfac-tion	Patients' recommenda-tions
Hospital Foodservice in Australia (Capra et al. 2005, p.8)	Food quality	Meal service quality	Staff/service issues	Physical environment	

While the above examples illustrate the range of possibilities, the responsibility of determining an appropriate aggregation level lies with the researcher in an individual project. Among the influences on this decision are the purpose of the study (national benchmarking vs. local quality management), the quality of the data gathered and the diversity of patients' sensitivities to satisfaction drivers. The researcher's decision will determine how factor analysis is employed, how many factors will be included in the framework, how specific their labels will be worded, and how closely it will match existing frameworks for better comparison. One interesting aspect for further research is to which degree global and local frameworks can be allowed to coexist within a questionnaire. Rules for employing the Picker instrument, for instance, are quite restrictive about using other research tools in concurrence with the standardized one. Whether both macro and micro objectives can be fulfilled within one project remains to be explored.

4.3.3 Consequences of Patient Satisfaction

The final arena of negotiating the concept of patient satisfaction is concerned with the question of how far the commercial consequences of it should be included. The range of possible attitudes towards this issue can be illustrated as follows:

- One practitioner states in his blog: *"Let me just say it as bluntly as I can—patients are not customers,"* and then produces a list of ten arguments to make his point, culminating in the assertion that the patient-physician relationship is sacred where that between *"the customer and the merchant"* is profane (Sullydog 2009).
- The contrast could not be sharper to the view expressed by a former Walt Disney executive (F. Lee 2003; F. Lee 2004), who contends that there is no fundamentally difference between managing a hospital and running a theme park, a view echoed by some in the medical profession (Mertz 1999).

Where on this continuum a particular hospital's management takes its stance will determine how far the consequences of patient satisfaction will be included in the concept, with an eye on commercial yields. In the words of the former Disney employee, the positive results of many hospital surveys are nothing but *"fool's gold. It looks valuable, but you can't take it to the bank,"* as long as patient's satisfaction is not correlated with loyalty and increased profitability of the relationship. If a survey is to make a positive difference in the hospital's marketing, it needs to go beyond momentary and subjective satisfaction measures. How far this is possible is likely a subject of negotiation during the project definition phase, and will reflect in the way satisfaction is then conceptualized.

Perhaps the spread between the two opposing points of view also explains how vastly different opinions there are about the commercial value of satisfaction research. On the one hand, Woodside et al. testify: *"Beyond a shadow of a doubt, however, hard-nosed, quantitative, systematic measures of customer perceptions of service quality and satisfaction are the single best indicators of the organization's future health or lack thereof."* (1989, p.16) On the other hand, Reichheld objects: *"Survey scores don't link to a company's performance. If they did, Wall Street would be the biggest consumer of survey data."* (2006, p.3) Our contention is that incorporating the consequences of satisfaction would greatly increase the relevance of satisfaction surveys, and therefore make them an ever more valuable tool in the hands of hospital managers.

One way to win over the staunch defenders of a pure medical view of patient satisfaction would be the inclusion of clinical performance parameters like patient compliance, which are also linked to commercial performance. Tabolli et al. (2003, p.181) find that patient dissatisfaction *"is related to patient non compliance with medical treatment, discontinuation of care and frequent changing of health care providers,"* hence both linked to clinical effectiveness and customer loyalty. The positive effect on customer loyalty is further reflected in Lowes' claim that *"compliance"* as a consequence of patient satisfaction should be renamed *"adherence ... a term that gets away from the image of doctors as white-coated police officers."* (Lowes 1998) Spahr and Hutchison (2003, p.54) add that satisfaction is positively linked not only to improved health outcomes, reduced malpractice, improved physician satisfaction, but also to – increased profitability.

