Outpatient Satisfaction in the UK and Finland - a comparative study using the SERVQUAL methodology

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1. PREFACE

A hospital is primarily a service organisation in that it performs a service rather than produces a product. To survive and prosper in the healthcare industry requires differentiation. A hospital must show evidence that it really does have something special to offer. Quality assurance is not a departmental activity. The responsibility for quality lies with everyone - from the secretary to the nurse to the individual doctor. All hospitals must face the task of responding effectively and efficiently to patients who expect quality service in the delivery of care as part of the hospital's service..

Researching customer's opinions has become an important part of evaluating healthcare services. Quality is no more the concern of just the professionals : it also includes evaluation from clients. The client's self-determination, activities and participation need to be stressed. Also, the clients' possibilities to influence their own affairs, for example in health centres, must be evaluated. There are many reasons to incorporate the views of clients . New government initiatives imply that the view of patients need to be more carefully considered. Citizens now have a higher expectations of their public services and they want to be heard.

Clients are people who use, need or utilize a service. 'Quality' in a service implies that it is suited for the client's purpose. The issue of 'Quality' appears repeatedly throughout client's experiences. As well as 'objective' measures of quality, it also possible to measure quality on the basis of the client's subjective estimation. Feedback from users is indispensable as a method of evaluating the suitability of the service to the client's needs.

This study presents the results of an exercise designed to measure perceptions of quality of healthcare services in two societies (UK and Finland).. The second section includes basic information about Total Quality Management and how it can be applied in healthcare institutions. The Finnish health-care system is presented in the third section whilst the fourth section supplies information about Vaasa Central Hospital, where the inquiry was executed. The fifth section describes the **SERVQUAL** methodology, which

was developed to measure clients' expectations of a service and their perceptions of a service as actually experienced. Results of the research made by **SERVQUAL**-methodology are presented in the sixth section.

2. TOTAL QUALITY MANAGEMENT

Total Quality Management (TQM) is an approach to improving the effectiveness and flexibility of businesses as a whole. It is essentially a way of organizing and involving the whole organisation. The methods and techniques used in TQM can be applied throughout the organisation. Once TQM gains ground rapidly, it becomes a way of life in many organisations.

To be successful in promoting business efficiency and effectiveness, TQM must be truly organisation-wide and it must start the top with Chief Executive, or equivalent, and the most senior directors and management, all of whom must demonstrate that they are serious about quality. The middle management have a particularly important role to play, as they must not only grasp the principles TQM but they must go on to explain them to the people for whom they are responsible, and ensure that their own commitment is communicated.

The idea of TQM was to create an effective system for integrating such elements as quality development, maintenance and improvement together with all the functions in an organisation. Most of the doctrines belonging to TQM have their origins in manufacturing industry and that is why many of the terms and models are difficult to use in service field such as health. Implementation of TQM may well inhibit other developments of quality in service organisations. But it is true that organisations in service fields implement quality in which ever way is possible. Quality and cost are two of the most important criteria by which people evaluate their health-care purchasing decisions. Quality has become a key strategic level for health-care management in the face of a growing number of highly informed consumers.

2.1. TQC in Healthcare Organisations

Total quality control (TQC) has the same aim as TQM: i.e. to produce a quality 'product' which satisfies the client's needs. Traditionally, it has been put in practice more in Japan than in the Western countries. Considered to be the father of quality control in Japan, Deming asserts that achieving excellence in quality starts with top management. Deming notes that management must develop the proper theory and tools to manage quality. He proposed a 14-point plan which will help top-level management to improve productivity, competitive position, and stay in business.

Deming's 14 points can also be applied to healthcare organisations too:

1. *Create constancy of purpose.*

   Hospitals need to create constancy of purpose in the quest for continuous improvement of technical quality and the customer perception of quality. The hospital's organisational philosophy should reflect this total commitment to constantly improving quality in all ways. Without a clear vision of the future, it is doubtful that a healthcare organisation will achieve its goal.

2. *Adopt the new philosophy for a changing economic age.*

   The top-level management of hospitals will have to launch their organisations into a new economic age that recognizes the need to meet and surpass the expectations of customers.

