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PATIENTS' ACCEPTANCE OF WAITING FOR CATARACT SURGERY: WHAT MAKES A WAIT TOO LONG?

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Abstract—The patient's perspective about waiting for elective surgery is an important consideration in the management of waiting lists, yet it has received little attention to date. This study was undertaken to assess the acceptability of personal waiting times from the perspective of patients, and to examine waiting time and patient characteristics associated with the perception that a wait for cataract surgery is too long. The international prospective study was conducted in three sites with explicit waiting systems: Manitoba, Canada; Denmark; and Barcelona, Spain. Patients over the age of 50 years were recruited consecutively from ophthalmologists' practices at the time of their enlistment for first-eye cataract surgery. Anticipated waiting time, opinions about personal waiting time, and patients' visual and health characteristics were identified by means of telephone interviews. The 550 patients interviewed at the time of enlistment for surgery anticipated waits varying from < 1 to 24 months. Clinical visual acuity measures were obtained from patients' ophthalmologists/cataract surgeons. Results indicated that anticipated waiting time was the strongest predictor of patients' tolerance of waiting for cataract surgery. Patient dissatisfaction increased with the duration of the anticipated wait. Patients in all three sites were accepting of waits of three months or less, and considered waits exceeding six months to be excessive. Response to waits between three and six months varied across study sites. Patients with low tolerance for waiting had greater self-reported difficulty with vision, as assessed by a Cataract Symptom Score and expressed trouble with vision. Patients' acceptance of waiting was not associated with clinical visual acuity measures or socio-demographic characteristics. The patient perspective on acceptability of waiting times for cataract surgery suggests that restricting waiting times to less than six months and preferably less than three months and utilizing self-reported measures of visual difficulty in prioritizing patients may contribute to improved management of waiting systems. Patients are more tolerant of their personal waiting times than responses to questions about waiting for elective surgery in general would indicate, and appear to accept waiting times that are longer than those identified as reasonable by specialists. © 1997 Elsevier Science Ltd

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Publicly funded universal health insurance systems are often criticized for burdening patients with excessive waiting times for elective surgery (e.g. Neuschler, 1994). There is evidence of variability in waiting times both among countries (Carroll *et al.*, 1995) and within countries (across regions, hospitals, and surgical practices) (Naylor *et al.*, 1995; Pope *et al.*, 1991; Ramsay and Walker, 1994). The distribution of waiting times is typically skewed, with the majority of patients waiting a relatively short time, but a significant minority waiting for periods that have been described as "unacceptably long" (Pope *et al.*, 1991). Opinions about what are acceptable waits for elective surgery may vary, however.

Service providers, including specialists and hospital administrators, have expressed opinions about what are reasonable waiting times for treatment (Jacobs and Hart, 1990; Naylor *et al.*, 1991; Ramsay and Walker, 1994), but there is little information available about patients' tolerance for waits of various durations. There are many reasons why physicians' and hospital managers' perceptions about what constitutes an acceptable wait may differ from those of patients. Understanding patients' perceptions may be an important consideration in the formulation of policy pertaining to waiting times for elective surgery.

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A number of studies have addressed the perceptions and satisfactions of patients with regard to various aspects of their health care (Davies and Ware, 1988; Deyo and Diehl, 1986; Kurata *et al.*, 1992, 1994; Roberts and Tugwell, 1987). With the exception, however, of recent retrospective reports of waiting for knee replacement surgery in Ontario, Canada and the United States (Coyte *et al.*, 1994; Ho *et al.*, 1994), there has been little attention directed to assessing patients' perception of the acceptability of their wait for surgery, and the factors that might be associated with different levels of acceptance.

The present prospective study examined patients' views about the acceptability of waiting for first-eye cataract surgery in order to assess which waiting time and patient factors were associated with the perception that a wait for surgery is too long. The study was conducted in three sites that have explicit waiting systems (Manitoba, Canada; Denmark; and Barcelona, Spain). In contrast to previous retrospective work on patients' acceptance of waiting times (Coyte *et al.*, 1994; Ho *et al.*, 1994), we examined patients' views at the time of their initial placement on a waiting list for surgery, when those facing the prospect of a wait perceived as too long might be most likely to consider alternative avenues for surgery, such as private clinics.

METHODS

Study design

Data were collected as part of an International Patient Outcomes Research Team (IPORT) study, examining outcomes of cataract surgery in the United States; Manitoba, Canada; Denmark; and Barcelona, Spain, with data pertaining to perceptions of waiting for surgery collected in the latter three sites. Cataract surgery patients were recruited consecutively from the practices of participating ophthalmologists in each site. Of 18 ophthalmologists performing surgery in the Province of Manitoba, 12 (67%) agreed to participate. In Denmark, cataract surgery is performed at 17 public hospitals, all of which agreed to contribute patients to the study. Private clinics, which performed no more than 15% of the total volume of cataract surgery in Denmark during the study period, did not participate. In Barcelona, Spain, approximately 40% of the cataract surgery is done in the private sector and 60% in the public sector. From the private sector, 12 ophthalmologists were randomly selected; of these, seven agreed to participate. From the public sector, four out of 10 departments providing cataract surgery care were randomly selected, after stratification based on the volume of cataract surgery and the average case severity of each hospital, with all agreeing to participate.

Patients were eligible for the study if they were seen by a participating specialist and enlisted for first-eye cataract surgery that did not involve a combined procedure, were 50 years of age or older, and were living within a specified recruitment area. Eligible patients who provided an informed consent were enrolled in the study. In Manitoba, 71% of eligible patients agreed to participate in the study. In Denmark, 73% of eligible patients participated, while the response rate in Barcelona, Spain was 89%. Patients who were deaf, confused, did not speak the primary language of the study site, or did not have access to a telephone were excluded, as follows: Manitoba (19% of eligible patients); Denmark (8% of eligible patients); and Barcelona, Spain (3%).

Data were obtained between September 1992 and May 1994 from telephone interviews conducted shortly after patient enlistment. Briefly, the prospective study was designed to gather data on patients' visual and health status both pre- and post-operatively. Data collection instruments were translated from the English version developed by the international team, using a translation/back-translation technique emphasizing conceptual equivalence (Anderson *et al.*, 1994). Information about the clinical status of patients, including best-corrected Snellen visual acuity, was obtained from patients' ophthalmologists at the time of enrollment in the study.

Measures

The major outcome variable was developed from patients' responses to the following question: "We would like to know how you feel about the length of time that you, personally, must wait to have your cataract surgery". Patients rated their waiting time as "shorter than they would like", "reasonable", "longer" or "much longer than they would like". Respondents who reported their wait as "longer" or "much longer" were categorized as perceiving their wait to be "too long", in contrast to those who felt their wait to be too short or reasonable.

Since there is no well-developed theory about factors which might affect patients' response to waiting times, a spectrum of indicators of potential importance was selected. Variables for consideration were also suggested by a previous study on acceptance of waiting for surgery (Coyte *et al.*, 1994). Dimensions included socio-demographic characteristics, health status and visual status, study site, anticipated personal waiting time, as well as general attitude about a reasonable wait for surgery.

Socio-demographics. Variables considered were gender, age, living arrangement (living alone/with others), years of education (less than eight years/eight years or more), and work status (working/not working), reflecting both paid and volunteer work.