While the notion that customer defections are to service industries what product defects mean to manufacturers dates back to the beginning of the recent surge in service marketing (Reichheld & Sasser 1990, p.105), the importance of satisfaction for loyalty and retention has been confirmed early on (Woodside et al. 1989, p.12; Hays et al. 1995, p.10). Wicks and Roethlein (2009, p.83) argue that satisfaction, loyalty, retention and quality should be seen in conjunction, while Cronin Jr. et al. (2000, pp.210-11) take position for extending the concept of satisfaction to aspects of quality, perceived value and patients' behavioral intentions. Such behavioral intentions, for instance, may also include recommendation behavior (Zeithaml et al. 1996, p.33). More research is needed however, to determine how satisfaction and positive word-of-mouth are related, as findings so far are inconclusive (conflicting results, for example, are reported in S. Cheng et al. 2002, p.159; S. Cheng et al. 2003, p.352).

As for the practical implementation of a notion of satisfaction extended by commercial consequences, proposals are parsimonious at best. Chang et al. propose a weighting of satisfaction drivers by Kano categories, i.e. a grouping into basic, excitement and performance factors (a resemblance of Herzberg's motivation and hygiene factors, Chang et al. 2006, pp.762-7), while Çaha (2007, pp.58-60) uses a system of differential equations to estimate model parameters for health care price and quality as they relate to patients' repurchase intentions. A more pragmatic approach would be to include loyalty and recommendation-related items along with the patient identifiers already proposed in the construction of the patient questionnaire, and see by the way of factor analysis how they relate to relate to the dimensions of satisfaction. Any concerns about patient data privacy – e.g. when satisfaction questionnaires and patients' medical records are used in conjunction – can be alleviated by pooling data on a per-ward basis only, and using anecdotal evidence for checking validity.

4.4 Applications in Hospital Marketing

4.4.1 A Satisfaction Monitor System

A third area where implications from the project can be drawn is the extension of satisfaction research into a system of marketing policies and measures for the hospital. As one healthcare consultant puts it, executives need to *"go beyond surveys"* and *"share feedback in ways that teach and inspire"* (Scott 2001, pp.222-3). We will briefly comment on four areas where hospitals can build on the stakeholder satisfaction information they have to improve their market position and performance: satisfaction monitors, patient segmentation, and marketing communication.

Typically, an isolated satisfaction survey – like the one reported here – produces a snapshot of satisfaction within the patient population at a given time, together with a wealth of anecdotal evidence about specific grievances that more or less merit attention of hospital executives. Contrary to this, management decisions usually require a long-term perspective and priority setting in accordance with the organization's mission and vision. Also, depending on the mobility of the patient population, survey results might become obsolete after as little as two years (Atkins et al. 1996, p.22). Going beyond isolated and perishable survey results, a **satisfaction monitor** will link periodic polls with the ongoing information needs of hospital management (Mangold & Babakus 1990, p.28; Reeves & Seccombe 2008, pp.438, 441).

Common metaphors for such strategic information systems are the **balanced scorecard** (Tarantino 2003), or the **corporate dashboard**. Instruments of the latter kind usually start by listing financial parameters, or "dials" (Moseley 2008, p.267), and subsequently add non-financial and industry-specific data to the picture (Clark 1999, p.712). In one Canadian example (Leamington District Memorial Hospital 2009), the dashboard comprises one medical quality section with 23 indicators, followed by sections on Finance (4 indicators), Information (2 indicators), Partnership (with other health care providers, 7 indicators), and People, where patient satisfaction figures as one of five indicators. Previous year numbers and next year objectives are listed, and the indicators are loosely linked to the policies implemented to improve them, certainly a major achievement in implementing "evidence-based" management. However, if the marketing potential of satisfaction data is to be fully realized, a more differentiated picture needs to be drawn. A dedicated marketing or stakeholder monitor where the general satisfaction indicator is broken down into its components and complements might prove itself useful here.

To measure satisfaction *"in an ongoing and meaningful way"* (Spahr & Hutchison 2003, p.56), multiple stakeholder groups should be monitored (Phelan 1987, p.49; Tregunno et al. 2004, p.789) both for transaction-specific assessments and for long-term attitudes towards the hospital (Taylor & T. L. Baker 1994, p.173; Bendall & Powers 1995, p.51). Of particular importance is the integration of the hospital's **complaint handling** efforts (Johnston & Mehra 2002, pp.148-9). To take again the medical viewpoint, *"patient complaints may have value as markers for poor clinical outcomes and might even serve as potential 'sentinel events'."* (Murff et al. 2006, p.15) Also, individual grievances may serve as *"a potentially valuable 'window' on serious threats to patient safety."* (Bismark et al. 2006, p.17) The usefulness of complaints information for satisfaction management (Dolinsky 1995, p.42), as well as for service marketing in general, is well established. Also, the way how complaints are handled is in itself a potential source of satisfaction or dissatisfaction (Friele & Sluijs 2006, pp.2-3), while good complaint management may lead to customer retention and prevent bad word-of-mouth (Stichler & Schumacher 2003, p.15).