3. *Cease dependence on mass inspection.*

   Mass inspection cannot undo the damage caused by administering the wrong medication or a patient becoming infected during hospitalisation. Hospitals need to work together with reputable vendors and suppliers to ensure compliance to acceptable quality levels.

4. *Cease buying based on price tag alone.*

The need to cease buying based on the price tag alone is especially important in health care, where drugs, instruments, equipment and supplies are used everyday in life-and- death situations. Technology is also becoming a major selling point for the quality of care provided by medical institutions.

5. *Constantly improve the system of production and service.*

The constant improvement of a hospital should be first preceded by a realisation of the need for standardisation and training in areas of quality improvement.

6. *Institute training on the job.*

Hospitals emphasise a great deal of training, especially in nursing and medicine. Lack of training often leads to misuse and abuse of devices.

7. *Adopt and institute leadership.*

One of the goals of a hospital's leadership should be to motivate employees to be a part of the constancy of purpose adopted by the organisation.

8. *Drive out fear.*

One common fear that nurses and other health-care professionals face is the fear of making mistakes. Another fear is the fear of change. The fear of computers is a prime example of resistance of change. Physicians or top administrators who are experiencing fear have costly and potentially devastating effects on a health-care organisation.

9. *Break down barriers between departments.*

The health-care process is multidisciplinary in nature; it draws upon the expertise and support of several departments and people. One way to eliminate barriers is to use cross-functional teams, involving personnel from various functions and departments.

10. *Eliminate slogans, exhortations and targets for the work force.*

Slogans are not very common in health care. They are no substitute for training.

11. *Eliminate numerical quotas for the work force and numerical goals for management.*

Work standards and standard costs are not traditionally employed in health-care services. Work sampling technique is more applicable. Numerical quotas are used when establishing minimum requirements for maintaining licenses of nurses and doctors.

12. *Remove barriers that rob people of pride of workmanship. Eliminate the annual rating or merit system.*

The performance appraisal system of some health-care organisations can be major inhibitor to continuing improvement. In certain hospitals, performance evaluation is based on a point system. Without an adequate management and control of the process producing the variation, performance may continue to be erratic.

13. *Institute a vigorous program of education and self-improvement for everyone.*

Progressive hospital organisations are beginning to realise that people are the most important assets of an organisation. Healthcare organisations need to show a strong commitment to investing in employees.

14. *Put everyone in the company to work to accomplish the transformation.*

In order to put everyone in the hospital organisation to work to accomplish the transformation, some key factors are important:

- Management should demonstrate an unequivocal commitment to total quality management.
- Management should drive out fear and eliminate other inhibitors and barriers to quality improvement in the organisation.
- Quality improvement must be preceded first by the education of the employees on what quality means and what the needs of the customers are.
- Quality is not a departmental function. It is everyone's business.
- Quality improvement is a continuous, never-ending process.
- Inspection by the government or any other agency does not mean quality control.
- Quality improvement cannot be accomplished without the total involvement of employees.

2.2 TQM in British Healthcare - a cautionary note

Although TQM has been embraced with a certain degree of fervour in the past, not least by hospital managements in the UK, there remain some conceptual difficulties before the philosophies and techniques of TQM can be applied wholesale to healthcare organisations in the UK.

One of the principal tenets of TQM is to 'delight the customer'. But it is important to note that the role of 'customer' subsumes two roles i.e. the role of the *consumer* of services on the one hand and the role of the *purchaser* of services on the other. In the reorganised British NHS, there is now a sharp differentiation between the purchasers of care and the providers of that care, purchasers typically being GP fundholders or purchasing commissions. To 'delight' one patient by agreeing to fund an expensive course of treatment may be to disadvantage other patients for whom such funds may now be limited or denied. These issues were acutely raised in the public concern of the 'Child B' case (when a young girl was denied further tranches of treatment for

leukaemia when medical opinion agreed that her chances of ultimate survival were less than 10%).

Another issue of concern is the discernment of *Total* in TQM. At any one time, there are liable to a series of initiatives designed as quality checks (the operation of the 'managed market' itself, audits in various shapes and sizes, quality circles, BS 5750/ISO 9000 groups, resource management initiatives, various 'waiting list' initiatives and so on). The philosophy of TQM may thus come to be seen as just one more initiative to be 'bolted on' to various other quality procedures currently in train and it may therefore prove difficult, if not impossible, to implement in a large and complex hospital.

The most recent large-scale evaluation of TQM in the NHS is provided by Joss and Kogan (1995). They indicate, contrary to the claim by Crosby (1979), that quality does not 'come free' and the implementations of TQM in 19 demonstration sites were funded far less generously than their private-sector comparators. The majority of consultants had little or no involvement in TQM and were generally suspicious of it. Those hospitals that had most success in implementing TQM were those who secured the full-hearted cooperation of the medical director and the chair of medical audit within the hospital. It may be, that as Øvretveit (1994) maintains, it is necessary to implement a more 'bottom up' rather than 'top down' strategy of TQM in which top management offers support to properly costed initiatives that show the prospects of success in patient outcomes and reduced costs. Such local ventures can then be implemented laterally by groups of like-minded individuals, with management taking the role of a facilitator rather than one of direct implementation. It may well be that TQM has been used as a useful 'banner' under which to raise various quality initiatives in the NHS, but its force (and that of successors such as CQI) may well be fated in the absence of a demonstrable effect upon operational costs (Watkinson, 1995). The philosophy of TQM may well need to both conceptually redefined and carefully implemented before any chance of success is possible, as one of the authors has recently argued (Hart, 1996a).

3. FINNISH PUBLIC HEALTH SYSTEM

3.1. Health policy

The Finnish cabinet formulates the main health policy strategies by issuing a statement on health policy which is discussed by the Parliament. If seen functionally, health policy consists of health promotion, curative care and rehabilitation. The role of health services is strongly affected by restrictions and incentives set on health promotion and rehabilitation by macro-economic policy. For example, inflation targets set out in the state budget may restrain the use of effective price-measures in promoting health. Insurance and employment policies affect the quality and scope of rehabilitation. Implementation of the national health policy is also complicated by other political pressures. One example is the set of measures proposed to prevent cardiovascular diseases. In this case farmers are likely to oppose some effective preventive action, since reduction in the intake of butter and other dairy products would reduce their income. And of course the membership in European Union effects the national health policy both politically and economically.

3.2 Healthcare

In Finland healthcare is mostly tax-financed through the state and municipal income-taxes. Healthcare services are produced mainly by public organisations with a small proportion of outpatient services supplied by the private sector. Services are managed at the municipal level. The state implements regional equity by allocating state subsidies to public providers. The planning system is similar for all public welfare services.

The state subsidy strongly influences the investments and therefore the growth of health care expenditure at the national and regional level. State subsidies are paid directly to the municipality. The amount of subsidy is defined as a proportion of municipality's

anticipated health expenditure, defined by three criteria: size, age-structure and density of population. Although the state subsidy is defined separately for health care, the municipality is free to use the subsidy as it wishes. A municipality can retain the efficiency gains it achieves.

The minimum standards, laws and budget for health care services provided by municipalities are defined by the Parliament according to the proposals made by the Ministry of Health and the National Board of Health. The municipality is free to supply services above the national standards, but it will not get state subsidy for those services.

There are 21 economically strong Hospital Regions in Finland. Hospital Regions or hospital districts are accountable for organising hospital services for the region. Hospitals are reimbursed according to the number of patients treated and treatment provided. Hospitals charge municipalities the full costs of treatment by using patient specific cost-figures.

Basic public health services are mainly free at the point of delivery except dental services for adults. Special health care patients have to pay a small proportion of the real costs. The whole population has a right to health insurance.

3.3 Local Health Centres

Municipalities have the basic responsibility of organizing public health. Municipalities different in their size and population but they have same responsibilities. Two or more small municipalities can form a hospital district. There are about 200 health centres in Finland. Half of them serve just one municipality and other half belong to hospital districts.

The Health Centre is an organisation which takes care of providing basic health care to inhabitants living in the area. Administration of health centres belongs to health

committee. It chooses the majority of the holders of the office and has responsibilities for planning and day-to-day operations.. Most health centres deploy at least four doctors and 40-50 persons nursing staff. Doctors working in local health centres are rarely specialists. Health centres have laboratory, X-ray equipment and beds for acute and minor illnesses and chronic patients. Almost 75% of visits to doctor take place in health centres when the matter in question is basic health care. Private health care complements public services. Private health care is important in large centres where inhabitants need for example physiotherapy and rehabilitation. The proportion of doctors who make their living only by private sector work alone is 5% of the whole medical profession.