Despite their acknowledged value, many existing complaint systems however are still geared towards resolving individual conflicts instead of generating consistent information on patient satisfaction (for the British NHS: Mayberry 2002, p.653). Also, they meet with reluctance to report criticism by patients (Johnston & Mehra 2002, pp.148-9) and resistance from medical personnel, who *"would not accept a clinical complaints procedure which entailed lay participation."* (Donaldson & Cavanagh 1992, p.25). To integrate complaints information into a satisfaction monitor will need a considerable organizational effort.

4.4.2 Patient Segmentation

An immediately practicable use of satisfaction survey data is the distinction of different segments within the patient population, as exemplified in the study reported here (cf. section 3.2, p. 31). This technique *"seeks to uncover 'natural' groupings of patients who are more or less satisfied with different objects (e.g., physician, hospital, insurance provider) in their health care delivery system."* On the basis of such grouping, demographic and behavioral profiles have been developed (Singh 1990, pp.8-9; U. Lehtinen & J. R. Lehtinen 1991, p.301). In comparative view, no general conclusions can be drawn, as results on some common segmentation variables show:

- **Age:** While many studies have found elderly patients to show higher degrees of satisfaction or a lower likelihood for complaints (for recent examples see Verma & Sobti 2002, p.129; Bismark et al. 2006, p.19; Thiedke 2007), converse results have been reported too (Hsiao et al. 2009, p.212). The generally inconclusive findings might be due to the moderating influence of quality of life or cohort effects (Crow et al. 2002, pp.45, 51; Jaipaul & Rosenthal 2003, pp.27-8)
- **Gender:** Reporting on gender influence, while some studies give account of higher satisfaction in female patients (e.g. Verma & Sobti 2002, p.130), others report male patients as better satisfied (e.g. Priporas et al. 2008, p.334). In general, there is agreement to disagree on a gender constant (Crow et al. 2002, p.45). Light might be shed on the matter by combining gender with other variables; Dullenkopf and Rothen (2009, p.49), for instance, report that women place greater importance on issues of communication.
- **Ethnicity:** Both for international comparisons and for hospitals working in multi-ethnic environments, different ethnographic backgrounds of patients play a major practical role. While there are indications that minority patients show less satisfaction (Thiedke 2007), not all such groups are similar (Ueltschy & Krampf 2001, p.23), and must not be judged by stereotypes (Winsted 1999, pp.119-20). Again, a combination of variables will yield specific insights for each hospital concerned.

Against this background, patient segmentation holds both great rewards and tough challenges for hospital marketing. On the positive side, Targeting different patient groups with an adapted mix of medical and marketing measures will help channel resources and increase efficiency. For this reason, segmentation may prove a necessi-

ty in healthcare systems undergoing structural changes (for a Bulgarian example cf. Ganova-Iolovska et al. 2008, p.8), just as hospitals in more advanced economies cannot afford to neglect the positive effects of segmentation on their budgets. Potential use of the technique is assumed, for example, in selecting high-tech investments (Roth & Amoroso 1993, p.53) and developing a 'soft-factor policy' for patient care, regarding e.g. information and empathy (Joos et al. 1993). On the other hand, concerns must be alleviated whether giving preferential treatment to some segments might leave others behind, or if the uniformity of health care standards might be compromised (Leavey et al. 1989). Still, the segmentation technique, when based on a sound general strategy for the hospital, holds too much potential to be easily dismissed.