3.4 Centre hospitals

Centre hospitals are also maintained by several municipalities. Centre hospitals arrange specialist health care services. Five of the centre hospitals are University central hospitals. They have the capabilities to give very specialised treatment. They are also training hospitals for medical students. Hospitals have out-patient departments where patients are received only if they have a care package purchased for them. Acute patients will nevertheless be received for treatment after an evaluation has been made in an out-patient department.

The main economic problem is the lack of incentives on the provider side which has lead to an inappropriate service structure and decreased productivity. Providers (hospitals and health centres) are reimbursed according to the number of services (inpatient days, outpatient visits) produced using average cost-figures. Providers are heavily subsidised by the state. Subsidy is paid directly to hospitals and health centres which charge the net-costs (gross-costs minus state subsidy) from the municipalities. Doctors and other staff are paid by a fixed monthly salary.

In principle, the service structure, outlined in the Finnish health policy documents, is hierarchical. In practice, the supply of hospital services is fragmented and hospitals (university, central, regional, health centre) treat broadly similar type of patients. Healthcare provision is still dominated by the hospital sector.

4. VAASA CENTRAL HOSPITAL

Vaasa hospital district is one of the 21 hospital districts and Vaassa Central Hospital is the biggest of the three hospitals belonging to Vaasa hospital district. The hospital district is formed of 17 municipalities. Ostrobothnia is bilingual area, with a population of 160,000 inhabitants. 51% of them are Finnish-speaking and 49% Swedish-speaking. Vaasa central hospital opened as a central hospital in year 1956. Today there are 16 specialties. Vaasa Central Hospital has 600 beds and 1,400 employees. Functions are divided to six profit centres.

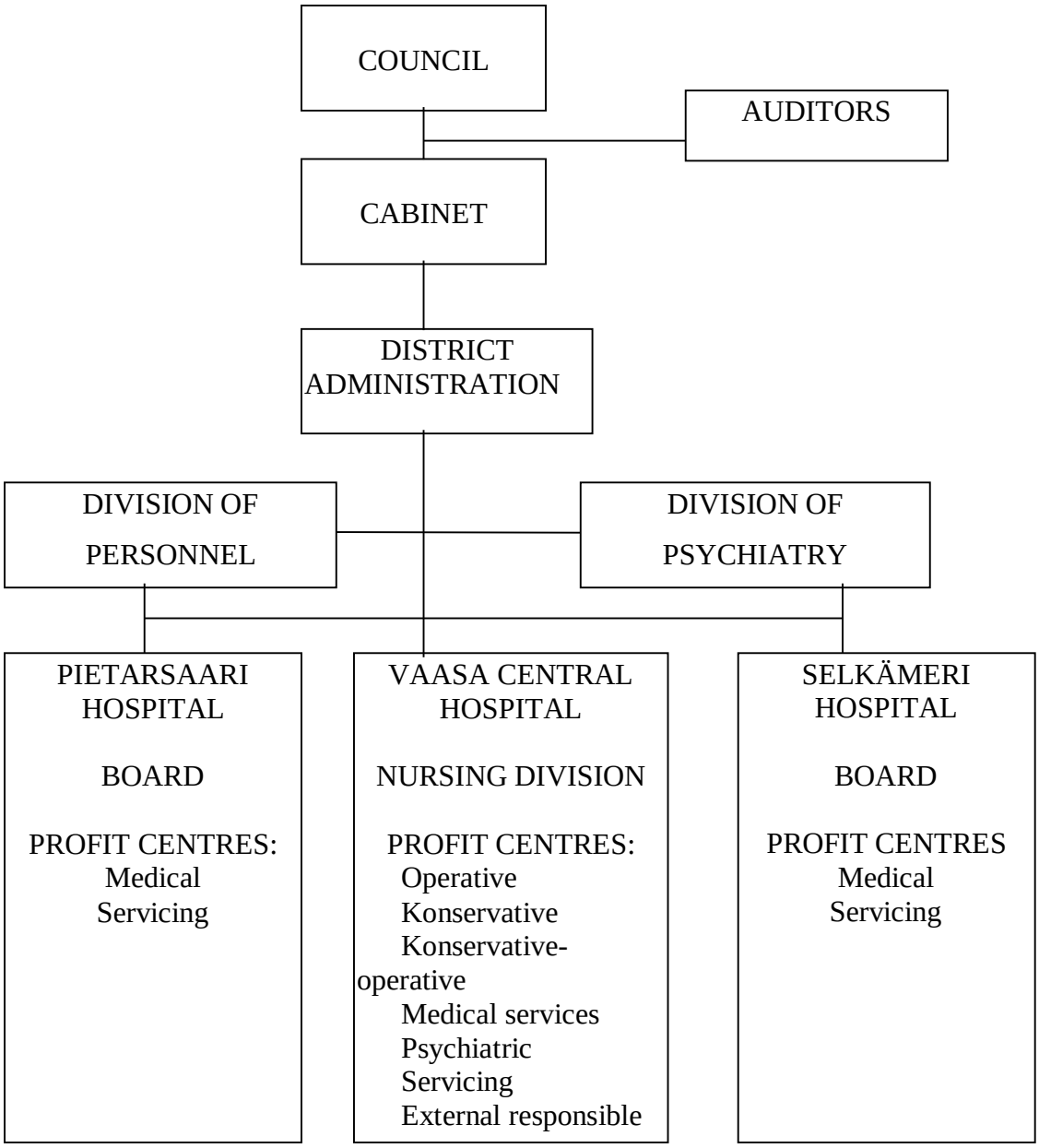

FIGURE 1. Organisation of Vaasa Hospital District

The supreme governing body of a hospital district is the Council. It is formed of representatives of each member municipality. The Cabinet is the executive body. The Administrative district is formed of some officials such as the head of whole hospital district, the principal medical officer and principal nursing officer of the hospital

district. The Nursing division is the governing body of Vaasa Central Hospital. Hospitals executives are Head of the hospital, Management Director and Director of Nursing Services.

Vaasa Central Hospital consists of seven profit centres:

1) Konservative profit centre including following specialties: internal diseases, dialysis therapy, dermatology, oncology, neurology and lung diseases.
2) Konservative-operative profit centre including gynaecology, obstetrics, paediatrics children's neurology.
3) Operative profit centre including surgery, ENT, opthalmics, dental and oral medicine, intensive care, cardiac medicine, physical medicine.
4) Medical services profit centre includes clinical chemistry, clinical microbiology, clinical physiology, isotope laboratory, neurophysiology, x-ray treatment, medicinal rehabilitation, pathology, dispensing and equipment supply.
5) Psychiatric profit centre including acute psychiatry, chronic psychiatry, psychiatry for the elderly, child and youth psychiatry and general hospital psychiatry.
6) Servicing profit centre including food, clothing and technical services, cleaning and property services
7) External relations profit centre including general administration, salary and personnel administration, patient office and occupational health.

5. SERVQUAL METHODOLOGY

Unlike the quality of goods, which can be measured objectively by such indicators as durability and number of defects, service quality is an abstract and elusive construct because of three features unique to services: intangibility, heterogeneity and inseparability of production and consumption.

The **SERVQUAL** methodology is primarily developed to measure satisfaction with service industries. The method is well-known in Total Quality Management circles. The approach starts with the hypothesis that service quality is critically determined by the difference between consumers' expectations and perceptions of services. The method is predicated upon the gap to be discerned between clients' expectations of a service and their perceptions of a service as actually experienced.

Research has shown that regardless of the type of service, consumers use basically similar criteria in evaluating service quality. The criteria falls into 10 key categories which are labelled 'service quality determinants'. These ten determinants are:

1. *reliability*, which involves consistency of performance and dependability.
2. *responsiveness* concerns the willingness or readiness of employees to provide service. It involves timeliness of service.
3. *competence* means possession of the required skills and knowledge to perform the service.
4. *access* involves approachability and ease of contact.
5. *courtesy* involves politeness, respect, consideration and friendliness of contact personnel.
6. *communication* means keeping customers informed in language they can understand and listening to them.
7. *credibility* involves trustworthiness, believability and honesty. It involves having the customer's best interests at heart.
8. *security* is the freedom from danger, risk or doubt.