4.4.3 Patient Satisfaction in Marketing Communication

Finally, we will discuss corporate communication as one more area where satisfaction information can be put to immediate use in hospital marketing. In fact, the possible uses are as universal as the concept of satisfaction itself: Coulter and Cleary (2001, pp.250-1) make a point that different stakeholder groups not only may act as sources, but also as addressees of monitoring data:

- Nursing and medical staff: to identify and investigate poor-quality care in quality improvement efforts
- Hospital management: allow purchasers and patients to make informed choices
- Policymakers and the general public: build public confidence and accountability; guide strategic policy making at the national and local levels

But just as in gathering satisfaction data, the primary target for information about satisfaction is the patient population, both actual and potential. This is most obvious in situations of premeditated choice of hospital, such as medical check-ups and childbearing (Finkelstein et al. 1999, p.635). For expectant mothers, evidence of existing high levels of satisfaction can help in trustbuilding and communicating of shared values (Halliday & Hogarth-Scott 2000, pp.65-6). Another approachable audience is patients who are particularly involved in their condition and treatment, e.g. psychiatric outpatients, who actively look out for additional information on the quality of service providers (Sheeran 2003, p.1033). Generally, patients actively searching related information can be more likely found among the clients of private hospitals (Verma & Sobti 2002, p.126) and users of online portals specialized on hospital comparisons (S. Adams & de Bont 2007, p.277).

In the light of satisfaction management, one particularly underdeveloped area is the management of patients' expectations (Sheppard 2002, p.12), which, according to accepted theory (cf. section 2.2.4, p. 13), provide half of the basis a patient's judgment is based upon. While unrestricted advertising of high satisfaction levels might have overly raised such expectations in the past, and subsequently lead to lower satisfaction levels in disappointed patients (Schlegelmilch et al. 1992, pp.279-80), more caution is advised (S. K. Baker 1998). Better results can be obtained by stressing low patient sacrifice (e.g., hospital proximity) while maintaining a high quality image in general (Smith Gooding 1995, p.28). Preference should be given to those areas where the hospital is perceived as lagging behind local competitors, e.g. for rural hospitals in comparison with specialist clinics (ibid.). Tarn (2005, pp.750-6) gives a list of tangibilization strategies, which help decision makers (patients and referring doctors) make better sense of the information provided. One likely focus of attention, for instance, is the performance of the hospital's emergency department (Sherrod & H. N. Brown 2005, p.61).

A particular set of satisfaction-relevant hospital characteristics that should be promoted is the behavior of hospital staff, though with a differentiated approach for different groups of personnel. In personal communication, patients' perception is mainly influenced by front-office employees, with clinical support staff ranging behind, and physicians on the lowest rank (Mertz 1999, p.34). In impersonal communication however, the doctors' credentials, including patient satisfaction scores attained, is predominant and should be actively promoted (van Amerongen 2002, p.155). As could also be seen in the present project, physicians tend to feel uncomfortable in taking an active communication role themselves (Pawar 2005, p.44), or in being promoted as the hospital's "satisfaction stars".

Yet it might be exactly this active approach to communicating a hospital's achievements in satisfaction management that is most beneficial to patients. The reason lies in what may be termed "health literacy", or a general understanding of the criteria patients should base their choices upon for optimal health results (Colmers 2007, p.9). While this might especially be the case in developing countries (Nandraj et al. 2001, p.77), national quality indicators in general suffer from a degree of abstraction that renders them unintelligible for parts of the population (S. Cheng et al. 2002, pp.158-9). A fresh attitude to consumer empowerment is therefore desirable (Adkins & Corus 2009, pp.219-20), including unconventional approaches to promoting the hospital and its assets.

5. Conclusion

The present report has given account of one locally limited research project on hospital stakeholder satisfaction, together with a review and discussion of the relevant literature. To close, we will postulate, without further comment, a set of petitions that will help further the cause of satisfaction research in the healthcare context, and hospital marketing in particular:

Patients should be seen as customers.

Stakeholder satisfaction should be defined as a negotiated concept.

The three relevant "arenas for negotiation" are:

a) All of a hospital's stakeholder groups should be considered according to their management relevance. Hospital stakeholders are survey stakeholders, too.

b) The scope of how satisfaction is defined should strike an arc between global benchmarking and local management objectives.

c) Survey information should be incorporated into a wider satisfaction monitor and hospital marketing system.

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7. Table of Figures