9. *understanding*/knowing the customer involves making the effort to understand the customer's needs.
10. *tangibles* include the physical evidence of the service like physical facilities and appearance of personnel.

Only two of the ten determinants, tangibles and credibility, can be known in advance of purchase, the other determinants often only being evidenced once a service transaction has taken place. While customers may possess some information based on their experience or on other customers' evaluations, they are likely to re-evaluate these determinants each time a purchase is made because of the heterogeneity of services. Two of the determinants, competence and security, consumers cannot evaluate even after purchase and consumption.

Figure 1 indicates that perceived service quality is the result of the consumer's comparison of expected service with perceived service. It is quite possible that the relative importance of the 10 service quality determinants in moulding consumer expectations may differ from their relative importance vis-a-vis consumer perceptions of the delivered service.

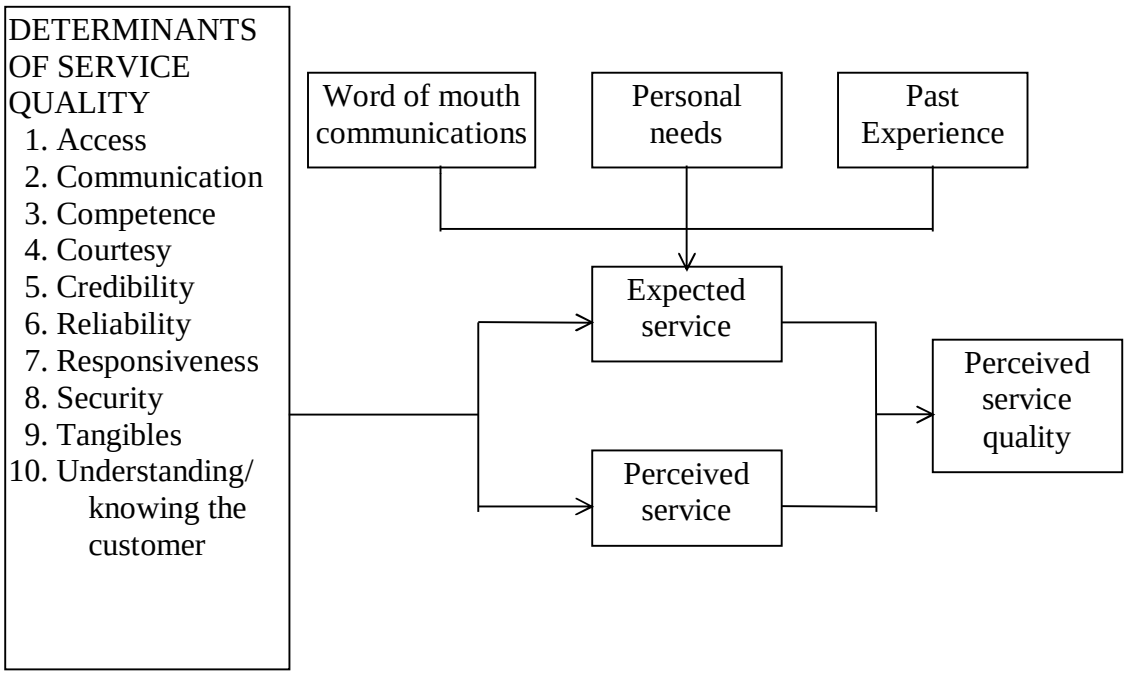

FIGURE 2. Determinants of Perceived Service Quality

The gap between expectations and perceptions may be analysed with respect to five dimensions. An examination of the content of the 10 service quality items allows a construction of five dimensions in **SERVQUAL**, of which three are original list items (*tangibles*, *reliability*, *responsiveness*) and two are combined dimensions: (*assurance* including communication, credibility, security, competence and courtesy; *empathy* including understanding/ knowing customers and access). The final list of five dimensions and their concise definitions are as follows:

1) *Tangibles*: physical facilities, equipment and appearance of personnel
2) *Reliability*: ability to perform the promised service dependably and accurately
3) *Responsiveness*: willingness to help customers and provide prompt service
4) *Assurance*: knowledge and courtesy of employees and their ability to inspire trust and confidence
5 *Empathy*: caring, individualised attention the firm provides its customers

The last two dimensions contain items representing seven original dimensions communication, credibility, security, competence, courtesy, understanding/knowing customers, and access that did not remain distinct after the two stages of scale purification. Therefore, while **SERVQUAL** has only five distinct dimensions, they capture facets of all 10 originally conceptualised dimensions.

In the questionnaires the dimensions are divided into a 22-item, 7-point scale. Dimensions may not be regarded as equally important. Each client may allocate points out of 100 to each of the five dimensions so that the instrument is sensitive to an individual's perceptions of the relative importance of each dimension.

SERVQUAL has a variety of potential applications. It can help a wide range of service and retailing organisations in assessing consumer expectations about and perceptions of service quality. It can also help in pinpointing areas requiring managerial attention and action to improve service quality.

Application of **SERVQUAL** can be used to make comparisons globally over time. Moreover, it is possible to ascertain those elements of services in which the gap between expectations and perceptions is widest. The application of this instrument and the results of measurement allows possibilities of more specific management action to redress perceived shortcomings. Although well-developed and extensively used in USA, studies are only just commencing utilising the methodology within the UK and Finland.

SERVQUAL RESULTS - Previous Studies

USA General Sample [1990]

Dimension	Weight	Perceptions	Expectations	Gap
Tangibles	0.11	5.54	5.16	+0.38
Reliability	0.32	5.16	6.44	-1.28
Responsiveness	0.22	5.20	6.36	-1.16
Assurance	0.19	5.50	6.50	-1.00
Empathy	0.16	5.16	6.28	-1.12
Weighted averages [n=1936]		**5.28**	**6.27**	**-0.99**

Scottish -Public Library Service [1995]

Dimension	Weight	Perceptions	Expectations	Gap
Tangibles	0.18	5.68	5.93	-0.25
Reliability	0.23	6.10	6.30	-0.20
Responsiveness	0.22	6.62	6.51	+0.11
Assurance	0.21	6.58	6.29	+0.29
Empathy	0.17	6.28	6.27	+0.01
Weighted averages [n= 368]		**6.33**	**6.33**	**-0.00**

Scottish -Home Help Service [1995]

Dimension	Weight	Perceptions	Expectations	Gap
Tangibles	0.17	5.28	4.72	+0.56
Reliability	0.20	5.91	5.47	+0.44
Responsiveness	0.21	6.33	5.74	+0.59
Assurance	0.21	6.40	5.93	+0.47
Empathy	0.21	6.06	5.62	+0.44
Weighted averages [n= 124]		**6.03**	**5.33**	**+0.50**

SERVQUAL RESULTS - UK and Finnish Studies

Sampling Details

UK 72 completed questionnaires from four outpatient clinics in Leicestershire (diabetes, paediatrics, general medical, enuresis)
Data collected: July, 1995

Finland 135 completed questionnaires from three clinics in Vaasa, Finland (diabetes, paediatrics, general surgical)
Data collected: Jan-Feb 1996

East Midlands, UK Outpatients [July 1995]

Dimension	Weight	Perceptions	Expectations	Gap
Tangibles	0.13	5.21	5.24	-0.03
Reliability	0.26	5.52	6.31	-0.79
Responsiveness	0.21	5.88	6.17	-0.29
Assurance	0.20	5.98	6.39	-0.41
Empathy	0.20	5.66	6.16	-0.50
Weighted averages [n= 72]		**5.67**	**6.15**	**-0.48**

Vaasa,Finland Outpatients [Jan-Feb 1996]

Dimension	Weight	Perceptions	Expectations	Gap
Tangibles	0.18	5.64	6.03	-0.38
Reliability	0.21	5.51	6.04	-0.54
Responsiveness	0.20	5.73	6.12	-0.39
Assurance	0.22	5.83	6.23	-0.40
Empathy	0.19	5.74	6.08	-0.35
Weighted averages [n= 135]		**5.72**	**6.14**	**-0.41**

Table of Significant Differences - UK and Finland

Dimension	Weight	Perceptions	Expectations	Gap
Tangibles	p<0.0001	p=0.0080	p<0.0001	p=0.0228
Reliability	p=0.0007	-	p=0.0257	-
Responsiveness	-	-	-	-
Assurance	-	-	-	-
Empathy	-	-	-	-

COMMENTARY

1. Note the similarity of the European data when compared with the American data.

2. Note also the **overall** similarity of the UK and the Finnish data

3. However, there are differences which are disguised within the data:

- Finnish patients place greater **weight** on *Tangibles*
  (0.18 v. 0.14, p<0.0001)

- But British patients place greater **weight** on *Reliability*
  (0.26 v. 0.21, p=0.0007)

- Finnish patients have a greater Perceptions of *Tangibles*
  (5.64 v. 5.21, p=0.0080)

- Finnish patients have greater Expectations of *Tangibles*
  (6.02 v. 5.24, p<0.0001)

- Finnish patients experience a greater gap (Perceptions-Expectations) for *Tangibles*
(-0.38 v.-0.03, p=0.0228)

- UK patients have greater Expectations of *Reliability*
  (6.31 v, 6.04, p=0.0257)

CONCLUSIONS

Any data from cross-cultural studies must be treated with a degree of caution. Nonetheless, the fact that exactly the same type of questionnaire was used (after translation into Finnish and Swedish) and some care was taken to meatch up the types of clinics utilised helps to raise confidence in the results that we obtained.

It could well be that further research in this area needs to concentrate in two directions:

1. The deployment of a variety of quality instruments, including both quantitative measures (e.g. waiting times), qualitative measures (how waiting times, clinic interactions are experienced) as well as a **SERVQUAL** analysis.

2. Further refinement of the **SERVQUAL** scale to incorporate the concept of magnitude scaling (i.e. approaches in which the various points of a scale are given an explicit weighting instead of the assumption that the scale used is an equal-interval ratio scale). Some suggestions have recently been made in this regard by one of the authors (Hart, 1996b).

REFERENCES - FINNISH

Ailus-Ihalainen-Jormanainen-Kankaanpää-Palomäki-Pärnänen (1993). Etiikka. laatu, va linnanvapaus. Painatuskeskus Oy, Helsinki.

Berry, Leonard A. - A.Parasuraman - Valerie A. Zeithaml (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. Journal of Marketing Vol 49, Fall 1985, 41-50.

Berry, Leonard A. - A.Parasuraman - Valerie A. Zeithaml. ( ) Servqual: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. Journal of Retailing 12-40

Lumijärvi, Ismo (1994). Laadun arviointi sosiaali- ja terveysalan palveluyksiköissä. Vaa san yliopiston julkaisuja, Vaasa.

Oakland, John (1989). Total Quality Management. Redwood Press Limited, Melksham - Wiltshire.

Omachonu, Vincent K. (1991). Total Quality and Productivity Management in Health Care Organisations. Industrial Engineering and Management Press, Nocross, Georgia.

Pekurinen Markku-Vohlonen Ilkka (1991). Terveydenhuollon uudistukset: miksi, mitä ja mihin 1990-luvulla? Kuopion yliopiston painatuskeskus, Kuopio.

Sosiaali- ja terveysministeriön esite 5/1990: Terveydenhuolto Suomessa.

Vaasan keskussairaalan esite. (1995)

REFERENCES - BRITISH

Crosby,P. (1979) *Quality is Free*, New York, McGraw-Hill

Hart,M.C. (1996a) 'Improving the Quality of NHS out-patient clinics: the applications and misapplications of TQM', *International Journal of Health Care Quality Assurance*, Vol. 9(2) pp. 21-28.

Hart,M.C. (1996b) 'Measuring the Perceptions of Quality in NHS Clinics using the SERVQUAL methodology' in Richards,B. (ed) *Current Perspectives in Healthcare Computing*, BJHC, Weybridge,1996.

Joss,R. and Kogan,M. (1995) *Advancing Quality - Total Quality Management in the National Health Service*, Buckingham, Open University Press

Øvretveit,J. (1994) 'All together now', *Health Service Journal*, 1st December: 24-26.

Watkinson,J. (1995) *'Feeling the pinch: Is TQM being squeezed out of the NHS ?'* in Kanji,G. (ed) Total Quality Management, London, Chapman and Hall.